



**INTERNATIONAL SEMINAR & CONFERENCE
ON LEARNING ORGANISATION**

Learning Organisation in the New Normal Era

**CONFERENCE
PROCEEDING**

**Bandung, West Java, Indonesia
11th November 2020**

**Proceeding of the
8th International Seminar and Conference on Learning Organisation
“Learning Organisation in the New Normal Era”**

By: International Seminar and Conference on Learning Organisation, Telkom University
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ISCLO Secretariat

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The purpose of the ISCLO is to serve as one of the primary channels of knowledge sharing and the promotion of learning organisation. The conference encourages experts and scholars all over the world to share their research and best practice outcomes through presentations. An important goal of the conference is to promote learning from each other by exchanging ideas and views, and building networks.

The conference encourages submissions for paper presentations from academics and practitioners. In order to reach the goals of the sharing and exchange of experiences of both theoretical developments and applications, these presentations may have a focus on either research studies or case studies of best practices on related topics.

ISCLO 2020

“Learning Organisation in the New Normal Era”

Technological disruption, demographic change, the evolving nature of work, and the latest pandemic challenge the organisation's operations. How well an organisation can cope with, make adjustment to, and survive from the current turbulence condition can be considered as the organisational learning process. Therefore, the outcome is a learning organisation. This organisational learning process happens in various areas of organisation as well as various fields of business. It does not only occur in the profit oriented organisation, but also in the non-profit organisation. There are the creation of knowledge, the retention of knowledge, and the transfer of knowledge conducted which impact on organisational performance and innovativeness.

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PREFACE

Assalamu'alaykum Warahmatullahi Wabarakatuh.

All praises are to Allah, the Merciful, the All – Beneficent, by whose Grace and Blessings have enabled us to gather here for the 8th ISCLO (International Seminar and Conference on Learning Organisation) 2020.

I would like to express my gratitude to our honourable keynote speaker, Professor Alexandros Psychogios, distinguished panellists, Dr Marianne Afanassieva, Dr Muhammad Awaluddin, and Mr Yose Rizal for the opportunity they give to us to learn and to gain insights from their expertise and experiences. I would like to thank the respected authors who presented their works in 5 parallel session rooms provided. Huge appreciation is presented to the Rector of Telkom University, Professor Adiwijaya and all the vice rectors, Dean of Faculty of Economics and Business, Dr Ratri Wahyuningtyas and FEB management, and last but not least, all the 8th ISCLO 2020 committee, Reviewers, Session Chairs, Hosts, Co-Hosts, MC, and Moderator that can make this event happened. Massive thanks also presented to our great partner, STIE Ekuitas and Business Administration Department, Parahyangan Catholic University as well as our superb sponsors, Prodia and Yayasan Perisai Academia Peduli.

As a regular event, this year's ISCLO is the 8th event since 2013. This is the first ISCLO in history which is completely conducted on a digital platform in line with the physical distancing norms due to the COVID-19 pandemic. Fortunately, we can still receive 87 submissions with 53 of them are presented on the conference day after a careful blind review process. There are 16 titles from the Marketing track, 12 titles from the HRM track, 11 titles from Economics, Financial Management and Accounting track, 8 titles from the Entrepreneurship track, 3 titles from the Operation and IT Management track, and 3 titles from the Strategic management track. With the theme of learning organisation in the new normal era, we seek the research that capture, examine, and explore the organisational learning process of organisation impacted by the pandemic. Therefore, 10% of the registration fees is donated to the COVID-19 impacted parties.

On behalf of the committee, I hope you can have an insightful learning and wonderful experience from this ISCLO 2020. Thank you very much once again and please apologise if there are still some shortcomings.

Wassalamu'alaykum warahmatullahi wabarakatuh,

Jurry Hatammimi, PhD

The 8th ISCLO Chairperson

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CONFERENCE PROGRAMME

8th ISCLO 2020

Wednesday, 11th November 2020

Time (GMT +7)	Activities	Person in Charge
08.00 - 09.00	Open Registration and Protocol Preparation	MC: Muhammad Azhari, SE, MBA Zoom Link: https://zoom.us/j/92215703686
09.05 - 09.30	Opening Speech	The Dean of Faculty of Economics & Business, Telkom University (Dr. Ratri Wahyuningtyas)
09.30 – 09.35	Preparation of Parallel Session	Presenters, Session Chairs, Host, & Co-Host join the Zoom link of the Room they belong to.
09.35 - 09.45	Opening of Parallel Session 1	Session Chairs (5 Rooms)
09.45 - 10.00	Presentations of Parallel Session 1	Presenter 1
10.00 - 10.15		Presenter 2
10.15 - 10.30		Presenter 3
10.30 - 10.45		Presenter 4
10.45 – 10.55	Opening of Parallel Session 2	Session Chairs (5 Rooms)
10.55 – 11.10	Presentations of Parallel Session 2	Presenter 1
11.10 - 11.25		Presenter 2
11.25 - 11.40		Presenter 3
11.40 - 11.55		Presenter 4
12.00 - 13.00	Lunch Break	
13.00 – 13.10	Opening of Parallel Session 3	Session Chairs (5 Rooms)
13.10 - 13.25	Presentations of Parallel Session 3	Presenter 1
13.25 - 13.40		Presenter 2
13.40 - 13.55		Presenter 3
13.55 - 14.10		Presenter 4
14.10 – 14.20	Preparation for Plenary Session	All participants and committee
14.20 – 14.25	Opening of Plenary Session	MC: Muhammad Azhari, SE, MBA
14.25 - 14.30	Report Speech	Chairperson (Jurry Hatammimi, Ph.D)
14.30 - 14.45	Telkom University's Rector Speech	Represented by Vice Rector for Academic Affair, Dr. Dadan Rahadian Zoom Link: https://zoom.us/j/93873511012
14.45 - 15.15	Keynote Speech	Prof. Alexandros Psychogios
15.20 - 17.00	Panel Discussion of Invited Speakers	Moderator (Dr. Fetty Poerwitasary)
		Speaker 1 (Dr. Marianne Afanassieva)
		Speaker 2 (Dr. Muhammad Awaluddin)
		Speaker 3 (Yose Rizal)
17.00 - 17.30	Best Paper Awards, Best Presenter Award, Giveaways announcement and Closing Speech	Chairperson (Jurry Hatammimi, Ph.D)

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1. Kindly display your name as formatted below:
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Room_Author Name_Paper ID, Example: 1_Ariana Grande_123
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3. Please manage your time when presenting your paper. Every presenter will be given 15 minutes, 10 minutes for presentation, and 5 minutes for Questions & Answers.
4. The session chair in every room will be the time keeper who will remind the presenters about the remaining time within the presentation.
5. The whole event in this conference (plenary and parallel sessions) will be recorded for the documentation. The plenary session will also be live streamed on SEB Telkom University's YouTube channel while the parallel sessions' recording will only be given to the presenter upon request.
6. Audiences' microphone will be muted during the presentation. The audience can deliver questions to presenters by typing the questions in the chat feature in Zoom.
7. Due to the limited time, the questions from participants and audiences will be selected and adapted by moderator to be answered by the presenter.
8. Participants and presenters can only join one room during the whole parallel session.
9. Participants and presenters should update their Zoom application to the latest version.
10. Certificate of attendance can be accessed by participant after filling out the questionnaire after the event.

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2. The format of presentation file name is: Room_Author Name_Paper ID
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3. Please fill the form of Copyright Agreement and submit it in *.pdf file format.

PRESENTATION SCHEDULE – Marketing Track – ROOM 1

Session Chair: Indira Rahmawati, Ph.D

Zoom Link: <https://zoom.us/j/97688203717>

1st session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	09.35	09.45	10	Session Chair: Indira Rahmawati, Ph.D		
1.	09.45	10.00	15	Mohammad Rynaldi Faisal AK, Wawan Dhewanto	Sales Conversion Rate In e-Commerce Shopee: Case Dari Bandung Project Store	152
2.	10.00	10.15	15	Nurchelly Rahmah, Eko A Prasetyo	Proposed New Marketing Mix Strategy To Increase (Case Arine)	172
3.	10.15	10.30	15	Dinda Amanda Zulestiana	Digital Marketing Strategies For Small Business In Industries 4.0	242
4.	10.30	10.45	15	Refi Rifaldi Windya Giri, Fandi Kurnia Putra, Tarandhika Tantra	Is Culture Magnified The Intention To Use Of Internet Banking? A Study Of Modified UTAUT With Hofstede Culture Theory	194

2nd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	10.45	10.55	10	Session Chair: Indira Rahmawati, Ph.D		
1.	10.55	11.10	15	Refi Rifaldi Windya Giri, Dinny Aprilianni, Tarandhika Tantra	The Analysis of Multi Dimensional Trust And Perceived Risk Using LUO – Modified UTAUT Model On Acceptance Of Internet Banking Service In Indonesia	195
2.	11.40	11.55	15	Mandeep Kumar Kushwaha	A Perspective View On The Covid – 19 Impact On Micro Small And Medium Enterprise (MSMEs) In Indonesia	219

3rd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	13.00	13.10	10	Session Chair: Indira Rahmawati, Ph.D		
1.	13.10	13.25	15	Eristiar Syah Permana Tarigan, Gadang Ramantoko	Marketing Strategy In Indonesian Sharia E-Money Companies Using Descriptive Analysis Marketing Management	238

2.	13.25	13.40	15	Tarandhika Tantra, Refi Rifaldi Windya Giri, Abul Aziz Ramadhan	Consumer Resistance To Internet Banking (Study On Non Adopter Internet Banking)	248
3.	13.40	13.55	15	Arvi Damayanti, Erni Martini	Measuring Tools To Identify Correlation Between Brand Experience Towards Brand Equity In E-Commerce (Case Study: Lazada Indonesia)	249
4.	13.55	14.10	15	Teguh Widodo, Mochammad Yudha Febrianta	The Effect Of Market Orientation On Market Performance Intervended By Product Innovation And Moderated By Education Level	255

PRESENTATION SCHEDULE – Marketing, Strategic, Operation and Information Management – ROOM 2

Session Chair: Ratih Hendayani, Ph.D

Zoom Link: <https://us02web.zoom.us/j/84087820593?pwd=TzhaTUxuQ0xZeDUyTVpDWmNPZkVhQT09>

1st session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	9.35	9.45	10	Session Chair: Ratih Hendayani, Ph.D		
1.	9.45	10.00	15	Rennyta Yusiana, Arry Widodo	Impact of Brand Positioning And Brand Knowledge On Purchase Intention Using The PLS-SEM Approach	158
2.	10.00	10.15	15	Herliani, Whony Rofianto	E-Satisfaction & E-Trust Driving Factors And Its Implications On Customer Loyalty: A Research On The Groceries Application	169
3.	10.15	10.30	15	Teguh Widodo, Vany Octaviany	The Role of Switching Cost In Increasing The Effect Of Service Quality to Customer Loyalty	174
4.	10.30	10.45	15	Abdi Januar, Dodie Tricahyono	The Effect Of Service Quality Of My Telkomsel Toward Customers Satisfaction And Company Image As Well As The Impact On Customers Loyalty	178

2nd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	10.45	10.55	10	Session Chair: Ratih Hendayani, Ph.D		
1.	10.55	11.10	15	Tri Widarmanti, Refi Rifaldi Windya Giri, Muhammad Rizky Rianto	Group Analysis Non User Of Internet Banking With Costumer Resistance To Innovation Approach In Indonesia	204
2.	11.10	11.25	15	Ario Pudianingrat, Maya Ariyanti	The Impact Of Costumer Interactions In Social Media Marketing Activity On Brand Awareness, Electronic Word Of Mouth (EWOM) & Purchase Intention For Internet Plan Based On IMEI (TAU Plan)	206
3.	11.25	11.40	15	Tonda Priyanto, Cahyana Ahmadjayadi, Agung Sutanto Adi SUsetyo	Envisioning Role Of Leaders In Developing Corporate Learning In Post Pandemic Era.	148
4.	11.40	11.55	15	Osphanie Mentari Primadiarti, Anna Christina Situmorang	Cellular Operator Strategic In A Coronavirus Pandemic.	196

3rd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	13.00	13.10	10	Session Chair: Ratih Hendayani, Ph.D		
1.	13.25	13.40	15	Ratih hendayani, Auda Akmal Majid, Grisna Anggadwita	Criteria of Supplier Selection For A Small Coffee Shop Business	239
2.	13.55	14.10	15	RR. Rieka Febriana Hutami, Alif Ramdhan Putra Anam	Optimizing Seaport Capacity For Container Loading Terminal	252

PRESENTATION SCHEDULE – Economics, Finance, and Accounting Track – ROOM 3

Session Chair: Dr. Astrie Krisnawati

Zoom Link: <https://us02web.zoom.us/j/89200980588?pwd=RkFORE04NmZOemFBOVpqN2Jyb0JrZz09>

1st session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	09.35	09.45	10	Session Chair: Dr. Astrie Krisnawati		
1.	09.45	10.00	15	Pande Made Rahayu Srijayanti, Tieka Trikartika Gustyana	Optimal Portofolio Analysis On Shares Included In 100 Excellent Growth Companies Ranks Category Using The Single Index Model	230
2.	10.00	10.15	15	Fajra Octrina, Alia Gantina Siti Mariam	Productivity And Efficiency Of Islamic Banking In Indonesia	218
3.	10.15	10.30	15	Tri Utami Lestari, Ardan Gani Asalam	Analysis of Factors Affecting Internet Facial Reporting at LQ 45	227
4.	10.30	10.45	15	Ardan Gani Asalam, Tri Utami Lestari	The Effect Of Good Corporate Governance On Tx Avoidance	228

2nd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	10.45	10.55	10	Session Chair: Dr. Astrie Krisnawati		
1.	10.55	11.10	15	Willy Sri Yuliandhari, Rizka Enggar Novitasari	The Effect Of Management Ownership, Institutional Ownership, And Independent Commissions On Return On Assets (A Study of The Manufacturing Companies In The Consumer Goods Sector In 2014 - 2018)	240
2.	11.10	11.25	15	Vaya Juliana Dillak, Annisa Pratamanti, Sri Rahayu	Income Smoothing On The Consumer Goods Industry Company Listed At Indonesia Stock Exchange (BEI)	245
3.	11.25	11.40	15	Dudi Pratomo, Athiyya Nadhifa Nuraulia	The Effect Of Institutional Ownership, Managerial Ownership And Ownership Concentration On Earnings Persistency	259

4.	11.40	11.55	15	Wiwin Aminah, Luthfiyatul Farida	Ajeng	Internal Control Of Fraud With Enterprise Risk Management (ERM) as Intervening Variables In Insurance Emitens Listed In Indonesia Stock Exchange	236
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3rd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	13.00	13.10	10	Session Chair: Dr. Astrie Krisnawati		
1.	13.10	13.25	15	Aldilla Iradiany, Khusnul Khotimah	Analysis Of The Effect Of Bank Soundness On Stock 2010 – 2019 Period	151
2.	13.25	13.40	15	Astrie Krisnawati, Wahdan Arum Inawati, RR. Sri Saraswati.	Mapping Of Corporate Social Responsibility Performance Based On Triple Bottom Line: An Evidence From Indonesia	157
3.	13.40	13.55	15	Yusnita Octafilia Theresia A Yesu Infante, Putu Rani Susanthi, Evelyn Wijaya	Regional And Commercial Banks Development In Indonesia After Global Economic Crisis	168

PRESENTATION SCHEDULE – Human Resource Track – ROOM 4

Session Chair: Ella Sagala, S.Psi., M.Psi.

Zoom Link: <https://us02web.zoom.us/j/4784556400?pwd=SlZUQVpUejNmSS9ucGhLnBhY241dz09>**1st session**

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	09.35	09.45	10	Session Chair: Ella Sagala, S.Psi., M.Psi.		
1.	09.45	10.00	15	Sukatno, Maruf Akbar, Rd. Tuty Sariwulan	Improving Service Oriented Organizational Citizenship Behavior (Nurses in Regional Public Hospitals (RSUD) Dr. Soediran Mangun Sumarso District Wonogiri Central Java Province	197
2.	10.00	10.15	15	Ratri Wahyuningtyas, Theo Brian Ananto	Employee's Readiness And Strategy To Adapt Digital Transformation	210
3.	10.15	10.30	15	Nur Halimah, Nidya Dudija	Implementation of Lean Manufacturing in Indonesia	183
4.	10.30			Puspita Wulansari	The Effect of Compensation And Motivation On Job Satisfaction Of Gojek Bandung Driver Partner	254

2nd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	10.45	10.55	10	Session Chair: Ella Sagala, S.Psi., M.Psi.		
1.	10.55	11.10	15	Hernawaty	The Role Of Job Satisfaction In Realtionship Among Emotional Intelligence, Work Stress, Quality Of Work Life And Intention To Leave Of Civil Servants (Study IN Border Area Of Kalimantan Island – Indonesia)	146
2.	11.10	11.25	15	Nopriadi Saputra, Farid Ardyansyah, Dyah Palupiningtyas, Bahri, Nuriana Thoha.	Tracing Predictors Of WFH Productivity: A Structural Equation Modelling	167
3.	11.25	11.40	15	Harry Ridho Alfikri , Nidya Dudija	The Influence Of Islamic Religiosity On Turnover Intention Using Subjective Well Being As Intervening Variable At Bank X Had Office	193
4.	11.40	11.55	15	Audi Isra Eprillia, Anita Silvianita	The Influence Of Online Behavior Through Knowledge Sharing Intention On Telekomunikasi Sharing Behavior At The Digital Business Directorate Of PT. Telkeomunikasi Indonesia Tbk, Kota Bandung.	142

3rd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	13.00	13.10	10	Session Chair: Ella Sagala, S.Psi., M.Psi.		
1.	13.10	13.25	15	Nopriadi Saputra, Harry Sutanto	Learning Engagement and e – Satisfaction: Impact of Digital Lecturing Capability on Online Learning Experience	166
2.	13.25	13.40	15	Sawir Rifatullah Akil, Imas Soemaryani, Hilmiana, Joeliaty	Improvement Of Public Sector Organization Performance Through Innovation Based On Collaboration And Knowledge Management	149
3.	13.40	13.55	15	Yoke Pribadi, Agus Gunawan, Angela Caroline, Andrew Harnadi	Knowledge Based Training System In The New Normal	163
4.	13.55	14.10	15	Niken Ulyana Nainggolan, Ade Irma Suryani	Training Program Evaluation By Using Four Level Kirkpartricks Method At A Company In Bandung West Java Indonesia	175

PRESENTATION SCHEDULE – Entrepreneurship , Strategic, and Operation and Information Management – ROOM 5

Session Chair: Eka Yuliana, ST, MSM

Zoom Link: <https://us02web.zoom.us/j/86143079250?pwd=Q2FSdDIStEF6Mmt0ditJSjFmZXdCdz09>

1st session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	09.35	09.45	10	Session Chair: Eka Yuliana, ST, MSM		
1.	09.45	10.00	15	Reynaldo Dwi Franata, Retno Setyorini	Costumer Profile Analysis Of Manen. ID Using Empthaty Map Approach Method	160
2.	10.00	10.15	15	Agung Ariwibowo, Sonny Rustadi	Business Strategy of Young Entrepreneur Academi Indonesia In The New Normal Era	176
3.	10.15	10.30	15	Dodie Tricahyono	Emotional Dynamics Dialogue, And Organisational Innovativeness of Indonesian Private TV Stations	220
4.	10.30	10.45	15	Ovalia Rukmana, Amal Ahmad Khair	Exploring Online Teaching And Learning Process During Covid 10 In Indonesian Higher Education Institutions	153

2nd session

NO.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	10.45	10.55	10	Session Chair: Eka Yuliana, ST, MSM		
1.	10.55	11.10	15	Vinayu Anggerina, Kiki Sudiana, Fajar Prabowo	The Influence Of Business Incubator On Startups	192
2.	11.10	11.25	15	Maria Sugiat	Value Creation In Online SMEs Business facing The Covid – 19 Pandemic in West Java	211
3.	11.25	11.40	15	Banowati Talim	O r g a n i z a t i o n a l Atmosphere That Support To Humane E n t r e p r e n e u r s h i p Implementation	155
4.	11.40	11.55	15	Erik, Lupi Yudhaningrum, R. A. Fadhallah	The Effect Of Family Background On Entrepreneurial Intention In Psychlogy Students Of Jakarta State University	165

3rd session

No.	Start	End	Duration	Presenter Name	Paper Title	Paper ID
	13.00	13.10	10	Session Chair: Eka Yuliana, ST, MSM		
1.	13.10	13.25	15	Lupi Yudhaningrum, Zarina Akbar, Waode Imani Ismi, Rahadita Rifayanti	Self Efficacy, Risk Taking And Entrepreneurial Intentiton Among Students	221
2.	13.25	13.40	15	Intan Ayu Septianingrum	Identification Of The Effectiveness Of Smart City Program Information Delivery Through Instagram With Sentiment Analysis Approach (Based On The Governor Of Central Java Province Instagram Account @ Ganjarpranowo Period January 20, 2019 To February 20, 21)	237

SALES CONVERSION RATE IN E-COMMERCE SHOPEE: CASE FROM BDG PROJECT STORE

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Abstract

Indonesia's e-commerce industry holds much promise for the retail industry. Google-Temasek e-Conomy SEA 2019 Report project that e-commerce value in Indonesia is estimated to increase from US\$ 21 billion in 2018 to US\$ 82 billion in 2025. E-commerce will contribute significantly to Indonesia's GDP in the retail sector, with value US \$ 20 billion that equivalent to 2-3% of GDP in 2022 (Word Market Monitor, 2018).

From BDG Project (FBP) is an e-commerce store that sells home living products at e-commerce Shopee Indonesia. Since it was founded in January 2019, FBP has managed to sell 50,000+ pcs products and has succeeded in getting 18,000+ positive reviews with an almost perfect rating of 4.8/5.0 stars. FBP is visited by more than 45,000 Shopee users every month. However, the sales conversion rate is only 5.6%. FBP wants to increase its sales by increasing its sales conversion rate.

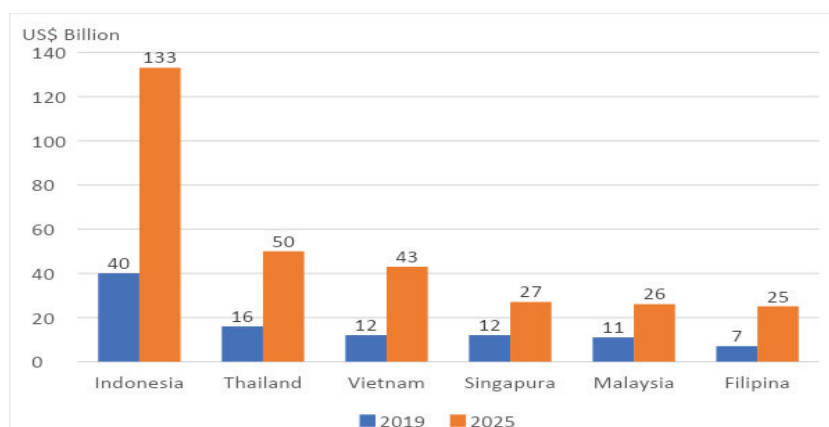
To understand consumer behaviour in purchasing decisions at Shopee after visiting the product, questionnaires have distributed to 500 internet users in Indonesia who had made purchases at Shopee. Based on the analysis of the respondent's answers, things that FBP can do to increase the sales conversion rate are revise product information at Shopee product page, maximize potential buyer opportunities, and open a branch store in Jakarta and other big cities, create a giveaway program for creative product reviews and make a new division, quality control (QC).

Keywords: Consumer Behaviour, e-commerce, Sales Conversion Rate, Marketing Strategy.

1. INTRODUCTION

Indonesia is a market with an attractive amount of e-commerce growth. The development of e-commerce in Indonesia can also be seen from its rapidly growing economic value. Figure 1 shows that based on Google, Temasek and Bain research reports titled e-Conomy SEA 2019, in 2025, Indonesia estimated to contribute around US\$ 133 billion in the digital economy.

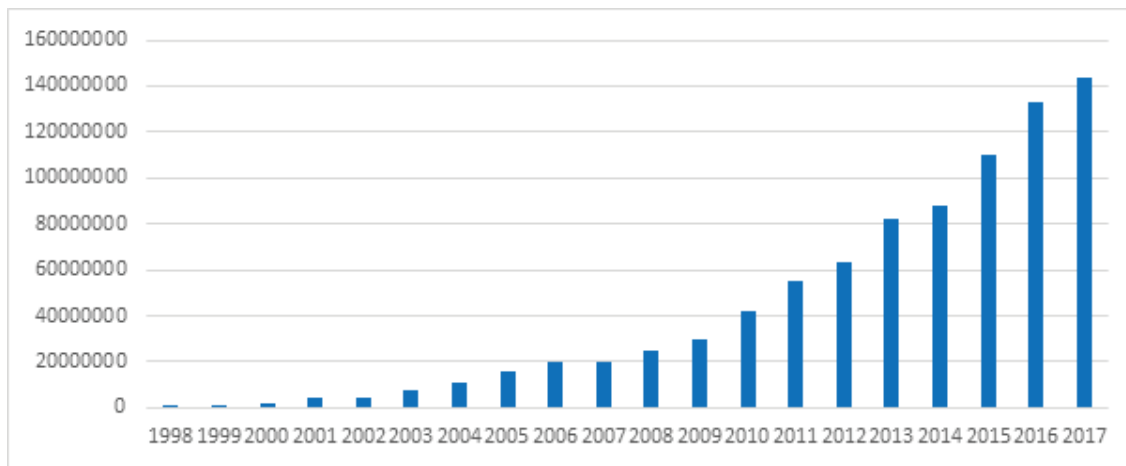
Figure 1 Digital Economic Value Projection in Southeast Asian Countries 2019 and 2025



Source: katadata.co.id, 2019

Indonesia's e-commerce market value is estimated to increase from US\$ 21 billion in 2018 to US\$ 82 billion in 2025. Based on Indonesia's national economy, e-commerce will contribute significantly to Indonesia's GDP. E-commerce is projected to contribute revenue in the retail sector of US \$ 20 billion, equivalent to 2-3% of Indonesia's GDP in 2022 (Word Market Monitor).

Figure 2 Internet Users in Indonesia (1998-2017)



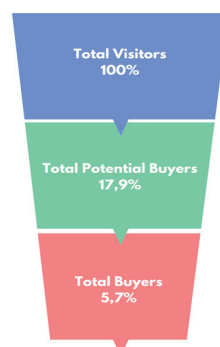
Source: APJII, 2018

Figure 2 shows the high number of Internet users growth in Indonesia that support the development of Indonesian e-commerce. There are 171.17 million internet users in Indonesia that if compared to protection total population of Indonesia 265 million people it means that the penetration rate of internet users in Indonesia has reached 64.6% in 2018. This figure is up 10.12% compared to the penetration in 2017, which was only 54.8%. The APJII survey in 2018 also showed that out of 171.17 million internet users, it known that 46.6% of internet users had bought goods via online, the majority answered buying on the Shopee platform by 11.2%, Bukapalak platform by 8.4%, Lazada platform at 6.7%, and shopping on the Tokopedia platform at 4.3%. In comparison, the remaining 53.4% of internet users have never bought goods online. Internet users by 53.4% indicate that there is great potential for e-commerce players in Indonesia, that there are still many Indonesian citizens who have become internet users but have not used it for shopping online.

From BDG Project (FBP) is an e-commerce store that sells home living products at e-commerce Shopee Indonesia. Since it was founded in January 2019, FBP has managed to sell 50,000+ pcs products and has succeeded in getting 18,000+ positive reviews with an almost perfect rating of 4.8/5.0 stars. FBP is visited by more than 45,000 Shopee users every month. However, the sales conversion rate is only 5.6%. FBP wants to increase its sales by increasing its sales conversion rate.

The products that FBP sells are products with mixed categories because FBP sells any product that has proven to be marketable based on the results of Big Data research. The majority of categories it sells are household products. Household products were chosen because they have a long life in the product life cycle so that it will avoid deadstock due to the coming of new products model. Some of the products that FBP sells are mouse traps, Korean magic dishwashing gloves, Vietnamese drip coffee home filters, manual hand coffee grinder, special panties for after circumcision, kalimba African traditional music instrument, and digital kitchen scales.

Figure 3 FBP Conversion Rate in Shopee Indonesia



While selling on the e-commerce Shopee Indonesia, FBP has success get a large number of visitors with more than 45,000 visitors per month (Processed Author Data, 2020). However, from a large number of visitors, the conversion rate that occurred from visitors to the customer showed a low percentage, it is only 5.6%. It is mean that, from 45,000 visitors, only 5.6% visitor or 2,520 people bought FBP products, and the remaining 94.4% visitor or 42,480 people who were interested and saw FBP products, did not buy for various reasons (Figure 3). With the high number of visitors who do not buy reaching 94.4%, FBP feels it has thrown away the potential sales it can do.

This research expected help FBP and others Shopee sellers understand the consumer behavior and desires of buyers at Shopee to increase their sales through increasing sales conversion. Through increase its sales by maximizing existing visitors FBP able to increase sales without having to spend additional resources and costs to increase the number of visitors.

2. LITERATURE REVIEW

2.1 CONCEPTUAL FRAMEWORK

The conceptual framework itself is explained as to present an integrated way of looking at a problem under study (Liehr & Smith, 1999). Using this framework, the concept within the problem of the research will be easily specified and defined (Dixon, Gulliver, Gibbon, & Hall, 2001).

2.2 RESEARCH METHODOLOGY

Research Methodology is the researcher's method in gathering the data, such as interviews, observation, tests, and documentation (Arikunto, 2002). Besides, research methodology is a way to get back the solution to all problems (Subagyo, 2006).

2.3 PRIMARY AND SECONDARY DATA

Based on the source of data used in this research, there are two types of data: primary and secondary. Primary data is the data obtained and collected directly in the field, including interviews and observation. In contrast, secondary data is the data used to support the primary information collected by people who research existing sources such as books, literature, journal, the internet, and so forth (Hasan, 2002). The primary data in this research obtained directly from FBP customer and Shopee User opinion with questionnaires. The secondary data obtained from previous researches, books, and FBP internal data.

2.4 E-COMMERCE

E-commerce (electronic commerce) is the process of buying and selling goods electronically by consumers and from company to company through computerized business transaction (Laudon, 1998). Besides, E-Commerce is a dynamic set of technologies, applications, and bussines process that link enterprises, consumers, and communities through electronics transactions and the electronic exchange of goods, services, and informations (David, 1999).

2.5 CONSUMER BEHAVIOUR

Consumer behaviour is the actions taken by individuals, groups, or organizations related to the decision-making process in obtaining, using economic goods or services that can be influenced by the environment (Mangkunegara, 2002). Besides, consumer behaviour is the action directly involved in obtaining, consuming, and consuming products and services, including the processes that precede and follow these actions (Engel et al, 2010).

2.6 CONSUMER ANALYSIS

Consumer Analysis needs to be done to determine the market needs, targets that are appropriate to what our company is like, demographics, and other relevant information that companies want to know through market research (MBA Skool, 2011)

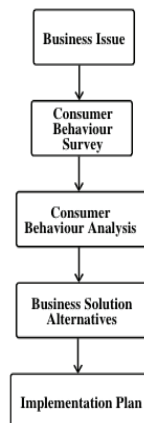
3. METHODOLOGY

3.1 CONCEPTUAL FRAMEWORK

Low sales conversion rates become the business issue of FBP. FBP wants to maximize sales potential by encouraging more visitors who have seen FBP products to make transactions then make payments. Therefore to determine the appropriate marketing strategy of FBP's current business issue, a systematic stage to analyze it should be made in a conceptual framework. Figure 4 shows the conceptual framework of the research. This research will start with consumer behaviour survey by distribute questionnaires to buyers on the Shopee Indonesia platform in general and FBP buyers in particular. Based on existing data and analysis, business solution alternatives will be

determined to solved FBP business issue.

Figure 4 Conceptual Framework



3.2 DATA COLLECTION

Understanding consumer behaviour is necessary so that companies can make plans and make decisions based on consumer desires. In e-commerce Shopee, where FBP sells, consumers have a large selection of stores that sell products that consumers want. It is necessary to get primary data to understand how the Indonesian online shopping behaviour is in purchasing decisions at Shopee Indonesia to increase the sales conversion rate at the store at Shopee.

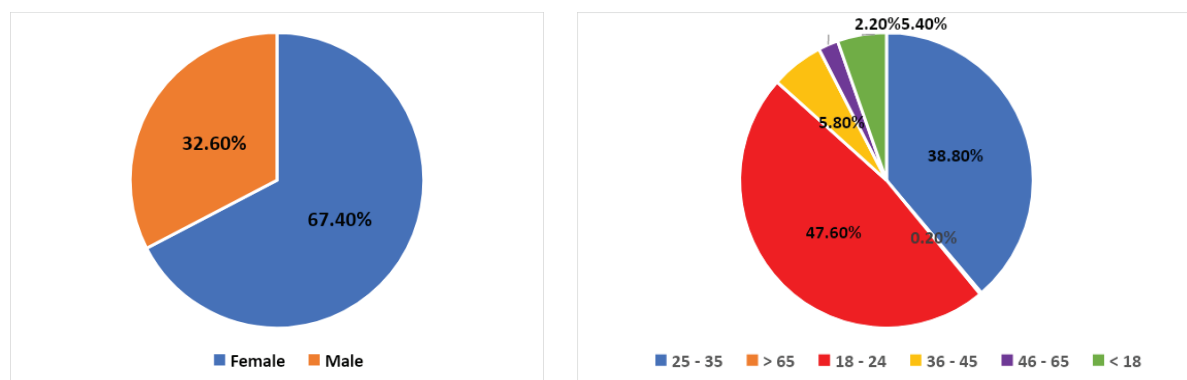
The researcher has distributed online questionnaires “Indonesian Online Shopping Behavior in Purchasing Decisions at Shopee Indonesia” via Google Form to internet users throughout Indonesia in general and to consumers who have purchased products at the Shopee FBP store. The online questionnaire has been filled by 647 respondent. Of the 647 respondent data, invalid data were deleted, namely respondents who had never shopped at Shopee and cleaning data indicated as duplicate. Data was obtained from 500 valid respondents who had made purchases at Shopee using the Shopee application on smartphones.

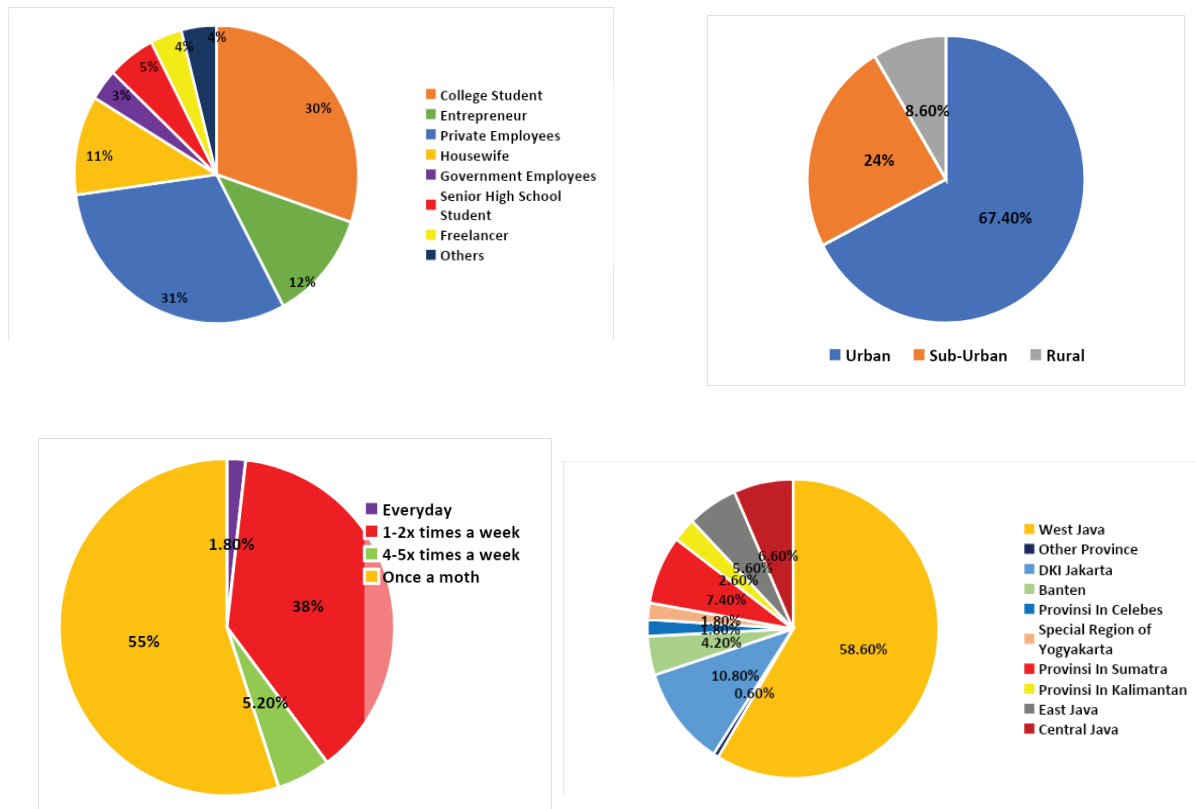
4. FINDINGS & DISCUSSION

4.1 RESPONDENT PROFILE

Based on the data 500 respondent’s answer to the questionnaire “Indonesian Online Shopping Behaviour in Purchasing Decisions at Shopee Indonesia, the following Figure 5 is the profile of the respondents who filled out the questionnaire:

Figure 5 Respondent Profile





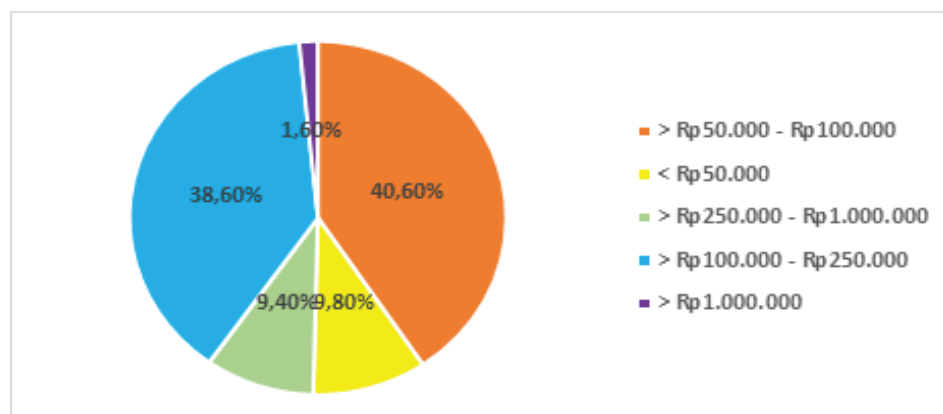
4.2 CONSUMER BEHAVIOUR ANALYSIS

4.2.1 SHOPPING HABITS AT SHOPEE

In this section, the respondent is given questions to determine the shopping habits of consumers at Shopee.

4.2.1.1 PRICES OF PRODUCTS PURCHASED AT SHOPEE

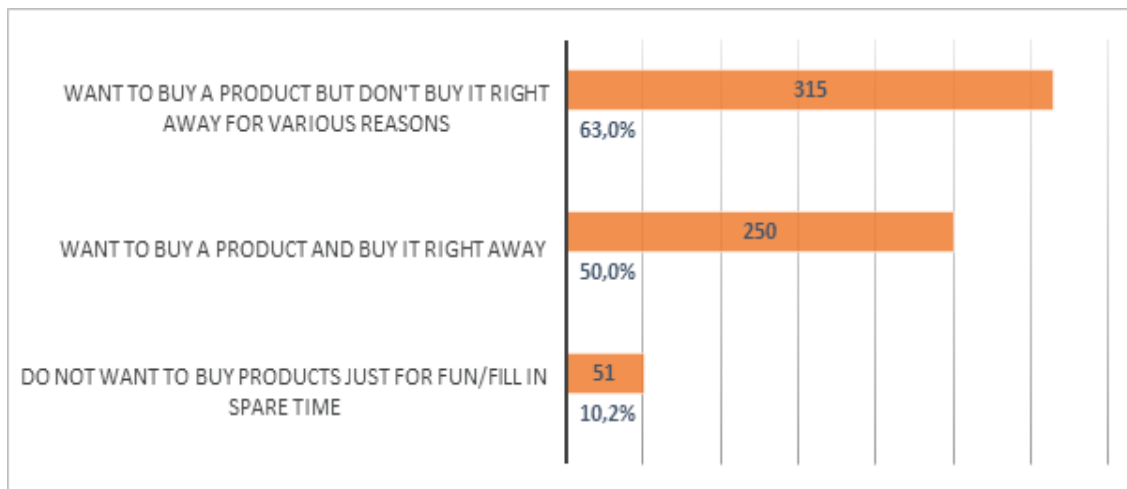
Figure 6 Prices of Products Purchased at Shopee



From the data, FBP product prices can be seen in Figure 6 which range from IDR 2,500 - 35,000, are still included in the product price range that Shopee users often buy. In research and development of new products, FBP can sell new products that have a higher price with a price range of IDR 50,000 - 250,000. It is suitable for the price range that usually purchased by 84.6% (396 respondents), so that is still affordable for Shopee users.

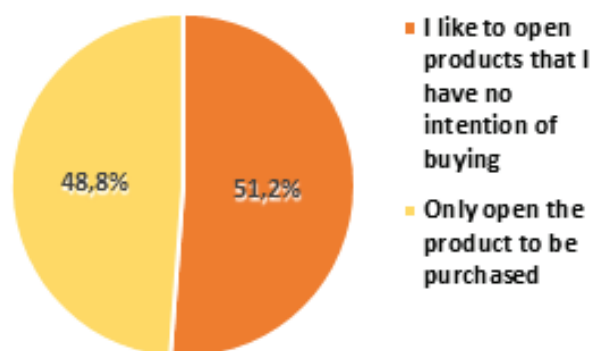
4.2.1.2 PURCHASE INTENTION WHEN VIEWING PRODUCTS ON SHOPEE

Figure 7 Condition to Search and View Product on Shopee



Respondents were asked to choose when they searched and viewed products on Shopee. Respondents can choose more than one reason as an answer. Figure 7 shows the majority of respondents, 63% (315 respondents) stated search and view product when want to buy a product but do not buy it right away for various reasons, and 50% (250 respondents) indicated search and view product when want to buy a product and buy it right away. The rest of the respondents numbered 10,2% (51 respondents) state search and view the product, but do not want to buy products, they only browse in Shopee just for fun and fill in spare time.

Figure 8 The Habit of Opening Products at Shopee Search Result



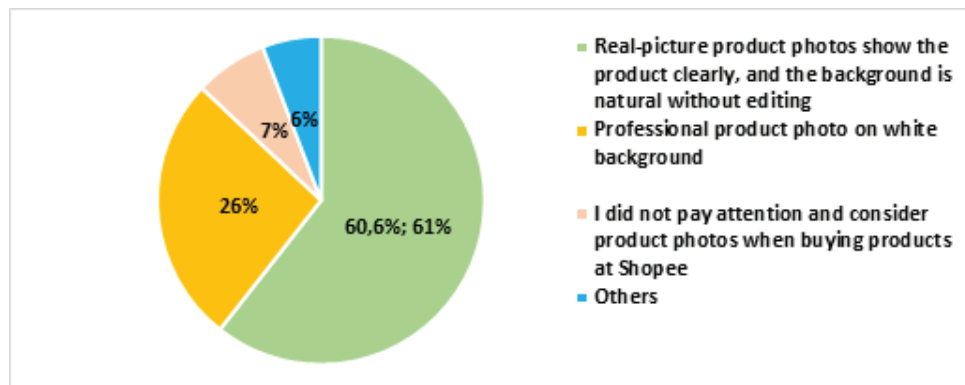
To better understand consumer behaviour in opening products at Shopee, respondent asked questions about the habits of opening products in Shopee search results. Figure 8 shows more than half of the respondents at 51.2% (256 respondents) like to open products because of curiosity but not have the intention of buying and only 48.8% (244 respondents) that only open the product to be purchased. Based on the respondent's answer data, it can be seen that one of the biggest reasons for low FBP sales rate conversion is like to open products because curious but not have the intention of buying many consumers who want to buy but do not buy it right away for various reasons.

4.2.2 SHOPPING CONSIDERATIONS WHEN VIEWING PRODUCT PAGES ON SHOPEE

In this section, respondents are asked questions to determine what information Shopee users consider when viewing product pages on Shopee. This is related to the purchase decision that Shopee users will make when they have seen detailed product information on the product page. Shopee users who have reached the stage of viewing this product page will be counted as visitors to Shopee's store statistics. The following is the respondent's answer to each section on the Shopee product page.

4.2.2.1 THE MORE RELIABLE PRODUCT PHOTOS

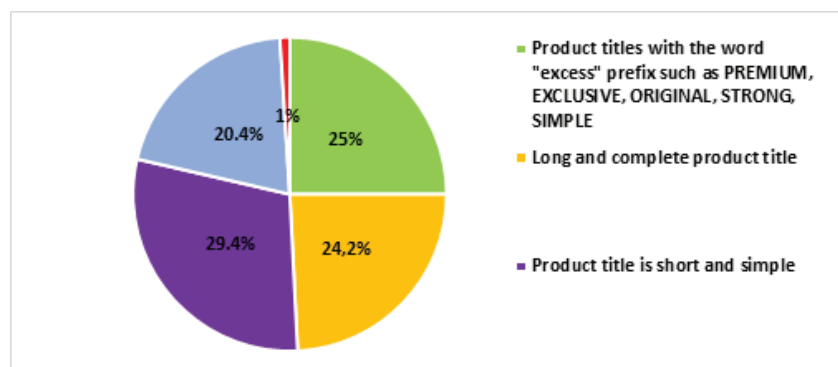
Figure 9 The More Reliable Product Photos



Based on the question regarding the more convincing product photo to buy, in Figure 9 it can be seen that the majority of respondents at 60.6% (303 respondents) prefer real-picture product photos to show the product clearly, and the background is natural without editing. Based on the respondent's answers above, it is recommended that FBP use real picture photo product with a natural background.

4.2.2.2 THE MORE RELIABLE PRODUCT TITLE

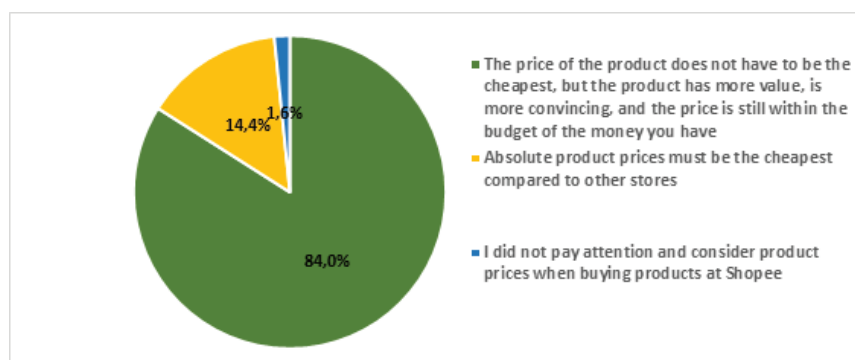
Figure 10 The More Reliable Product Title



Based on the question regarding the product title, which is more convincing when buying Shopee, it can be seen in Figure 10 It is recommended that FBP use the type of title that Shopee users like the most, namely short, simple, and clear titles. Using headlines that are to the point will help improve the position of FBP products in the organic search results for related products on Shopee.

4.2.2.3 THE MORE RELIABLE PRODUCT PRICES

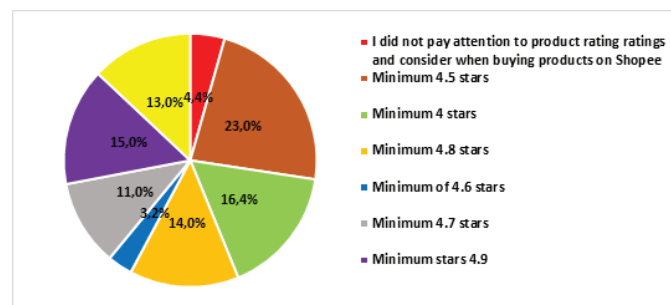
Figure 11 The More Reliable Product Prices



The results can be seen in Figure 11 that 84% (420 respondents) answered that they prefer product at a price, not the cheapest, but the product has more value, is more convincing, and the price is still within the budget of the money that respondent has. Based on the respondent's answer above, the information that selling products in e-commerce must be at the lowest price is the wrong information. FBP's strategy of selling products at prices that are not the cheapest can be continued, but there must be added value that makes buyers more confident and willing to buy products at FBP.

4.2.2.4 THE MORE RELIABLE PRODUCT RATING

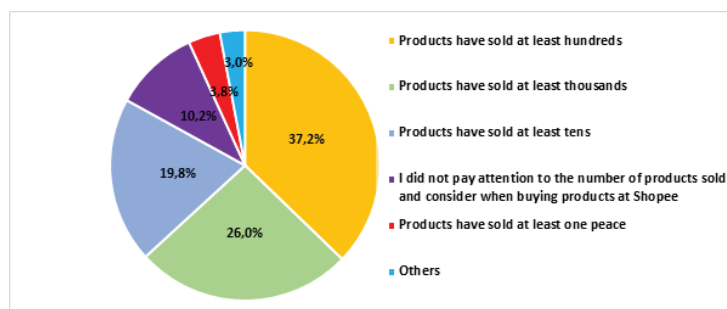
Figure 12 The More Reliable Product Rating



The answers of the respondents can be seen in Figure 12 shows that Shopee users do not pay too much attention to numerical product rating. Based on the data from the questionnaire results, the FBP product rating, which is in the numbers 4.7 - 5.0 has met the majority of respondents' preferences. It is recommended that the product rating, which is in the numbers 4.7 - 4.9, be increased again to 5.0 to convince Shopee users as a whole.

4.2.2.5 THE MORE RELIABLE PRODUCT SOLD

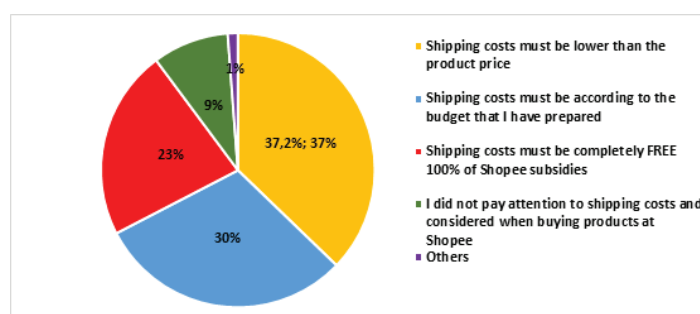
Figure 13 The More Reliable Product Sold



The results can be seen in Figure 13 the majority of respondents, 37.2% (186 respondents) believed in buying products have sold at least hundreds. It is recommended that FBP has a minimum sales of hundreds so that it can immediately convince visitors to buy products at FBP. The strategy of selling products at low prices and thin margins at the beginning to get the number of products sold in the hundreds can be done to accelerate the increase in the number of products sold.

4.2.2.6 THE MORE RELIABLE SHIPPING COST

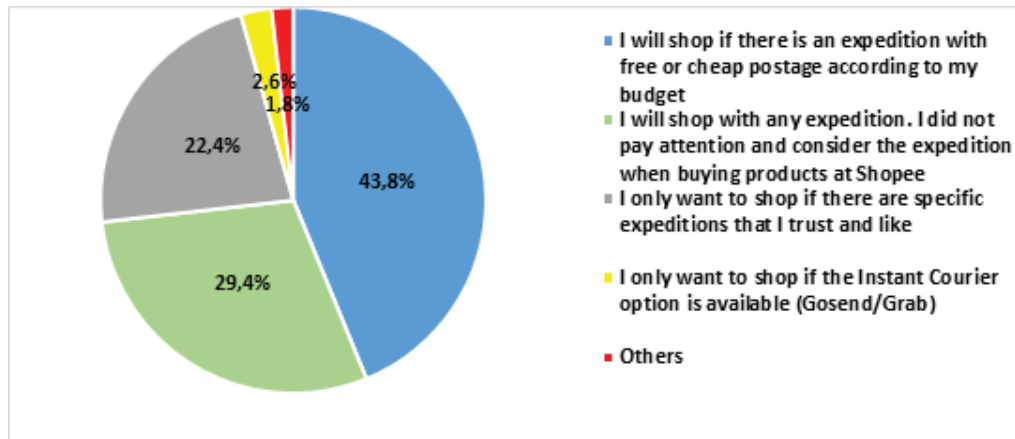
Figure 14 The More Reliable Shipping Cost



Based on the respondent's answer indicated by Figure 14 it is recommended that FBP sell products at a higher price than the shipping cost. This is to avoid consumers who do not want to buy goods because the shipping cost is more expensive. Another step that FBP must take is to take part in a discount or free shipping cost program from Shopee, such as "GRATIS ONGKIR XTRA.

4.2.2.7 THE MORE RELIABLE AVAILABILITY EXPEDITIONS

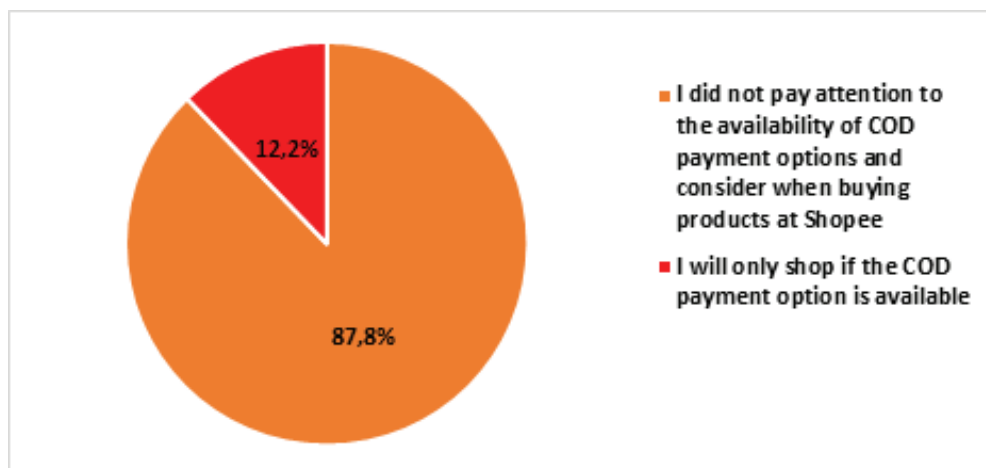
Figure 15 The More Reliable Availability Expeditions



Based on the question regarding the preference for the availability of a more convincing expedition when shopping at Shopee, can be seen in Figure 15 that the majority of respondents, 43.8% (219 respondents) answered will buy if there is an expedition with free or cheap shipping cost. Based on the respondent's answer, FBP is required to open delivery options using cheap expeditions and has free shipping programs at Shopee, namely SiCepat, J&T Express and Ninja Express. To convince respondents who choose the other answer, FBP is advised to open all available expedition options so that consumers can choose whatever expedition they want.

4.2.2.8 THE MORE RELIABLE AVAILABILITY OF COD PAYMENT

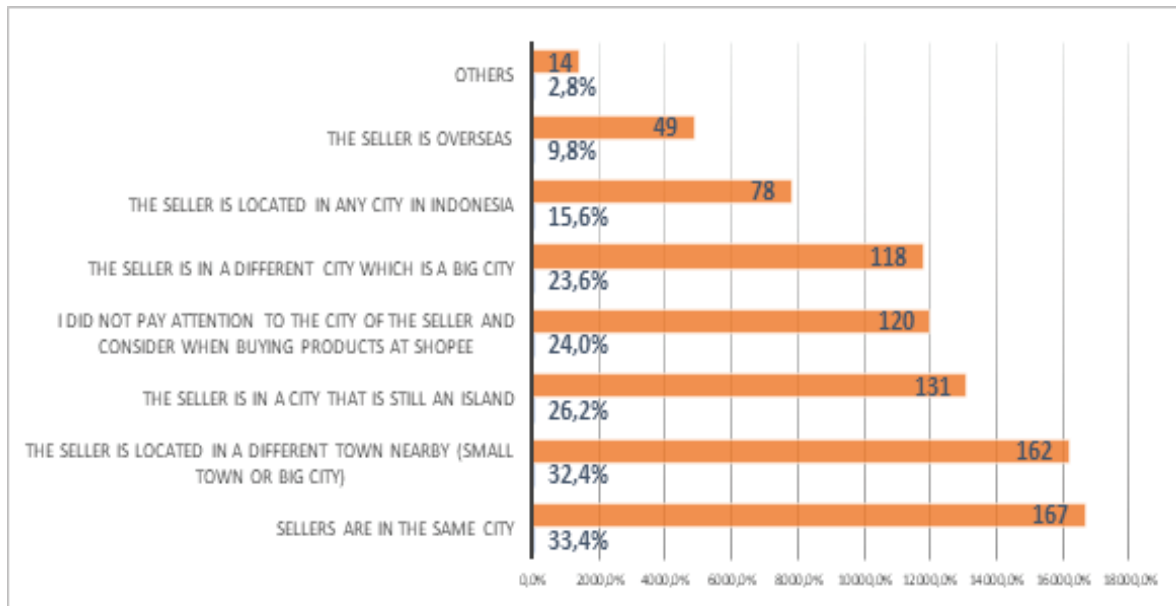
Figure 16 The More Reliable Availability of COD Payment



Based on the respondent's answer data on Figure 16, although almost all respondents did not consider COD availability as necessary, FBP was advised to open the COD option to accommodate Shopee users wishes who would only shop if they could pay via COD. In anticipation of COD returns, FBP must create a COD package tracking system to ensure that COD package buyers place their orders correctly and prepare cash to make payments to couriers who deliver their COD package.

4.2.2.9 THE MORE RELIABLE LOCATION OF THE SELLER

Figure 17 The More Reliable Location of The Seller



Based on the respondent's answer that can be seen in Figure 17 it is known that the majority of the respondents shop from sellers who are in the same city, cities that are near, and cities that are on the same island where the respondent lives. Currently, FBP only has one shop and warehouse in Bandung City. FBP should open branch stores outside Bandung City to reach more consumers. The recommended city for FBP to open a branch in Jakarta City to reach buyers in the JABODETABEK area, Surabaya City, to reach buyers in Eastern Indonesia as a whole, branches in big cities on each island, to branches in every provincial capital.

4.2.2.10 THE MORE RELIABLE PRODUCT DESCRIPTION

Figure 18 The More Reliable Product Description

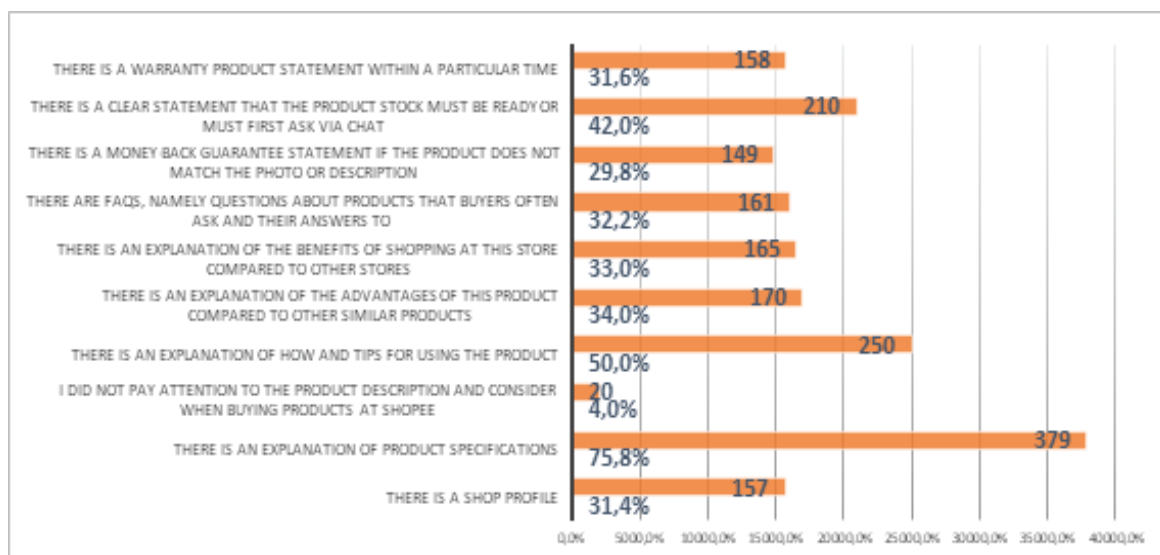
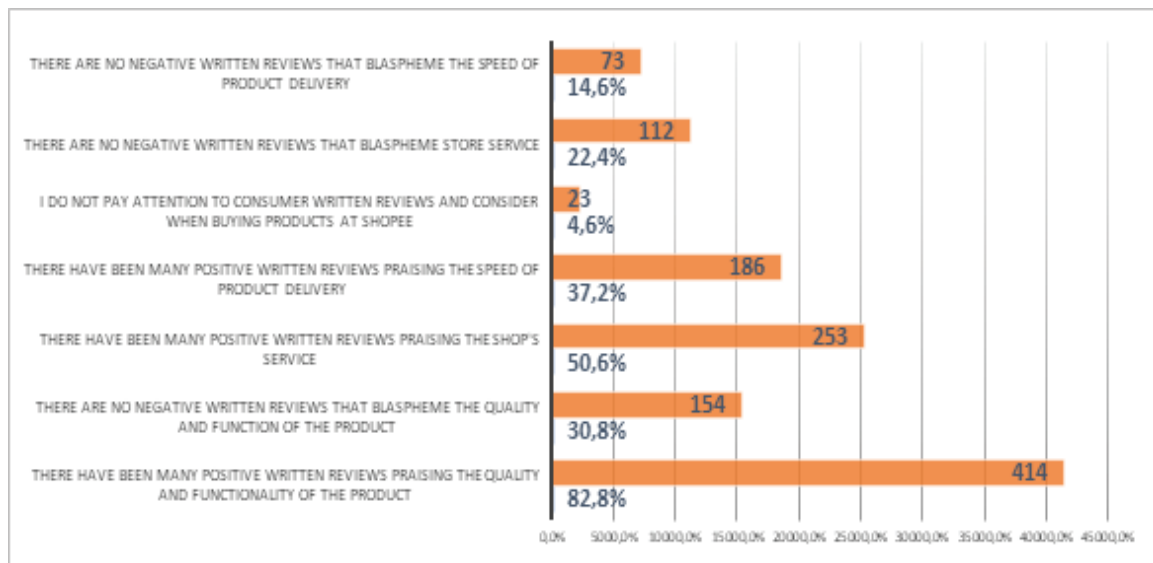


Figure 18 shows FBP is required to include information on product specifications, how to use it, and tips for using it and an explanation of product stock availability. Other information that is recommended in the FBP product description is the advantages of products sold by FBP and the advantages of shopping at FBP compared to buying at other stores.

4.2.2.11 THE MORE RELIABLE WRITTEN REVIEW FROM BUYERS

Figure 19 The More Reliable Written Review from Buyers

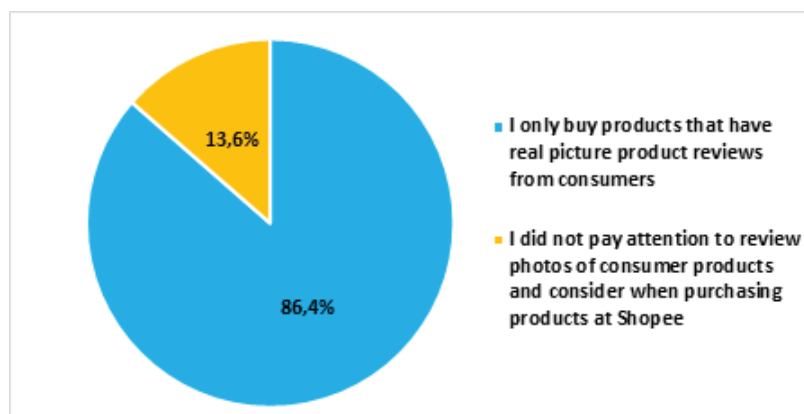


Source: Processed Author Data, 2020

Based on the answer from the respondent in Figure 19, it is known that the respondent will pay more attention to positive reviews than negative reviews on the store. The thing that is most concerned about in the review is the quality and function of the product, followed by shop services and what is not paid attention is the review regarding the speed of delivery. To further convince Shopee visitors, FBP is advised to reproduce positive written reviews regarding the quality and function of the product, as well as excellent FBP services by asking for a personal review from FBP customers. Giving random discount vouchers and giveaway prizes can also be given to consumers who give positive reviews to increase the number of positive reviews significantly.

4.2.2.12 THE MORE RELIABLE REVIEW PHOTO FROM BUYERS

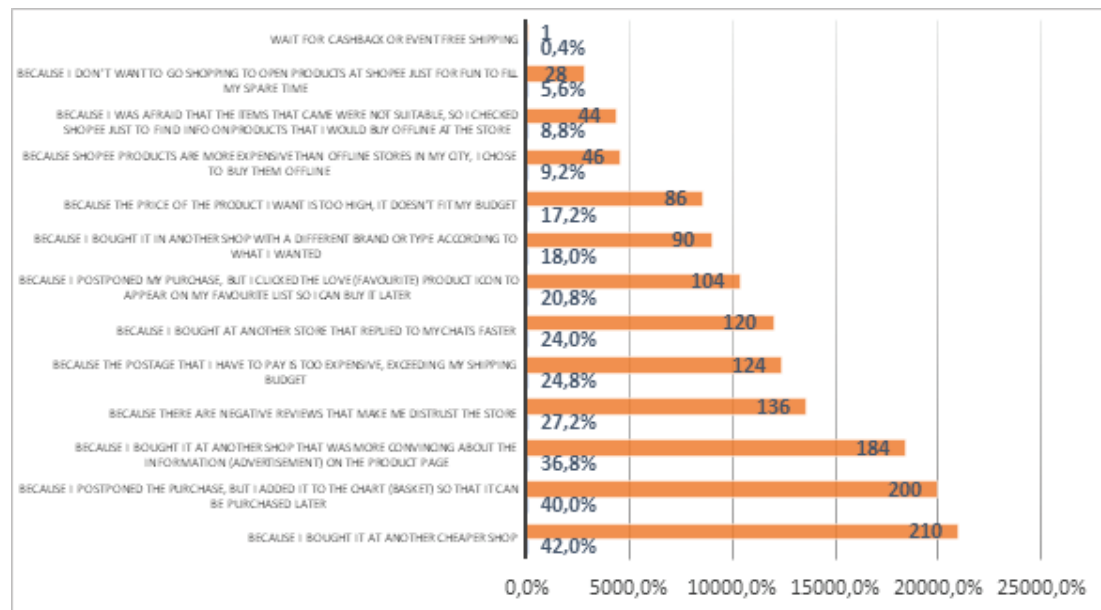
Figure 20 The More Reliable Review Photo from Buyers



This is shown by the respondent's answer in Figure 20 that photoproduct reviews from consumers very important to convince consumers to buy products. A note that must be considered is that FBP must ensure that consumers upload product photos that clearly and well illustrate the product to convince FBP Shopee visitors. If there is a product photo that shows the product in the wrong way, FBP should contact the customer for help in replacing the product photo with a good one. In the case of a new product being uploaded for which there is no product review photo, FBP can give a special bonus to the first ten buyers to write a review with a product photo so that the product has many convincing product review photos.

4.2.3 REASONS FOR NOT SHOPPING IMMEDIATELY AFTER SEEING PRODUCTS ON SHOPEE

Figure 21 Reasons for Not Buying



Source: Processed Author Data, 2020

Based on the respondent's answer, the reason for not making a purchase is because choosing a shop with a lower price is the most favourite reason. It is recommended that FBP be able to reduce product COGS and other expenses so that it can sell at a lower price than other stores. Suppose FBP does not apply the lowest price strategy. In that case, FBP is required to make product information advertisements that are more convincing than other stores to convince visitors who come to make a purchase immediately.

For reasons that the purchase has been postponed and has been added to the cart, FBP can maximize the Shopee user-product visitors because the data is entered as a potential buyer. The statistical data available at Shopee seller centre, Shopee product visitor users who do not make a purchase is divided into regular visitors and potential buyers. Ordinary visitors are visitors who only see the product without taking action. At the same time, potential buyers are visitors who know the product and take action on the product, namely adding the product to the basket. FBP can do followups and reminders via chat to potential buyers to make purchases.

Regarding negative reviews that make product visitors doubt, FBP must avoid getting negative reviews by delivering products quickly and well. In the case of a negative review complaint from a buyer, FBP must contact the buyer to solve the problem and provide the best solution such as refunding money or sending a new product. After the complaint is resolved, FBP asks the buyer to change the negative review to a positive review of at least four stars.

In serving customers, FBP must have a customer service team that is always on standby to reply to customer chats in minutes or even seconds. Consumers will choose to buy products in stores that respond to chats faster. The provision of cheap expeditions must be made by FBP so that consumers do not pay expensive shipping costs. The expedition that has the most affordable shipping cost is SiCepat Halu for retail delivery and JNE Trucking (JTR) for bulk shipments.

5. DISCUSSION

5.1 BUSINESS SOLUTION ALTERNATIVE RESUME

The following is a summary of business solutions that can be used as an option for FBP to use in resolving its business issues.

5.1.1 IMPROVED SHOPEE PRODUCT PAGE VIEWS

Based on the analysis of the respondent's answers, the following Table 1 is a business solution that can be applied by FBP by improving the information seen by Shopee user-product visitors on the product page.

Table 1 Improved Shopee Product Page Views

Info in Product Page	Current Condition	New Solution
Product Photo	Photo professional from supplier with white background	Use real picture that show product clearly with natural background as main photo product
	Another photos product only use real picture	Another photos product use professional photo and real picture from customer review
Product Title	Full length title 100 character	Short, simple, and to the point title with SEO Shopee
Product Price	Product pricing: competitive price with added value but not the cheapest	Cheapest product price
		Not the cheapest, but still affordable and around average market price
	Price range: IDR 2,500 – 24,900	Selling new products with a price range of IDR 50,000 - 250,000 according to the data on the average price of one product purchased online at Shopee so that the shipping cost is not higher than the price of the item
		Selling new products with prices above IDR 22,000 to exceed the national average shipping cost because many consumers do not want to buy products that are cheaper than the shipping cost
		Selling new products at a price above the minimum shopping requirements for free shipping because many consumers don't want to buy a product if they can't use a free shipping cost voucher
Product Rating	Different depending on the product, range rating 4.7 - 5.0	Maintain a minimum rating of 4.5 and increased the product ratings from 4.7-4.8 become 5.0 by improving service and ensuring good product quality
Product Sold	Different depending on the product, range 71pcs – 14,300pcs sold	Increased the number of product sold that below 999pcs become more than 1,000pcs sold
Shipping Cost	Join Gratis Ongkir XTRA program	Continue to join XTRA Free Shipping program to meet consumer desires
Expedition Option	Only J&T Express expeditions available	Open Gojek & Grab instant courier options so that delivery will arrive on the same day
		Opening a cargo type expedition such as JNE Trucking (JTR) so that the shipping costs for wholesale purchases are cheap
		Opened expeditions at low prices and participated in free shipping cost programs, namely SiCepat Halu and Ninja Express
		Open all expedition options so that consumers can choose an expedition that is trusted and available in their city
COD Payment Method	COD payment method options are available	Continue the availability of the COD payment method to meet consumer desires
Store Rating	4.84 / 5.00	Maintain a minimum rating of 4.5 and Increased the store ratings from 4.84 become 5.0 by evaluating the rating of each product

Percentage of chats replied	97%	Keeping the percentage of chats replied at least 95% and increased become 100% with shifting admin 24 hours
Seller Location	Only in one city, Bandung	Adding warehouse branches to Jakarta to expand the market to the JABODETABEK area
		Added a warehouse branch to Surabaya to be closer to buyers in Eastern Indonesia
		Adding warehouse branches on every island so that the shipping costs are cheap and get to consumers quickly
		Adding warehouse branches in every major city in Indonesia so that the shipping costs are cheap and reach consumers quickly
Product Description	There are still limited results from other sellers	Ensure that there are at least three pieces of information, namely product specifications, explanation of product specifications and information about the availability of product stock
Written Review	Not asking consumers to review	Provide discount vouchers to consumers who provide positive reviews
		Give a giveaway in the form of a raffle prize to buyers who provide positive reviews
Photo Product Review	Not reply to all negative reviews	Reply to negative reviews with a confirmation statement and contact the buyer to resolve the problem and ask for a change to a positive review
	Not asking consumers to upload product photos in reviews	Ask consumers to provide reviews using product photos from consumers
		Send real pictures of products that will be sent to consumers so that the photos can be used by consumers to write reviews
Star Seller Badge	Have a Star Seller badge	Maintain the Star Seller title
Cashback XTRA Badge	There is no Cashback XTRA badge because not joining the program	Join the Cashback XTRA program by paying an additional 2% admin fee
		Do not join the Cashback XTRA program and do not need to pay admin fees

5.1.2 FOLLOW UP POTENTIAL BUYER

Based on the respondent answer about reasons for not making a purchase, FBP can follow up potential buyers to purchase by understanding the type of potential buyer and how to treat them. The following Table 2 is a strategy that can be applied by FBP to increase the sales conversion rate by maximizing potential buyers.

Table 2 Follow Up Potential Buyer

Type Potential Buyer	Data Findings	Business Solution
Added product to cart, but have'nt checkout	Customer list in broadcast chat payment reminder at Shopee seller center sub-buyer management	Broadcast chat special free shipping cost or discount voucher
Checked out product but have'nt made a payment	Shopee seller center in the order section -> my order -> unpaid	Personal chat to reminders payment. First chat at first hour order created to confirm order receipt and second chat at last 3 hours payment to offering special additional gift.

Checked out product but didn't make payment until deadline	Shopee seller center in the order section -> my order -> cancellation (canceled automatically by the system)	Personal chat to ask about reason canceled order and offering special additional gift to create new order
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For visitors who have added FBP products to their cart and have not checked out, FBP can use the buyer management feature in the seller centre to broadcast chat to consumers who have FBP products in their basket. FBP can provide exclusive vouchers in the form of a discount or free shipping in its broadcast chat to increase checkout desires. For potential buyers in the way of visitors who have checked out the product and have not made a payment or have not made a payment until the 1x24 hour deadline, FBP can remind the payment via chat to the user. How to see a list of users can open a seller centre in the order section -> my order -> unpaid and cancellation (cancelled automatically by the system). Chat reminders can add additional gift offers if you make a payment on the same day or confirm that the goods will be shipped immediately if you make a payment before cut off packing.

5.2 CONCLUSION

After distributing questionnaires and analyzing answers from the respondent, the low of FBP sales conversion rate is concluded from two leading causes, first is the habit of Shopee users who open products without buying intent or delaying the purchase and second is information on FBP product pages that is not convincing so that visitors do not buy products at FBP.

FBP Visitor who did not want to buy the product, its potential could not be maximized so that the sales conversion rate would not be able to reach 100%. The habit of Indonesian consumers who often walk to the mall without shopping turns out to be in online media, which is only looking at products at Shopee for fun. For FBP visitors who postpone product purchases and have put the product in the shopping basket, this can be maximized through consumer follow-up, which is included in potential buyer data.

To maximize FBP visitors who intend to buy a product, but do not shop because the information on the FBP product page is inconclusive, new strategies will be implemented to improve it. As a solution to increasing the sales conversion rate, two business solutions will be carried out, improving the appearance of the FBP product page on Shopee and following up potential buyers through the features available on Shopee.

5.3 LIMITATION

Based on the explanation above, this research focuses on strategies to solve FBP problems about the low of sales conversion rate. On the other hand, human resources, finance, operations aspects are not included in aspects that will be focused more deeply. This research will be for July 2020 based on data from January 2019 to June 2020.

REFERENCES

- Arikunto, S. (2002). *Metodologi Penelitian Suatu Pendekatan Proposal*. Jakarta: PT. Rineka Cipta.
- Baum, David. (1999). *Business Links*. Oracle Magazine Vol. XIII.
- Dixon, J., Gulliver, A., Gibbon, D., & Hall, M. (2001). *Farming Systems and Poverty: Improving Farmers' Livelihoods in a Changing World*. Washington DC: World Bank.
- Engel, F. James, Blackwell D. Roger, dan Miniard W. Paul. (2010). *Perilaku Konsumen*. Jakarta: Binarupa Aksara.
- Hasan, M. Iqbal. (2002). *Pokok-pokok Materi Metodologi Penelitian dan Aplikasinya*, Bogor: Ghalia Indonesia.
- Katadata.co.id (2019, October 3). Indonesia Kontributor Terbesar Ekonomi Digital di Asia Tenggara. Retrieved from <https://databoks.katadata.co.id/datapublish/2019/10/03/indonesia-kontributor-terbesar-ekonomi-digital-di-asean#>
- Katadata.co.id (2019, October 3). Riset Google: Nilai Ekonomi Digital Indonesia Saat Ini Rp 568 Triliun. Retrieved from <https://katadata.co.id/desysetyowati/digital/5e9a4e616f15b/riset-google-nilai-ekonomi-digital-indonesia-saat-ini-rp-568-triliun>.
- Katadata.co.id (2018, September 18). Ekonomi Digital Diprediksi Sumbang 9,5% PDB pada 2025. Retrieved from <https://katadata.co.id/pingitaria/digital/5e9a55d4b8514/ekonomi-digital-diprediksi-sumbang-95-pdb-pada-2025>.

Katadata.co.id (2018, February 20). Berapa Jumlah Pengguna Internet di Indonesia?. Retrieved from <https://databoks.katadata.co.id/datapublish/2018/02/20/berapa-jumlahpengguna-internet-di-indonesia>

Laudon, Kenneth C. & Laudon, Jane P. (1998). *Management Information Systems - New Approaches to Organization & Technology*. New Jersey: Prentice Hall.

Liehr, P., & Smith, M. (1999). *Middle Range Theory: Spinning Research and Practice to Create Knowledge for the New Millennium*. Advances in Nursing Science.

Mangkunegara, Prabu Anwar. (2002). *Perilaku Konsumen*. Bandung: PT. Refika Aditama.

MBA Skool. (2011). Consumer Analysis. Retrieved from <https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/11977-consumer-analysis.html>

Subagyo, P. (2006). *Metode Penelitian Dalam Teori dan Praktek*. Jakarta: PT. Rineka Cipta.

PROPOSED NEW MARKETING MIX STRATEGY TO INCREASE SALES (CASE ARINE)

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Abstract

Fashion is the second fastest growing industries in Indonesia, especially in Bandung which is known as Paris Van Java. Arine is a local fashion brand that focused on aesthetic and vintage-inspired essentials. Arine sells their products on Instagram and Shopee with 15.500 followers on Instagram in one year with engagement rate 2.28% and 1.700 followers in Shopee with rating 4.9/5. Instagram is the main social media where Arine does their marketing. But, with those followers and that rating, Arine revenue is still very low. External analysis will be carried out by using Porter Five Forces Analysis, Benchmark Analysis, and Customer Analysis by distributing questionnaires and the internal analysis by using Current Business Process, STP Analysis, Marketing Mix Analysis, and Business Model Canvas. After that, researcher break down the root cause being faced by using Fishbone to be more detailed. The root cause of Arine's business issue after conducting fishbone diagram are lack of product variation, do not have offline channel, and low of brand awareness. To solve the main business issue of Arine, researcher has proposed new marketing mix strategy by incorporating consumer behaviour, customer path and marketing 4.0 in it. Researcher can find the reference of Arine potential customer product, price, place, and promotion by using the consumer behavior and customer path. Lastly, to make the solution happen the new marketing mix strategy proposed earlier need an action budget plan.

Keywords: Women Fashion, Marketing Mix, Increase Sales

1. INTRODUCTION

Fashion is the second-fastest-growing industry in Indonesia, especially in Bandung which is known as *Paris Van Java*. The top three sub-sectors that dominated Indonesian economy are culinary, fashion, and craft (Bekraf, 2019). Based on the data, it shows that there is a big opportunity to enter the fashion industry. Local fashion is on the rise, nowadays. There are many local fashion brands that gain popularity across age groups and social classes and many events being held to support such as Brightspot Market, Pop Up Market, Trademark, etc. Arine is a local fashion brand that focused on aesthetic and vintage-inspired essentials. Currently, the store is online store and based in Bandung, Indonesia. Arine's first launch was on May 2019 with the tagline "The style you crave". Arine sells their products on Instagram and Shopee. Arine gets 15.500 followers on Instagram in nine months with engagement rate 2.28% and 1.900 followers in Shopee with rating 4.9/5. Instagram's engagement rate is a metric that measures the level of engagement that a piece of created content is receiving from audience. In summary, as an industry standard, an engagement rate on Instagram between 1% and 3% is generally good (Scrunch, 2019). Arine's engagement rate on Instagram is good enough to communicate with followers and bring them to the last step which is closing sales. But, with those followers and that rating, Arine revenue is still very low. In this phase, Arine needs a large sum of working capital and retained earnings to operate. Thus, it is crucial that the company must increase their sales per month. This research focuses on new marketing mix strategy for Arine to increase sales.

2. METHODOLOGY

2.1 CONCEPTUAL FRAMEWORK

The business issue in Arine brand is mainly about optimizing sales through a maximized marketing mix. Business issue analysis will used combination between internal, external, and SWOT analysis. The conceptual framework in figure 2.1 below consist of analysis stage, concept, and the context of the research that are needed to sold the business problem.

Figure 1. Conceptual Framework



2.2 DATA COLLECTION

This research uses two research methods, those are qualitative and quantitative. According to Barnham (2015), Quantitative research tries to find answers to concrete questions by generating numbers and facts. “The goal is to establish a ‘representation’ of what consumers do or what consumers think”. The quantitative data obtained from questionnaire data in the form of multiple choices. While the qualitative approach is informed by inductive logic, in which potential understandings of a phenomenon are derived from the data. Researcher used interviews with local brand owners to support the data needed. This research uses analytical management tools such as STP, Marketing Mix Analysis, Five Forces Analysis, Business Model Canvas, Benchmark Analysis, and Customer Analysis to determine the internal and external condition of Arine business environment.

2.3 INTERNAL ENVIRONMENT ANALYSIS

2.3.1 SEGMENTING, TARGETING, AND POSITIONING ANALYSIS

1. Segmenting

According to Dharmmesta and Handoko (2013), market segmentation is the process of dividing the market into market segments that will be targeted sales to be achieved with certain marketing mix. Arine will use four variables in order to segment the customer market. These four variables are geographic, demographic, behavioral and psychographic variables.

2. Targeting

According to Kotler and Armstrong (2014), market targeting is a process of evaluating each market segment’s attractiveness and selecting one or more segments to enter. The result of Arine customer target is shown in table 1 below.

Table 1. Arine’s Target Market

Geographic segmentation (Indonesia)	
Region	Sumatera Selatan, Jakarta, Jawa Barat, Jawa tengah, Jawa Timur, Sumatera Utara, Sumatera Barat, Riau, Aceh, Kalimantan Timur, Kalimantan Barat, Sulawesi Selatan, Bali.
Population Density	Big city/capital City
Demographic	
Age	16-18, 19-21, 22-28
Gender	Female
Income	500.000 – 1.000.000 2.500.000 – 2.500.000 2.500.000 – 3.500.000 3.500.000 – 6.000.000
Generation	Generation Y (millennial), Generation Z

Psychographic	
Social Class	Middles, middle up
Lifestyle	Fashionable, vintage/retro style, outgoing, stylish, traveler, independent, adventurer, nature-lover

3. Positioning

Positioning is the way a company's product, brand, or organization was perceived relatively compared to a product, brand, or organization competing by current customers as well as potential customers (Tjiptono and Chandra, 2012). Arine positioned itself as a fashion brand for women that provide vintage or retro essentials at a reasonable price, good services, unique, and colorful. Arine's positioning will be shown in figure 2 below.

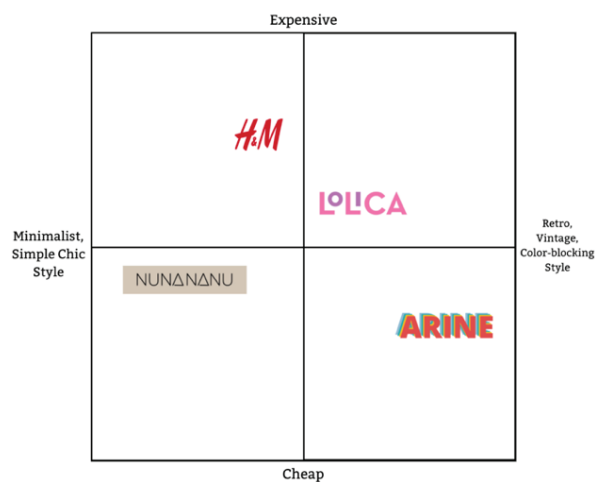


Figure 2. Arine's Positioning

2.3.2 MARKETING MIX ANALYSIS

1. Product

Product is the good the combination of goods and services that the business provides to the market (Kotler and Armstrong, 2014). As previously mentioned in the company profile, Arine is a local fashion brand that focused on aesthetic and vintage-inspired essentials. Currently, Arine launch the basic of vintage fashion, such as shirt, printed t-shirt, jeans, tote bag, and necklace. All the product of Arine material is fabricated in Indonesia. In terms of packaging, Arine uses cardboard as a packaging with the logo of Arine attached to the box. The advantages of cardboard packaging are very durable, cheap, and recyclable. In the near future, Arine is planning to use packaging that is 99% non-plastic and recyclable.

2. Price

The definition of Price in terms of Marketing Mix is the total cost that customers give up to gain the benefits of having or using a product and services (Kotler and Armstrong, 2014). Arine set their price starting from Rp 49,000 – Rp 199,000.

3. Place

According to Kotler and Armstrong (2014), the definition of place in the context of Marketing mix is the all company activities that makes the products available to the targeted segments and customers. Currently, Arine does not have an offline store yet. In this technology communication era, Arine uses internet as their base of sales.

4. Promotion

Promotion mix consists of advertising, sales promotion, personal selling, public relation, and direct marketing (Kotler and Armstrong, 2014). There are some aspects of promotional used by Arine such as Instagram Ads, Discount Promotion, Bazaar, and Endorsement.

2.3.3 BUSINESS MODEL CANVAS

Business model describes the rationale of how an organization creates, delivers, and capture value (Osterwalder

& Pigneur, 2010). The business model canvas of Arine as shown in figure 2, is formulated based on the company activities, value, and product 2019-2020 period.

Table 2. Arine's Business Model Canvas

<div>Key Partners</div> <ul style="list-style-type: none">• Vendors• Photographer• Material Suppliers	<div>Key Activities</div> <ul style="list-style-type: none">• Production• Advertising• Selling• Product Photo-shoot <div>Key Resources</div> <ul style="list-style-type: none">• Physical Asset• Human Resource	<div>Value Propositions</div> <ul style="list-style-type: none">• Aesthetic fashion essentials	<div>Customers Relationship</div> <ul style="list-style-type: none">• Instagram’s Stories• Daily Posts <div>Channels</div> <ul style="list-style-type: none">• Instagram• Line• Shopee• Tokopedia• WhatsApp	<div>C u s t o m e r Segments</div> <ul style="list-style-type: none">• 18-24 y.o• Female• Women who seek on aesthetic fashion
<div>Cost Structure</div> <ul style="list-style-type: none">• Production• Advertising• Vendors Services• Materials			<div>Revenue Stream</div> <ul style="list-style-type: none">• Product Sales	

2.4 2.4 EXTERNAL ENVIRONMENT ANALYSIS

2.4.1 2.4.1 PORTER FIVE FORCES

According to Williams and Curtis (2016), Porter five forces is a perspective for assessing and analyzing the competitive strength and position of a corporation or business organization.

The Bargaining Power of Supplier

The bargaining power of supplies of Arine is relatively small and insignificant force. In Bandung, we can find any kind of fabrics sellers at Cigondewah, Otista, Tamim street, etc. It's easier to find many suppliers that can provide any fabrics that we need (Nola as the owner of Lolica, 2020). Arine source their products from some suppliers in Bandung with good quality of materials. Suppliers have little control over the fashion industry as, unfortunately, they are dispensable and can always be swapped out. As a result, input prices are relatively low.

2. The Bargaining Power of Buyer

Arine, as a new small player in fashion industry, has less bargaining power than potential customer. Customers can choose another brand which they already know because the customer awareness about Arine is still low. According to Nuna as the owner Nuna Nanu (2020), some of Nuna Nanu's customers feel bored with existing design. So, the bargaining power of buyers is high.

3. Threat of New Entrants

Based on the data conducted earlier, the fashion industry is one of many industries that have a high threat of new entrants. The possibility of additional businesses entering the retail women's apparel market affects the current profit and competition levels experienced by businesses in the industry. Existing businesses may choose to limit their profits to discourage new entrants. New businesses would bring with them the potential to pressure prices, costs, and investment rates of returns as well as taking market share from established businesses (Porter, 2008). Currently, Arine is trying to find unique ways to popularize their own products and as such build a strong brand because the threat of new entrants is high.

4. Threat of Substitutes

There are so many local brands in Indonesia that create so many choices for customers to choose from. According to Njambi et al (2016), substituted products are products that can meet the same needs as other products even though the resulting product is different. There are few substitutes for clothing but all the 'substitutions' in the industry are about competition. Based on Nuna (2020), sweatshirt and t-shirt products in e-commerce have tens of thousands of choices. So, you have to look for other values besides the product and the price of the product itself. Therefore, the threat of substitute players is quite high.

5. Rivalry Among Competitors

According to Ehmke (2014), rivalry among competitors is often the strongest of the five competitive forces, but can vary widely among industries. Porter's intensity of rivalry in an industry affects the competitive environment and influences the ability of existing firms to achieve. Arine has low score in rivalry among competition (such as Nuna Nanu and Lolica). This means, Arine must find out the right strategy for having more power to compete with competitors.

2.4.2 BENCHMARK ANALYSIS

According to Kotler and Armstrong (2012), benchmark is the process of comparing the company's products and processes to those of competitors or leading firms in other industries to identify "best practices" and find ways to improve quality and performance.

There are three brands in the same industry with Arine that have similar products and value.

1. Lolica

Lolica is one of local brands in Indonesia. According to their website, the company found in 2018 and inspired by Korean culture. The idea behind Lolica is making people happy every time they wear Lolica's outfit (www.lolicalolice.com, 2018). They have Instagram account named @lolica.id. The products are very similar with Arine such as sweatshirt, pants, t-shirt, tote bag and necklace. The price starts from Rp 150.000 to Rp 450.000. Most of the Lolica's products are colorful and cheerful.

2. Nuna Nanu

Nuna Nanu is a local brand in Surabaya, Indonesia. They have Instagram account named @nunaastore. They sell sweatshirt, t-shirt, pants, and tote bag. Most of the Nuna Nanu products have pastel colour and the range price is from Rp 135.000 to Rp 225.000.

3. H&M

H&M is a Swedish multinational clothing-retail company known for its fast-fashion clothing. As of November 2019, H&M operates in 74 countries with over 5,000 stores under the various company brands, with 126,000 full-time equivalent positions. It is the second-largest global clothing retailer, just behind Spain-based Inditex. The company has a significant online presence, with online shopping available in 33 countries. They utilize website as their channel for selling the product to potential customer, the look of their website is shown on figure 2.10 below. H&M has considerably affordable prices for middle class in Indonesia which starts from Rp 149.000.

Table 3. Benchmark Analysis

Brand	Est.	Product	Price	Distribution channel	Promotion
Arine	2019	Women wear	Rp 135,000 – Rp 199,000	@arine.id (15,500 followers)	Instagram Ads Endorsement
Lolice	2018	Women wear inspired by Korean Culture	Rp 150,000 – 450,000	@lolice.id (150,000 followers) www.lolice.lolice.com Official store	Instagram Ads Endorsement Brand ambassador
Nuna Nanu	2016	Women wear	Rp 135,000 – Rp 225,000	@nunaastore (572,000 followers)	Instagram Ads Endorsement
H&M Indonesia	2013	Women wear	Rp 149,000 – Rp 1,000,000	www.id.hm.com	• Free return • Product Warranty • Discount

Based on the table above, Arine product prices are the cheapest compared to other competitors. For a brand just starting out in 2019, Arine's followers are already good at the 15,500 followers point. With the promotion used, Arine can add a website as a distribution channel.

2.5 SWOT ANALYSIS

According to Harrison (2010), SWOT analysis is an examination of an organization's internal strengths and

weaknesses, its opportunities for growth and improvement, and the threats the external environment presents to its survival. Arine SWOT analysis are elaborated below:

1. Strength

The strength of Arine based on the earlier internal and external analysis are listed below:

- a. Competitive Pricing for the Quality
- b. Eco Friendly Packaging
- c. Unique Selling Proposition
- d. Interactive Content in Social Media

2. Weakness

There are three weakness which Arine has. The weaknesses are described below:

- a. Low Brand Awareness
- b. Low Product Variety
- c. Online Store Only

3. Opportunities

There are two opportunities which Arine has. These are:

- a. Instagram as The Prospective Social Media
- b. Website as The Prospect to Expand Market Channel

4. Threats

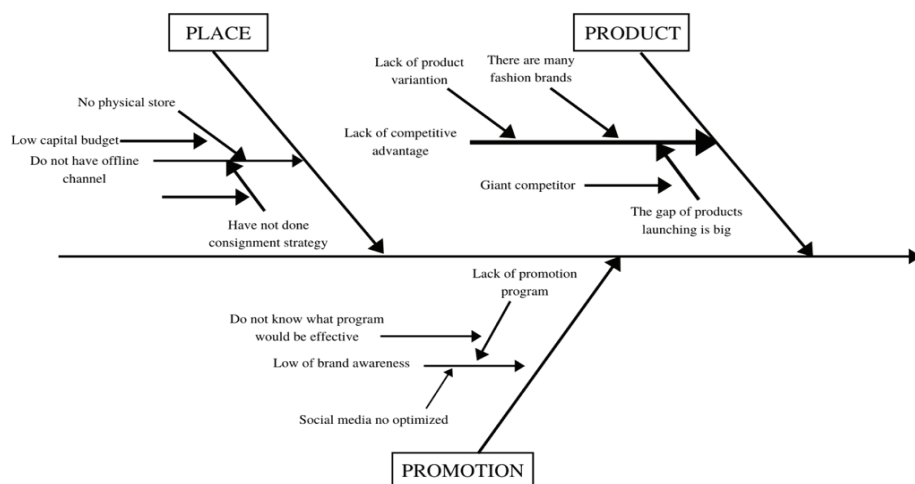
The threats of Arine are listed below:

- a. High Number of Emerging and Established Competitors
- b. Risks or Scam and Fraud
- c. International Giant Retail Brand

2.6 ROOT CAUSE ANALYSIS

According to Ilie and Coicoiu (2010), the Root Cause Analysis (RCA) is a business tool that is purposed to locate and define the root cause of the problem that is located inside a certain subject. There are several tools that are designed to locate the problem, but in this research, the method of fishbone diagram will be used in order to locate and identify the problem located inside Arine, the diagram presented below on figure 2 has identified Arine problem from each dimension.

Figure 2 Arine's Fishbone Diagram



4. BUSINESS SOLUTION

This chapter will elaborate the solution for company issue. Marketing strategy is needed in term of increasing the revenue of Arine company. Researcher conducts surveys based on the potential customer behavior and marketing mix preference. A new marketing mix strategy will be formulated by the researcher from the data.

4.1 POTENTIAL CUSTOMER INSIGHT

Customer Insight are made up of evaluated information about the current and potential customers. They come from a combination of quantitative and qualitative research and data analysis. This analysis is conducted to gain data about Arine potential customer behavior in their purchasing stage and their four P's preference.

1. Customer decision making process and customer path

According to Wang & Ruhe, Decision-making is one of the basic cognitive process of human behaviors by which a preferred option or a course of actions is chosen from among a set of alternatives based on certain criteria. Based on Solomon (2015), the stages of cognitive decision-making process in digital era are need recognition, information search, evaluation of the choice, purchase, post-purchase evaluation. According to Kotler and Kartajaya (2017), in marketing 4.0, the customer path should be rewritten as the five A's: *aware, appeal, ask, act, advocate*.

2. The O Zone

A customer's decisions across the five A's are usually influenced by a combination of their *own* influence, *others'* influence, and *outer* influence and it's called as The O Zone (Kotler and Kartaya, 2017). The outer influence comes from external sources. From a brand's standpoint, outer influence is still manageable and controllable. Marketers take an important role here to communicate with potential buyers and attract them. The others' influence comes from a close circle of friends and family as word of mouth. Otherwise, the other's influence may also come from forum or communal rating in the internet. The own influence comes from within oneself. It's an honest review or past experience with several brands. They have their own personal judgement and evaluation of the brands, and ultimately individual preference toward the chosen brands.

3. Potential customer's preference towards marketing mix

The brands must analyze the entire product cycle. This means that the brand should study how their product is perceived by the potential customer. Based on Kotler and Kartajaya (2017), the marketing mix is a classic tool to help plan what to offer and how to offer to the customers. Thus, the survey will ask about the customer product, price, place, promotion preference.

4.2 DATA FINDING FOR THE SURVEY

In this research, researcher uses questionnaire to generate insight from Arine potential customer about their decision-making process and their marketing preferences. The questionnaire is using Google form for 102 respondents. The questionnaire will be divided into two parts. The first part is about the consumer's decision-making process and customer path towards fashion shopping behavior. This part is used for formulating marketing strategy to gain more customer and increase sales. The second part is using to identify the preference of potential customer towards product, price, place, and promotion of fashion brand.

4.2.1 OPERATIONAL VARIABLE

The operational variable of Arine based on:

1. Operational variables of Arine potential customer decision making process and customer path model (shown on table 3.1).

Table 3.1 Consumer Behaviour Operational Variables

Variables	Sub-Variables	Instrument	Scale
Consumer decision making process and Consumer path model.	Need Recognition	S t r u c t u r e d Questionnaire	Open-Ended Question
	Aware		Open-Ended Question
	Information Search		Open-Ended Question
	Appeal		Short Answer
	Evaluation of Alternatives		Open-Ended Question
	Ask		Short Answer
	Purchase Decision/Act		Multiple Choice and Open-Ended Question
	Post Purchase Behavior/Advocate		Open-Ended Question

2. Operational variables for Arine potential customer preferences based on marketing mix four P's (shown on table 3.2).

Table 3.2 Four P's Operational Variables

Variables	Sub-Variables	Instrument	Scale
Product	Product Feature	Structured Questionnaire	Open-Ended Question
	Product Style and Design		Open-Ended Question
Price	-	Structured Questionnaire	Multiple Choice
Place	-	Structured Questionnaire	Open-Ended Question
Promotion	Advertising	Structured Questionnaire	Open-Ended Question
	Message Strategy		Open-Ended Question
	Execution Style		Open-Ended Question
	Sales Promotion		Open-Ended Question

4.2.2 POPULATION

Population is geographic generalization there are: object or subject has the quality and certain of characteristic that set by the researcher to learning then conclude (Sugiyono, 2010). In this research, the population is Arine's target market that has been described in chapter two. Because the limitation of the researcher to count the population of the respondent based on the Arine's target market, the total population are considered as infinite population.

4.2.3 SAMPLING METHOD AND SIZE

Sample is a part of the population which will to be analyzed. According to Arikunto (2006), a sample must be representative to the population. Based on Sekaran (2000), the sample size must be larger than 30 and less than 500 appropriate for most research. So, the respondent as 102 women in age 16-28 years old, domicile in Jakarta, Bandung, Surabaya, Tangerang, Medan, Jogjakarta.

4.3 FINDINGS OF THE SURVEY

Awareness is the first stage of cognitive decision-making process. Based on the data that researcher got from respondent, most of customers will buy fashion products when they need it and when it's discounted. According to Kotler (2017), Marketers do not create needs, needs pre-exist marketers along with other societal factors, and influence wants. This means Arine must satisfy needs and give them the reason to buy Arine's products through discount promotion. They discover new local brand from Influencer's review (69%) and Ads on Social Media (67.6%). This result means Arine must focus on influencer endorsement, ads on social media, and word of mouth from social community approach. Then, researcher asks respondent about what online platform that they mostly use to shop and the result is E-commerce such as Shopee, Tokopedia, Zalora, etc (86.3%) and Instagram (52%). This result will determine where Arine put its advertisement on those online platforms in the future to increase sales.

The next stage, after need recognition, customer search for more detail information to make a decision. Researcher ask respondent about what online platform that they mostly use to search information about the product. Researcher conducts the result from the survey that they use E-Commers search in the first place (86.3%), Instagram Search (52%), and Google search (39.2%).

After information search and appeal, customers go to the next stage which is evaluation of alternatives and ask. Since customer cannot compare the brands by directly touch the materials or wear it, there are determinant attributes for the customer to evaluate. Researcher asks respondent what activity they do when they are evaluating a product they wanted. The result is comparing with other brand (quality, price, service) (74%), depending on variations (64.7%), and reading some testimonials from other customers (61.8%). Respondent also more interested with the attractive design of product and the concept of the brand is fit on them. When evaluating alternatives, customers feel more curious about the brand they are attracted to and actively search more information. Based on the data that researcher got, testimonials are very important for deciding (88.2%) and followed by asking to friends or family that have bought the product. Convinced by further information in this stage, Arine have one more question for respondent about what additional information they may need and the result is they have been felt satisfy with the information (18%), detail size chart (20%), and material information (10%).

The next stage is purchase. This stage is crucial enough because they can get the experience directly from the brand. The brand can convert their potential buyer to a customer. So, researcher asks respondent about which online channel they prefer to place their order. The result is E-Commerce (91.2%) and WhatsApp (28.4%). After ordering, the last step for potential customer to do is payment. Based on the data that researcher gathered is they prefer pay the bills by transfer debit/credit card (76%) and payment on E-commerce itself (70%).

Purchase stage is not the last stage of this customer path. The brands need to engage with their customers and make sure the experience that their customers get is excellent. Researcher needs to know on their factor of repetition buying. Based on the data collected, they will do repurchase if the price and quality are as expected (99%), special promotion for repurchase (48%), and on-time delivery (40.2%).

The brands also have to pay attention to the factors that make people stop buying from their brand. The disappointment of customer will be negative comment that will be spread on internet. Based on the data from questionnaire, they will stop buy that product online if the photo of product is not match in real life (91.2%), quality of service is poor (58.8%), and the brand does not have return policy for reject product (54.9%).

4.4 MARKETING MIX PREFERENCE

1. Product Preference

Based on fishbone diagram about root cause analysis, one cause that Arine decrease their revenue is low variety in the product line. Researcher utilize Co-Creation approach to make more new products. According to Kartajaya & Kotler (2016), Co-creation involve customer early in the ideation stage. Based on the data, fashion products respondent mostly bought are outer such as sweatshirt, sweater, cardigan, etc (32.4%) and skirt (31.4%). After knowing fashion product they mostly buy, researcher want to know what kind of outer they mostly wear. The result is long cardigan (71.3%), sweater (47.1%), and oversized sweatshirt (32.4%). For skirt, the data shown that most respondent attract to maxi skirt (69.6%) & Midi A Line skirt (37.3%).

2. Price Perception

Price perceptions have a significant direct effect on customer satisfaction and behavioral intentions, over and above their mediated effect through the construct of customer value (Varki & Colgate, 2001). This survey collected to capture directly respondent's perception of Arine product prices. The first product of Arine is outer. Their perception of outer's prices is Rp 100,000 – Rp 200,000 (58.8%) and Rp 200,00 – Rp 300,000 (25.5%). The second product is t-shirt, the result is Rp 100,000 – Rp 200,000 (60.8%) and less than Rp 100,000 (37.3%). Next product is skirt, their price perception about the skirt is Rp 100,000 – Rp 200,000 (54.9%) and Rp 200,000 – Rp 300,000 (29.4%). The last product is pants, then the result is Rp 200,000 – Rp Rp 300,000 (45.1%) and Rp 200,000 – Rp 300,000 (33.3%).

3. Place Perception

This place perception survey will be used to determine Arine next strategy related to distribution channel. According the data collected, respondent can choose retail fashion, online store, or both of them as their favorite place to shop. The answer is retail fashion (86.3%) and online store (74.5%). It means, retail fashion or offline store is still their priority to go shopping.

4. Promotion Preference

Promotion preference survey can be good for integrating marketing communication and digital marketing. Based on the promotion channel preference survey result, most of respondent choose Instagram ads (95.1%) as their attractive advertising and You Tube ads (6.9%). For the content itself, they prefer in photo format (89.2%) and video format (60.8%). Researcher also need to know what kind of advertising they feel excited about and respondent choose product details content (73.5%), promotion content (60.8%), and life style (48%). The last question researcher asks to respondent is about what kind of sales promotion preferences they usually attracted. According the result collected, the respondent prefer discount (91.2%). This means that discount can be used as Arine promotional materials in the future.

4.5 SOLUTION

4.5.1 NEW MARKETING STRATEGY

After doing a survey based on the potential customer behavior and their preference, researcher found that the price is already fit in the potential customer perception which then shifting the solution priorities to just product, place, promotion. Marketing 4.0 by Kartajaya & Kotler (2016) will be implemented which combines online and offline interaction between Arine and their customers.

4.5.2 NEW PRODUCT DEVELOPMENT MIX

1. Co-Creation

From the potential customer insight conducted earlier, researcher formulate 2 new products line concept as shown in the table below:

Table 4. Arine's New Product Line and Concept

Product Style	Product Line	Type/Pattern	Colour
Vintage Style	Skirt	Maxi Skirt	Red
			Cream
	Span Skirt		Cream Yellow
Aesthetic Outer	Cardigan	Long Cardigan (daisy embroidery)	Lilac
		Cropped Cardigan	Lime Green
	Sweater	Oversized Sweater (Band Photo Printing)	White
			Black
		Knitted Sweater	Lilac Orange

4.5.3 NEW DISTRIBUTION AND ONLINE CHANNEL STRATEGY

Based on customer analysis conducted earlier, customer likely to purchase a fashion brand through offline store (retail fashion) (86.3%) and online store (74.5%). Thus, Arine must utilize both channels to boost sales.

1. New Offline Channel

Offline store is one of many solutions to create new revenue stream. Based on benchmark analysis and observation, there are several distribution store Arine need to consider as their distribution partner:

- Happy Go Lucky (Bandung)
- Kanayakan Cafe (Bandung)
- Local Cuteness (Bandung)

2. New Online Channel

Arine already has an account in Shopee (e-commerce). But, Arine needs to increase the coverage of sales channel. Here are the best three of e-commerce which can be as a good online channel for Arine based on the respondent research:

- Zalora

- Tokopedia
- Lazada

4.5.4 NEW PROMOTION STRATEGY

New Promotion Strategy of Arine will be shown on the table below:

Table 5. Arine's New Promotion Strategy

Aesthetic Style (Hobby, Interest, and life style)	Promotion Type	Objective	Strategy
	Advertising	Informative	Product Details
	Digital Communications	Customer Relation and Awareness	Instagram Ads, Website
	Sales Promotion	Awareness and Sales	Discount, Free Shipment, Extra Gift

5. CONCLUSION

Arine's main issues were identified by fishbone diagram in the earlier analysis. This research uses internal analysis and external analysis for looking at the wider business environment that affect the business and factors within Arine itself such as strength and weaknesses. The internal analysis tools consist of STP analysis, Marketing Mix analysis, Business Model Canvas and the external analysis consist of Porter's 5 force, and Benchmark analysis. After analyzing the internal and external situation of Arine and identifying root problem, Arine has discover the business solution. For marketing perspective, the problem is on a Four P's. In product itself, Arine has lack of product variation compare to the competitors. In place dimension, most of potential customers choose to shop at offline store. They want to try the product physically. In promotion dimension, people still have low of awareness about the brand. This is because lack of promotion activity since introducing the brand until now. For solving those issues, researcher has proposed new marketing mis strategy by incorporating consumer behavior, customer path and marketing 4.0 in it. Arine needs customer behaviour and customer path to find the preference of Four P's. The last step is creating action and budget plan for the new marketing mix strategy proposed earlier.

5.1 IMPLEMENTATION PLAN

Based on the analysis that have been conducted previously, Arine is able to create action plans that would accommodate and solve Arine's problems. The action plan consists of the activities needed with the schedule for the proposed strategy and budgeting plan. The schedule is for a year time span between November 2020 – October 2021.

Table 4.1 Action Plan Calendar of Arine

Action Plan	Details	November 2020 – October 2021											
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
New Product Development Mix													
Production													
Launch													
New Offline Channel													
Local Cuteness	Negotiation												
	Dealing												
	Selling												
Happy Lucky Go	Negotiation												
	Dealing												
	Selling												
Kanayakan Cafe	Negotiation												
	Dealing												
	Selling												
New Online Channel													

Zalora	Joining												
	Selling												
Lazada	Joining												
	Selling												
Tokopedia	Joining												
	Selling												
New Promotion Strategy													
Advertising	C o n t e n t Planning												
	P r o d u c t Photoshoot												
	Editing												
	Running an Online Ads												
B u i l d i n g Website													

The production of new product will start in November and is predicted to start launching in January 2021. Furthermore, Arine also focus on their new revenue streams by Signing up the account at Zalora, Lazada, and Tokopedia. For promotion strategy, Arine starts building their website in December with one of agencies in Bandung. Advertising also design by the result of the survey conducted earlier. Content planning will be done in November and will predictably running in January 2021.

5.2 PROPOSED BUDGET

Table 4.2 Proposed Budget Plan for Promotion Strategy

Promotion Strategy	Budget	Total
Website	Rp 3,500,000	Rp 3,500,000
Content Production		
Photographer	Rp 80,000/hour x 7 hours	Rp 560,000
Woman Model	Rp 350,000/day	Rp 350,000
Accommodation	Rp 200,000	Rp 200,000
Properties		
Advertising		
Instagram Ads	Rp 500,000/month x 6 months	Rp 3,000,000
Budget Total		Rp 7,610,000

Table 4.3 Proposed Sales Promotion for New Product Variety

Sales Promotion	Term and Condition
Year and Sale	Up to 50%
Free Shipment	Max. Rp 35,000
Free Extra Product	Min. purchase Rp 200,000
Consignment Store	20%

5.3 ESTIMATED RESULT

By implementing and executing the following budget, Arine could estimate the results and the outcome that the company would get. The estimated result consists of three condition such as Optimistic, Most Likely, and Pesimistic. According to the sales data earlier, the average of Arine monthly sales is Rp 1,350,000. Given the average price of Arine is Rp 149,000 and the cost of production 35%-50% of the price. Arine new marketing strategy estimated result will be shown in table 4.4 below.

Table 4.4 Arine New Marketing Strategy Estimated Result

Proposed Strategy	Scenario		
	Optimistic	Most Likely	Pessimistic
New Marketing Mix Strategy	25,000 followers, 150,000 reach, and 5% sales conversion.	22,000 followers, 125,000 reach, and 2.5% sales conversion.	20,000 followers, 100,000 reach, and 1% sales conversion.
Result for monthly revenue	1,500% increase	760% increase	300% increase

REFERENCES

JOURNAL ARTICLE

- Ilie, G. & Ciocoiu, C.N. (2010). Application of Fishbone Diagram to Determine the Risk of an Event with Multiple Causes. *Management Research and Practice*.
- Porter, M.E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard business Review*.
- Wang, Yingxu & Ruhe, Guenther. (2007). The Cognitive Process of Decision Making. *Cognitive Informatics and Natural Intelligence*
- Ashman, Rachel., Solomon, Michael R., & Southampton, Julia W. (2015). An Old Model for a New Age: Consumer Decision Making in Participatory Digital Culture. *Journal of Customer Behavior*.
- Varki, Sajeev and Colgate, Mark. 2001. The Role of Price Perceptions in an Integrated Model of Behavioural Intentions. *Journal of Service Research*.
- Wang, Yingxu Njambi, E., Lewa, P., & Katuse, P. (2016). Relationship between Threat of Substitutes and Competitive Advantage of Large Multinationals in Kenyan Beverage Industry. *International Journal of Business and Management*, 4(7), 412-423.

A BOOK

- Sterman, John D. (2000). *Business Dynamics: Systems Thinking and Modelling for a Complex World*. McGraw-Hill Inc.
- Indriyo Gitosudarmo, 2014, *Manajemen Pemasaran*, Yogyakarta, BPFEYogyakarta (gajadi)
- Dharmmesta, Basu Swastha., Handoko, T. Hani. 2012. *Manajemen Pemasaran Analisis Perilaku Konsumen. Edisi Pertama*. BPFE, Yogyakarta
- Solomon dan Elnora. 2003. *Strategi Pemasaran*. Jakarta: Kelompok Gramedia.
- Fandy Tjiptono dan Gregorius Chandra. 2012. *Service, Quality Satisfaction*. Jogjakarta: Andi Offset.
- J.Stanton, William. (2006). *Fundamentals of Marketing, Seventh Edition*. Mc. Graw-Hill, Inc.
- Kotler, Philip & Gerry Armstrong, (2014): *Principle of Marketing, 15th edition*. New Jersey: Pearson Pretice Hall.
- Kotler, Philip., Kertajaya, Hermawan., & Setiawan, Iwan. (2017). *Marketing 4.0: Moving from Traditional to Digital*. New Jersey: John Wiley & Sons, Inc., Hoboken.

DIGITAL MARKETING STRATEGIES FOR SMALL BUSINESS IN INDUSTRIES 4.0

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Abstract

Utilization of technological developments in the industrial era 4.0 which has changed the way of working carried out from conventional ways to digital technology also carried out by small business people. This research using descriptive research methods with a qualitative analysis approach. Data study techniques in This study uses primary data and secondary data approaches. The data obtained from the research are empirical data. The methodology used in this study is a conceptual review, namely the method used out by collecting data and information related to market potential, changes in consumer behavior and how to use digital marketing technology as an alternative solution in innovating with marketing strategies capture the potential market potential. The results of this study are digital marketing strategies for small businesses in the industrial era 4.0 to achieve business goals with high challenges and be able to compete in the market. Where small business people can use the strategy for success in this technological era, including; framing market opportunities; formulate digital marketing strategy; a customer experience; designing program marketing; utilize customer information through technology; have a competent business; systemized market customers; and can actively take up marketing programs.

Keyword : Digital Marketing, Small Business, Industries 4.0

IS CULTURE MAGNIFIED THE INTENTION TO USE OF INTERNET BANKING? (A STUDY OF MODIFIED UTAUT MODEL WITH HOFSTEDE CULTURE THEORY)

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Abstract

Number of Internet users in Indonesia is quite a lot to show major increases every year. This condition doesn't support by number of internet banking users. One of the major reasons is the culture difference within country. The purpose of this research is analyzing culture's effect as a moderator with modified UTAUT model without facilitating condition variable. This research focused on culture's effect influencing behavioral intention as the key factor from system technology's non-user. This study collected primary data by distributing questionnaires to 900 respondents in Indonesia. This study uses Structural Equation Modeling (SEM) analysis techniques with the Warp-PLS 5.0 computer program, which is an alternative approach that shifts from a covariance-based SEM approach to a variant-based approach. The result of this research shows the significance relationship between effort expectancy, performance expectancy, social influence, behavioral intention and usage behavioral. Then the correlation between culture variables as a moderator (Long Term Orientation and Uncertainty Avoidance) decrease the exist correlation in this research.

Keywords: Internet Banking, Hofstede Culture, Modified UTAUT

1. INTRODUCTION

Advances in technology and information have a major impact in people's lives in all fields (Putri, 2015). The development of the internet has become increasingly dominant in everyday life, although the clear benefits of the internet still raise concerns about the potential risks of the internet (Batey and Comer, 2013). The development of the internet has entered aspects of life from small to large. The use of the internet can increase productivity and cut costs (Moyer and Hughes, 2012: 919). According to the BCG Report (2015) the number of internet users in Indonesia in 2014 was 80 million internet users, an increase of 60 million in 2013. The internet now affects almost all elements, including industry and companies (Bitner et al, 2000).

This technological development causes the banking industry to compete in presenting internet banking services as a form of interaction with its customers, on the other hand, these customers interact with other financial industries (Hanafizadeh et al., 2014). Internet banking is an innovative product in banking institutions that offers advantages and benefits to customers, internet banking also offers new products and services that provide a sense of security (Gopalakrishnan et al., 2003). Internet banking is a network facility used between bank branches so that transactions can be made at each branch (Mujilan, 2013). Internet banking services have recently been increasing and developing tremendously (Hanafizadeh et al., 2014). The history of internet banking was first started in 1983 in the United Kingdom by the Bank of Scotland which offered internet banking services for the first time. The service offered is Homelink. Then the service was developed into software used for individual finances with the name "Microsoft Money" to be accessed by 100,000 households in 1994 (The Financial Brand, 2012). Currently, it is estimated that almost every bank provides internet banking facilities (Mujilan, 2013: 20).

Many banks in Indonesia currently offer internet banking services in carrying out daily transactions, one of which is the BCA bank which has had KlikBCA since 2001 and has since been followed by other banks (Mayasari, 2011). For example, the Indonesian banking industry offers this service to improve services to existing customers even though internet banking is still new in Indonesia (Utomo, 2012). One of the advantages of banking companies is that they have added value as a competitive advantage (Maharsi da Mulyadi, 2007).

Internet banking services that provide various facilities are not supported by the number of users. Many customers in Indonesia still use ATM services compared to electronic services and customers prefer to interact with tellers rather than use the internet to make transactions. Internet banking penetration in Indonesia is 36 percent and is

somewhat lower compared to countries in ASEAN which have fewer internet users than Indonesia (Laukkanen, 2012). This difference is caused by differences in cultural factors in a country that affect the level of technology adoption (Huang, 2010). Culture can be described as a moderate effect construct on a significant level of the relationship between the independent and dependent variables in the technology adoption model (Bankole, 2011). Hofstede's cultural variables referred to are Power Distance, Individualism, Masculinity, Uncertainty Avoidance and Long-term Orientation. Research on culture as a moderating variable in the adoption rate of internet banking services has been carried out using The Unified Theory of Acceptance and Use of Technology (UTAUT) (Alshare, 2010).

2. LITERATURE REVIEW

Internet banking is a network facility used between bank branches so that transactions can be made at each branch (Mujilan, 2013). Internet banking is a branch of electronic banking that provides consumers with the opportunity to use various services such as cash transfers, paying bills, obtaining information on deposits, investing and checking services via the internet and a website designed by banks (Hanafizadeh et al., 2014)

Internet banking is considered to be one of the most significant technological innovations in the banking world (Lin, 2011), which has made it possible to get easy access to banking services without time and location limits (Makris et al., 2009). Internet banking services as a form of interaction with customers, on the other hand, these customers interact with other financial industries (Hanafizadeh et al., 2014). Internet banking also offers new products and services that provide a sense of security (Gopalakrishnan et al., 2003). UTAUT is a research model that stands out the most in technology acceptance and understands the driving factors in technology acceptance introduced by (Venkatesh, 2003). This research model is a combination of previous research, namely Theory of Reasoned Action (TRA) Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM) in analyzing technology acceptance (Hanafizadeh et al., 2013).

The first Theory of Reasoned Action was made by Ajzen and Fishbein in 1975. TRA uses the assumption that behavior towards certain objects is influenced or driven by one's intention (behavioral intention), influenced by individual attitudes (attitude towards behavior) and social influence (subjective norms). According to (Hanafizadeh et al., 2014) Theory of Reasoned Action comes from the social psychology field. In an effort to reveal the influence of subjective attitudes and norms on the intention to carry out behavior or not, complementing this theory of reaction with beliefs, he argues that attitudes come from behavioral beliefs, while subjective norms come from normative beliefs.

The theory of Planned Behavior (TPB) is a development of the theory of reaction action (TRA). TPB views a person's behavioral intention to determine behavior is not only determined by subjective attitudes and norms, but is also influenced by perceived behavioral control which originates in a person's belief in these controls (Ajzen, 1991 in Al-Qeisi, 2009). Based on the TPB model above, it is explained according to (Chi lee, 2009) that the attitude towards a person's actual behavior in carrying out an action in determining is directly influenced by behavioral intention, this is determined by attitude (attitude), norms (subjective norms) and behavioral control.

TAM is an adaptation of the theory of Reasoned Action (TRA) theory according to (Davis, (1993) in Al-Qeisi, (2009) TAM is a model to explain the acceptance of technology that will be used by technology users. This model connects cause and effect between system designs. features, perceived usefulness, perceived ease of use, attitude towards using and actual usage behavioral. Perceived usefulness and perceived ease of use variables are placed as variables that affect individual interest in technology acceptance (Davis, 1993). According to Davis (1993) in Al-Qeisi, (2009) variables have a direct influence on the actual use of the system, namely perceived usefulness is the subjective perceived benefit of the use of technology. Perceived ease of use is the ease felt by the use of technology. Attitude toward using is the feelings, thoughts and perceptions of consumers directly or indirectly in technology usage behavior. Meanwhile, the actual system use is one's own explicit power to use information technology.

The limitation of the TAM model most often found by researchers is that the measurement of technology usage in respondents only relies on answers from the respondents themselves so it is assumed that the use reported by respondents is considered to reflect actual use (Al-Qeisi, 2009). Venkatesh and Davis (2000), in Al-Qeisi, (2009) extend the first TAM model to explain perceived usefulness and usage intentions in social influence and cognitive instrument processing. This TAM 2 model has a key determinant of the constructs of perceived usefulness and usage intentions which explain changes in technology acceptance over time each individual uses predetermined technology (Al-Qeisi, 2009).

The UTAUT model above is divided by four independent variables, one dependent variable and four moderator variables. The independent variables in question are those that directly affect the dependent variable, the effect can be positive or negative (Indrawati, 2015: 73). The independent variables in question are: (1) Performance Expectancy (PE) is the extent to which an individual believes that using the system will help him to achieve

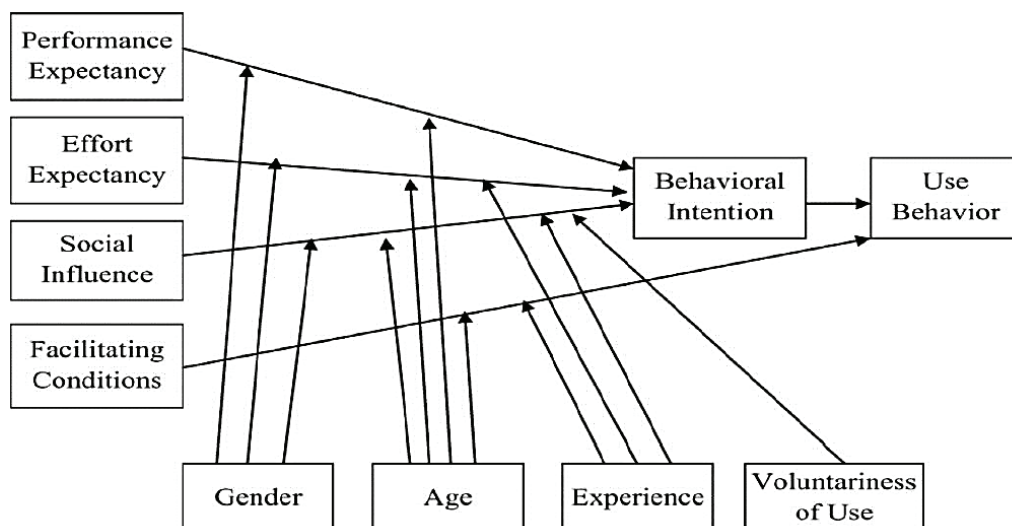
gains in job performance (Venkatesh et al, 2003 in Saibaba and Murthy, 2013: 80). (2) Effort Expectancy (EE) is the extent to which individuals understand the ease with which they use systems and technology (Venkatesh et al., 2003 in Saibaba and Murthy, 2013: 80). (3) Social Influence (SI) is the extent to which individuals feel that other people can make trust in using new systems and technologies (Venkatesh et al., 2003 in Saibaba and Murthy, 2013: 80). (4) Facilitating Conditions (FC) is an individual's perception of the availability of resources and supporting elements in adopting a new system and technology (Venkatesh et al., 2003 in Saibaba and Murthy, 2013: 80). The moderating variable has a contingent effect on the relationship between the independent variable and the dependent variable, the presence of a moderating variable can change the initial relationship between the independent variable and the dependent variable (Indrawati, 2015: 74). The initial variables of UTAUT were gender, age, experience and volunteerism (Venkatesh et al, 2003).

Hofstade's national culture dimension (Hofstade, 2010,2001) is to form a framework for adopting a new system and technology by taking into account the impact of national cultural differences that make individuals fast in adopting systems and technology. Hofstede (2010) divides the cultural dimension into five dimensions, namely: power distance, individualism, masculinity, uncertainty avoidance, long term orientation and the understanding of the cultural dimension. Power distance (PD) focuses on the level of equality or inequality between individuals in society in a country. Individualism (IDV) focuses on the extent to which society reinforces individual achievements or the collectivity of the individuals themselves. Masculinity (MSC) is the extent to which level is measured masculine of values such as assertiveness, performance, success, and competition. Uncertainty Avoidance (UA) is the degree to which people feel threatened by uncertainty and ambiguity and try to avoid the situation. Meanwhile, Long Term Orientation (LTO) is where the individual's situation is oriented towards the future and sees opportunities in the future by taking into account the level of success.

3. RESEARCH FRAMEWORK

This research framework uses individual behavioral intentions in seeing individuals in technology absorption, focusing on the determinants of individual intentions in using or adopting technology services (Saibaba and Murthy, 2013). Several research models are mostly used in the acceptance of information technology including Fishbein's Theory of Reasoned Action (TRA) and Ajzen (1975), Ajzen's Theory of Planned Behavior (1991), Davis's (1989) Technology Acceptance Model theory. And the Unified Theory of Acceptance and Use of Technology by Venkatesh et al (2003).

Figure 1 The Unfied Theory of Acceptance and Use of Technology (UTAUT)



The selection model for adopting technology adoption Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al (2003) is considered a strong and comprehensive model to understand the acceptance of information technology adoption that integrates the eight models defined in the previous model on information technology delivery (Saibaba and Murthy, 2013). It was found that there are four factors that significantly influence the acceptance of work expectancy (performance expectancy), effort expectancy, social influence and facilitating conditions and moderators in the model are gender, age. (age), experience (experience) and volunteerism (voluntariness) (Venkatesh et al., 2003). The UTAUT model was found to explain 70 percent of the variance to users in terms of intention to use technology, whereas the previous eight models could only explain at a percentage of 53 percent (Saibaba and Murthy, 2013).

This study uses UTAUT modifications, by eliminating facilitating conditions according to previous studies, facilitating conditions do not have a significant effect on individual factors for receiving adoption of information technology (Alhudait, 2015) because facilitating conditions are eliminated in this study. The moderator in this study was replaced with a cultural dimension (culture) Hofstede (2010). According to Bankole et al (2011), Srite and Kaharana, (2006), Alshare et al., (2011), Lauksen and Cruz (2012), and Baptista and Oliveira (2015: 426) states that culture is the most influential structure. on acceptance of information technology services. Culture has a significant effect in moderating the adoption of technology services. Cultural practices influence the acceptance of technology service adoption.

Figure 2 Modified UTAUT Model

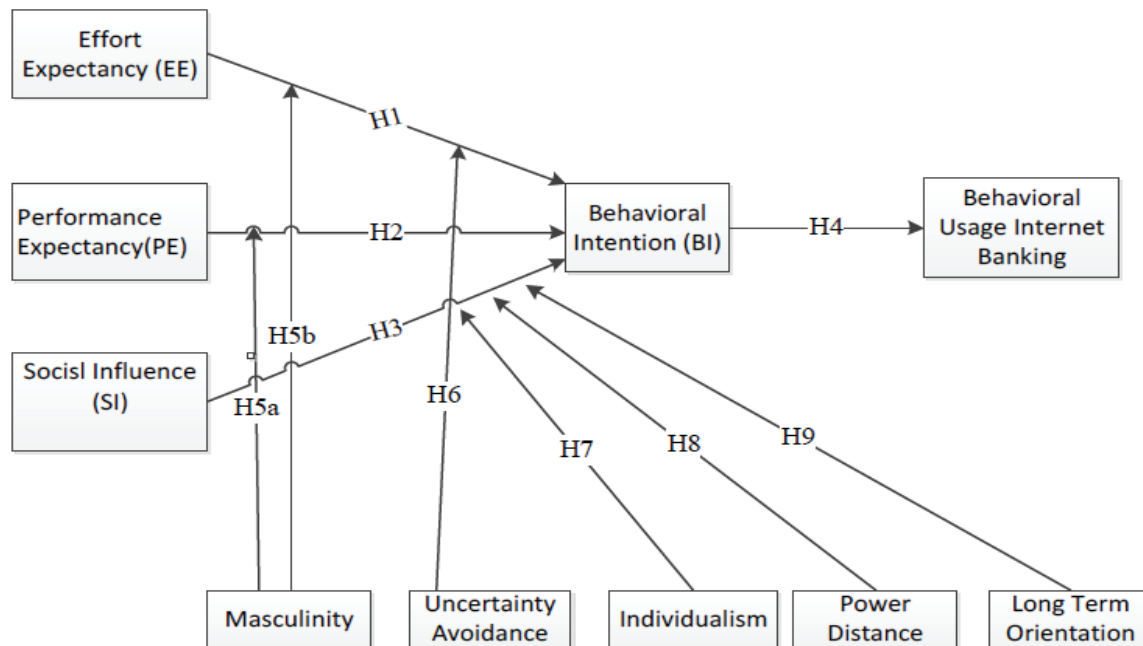


Figure 2 is the author's model framework based on previous research that supports this framework. By using the variable job expectancy (performance expectancy), business expectancy (effort expectancy) and social influence (social influence) from the basic model UTAUT (Vankatesh, et.al, 2003) and the moderator variable using culture (Hofstede, 2010). Distance, Individualism, Masculinity, Uncertainty Avoidance, Long Term Orientation.

Based on the research model above, the research hypothesis is:

H1: Effort Expectancy (EE) has an influence on behavioral intention (BI).

H2: Performance Expectancy (PE) has an influence on behavioral intention (BI).

H3: Social Influence (SI) has an influence on behavioral intention (BI).

H4: Behavioral intention has an influence on usage intention (UI).

H5a: Masculinity has an influence on the relationship between Performance Expectancy (PE) and behavioral intention (BI).

H5b: Masculinity (MSC) has an influence on the relationship between Effort Expectancy (EE) and behavioral intention (BI).

H6: Uncertainty Avoidance (UA) has an influence on the relationship between Effort Expectancy (EE) and behavioral intention (BI).

H7: Individualism (INV) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI).

H8: Power Distance (PD) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI).

H9: Long Term Orientation (LTO) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI).

4. METHODOLOGY

This research used quantitative research methods. This study uses a Likert scale, the use of this scale has the advantage of diversity of values and has a higher reliability coefficient. The sampling technique used in this study is non-probability sampling using quota sampling, namely the selection of sample members according to the comfort conditions of the researcher from a limited population with a predetermined number of samples. The population used in this study are bank customers who live in the territory of Indonesia. Then the samples to be taken for this study are bank customers who have not or do not use internet banking services (non-users) in Indonesia.

This study uses primary data by distributing questionnaires to respondents. The minimum sample used in this study was 240 respondents. The questionnaire was collected online through social media such as lin This study uses primary data by distributing questionnaires to respondents. The minimum sample in this study was 185 samples. The collection of questionnaires was carried out online through several social media, namely line, fuel, WhatsApp and Facebook with 1149 respondents. The distribution of questionnaires directly (offline) with a total of 150 respondents was as follows. Respondents in this study are bank customers in Indonesia who have not used internet banking, so respondents who are not bank customers in Indonesia and customers who have used internet banking cannot be sampled in this study. The number of respondents that can be taken in this study is 900 respondents.

The validity test was performed using the product moment correlation formula to test the hypothesis of the relationship between one independence variable and one dependent variable. Meanwhile, the instrument reliability testing was carried out using internal consistency using the split half technique, which was analyzed using the Spearman Brown formula. Validity and reliability testing were carried out with the help of SPSS version 20 for windows software. In this study, in the early stages of developing a measuring scale of indigo loading > 0.50, it is considered sufficient to show the validity of a study (Sugiyono, 2011). So, it can be concluded that all indicators can be said to be valid because the value of the loading factor is > 0.50.

Table 1 Reliability Test Result

Cronbach's Alpa	Cronbach's Alpha Based on Standardized Items	N of Items
.744	.935	38

The results of the reliability test that have been analyzed using SPSS version 23 show that the Cronbach Alpha value is 0.744. The variables in this study are declared to meet the criteria in reliability, which is more than 0.70 (Indrawati, 2015: 155).

5. RESULTS

This study uses Structural Equation Modeling (SEM) analysis techniques with the WarpPLS 5.0 computer program, which is an alternative approach that shifts from a covariance-based SEM approach to a variant-based approach. PLS is more of a predictive model. PLS is a powerful analytical method because it is not based on many assumptions. Multivariate analysis technique is a statistical analysis that involves more than two variables in each variable. The variables used in this study include effort expectancy, performance expectancy, social influence, behavioral intention and usage behavioral as well as moderator variables, namely Power Distance, Individualism, Masculinity, Uncertainty Avoidance and Longterm Orientation.

The characteristics of the respondents examined in this study were based on gender, occupation, monthly income, latest education, age and duration of internet use.

Table 2 Respondent Characteristics

Characteristic	N		Characteristic	N		Characteristic	N	
Gender			Monthly income			Age		
Male	514	(57%)	<= Rp 2.000.000	109	(12.1%)	17-20	3	(0.33%)
Female	386	(43%)	Rp 2.000.001 - 5.000.000	147	(16.3%)	21-30	245	(27.2%)

Characteristic	N		Characteristic	N		Characteristic	N	
			Rp 5.000.001 - 10.000.000	509	(56.6%)	31-40	348	(38.7%)
			Rp 10.000.001 - 15.000.000	129	(14.3%)	41-50	273	(30.3%)
			>Rp 15.000.001	6	(0.7%)	>50	31	(3.4%)
Occupation			E ducational Background			Experience using the internet		
Student	182	(20.2%)	SMA/SMK	227	(25.22%)	<1 year	9	(1%)
Entrepreneur	200	(22.2%)	Diploma	10	(1.1%)	1-3 years	192	(21.3%)
Housewife	18	(2%)	S1	492	(54.7%)	3-5 years	47	(5.22%)
Employee	470	(52%)	S2	167	(18.6%)	>5 years	652	(72.3%)
Others	30	(3.3%)	S3	0	(0%)			

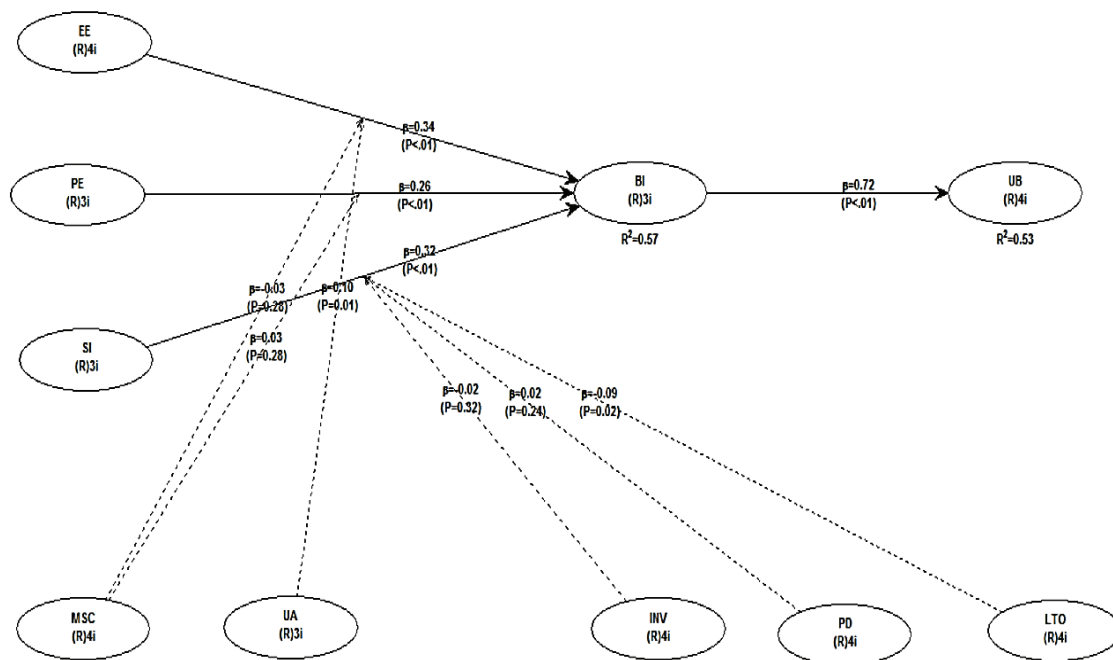
The validity test of the measurement model in warpPLS is used to determine the relationship between interconnected variables and how precisely the manifest variable can explain the existing latent variables. In this study, in measuring the outer model by looking at several indicators including Reliability Indicator, Internal Consistency Reliability, Convergent Validity and Discriminant Validity. From this method the variable components in this study can be declared valid and reliable.

Table 3 Structural Model Test Results

Indicator	Value	Rule of Thumb	Explanenation
APC	0,192	P-value \geq 0,05	Fit
	P<0,001		
ARS	0,549	P-value \geq 0,05	Fit
	P<0,001		
AARS	0,546	P-value \geq 0,05	Fit
	P<0,001		
AVIF	2,333	\leq 3.3, \leq 5 can be accepted	Fit
AFVIF	2,315	\leq 3.3, \leq 5 can be accepted	Fit
Gof	0,630	\geq 0.10, \geq 0.25, and \geq 0.36 (small, medium, large)	Fit
SPR	0,700	1: ideal, but \geq 0.7 can be accepted	Fit
RSCR	0,977	1: ideal, but \geq 0.7 can be accepted	Fit
SSR	1,000	\geq 0.7	Fit
NLBCCR	0,500	\geq 0.7	Less Fit

In WarpPLS there are 10 ways to determine the fit size of a model, namely Average Path Coefficient (APC), Average R-squared (ARS), Average Adjusted R-squared (AARS), Average Block Variance inflation factor (AVIF), average full collinearity VIF (AFVIF), Thenehaus GoF (GoF), Sympson's paradox ratio (SPR), R-squared Contribution Ratio (RSCR), Statistical Suppression Ratio (SSR) and Nonlinear Bivariate Causality Direction Ratio (NLBCDR). The following is the fit size value for a model in the table. The results of testing of these 10 methods 9 of the requirements are met 1 is not met, that if the goal is only to test the hypothesis, where each path represents the hypothesis then the evaluation of the fit model is less important. On the other hand, if the objective of the analysis is to find a fit model with the original data, then the evaluation of the fit model is important and useful for determining the quality of the model. In this study, the researcher aims only to test the existing hypothesis.

Figure 3 WarpPLS 5.0 Output Result



The hypothesis (H1) is Effort Expectancy (EE) has an influence on Behavioral Intention (BI) has a positive relationship with a parameter coefficient value of 0.336 and a P-value of 0.001, which is below 0.05, which means that H0 is rejected and H1 is accepted.

The hypothesis (H2) is Performance Expectancy (PE) has an influence on Behavioral Intention (BI) which has a positive relationship with a parameter coefficient value of 0.261 and a P-value of 0.001 which is below 0.05 which can be seen in table 4.9 which means H0 rejected and H1 accepted.

Hypothesis (H3) is Social Influence (SI) has an influence on behavioral intention (BI) has a positive relationship with the parameter coefficient value of 0.319 and a P-value of 0.001, which is below 0.05, which means that H0 is rejected and H1 is accepted.

The hypothesis (H4) is behavioral intention (BI) has an influence on usage intention (UB) which has a positive relationship with a parameter coefficient value of 0.725 and a P-value of 0.001, which is below 0.05, which means that H0 is rejected and H1 is accepted.

The hypothesis (H5a) is Masculinty has an influence on the relationship between Performance Expectancy (PE) and behavioral intention (BI) which has a positive relationship with a parameter coefficient value of 0.031 and a P-value of 0.281 which is above 0.05, which means that H0 is accepted and H1 rejected.

The hypothesis (H5b) is Masculinty has an influence on the relationship between Effort Expectancy (EE) and behavioral intention (BI) has a negative relationship with a parameter coefficient value of -0.027 and a P-value of 0.279 which is above 0.05, which means that H0 is accepted and H1 is rejected.

The hypothesis (H6), namely Uncertainty Avoidance (UA) has an influence on the relationship between Effort Expectancy (EE) and behavioral intention (BI) which has a positive relationship with a parameter coefficient value of 0.103 and a P-value of 0.013, which is below 0.05, which means H0 rejected and H1 accepted.

The hypothesis (H7) is individualism (INV) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI) which has a negative relationship with a parameter coefficient value of -0.019 and a P-value of 0.313, which is above 0.05, which means H0. accepted and H1 is rejected.

The hypothesis (H8) is Power Distance (PD) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI), which has a positive relationship with a parameter coefficient value of 0.023 and a P-value of 0.243 which is above 0.05, which means H0 accepted and H1 is rejected.

The hypothesis (H9) is Long Term Orientation (LTO) has an influence on the relationship between Social Influence (SI) and behavioral intention (BI), which has a negative relationship with the parameter coefficient value of -0.088 and a P-value of 0.023, which is below 0.05. which means that H0 is rejected and H1 is accepted.

6. DISCUSSION

Based on the data collection, this study uses five main variables and five moderator variables, the main variables are Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Behavioral Intention (BI), Usagae Behavioral (UB), and Modification variables are Masculinity (MSC), Individualism (INV), Long Term Orientation (LTO). Uncertainty Avoidance (UA), Power distance (PD) with 37 items of questionnaire questions. This study adopts the previous studies of Venkatesh (2003) in Al-Qeisi, 2009, Huang et al, 2010, and Alshare et al., 2011).

Effort Expectancy (EE) has a significant effect on Behavioral Intention (BI) with a coefficient value of 0.337, this means that the higher the level of expectation for convenience after using internet banking services, the higher the individual's interest in using internet banking services. This statement supports the results of research conducted by Alshare et al. (2011) which states that Effort Expectancy (EE) is a key determinant of behavioral intention (BI) in the use or adoption of a new service.

In this study, the constructs that have a significant effect on forming behavioral intention (BI) are Effort Expectancy (EE) and Social Influence (SI). This result is the same as previous research conducted by Alshare et al, (2011). The construct variables Effort Expectancy (EE) and Social Influence (SI) are the constructs that most influence a person's intention to use internet banking.

Behavioral Intention (BI) has a significant effect on Usagae Behavioral (UB) with a coefficient value of 0.725 with a coefficient value of 0.337.

The Hofstede culture moderator variables in this study are Masculinity (MSC), Individualism (INV), Power distance (PD) which do not moderate the relationship between the variables Performance Expectancy, Effort Expectancy Social Influence. It can be concluded that the cultural moderator variable above does not strengthen the influence of Performance Expectancy, Effort Expectancy Social Influence and Behavioral Intention. But in this study, there is a moderator variable (Long Term Orientation, Uncertainty Avoidance) which moderates the relationship between Effort Expectancy, Social Influence and Behavioral Intention.

Masculinity is the degree to which certain behavioral values, such as assertiveness, achievement, success, and competition among people. If the Masculinity score in an area is high, the higher the community in that area will be more aggressive in achieving its goals. It is assumed that countries with high masculine levels will be more interested in using technology if they believe that the technology can increase performance and facilitate the achievement of its goals (Hofstede, 2010). According to Hofstede (2010), the characteristics of Indonesian society have a low Masculinity score compared to other Asian countries. With a low masculine level, people are less motivated to increase expectations of convenience and someone's intention to use these services is getting smaller so that they are less interested in adopting technology.

Therefore, the relationship between variables, Effort Expectancy and Behavioral Intention is not moderated by Masculinity. In research supporting previous research, Wanda and Giri (2015) state that Masculinity does not affect the relationship between Performance Expectancy and performance expectations that customers will get after using internet banking services on their interest in use, supporting the research of Huang et al (2010).

Uncertainty Avoidance is a level of society feeling threatened by uncertainty and trying to avoid it, the characteristics of Indonesian society tend to avoid uncertainty. This shows that the higher the level of Uncertainty Avoidance, the hope of convenience will affect one's interest in using internet banking services.

Individualism is the degree to which individual traits are stronger in society. Low individualism means that there is a close relationship between individuals in community groups (collectivism). If Individualism in an area is high, it will be increasingly difficult for individuals to be influenced by other people to adopt internet banking services. If it is related to the culture of Hofstede (2010), Indonesia is stated to have a low individualism score, meaning that people have good social relations with each other. In this study, individualism has no influence on the relationship between social influence and behavioral intention. This supports the research conducted by Wanda and Giri (2015).

Power distance, Indonesia has a high score, which means that there is an inequality or gap between people who have higher power and lower power. For example, decisions made by a manager will be obeyed by his subordinates. With the highpower distance in a country, it will be easier for people to be influenced by other people, especially people who have higher power in adopting technology (Hofstede, 2010). In the results of this study, power distance has no relationship between the influence of social people that will be obtained by customers after using internet banking services on interest in use. This supports previous research conducted by Wanda and Giri (2015) Huang et al (2010).

Long term orientation is where an individual's situation is oriented towards the future and sees opportunities in the current phase by taking into account their level of success, in this study the results of the Long term

orientation get negative results between the relationship of social influence and behavioral intentions, which in this study means that more High someone in the long term thinking will keep them from using internet banking services. But social influences that are not influenced by long-term thinking will have a major social influence on one's intention to use internet banking services.

7. CONCLUSION

The results of research that variable Effort Expectancy (EE) or the hope of convenience has the greatest influence on customer interest in using internet banking services. This may imply that the higher the level of expectation for convenience after using internet banking services, the higher the individual's interest in using internet banking services. Then the influential variable in this study is Social Influence which has the next biggest influence on customer interest in using internet banking services. This means that it shows that there is a role from other people / family environment that can influence them to use internet banking services. Then the variable that has the lowest influence on customer interest is Performance Expectancy. This means that the more benefits that will be felt when using internet banking services, the more they will want to use the service. The influencing variables in this study were the Longterm Orientation (LTO) and Uncertainty Avoidance (UA) variables and the variables that did not affect this study were Masculinity (MSC), Individualism (INV), Power distance (PD). It can be concluded that the characteristics of Indonesian society tend to be long term oriented and tend to avoid uncertainty in the interest in using internet banking services.

There are several things that can be used as suggestions for the banking sector as internet banking service providers with the aim that customers want to use internet banking services. Some suggestions include: 1). The expectation of convenience is the factor that most influences customer interest in using internet banking services. Banks can provide services that make it easier for customers to use with a user interface that is not only attractive but with easy-to-use navigation. Socialization regarding ease of use is also necessary so that customers are aware of the services offered by banks. 2) The characteristics of the Indonesian people tend to think about the short term rather than the longterm benefits so that internet banking service providers must provide services that can provide benefits and convenience in the long and short term so that people intend to use internet banking services. 3) The bank should make services that have benefits tailored to the expectations and needs of consumers

This study also has several limitations which are expected to be improved by conducting further research. Here are some suggestions that can be used for further research: 1) Looking for cultural moderators other than the Hofstede Culture that has a relationship that strengthens one's intention to use a new service. 2) In this study, it is focused on urban areas, it is better if further research is carried out in rural or urban areas, to see the characteristics of rural culture. 3) Further research is carried out not only focusing on internet banking services but also for mobile banking services and other new technology services.

REFERENCES

- Alhudaith, Abdullatif. (2015). The Differences Between Online Banking Users. Intenational Conference on eBusinees, eCommerce, eManagement, eLearning, and eGovernance, Vol 1.
- Alshare, K., Mousa, A., Al-Garni, M., Musa, A. (2010). The Moderating Effect of Cultural Dimensions on User's Acceptance of Mobile Payment Devices: A Conceptual Model, 1-7.
- Al-Qeisi, Kholoud Ibrahim. (2009). Analyzing the Use of UTAUT Model in Explaining an Online Behaviour: Internet Banking Adoption. Dissertation, Brunel University
- Al-Qiesi, Kholud, Charles Dennis, Ahmed Hegazy dan Munerr Abad. (2015). How Viable Is The UTAUT Model in a Non-Westren Context?. International Bussiness Research, Vol 8, No2
- Badan Kependudukan dan Keluarga Berencana Nasional. (2013). Profil Kependudukan dan Pembangunan di Indonesia. BKKBN.
- Bank Central Asia. (2013). Annual Report 2013. PT. Bank Central Asia (Persero) Tbk.
- Bank CIMB Niaga. (2014). Annual Report 2014 [online]. Tersedia: <https://www.cimbniaga.com/> [22 November 2015]
- Bank Indonesia. (2014). Statistik Perbankan Indonesia – September 2014. Didapat dari: <http://www.bi.go.id> (19 November 2015).

- Bank Indonesia. (2014). Jumlah Simpan Pinjam. Didapat dari: <https://www.bi.go.id> (19 November)
- Bank Rakyat Indonesia. (2013). Annual Report 2013. PT. Bank Rakyat Indonesia (Persero) Tbk.
- Bank Negara Indonesia. (2013). Annual Report. PT. Bank Negara Indonesia (Persero) Tbk.
- Batey, Glen & Comer, Theresa. (2013). Development of an Internet Risk Awareness Group for Learning Disabled Offenders. *Journal of Intellectual Disabilities and Offending Behaviour*, 4(3), 109-116. Retrieved from Emerald Insight Journal Database.
- Bankole, F. O., Bankole, O. O., dan Brown, I. (2011). Mobile Banking Adoption in Nigeria. *The Electronic Journal on Information Systems in Developing Countries*. 47(2), 2-7
- Baptista, Gancalo dan Tiago Olievera. (2015). Understanding Mobile Banking: The Unified Theory of Acceptance and Use of Technology Combined with Cultural Moderators. *Computera in Human Behavior*. 419-428
- BCG Report (2015). The Internet's Ne Billion Digital Consumers in Brazil, Rusia, India, China, and Indonesia. Di dapat dari www.bcg.com/documents/file58645.pdf (19 November 2015).
- Ghozali, Imam & Hengky Latan. (2014) Partial Least Square Konsep, Metode dan Aplikasi Menggunakan Program WarpPLS 4.0. Semarang: BP Undip
- Giri, Refi Rifaldi Windya dan Ayu Noor Asry Sy. Saad. (2015). Implementation of Analysis Model UTAUT to Online Behavioral in Adopting Internet Banking In Bandung. *Advanced Science Letters*, 2015, American Scientific Publishers.
- Gopalakrishnan, S., Wischnevsky, J. and Damanpour, F. (2003), "A Multilevel Analysis of Factors Influencing the Adoption of Internet Banking", *IEEE Transactions on Engineering Management*, Vol. 50 No. 4, pp. 413-26.
- Hanafizadeh, Payam, Byron W. Keating dan Hamid Reza Khedmatgozar. (2014). A Systematic Review of Internet Banking Adoption. *Elsevier: Journal Telematics and Informatics*, 31 (2014), 492–510.
- Huang, K.Y., Choi, N.J., Smith, I., C. (2010). Cultural Dimensions as Moderators of the UTAUT Model: a Research Proposal in a Healthcare Context. *Americas Conference on Information Systems* 2-6. Retrieved from Association for Information Systems Electronic Library (AISel).
- Hofstede, G. (1980) *Culture's Consequences: International differences in Work-related Values*, Sage, Beverly Hills, CA.
- Hofstede, Geert dan Bond, Michael Harris. (1988). *The Confucius Connection: From Cultural Roots to Economic Growth*. *Organizational Dynamics* Vol. 16, Issue 4, Spring 1988, Pages 5-21.
- Hofstede, Geert dan Minkov, Michael. (2010). Long-term versus Short-term Orientation: New Perspectives. *Asia Pacific Business Review*, 16:4, 493-504.
- Indrawati, Ph.D. (2015). *Metode Penelitian Manajemen dan Bisnis*. Reflika Aditama.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Delhi : New Age International (P) Linted, Publishers.
- Kurniawan, Galih. (2014). Layanan Bank: Bisnis E-channel Makin Berkibar. Didapat dari: <http://finansial.bisnis.com/read/20140811/90/248916/layananbank-bisnis-e-channel-makin-berkibar>
- Laukkanen, T. dan Cruz, P. (2012). Cultural, Individual and Device-Specific Antecedents on Mobile Banking Adoption: A Cross-National Study. *45th Hawaii International Conference on System Sciences*, 45.
- McKinsey. (2014). *Asia Personal Financial Services Survey 2014*. McKinsey and Company
- Maharsi, Sri dan Mulyadi, Yuliani. (2007). Faktor-Faktor yang Mempengaruhi Minat Nasabah Menggunakan Internet Banking dengan Menggunakan Kerangka Technology Acceptance Model (TAM). *Jurnal Akuntansi dan Ekonomi*, Vol 9(1), 18-28.
- Martins, C., Oliveira, T. and Popovic, A. (2014). Understanding the Internet Banking Adoption: A Unified Theory of Acceptance and Use of Technology and Perceived Risk Application. *International Journal of Information Management*, Vol. 34 No. 1, pp. 1-13

- Mayasari, Feronica., Kurniawati, Elisabeth Penti dan Kurniawati, Paskah Ika. (2011). Antecedents and Consequences of Nasabah's Usage of Internet Banking in Using Technology Acceptance Model (TAM), (Survey Pada Pengguna KlikBCA). Seminar Nasional Teknologi Informasi & Komunikasi Terapan 2011. [1-9]
- Mujilan. (2013). Kualitas Layanan Internet Banking dan Karakteristiknya Berdasarkan Frekuensi Penggunaan. Widya Warta No.1 Tahun XXXVII, ISSN 0854-1981.
- Moyer, J.D, dan Hughes, B.B. (2012) ICTs: Do They Contribute to Increased Carbon Emissions. Technological Forecasting and Social Change, 79 (2012), 919-931.
- Nor, K.M., Sutanonpaiboon, J., Mastor, N.H. (2010). Malay, Chinese, and Internet Banking. Chinese Management Studies. 4(2), 6, 145.
- Otoritas Jasa Keuangan. (2013). Bank Umum [Online]. Tersedia: <http://www.ojk.go.id> (19 November 2015).
- Putri, Intan Pratamei. (2015). Analisis Peralihan Layanan Internet Banking Terhadap Nasabah Perbankan di Jawa Barat Dengan Pendekatan Technology Acceptance Model (TAM). Skripsi pada Telkom University.
- Profil Pengguna Internet di Indonesia. (2012). <http://www.slideshare.net/internetsehat/profil-pengguna-internet-indonesia-2014-riset-oleh-apjii-dan-puskom-ui> (18 November 2015)
- Sabi, Humphrey Muki. (2014). Research Trends in the Diffusion of Internet Banking in Developing Countries. Journal of Internet Banking and Commerce, August 2014, vol. 19, no.2.
- Saibaba, S. Dan T. Naryana Murty. (2013). Factors Influencing The Behavioral Intention to Adopt Internet Banking: An Empirical Study In India. Journal of Arts, Science & Commerce, Vol IV, 77-90 Sandjojo Nidjo. (2011). Metode Analisis Jalur (Path Analysis) dan Aplikasinya. Jakarta: Pustaka Sinar Harapan.
- Sekaran, Uma. (2003). Research Methods for Business: A Skill, Approach, Fourth Edition. New York: John Wiley & Sons.
- Srite, Mark dan Elena Kaharanna. (2006). The Role of Espoused National Cultural Values In Technology Acceptance. Management Information System Quarterly. 30(3), 683-688.
- Statista. (2015). Number of Internet Users in Indonesia from 2013 to 2018. Didapat dari: <http://www.statista.com/statistics/254456/number-of-internet-users-in-indonesia/> (19 November 2015)
- Siahaan, M.S., dan Widodo, P.P. (2013). Kajian Unified Theory of Acceptance and Use Of Technology Dalam Penggunaan Open Source Software Database Management System: Studi Kasus Universitas Indraprasta PGRI.
- Sugiyono (2012). Metode Penelitian Kombinasi (Mixed Methods). Bandung: Alfabeta CV.
- Sholihin, Mahfud dan Ratmon Dwi (2013) Analisis SEM-PLS dengan WarpPLs 3.0 untuk Hubungan Nonlinier dalam Penelitian Sosial dan Bisnis. Yogyakarta: Andi
- Utomo, Sulisty Budi (2012). The Online Banking Usage in Indonesia An Empirical Study. Indonesia School of Economics, Vol 54, 19.
- Venkatesh. Theoretical Models. Didapat dari www.vvenkatesh.com/organizations/Theoretical_Models.asp#Constructs. (20 November 2015).
- Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis dan Fred D. Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. MIS Quarterly, Vol. 27, No. 3 (Sep., 2003), pp. 425-478
- Widiatmanti, Heru. (2015). Penghasilan Kelas Menengah Naik = Potensi Pajak?. Kementerian Keuangan Republik Indonesia [online]. Tersedia: <http://bppk.kemenkeu.go.id> [4 Januari 2016].
- Widjana, Mahardika Aditya. (2010). Determinan Faktor Penerimaan terhadap Internet Banking pada Nasabah Bank di Surabaya. Tesis. Sekolah Tinggi Ilmu Ekonomi Perbanas Surabaya.
- Wanda, Vanesya dan Refi Rifaldi Windy Giri. (2015). The Use of Internet Banking Analysis Using Model UTAUT With Culture as Moderator in Medan and Bandung Raya. Advanced Science Letters, 2015, American Scientific Publishers.
- Yosfi, Ramdhasari Widya. (2015). Analisis penggunaan Internet Banking dengan Mengadopsi Technology Acceptance Model (TAM) di Bandung. Skripsi pada Telkom University.

THE ANALYSIS OF MULTI DIMENSIONAL TRUST AND PERCEIVED RISK USING LUO-MODIFIED UTAUT MODEL ON ACCEPTANCE OF INTERNET BANKING SERVICE IN INDONESIA

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Abstract

The number of internet users in Indonesia is the fourth largest in Asia Pacific in 2018 with an increasing internet penetration rate. However, this condition is not comparable to the number of internet banking service users which tends to be lower. Malaysia which has a lower number of internet users than Indonesia but has a larger number of internet banking users. This study aims to analyze the effects of the dimensions of trust (tendency to trust, structural assurance and trustworthiness), perceived risk and the UTAUT-Luo modification model on behavioral interest in using internet banking services in Indonesia. The data was collected using a sample quota method so that there were 450 respondents who were spread across Indonesia based on savings and loans. The analysis technique of this research uses Structural Equation Modeling (SEM) with AMOS version 21 software. The results of this study indicate that the variable trust belief is the main factor influencing individual interest in using internet banking services.

Keywords: Internet Banking, Trust, Perceived Risk, AMOS, Modified UTAUT

1. INTRODUCTION

The transformation of information and communication technology has changed all aspects of life from private to general aspects (Pratama and Al-Shaikh, 2012). The use of technology can increase productivity and cut costs (Moyer and Hughes, 2012). The combination of the use of technology and information is one indicator of technology capability for each country (Archibugi and Coco, 2004). This condition causes the internet to be an important component in individual life and a sign of the development of a country (Pratama and Al-Shaikh, 2012).

Table 1 Internet Growth in Indonesia

Year	Internet Users	Growth
2018	171.170.000	16%
2017	143.260.000	7%
2016	132.700.000	17%
2015	110.200.000	20%
2014	88.100.000	-

According to APJII (2019) internet users in Indonesia reach 171 million users and continues to growth every year and makes Indonesia as the fourth largest internet users in Asia Pacific. This growth made the banking industry competing to provide internet banking services as a form of interaction with customers, as these customers interact with other financial industries (Hanafizadeh et al., 2014). Internet banking services were first introduced in Indonesia by Bank Internasional Indonesia (BII) in 2000, which was limited to promoting the products offered (Utomo, 2012). The Indonesian banking industry offers this service to improve services to existing customers even though internet banking itself is still relatively new for most people in Indonesia (Utomo, 2012).

Indonesia is included in the top ten countries with the largest digital banking penetration in Asia Pacific with 56 percent in 2018. This can be compared to Malaysia, where the number of internet users smaller than Indonesia, which was 29 million users in 2018, but has 85,1 % penetration rate.

Indonesian society has characteristics that tend to avoid risk, one of the causes of the low adoption rate of internet banking services in Indonesia (McKinsey and Company, 2013). One of the potential risks posed is security and confidentiality of customers' personal financial data. The biggest risk that customers avoid before deciding to use internet banking services in Indonesia is cyber crime, such as the dissemination of personal financial data by irresponsible individuals (Maharsi and Fenny, 2006). This statement is supported by the level of cyber crime in Indonesia in 2014 which was ranked first in the world as a country that became victims of cybercrime with an average of 42,000 attacks per day (National Geographic Indonesia, 2014). Then the issue of trust, especially trust in the use of technology, is still a major issue in Indonesia and is still relatively low (Techinasia, 2013).

Several studies related to the level of internet banking service adoption have been conducted, where trust affects the level of online banking penetration (McKnight, 2002). Then the level of adoption or rejection of a technology, including internet banking, is influenced by trust and customer perceived risk (Luo et al., 2010). Customers will not receive or use a technology-based service without the trust that has been built previously (Kim et al., 2004) and security and data confidentiality considerations are not addressed (Gefen, 2003). So there is an assumption that trust and perceived risk by customers affect the adoption rate of internet banking service use (Luo et al, 2010). Research on the effect of trust and perceived risk on the adoption rate of internet banking services is important to do.

Based on previous research on technology adoption, it is known that The Unified Theory of Acceptance and Use of Technology (UTAUT) model by Venkatesh et al. (2003) and in particular the modified UTAUT Luo model is an appropriate model as a theoretical basis for research on internet banking. However, based on studies of several previous studies as well, there are several variables that are not contained in the UTAUT model and it is necessary to modify the addition of several variables. The use of the UTAUT-Luo modified model was used in this study.

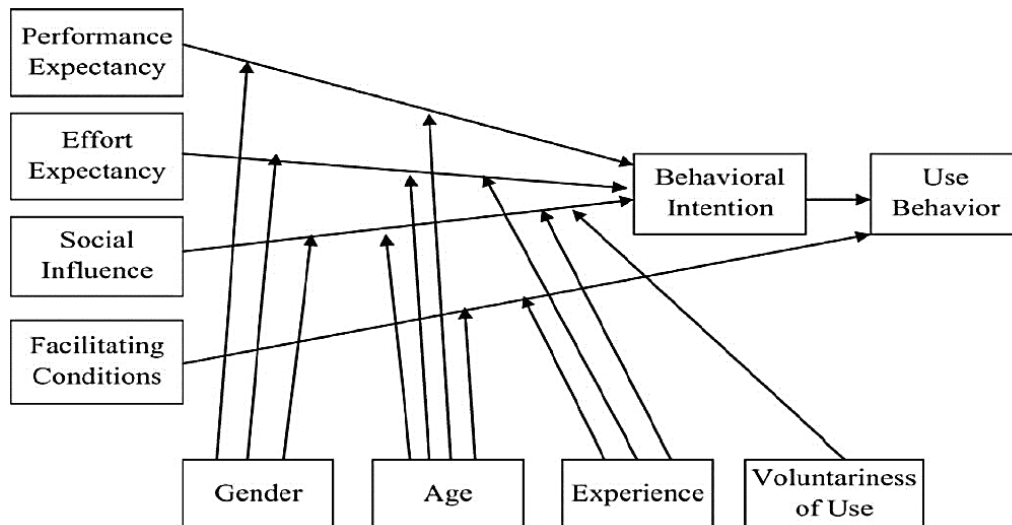
Thus, the research questions for this research include:

1. Does Disposition to Trust affect Structural Assurance?
2. Does Self Efficacy affect Structural Assurance and Perceived Risk?
3. Does Perceived Risk affect Performance Expectations?
4. Does Trust Belief affect Performance Expectancy and Perceived Risk?
5. Do Trust Beliefs, Performance Expectancy and Perceived Risk influence Behavioral Intention?
6. How does the perceived dimension of trust (multidimensional trust) affect the acceptance rate of internet banking services?
7. How does the dimension of perceived risk (multi-faceted risk) affect the level of acceptance of internet banking services?

2. LITERATUR REVIEW

Internet banking is a service that allows banking customers to make transactions such as transfers, bill payments, access account balances, access account information via the internet (Muzividzi, 2013). Customers who have an internet banking account can perform several activities related to banking, such as viewing the amount of the account balance, transferring funds and paying bills (Tan and Teo, 2000). This is what makes internet banking a communication and information service center that promises benefits to both customers and the banking company itself (Tan and Teo, 2000). The benefits of internet banking for banking companies are increasing their competitive advantage through reducing transaction costs, providing better service to customers, fulfilling customer demands and creating more efficient transactions (Kalakota and Winston, 1996 in Takieddine and Sun, 2015). Customers also feel the benefits of internet banking, including the flexibility it offers because customers can save time and effort to access services anytime and anywhere (Tan and Teo, 2000). This can be done without having to visit one of the bank's branch offices with a limited operational schedule (Polasik and Wisniewski, 2009).

Figure 1 The Unified Theory of Acceptance and Use of Technology (UTAUT)



UTAUT is a research model that provides a useful tool for managers to assess the possibility of success from the introduction of technology and helps them to understand the driving factors for acceptance in order to further design activities that are System Design Features Perceived Usefulness Actual System Use Attitude Toward Using Perceived Ease of Use interventions such as training and marketing (Venkatesh, 2003). This model is also a combination of previous theories and analyzes the reasons for the use or rejection of a new technology (Hanafizadeh et al., 2013). According to Venkatesh (2003), this model consists of three moderators, namely gender, age, experience and voluntariness as well as four core variables:

Performance Expectancy (PE) is the extent to which individuals believe that using a system will help them to gain benefits in job performance. In this context, performance expectancy is the level of individual confidence that using this service will improve performance on matters related to banking tasks (Venkatesh et al., 2003).

Effort Expectancy (EE) is the extent to which the level of ease is associated with the use of a system and technology (Venkatesh et al., 2003). Effort expectancy affects effort expectancy. When users feel that using the internet is easy and does not require a lot of effort, the expectation to get the desired performance will appear (Zhao et al., 2010).

Social Influence (SI) is a perception where many people advise individuals to use or not use a technology. This perception can come from the user's friends, family or people who have used the technology first. This has similarities with the subjective norm variables contained in Theory of Reasoned Action (Venkatesh et al., 2003). These opinions and perceptions will influence users' interest in adopting a technology (Martins et al., 2014).

Facilitating Conditions (FC) is the customer's perception of the availability of resources and other supporting elements for adopting a technology including user knowledge, capabilities and existing resources (Venkatesh et al., 2003). This variable has similarities with the perceived behavioral control variable contained in Theory of Planned Behavior

Self-efficacy is an individual's perception of the level of difficulty and ease of something that can lead to behavior (Ajzen, 2006). In its application to internet banking adoption, self-efficacy is the user's assessment of one's own capability to adopt internet banking services (Luo et al., 2010). The role of self-efficacy in the world of technology and information systems is to help understand individual responses to information technology (Luo et al., 2010).

Trust is the hope that an individual or company has when interacting with other parties and will not take undue advantage over dependence on that party (Gefen et al., 2003). This is one of the keys to supporting behavioral intention because transactions via the internet (e-commerce) are carried out without face to face (Gefen et al., 2003).

The dimensions of trust based on information technology can be divided into disposition to trust, structural assurance and trust belief (Luo et al., 2010). Disposition to trust according to the perspective of trust attributes is a general tendency in which people believe and believe in something in a humanitarian context and adopt an attitude of mutual trust between each other (McKnight et al., 2002). Then structural assurance is the perception of individual trust in an organization or institutional institution (McKnight et al., 2002). In the context of electronic banking transactions, structural assurance is the perception of the availability of legal structures and techniques such as encryption, guarantees, insurance, regulations or other procedures on the wireless internet to ensure

the success of financial transactions with banks (McKnight et al., 2002). Trust belief is a perception of trust in a vendor which consists of specific beliefs about integrity, benevolence, and competence (McKnight et al., 2002).

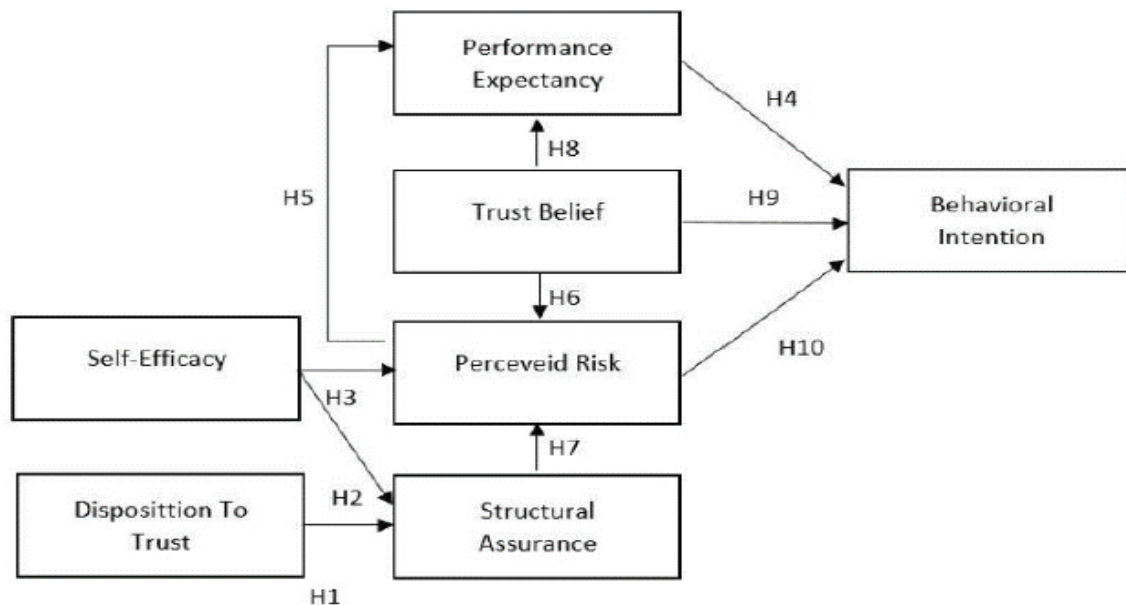
Perceived risk is the customer's perception of uncertainty which is a result related to searching and selecting information about a product or service before making a purchase decision (Kesharwani and Bisht, 2012). Then this variable can also be defined as the main obstacle felt by customers to use electronic services or e-service (Featherman and Pavlou, 2003). If the customer finds a difference between the purchase experience and the purchase goal, the level of perceived risk will be higher so that the customer can reduce or even stop consumption of the product or service (Kesharwani and Bisht, 2012). Perceived risk is a barrier to the use and adoption of internet banking (Laforet and Li, 2005).

Behavioral intention in the context of online transactions is a major variable of interest for web-based vendors, which is customer behavior, especially customer willingness to make transactions via web pages (McKnight et al., 2002). This variable reflects individuals who are willing to try and are motivated to behave (Ajzen, 1991 in Gu et al., 2009).

3. METHODOLOGY

This study uses the basic model of The Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). UTAUT separates critical and continuation factors related to predictions regarding behavioral intention to use technology in an organizational context (Venkatesh et al., 2012). The UTAUT model used in this study is a modified UTAUT-Luo model and is a replication of previous research by Luo et al. (2010). Several variables were added to the UTAUT model, including disposition to trust, structural assurance, perceived risk, trust belief and self efficacy. Based on this explanation, this research model can be seen in Figure 2

Figure 2 Modified UTAUT-Luo Model



Some variables have a negative influence on other variables, based on previous research that has been done by Luo, the variables are still included in the research model with the aim of looking back at the influence between these variables. So based on the above thinking, the hypothesis of this study is:

H1: Disposition to Trust (DTT) has an influence on Structural Assurance (SA).

H2: Self Efficacy (SE) has an influence on Structural Assurance (SA).

H3: Self Efficacy (SE) has no effect on Perceived Risk (PR).

H4: Performance Expectancy (PE) has an influence on the Behavioral Intention (BI) of customers in adopting internet banking services.

H5: Perceived Risk (PR) has no effect on Performance Expectancy (PE).

H6: Trust Belief (TB) on banks has no influence on the Perceived Risk (PR) of customers in adopting internet

banking services.

H7: Structural Assurance (SA) has no influence on Perceived Risk (PR).

H8: Trust Belief (TB) has an influence on Performance Expectancy (PE).

H9: Trust Belief (TB) to banks has an influence on the Behavioral Intention (BI) of customers to adopt internet banking services.

H10: Perceived Risk (PR) has no effect on Behavioral Intention (BI) in adopting internet banking services.

The data analysis method used in this research is quantitative. This study uses a Likert scale where by using this scale the benefits obtained are the diversity of values and have a higher reliability coefficient. The sampling technique used in this study is non-probability sampling with a quota sampling type (selection of sample members is in accordance with the comfort conditions of the researcher from a limited population with a predetermined number of samples). The population used in this study were bank customers domiciled throughout Indonesia with a sample of bank customers who had not or did not use internet banking services (non-users) in Indonesia.

This research uses Structural Equation Modeling (SEM) as a analysis method. SEM is a multivariate technique that combines aspects of multiple linear regression and factor analysis to estimate a series of interrelated dependency relationships simultaneously (Hair et al., 2006 in Dachlan, 2014: 4). Multivariate analysis technique is statistical analysis which involves more than two variables in each analysis (Dachlan, 2014: 6). SEM also allows researchers to answer research questions that are interrelated in a single, systematic and comprehensive analysis, namely through modeling the relationships between a number of independent and dependent construct variables simultaneously (Dachlan, 2014: 2).

SEM reflects the activities performed by several analytical techniques such as factor analysis, regression analysis and path analysis. Like regression analysis, SEM can also be used to test the causal relationship (statistical dependency) between the independent variables and the dependent variable in one test. Then this analysis technique also accommodates the ability of path analysis (path analysis) by displaying a path in the form of a schematic diagram to facilitate analysis with a visual display. The diagram shown illustrates the relationship of each variable along with its measuring indicators simultaneously (Dachlan, 2014: 8).

4. RESULTS

This study uses Structural Equation Modeling (SEM) analysis method using the AMOS version 21 computer program. This study uses seven variables: Disposition to Trust (DTT), Structural Assurance (SA), Self Efficacy (SE), Perceived Risk (PR), Trust Belief (TB), Performance Expectancy (PE) and Behavioral Intention (BI) with 48 question items.

This study uses primary data by distributing questionnaires to respondents. The minimum sample used in this study was 240 respondents. The questionnaire was collected online through social media such as line, WA and Facebook with a total of 291 respondents. Direct distribution of questionnaires was carried out by distributing questionnaires with a total of 172 respondents. Respondents in this study are bank customers in Indonesia who have not used internet banking. So that respondents who are not bank customers in Indonesia and have used internet banking, cannot be sampled in this study. The number of respondents taken in this study were 450 respondents.

The characteristics of the respondents examined in this study were based on gender, domicile, occupation, monthly income, latest education, age and duration of internet use.

Table 2 Respondents Characteristic

Characteristic	N		Characteristic		N		Characteristic	N				
Gender			Monthly income					Age				
Male	180		<= Rp 2.000.000			23	(5.1%)		17-20	15	(3.3%)	
Female	270		Rp 2.000.001 -		Rp 5.000.000	283 (62.9%)		21-30		211 (46.8%)		
			Rp 5.000.001 -		Rp 10.000.000	111 (24.7%)		31-40		107 (23.7%)		
			Rp 10.000.001 -		Rp 15.000.000	15	(3.3%)		41-50		77	(17.1%)
			>Rp 15.000.001			18	(4%)		>50		40	(8.9%)
Occupation				Education				Experience using the internet				
Sivil servant	148	(32.9%)	SMA/SMK			125 (27.8%)		<1 year		16	(3.6%)	
Entrepreneur	64	(14.2%)	Diploma			7	(1.5%)		1-3 years		20	(4.4%)

Housewife	13	(2.9%)	S1		272 (60.4%)	3-5 years	89	(19.8%)
Others	23	(5.1%)	S2		46 (10.2%)	>5 years	325 (72.2%)	
			S3		0 (0%)			

Respondents who use internet banking services are dominated by female respondents with a percentage value of 60 percent. Then respondents who do not use internet banking services are dominated by respondents aged between 21 years and 30 years with a percentage of 46.8 percent or as many as 211 people. Characteristics based on income who have not used internet banking services are dominated by respondents with incomes between Rp. 2,000,001 to Rp. 5,000,000 as many as 283 people or 62.9 percent. Respondents who have jobs as civil servants with a percentage of 32.9 percent or as many as 148 people are customers who have not used internet banking services

The validity test of the measurement model ($\alpha = 5\%$) is used to determine the relationship between interconnected variables and how precisely the manifest variable can explain the existing latent variables. The goodness of fit test is used to assess whether the model is fit by looking at the values of Absolute Fit Indices, Incremental Fit Indices and Parsimony Fit Indices. The results of data processing show that based on testing using a measurement model, the number of path coefficient (H1: 0.55, H2: 1.62, H3: 0.93, H4: 1.04, H5: 0.09, H6: 0.12, H7: 0.13, H8: 0.79, H9: 0.93 and H10: 0.09) and a p value less than 0.05 indicates that the overall model is acceptable except for H45, H6 and H10. Based on this, it can be interpreted that there is a significant positive influence between the variables of DTT on SA, SE on SA, SE on PR, PE on BI, TB on PR, SA on PR, TB on PE and TB on BI.

Testing the hypothesis in a structural model ($\alpha = 5\%$) is basically the same as testing a hypothesis using a measurement model, but in a structural model it only changes the arrangement during the measurement model test. The results in the structural model test indicate that H1, H2, H3, H6, H7, H8 and H9 are accepted. Meanwhile, H4, H5 and H10 were declared not accepted. A positive estimate value indicates a significant correlation, while a negative estimate value states that there is no correlation and is insignificant between latent variables and between latent variables and manifest variables. The CMIN value on the default model is 8447,177 and is between the saturated model (.000) and independence model (15235.151). So that based on the structural model test, it means that the model is considered fit and shows support for the results of the Chi-square. Then the value of GFI (0.521) and AGFI (0.474) is close to number one and the value of RMR (0.197) is close to zero. This shows that the covariance of the sample is close to the estimated covariance, thus showing support for the Chi-square results in the research model.

Based on the results in the structural model test, there is a significant relationship between the variables DTT-SA, SE-SA, TB-PR, SA-PR, TB-PE and TB-BI because the path coefficient number is positive and the p value is more than 0.05. Whereas in the structural model test, there was no significant relationship between the variables SE-PR, PE-BI, PR-PE and PR-BI because the calculated p value was above 0.05.

Hipotesis	Path Coefficient	Estimate
H1: Disposition to Trust (DTT) – Structural Assurance (SA)	0.94	0.630
H2: Self Efficacy (SE) - Structural Assurance (SA)	0.41	0.343
H3: Self Efficacy (SE) - Perceived Risk (PR)	0.08	0.110
H4: Performance Expectancy (PE) – Beahavioral Intention (BI)	0.17	0.139
H5: Perceived Risk (PR) – Performance Expectancy (PE)	0.00	0.003
H6: Trust Belief (TB) – Perceived Risk (PR)	-0.11	-0.168
H7: Structural Assurance (SA) – Perceived Risk (PR)	0.20	0.340
H8: Trust Belief (TB) – Performance Expectancy (PE)	0.67	0.799

Based on the results of data collection, this study uses seven variables, namely Disposition to Trust (DTT), Structural Assurance (SA), Self Efficacy (SE), Perceived Risk (PR), Trust Belief (TB), Performance Expectancy (PE) and Behavioral Intention. (BI) with 48 items of questionnaire questions.

The results showed that hypothesis one (H1), namely Disposition to Trust (DTT), has an influence on Structural Assurance (SA) with an estimate value of 0.630, thus indicating that H0 is rejected. This may imply that the higher the level of trust the respondent has, the more confidence in the structural guarantees of technical, technological and procedural guarantees. This statement supports the results of research conducted by Luo et al (2010). Disposition to Trust (DTT) is a general tendency in which people believe and believe in something in a humanitarian context and adopt an attitude of mutual trust between one another (McKnight et al, 2002 in Gefen and Straub, 2004). Meanwhile, Structural Assurance (SA) is the perception of the availability of legal

structures and techniques such as encryption, guarantees, insurance, regulations or other procedures on the wireless internet to ensure the success of financial transactions with banks (McKnight, 2002).

Then the second hypothesis (H2) in this study states that Self Efficacy (SE) has an influence on Structural Assurance (SA) and shows that the estimate value is 0.343 and H0 is rejected. It can be concluded that the higher the respondent's perception of his or her capability in adopting a technology, the more confidence in the structural guarantees of technical, technology and procedures in it will increase. This statement supports the results of research conducted by Luo et al (2010) that potential customers with a high level of self-efficacy will have a high level of trust in the system and regulations.

Hypothesis three (H3) in this study states that Self Efficacy (SE) has no effect on Perceived Risk (PR) with an estimated value of 0.110 and H0 is accepted. It can be concluded that the higher the respondent's perception of his or her capability in adopting a technology, the more risk they feel about the technology.

Furthermore, hypothesis four (H4) in this study shows that Performance Expectancy (PE) has an influence on the Behavioral Intention (BI) of customers in adopting internet banking services with an estimate value of 0.139 and H0 is accepted. This result can be concluded that the higher the respondent's expectation of improving performance when using internet banking services, it will not affect the respondent's interest in adopting the service.

Then hypothesis five (H5) in this study shows that Perceived Risk (PR) has no effect on Performance Expectancy (PE) with an estimated value of 0.003 and H0 is accepted. It can be concluded that the higher the level of risk felt by the respondent regarding an internet banking service, it will not affect the respondents' expectations of improving performance when using internet banking services. This statement supports the results of research conducted by Featherman et al (2003) that the performance expectancy of the system or technology to be adopted is negatively affected by perceived risk. This is because the uncertainty and possible loss which are risk indicators can hinder the evaluation of technology adoption that will be carried out.

Hypothesis six (H6) shows that Trust Belief (TB) on banks has a negative effect on the Perceived Risk (PR) of customers in adopting internet banking services with an estimate value of -0.168 and H0 is rejected. It can be concluded that the higher the level of customer confidence in the bank, the lower the level of risk felt by the customer in using internet banking services. This condition supports the research conducted by Luo et al. (2010) which states that basically customers who trust in banks as internet banking service providers will overcome or even reduce the perceived risk perception related to the adoption of this technology. The higher the level of individual trust in an organization or institution, the lower the level of risk they will feel (Luo et al., 2010)

Then hypothesis seven (H7) in this study shows that Structural Assurance (SA) has no effect on Perceived Risk (PR) with an estimate value of 0.340 and H0 is rejected. So it can be concluded that the higher the level of respondent's confidence in the structural guarantees of technical, technological and procedural guarantees, the risk they feel when using internet banking services. This statement supports the results of research by Luo et al (2010) which states that there is no relationship between the level of confidence of respondents in structural guarantees of technical, technological and procedural guarantees and the risk that respondents feel when using internet banking services.

Hypothesis eight (H8) in this study shows that Trust Belief (TB) has an influence on Performance Expectancy (PE) with an estimate value of 0.799 and H0 is rejected. It can be concluded that the higher the level of respondent's trust in internet banking service providers, the higher the respondents' expectations of improving performance when using the service. This statement supports the results of research conducted by Gefen et al. (2003) which states that trust acts as a subjective guarantee, which ensures customers will receive the performance and usefulness of a product from this reciprocal relationship.

Furthermore, hypothesis nine (H9) in this study shows that Trust Belief (TB) to banks has an influence on the Behavioral Intention (BI) of customers to adopt internet banking services with an estimate value of 0.673 and H0 is rejected. It can be concluded that the higher the level of respondent's trust in internet banking service providers, the higher the respondent's interest in using these services. This statement supports the results of research conducted by Gefen et al. (2003) which states that Trust Belief (TB) is one of the key determinants of customer interest in carrying out an activity that contains risks.

Then the tenth hypothesis (H10) in this study shows that Perceived Risk (PR) has no influence on the Behavioral Intention (BI) of customers in adopting internet banking services with an estimate value of 0.004 and H0 is declared not to be rejected. It can be concluded that there is no influence between the perceived risk when using internet banking services and the respondent's interest in using the service. This statement supports the research conducted by Luo et al. (2010) stated that determining the interest in using a technology is not only determined by the perceived risk, but must be followed by the level of trust that the individual has and cannot be separated.

5. CONCLUSION

Overall, the factor that most influenced respondents' interest in using internet banking services was the level of trust in internet banking service providers (trust belief). This shows that the characteristics of Indonesian people are more likely to use internet banking services when they already have trust in the banking sector.

Then the second factor that has an influence on the respondent's interest in using internet banking services is the expectation of benefits that will be obtained after using the service. If the expectation of the benefits felt after using the service is high, the tendency of the Indonesian people to use internet banking services will be even greater. Based on the research results, the dominant respondent will use internet banking services to carry out fund transfer activities.

However, the perceived risk factor has the least influence on the interest in using internet banking services in Indonesia. The results show that the characteristics of Indonesian society tend not to consider the perceived risk problem of using these services. This is presumably because the research respondents are dominated by individuals who have an income of between Rp. 2,000,0001 to Rp. 5,000,000, are internet users and have been using the internet for more than five years. Individuals who have incomes in this range do not have a high level of risk when conducting financial transactions through internet banking services because the number of transactions made is relatively small (when compared to other characteristic options). Meanwhile, individuals who have used the internet for more than five years tend to have the capability of operating the internet (reliable) and have confidence in technology as evidenced by having a social media account which basically requires personal data such as a password to be accessed. Then the respondents are dominated by respondents who have jobs as Civil Servants (PNS) so that the possibility of making financial transactions through internet banking services is less frequent compared to other job options such as self-employment. So that the level of perceived risk is low because the estimated intensity of its use is also low.

Based on the research results, there are several things that can be used as suggestions for the banking sector as internet banking service providers with the aim that customers want to use internet banking services. Some of these suggestions include:

The level of trust in internet banking service providers is the strongest factor in influencing respondents' interest in using the service. So that the banking sector can carry out activities that can increase the level of trust, such as by socializing the features and security aspects of the internet banking services offered. It is hoped that in this way, the number of customers who are interested in using internet banking services will increase.

Provision of internet banking services that are in accordance with the needs and benefits expected by customers can be carried out by banks in order to increase interest in using these services. This is because the respondent's expectation of the benefits that will be obtained after using internet banking services is the next key determining factor.

Even though the perceived risk level has a low influence on the interest in using internet banking services, the banking sector must still guarantee the protection of customer data. Marketing activities regarding the features offered can also be carried out to customers who have not used internet banking services. So that customers do not only have conventional bank accounts but also have internet banking accounts.

This study also has several limitations which are expected to be improved by conducting further research. The following are some suggestions that can be used for further research:

The focus of this research is on respondents who are in urban areas, so that further research should be focused on respondents who are in rural areas who are interested in using internet banking services.

This research focuses on regions of Indonesia, so it is better if further research can be focused on the comparison of several regions in Indonesia but using the same research model.

The existence of other factors such as the level of security (security) which is suspected to be another important factor so that many customers do not or do not use internet banking services. This is because trust in internet banking service providers is the strongest factor in influencing customer interest in using these services.

REFERENCES

Featherman, M.S., dan Pavlou, P.A. (2003). Predicting e-Services Adoption: A Perceived Risk Facets Perspective. *International Journal of Human Computer Studies*, 59, 451-474. Retrieved from Elsevier Journal Database.

- Gefen, D., Karahanna, E., dan Straub, D.W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *Management Information System Research*, 27(1), 51-90. Retrieved from MIS Quarterly Journal Database.
- Hanafizadeh, P., Keating, B.W., dan Khedmatgozar, H.R. (2013). A Systematic Review of Internet Banking Adoption. *Telematics and Informatics*, xxx (2013), xxx-xxx. Retrieved from Elsevier Journal Database.
- Jacoby, J., dan Kaplan, L.B. (1972). The Component of Perceived Risk. *Proceedings of the Third Annual Conference of the Association for Consumer Research*, 382-393. Retrieved from Association for Consumer Research Journal Database.
- Kesharwani, A., dan Bisht, S.S. (2011). The Impact of Trust and Perceived Risk on Internet Banking Adoption in India. *International Journal of Bank Marketing*, 30(4), 303-322. Retrieved from Emerald Insight Journal Database.
- Kim, K.K., dan Prabhakar, Bipin. (2004). Initial Trust and The Adoption of B2C e-Commerce: The Case of Internet Banking. *Journal of Electronic Banking System*, 35(2), 50-64. ACM SIGMIS Journal Database.
- Laforet, S., dan Li, X. (2005). Consumer's Attitude Towards Online and Mobile Banking in China. *International Journal of Bank Marketing*, 23(5), 362-380. Retrieved from Emerald Insight Journal Database.
- Luo, X., Li, H., Zhang, J., dan Shim, J.P. (2010). Examining Multi-Dimensional Trust and Multi-Faceted Risk in Initial Acceptance of Emerging Technologies: An empirical Study of Mobile Banking Services. *Decision Support System*, 49, 222-234. Retrieved from Elsevier Journal Database.
- McKinsey. (2014). *Asia Personal Financial Services Survey 2014*. McKinsey and Company.
- McKinsey. (2015). *Understanding the Indonesian Consumer*. McKinsey and Company.
- McKnight, D., H, Choudhury, Vivek., & Kacmar, Charles (2002). The Impact of Initial Customer Trust on Intention to Transact with a Website: A Trust Building Model. *Journal of Strategic Information System*, Vol.11, 297-323. Retrieved from Elsevier Database.
- Muzividzi, D.K. (2013). An Evaluation of the Effectiveness of Public Financial Management System being used by Government Departments in Zimbabwe (2000-2011). *Research Journal of Finance and Accounting*, 4(4). Retrieved from IISTE Journal Database.
- Pratama, A.R., dan Al-Shaikh, M. (2012). Relation and Growth of Internet Penetration Rate with Human Development Level from 2000 to 2010. *Communications of the IBIMA*, 2012(2012), 1-8. Retrieved from IBIMA Publishing.
- Statista. (2015). Internet User in The World [online]. Tersedia : <http://www.internetlivestats.com/internet-users/> [14 November 2015].
- Lukman, Enricko. (2013, 22 November). Keynote: The State of e-commerce in Indonesia. *Techinasia* [online]. Tersedia: <https://www.techinasia.com> [22 Desember 2015].
- Venkatesh, V., Morris, M.G., Davis, G.B., dan Davis, F.D.(2003). User Acceptance of Information Technology: Toward a Unified View. *Management Information System Research*, 27(3), 425-478. Retrieved from MIS Quarterly Journal Database.

A PERSPECTIVE VIEW ON THE COVID-19 IMPACT ON MICRO SMALL AND MEDIUM ENTERPRISES (MSMES) IN INDONESIA

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Abstract

Indonesia is the largest economy in the Southeast Asia and has recorded remarkable economic growth over the last ten years. More than 90% of domestic employment in MSMEs. MSMEs play a vital role in fighting poverty and unemployment, in fact MSMEs strengthen the national economy. Due to the fact that Covid-19 outbreak is drastically change the face of economic, it reflects the largest economic shock the world has experienced in decades. That's why this paper try to answer the research problem i.e. (i) What are the problem being faced by MSMEs in Covid-19? and (ii) What MSMEs need to do to protect their business and their workforce? The study is based on a summation of existing literature. We conducted discourse analysis using data from various media sources, ILO and WHO during the period of Covid-19, in which there are significant data of impact of Covid-19 on MSMEs. This study aims to know the deeper understanding of the current situation of Indonesian MSMEs in new era of pandemic Covid-19. The finding shows Covid-19 has negatively impacted the MSMEs mostly on manufacturing as a result there is huge decline in the economic as well as revenue so most of the MSMEs are being forced to shut down their business either temporarily or permanently. This research article provides an insight into Covid-19 in the Indonesian MSMEs sector and suggests appropriate improvements to provide sustenance and support to Indonesian MSMEs.

Keywords: Economic growth, MSMEs, Covid-19

1. INTRODUCTION

The 2019 coronavirus (Covid-19) pandemic has spread at disquieting rate, infecting millions of people worldwide and cessation economic activity. This is much more than just a health crisis, it is significantly impacting economic and could lead to a global recession. Most of the countries have introduced strict restrictions to prevent the virus from spreading. As per the data recorded by WHO, there are 26,121,999 total cases, 864,618 total death and 216 infected countries till date 4 September 2020 (WHO, 2020). In Indonesia there are total 187,537 confirmed cases, 134,181 are recovered and 7,832 are dead till date 4 September 2020. On 2nd March 2020 the first two Covid-19 infection was being announced in Indonesia (covid19.go.id, 2020). The virus spreads like a fire and it cross above 3,000 infected people just within a month (Suryahadi, 2020).

The risks of the virus transmission caused public attention as a result it affects social life. The impact of Covid-19 has negative supply shock on economic (Hausmann, 2020). This outbreak's provoke world health emergencies and is likely to slow down the economy by increasing global poverty and inequality. In prevention, Government of Indonesia issued PSBB (*Pembatasan Sosial Berskala Besar*) regulation to control the rise in coronavirus cases as Large-scale social restriction which include closure of schools and workplace, limitation on religious activities, limitation on public places and facilities activities and limitation on moods of transportation (PMK Republik Indonesia No. 9, 2020). Ultimately, these lead to a demand shock in Indonesia as with incomplete markets and liquidity constrained consumers, the initial supply shock lead to magnified demand shocks (Guerrieri et al., 2020). In addition, there would be a great impact of investment, trade, and employment crisis on achieving sustainable development goals.

The rapidly increasing rate of coronavirus has impacted several sectors with loss which tend to be extensive and multi-sector. The most affected sectors are health, education, trade, and transportation (Albulescu, 2020). Even though under the influence of PSBB policy, business like as food and main basic products are expected to survive. However, the secondary needs for example tourism, clothing, and entertainment are collapsing due to PSBB policy. MSMEs are the most vulnerable group of entity due to they had very less resources to survive the pandemic. There could be an increase in the role of nation intervention and international financial institution due

to the rising crisis of global economy. The slowing down of economy give opportunity to delays in loan and tax payment, the takeover some section of employment or social security costs with a central budget, give national relief which is announced by government, prioritizing safety management and disaster medicine (Sułkowski, 2020). Moreover, In the country, as part of the non-fiscal response, the rules will be relaxed by regulating the restructuring of bank loans to MSMEs, simplifying the certification process for exporters, and the government will facilitate the import of raw materials (straitstimes.com, 2020).

Indonesian finance minister Sri Mulyani Indrawati said there are four sectors which are most depressed because of Covid-19 outbreak, namely MSMEs, households, corporations, and Financial sector. Economic growth is also predicted to contraction (republika.co.id, 2020). However, business that remain open must adhere to the Covid-19 workplace protocols developed by the regulators, that includes restricting interactions, denying access to the workplace to unhealthy people, ensuring the cleanliness and hygiene of the workplace, allocating needed healthcare protections, maintaining physical distancing at least one meter, and particularly for restaurants providing only takeaway or online services. Before Covid-19, there has been an extensive scaling-up process in which MSMEs have come to account for a larger share of national employment and investment. In prefer of MSMEs, several policies were developed by the government to boost the rise in the number of MSMEs. Indonesia business environment offers mixed conditions for MSMEs and entrepreneurial activity. MSMEs have significant role in increasing gross domestic product (GDP), employment and allocating jobs specially to the poor people. About 64,199,06 MSMEs were operating in Indonesia in last year (depkop.co.id, 2020). About 97% of the total workforce is currently employed in MSMEs, 99.9% of the business are MSMEs. MSMEs account for approximately 60% of the overall GDP of Indonesia (Alex, 2017).

The informal sector dominates globally in all developing countries. Informal employees contain freelance, home industry, MSMEs, etc. Meanwhile, the formal sector contains civil servants, police officers, soldiers, etc. In 2019, the percentage of informal sector were 57.27% or 74.08 million as data recorded by BPS-statistics Indonesia (*Badan Pusat Statistik*). The informal sector is the most sensitive sector of economic crisis at the time of Covid-19 outbreak that is caused by the social interaction restriction outside the home, so that several informal sector cannot able to deploy the Work From Home (WFH) regulations. As a result, the normal daily/weekly income earned were decreased or even temporarily stop.

If the spread of Covid-19, and its influence cannot be cured quickly, micro small and medium enterprises are expected to deteriorate and global recession can occur. How serious and long this recession relies on the success of the regulation taken to prevent the spread of corona virus, the impact of government policies to overcome liquidity issues in MSMEs, policy to help families which are being suffering by money problem, policies to secure jobs, and supply chain are also major considerations (Fernandes, 2020).

2. RESEARCH QUESTIONS

- I. What are the problems being faced by MSMEs in Covid-19 outbreak?
- II. What MSMEs need to do to protect their business and their workforce?

3. RESEARCH OBJECTIVE

To know the deeper understanding of the current situation/challenges of Indonesian MSMEs in new era of pandemic Covid-19. Furthermore, to access the step is being adopted by MEMEs to protect their business and their workforce.

4. LITERATURE REVIEW

The real consequences of the pandemic in Indonesia were experienced around starting of March 2020, with two active cases and shut down of schools and campuses. Subsequently, in no time additional cases are being detected mainly in people who come from abroad, and the government introduced 14 days quarantine regulation to the traveler. In addition, lockdown have been implemented in several areas to prevent the virus from spreading. Occasionally, lockdown was released at prescribed time every day to enable people their daily basic needs specially foods, and preventive measures were introduced such as social distancing, mandatory use of face masks, check temperature and wash hand before entering any store and other personal protective equipment. With this situation, economic activity has been severely affected, causing MSMEs to have great difficulty. According to ILO, 2020 the most impacted sector is food, drink and tobacco industries. MSMEs respondent that the jobs are at risk, mostly the day-to-day workers (people who work on a voluntary basis) were impacted worst. The regulation in the workplace related to prevention of spreading the virus provided by government such as, social distancing, temperature check, wearing mask and using sanitizer has become a vital problem. Several people shows difficulties to follow this precaution specially maintain social distancing (ILO, 2020). Therefore, it is becoming difficult to re-

open the business however, various business shifted from traditional to the digital platform to continue the work.

During this pandemic most of the MSMEs experienced a great decline in the revenue therefore, they argue to the government for support related to financial scheme that include loans on low interest rate, relaxation of loan payments and taxation (Ganaie et al., 2020). However, the Covid-19 has negative impact on MSMEs as a result there is a massive crisis in demand and supply including substantial impact on productivity growth and employment. Economic activity and employment are falling abruptly (Fornaro & Wolf, 2020) the Covid-19 coronavirus is spreading throughout the globe. Besides its impact on public health, this coronavirus outbreak is likely to have significant economic consequences. The consensus is that the virus will cause a negative supply shock to the world economy, by forcing factories to shut down and disrupting global supply chains (OECD, 2020). The ILO predicted that the effect of Covid-19 can led to global unemployment of between 5.3m and 24.7m (ILO, 2020). Some author such as Musa & Aifuwa, (2020) concluded that MSMEs can able to victory in this pandemic time following the health protocol given by regulators. The authors also suggested some ways of protection such as MSMEs can build a temporary isolation room with basic kits in their business area and using more technology for work in order to prevent form spreading the virus (Musa & Aifuwa, 2020). The restriction of movement, decline in exports & imports and decrease in consumer spending ability is negatively impacting MSMEs as a result various firms forced to either shut down or slow down the business. Nevertheless, the regulators are providing various policies to save the MSMEs, but its need extra interventions and powers to empower them to endure the significance of the epidemic (Adiyoh et al., 2020).

Nevertheless, the year 2020 has been incredibly challenging for the global community. The spread of the novel coronavirus, has led to an unparalleled health crisis in countries across the world. The crisis has unprecedented and serious impacts on all aspects of how people communicate, work, produce, trade, consume and live. Furthermore, all businesses regardless of size, are facing serious challenges, especially those in the aviation, tourism and hospitality industries, with a real threat of significant declines in revenue, insolvencies and job losses in specific sectors. Sustaining business operations will be particularly difficult for Micro Small and Medium Enterprises. Following travel bans, border closures and quarantine measures, many workers cannot move to their places of work or carry out their jobs, which has knock-on effects on incomes, particularly for informal and casually employed workers.

5. METHOD AND DATA ANALYSIS

The research method we used is qualitative method which is based on the summation of existing literature review and several media information. Furthermore, the data is secondary data, collected from various media text as well as the survey initiated by ILO and WHO and analyzed by using discourse analysis. Discourse theory is a structured assortment of texts and practices that brings social reality into existence (Grant et al., 2016) also it creates relationships among concepts, objects and subjects which enable growth to meaning (Howarth et al., 2000).

6. RESULTS AND DISCUSSION

In the starting days of pandemic, countries learned significant lesson as they rushed to strengthen their MSMEs. It became clear that stimulating business in good period would facilitate MSMEs overcome the crises, enhance the situation of the economy and reduce the likelihood of bankruptcy. In addition to overcoming the health crisis, regulators are also fighting to reduce the impact of Covid-19 on MSMEs and announcing new policies to support them to tackle with short-term financial risk and long-term business impact. However, still MSMEs facing many challenges to continue business and plan to stop temporarily. The major challenges of MSMEs in corona virus outbreak are discussed below.

Quarantine Policy: To the date, most of the cities require the travelers and the migrants to go on quarantine for 14 days. During this 14-day period, either the company or the workers themselves must have to cover the accommodation.

Demand shortage: Although the curfew/lockdown is being eased on the particular time to time, the people are avoiding coming out from home due to fear of virus and neglecting shopping which are not essential at this time. It will take unpredictable time for MSMEs to be able to develop a new demand for their products and services when the consumer will get ready for shopping again later or sooner.

Raw material shortage and Broken supply chain: Without the parts and required logistic which brings in materials and transport the products, several factories hardly able to produce goods. Most of the international transportation companies are facing challenges to getting back to work due to several transport restrictions. The main problems for many MSMEs are the shortage of raw materials, due to the fact that, most of the MSMEs sector is comparatively more dependent on China (Origin of Covid-19) for the supply of raw materials. The cost

of raw materials rises up by a small amount, and this also impacting the overall manufacturing cost of the goods.

Government schemes and re-opening permits: Most of the MSMEs are struggling to meet the Covid-19 prevention requirements set by the government regulators. The industries should stay updated and must properly study and research the various schemes announced by the government to move on track and to avail the schemes which can be beneficial for the organizations. Furthermore, a thorough financial assessment of the current financial situation of the company is very important. In some cities the local government put burden on the MSMEs for prevention from virus, as if any cases of Covid-19 found in that company, then the business must have to stop working for long time. So that, taking all this factors into account, the business can develop working financial strategies to overcome the crisis.

Scarcity of manpower: Because of covid-19 scare and lockdown, many laborers return back to their home towns, so that this leads to a huge scarcity of manpower within the MSMEs. Although MSMEs are facing these big challenges, they should not lose their hopes and persistent efforts should be made in the direction of getting back on their feet. The current situation shows the inability of the regulators and economists in solving the problems for the MSMEs sector. Therefore, the MSMEs themselves can take some steps in order to manage and keep going.

Depending on technology: Technology has always proven to be a great money savings for companies. Business software applications can be a great way to help companies simplify their business. Small and medium-sized businesses now have many government schemes available for technological upgrades, and business owners need to consider to take advantage of this opportunity.

Cost effective marketing: Marketing and advertising the products is never being easy for the MSMEs. With the current situation of new normal of the ecosystem, the total advertising rates across medium are drop down. A huge price drop is already being noticed in television, print, billboards and other advertising media. The digital media is one option that is highly economical.

Cashflow worries and Liquidity issues: Small and medium-sized businesses struggle to find insufficient cash flows, such as a lack of funding. Now with the closure, conditions are even worse. According to the survey, only 7% of the manufacturing industries in the MSMEs sector has been shown to be able to survive with the available cash flow for three months without having to work every day. Despite the fact that the government has announced various schemes to help the industry at the moment, it is still far from reaching the cash starved companies in full force. Furthermore, the widespread of low market demand, various MSMEs have found that re-operating of their business only means they continue to pay rent and salaries without making any revenue.

According to some survey, done till now, many MSMEs confess that they are working somehow, but not with full force. Many employees work from home as some business owners use downtime to explore different supply chains, look for new contracts overseas, plan staff training or redesign websites, or keep in touch with a regular customer through online platforms and social media. Their losses for the first quarter are seen as a natural disaster that their business has to bear; some people are worried about taking out more credit if their future income is uncertain. Many expect their business to gradually rebound by the end of the second quarter.

However, the new policies and regulations will progressively regulate cross-border trade including travel and tourism. Which helps firms to meet new market needs i.e. management system rules on quality, occupational safety, food safety, health and social accountability as well as specified products standard. Also helps to concern security, resilience and risk management that include company continuity management, crisis management emergency management and supply chain security. (ITC, 2020). Furthermore, when demand in market is low MSMEs are more breakable and cash-strapped financially. Emergency funding programs which target MSMEs could be one essential factor of a response. Deferred/waived taxes and fees, lower interest rates and making easier lending policies can also help MSMEs to stay afloat in pandemic situation. Government has begun to take actions through supplemental appropriations to address some of the financial challenges of MSMEs. The state Bank's recent lending rate cut and relax debt repayments will also support MSMEs.

Apart from the above challenges MSMEs must need to take action to protect themselves and to face out the outbreak of coronavirus. They should grab all the possible opportunities which are being availing by the government for the relief of SMEs such as exempting manufacturing workers from income tax, reducing corporate tax, simplifying certification process for exporters and making easier to import raw materials etc. (straitstimes.com, 2020). According to ILO, (2020) the following provisions/consideration can be taken by MSMEs to protect their business and workforce by utilizing the state government policy.

Enhanced and easier access to finance and working capital: MSMEs usually faces greater finance challenges than larger firms. In response to Covid-19 the Indonesian government allocate state budget of Rp 48.8 trillion to MSMEs towards accelerating the National Economic Recovery (PEN) (setkab.co.id, 2020). However, to stay afloat in Covid-19, the Indonesian government subsidize and ease interest payments for MSMEs. The government

is also roll out the working capital credit for MSMEs. As said by Indonesian finance minister, the government will cover 6% of the interest and suspend loan repayments, for six months under UMi (Ultra-Micro Financing) programs (thejakartapost.com, 2020). Providing unconditional cash transfer (*Bantuan Langsung Tunai*/BLT) as income substitute to ultra-micro and micro enterprises affected by Covid-19. Furthermore, many more schemes are being announced by Indonesian Government to defend MSMEs financial capabilities. The government has also allocated Rp 150 trillion for business recovery program. By affordable loans and temporary tax exemptions policy can give a great relief in their short term cash flow. In addition, government must need to formulate stronger incentives to really boost their negative cash flow.

Stimulating demand for products and services: Teten Masduki Minister of Cooperatives and MSMEs register their products to the government's Goods and Services Procurement Agency (LKPP), adding that the government had already allocated Rp 307 trillion (US\$20.8 billion) for state-owned enterprises to acquire goods and services from MSMEs (nasional.kompas.com, 2020). This can support for temporarily converting production to covid-19 necessities.

Employment and social protection: Many of the impacted employers have been anticipating the possibility of temporarily suspension (laying off) workers. This decision for layoffs for struggling employers can lead the risk of losing skilled experienced employers in future. Therefore, it is decisive for Indonesian government to issue a policy/subsidy that facilitates employers to maintain their payroll so that when the Covid-19 will over, the workers can immediately recontinue full-capacity operations. The wage subsidy program would also help the government to avoid the burden of further unemployment benefits apart from the controversial training program.

Re-operating firms during pandemic: Indonesian government announced some protocols to start easing the Covid-19 social restriction to allow business to resume operating gradually. The Ministry of Trade has issued circular no. 12/2020 on restoration of business activity in Covid-19 and the new normal. The circular sets out policies and protocols that business operators must follow, such as shopping malls and entertainment centers, that reopen their businesses as part of the government's new normal campaign. The regulators also issued joint ministerial decrees on the technical guidelines for preventing and controlling virus. The joint decree contains guidelines for the reopening of cinemas, museums and other cultural and educational venues for general public during Covid-19 pandemic, and it includes protocols such as social distancing measures as well as making mandatory to all operators to wear health mask. Furthermore, the MSMEs which are reopened must have to follow the preventive guidelines such as facilitating customer and worker hand wash and sanitizer on the venue, keeping social distancing and covering the counter with transparent glass/plastic in accordance of avoiding direct contraction to the people. The firms need to adopt to new market condition.

This will hopefully decrease redundancies, stimulating investment, preventing bankruptcy, and rebounding the economy as soon as possible after the crisis. Moreover diversity, linking to organization that support business and build a financial buffer can help to increase the resilience of small and medium-sized enterprises. For small businesses which are active in the global supply chains resilience will also make a lot of sense in their relationships with customers and suppliers.

Several authors argue there are negative impact of Covid-19 on MSMEs such as Fornaro & Wolf, (2020) the Covid-19 coronavirus is spreading throughout the globe. Besides its impact on public health, this coronavirus outbreak is likely to have significant economic consequences. The consensus is that the virus will cause a negative supply shock to the world economy, by forcing factories to shut down and disrupting global supply chains (OECD, 2020) argued that because of this pandemic demand and supply crisis lead to growth in unemployment and decline in productivity. While Adiyoh et al., (2020) argued the restriction of movement and several precaution policies enforced MSMEs to pause the business temporarily. However, some author focused on the survival of MSMEs they mentioned that the MSMEs can able to triumph this novel corona virus by adopting regulation and following policies given by government such as availing financial benefit, relaxation in tax, minimize loans interest rates, etc. (Pozhidaev, 2020). According to Aladejebi, (2020) MSMEs need to motivate their staff to achieve maximum result and should consider digitalization work. They must collaborate with information technology, research and development and also should take advantage of government initiatives like various palliative measures to survive in this pandemic. Besides those availing survival policies still MSMEs have difficulties in holding their revenue and facing huge decline in revenue. Furthermost important challenges faced by MSMEs in loan payment, wages payment to staff and rent. So, we can clearly say by considering our and other authors research, the Covid-19 has negatively impacted the MSMEs.

Nevertheless, in this pandemic situation the digital technologies play a vital role to continue the daily work. During lockdown, global economy shifted onto digital platforms. Remote learning, teleworking, teleconferencing, e-commerce and digital payments, online health services really made the world go round. Further we cannot say digital facilities as an optional. Clients, business partners, consumers and workers will come to expect them as essential course. Still, to continue towards digital technology must be accomplished by technical assistance, skills

development and infrastructure support to ensure inclusionary and equitable. MSMEs can get advantage from diversifying their business sectors. Online-based platforms and virtual service provisions can help them to sustain business during quarantines or travel bans. It would be beneficial if policymakers could bring better tax breaks and technical guidance to support MSMEs restructure their business operations.

7. CONCLUSION

Small and medium-sized enterprises are considered the backbone of the Indonesian economy. 2020 is a very challenging year for the international community. A novel coronavirus spreading has caused an unprecedented health crisis in countries around the world. The crisis has unprecedented and has had a profound impact on all aspects of how human communicate, situation, work, produce, trade, consume and live. The economic consequences of the pandemic soon became visible and MSMEs is in the lead. By staff, workers and customers are being lockdown, and supply chains disruption, the MSMEs that provide more than 70% of jobs in countries around the world and about half of economic activity have emphasized. By considering the challenges facing by MSMEs the government of Indonesia has announced and released regulations and subsidies to support them. Therefore, MSMEs can able to survive the pandemic by utilizing the guidelines and policies provided by government which indirectly also benefits to improve the national economy.

However, Social distancing-based public health measures, like as mass quarantines, extensive travel bans and disruption of the transport system, shock the economy and reduce market demand in the service sector, which is crucial for various MSMEs that depend on regular customer visits. We already know various of the most affected sectors. Covid-19 crises could lead younger and less educated workers to suffer more to lose their jobs. The costs of small and medium-sized enterprises and jobs relief should be taken into account when considering this intervention.

Humanity is now facing not only the Covid-19 epidemic, but also the sifting on technological, business, environmental and financial disruptions. These challenges are so complex, global and interconnected that there is no government or intergovernmental organization will be able to solve it alone. The post-pandemic recovery period provides a unique opportunity for international cooperation to rebuild international structures, including in areas of international trade. A global recession seems inevitable today. However, the depth and duration of the decline will depend on the effectiveness of measures taken to prevent the spread of Covid-19, the impact of government policies to reduce liquidity problems for small and medium-sized enterprises and to support families in financial distress. It also depends on how the company responds and prepares to continue the business. And most importantly, it depends on how long the current lockdown lasts. If the ongoing pandemic will last till end of the summer then the global economy will suffer the huge economy recession seen in the last two centuries. So, we concluded that corona virus has negative impact on MSMEs.

REFERENCE

- Adiyoh, S., Ze, T., Odette, T., & Gidado, S. (2020). *Effect of COVID-19 Pandemic on Small and Medium Scale Businesses in Nigeria*. 3578(1).
- Aladejebi, O. (2020). *Managing Small Businesses in Nigeria during Covid-19 Crisis : Impact and Survival Strategies*. 22(8), 24–34. <https://doi.org/10.9790/487X-2208012434>
- Albulescu, C. (2020). Coronavirus and Financial Volatility: 40 Days of Fasting and Fear. *SSRN Electronic Journal*, 1–7. <https://doi.org/10.2139/ssrn.3550630>
- Alex Capri. (2017). Micro and Small Businesses in Indonesia ' S Digital Economy Keys To Developing New Skills and Human Capital Table of Contents. *The Asia Pacific Foundation of Canada*. Retrieved from <https://apfcanada-msme.ca/sites/default/files/2019-03/Micro and Small Businesses in Indonesia's Digital Economy.pdf>
- Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy Nuno Fernandes Full Professor of Finance IESE Business School Spain. *SSRN Electronic Journal, ISSN 1556-5068, Elsevier BV*, 0–29.
- Fornaro, L., & Wolf, M. (2020). Covid-19 Coronavirus and Macroeconomic Policy. *CEPR Discussion Papers*, (March), 1–8.
- Ganaie, M. A., Enterprises, M., Authority, D., & Zafar, F. (2020). *Survey Report : Impact of COVID-19 on SMEs Policy & Planning Division*. 19(May), 1–34. <https://doi.org/10.13140/RG.2.2.21236.09607>

- Grant, C. D., Hardy, C., Oswick, C., Putnam, L. L., Grant, E. D., Hardy, C., ... Putnam, L. (2016). *The SAGE Handbook of Organizational Discourse Introduction : Organizational Discourse : Exploring the Field*.
- Guerrieri, V., Lorenzoni, G., Straub, L., & Werning, I. (2020). Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3570096>
- Hausmann, R. (n.d.). *The Macro-Economic Implications of COVID-19 in developing countries*.
- Howarth, D., Norval, A., & Stavrakakisi, Y. (2000). Discourse Theory And Political Analysis. In *Manchester University Press*.
- ILO. (2020). Research brief. *International Labour Organization*. [https://doi.org/10.1016/S1473-3099\(20\)30015-3](https://doi.org/10.1016/S1473-3099(20)30015-3)
- ITC. (2020). *SME Competitiveness outlook 2020: COVID-19: The great lockdown and its impact on small business*.
- Musa, S., & Aifuwa, H. O. (2020). CORONAVIRUS PANDEMIC IN NIGERIA : HOW CAN SMALL AND MEDIUM ENTERPRISES (SMEs) COPE AND FLATTEN THE CURVE ? *Monthly COVID-19 Cases in Nigeria*. 6(5), 55–61.
- PMK Republik Indonesia Nomor 9 Tahun 2020. (2020). Pedoman Pembatasan Sosial Berskala Besar Dalam Rangka Percepatan Penanganan Corona Virus Disease 2019 (Covid-19). *Kementerian Kesehatan RI*, 28. Retrieved from http://hukor.kemkes.go.id/uploads/produk_hukum/PMK_No__9_Th_2020_ttg_Pedoman_Pembatasan_Sosial_Berskala_Besar_Dalam_Penanganan_COVID-19.pdf
- Pozhidaev, D. (2020). Impact of COVID-19 on Ugandan MSMEs : Informal sector Summary General analysis of COVID-19 economic shock on MSMEs. *UN Capital Development Fund*, 1–12.
- Sułkowski, Ł. (2020). Covid-19 Pandemic; Recession, Virtual Revolution Leading to De-globalization? *Journal of Intercultural Management*, 12(1), 1–11. <https://doi.org/10.2478/joim-2020-0029>
- Suryahadi, A., Al Izzati, R., & Suryadarma, D. (2020). The Impact of COVID-19 Outbreak on Poverty: An Estimation for Indonesia (Draft). *SMERU Working Paper, April*, 1–20. Retrieved from <http://smeru.or.id/en/content/impact-covid-19-outbreak-poverty-estimation-indonesia>
- World Health Organization (WHO). (2020). *Weekly Operational Update on COVID-19, 21 August 2020*. (June), 1–10.
- Online
- Peta sebaran, 2020 <https://covid19.go.id/peta-sebaran> (accessed on 23 August 2020)
- Empat Sektor Ekonomi yang Paling Tertekan Pandemi Covid-19, 2020 <https://republika.co.id/berita/q83llp409/empat-sektor-ekonomi-yang-paling-tertekan-pandemi-covid19> (Accessed on 24 August 2020).
- Small business get subsidies, loan relief. <https://www.thejakartapost.com/news/2020/04/30/small-businesses-get-subsidies-loan-relief.html> (Accessed on 5 September 2020).
- Indonesia unveils more emergency stimulus to fight coronavirus fallout, 2020. <https://www.straitstimes.com/business/economy/indonesia-unveils-more-emergency-stimulus-to-fight-coronavirus-fallout> (Accessed on 4 September 2020).
- RAPBN 2021: Anggaran Pemulihan Ekonomi Rp356 Triliun, Ada 6 Fokus Alokasi, 2020. <https://setkab.go.id/rapbn-2021-anggaran-pemulihan-ekonomi-rp356-triliun-ada-6-fokus-alokasi/> (Accessed on 6 September 2020).

MARKETING STRATEGY IN INDONESIAN SHARIA E-MONEY COMPANIES

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Abstract

The development of information technology is currently growing so faster including financial technology. One of the developing financial technologies is electronic money or e-money. Indonesia, as the largest Muslim country in the world, has influenced the development of this financial technology, such as sharia e-money. In this study, the author researches electronic money based sharia e-money companies using an application. This application has features such as purchasing pulses and data packages, paying bills, purchasing airline tickets and train tickets, alms, zakat, and waqf. In the object of this research, in 2019 this sharia e-money-based application experienced a decrease in transactions through available features and also new users. The authors researched to create a marketing strategy so that transactions can build and grow again. To get the best marketing strategy, the author uses descriptive analysis using a collection of sharia e-money application data. This data used to determine the characteristics of active application users to provide an appropriate marketing strategy. In data processing and data analysis, the authors use random forest for the classification of variables that affect the activeness of application users, then K-Means for clustering users. In the final stage, triangulation or interviews with marketing experts at the sharia e-money application company to obtain a company SWOT analysis and the right marketing strategy for the user cluster acquired. In this study, the authors found two clusters of application users, namely C1 and C2. C1 is a B2B (Business to Business) user, namely using applications to sell pulses, data packages, bill payments, airplane tickets, train tickets, and others, so C1 is a cluster with high prospects due to the high frequency and transactions using the application. C2 is a B2C (Business to Customer) user, namely using the application for personal needs so that the frequency and transactions are lower C1. After getting the user cluster, the given marketing strategy is different in the form of a marketing program. This marketing program provides C1 points and rewards that are much more attractive than C2. The similarity program for the two clusters is that every transaction made, the profit of the transaction will be shared between the company and alms so that each user makes a transaction on the sharia e-money application, so it contains elements of alms.

Keywords: Marketing Strategy; Big Data; Random Forest; K-Means; Triangulation

1. INTRODUCTION AND LITERATURE REVIEW

The development of information technology is currently growing so faster including financial technology. One of the developing financial technologies is electronic money or e-money. Indonesia, as the largest Muslim country in the world, has influenced the development of this financial technology, such as sharia e-money. As the largest Muslim country in the world, causing the application of sharia to grow well in Indonesia. In this study, the author researches electronic money based sharia e-money companies using an application sharia e-money. This application sharia e-money has features such as:

- PPOB (Online Bank Payment Point) for purchasing pulses and data packages for Telkomsel, Indosat, XL, Three, Axis, Smartfren, and Voucher games
- Bill payments such as Telkom, Postpaid Telephone, PLN, PDAM, Gas, Pay TV, Internet, BPJS
- Purchase airline tickets and train tickets
- Alms, zakat, and waqf

In the object of this research, in 2019 this sharia e-money-based application experienced a decrease in transactions through available features and also new users. Figure 1, in 2017 and 2018, transactions through the sharia e-money application exceeded 2 trillion rupiahs annually. Meanwhile, there was a decline until Q3 2019 in the transactions via the sharia e-money application, only around 900 million.

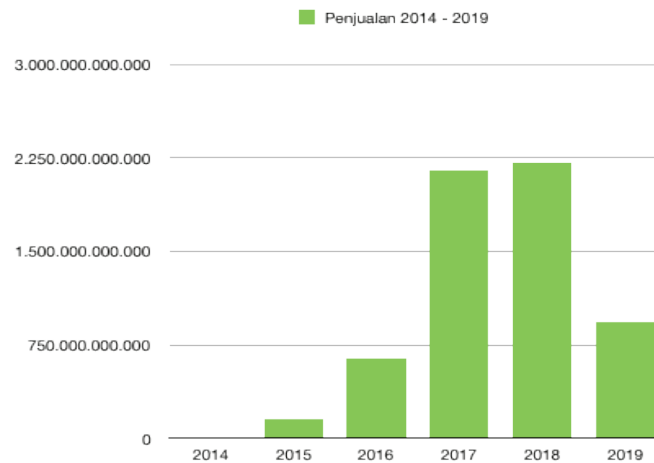


Figure 1. Amount of Transactions using the Sharia e-money application

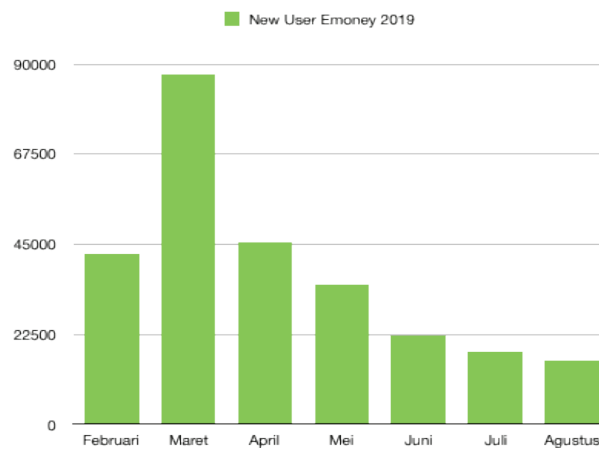


Figure 2. Number of new users in 2019

Figure 2, in 2017 and 2018, users of the sharia e-money application increased by around 500 thousand new users annually and decreased in 2019. Target in 2020 sharia e-money companies set a target amount of transactions of 3 trillion and new users of 1.2 million and 700 thousand monthly active users. With 2019 conditions, a marketing strategy is needed to increase transactions to meet targets in 2020. The authors researched to create a marketing strategy so that transactions can build and grow again. To get the best marketing strategy, the author uses descriptive analysis using a collection of sharia e-money application data.

In this study, the authors used a literature review related to marketing and data processing. According to (Armstrong & Kotler, 2015) marketing is the process of a company in creating value for customers and building stronger relationships with customers to get value from customers. In current business competition, companies must be able to understand consumer needs so that they can provide added value to consumers. The more consumers or customers you get and the higher the transaction, the more it will contribute to the company's revenue. The purpose of marketing is to attract new customers by providing more value or advantage to customers and retaining existing customers while maintaining customer satisfaction. According to (Kotler & Keller, 2016), the essence of marketing is satisfying the needs and desires of customers or consumers. The main objective in this case is to provide the value needed by the customer to make a profit.

For data processing, the author uses random forest for classification. Random forest is a scheme proposed by Leo Breiman in 2000 to build a predictor ensemble with a set of decision trees that grow on randomly selected data. Random forest is also an algorithm that is used in the classification of large amounts of data. Random forest classification is carried out through a combination of trees by conducting experiments on the data sample that has been provided. The use of more trees will affect the accuracy that will be obtained for better and optimal. In

determining the classification with random forest, it is taken based on the voting results of the trees that have been formed. Construction of trees in a random forest until reaching the highest size of the data tree, forming random forest trees is not done by pruning, which means a method to reduce space content. Forming is done by applying a randomization method to reduce errors. The formation of trees with sample data uses randomly drawn variables and classifies all the trees that have been formed. In random forest, all solutions are used to divide the data based on the type of attribute used. random forest is one way of applying the stochastic discrimination approach to classification. In the classification process that will run if all trees have been formed and when the classification process is complete, initialization is carried out with as much data based on the accuracy value. The random forest has its advantages, namely being able to classify data that has incomplete attributes, and can also be used for classification and regression but not too good for regression. Because it is more suitable for classifying data and also functions to process quite a lot of data. In the process after the process is formed, a selection is made for each class from the existing data. After that, a selection was made from each class and then the most selection was taken, data classification using random forest would produce the best selection.

For data processing, the author uses K-Means for clustering. K-Means is the most frequently used clustering method in which we determine the number of clusters (k) of a data set. The purpose of the K-mean is to determine the center point of each cluster which is called the centroid. K-means clustering creates k partitions in n-dimensional space, where n is the number of attributes in a data set. Partition the data set, it is necessary to define a measure of proximity. The most common measure used for attributes is Euclidean distance (Kotu & Deshpande, 2015). The stages of making clustering with the K-Means method based on the results of logistic regression are Identifying all input variables that will be used in clustering. Determine significant variables based on the results of logistic regression. Determine the K value of K-Means, namely the number of clusters that will be created for each important variable, Validate cluster accuracy by measuring the silhouette index. By creating clustering, we can find out what customer profiles have in common

To determine the company's internal and external factors, the authors use SWOT analysis. SWOT analysis is a systematic study of the company's internal strengths and weaknesses with the opportunities and environmental threats faced in the company. According to Rangkuti, in the Technical SWOT Analysis, Dissecting Business Cases (2014: 19) SWOT analysis is a way to systematically identify various factors to formulate a company strategy. This analysis is based on the logic that maximizes strengths and opportunities, but simultaneously minimizes weaknesses and threats. Meanwhile, according to Kotler which is translated by Molan (207) SWOT analysis is an evaluation of the overall strengths, weaknesses, opportunities, and threats of the company. The strategic decision-making process is always related to the development of the company's mission, objectives, strategies, and policies. Thus the strategic planner must analyze the company's strategic factors (strengths, weaknesses, opportunities, and threats) in the current conditions. This is called a situation analysis. A very popular model for situation analysis is the SWOT analysis (Rangkuti, 2014). SWOT analysis in the context of the strategy aims to find out how the conditions exist within the company, in this case, the internal conditions of the company running its business activities. Then this SWOT analysis aims to find out the actual external conditions that will be faced by the company. So that the company can maximize the advantages of its internal factors to deal with external conditions

For data validation and targets and marketing strategies, the authors used triangulation. According to Moloeng (2007: 330), triangulation is a technique of checking the validity of data that makes use of something else. Outside the data for checking purposes or as a comparison against that data. The triangulation technique most widely used is checking through other sources. Denzin in Moloeng (2007: 330) distinguishes four types of triangulation as an examination technique that utilizes the use of sources, methods, investigators, and theory. Triangulation is carried out through interviews, direct observation, and indirect observation. This indirect observation is meant in the form of observing several behaviors and events which are then derived from the results of these observations, a common thread that connects the two. The data collection techniques used will complement the primary and secondary data collection. Observations and interviews are used to collect primary data relating to the evaluation of employee performance on public services provided, while documentation studies are used to collect secondary data that can be picked up from various documentation about employee performance.

2. METHODOLOGY

In this study the authors used mixed methods to get the best marketing strategy. Below are the stages of research:

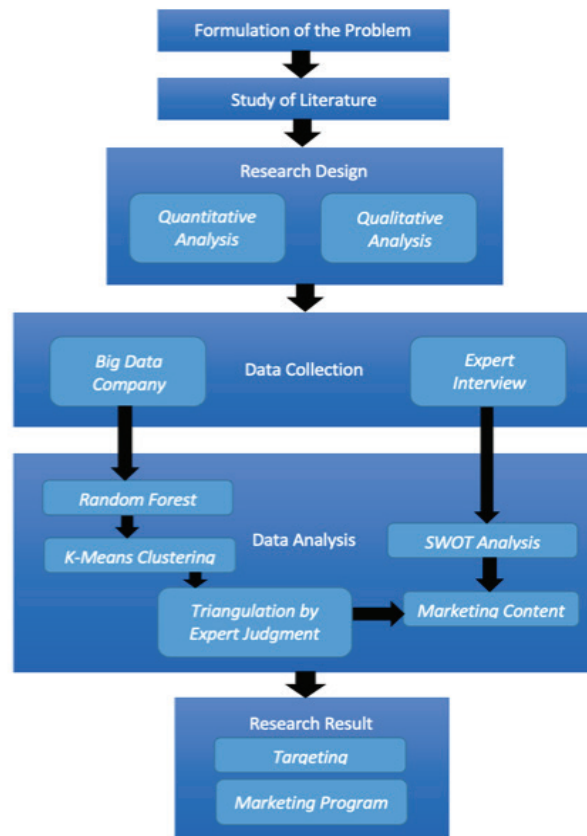


Figure 3. Research Stages

Figure 3. In this study, to obtain a marketing strategy in the form of a marketing program that is following user clustering. Starting with the formulation of the problem about the background problem of the object of research. Then a literature study was carried out to explore similar problem theories from other studies. The research design using mixed methods, qualitative and quantitative methods then complemented by data from the company and interviews. In this study, data analysis was carried out in 2 parts, namely big data analysis for classification using random forest and clustering using K-means to obtain the descriptive analysis. Then to ensure that the data is triangulated or interviewed by the expert judgment. To ensure that the data has been processed and to determine marketing targets. After that to get a SWOT analysis and a marketing program for the user cluster.

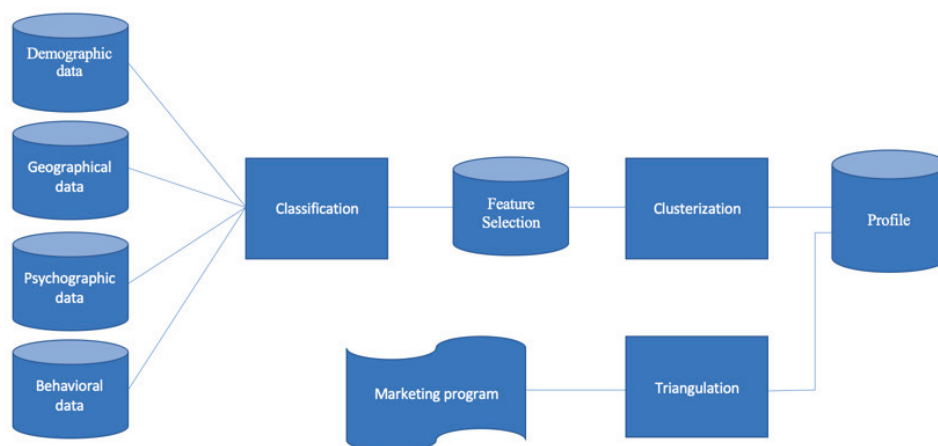


Figure 4. Research framework

Figure 4, The author collected data from sharia e-money companies. Data is collected and becomes variables. In data processing and data analysis, the authors use random forest for the classification of variables that affect the activeness of application users, then K-Means for clustering users. In the final stage, triangulation or interviews with marketing experts at the sharia e-money application company to obtain a company SWOT analysis and the right marketing strategy for the user cluster acquired. In Table 1 it can be seen that the segmentation geography consists of 2 variables that are city name and province name. Segmentation demography consists of 7 variables that are religion, gender, age, marital status, last education, job type and PEP. Segmentation Psychography consists of 1 variable that is mobile type. Segmentation behavior consists of 3 variables that are recency, amount and frequency.

Table 1 Variable Data

Segmentation	Variable	Description
Geography	City name	The city area of the application user
	Province Name	The Province of the application user
Demographics	Religion	Application user religion
	Gender	Application user gender
	Age	Age of the application user
	Marital Status	Marital application user status
	Last Education	Last Education app users
	Job Type	Job Type of application users
	PEP	PEP (risk level) of application users
Psychographics	Mobile Type	Type of mobile application user
Behavioural	Recency	When was the last time I used the app
	Amount	The amount of the application user transaction amount
	Frequency	Total frequency of application user transactions

3. DISCUSSION, CONCLUSION AND LIMITATION

In this study, to create a marketing strategy, the authors made research questions to be discussed as follows:

- What are the most important variables (Important variable) for segmenting sharia e-money application customers
- How many the most optimal sharia e-money application customer segmentation?
- What are the characteristics of the targeted segment (highly prospect)?
- What are the Strengths, Weaknesses, Opportunities, and Threats of the case study company?
- What marketing programs are recommended to increase sales on the sharia e-money application for each cluster?

3.1 IMPORTANT VARIABLES FOR SEGMENTATION

To answer research questions, what are the most important variables (Important variable) for segmenting sharia e-money application customers. The author uses the orange lab application for data processing. Data processing with random forest models. In figure 5 is the random forest model in the orange application. The file in the model is given an input variable consisting of 13 variable data that are city name, province name, religion, gender, age, marital status, last education, job type, PEP, mobile type, recency, amount, and frequency. Variable input data will be processed using a random forest with a complete model as shown in Figure 5. The expected output is found 5 important variables that affect the activeness of users of the sharia e-money application.

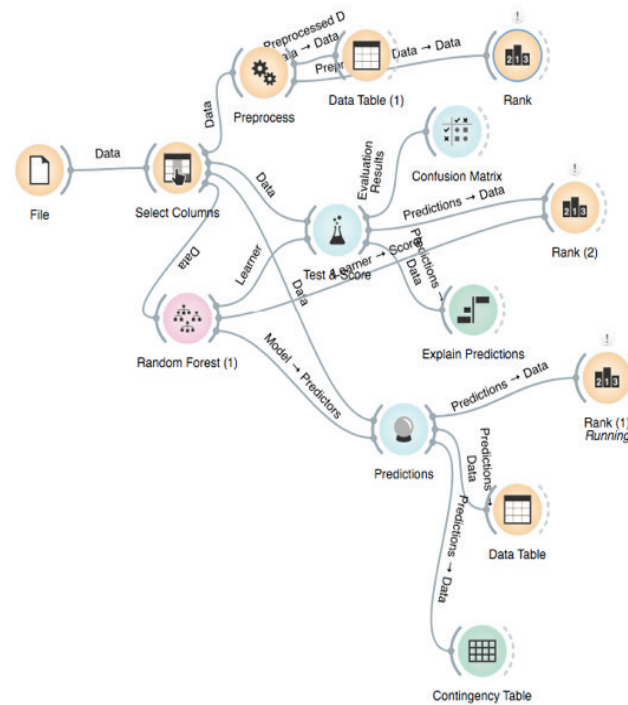


Figure 5. Random Forest Model

In Figure 6, we find the random forest results. The top 5 variables from Figure 6 are the 5 most important variables that affect the activeness of users of the sharia e-money application. The authors conclude that there are 5 important variables for segmentation, that are variabel money, frequency, recency (last_trx), province name, and job type to be processed into input Clustering.

	#	Info. gain	Gain ratio	Gini	χ^2	ReliefF	FCBF	Rand...rest
LAST_TRX		0.126	0.064	0.021	4761.812	0.998	0.123	0.355
MONEY		0.126	0.063	0.021	4833.302	0.014	0.122	0.635
FREKUENSI		0.121	0.061	0.019	4721.176	0.023	0.000	0.009
NAMA_PROVINSI	34	0.001	0.000	0.000	12.843	0.160	0.000	0.000
JOB_TYPE	46	0.001	0.000	0.000	0.061	0.022	0.000	0.000
LAST_EDUCATION	6	0.000	0.000	0.000	0.156	0.012	0.000	0.000
MARITAL_STATUS	4	0.000	0.000	0.000	3.698	0.020	0.000	0.000
GENDER	2	0.000	0.000	0.000	0.685	0.016	0.000	0.000
PEP	3	0.000	0.000	0.000	0.010	0.000	0.000	0.000
MOBILE_TYPE	2	0.000	0.000	0.000	0.302	0.022	0.000	0.000

Figure 6. Result Best Rand Random Forest Model

3.2 OPTIMAL AMOUNT OF USER SEGMENTATION

To answer research questions, how many the most optimal sharia e-money application customer segmentation. The author uses the orange Lab application for data processing, data processing with K-means models. In figure 7 is the K-Means model in the orange application. The file in the model is given an input variable important consisting of 5 variable data that are money, frequency, recency (last_trx), province name and job type. This data comes from the previous random forest output to find 5 important variables. Variable input data will be processed using a K-Means with a complete model as shown in Figure 7. The expected output is to find the best number of clusters for application user segmentation

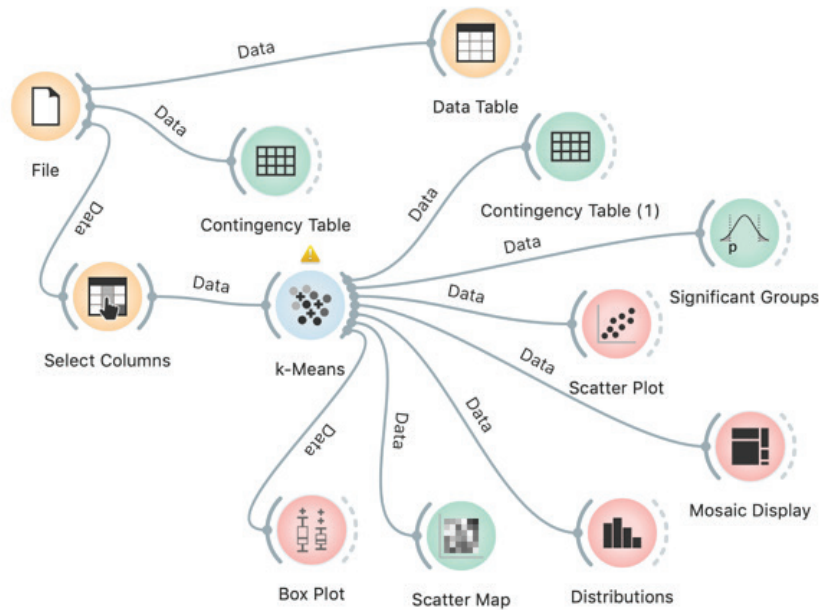


Figure 7. K-Means Model

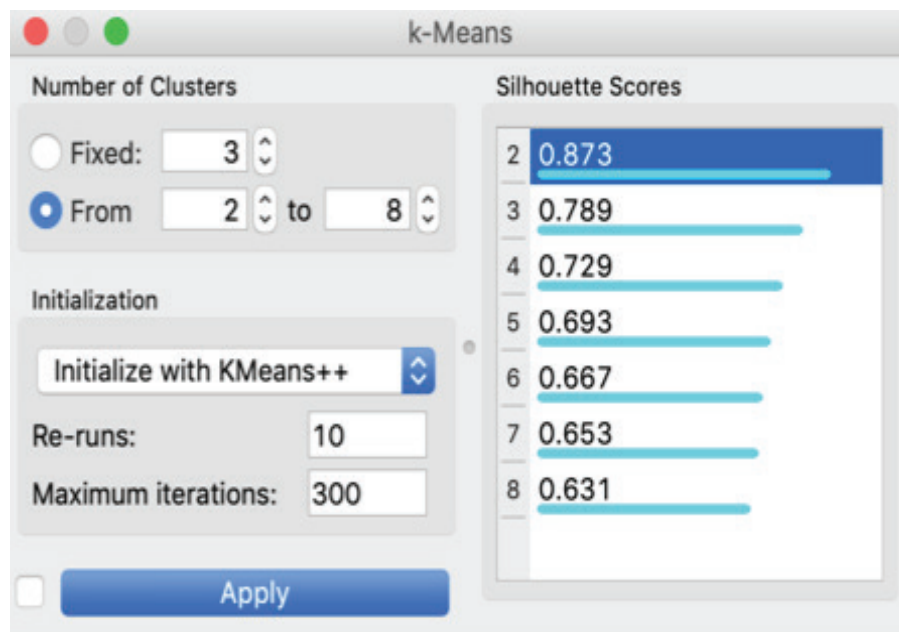


Figure 8. Silhouette Scores

In Figure 8, from Orange Lab, the highest score of silhouette Score is 0.873 with 2 clusters. In this study, the authors concluded that the most optimal cluster segmentation is with 2 clusters segmentations.

3.3 CHARACTERISTICS OF SEGMENTATION WITH HIGH PROSPECT

To answer research questions, What are the characteristics of the targeted segment (highly prospect). The author uses the orange lab application for data processing, data processing with scatter map model, box plot model and significant groups.

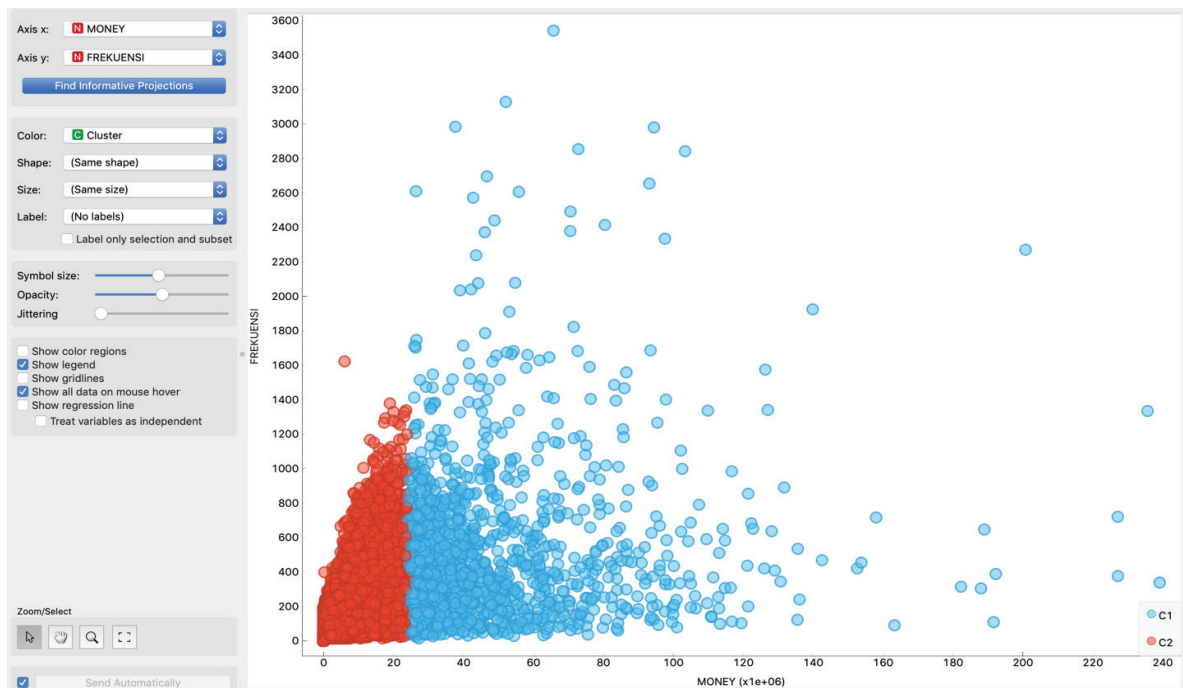


Figure 9. Scatter map with 2 Cluster

In figure 9, the author tested the data on the scatter map model using 2 clusters (the most optimal cluster segmentation is with 2 cluster segmentations). When doing the scatter map test, it was found that the best pattern of division of the 2 clusters was using the money variable on the x-axis and the frequency variable on the y-axis. In Figure 9, the output of C1 or cluster 1 is blue and C2 or cluster 2 is red. In this scatter map we know that C1 or cluster 1 has a greater amount and frequency than C2 or cluster 2, so that the authors conclude that C1 or cluster 1 is a targeted segment (highly prospect).

To find out the characteristics of each cluster, first it can be done with a box plot model. The results of the Box Plot model are categorical and numeric exploratory analysis. In Figure 10, Cluster Plot and Money Variables, a cluster analysis is performed with the variable money in Rupiah. The dark blue vertical line is the mean (average) and the thin blue vertical line represents the standard deviation with the amount values of C1: 44,614,681.4 \pm 25,540,711.7 and C2: 3,612,889.4 \pm 4,301,472.7.

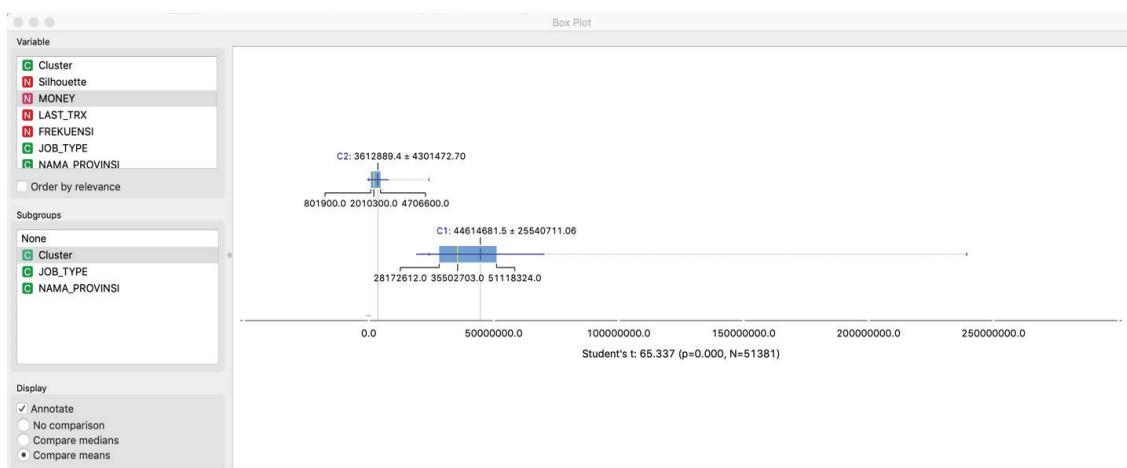


Figure 10. Box Plot Cluster and Money Variable

The results of the Box Plot model are categorical and numeric exploratory analysis. In Figure 11 Box Plot Clusters and Frequency Variables, a cluster analysis is performed with the variable frequency. The dark blue vertical line is the mean (average) and the thin blue vertical line represents the standard deviation with the frequency values C1: 463.4 \pm 420.48 and C2: 95.3 \pm 112.65

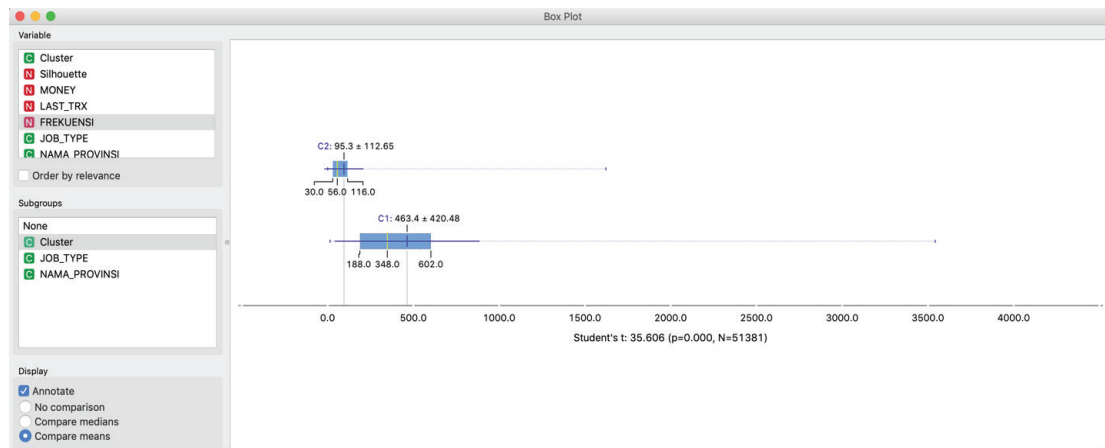


Figure 11. Box Plot Cluster and Frequency Variable

In Figure 12, the box plot cluster model and Provincial Name Variables, it can be concluded that there are 5 provincial attributes in C1 and C2, namely West Java, Central Java, East Java, Banten, and DKI Jakarta



Figure 12. Box Plot Cluster and Province Name Variable

In Figure 13, the box plot cluster model and the Job Type variable, it can be concluded that 5 attributes of high quantity user work types at C1 and C2 are housewives, private employees, entrepreneurs, students and traders.

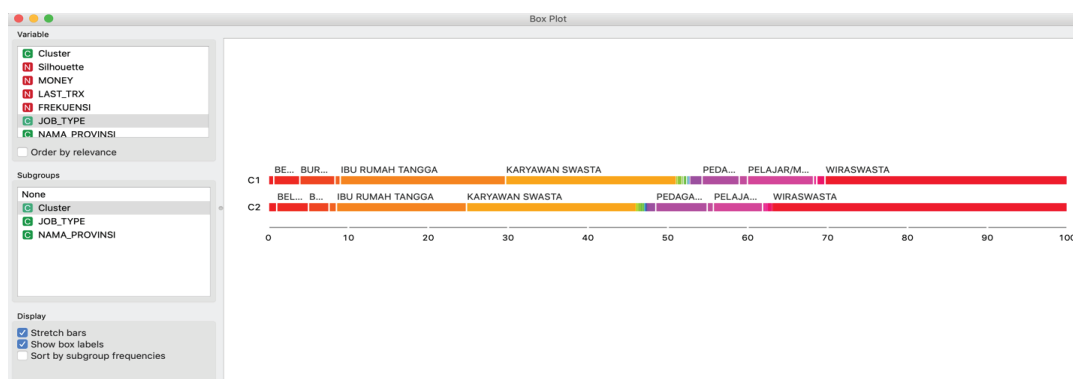


Figure 13. Box Plot Cluster and Job Type Variable

In Figure 14, the Significant Group model using the maximum statistic in the money variable, it can be seen that C1 or cluster 1 as a high prospect has Job Type Private Employees, Entrepreneurs, Housewives, Students and Traders. The provinces consist of West Java, Central Java, East Java, Banten, DKI, Lampung, North Sumatra, South Sumatra and South Borneo.

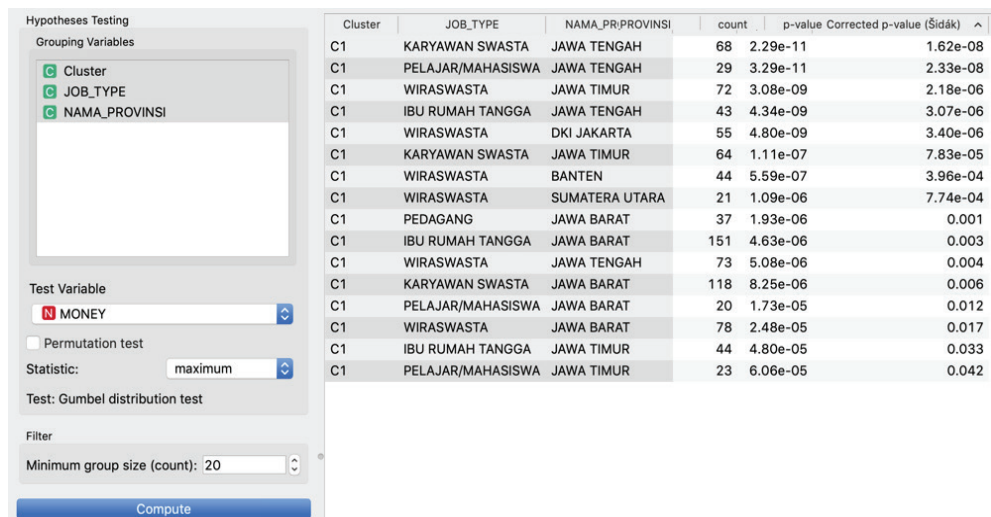


Figure 14. Significant Group Cluster, Job Type, and Money

In Figure 15, the Significant Group model using the maximum statistic in the frequency variable, it can be seen that C1 or cluster 1 as a high prospect has provinces consist of West Java, Central Java, East Java, Banten, DKI, Lampung, North Sumatra, South Sumatra and South Borneo.

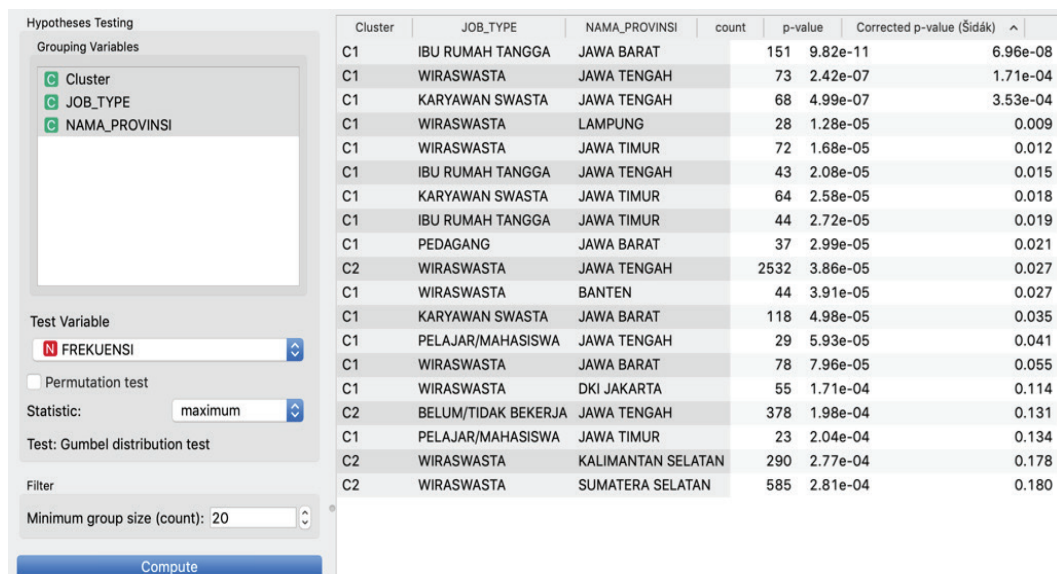


Figure 15. Significant Group Cluster, Job Type and Frequency

From data processing with scatter map model, box plot model and significant groups.

The authors conclude in table 2, the profile of customers with High Prospects, variable money obtained the average (mean) transaction of IDR 44,614,681.4 for 6 months of transactions or IDR 7,435,780.23 per month and the average (mean) frequency of transactions is 463 times for 6 months of transactions or 77 transactions every month. In other words, the average transaction divided by the average frequency of each month, the average transaction is IDR 96,568.57 and the average transaction per day is around 2.56 times a day or 2-3 times a day.

Table 2. Characteristics of Segmentation with High Prospect

VARIABLE	HIGH PROSPECT CUSTOMER PROFILE
Money	Average (mean) transactions of IDR 44,614,681.4 for 6 months of transactions or IDR 7,435,780.23 per month
Frequency	The average (mean) frequency of transactions was 463 times for 6 months of transactions or 77 transactions per month
Job Type	Private Employees, Entrepreneurs, Housewives, Students and Merchants
Province Name	West Java, Central Java, East Java, Banten, DKI, Lampung, North Sumatra, South Sumatra and South Borneo

3.4 SWOT ANALYST

To answer research questions, What are the Strengths, Weaknesses, Opportunities, and Threats of the case study company. The author conducted an interview with the Product & Marketing Head of the sharia e-money application company.

In Table 3 explains about strengths, weaknesses, opportunities, and threats application sharia e-money. From an internal factor, the main strength is because the owner of the company is a religious figure in Indonesia, the main weakness is that the company's finances are not good. From an external factor, the main opportunity is because Indonesia is the largest Islamic country in the world and Indonesia's demographic bonus, the main threat is the existence of other Islamic e-money application competitors.

Table 3. SWOT Analysis Application Sharia E-money

Strengths	Weakness
<ul style="list-style-type: none"> Branding owner as a public figure Strong Community Based Pioneer of sharia e-money in Indonesia Application is the work of the Nation's Children 	<ul style="list-style-type: none"> Poor company finances The amount of incomplete or registered data Low active user Less competitive prices Internal has not yet focused on developing e-money
Opportunities	Threats
<ul style="list-style-type: none"> Indonesia is the largest Islamic country in the world Demographic Bonus starting in 2020 There are still many untapped community bases 	<ul style="list-style-type: none"> The existence of other sharia e-money players The amount of political influence on the branding owner e-money regulations are still changing

After swot analysis with the Product & Marketing Head interview method then proceed with mapping the TOWS strategy. TOWS The strategy is concluded from the interview results:

- SO (Strength Opportunities) Strategy: optimizing the internal strength of the company such as the owner is a public Islamic figure in Indonesia to take market opportunities
- WO (Weakness Opportunities) Strategy: increase the user community of the application and reduce costs
- ST (Strength Threats) Strategy: build positive perceptions about the application by dividing the profits of each application to the company and alms
- WT (Weakness Threats) Strategy: develop applications according to user needs

In the interview, also discussed marketing program ideas by considering SWOT Analysis and TOWS Strategy. Several marketing programs such as meet and greet the owner as public Islamic figures in Indonesia, points and reward systems.

3.5 MARKETING PROGRAM

To answer research questions, What marketing programs are recommended to increase sales on the sharia e-money application for each cluster. The author conducted triangulation or interview with the Product & Marketing Head of the sharia e-money application company.

In table 5 the authors validate each description analysis result such as important variables to identify active users, the most optimal number of segmentations, high prospect segment characteristics, and the given marketing program.

Table 5. Triangulation Interview

INTERVIEW	Discussion	Result Expert Judgment
Variable Important	Results of Random Forest 5 Best Rank Variable - Money - Frequency - Last Trx - Job Type - Name of Province	Expert Judgment (Product & Marketing Head) agrees that 5 important variables are - Money - Frequency - Last Trx - Job Type - Name of Province
Optimal amount of segmentation	The K-means result from the Silhouette Score is 0.873. The most optimal number of clusters is 2 clusters.	- Expert Judgment (Product & Marketing Head) agrees for the optimal number of 2 Clusters.
High Prospect segment characteristics	From K-Means Results. C1 obtained box plot and significant group as high prospect with high frequency and number of transactions	Expert Judgment (Product & Marketing Head) agrees that C1 is a High prospect in terms of frequency and money (number of transactions) C1 as B2B (Business to Business) and C2 as B2C (Business to Customer)
Marketing program for clustering	C1 is a High prospect user and C2 is a Normal user	Expert Judgment (Product & Marketing Head) divides the Marketing Program analysis with points and reward systems.

After triangulation and description analysis, it was found that 2 clusters, namely C1 and C2. C1 is a B2B (Business to Business) user, using applications to sell pulses, data packages, bill payments, airplane tickets, train tickets, and others, so C1 is a cluster with high prospects due to the high frequency and transactions using the application. C2 is a B2C (Business to Customer) user, using the application for personal needs so that the frequency and transactions are lower C1.

After getting the user cluster, the given marketing strategy is different in the form of a marketing program. This marketing program provides C1 points and rewards that are much more attractive than C2. Points and rewards are conducted through tearing, if the customer reaches a certain frequency and number of tearing, the points and reward levels will be even greater. The similarity program for the two clusters is that every transaction made, the profit of the transaction will be shared between the company and alms so that each user makes a transaction on the sharia e-money application, so it contains elements of alms.

4. ADDITIONAL IMPROVEMENT

This research can be developed again in the future with several methods and data completeness.

1. Data processing using the Next Best Action Marketing (One on One Marketing) by developing a Forecast the customer lifetime value (CLV)
2. Data processing using statistical methods such as neural networks, decision trees and others to produce the

most optimal model accuracy

3. Research and develop user clusters with more data so that the more clusters the more specific
4. Researching and developing new clusters such as C2C (Customer to Customer)
5. Researching and developing marketing programs and measuring programs that have been implemented

REFERENCES

- Basu Swasta dan T. Hani Handoko, William J. Stanton. (2004). *Management Pemasaran Modern*. PT. Grasindo Persada. Jakarta.
- Brooks, C., & Thompson, C. (2017). Predictive Modelling in Teaching & Learning. *Handbook of learning Analytics*, 61-62.
- Chapman, P., Clinton, J., Kerber, R., Khabaza, T., Reinartz, T., Shearer, C., & Wirth, R. (2000). *CRISP-DM 1.0 Step-by-step data mining guide*. SPSS Inc. Dipetik 2019
- Collica, R. (2018). *Customer Segmentation and Clustering Using SAS Enterprise Miner*. USA: SAS Institute Inc.
- Danang. Sunyoto, (2012) *Dasar-dasar manajemen pemasaran*, Cetakan Pertama, Caps, Yogyakarta,
- Goldsmith, R. E. (1999). The personalised marketplace: beyond the 4Ps. *Marketing Intelligence & Planning*, 17 (4), 178-185. doi:10.1108/02634509910275917
- Goldsmith, R. E., & Freiden, J. B. (2004). Have it your way: consumer attitudes toward. *Marketing Intelligence & Planning*, 22 (2), 228-239. doi:10.1108/02634500410525887
- Hassouna, M., Tarhini, A., Elyas, T., & Abou Trab, M. S. (2015, May 25). Customer Churn in Mobile Markets: A Comparison of Techniques. *International Business Research*, 8 (6), 224-237. doi:10.5539/ibr.v8n6p224
- Indrawati, P. (2015). *Metode Penelitian Manajemen dan Bisnis Konvergensi Teknologi Komunikasi dan Informasi*. (D. Sumayyah, Penyunt.) Bandung, Jawa Barat, Indonesia: PT Refika Aditama.
- Keith J. Tuckwell, M. J. (2016). *Think Marketing*. Canada: Pearson Canada Inc.
- Kerin, R., & Peterson, R. (2015). *Pemasaran Strategis: Kasus dan Komentar*. Jakarta: Indeks.
- Kotler, P., & Keller, K. (2018). *Marketing Management*. Jakarta: Indeks.
- Kotler, P., & Lane Keller, K. (2016). *Marketing Management (Global Edition ed.)*. USA: Pearson Education Limited. doi:ISBN 978-0-13-385646-0
- Kotu, V., & Desphande, B. P. (2015). *Predictive Analytics and Data Mining*. Waltham, USA: Elsevier Inc.
- Lilen Gary, Rangaswamy Arvind, (2002), *Marketing Engineering* New Jersey: DecisionPro.
- Massis, B. E. (2012). Using predictive analytics in the library. *New Library World*, 113(9/10), 491-494. doi:10.1108/03074801211273957
- Monroe, Kent B. 2005. *Pricing: Making Profitable Decisions (3rd edition)*. New York: Mac Milan
- Mullins, John, Orville, Walker (2010), *Marketing Management: A strategic decision making approach*, New York: McGraw Hill.
- Nisbet, R., Elder, J., & Miner, G. (2009). *Handbook of Statistical Analysis and Data Mining Application*. California, USA: Elsevier Inc. Dipetik Juni 16, 2019
- Perrault, William., Canoon, Joseph., McCarthy, E., Basic, (2014), *Marketing: A Marketing Strategy Planning Approach*, New York: McGraw-Hill.
- Shen, A. (2014). Recommendations as personalized marketing: insights from customer experiences. *Journal of Services Marketing*, 28(5), 414-427. doi:10.1108/JSM-04-2013-0083
- Suyanto. (2018). *Data Mining untuk Klasifikasi dan Klasterisasi Data*. Jakarta: Informatika.

CONSUMER RESISTANCE TO INTERNET BANKING (STUDY ON NON-ADOPTER INTERNET BANKING)

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Abstrack

Internet banking users still less when compared with the total population of customers. If seen from the number of Internet users in Indonesia, the development of Internet banking should be more massive. The purpose of this paper is to further the understanding of innovation resistance by dividing internet banking non-adopters into three groups based on their intention to use the innovation. Thereafter, the aim si to identfy how the resistance differs in these customers groups. This study identifies three groups of internet banking non-adopters, namely postponers, opponents, and rejectors. The data were collected by conducting questionnaire through online and offline among the retail banking customers in Indonesia who had not adopted internet banking. Thereafter, kruskal-wallis test used to analyzed data by using SPSS 22. The result showed that usage, value, risk, tradition and image barrier differ significantly between the groups. The result also showed that postponers had low resistance than opponents, while the rejectors show high resisntance. The postponers had some doubt about risk aspect. Risk barrier is the most intense barrier to internet banking adoption among opponents, followed by usage barrier. The results indicate that tradition barrier is the most intense barrier to internet banking adoption among the rejectors. This research suggested to the bank, the groups should be approached with different strategies and differentiated targeted marketing actions.

Keywords: Consumer resistance; Internet banking, Adoption.

1. INTRODUCTION

Information and communication technology (ICT) developing very rapidly nowadays. The Indonesian Internet Service Providers Association (APJII) argues that in 2018 most Indonesians can no longer escape from internet-based communication activities. In 2017 the number of internet users in Indonesia was 143.3 million people with a penetration of 40%. In 2018, there was an increase in the number of internet users in Indonesia reaching 171.2 million people with a penetration of 54,86%.

According to Jun and Cai (2001) in Kerti et al. 2014) revealed that the rapid growth of the internet has changed the way companies connect with their customers, the banking business is no exception. The Internet has helped the IT revolution in financial services in banking services. (Makris et al in Hanafizadeh et al., 2014). The flexibility and mobility of a person who is getting faster and the presence of internet services require easier and faster banking services. Internet banking service is one of the answers. (Prihiyani, 2012)

Internet banking provides fast, safe, convenient, inexpensive service, and is available at any time (24 hours non-stop), and can be accessed from anywhere, be it from cell phones, computers, laptops / notebooks, PDAs, and so on. Through internet banking, customers can perform an account in quiry, account opening, transfers, bill payments, information on interest rates and currency exchange rates, change PIN numbers and simulate credit calculations. (Prihiyani, 2012). Of the 5 largest banks in Indonesia based on total customers, customers who use internet banking services are still low. Table 1 shows the comparison of the number of customers with internet banking users in the 5 largest banks in Indonesia based on the number of customers.

Tabel 1. Comparison of Number of Customers and Internet Banking Users in the 5 Largest Banks in Indonesia in 2019

No	Bank	Number of Customers 2019	Internet banking Users	%
1	BRI	90 mil	11 mil	12 %
2	BNI	44,9 mil	4,2 mil	9,4 %
3	Bank Mandiri	83,5 mil	8,3 mil	10 %
4	BCA	19,5 mil	9 mil	46 %
5	CIMB Niaga	8 mil	2,5 mil	31,3 %

To understand consumer adoption behavior, it is necessary to understand innovators and users of innovation but also the reasons why some people do not adopt and may reject innovation. (Laukanen et al., 2008). Banks are interested in finding ways and strategies for their customers to use internet banking. Understanding resistance to non-adopters can help to achieve these goals. (Laukanen et al., 2008). Non-adopters can be a vital source of information in the successful development, development, implementation and marketing of an innovation. Therefore, companies need to identify different sources of consumer resistance to innovation to reduce failed products (Ram in Lauksen et al., 2008).

There are several studies on consumer resistance to internet banking. One of them is research by Laukanen et al. (2007, 2008) in Finland who examined the barriers to the adoption of internet banking which became consumer resistance to internet banking using the theory of consumer resistance to innovation by Ram and Sheth. Innovation resistance is somewhat neglected in academic marketing research (Sheth in Laentuken et al. (2007, 2008). So far, the literature on innovation has been mostly concentrated on diffusion, innovation adoption, motivational factors in adoption, factors that accelerate adoption process, and the characteristics of innovation adopters (Rogers in Lauksen et al., 2007; Gatignon and Robertson; Ram in Lauksen et al., 2008), instead of the reasons that slow down or inhibit or prevent or delay diffusion, the adoption of an innovation (Lauksen et al., 2007; Bradley and Stewart in Laentuken et al., 2008). However, studying the innovation resistance process may be even more important than learning adoption (Ram in Lauksen et al., 2007).

Even in the case of successful innovations, resistance can occur. Innovation resistance can hinder or even prevent the adoption of an innovation and therefore must be overcome before adoption can begin. (Ram in Laentuken et al., 2008). The adoption process can only begin after the resistance has been overcome (Ram; Bagozzi and Lee in Lauksen et al., 2007). Laukanen et al. (2008) assume that innovation resistance has an influence on consumer intentions in using an innovation.

Based on the background description above, the authors are interested in conducting a research related to internet banking and adopting the research that has been conducted by Laukanen et al. (2008). The purpose of this study is to determine the differences in consumer resistance to internet banking among postponers, opponents and rejectors.

2. LITERATURE REVIEW, FRAMEWORK AND METHODOLOGY

Literature Review

Internet banking is another term used for online banking. Internet banking or online banking is defined as the use of the internet as a channel for delivering banking services through the World Wide Web. (Hamid et al. In Nasri et al., 2012). [13] Internet banking allows bank customers to carry out banking activities such as paying bills, checking account information, transferring funds, investing and checking services through bank websites (Tan and Teo, 2000; in Hanafizadeh et al., 2014). [2]

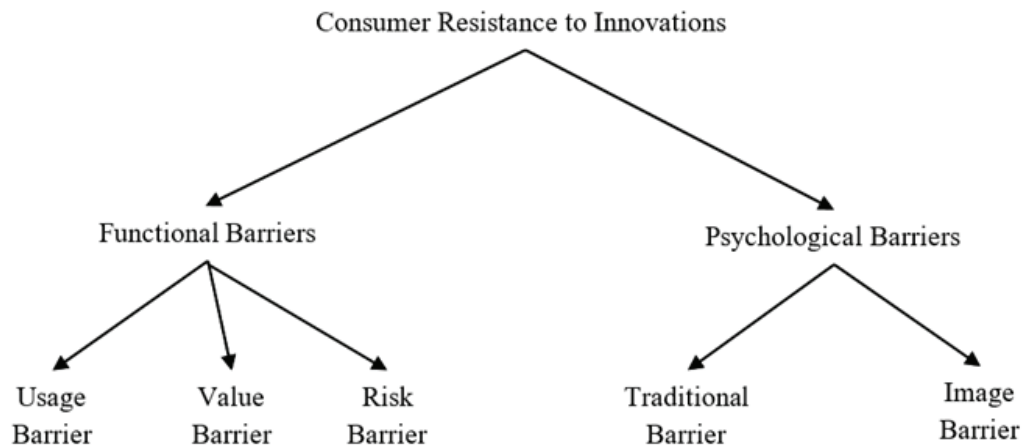
Innovation resistance is defined as resistance that consumers offer to an innovation, either because it raises the potential for a satisfactory change in the status quo or because it conflicts with their belief structure (Ram and Sheth, 1989) [15].

Innovation resistance is seen as a normal consumer response to changes in existing habits or supposed practices of the adoption of an innovation. (Ram in Laentuken et al., 2008) [10]. Thus, innovation resistance can be considered as a special form of resistance to change (Ram in Laentuken et al., 2007) [9].

Consumers face several obstacles that stifle their desire to adopt an innovation, and these obstacles are categorized into 2 obstacles, namely functional barriers and psychological barriers. Functional barriers (functional barrier) consists of usage barriers, value barriers, risk barriers. Meanwhile, psychological barriers (psychological

barrier) consist of traditional barriers (traditional barrier) and image barrier (image barrier). (Ram and Sheth in Laentuken et al., 2007) [9]. As illustrated in Figure 1 below.

Picture 1. Consumer Resistance to Innovation



Ram and Sheth in Laentuken et al. (2007) [9] argue that usage barrier is perhaps the most common cause of consumer resistance in an innovation. Usage barrier is mostly related to the usefulness of an innovation and the changes required from consumers. Barriers arise when an innovation is not compatible with existing workflows, practices and habits.

Value barrier is based on the monetary value of an innovation. If an innovation does not offer a good ratio of performance to change price, then there is no benefit for customers changing the way they do their jobs. (Ram & Sheth in Laentuken et al., 2007). [9]

Risk barrier refers to the level of risk of an innovation. Innovation always includes the level of risk that will be felt, because of the uncertainty of an innovation. (Ram & Sheth in Laentuken et al., 2007). [9]

Tradition barrier has implications for an innovation that causes changes in the daily routine of consumers. This routine can be very important for consumers. Consumers also have social and family values and social norms. Behavior that is contrary to values and norms will cause obstacles to tradition. (Ram & Sheth in Laentuken et al., 2007). [9]

Image barrier comes from stereotypical thinking about an innovation. Each innovation achieves a certain identity from its origin, such as including which product category they come from, which country or brand of the innovation. Therefore, in general, the image barrier can be considered as the image of an innovation. (Ram & Sheth in Laentuken et al., 2007). [9]

Szmigin and Foxall in Laentuken et al. (2008) [10] categorize non-adopters into 3 groups based on their intended use in the adoption of an innovation, namely:

1. Postponers are a group of non-adopters who intend to adopt an innovation within 1 year.
2. Opponents are a group of non-adopters who intend to adopt an innovation but have not yet decided when to adopt it, but certainly not within 1 year.
3. Rejectors are a group of non-adopters who have no intention of adopting an innovation at all.

Framework

This study adopted the research of Laukanen et al. (2008) because they have the same objective, namely to identify the barriers that become consumer resistance to internet banking in the three non-adopter groups, which consist of postponers, opponents, and rejectors. As well as looking for differences in resistance among postponers, opponents, and rejectors. Laukanen et al. (2008) examined non-adopters because nonadopters unwittingly could become a vital source of information in the successful development, implementation and marketing of an innovation. In addition, companies need to identify different sources of consumer resistance to innovation to reduce failed products.

Figur 2. Framework

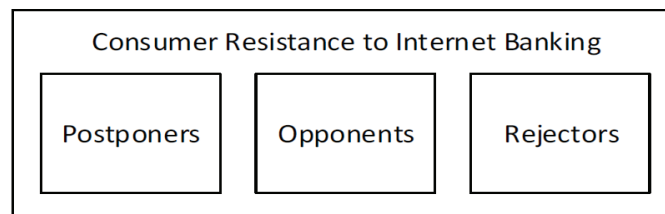


Figure 2 shows the framework in this study which is based on research by Lauksen et al. (2008). This study will identify resistance among the three non-adopter groups to internet banking. Ram and Sheth (1989) used innovation resistance theory to explain consumer resistance to internet banking. Consumer resistance to innovation has been explained by different barriers that hinder or even prevent innovation adoption. Innovation resistance consists of functional barriers and psychological barriers. Where the barriers to use, value and risk include functional barriers and traditional and image barriers including psychological barriers. The following is the hypothesis of this study:

- H1. The usage barrier in internet banking adoption differs significantly among postponers, opponents, and rejectors.
- H2. The value barrier in internet banking adoption differs significantly among postponers, opponents and rejectors.
- H3. The risk barrier in internet banking adoption differs significantly among postponers, opponents and rejectors.
- H4. Tradition barriers to internet banking adoption differ significantly among postponers, opponents and rejectors.
- H5. Image barriers to internet banking adoption differ significantly among postponers, opponents and rejectors.

Methodology

In this research, the method used is quantitative method. Based on the objectives of this study, it is included in descriptive research. This research is based on the type of investigation included in comparative research. In this study, based on the involvement of the researcher, the researcher did not manipulate (intervention) any data. The unit of analysis in this study is an individual because it examines the opinion of each person or individual. This study was based on the time of implementation included in a cross-sectional study.

The sampling technique used was non-probability sampling with the sampling technique used, namely purposive sampling. The population in this study are bank customers in Indonesia, while the sample of bank customers who have not used internet banking. The data was collected by distributing questionnaires through Google Forms and directly, obtained 593 respondents consisting of 225 (38%) postponers respondents, 271 (46%) respondent opponents, and 97 (16%) rejectors respondents. In this study, a Likert scale was used on a scale of 4, from strongly disagree (1) to strongly agree (4), in which the neutral choice is eliminated.

The data analysis technique used was the Kruskal-Wallis test. The Kruskal Wallis test (ranked one-way ANOVA) is a ranking-based nonparametric test whose purpose is to determine whether there is a statistically significant difference between two or more groups of independent variables on the dependent variable on the numeric data scale (interval / ratio) and ordinal scale. [16] Then a post hoc analysis was performed using the Mann-Whitney test to determine which groups had differences.

4. DISCUSSION

To find out whether there are differences in the barriers that exist in the adoption of internet banking among the non-adopter internet banking groups (postponers, opponents, and rejectors), an ANOVA test was performed on the answers to each variable from the three groups. However, because it did not meet the requirements (normal data distribution and homogeneous data variance) the ANOVA test could not be done so as an alternative, the Kruskal-Wallis test was used. Table 2 shows the results of the Kruskal-Wallis test.

Table 2. Kruskal-Wallis Test Results

Indicator	Mean Rank			Chi-Square	df	Sig.
	Postponers	Opponents	Rejectors			
Usage barrier	210,51	321,83	428,24	122,148	2	0,000
UB1	214,45	315,29	437,39	145,583	2	0,000
UB2	223,12	317,94	409,89	107,527	2	0,000
UB3	241,19	300,27	417,31	86,999	2	0,000
UB4	225,85	310,75	423,61	109,931	2	0,000
UB5	258,82	311,84	344,12	23,454	2	0,000
Value barrier	220,02	298,56	471,18	152,012	2	0,000
VB1	226,77	306,24	434,10	119,612	2	0,000
VB2	226,05	277,13	424,29	71,383	2	0,000
VB3	236,59	311,98	395,27	74,576	2	0,000
Risk barrier	247,58	325,53	331,92	30,768	2	0,000
RB1	285,74	316,12	269,71	7,688	2	0,021
RB2	261,14	311,43	339,87	21,732	2	0,000
RB3	267,81	314,14	316,84	11,851	2	0,003
RB4	264,08	319,00	311,90	15,186	2	0,001
RB5	265,31	312,46	327,31	14,609	2	0,001
Tradition barrier	213,35	297,98	488,28	178,877	2	0,000
TB1	244,31	284,26	454,81	113,029	2	0,000
TB2	229,48	308,05	422,74	104,857	2	0,000
TB3	231,35	300,19	440,35	118,343	2	0,000
Image barrier	240,98	292,58	439,29	94,397	2	0,000
IB1	243,81	293,93	428,96	108,577	2	0,000
IB2	249,63	298,00	404,07	62,339	2	0,000
IB3	264,67	290,19	391,03	42,491	2	0,000

Based on the results of the Kruskal-Wallis test in Table 2, it shows that there are significant differences in the usage barrier, value barrier, risk barrier, traditional barrier and image barrier among postponers, opponents, and rejectors.

The results also showed the postponers had lower resistance compared to the other groups. This is because the results show the mean rank postponers are lower than the other groups. A closer examination reveals that in the postponers group there are some doubts regarding the risk aspects of internet banking. Most of the postponers seem to be concerned that they are incorrectly pressing or filling out their information on bills that are being paid. Moreover, they seem to be on average in the postponers group worried that the connection will suddenly drop when they use internet banking which shows a higher mean rank than the rejectors group.

This supports the results of the study by Laukanen et al. (2008) [9], where the postponers group has low resistance, and there are some doubts about the risk aspects of internet banking. The findings of Laukanen et al. (2008) revealed that most of the postponers had concerns that they incorrectly pressed or filled in the invoice information to be paid or they might lose their PIN records, and moreover, they were afraid that the internet connection would suddenly disconnect / disappear while using internet banking.

The results show that the risk barrier is the main obstacle in the adoption of internet banking among the opponents group. Then followed by a usage barrier. This is because the results show that the risk barrier obtains a high mean rank. These results also support the findings of Laentuku et al. (2008) [10] stated that the most important obstacle in the adoption of internet banking by the opponents group is risk barrier. Furthermore, the results show that opponents are concerned about the risk of pressing or filling in wrong information on bills to be paid and are worried if the internet connection suddenly drops / disappears while using internet banking. Moreover, they are worried that the PIN record might be lost. At the usage barrier, the opponent group has a perception that using internet banking is complicated or not easy to use.

Based on the results it was revealed that the rejectors group had higher resistance compared to postponers and opponents, the mean rank of rejectors was greater than the other two groups at each barrier. The examination of the results further showed that on the risk barrier, the mean RB1 rank of the rejectors group was lower than

the other two groups, it indicated that the level of concern that the internet connection was disconnected / disappeared when using internet banking was lower in the rejectors group than the opponents and posponers. The results reveal that tradition barrier is the main obstacle preventing the rejectors from adopting internet banking. They prefer to visit banks and transact through tellers and they think that internet banking does not provide a better option than other services. Then it was revealed that the value barrier is the second strongest obstacle in the adoption of internet banking. They consider that internet banking services are not economical and internet banking does not provide any benefit in managing finances compared to other methods.

Table 3. Mann-Whitney Test Results between Postponers and Opponents, Postponers dan Rejectors, and Opponents s dan Rejectors

Indicators	Mann-Whitney U	Wilcoxon W	Z	Sig.	Mann-Whitney U	Wilcoxon W	Z	Sig.	Mann-Whitney U	Wilcoxon W	Z	Sig.
	Postponers and Oppenents				Postponers and Rejectors				Opponents and Rejector			
Usage barrier	18308	43733	-7,73	0	3632,5	29057,5	-9,59	0	7693	44549	-6,12	0
UB1	19599,5	45024,5	-7,7	0	3227	28652	-10,82	0	7211,5	44067,5	-7,36	0
UB2	20466	45891	-7,08	0	4310	29735	-9,34	0	8795,5	45651,5	-5,41	0
UB3	24336	49761	-4,3	0	4507,5	29932,5	-9,17	0	7878,5	44734,5	-6,45	0
UB4	21403	46828	-6,31	0	3988	29413	-9,66	0	7786,5	44642,5	-6,44	0
UB5	24922,5	50347,5	-3,75	0	7886	33311	-4,2	0	11599	48455	-1,83	0,066
Value barrier	22018	47443	-5,47	0	2062,5	27487,5	-11,77	0	5098	41954	-9,13	0
VB1	22227,5	47652,5	-5,73	0	3370,5	28795,5	-10,65	0	7387	44243	-6,99	0
VB2	28908,5	54333,5	-1,05	0,293	5527,5	30952,5	-7,32	0	6181	43037	-8,24	0
VB3	22578	48003	-5,56	0	5229	30654	-8,05	0	9294,5	46150,5	-4,66	0
Risk barrier	21931,5	47356,5	-5,44	0	8350	33775	-3,36	0,001	12318,5	49174,5	-0,92	0,355
RB1	27316,5	52741,5	-2,13	0,033	10275,5	15028,5	-0,87	0,38	11133	15886	-2,38	0,017
RB2	25122,5	50547,5	-3,79	0	8209	33634	-3,83	0	11689	48545	-1,78	0,074
RB3	25578,5	51003,5	-3,3	0,001	9253	34678	-2,27	0,023	12879	49735	-0,31	0,755
RB4	24778,5	50203,5	-3,81	0	9214,5	34639,5	-2,33	0,019	12891	17644	-0,3	0,764
RB5	25475	50900	-3,38	0,001	8794,5	34219,5	-2,92	0,003	12321,5	49177,5	-0,96	0,333
Tradition barrier	20991,5	46416,5	-6,07	0	1587,5	27012,5	-12,31	0	3914	40770	-10,4	0
TB1	26108	51533	-2,88	0,004	3436	28861	-10,09	0	5312	42168	-9,04	0
TB2	22371	47796	-5,51	0	3836,5	29261,5	-10,02	0	8022,5	44878,5	-6,5	0
TB3	23099	48524	-5,02	0	3530,5	28955,5	-10,28	0	6620,5	43476,5	-8,18	0
Image barrier	24631,5	50056,5	-3,76	0	4164	29589	-8,91	0	6089,5	42945,5	-8	0
IB1	25080	50505	-4,08	0	4351,5	29776,5	-9,61	0	6904	43760	-8,25	0
IB2	25261	50686	-3,53	0	5481,5	30906,5	-7,46	0	8189	45045	-5,87	0
IB3	27582,5	53007,5	-1,96	0,05	6542,5	31967,5	-5,95	0	8392,5	45348,5	-5,66	0

The results of the Mann-Whitney test show that based on the p-value in the column sig. There is no difference between postponers and opponents in the perception that internet banking does not provide significant benefits in managing financial matters compared to other means (VB2) because it has a p value > 0.05. There is no difference between postponers and rejectors when using internet banking, the internet connection suddenly disconnects (RB1) which is significant because it has a p value > 0.05. there is no difference in the perception that changing the PIN code periodically is not troublesome (UB5), the level of confidence that proof of transactions that can be printed through internet banking services can be used as valid proof of payment (RB2), the level of concern is that it is wrong to press or fill in the information on bills to be paid when using internet banking (RB3), the level of concern that the PIN code record may be lost and fall into the hands of an irresponsible person (RB4), and the level of confidence that when using internet banking no other party can use or see my account information (RB5) because it has a p value > 0.05.

On the usage barrier, value barrier, tradition barrier and image barrier, it can be concluded that the groups that have differences are between postponers and opponents, postponers and rejectors, opponents and rejectors. Meanwhile, the group that has differences in risk barrier is between postponers and opponents, postponers and rejectors.

Further results through the Mann-Whitney test between postponers and opponents show that between the two groups of non-adopters on the value barrier there is no difference in perceptions between postponers and opponents that internet banking does not provide benefits in managing my finances compared to other means. It also shows that based on the results, the mean rank of the postponers group has a lower resistance than the

opponents group.

The results of the Mann-Whitney test between Postponers and Rejectors show that between the two groups of non-adopters both have concerns when using internet banking services, the internet connection suddenly disappears / disconnects. It also shows that based on the results, the mean rank of the postponers group has a lower resistance than the rejectors group.

Furthermore, the Mann-Whitney test results between Opponents and Rejectors show that there is no significant difference in risk barrier. These results support the findings of Lee et al. (2005) in Lauksen et al., (2008) [10], which divides non-adopters into 2 groups, namely groups who will adopt in the next 12 months and groups who will not adopt at all. They found that there was no significant difference in risk perception between the 2 groups of non-adopters. Both groups have concerns that when using internet banking they will make mistakes in pressing and filling in billing information and are worried that the PIN code record may be lost and fall into irresponsible hands. Both groups also believe that printable proof of transaction can be used as proof of legal payment and believe that no other party can use or view their internet banking account.

The results also show that among the opponents and rejectors alike have the perception that changing the PIN code periodically is troublesome, and show that based on the results the mean rank of the opponents group has lower resistance compared to the rejectors group.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Based on the results, it can be concluded that usage barriers, value barriers, risk barriers, tradition barriers, and image barriers in the adoption of internet banking have significant differences between groups of non internet banking users (postponers, opponents and rejectors). Thus H1, H2, H3, H4, H5 which state that there are significant differences are proven to be true.

5.2 RECOMMENDATIONS

5.2.1 RECOMMENDATIONS FOR INTERNET BANKING SERVICE PROVIDER BANKS

Based on the results, the three groups of non-adopters had significant differences in resistance. Therefore it is recommended that banks providing internet banking services provide different strategic approaches and different marketing actions in each group to encourage customers to use internet banking services.

The postponers group is concerned about the risk aspects when transacting through internet banking services by wrongly pressing or filling in the information on bills to be paid. Moreover, the average postponers seem to be worried that the internet connection will suddenly disconnect / disappear when making transactions. To accelerate postponers adopting internet banking, banks can concentrate on security issues in marketing internet banking. In addition, banks can minimize errors that occur in internet banking services, especially errors during transactions.

The opponents group also concentrates on the risk aspect but also on the usefulness of internet banking. To accelerate the adoption of internet banking, banks can take a similar marketing approach to the postponers group. In addition, banks can improve the user authentication mechanism at login by providing an option if the PIN is lost. The bank also focuses on the use and convenience of internet banking when marketing internet banking.

Then to convince the rejectors group to adopt internet banking, banks can provide education and information about the ease, usefulness and benefits of using internet banking services. If necessary, demonstrations and training are conducted in the operation of internet banking services.

5.2.2 SUGGESTIONS FOR FURTHER RESEARCH

The object of this research is bank customers in Indonesia who have not used internet banking. With the non-probability sampling technique, the research results do not represent Indonesia, so the suggestion for further research is to use probability sampling techniques to represent Indonesia. It is also suggested for further research to be carried out by narrowing the scope of the research, for example, namely only one or two cities / regencies / provinces to be researched. It is also suggested for further research to examine urban communities (urban) and rural communities (rural).

REFERENCES

- Asosiasi Penyelenggara Jasa Internet Indonesia. 2019. *Profil Pengguna Internet Indonesia 2019*. Jakarta: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Hanafizadeh, P., Byron W. Keating, dan Hamid Reza Khedmatgozar. 2014. *A Systematic Review of Internet banking*. Telematics and Information, 31(3), 492 - 510.
- Kerti, Ni Nyoman, Luh Putu Rara dan Putu Gde S. (2014). *The Application of Technology Acceptance Model on Internet banking Users in the City of Denpasar*, 16(2).
- Laporan Tahunan Bank Mandiri. 2019. *Laporan Tahunan Bank Mandiri 2020*. Jakarta: Bank Mandiri
- Laporan Tahunan BCA. 2019. *Laporan Tahunan BCA 2020*. Jakarta: BCA.
- Laporan Tahunan BNI. 2019. *Laporan Tahunan BNI*. Jakarta: BNI.
- Laporan Tahunan BRI. 2019. *Laporan Tahunan BRI*. Jakarta: BRI.
- Laporan Tahunan CIMB Niaga. 2019. *Laporan Tahunan CIMB Niaga 2020*. Jakarta: CIMB Niaga.
- Laukkanen, Pekka., Sinkkonen, Suvi., Kivijarvi, Marke., dan Laukkanen, Tommi. 2007. *Consumer Resistance and Intention to use Internet banking Service*.
- Laukkanen, Pekka., Sinkkonen, Suvi., dan Laukkanen, Tommi. 2008. *Consumer Resistance to Internet banking: Postponers, Opponents, and Rejectors*. International Journal of Bank Marketing, 26(6), 440-455.
- Laukkanen, Tommi., Sinkkonen, Suvi., Kivijarvi, Marke., dan , Laukkanen, Pekka. 2007. *Innovation Resistance among Mature Consumer*. Journal of Consumer Marketing, 24(7), 419-427.
- McKinsey&Company. 2014. *McKinsey Asia Personal Financial Services Survey 2014*. Australia: New Media Australia.
- Nasri, Wadie dan Lanuoar Charfeddine. (2012). *Factors Affecting the Adoption of Internet banking in Tunisia: An Integration Theory of Acceptance Model and Theory of Planned Behavior*. Journal of High Technology Management Research, 23(1), 1-18.
- Prihiyani, Eny. 2012. *Memaksimalkan Internet banking*. [Online] Available at: <http://bisniskeuangan.kompas.com> [Accessed 7 Oktober 2015]
- Ram, S. and Sheth, J.N. 1989. *Consumer resistance to innovations: the marketing problem and its solutions*, The Journal of Consumer Marketing, 6(2), 5-14.
- Statistics Laerd. 2013. *Kruskal-Wallis H Test using SPSS Statistics*. [Online] Available at: <https://statistics.laerd.com/spss-tutorials/kruskal-wallis-h-test-using-spss-statistics.php>
- Zumar, Dhorifi. 2013. *34% Nasabah Sudah Melek Internet banking*: [Online] Available at: <http://www.marsindonesia.com/newsletter/34-nasabah-sudah-melek-internet-banking> [Accessed 5 Oktober 2015]

EXPERIENCE AND BRAND EQUITY IN E-COMMERCE (CASE STUDY: LAZADA INDONESIA)

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Abstract

In 2020, rotation money of e-commerce is increasingly significant due to changes in behavior caused by the Covid-19 pandemic, which makes online shopping activity continuously increasing. Lazada is one of the major e-commerce companies in Indonesia, spotting the opportunity from behavior changes in online shopping by strengthening brand equity. Lazada's strategy is to make brand experience becomes one way to form a strong brand. In the implementation, Lazada has quite active to offer brand experience through experience sensory, affective, intellectual, and behavioral. This study is proposed to analyze factors that can influence brand experience and brand equity. The number of items used to measure brand experience is 12 items. Meanwhile, the number of items used to measure brand equity is 16 items. Pilot test has been tested for proposed variables to 30 respondents. The research instruments will be tested by pearson product moment to test the validity and cronbach's alpha value to test the reliability. The result indicates that the 2 variables with 28 items are valid and reliable, therefore the measurement tools can be used for further study.

Keywords: Brand Equity, Brand Experience, E-commerce, Lazada, Online Shopping.

INTRODUCTION

In early 2020, internet user penetration in Indonesia has increased 64% with a total population of 272,1 million. It is significantly increasing the usage of digital technology in Indonesia, especially online shopping. In 2018-2019, there was a 46% rising in online shopping. Then, in January 2020 the growth of online shopping activity was 88% (We Are Social & Hootsuite, 2020). The behavior changes that occurred during pandemic covid-19 has triggered e-commerce growth. E-commerce is considered to be an alternative solution to fulfill consumer needs during this pandemic. The high risk of spread, making all of the activities restricted and health protocol must be implemented, one of which is minimize physical contact.

There are big four e-commerce in Indonesia for instance Shopee, Tokopedia, Bukalapak, and Lazada. During 2018-2020, Lazada's monthly website visit performance has been always at the lowest place among them (Iprice, 2020). Spotting opportunity from this behavior changes and to grab the market chance, Lazada strengthening their brand equity by creating a brand experience. Lazada is quite active to provide experience through experience sensory, affective, intellectual, and behavioral. In providing a sensory experience, Lazada providing product category on their website and mobile apps to make activity shopping easier for customers. Lazada pleasing customer's feeling by providing live chat 24 hours, it can make all of the problems solves in real-time and that is one of affective experience. Lazada's intellectual experience providing LazLive features where sellers give information related to their products. Then, Lazada's behavioral experience is conducting flash sale and interesting events by providing discounts and vouchers. Brand experience can assist a company to enamor its brand in the market, influence emotions/feelings, and psyche customers, also gaining loyalty (Beig and Nika, 2019). Brand equity helps the company in marketing and identifying customer's wants (Rahmady and Purwanti, 2020). Strong brand equity can make a competitive advantage and increasing sales (Rahmady and Purwanti, 2020). A well-formed brand experience will ultimately create strong brand equity (Beig and Nika, 2019).

Model brand experience and brand equity by Beig and Nika (2019) that adapted for this study will focus to analyze the indicator that can measure the dimension of brand experience and brand equity for further research.

1. LITERATURE REVIEW

Brand Experience

Brand Experience was developed by Brakus, J. J., Schmitt, B. H., & Zarantonello, L (2009). According to Brakus et al. (2009:53) brand experience is as subjective, consumer response (sensation, feeling, and cognition) and behavioral responses that arise due to brand-related stimuli which are part of design and identity, packaging, communication, and environment. Other statements stated by Harris et al. (2018) brand experience is beyond the benefits provided by product and services, authentic, something surprising and unexpected, and leads to positive memories. The experiential route can positively influence brand equity. Thus, brand experience is considered to be efficient and cost-effective to achieve brand success in the e-commerce industry (Beig and Nika, 2019).

There are four dimensions of brand experience. Firstly, sensory experience is described as how the brand can attract consumer's senses such as vision and sound (Tafesse, 2016). Then, affective experience as an emotional assessment, it can represent emotional attraction and brand content (Tafesse, 2016). Thirdly, an intellectual experience is defined as how the brand can induce consumer's cognitive thinking and increase curiosity (Tafesse, 2016; Bapat, 2020). Fourthly, behavioral experience explaining how the brand can trigger physical actions (Tafesse, 2016).

Brand Equity

Brand equity is a brand value obtained from marketing efforts and considered as a company asset (Arora and Neha, 2016). When brand equity has a high value, it means that customers already know the brand, have a strong and positive association with a brand, good quality, and customers will be loyal to the brand (Brochado and Oliveira, 2017). Four dimensions of brand equity that related to customer or CBBE (Customer Based-Brand Equity) there are brand awareness, brand association, perceived quality, and brand loyalty.

Brand awareness means that a brand can easily recognize and remembered in different situations, that provides opportunities for the brand to be purchased and if customers get satisfied, the company will achieve a competitive advantage (Shahid et al., 2017; Chiguvi et al., 2020). Brand association creating value for companies and customers by differentiates the brand and instilling positive behaviors or feelings into customer minds (Sharma, 2017). If a group of associations is well managed, a brand image will be created (Borchado and Oliveira, 2017: 6). Perceived quality comes from customer's perception of innovation and the ability of a product to meet customer expectations, so as can creating customer satisfaction (Inayati and Wahyuni, 2017; Chiguvi et al., 2020: 3). Brand loyalty is when customers show a positive response to the brand, buy the brand regularly, and do not switch to other brands while still being aware of product prices (Borchado and Oliveira, 2017: 7).

2. MEASUREMENT MATERIAL

The quality of a study is assessed from research results. Therefore, data collection must meet the goodness of data criteria. To test the goodness of data, it is necessary to test the validity and reliability of the data that has been obtained (Indrawati, 2015:145). Firstly, test validity as a measurement in the quantitative study that showing questionnaire quality is approaching the target (Heale dan Twycross, 2015; Indrawati, 2015:147). Secondly, reliability tests indicating the degree of trust, reliability, consistency of measurement result, and showing that measurement is freed from error (Indrawati, 2015:155). The research questionnaire items were applied from the research of Beig and Nika (2019) by title "Impact of Brand Experience on Brand Equity of Online Shopping Portals: A Study of Select E-Commerce Sites in the State of Jammu and Kashmir". There are 12 items of brand experience and 16 items of brand equity used to measure both variables and it is proven can be measured in the Jammu and Kashmir state. Table 1 shows the 28 items from brand experience and brand equity that will be proposed model.

Table 1: Questionnaire Items

Item code	Items of Sensory Experience
SEN1	E-commerce Lazada makes a strong impression on my visual sense
SEN2	I find e-commerce Lazada interesting in a sensory way
SEN3	E-commerce Lazada does not appeal to my visual sense
Item code	Items of Affective Experience
AFF1	E-commerce Lazada induces feelings and sentiments
AFF2	I do not have strong emotions for e-commerce Lazada
AFF3	E-commerce Lazada is an emotional brand
Item code	Items of Intellectual Experience
INT1	I engage in a lot of thinking when I encounter e-commerce Lazada

INT2	E-commerce Lazada does not make me think
INT3	E-commerce Lazada stimulates my curiosity and problem solving
Item code	Items of Behavioural Experience
BEH1	I engage in physical actions and behaviours when I use services of e-commerce Lazada
BEH2	E-commerce Lazada result in bodily experiences
BEH3	E-commerce Lazada is not action oriented
Item code	Items of Brand Awareness
BAW1	Some characteristics of e-commerce Lazada comes to my mind quickly
BAW2	I can quickly recognize Lazada among other e-commerce brands
BAW3	I am familiar with e-commerce Lazada
Item code	Items of Brand Association
BAS1	In comparison to other e-commerce brands, Lazada has a very unique image
BAS2	I respect and admire people who shop from e-commerce Lazada.
BAS3	I like the brand image of e-commerce Lazada
BAS4	E-commerce Lazada is a customer friendly company
Item code	Items of Perceived Quality
PQ1	I trust the quality of the products provided by e-commerce Lazada
PQ2	Product provided by e-commerce Lazada are good quality
PQ3	E-commerce Lazada provides excellent services
PQ4	Services offered by e-commerce Lazada are reliable
Item code	Items of Brand Loyalty
BL1	I consider myself to be loyal to e-commerce Lazada
BL2	E-commerce Lazada would be my first choice when shopping online
BL3	I will keep buying from e-commerce Lazada as long as it provides me good products and excellent services
BL4	I am still willing to buy from e-commerce Lazada even if the price of products provided by it is a little higher than of other e-commerce brands
BL5	I would love to recommend e-commerce Lazada to my friends

3. METHOD AND RESULT

This study is designed to analyze research indicators from brand experience and brand equity by the items of questionnaires. Pilot study was used to ascertain the validity and reliability constructs. Preliminary analysis using a pilot test is worthwhile for testing the questionnaires to find out that collected data can be answered by respondents, which there are no problems in processing the data research (Saunders et al., 2016).

Pilot test was tested on 30 respondents. The collected data was processed by IBM SPSS 24. The validity tested using pearson product moment correlation by comparing the pearson correlation value and R Table value with significance level 5%. If the correlation > 0.361, it indicates that item questionnaires are valid. It corresponds to Sugiyono (2018:198) that factor analysis is carried out by correlating the total factor score with the table score, if the correlation is positive and the amount is more than 0.3 then the factor is a strong construct. Furthermore, the reliability tested using Cronbach's Alpha. According to Hair et al. (2010); Kaplan and Saccuzzo (1993: 126); Nunnally and Bernstein (1994); Pedhazur and Pedhazur (1991) in Indrawati (2015: 155) Cronbach's Alpha coefficient with a minimum value of 0.70 indicates that the item questionnaires have a fairly good level of reliability. The pilot test result showed in table 2.

Table 2: Pilot Test Result

Item Code	Pearson Correlation	Cronbach's Alpha
SEN1	0.668	0.936
SEN2	0.614	0.937
SEN3	0.452	0.939
AFF1	0.406	0.940
AFF2	0.422	0.940
AFF3	0.528	0.938

INT1	0.396	0.940
INT2	0.425	0.940
INT3	0.675	0.936
BEH1	0.400	0.940
BEH2	0.462	0.939
BEH3	0.362	0.940
BAW1	0.706	0.936
BAW2	0.687	0.936
BAW3	0.653	0.937
BAS1	0.773	0.935
BAS2	0.573	0.937
BAS3	0.764	0.935
BAS4	0.769	0.936
PQ1	0.747	0.936
PQ2	0.775	0.935
PQ3	0.797	0.935
PQ4	0.755	0.935
BL1	0.884	0.934
BL2	0.773	0.935
BL3	0.655	0.936
BL4	0.565	0.938
BL5	0.784	0.935

The pilot test result indicates that all 28 questionnaire items in two variables of the measurement model proposed are valid and reliable.

4. CONCLUSION

The conclusion is the pilot test has been done to 30 respondents of Lazada users and has shown the measurement materials of two variables with 28 items proposed are valid and reliable. Therefore, the measurement materials that will be proposed can be used for further research.

REFERENCES

- Arora, S., & Neha. (2016). Determinants of customer-based brand equity: A study of public and private banks. *Global Business Review*, 17(4), 905–920.
- Bapat, D. (2020). Examining the antecedents and consequences of brand experience dimensions: implications for branding strategy. *Journal of Asia Business Studies*, 14(4), 505–524.
- Beig, F. A., & Nika, F. A. (2019). Impact of Brand Experience on Brand Equity of Online Shopping Portals: A Study of Select E-Commerce Sites in the State of Jammu and Kashmir. *Global Business Review*, July.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? *Journal of Marketing*, 73(3), 52–68.
- Brochado, A., & Oliveira, F. (2018). Brand equity in the Portuguese vinho verde “green wine” market. *International Journal of Wine Business Research*, 30(1), 2–18.
- Chiguvi, D., Guruwo, P. T., & Tadu, R. (2020). Brand Equity Influence on the Adoption of Professional Learning Courses: A Case of BA ISAGO University. *Dutch Journal of Finance and Management*, 4(2).
- Harris, P., Kluppel-Strobel, C., & Shakhiry, R. (2018). *An Exploration of Brand Experience Development and Management*. 209–216.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18(3), 66–67.

- Inayati, Laili Sofia., & Wahyuni, Dewi Urip. (2017). Pengaruh Kesadaran Merek, Persepsi Kualitas, Asosiasi Merek, Dan Periklanan Terhadap Keputusan Pembelian. *Jurnal Ilmu dan Riset Manajemen*, 6(4).
- Indrawati. (2015). *Metode Penelitian Manajemen dan Bisnis Konvergensi Teknologi Komunikasi dan Informasi*. Bandung: Refika Aditama.
- Iprice Insight. (2020). The Map of E-commerce in Indonesia [online]. Tersedia: <https://iprice.co.id/insights/mapofecommerce/en/> [20 Oktober 2020].
- Lazada. (2020). Lazada [online]. Tersedia: <https://www.lazada.co.id/?spm=a2o4j.12156668.header.dhome.208411d1XbDSxC> [20 Oktober 2020].
- Nurfitriani, N., Wibowo, L. A., & Widjajanta, B. (2018). Gambaran Brand Experience Dan Customer-Based Brand Equity Pada Situs Wedding Marketplace Bridestory Di Indonesia Indonesia. *Journal of Business Management Education (JBME)*, 3(3), 155–163.
- Pranadata, I. G. P., Rahayu, M., & Hussein, A. S. (2017). Analisis Pengaruh Brand Experience terhadap Brand Perceived Value, Brand Satisfaction, dan Brand Loyalty (Studi Kasus Pada Industri One Stop Carcare Service di Kota Malang). *Jurnal Bisnis Dan Manajemen*, 4(2), 217–227.
- Rahmady, A., Purwanti, A., Studi, P., Komunikasi, I., Batam, U. P., Program, D., Ilmu, S., & Batam, U. P. (2020). *Brand Equity Pt Samsung Electronic Indonesia Di Kota*. 01(12), 195–203.
- Saunders, M., Philip, L., Adrian, T., (2016). *Research Methods for Business Students 7th ed*. London: Pearson Education.
- Shahid, Z., Hussain, T., & Zafar, F. (2017). The Impact of Brand Awareness on the Consumers' Purchase Intention. *Journal of Accounting & Marketing*, 06(01), 34–38.
- Sharma, R. (2017). Building Customer-based Brand Equity of Domestic Brands: Role of Brand Equity Dimensions. *Metamorphosis: A Journal of Management Research*, 16(1), 45–59.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.
- Tafesse, W. (2016). Conceptualization of Brand Experience in an Event Marketing Context. *Journal of Promotion Management*, 22(1), 34–48.
- We Are Social. (2020). Digital 2020: Indonesia [online]. Tersedia: <https://datareportal.com/reports/digital-2020-indonesia> [20 Oktober 2020].

THE EFFECT OF MARKET ORIENTATION ON MARKET PERFORMANCE INTERVENED BY PRODUCT INNOVATION AND MODERATED BY EDUCATION LEVEL

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Abstract

This study aims to test a research model about the effect of market orientation on marketing performance mediated by the product innovation construct and moderated by the level of education. The market orientation construct consisting of competition orientation, customer service orientation and internal coordination is hypothesized to have an effect on product innovation and market orientation. Hypothesis in each relationship were tested with empirical data collected from 200 respondents who manage food stalls around the campus who were asked to rate with seven ordinal scales on each statement of the 20 statement items.

Without a moderating variable, apart from internal coordination, market orientation variables have a positive and significant effect on product innovation. On marketing performance, the direct effect of competition orientation was insignificant, while customer service orientation and internal coordination had a significant level of <0.05 .

The level of education has been shown to have a significant role in strengthening the influence of market orientation variables on product innovation and marketing performance, except for the effect of internal coordination on product innovation. The level of experience also strengthens the influence of the variables in the market orientation dimension on product innovation and marketing performance significantly except for the relationship between customer service orientation and internal coordination on product innovation, likewise the effect of customer orientation on marketing performance, the level of experience does not play a role in strengthening the effect.

The level of education and experience has implications for improving SME marketing performance and for improving research models.

1. INTRODUCTION

Studies on marketing performance will always attract business and the academia because it is the goal of all business processes of companies being operated. Marketing performance gives information about performance is eagerly awaited by all company stakeholders to make sure it's financially benefited accepted as well as an evaluation for marketing improvement in the future, in order to maintain the survival of the company, including small and medium-sized companies like those that are often found around campus. Researchers agree on the need for companies that are oriented towards competition, customer service, and internal coordination. The facts show that not all companies that are oriented towards these three things have succeeded in increasing their marketing performance. Likewise, from the literature review indicate that not all factors having a significant impact on marketing performance. However, the ability to innovate is very likely to have a role in intervening the influence of these three factors on marketing performance. It is assumed that the experience and education of the owners and managers of SMEs will influence these causalities. This study aimed to investigate the role of innovation in mediating influence these three factors to the performance of the marketing and the role of education and experience of managing in moderating any causal relationships in the model. The causal relationship between the variables that make up the structural equation model (SEM) tested empirically through a survey of 200 respondents. The sample taken is using convenient-purposive of the managers SMEs opened a business nearby Telkom University campus.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Previous studies have reported that competitor orientation, customer orientation, and coordination between internal functions are dimensions of market orientation. This integrated market presentation is an antecedent

for customer value creation (Chuang, 2018; Nasution et al., 2011b). In other service industries such as hotels, these three dimensions have a positive and significant effect on innovation (Nasution et al., 2011a), both product innovation, administrative innovation, and process innovation (Han et al., 1998; Nasution et al., 2011b). Small Medium Enterprise (SMEs) especially the street food stall entrepreneurs are a very simple form of business that needs product innovations practically comparing with innovation in the bigger business sector. The innovativeness of the company will increase the company's performance (Han et al., 1998; Widodo, T., 2015), for example in the form of increased marketing performance.

2.1 COMPETITION ORIENTATION TOWARDS PRODUCT INNOVATION.

Market-based view of the firm theorized that the profit above the average sustained an enterprise can be achieved when a company can use the environment externally to develop the company's strategy. Company oriented on a competition should understand the strengths and weaknesses of competitor as a consideration for managers in making decisions. The existence of competitors motivates employers do differentiation through the product innovation in accordance with market needs (Jorge Francisco Lengler, 2013). Innovation programs can also direct to increasing company efficiency, improving quality, and speeding up the product delivery process time. For companies operating in a dynamic competitive situation then product innovation can encourage the success of the long-term performance (Hans Lofsen, 2014).

Companies oriented on competition will be encouraged to create an organizational environment that facilitates innovation (Aiqi Wu et al., 2014). A competition-oriented company will always search for information about its competitors and formulate it into the company's knowledge of competitors. Information on competitors is a source for creating product innovation accordance with the wishes and needs of customers who can generate an increase in marketing performance. The presumption of a positive influence of competitive orientation on product innovation needs to be tested empirically and put forward in the following hypothesis statement:

H1: Competitor Orientation has a positive effect on Product Innovation.

2.2 CUSTOMER ORIENTATION TOWARDS PRODUCT INNOVATION

The intention of the company to innovate products is to create excellence through a value proposition for customers (Gruber Mueckedan and Hofer, 2015 in Bereket Mama Pangsit, 2017). Customer orientation is the company's progress in understanding its target customers to create and provide the best value for its customers. The company's actions that generate customer value will lead the company to generate long-term profitability (Jorge Francisco Lengler et al., 2013). Customer-oriented companies are generally able to achieve a higher level of performance than those that are not; Such companies generally understand customer needs, offer and innovate the right products and services for their customers (Deshpande' et al., 2014).

Product innovation is also a major source of future revenue for the company. Product innovation needs to be done not only to improve obsolete product life cycles but also to maintain a competitive advantage; the higher the level of competition, the higher the need to innovate in an effort to maintain marketing performance. Managers are expected to be able to manage the complexity of product innovation and ensure the role of product innovation in improving marketing performance. The essence of the analysis above shows that there is a positive relationship between customer orientation and product innovation. Companies that have a strong customer orientation will be more likely to innovate products to meet dynamic customer needs, customer satisfaction, build customer relationships, and customer retention.

H2: Customer orientation has a positive effect on Product Innovation.

2.3 INTER-FUNCTIONAL COORDINATION TOWARDS PRODUCT INNOVATION

Coordination between functions within the company will facilitate the running of business processes and the distribution of company resources to existing business units. Companies need to be proactive in exploring customer information to improve marketing performance. Customer information must be distributed immediately to related units so that each of them can contribute to product innovation to follow up on customer expectations (Amani et al., 2017). Many studies have reported on the importance of product innovation in improving the marketing performance of MSM Es (Hermert et al., 2013). Inter-function coordination affects Product Innovation which will improve quality products. The ability to produce quality products in turn can increase product innovation hastily (Raquel Machado et al., 2017).

H3: Inter-functional coordination has a positive effect on product innovation.

2.4 COMPETITOR ORIENTATION TOWARDS MARKETING PERFORMANCE

The company's success, which is reflected in the marketing performance achievements, is the implementation

of the strategy (Johanna Frosen., 2013). Companies that are oriented towards competition are accustomed to making strategic formulations before developing strategic initiatives and actions to secure company goals. The results of the analysis of strategic environmental conditions are used as input for developing plans and executing the company's strategic actions to maintain the company's competitive position.

A competition-oriented company always pays attention to the strategies and activities of its competitors. Information obtained from monitoring is used as a source to maintain customer satisfaction and loyalty by creating products that are expected to prevent customers from moving to competing products. Information about competitors' actions becomes material for marketing decision makers, for example in determining the time frame for new product launches, how to manage relationships with customers, improvements in handling customer complaints, how to manage the distribution and supply chain sides (Johanna Frosen., 2013).

H4: Competitor orientation has a positive relationship with marketing performance.

2.5 CUSTOMER ORIENTATION TOWARDS MARKETING PERFORMANCE.

Like food stalls scattered in various places in Indonesia, food stalls operating around the campus have more or less the same characteristics, namely that the manager who is concurrently the owner and employees interacts directly with visitors who come to eat their meals. Managers get direct information from their customers, both information conveyed in the form of feedback verbally and from direct observation of the manager and employees of each customer. Managers can immediately respond to visitor complaints by adjusting their products and services according to customer desires. Customer information can also be used as planning for future product and service development. Previous researchers have reported that the effect of customer orientation has a positive effect on company performance, unfortunately no one has examined this relationship in the SME sector (Colwell et al., 2009; Koshy, 2012; Li Sa et al., 2019).

Companies that are customer-oriented in relation to marketing performance need to be investigated further to see the differences between SMEs engaged in food stalls and other business fields. It is estimated that SMEs in the food sector have a much higher customer orientation because between customers and managers and their employees have a short value chain. The relationship between the manager and his employees to the customer is very close so that any complaints can be immediately handled, and a disappointed attitude can be immediately observed. Changes in products and services in response to dissatisfaction and complaints can be felt directly by customers. If the manager and its employees are able to respond well, it is believed that they will be able to retain existing customers and through the word-of-mouth process will attract new customers to come (Li et al., 2013).

H5: Customer Orientation has a positive effect on Marketing Performance.

2.6 INTER FUNCTIONAL COORDINATION TOWARDS MARKETING PERFORMANCE.

Inter-function coordination is the dissemination of information between internal functions of the company so that all individuals in the department have the same perspective on the market and customers and in organizing the company's strategic resources to increase value for customers. Inter functional Coordination encourages cross-departmental business processes effectively and increases resource utilization efficiently through resource sharing (Kahn, 2010 in Tun-Chih Kou, Bruce CY Lee., 2015). This effective and efficient internal coordination allows the company to be responsive to market changes and customer preferences so that it has a direct impact on marketing performance. Thus, the internal organizational routines that are interrelated with the process of product development, pricing, channel management, marketing communications, marketing planning, and marketing implementation are also effective and efficient (Mahmoud Abdulai Mahmoud., 2016).

Marketing performance is a concept for measuring the marketing achievement of a company. Every company has an interest in knowing its achievements as a reflection of the success of its business in market competition. The role of marketing is important for business organizations, it can be shown by performance that reflects the achievement of the company's profit level in a period. However, marketing activities have consequences for the allocation of several costs that should be responsible for increasing the level of company profits (Francesca Magno., 2017).

H6: Inter functional Coordination has a positive relationship to Marketing Performance.

2.7 PRODUCT INNOVATION TOWARDS MARKETING PERFORMANCE.

Product innovation is a change related to efforts to increase the use of existing resources, modify resources to create value and novelty, turn a material into a resource and combine each resource into a new, more productive configuration in an effort to achieve excellence in marketing performance (Juho-Petteri Huhtala, 2014). Innovation has been conceptualized in various ways (Damanpour and Gopalakrishnan., 2014), it is considered as a process, a result, or both, and different types of innovation. Product innovation refers to the development and introduction

of new, better products and or services.

Innovation driven by demands to stay ahead in a competitive market environment and demands to meet customer expectations will in turn result in product innovations that are valuable and different from competitors' products and services. The ability to produce valuable product innovations and create differentiation is believed to be a company capability that leads to increased competitive advantage which ultimately increases the company's marketing performance. This understanding inspires policymakers to make product innovation in order to improve marketing performance (Anabel Fernandez et al., 2013). The relationship between product innovation and marketing performance is hypothesized through the following statements:

H7: Product Innovation has a positive effect on Marketing Performance.

Practitioners and academics have not always succeeded in proving that there is a positive and significant influence of the variables in the market orientation variable group on product innovation and on marketing performance. This phenomenon is very likely to occur because there are variables outside the system that are very likely to influence the effectiveness of this influence. Practitioners and academics both believe that the level of education plays a role in moderating the effectiveness of the effect of a cause-and-effect relationship between variables. The education level of the management combined with years of daily experience produces competency at a certain level. With the level of experience that is evenly distributed among the sellers, the level of one's education will determine the level of competence. In various research fields, it seems that it is agreed that a person's competence will strengthen the causal effect of one variable on other variables, including the influence of a variable that leads to work performance (Kanibir et al., 2014; Pitafi et al., 2018; Swanson et al., 2020).

The education and experience level variables are expected to strengthen the influence of the variables in the market orientation group (competition orientation, customer orientation, and coordination between functions) both on product innovation and on marketing performance, and product innovation on marketing performance.

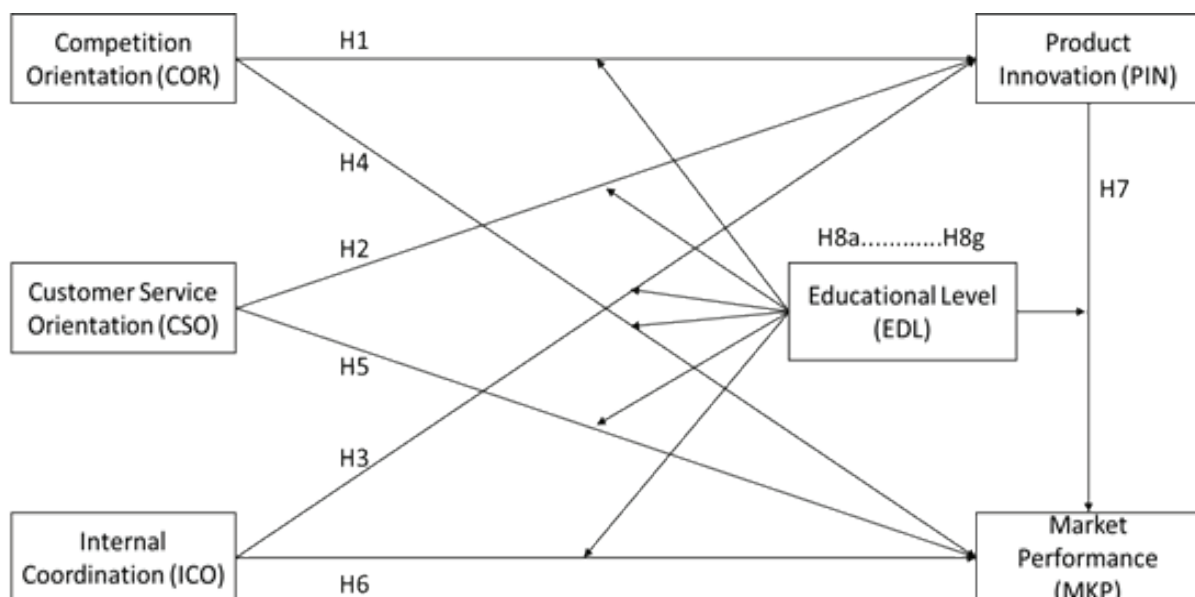


Figure 2: Research model and hypothesis

The construction of market orientation includes three dimensions, namely competition orientation, customer service orientation and coordination between functions within the organization. Product innovation is hypothesized to mediate the effect of these three dimensions on marketing performance. So, in addition to having a direct effect on product innovation, the three dimensions of market orientation are also hypothesized to have an indirect effect on marketing performance. The level of education of SME managers is hypothesized to play a role in increasing the influence of these three dimensions on product innovation and marketing performance. The level of education is also hypothesized to increase the effect of product innovation on marketing performance.

3. METHODOLOGY AND DATA ANALYSIS.

This quantitative research takes the object of small and medium entrepreneurs (SMEs) engaged in the street culinary business on the streets around the Telkom University campus. Guided directly by survey officers, 200 business owners were asked to fill out a questionnaire containing five items of respondent profile questions and

26 main question items (Lengler, JF, 2013; Chun, CY, 2013; Fernandez, A., 2013; Frosen, J. et al., 2013). There are six question items issued because they have a loading factor smaller than 0.5.

Respondents were asked to provide their perceptions by giving a value on the five Likert scale of each statement item. All statements represent indicators of the five variables developed in the research model. Information on education level is taken from the profile of respondents and used as a control variable to moderate the effect of three exogenous variables on both endogenous variables and between product innovation indogenous variables on indogeneous variables of marketing performance.

The indicator of a variable is not merely the final result of a series of work processes of a variable (lagging indicators) but can also be a series of processes or efforts that have the consequence of generating sales (leading indicator). All variables in this study use leading indicators. Marketing performance, for example, is not indicated by the number of sales or the satisfaction and loyalty index (lagging indicators) but rather from a series of efforts made by a company in order to acquire new customers or retain existing customers.

The WrapPLS_6 application is used to process excel survey data and to perform various model tests. The loading factor of each indicator in a variable is used to test the validity and reliability of the measurement model; the estimated adequacy level (p-value) of each regression coefficient of the causal variable pair was used to test the hypothesis; The determined value (R-squared) is used to measure the ability of the independent variable, the mediating variable and the moderating variable to explain the dependent variable in all structural equation models. The hypothesis about the role of the Level of Education (LED) and Level of Experience (LEX) variables in moderating the influence of the Product Innovation (PIN) variable on Market Performance (MKP) was tested simultaneously using the same application.

Table 1: Questionnaire Items

Latent Variables / Authors	Indicators	Questionnaire Items
Competition Orientation (COR) / (Jorge Francisco Lengler et al., 2013).	COR1	The number of street vendors selling around us affects our business
	COR2	We respond to new traders by offering the same but more diverse products
	COR3	The leadership discusses competition between similar traders
	COR4	We coordinate with the company's internal functions to serve the needs of target market
Customer Service Orientation (CSO) / (Jorge Francisco Lengler et al., 2013)	CSO1	We always take measurements regarding the level of customer satisfaction.
	CSO2	Our leaders meet with customers regularly.
	CSO3	Our competitive advantage depends on understanding customer needs.
Internal Coordination (ICO) / (Chen Yen-Chun et al., 2013)	ICO1	We include an integrated marketing function in the product development process.
	ICO2	We expand our target market for opportunities for excellence.
	ICO3	Cooperation and coordination of managers in integrating and using market information
Product Innovation (PIN) / (Anabel Fernandez et al., 2013)	PIN1	We innovate old products to produce new products that are more varied and of higher quality.
	PIN2	We use technology to generate innovation
	PIN3	We get people who have ideas and the ability to innovate products from packaging to appearance and product types.
	PIN4	We change the traditional way by utilizing modern technology to create product innovation
	PIN5	I came up with new design ideas, not imitations.
Marketing Performance (MKP) / (Johanna Frosen et al., 2013).	MKP1	We determine the time frame for the launch of a new product.
	MKP2	I pay attention to satisfaction and success in managing customer relationships.
	MKP3	We have been successful in dealing with customer complaints.
	MKP4	We are successful in managing the distribution side and supply chain of the raw material need.
	MKP5	Participating in direct sales through a bazaar or event can increase our sales volume.

3.1 VALIDITY AND RELIABILITY TESTS

The combined loadings and cross-loadings values generated by the software are used to calculate Average Variance Extracted (AVE) and Construct Reliability (CR). AVE and CR calculations yield the same values that are generated by the software. A set of indicators is declared valid indicating a variable if the AVE value > 0.5 and is declared reliable when the CR > 0.6 (Hair, 2010).

Table 2: Validity and Reliability Tests

Variables	Observed Variables	Combine X-Loading Factors	Cronbach Alfa	Construct Reliability	Average Variance Extracted
Competition Orientation (COR)	COR1	0,555	0,786	0,862	0,61
	COR2	0,528			
	COR3	0,55			
	COR4	0,535			
Customer Service Orientation (CSO)	CSO1	0,367	0,674	0,824	0,662
	CSO2	0,6222			
	CSO3	0,615			
Internal Coordination (ICO)	ICO1	562	0,743	0,854	0,663
	ICO2	0,515			
	ICO3	0,615			
Product Innovation (PIN)	PIN1	0,591	0,865	0,903	0,652
	PIN2	0,581			
	PIN3	0,489			
	PIN4	0,576			
	PIN5	0,562			
Marketing Performance (MKP)	MKP1	0,571	0,833	0,833	0,605
	MKP2	0,576			
	MKP3	0,543			
	MKP4	0,416			
	MKP5	0,577			

Table-2 above shows all the results of measuring the validity and reliability of all latent variables, which consist of loading factor values, Cronbach alpha, construct reliability and average variance extracted from each latent variable. Based on the above criteria, all indicators that will be used to observe each latent variable are declared valid and reliable. Cronbach alpha (α) is widely utilized to determine internal consistency reliability; this statistical tool tests the extent to which multiple indicators for a latent variable really belong together (D. Gefen and D.W. Straub, 2000). The software also provides a Cronbach alpha (α) value for each variable. A set of observed variables is declared reliable to measure a latent variable if the value of $\alpha > 0.6$.

3.2 GOODNESS OF FIT TESTS.

The literature review has resulted in allegations of a causal relationship between variables which is then formulated into a research hypothesis. A set of hypotheses that are related to one another forms a structural equation model that is presented in the form of a research model. Despite the alleged existence of a causal relationship has been supported by previous research, but this study includes variables of education as a moderating variable inter-relationship that need to be tested for their suitability. Besides, the collected sample data did not reflect the relationship is even might be opposite. The suitability of the relationship model is tested with a set of goodness of fit test tools. WarpPLS_6 provides 10 test parameters (Knock, 2019), the criteria and the results of such tests are shown in Table 2 below.

Table-3: Model Fit Tests

No	Parameters	Criteria	Result	Quality
1	Average path coefficient (APC)=0.149	significant if $p \leq 0.05$	$p=0.008$	significant
2	Average R-squared (ARS)=0.320	significant if $p \leq 0.05$	$p < 0.001$	significant
3	Average adjusted R-squared (AARS)=0.296	significant if $p \leq 0.05$	$p < 0.001$	significant
4	Average block VIF (AVIF)	ideal if $AVIF \leq 3.3$ accepted if $AARS \leq 5$	1.317	Ideal
5	Average full collinearity VIF (AFVIF)	ideal if $AFVIF \leq 3.3$	1.444	Ideal

		accepted if AFVIF ≤ 5		
6	Tenenhaus GoF (GoF)	Large if GoF ≥ 0.36 Medium if GoF ≥ 0.25	0.46	Large
		Small if GoF ≥ 0.1		
7	Sympson's paradox ratio (SPR)	ideal if SPR=1		
		accepted if SPR ≥ 0.7		
8	R-squared contribution ratio (RSCR)	ideal if RSCR=1	0.929	accepted
		accepted if RSCR ≥ 0.9		
9	Statistical suppression ratio (SSR)	accepted if SSR ≥ 0.7	0.994	accepted
		accepted if SSR ≥ 0.7		
10	Nonlinear bivariate causality direction ratio (NLBCDR)	accepted if NLBCDR ≥ 0.7	0.786	accepted
		accepted if NLBCDR ≥ 0.7		

The test results show that all the parameters in this study meet the specified criteria so that they are accepted so that overall, it can be concluded that the model fits the sample data. The effect of moderating variables was tested in three stages; the first stage examines the effect of all variables in the model without moderating variables, the second stage examines the role of the education level (as a moderating variable) in moderating the causal relationship between exogenous variables (COR, CSO and ICO) on endogenous variables (PIN and MKP) and testing the role of the mediating variable in increasing the effect of PIN on MKP. The results of the three stages of testing are summarized in the following table:

3.3 RESULT OF HYPOTHESIS TESTS

Three hypothetical groups were tested simultaneously with the WarpPLS software, namely testing the effect of seven relationships without moderation, with moderation level of education and level of experience.

The seven relationships of influence actually originate from the relationship between market orientation and marketing performance, which is moderated by the variable product performance. The hypothesis is accepted if the maximum significance level is 0.05 which is marked with**.

The significance of the role of the level of education as moderation means that education acts as a reinforcement of the effect of the moderated relationship, likewise the significance of the role of experience in managing food stalls partly strengthens the influence of existing relationships.

Tabel-4 di bawah mempresentasikan semua hasil hipotesis dari ketiga kelompok pengujian tersebut.

Tabel-4: Hypothesis Tests

Hypothesis Causalities		No Moderation		Moderated by EDL		Moderated by EXL	
		Reg. Coef.	Conclusion	Reg. Coef.	Conclusion	Reg. Coef.	Conclusion
H1	COR----> PIN	0,36***	accepted	0,35***	accepted	0,37***	accepted
H2	CSO----> PIN	0,14**	accepted	0,15**	accepted	0,11*	not accepted
H3	ICO ----> PIN	0,11*	not accepted	0,11*	not accepted	0,08	not accepted
H4	COR----> MKP	0,10*	not accepted	0,13**	accepted	0,10*	not accepted
H5	CSO----> MKP	0,15**	accepted	0,15**	accepted	0,16**	accepted
H6	ICO ----> MKP	0,55***	accepted	0,50***	accepted	0,51***	accepted
H7	PIN----> MKP	0,14**	accepted	0,11**	accepted	0,12**	accepted

Mean of stars: *** means hypothesis is accepted at $p < 0,01$; ** means hypothesis is accepted at $p = 0,05$; * and without star means hypothesis is not accepted

Without a moderating variable, apart from internal coordination, market orientation variables have a positive and significant effect on product innovation. On marketing performance, the direct effect of competition orientation was insignificant, while customer service orientation and internal coordination had a significant level of < 0.05 .

The level of education has been shown to have a significant role in strengthening the influence of market orientation variables on product innovation and marketing performance, except for the effect of internal coordination on product innovation. The level of experience also strengthens the influence of the variables in the market orientation dimension on product innovation and marketing performance significantly except for the relationship between customer service orientation and internal coordination on product innovation, likewise the effect of customer orientation on marketing performance, the level of experience does not play a role in strengthening the effect.

The level of education and experience has implications for improving SME marketing performance and for improving research models.

REFERENCES

- Jin K Han, Namwoon Kim, Rajendra K Srivastava.(1998). *Journal of Marketing*. Oct 1998; 62, 4. Research Library Core pg. 30. Retrieved from Emerald.
- Liem Viet Ngo and Aron O’Cass. (2012). *In Search of Innovation and Customer-related Performance Superiority: The Role of Market Orientation, Marketing Capability, and Innovation Capability Interactions*. J PROD INNOV MANAG 2012;29(5): 861–877. Retrieved from Emerald.
- Hamid Tohidi, Mohammad Mehdi Jabbari. (2012). *Product Innovation Performance in Organization*. Department of Industrial Engineering, South Tehran Branch, Islamic Azad University, Tehran, Iran. Retrieved from Emerald.
- Annemien Pullen, Petra C. de Weerd-Nederhof, Aard J. Groen and Olaf A.M. Fisscher. (2012). *SME Network Characteristics vs. Product Innovativeness: How to Achieve High Innovation Performance*. Creativity and innovation management. Volume 21 No 2. Retrieved from Emerald.
- Anahita Baregheh, Jennifer Rowley, Sally Sambrook, Dafydd Davies, (2012). *Food sector SMEs and innovation types*. British Food Journal, Vol. 114 Issue: 11, pp.1640-1653. Retrieved from Emerald.
- Kamalesh Kumar, Giacomo Boesso, Francesco Favotto, Andrea Menini. (2012). *Strategic orientation, innovation patterns and performances of SMEs and large companies*. Journal of Small Business and Enterprise Development, Vol. 19 Issue: 1, pp.132-145. Retrieved from Emerald.
- Anabel Fernández-Mesa, Joaquín Alegre-Vidal, Ricardo Chiva-Gómez, Antonio Gutiérrez-Gracia, (2013). *Design management capability and product innovation in SMEs*. Management Decision, Vol. 51 Issue: 3, pp.547-565. Retrieved from Emerald.
- Sheng-Yen Chang, Hsi-Peng Lu, Chiung-Ju Liang, (2013). *A Teaching Case Study: Innovation, Product Development, and Organizational Transformation at the Sunnic Group*. International Journal of Innovation Science, Vol. 5 Issue: 1, pp.45-68, Retrieved from Emerald.
- Chen Yen-Chun, Li Po-Chien, Lin Ya-Hui, (2013). *How inter- and intra-organisational coordination affect product development performance: the role of slack resources*. Journal of Business & Industrial Marketing. Vol. 28 Issue: 2, pp.125-136. Retrieved from Emerald.
- Johanna Frösén, Henrikki Tikkanen, Matti Jaakkola, Antti Vassinen, (2013). *Marketing performance assessment systems and the business context*. European Journal of Marketing, Vol. 47 Issue: 5/6, pp.715-737. Retrieved from Emerald.
- Deborah Goldring, (2015). *Reputation orientation Improving marketing performance through corporate reputation building*. Marketing Intelligence & Planning, Vol. 33 Issue: 5, pp.784-803. Retrieved from Emerald.
- Jorge Francisco Lengler, Carlos M.P. Sousa, Catarina Marques, (2013) *“Exploring the linear and quadratic effects of customer and competitor orientation on export performance”*, International Marketing Review, Vol. 30 Issue: 5, pp.440-468, Retrieved from Emerald.
- Dilani Jayawarna, Oswald Jones, Wing Lam, Sabrina Phua, (2014) *“The performance of entrepreneurial ventures: Examining the role of marketing practices”*, Journal of Small Business and Enterprise Development, Vol. 21 Issue: 4, pp.565-587, Retrieved from Emerald.
- Hans Lofsten, (2014) *“Product innovation processes and the trade-off between product innovation performance and business performance”*, European Journal of Innovation Management, Vol. 17 Issue: 1, pp.61-84. Retrieved from Emerald.
- Debadutta Kumar Panda, (2014) *“Managerial networks and strategic orientation in SMEs: Experience from a transition economy”*, Journal of Strategy and Management, Vol. 7 Issue: 4, pp.376-397. Retrieved from Emerald.

- Juho-Petteri Huhtala, Antti Sihvonen, Johanna Frösén, Matti Jaakkola, Henriikki Tikkanen, (2014) "*Market orientation, innovation capability and business performance: Insights from the global financial crisis*", *Baltic Journal of Management*, Vol. 9 Issue: 2, pp.134-152. Retrieved from Emerald.
- Hannu Saarijärvi, Hannu Kuusela, Kari Neilimo, Elina Närvänen, (2014) "*Disentangling customer orientation – executive perspective*", *Business Process Management Journal*, Vol. 20 Issue: 5, pp.663-677. Retrieved from Emerald.
- Shubhabrata Basu, (2014) "*Product market strategies and innovation types: finding the fit!*", *Strategic Direction*, Vol. 30 Issue: 3, pp.28-31. Retrieved from Emerald.
- Aiqi Wu, Shengxiao Li, Huafeng Wang, (2014) "*New ventures, product innovation and business intermediaries: Empirical analyses of 145 new Chinese ventures*", *Chinese Management Studies*, Vol. 8 Issue: 2, pp.241-257. Retrieved from Emerald.
- Tun-Chih Kou, Bruce C. Y. Lee, (2015) "*The influence of supply chain architecture on new product launch and performance in the high-tech industry*", *Journal of Business & Industrial Marketing*, Vol. 30 Issue: 5, pp.677-687. Retrieved from Emerald.
- Tina Gruber-Muecke, Katharina Maria Hofer, (2015) "*Market orientation, entrepreneurial orientation and performance in emerging markets*", *International Journal of Emerging Markets*, Vol. 10 Issue: 3, pp.560-571, Retrieved from Emerald.
- Ying Liao, Jane Barnes, (2015) "*Knowledge acquisition and product innovation flexibility in SMEs*", *Business Process Management Journal*, Vol. 21 Issue: 6, pp.1257-1278. Retrieved from Emerald.
- Mokter Hossain, Ilkka Kauranen, (2016) "*Open innovation in SMEs: a systematic literature review*", *Journal of Strategy and Management*, Vol. 9 Issue: 1, pp.58-73. Retrieved from Emerald.
- Hardeep Chahal, R.C. Dangwal, Swati Raina, (2016) "*Marketing orientation, strategic orientation and their synergistic impact on business performance: A case of SMEs in emerging context (India)*", *Journal of Research in Marketing and Entrepreneurship*, Vol. 18 Issue: 1, pp.27-52. Retrieved from Emerald.
- Mahmoud Abdulai Mahmoud, Charles Blankson, Nana Owusu-Frimpong, Sonny Nwankwo, Tran P. Trang, (2016) "*Market orientation, learning orientation and business performance: The mediating role of innovation*", *International Journal of Bank Marketing*, Vol. 34 Issue: 5, pp.623-64. Retrieved from Emerald.
- Sanja Pekovic, Sylvie Rolland, Hubert Gatignon, (2016) "*Customer orientation and organizational innovation: the case of environmental management practices*", *Journal of Business & Industrial Marketing*, Vol. 31 Issue: 7, pp.835-848. Retrieved from Emerald.
- Anne L. Souchon, Paul Hughes, Andrew M. Farrell, Ekaterina Nemkova, João S. Oliveira, (2016) "*Spontaneity and international marketing performance*", *International Marketing Review*, Vol. 33 Issue: 5, pp.671-690. Retrieved from Emerald.
- Alexander Newman, Daniel Prajogo, Andrew Atherton, (2016) "*The influence of market orientation on innovation strategies*", *Journal of Service Theory and Practice*, Vol. 26 Issue: 1, pp.72-90. Retrieved from Emerald.
- Ying-Pin Yeh, (2016) "*Market orientation and service innovation on customer perceived value: The case of supermarket retailers*", *Management Research Review*, Vol. 39 Issue: 4, pp.449-467. Retrieved from Emerald.
- Agneta Sundström, Zahra Ahmadi, Akmal S. Hyder, (2016) "*Market and innovation orientation typology: proposition and illustrations*", *Marketing Intelligence & Planning*, Vol. 34 Issue: 3, pp.376-393. Retrieved from Emerald.
- Bereket Mama Pangsit, (2017) "*Entrepreneurial orientation, market orientation and performance of SMEs in the manufacturing industry: Evidence from Ethiopian enterprises*", *Management Research Review*, Vol. 40 Issue: 3, pp.292-309, Retrieved from Emerald.
- Raquel Machado Engelman, Edi Madalena Fracasso, Serje Schmidt, Aurora Carneiro Zen, (2017) "*Intellectual capital, absorptive capacity and product innovation*", *Management Decision*, Vol. 55 Issue: 3, pp.474-490. Retrieved from Emerald.

- Reza Salehzadeh, Javad Khazaei Pool, Reihaneh Alsadat Tabaeian, Mojtaba Amani, Marjan Mortazavi, (2017) *"The impact of internal marketing and market orientation on performance: an empirical study in restaurant industry"*, Measuring Business Excellence, Vol. 21 Issue: 4, pp.273-290. Retrieved from Emerald.
- Markus Chiahian Tsai, Chunhsien Wang, (2017) *"Linking service innovation to firm performance: The roles of ambidextrous innovation and market orientation capability"*, Chinese Management Studies, Vol. 11 Issue: 4, pp.730-750. Retrieved from Emerald.
- Minna Saunila, (2017) *"Understanding innovation performance measurement in SMEs"*, Measuring Business Excellence, Vol. 21 Issue: 1, pp.1-16. Retrieved from Emerald.
- Francesca Magno, Fabio Cassia, Attilio Bruni, (2017) *"Adoption and impact of marketing performance assessment systems among travel agencies"*, International Journal of Contemporary Hospitality Management, Vol. 29 Issue: 4, pp.1133-1147. Retrieved from Emerald.
- Akin Kocak, Alan Carsrud, Sonyel Oflazoglu, (2017) *"Market, entrepreneurial, and technology orientations: impact on innovation and firm performance"*, Management Decision, Vol. 55 Issue: 2, pp.248-270. Retrieved from Emerald.
- Jeen-Su Lim, William K. Darley, David Marion, (2017) *"Market orientation, innovation commercialization capability and firm performance relationships: the moderating role of supply chain influence"*, Journal of Business & Industrial Marketing, Vol. 32 Issue: 7, pp.913-924. Retrieved from Emerald.
- Shampy Kamboj, Zillur Rahman, (2017) *"Market orientation, marketing capabilities and sustainable innovation: The mediating role of sustainable consumption and competitive advantage"*, Management Research Review, Vol. 40 Issue: 6, pp.698-724. Retrieved from Emerald.
- Mitch Beaumont, Ben Thuriaux-Alemán, Prashanth Prasad, Chandler Hatton, (2017) *"Using Agile approaches for breakthrough product innovation"*, Strategy & Leadership, Vol. 45 Issue: 6, pp.19-25. Retrieved from Emerald.
- Narentheren Kaliappen, Haim Hilman, (2017) *"Competitive strategies, market orientation types and innovation strategies: finding the strategic fit"*, World Journal of Entrepreneurship, Management and Sustainable Development, Vol. 13 Issue: 3, pp.257-261. Retrieved from Emerald.
- Shasha Zhao, Constantinos-Vasilios Priporas, (2017) *"Information technology and marketing performance within international market-entry alliances: A review and an integrated conceptual framework"*, International Marketing Review, Vol. 34 Issue: 1, pp.5-28. Retrieved from Emerald.
- Jurnal Kuesioner
- Liao, Jane Barnes, (2015) *"Knowledge acquisition and product innovation flexibility in SMEs"*, Business Process Management Journal, Vol. 21 Issue: 6, pp.1257-1278. Retrieved from Emerald.
- Anabel Fernández-Mesa, Joaquín Alegre-Vidal, Ricardo Chiva-Gómez, Antonio Gutiérrez-Gracia, (2013) *"Design management capability and product innovation in SMEs"*, Management Decision, Vol. 51 Issue: 3, pp.547-565. Retrieved from Emerald.
- Jorge Francisco Lengler, Carlos M.P. Sousa, Catarina Marques, (2013) *"Exploring the linear and quadratic effects of customer and competitor orientation on export performance"*, International Marketing Review, Vol. 30 Issue: 5, pp.440-468. Retrieved from Emerald.
- Chen Yen-Chun, Li Po-Chien, Lin Ya-Hui, (2013) *"How inter- and intra-organisational coordination affect product development performance: the role of slack resources"*, Journal of Business & Industrial Marketing, Vol. 28 Issue: 2, pp.125-136. Retrieved from Emerald.
- Tun-Chih Kou, Bruce C. Y. Lee, (2015) *"The influence of supply chain architecture on new product launch and performance in the high-tech industry"*, Journal of Business & Industrial Marketing, Vol. 30 Issue: 5, pp.677-687. Retrieved from Emerald.
- Latan, H. (2012). *Structural Equation Modeling: Konsep dan Aplikasi Menggunakan Program LISREL 8.80*. Bandung: Alfabeta
- Aditama Sekaran, Uma. (2014). *Research Methods for Business* (Metodologi Penelitian Untuk Bisnis-Buku 1. Jakarta: Salemba Empat.
- Sun, J., & Yuan, B.-Z. (2012). *Development and Characteristic of Digital Library as*

a Library Branch. *IERI Procedia*, 2, 12–17.

Suh, B., Han, I. (2002). Effect of trust on customer acceptance of Internet banking. <https://doi.org/10.1016/j.ieri.2012.06.044>

IMPACT OF BRAND POSITIONING AND BRAND KNOWLEDGE ON PURCHASE INTENTION USING THE PLS-SEM APPROACH

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Abstract

Purpose - This study aims to empirically explore brand positioning's effectiveness on purchase intention with brand knowledge from consumers' perspective at The Executive Bandung.

Design/methodology/approach - The method used in this research is a quantitative method with the type of research is descriptive verification, measurement scale used is Likert scale. The data analysis method used in this study is Structural Equation Modeling (SEM).

Findings - This study's results indicate that the type of positioning strategy used can affect brand positioning's success in influencing purchase intention. More specifically, this study confirms the normative argument about the effectiveness of brand knowledge relative to the overall primary positioning strategy by revealing that general positioning can outperform the process of determining product features and advantages based on consumer perceptions of differentiation, brand advantages, and credibility, regarding brand-specific influence, particularly in product and socio-demographic categories.

Originality - This study highlights the impact of the brand positioning strategy's effectiveness, which is influenced directly or indirectly by brand knowledge on purchase intention with consumers of The Executive in the city of Bandung.

Research limitations/implications - This study is limited to brand positioning as one of the strategies for determining the position and product category being evaluated, in addition to finding out how much impact and influence brand knowledge has on consumers in recognizing a known brand.

Contributions - This paper's results are expected to show empirically that measuring the effectiveness of positioning should be more than just capturing the measure consumer attitudes and behavior toward a brand.

Keywords: Brand positioning, brand knowledge, purchase intention

1. INTRODUCTION

The fashion industry continues to experience growth as the Badan Pusat Statistik (BPS) data in 2016 creative economy sector accounted for 18.15% of the entire national economy for the fashion sector. Even now, there is a constant movement to use local products, which allows us to quickly find various kinds of local products with well-known quality and brands, such as fashion with foreign terms. The Executive is a local brand that uses unfamiliar words like a brand that can compete with foreign brands amid the prevalence of today's consumer environment. The brand is something fundamental in the fashion industry.

The Executive is a fashion brand known to foreign countries by having a brand positioning (brand positioning) and informed knowledge of the brand (brand knowledge) in its products in the community to build consumer interest in buying the product. Besides, brand positioning has been suggested as an essential factor in its strategy with different product and service offerings (Wang, 2017). As integrated product and service offerings are becoming more common, it is not sufficient for companies to position themselves as "solutions providers" or as "total solutions providers." Companies that want to integrate the service with the products they need to manage around their customers' capabilities and objectives and determine how they will help customers achieve these objectives (Alimen & Cerit, 2010; Wang, 2017).

Brand positioning is an effort to build and offer a corporate image in determining the different places in the target market's minds. The result of positioning is a value proposition that focuses on customer dynamics that are compelling reasons why the target market should buy the product (Kotler & Keller, 2016). In general, a brand that has a good position should attract customers' unique needs for excellence/value proposition (Kotler & Armstrong, 2012). Excellence/value needs are met with more precision (Fuchs & Diamantopoulos, 2010). Positioning is expected to lead to consumer preferences and leads to high consumer loyalty, low consumer equity, and the willingness to search for brands (e.g., Kotler & Keller, 2016; Wang, 2017). Thus, choosing the most effective strategy is a significant challenge for marketers because it is the center of consumer perception and choice (Kotler & Keller, 2016). If positioning is done effectively, then brand positioning can potentially build a strong brand; however, it can lead to disaster (Kotler & Keller, 2016; Wang, 2017).

Limited attention is related to empirical studies. The use of a brand positioning strategy that produces a brand is superior to implementing other strategies (e.g., user-based positioning) (Kotler & Armstrong, 2012; Morgan et al., 2003). This study aims to close that gap and compare brand positioning from a consumer perspective based on knowledge of empirical-based insights to make the right positioning decisions. The effectiveness of positioning as a multidimensional construct that captures consumer evaluation of brand positioning in terms of credible and profitable differentiation about competing brands allows an assessment of the extent to which these brands have credibility, distinction, and value in consumers' minds.

2. LITERATURE REVIEW

2.1 BRAND POSITIONING

Brand positioning is a brand strategy that affects consumer perceptions of a brand initiative and provides the primary basis for brand differentiation from its competitors (Wang, 2017). Kotler and Armstrong (2012) stated that brand positioning is a communication strategy to enter the consumer's window so that the product has a particular meaning and brand positioning is a way to place itself in the eyes of its target consumers in terms of advantages and disadvantages into the dimensions of brand positioning, including Attributes, Benefits, Beliefs, and values.

In some of the literature explaining the previous brand positioning, several researchers have explored the existence of issues. For example, Fuchs and Diamantopoulos (2010) classify brand positioning strategies as functional effectiveness and consumers' perspectives. Through an experimental design, it was revealed that several factors support a brand positioning strategy having the most significant results in producing a positive and successful brand attitude that is related to alternative technology or company philosophy, which is determining a brand position plays an important role in maintaining the brand stays on track towards its goals. In addition, an empirical study by Alimen and Cerit, (2010) explains further about the relationship between brand knowledge and brand knowledge through surveys, especially when using brand knowledge as the dependent variable. Recently, Wang (2016) has explored corporate website content and branding's structural relationship through content analysis and network analysis approaches.

On the other hand, brand positioning focuses on the process of creating and changing consumer perceptions of a product or company brand that can occupy a place in the market segment (Fuchs & Diamantopoulos, 2010). A strategic position determines the necessary direction of a development and brand positioning based on a company (Hooley et al., 2007). Conceptually, brand positioning is similar to constructing a brand image, which is defined as "the brand concept adopted by consumers is largely a subjective phenomenon and perceptions are formed through consumer interpretation of a product or service, both rationally and emotionally" (Dobni and Zinkhan), 1990, p. 117). The main difference regarding brand position and image is that brand positioning uses an explicit frame of reference, which is usually in a competition between a company's brands (Aaker and Shansby, 1982; For a detailed explanation of the difference between this concept and other related concepts such as brand identity or reputation. Brand (Balmer) and Greyser, 2006; Brown et al., 2006; Dowling, 2001; Ellson, 2004).

2.2 BRAND KNOWLEDGE

Brands help differentiate a product or service from others (Kotler and Keller, 2016) and embody every company's efforts and represent it as a hologram, which plays a role in forming relationships, and expresses and contributes to group affiliations (Alimen & Cerit, 2010). The brand is a sign of a company's deals, and signs of quality, risk indicators for consumer confidence (Kotler and Armstrong, 2012). The total value of a point represents its equity (Kaplan, 2007). Brand equity is "a collection of brand assets and liabilities associated with brands, names and symbols that increase or decrease the value provided by a product or service to the company and / or company customers" (Aaker, 1991). There are two aspects of brand equity; the first is the company's financial value for accounting purposes. The second is consumers' perception of customer orientation towards the brand (Kotler and Armstrong, 2012).

According to Kotler and Keller, (2016), brand knowledge is defined as the presence of information about a brand in consumers' memories and associations related to the brand. The information recorded in the consumer's memory can be verbal, visual, abstract, or contextual information. It was also shown that the brand's knowledge in continuous communication with consumers who have a real understanding of the product or service (Richards et al., 1998). Therefore brand knowledge can understand tacit and explicit knowledge. Explicit theoretical knowledge can be seen through various media forms, such as documents, audiovisual equipment, computerized recordings, etc. Meanwhile, implicit knowledge is mostly subjective, practical, and personal (Sharif, 2004).

Furthermore, Kotler and Keller (2016) stated that brand knowledge dimensions include brand awareness, which is understood as consumer awareness of the existence of a brand in consumers' minds and the ease of being traced (to remember) the brand when dealing with a product. The brand image leads to successful perceptions of consumers about a brand. The perception of a brand can be positive or negative for a brand.

2.3 PURCHASE INTENTION

Purchase intention is significant in consumer attitudes, determining other tools such as demographics or economic factors where it is a consumer's preference to buy a product or service. (Ferrell and McIntosh 1992). The theory of Planned Behavior (TPB) was put forward by (Ajzen 1991), which is an extension of his own work in 1975, which was described in the previous concept, namely Theory of Reasoned Action (TRA). In TRA, it is proposed that behavior that comes out of individual intentions and from subjective attitudes and norms is both a function of belief (i.e., social influence). In other words, that a purchase intention has another aspect in which consumers will buy a product after evaluation. Many factors influence consumer intention when choosing a product, and the final decision depends on consumer intention with large external factors.

There are many other purchase intention indicators, perceived value, which implies a relationship with the product and consumers (Arshad, 2014). The literature says that the higher a value perceived by consumers, the higher the intention to buy, either directly influencing consumer intentions and indirectly also formed by consumer attitudes, purchase intentions, and behavior (Pomsanam, 2014). Purchase Intention can be seen from consumer attitudes and not by other factors (Arshad, 2014), as discussed in TPB, which shows inner self and past behavior (Ajzen 1991) is one of the best ways to understand human behavior and psyche. This model describes human behavior, but the decisions taken at the same time are about attitudes and norms that influence making a purchase intention. Therefore, the higher the perception of increasing value on purchasing decisions. However, based on product knowledge, consumers value products and make decisions.

2.4 THEORETICAL FRAMEWORK

This study focuses on brand positioning and brand knowledge that affects The Executive's fashion products' consumer purchase intentions. Brand positioning and brand knowledge create awareness and develop preferences among consumers that influence purchase intention (Figure 1).

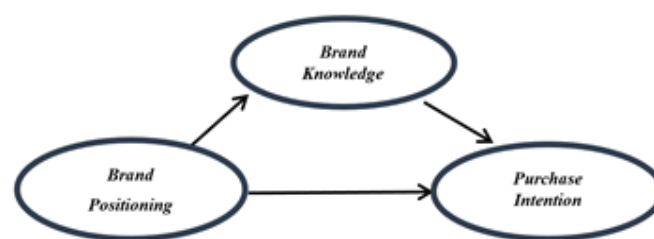


Figure 1. Framework

Research hypothesis:

Based on the previous framework, the hypothesis in this study is formulated as follows:

1. Brand Positioning affects Brand Knowledge.
2. Brand Knowledge affects Purchase Intention.
3. Brand Positioning affects Purchase Intention.
4. Brand Positioning affects Purchase Intention with Brand Knowledge as an intervening.

3. RESEARCH METHODOLOGY

The data has been collected through a structured questionnaire designed based on the objectives of this paper.

The number, type, relevance, wording, and measurement scale of the questions are weighted accordingly. The unit of analysis in this study is the consumer level. This study uses a questionnaire survey to verify the hypothesis and research framework from June 2019 to February 2020. The research object in this study focuses on consumers of The Executive in the city of Bandung, who have experience and intention to buy The Executive products. Questionnaires are distributed offline and randomly to consumers who have the purchase experience and the will to buy the executive product. The sample used in this study amounted to 100 respondents, using a level of accuracy α of 5%, 95% confidence level to obtain $Z = 1.96$. The error rate is set at 10%.

This study refers to previous research by designing questionnaire items. Before sending it to respondents, researchers conducted and modified the questionnaire on the pretest. Furthermore, the questionnaire is sent randomly to consumers who have experience purchasing the product and the intention to buy the exclusive product with the information obtained. The researcher confirmed each randomly selected consumer who had purchase experience and purchase intention to increase the valid survey response rate, explained the questionnaire's research objectives and contents, and confirmed the respondents' names and addresses. The measurement item questionnaire in this study is to use the vote "a five-point Likert scale of 1 to 5" from strongly disagree to be very agreed. This study asks each respondent to present specific information and executive products.

4. RESULTS

Convergent validity is proven to the instrument's score's validity, measuring the concept, or measuring the concept with different methods has a high correlation. The correlation between the indicator score and the variable score is a measurement of the measurement model's convergent validity. Indicators considered valid if the value of AVE (Average Variance Extracted) above 0.5 so that it can be said that the measurement meets the criteria of convergent validity (Hair et al., 2014).

Discriminant Validity can be seen through the measurement cross-loading factor with AVE comparison and correlation between variables in a study. Discriminant Validity can represent the extent to which the construct empirically differs from other constructs (Hair et al., 2014). In Partial Least Square (PLS), a reliability test can use two methods: Composite Reliability and Cronbach's Alpha.

Table 1. Reliability Test

Variable	Composite Reliability	Critical Value	Cronbach Alpha	Critical Value	Model Evaluation
Brand Positioning	0,883	>0,7	0,852	>0,6	Reliable
Brand Knowledge	0,918		0,881		Reliable
Purchase Intention	0,889		0,845		Reliable

Tests are carried out based on the path value to see the significant effect that can be displayed from the t value. The amount of t can be obtained by bootstrapping. The following is an image of the bootstrapping results in this study.

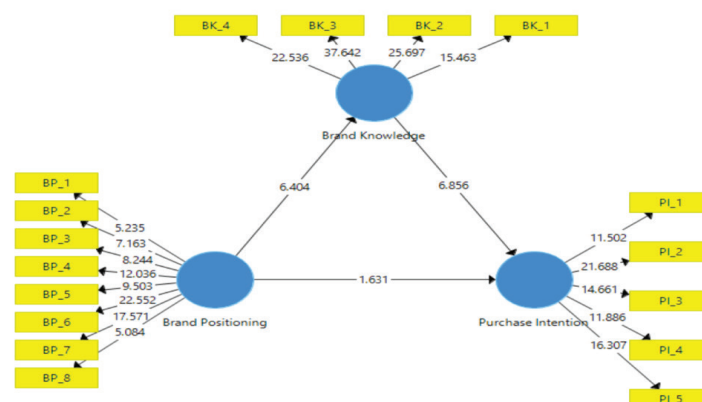


Figure 2. Display Bootstrapping Output

The R-Square value for the brand knowledge variable is 0.291, and the purchase intention variable is 0.425. R-square value for the variable of brand knowledge means there is the influence of brand knowledge brand positioning by 29.1%, and other variables outside of this study influence the remaining 0.709. Kotler and Keller

(2016) state that the dimension of brand knowledge includes: brand awareness and brand image. Based on this, the indicators used in this study can only explain 29.1% as a brand knowledge factor, while other factors explain 0.709 outside of this study.

The variable purchase intention generated an R-Square value of 0.425. This means that the brand positioning variable on purchase intention is 42.5%, and other variables outside of this study influence the remaining 0.575. According to Chen & Chang (2012), purchase intention indicators include transactional interest, referential interest, preferential interest, and explorative interest. Based on this, the indicators used in this study can only explain 0.425 as a purchase intention factor, while other factors explain 42.5% outside of this study.

In conducting hypothesis testing, it is necessary to compare the t-statistic value (t_o) with the t-table value (t_α) with the following conditions to accept the hypothesis:

Table 2. T-table value (t_α) Criteria

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistic (O/STDEV)	P Values	Information
Brand Positioning -> Brand Knowledge	0,540	0,560	0,083	6,473	0,000	Significant
Brand Knowledge -> Purchase Intention	0,546	0,534	0,079	6,908	0,000	Significant
Brand Positioning -> Purchase Intention	0,167	0,174	0,104	1,602	0,110	Not Significant
Brand Positioning -> Brand knowledge -> Purchase Intention	0,295	0,299	0,063	4,656	0,000	Significant

5. DISCUSSION

Based on the results of SEM analysis that has been carried out in this study, it can be seen from the effects of hypothesis testing in terms of brand positioning, which were analyzed using the PLS method, that the brand positioning variable affects the consumer brand knowledge variable on The Executive product brand. The four structural variables do not have a significant effect on the brand knowledge variable, with a t_o value of 6.473 > a t_α value of 1.649 based on the results of Smart PLS processing with the Bootstrapping procedure.

The results show that consumers, The Executive in making purchasing decisions have related information products to buy based on knowledge and brand. Furthermore, in making purchasing decisions, consumers place a brand based on product quality and brands based on product categories. This is consistent with Huang and Yang (2014) research with the object of research club members' lifestyle and sustainability (LOHAS) Taiwan.

Based on the SEM analysis results that have been carried out in this study using the PLS method, the brand knowledge variable affects the consumer's purchase intention variable for The Executive product brand. According to the results of processing Smart PLS with a bootstrapping procedure, four structural variables no significant influence on purchase intention with a t_o value to the value of 6.908 > t_α value of 1.649. Based on the results obtained indicate that consumers have a high buying interest after learning-related information product brands The Executive. Furthermore, consumers in their desire to buy The Executive product brand are based on their lifestyle needs. Based on these results, the company needs to pay attention to how the company builds a brand positioning in consumers' minds using strategies, for example, by using an integrated marketing strategy that focuses on consumers. Consumers require more information about the brand and the product, which the company can provide education and educate and campaign on consumers of products of The Executive.

Brand positioning variables affect the variable purchase intention through brand knowledge as an intervening variable in the Executive Bandung. According to the results of processing Smart PLS with bootstrapping procedure, the four structural variables that influence complimentary messages and significant impact on purchase intention variable with a value amounting to 4,565 > t_α value of 1.649. Based on the results obtained show that consumers make purchasing decisions based on their knowledge of the brand The Executive. After learning the product brand The Executive, there is interest in purchasing the products Executive. Moreover, consumers who know the position of a product brand The Executive against their interest in buying the brand product Executive.

6. CONCLUSIONS

a) The brand positioning gets responses in good categories. This is because consumers judge that the product brand positioning The Executive is genuine Bandung local brands that are well known and competitive to foreign countries so that eventually arises a sense of confidence about the consumer information about the position of

the brand The Executive so as to convince the viewer. Based on eight research indicators describing the product brand positioning, The Executive stated that the brand product quality is important when consumers buy local products valued by consumers with 83%. Meanwhile, price is an important factor when consumers buy local products that are considered the lowest by consumers, with a percentage of 67%.

b) Brand knowledge gets responses in useful categories. This is due to the consumer's assessment of The Executive's product brands' knowledge, which informs fashion products that are already competitive and well-known to foreign countries.

c) Purchase intention received a response in either category. This can be seen from how much knowledge of The Executive's product brand is and how the position of The Executive's brand is so that it creates buying interest.

d) The result of this research, brand positioning, and significant positive effect on brand knowledge with a value amounting to 6.473 > α value of 1.649; then, the decision is H0 rejected, and H1 accepted. This is shown in figure bootstrapping output that shows the influence of the brand positioning of brand knowledge.

e) From these results, brand knowledge and significant positive effect on purchase intention with a value amounting to 6.908 > α value of 1.649; then, the decision is H0 rejected, and H1 accepted. This is shown in the figure showing the output bootstrapping effect of brand knowledge on purchase intention.

f) From the results of this research, brand positioning is not positive and significant effect on purchase intention with a value of 1.602 to <value α amounted to 1,649; then, the decision is accepted H0 and H1 rejected. This is shown in figure bootstrapping output that shows the influence of the purchase intention's brand positioning.

g) From the results of this research, brand positioning and significant positive effect on purchase intention through brand knowledge as an intervening variable with a value amounting to 4,565 > α value of 1.649; then the decision is H0 rejected, and H1 accepted. This is shown in the output image bootstrapping, which shows the influence of brand positioning and brand knowledge as an intervening variable on purchase intention.

REFERENCES

- Aaker, D.A. (1991), *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, Free Press, New York, NY.
- Alimen, N., & Cerit, A. G. (2010). Dimensions of brand knowledge: Turkish university students' consumption of international fashion brands. *Journal of Enterprise Information Management*, 23(4), 538–558. <https://doi.org/10.1108/17410391011061807>.
- Arshad, R. (2014). Perceived Service Quality and Customer Satisfaction with the Mediating Effect of Purchase Intention. *Academy of Contemporary Research Journal*, 8(21), 40–49. Retrieved from <http://aocrj.org/archive/>.
- Ajzen, I. (1991) "The theory of planned behaviour." *Organisational Behaviour and Human Decision Processes*, 179-211.
- Chen, Y., & Chang, C. (2012). Enhance green purchase intentions; The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>.
- Ferrell, Zey, and McIntosh. (1992), "Predicting intention to consume beef: normative versus attitudinal influences." *Sociologia Ruralis*, 250-265.
- Fuchs, C., & Diamantopoulos, A. (2010). Evaluating the effectiveness of brand-positioning strategies from a consumer perspective. *European Journal of Marketing*, 44(11), 1763–1786. <https://doi.org/10.1108/03090561011079873>.
- Hair, et al, 2014, *Multivariate Data Analysis*, New International Edition., New Jersey : Pearson.
- Hooley, G.J., Piercy, N.F. and Nicoulaud, B. (2007), *Marketing Strategy and Competitive Positioning*, 4th ed., Pearson Education, Harlow.
- Kaplan, M.D. (2007), "Product appearance and brand knowledge: an analysis of critical relationships", doctoral dissertation, Izmir University of Economics, Izmir.

Tjiptono, Fandy.,dkk. (2017). Pemasaran Strategik Mengupas Pemasaran Strategik, Branding Strategy, Customer Satisfaction, Strategi Kompetitif, hingga e-Marketing. Yogyakarta: Andi.

Usmara, A. (2017). Marketing Classic. Yogyakarta: Amara Books

Widodo, T. (2015). The effect of transformative IT capability on sustainable competitive advantage. In *Information and Communication Technology (ICoICT), 2015 3rd International Conference*

E-SATISFACTION & E-TRUST DRIVING FACTORS AND ITS IMPLICATIONS ON CUSTOMER LOYALTY: A RESEARCH ON THE GROCERIES APPLICATION

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Abstract

The emergence of a new pandemic, namely COVID-19, has changed several aspects of consumers' lives, including the way they shop. One of the adaptations that consumers have taken with this pandemic is how they can shop for daily necessities without leaving the house but through applications. This study tries to implement an electronic satisfaction, trust, and loyalty model to examine the role of expanded marketing mix aspects in the context of shopping through applications during a pandemic. In short, this research is empirical testing of several hypotheses based on data from 160 users of the Grab Groceries application in the Jakarta area and its surroundings which were collected online. Data analysis was carried out through the Structural Equation Modeling (SEM) approach. The results of this study indicate that consumer loyalty in the context of digital shopping applications can be built by satisfaction and trust. Furthermore, this research indicates that aspects of product, place, price, and experience are needed to build satisfaction and trust which is interesting to discuss from the perspective of managerial implications. Another interesting finding is that in this research context the role of promotion is not so visible compared to the results of previous studies in the context of the adoption of new things. This research tries to contribute aspects of novelty to marketing disciplines in terms of generalization of the satisfaction-trust-loyalty model in the specific context of shifting digital lifestyles in the midst of a pandemic.

Keywords: marketing mix, customer experience, e-satisfaction, e-trust, customer loyalty.

1. INTRODUCTION

Today, consumers, including in Indonesia, increasingly rely on the internet for their daily activities, such as searching for various information, shopping, fulfilling daily needs to business transaction activities. On average, everyone in Indonesia can shop online 3-5 times a month and spend up to 15% of the monthly income they receive and this trend will increase (Goyena & Fallis, 2019). This phenomenon is further escalated by the Covid-19 pandemic with the spread of the virus which is very fast and endangers human lives, where consumers then have to move more from home #StayAtHome to reduce and if possible break the chain of spread of the Covid-19 pandemic.

The existence of online grocery shopping has become more present to help meet the daily needs of consumers in order to stay at home amid the Covid-19 pandemic, which has become known as the slogan "Stay at Home, Your Groceries Will Be Delivered to Your Door" (Shofa, 2020). One of the online grocery shopping applications that are no longer new but are increasingly being recognized because of the increasing consumer need for these services is the Grab Groceries application. This application is a third-party online shopping application that functions to bring consumers together with the provision of daily necessities services. With this application, consumers can get quality products and delivery according to the desired destination without having to worry in all conditions (Groceries, 2020).

The conditions described earlier illustrate that from the consumer side there has been a shift in behavior as a result of environmental changes, especially with the existence of the Covid-19 pandemic, which in turn can be seen as an increase in demand for online grocery application services. What then becomes a question from the perspective of marketing disciplines is how marketers should respond through their marketing activities to seize the opportunity for this shift in the demand side to be transformed into consumer loyalty. One of a number of studies in this discussion seeks to explain how customer loyalty is formed in the context of online groceries by reviewing e-satisfaction, e-trust, product, price, place, promotion and experience (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010). Departing from the research framework, this

research on the one hand seeks to meet the demand for further research, especially from the generalization aspect, where in the previous research it was only tested on Japanese consumers in Japan which of course still need re-research on other countries or ethnicities to add aspects of generalization. model. On the other hand, this study also seeks to expand the context of the application of the online grocery model to the online grocery application with additional information on facts captured in pandemic conditions.

One online grocery application that is well known to the public in Indonesia is the Grab Groceries application. The Grab Grocery application is a 3rd (third) party online shopping application, which is an application that brings together consumers and providers of daily necessities (Arini, 2018). Through the Grab Groceries application, which was released since September 2018, users can choose from more than 30 large supermarkets that have collaborated with grab groceries applications such as Ranch market, Farmers Market, Lotte Mart, Trans Carrefour, Super Indo, Giant, Hero, AEON, Papaya, Grand Lucky, The Food Hall and many others with a selection range of more than 20 thousand SKUs (Stock Keeping Units) and will continue to grow in the future (Nabila, 2018). The fact that it has been operating for quite a long time with a diverse range of merchants and goods choices certainly makes the Grab Groceries Application an attractive alternative as an object of data collection in this study.

2. LITERATURE REVIEW

The development of information technology and the internet has brought about a number of changes in how consumers, markets and businesses operate and interact, one of which is the transformation of grocery shopping into online grocery shopping with usage intensity which tends to increase from time to time (Ilyuk, 2018). As a result of the transformation that is relatively young, online grocery shopping still faces many challenges such as how to maintain and increase online consumer loyalty, how to increase profitability and how to understand online product buyers to increase the level of online purchases for consumers who are often skeptical of online shopping, become a more capable, trusting and frequent buyer of online shopping (Forsythe et al., 2006). Previous research has suggested paying attention to aspects of product, price, place, promotion (Marketing mix) and experience which are believed to increase e-satisfaction and e-trust on the consumer side and ultimately have the potential to increase consumer loyalty (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010).

The marketing mix element has long played an important role in marketing strategy and is believed to have a positive impact on the achievement of marketing objectives including the formation of the company's equity value (Lee et al., 2014) "mendeley":{"formattedCitation": "(Lee et al., 2014. Along with changes in the marketing environment, especially with the existence of internet-based information technology, the role and positive impact of the marketing mix was also expanded in its application to the context of online marketing with a number of concept developments which were later referred to as the e-marketing mix (Kalyanam & McIntyre, 2002). In general, online grocery shopping is an applicative expansion of the marketing mix, especially in the distribution aspect which is considered to be able to create more convenience for consumers to buy the desired product compared to the traditional distribution system that has been running so far (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010).

Consumer satisfaction, including that which occurs online, can be viewed as an overall evaluation of the consumer's total purchasing experience and consumption with a product or service provided during a certain period of time (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010. Satisfied customers will continue to buy through the e-vendor and will share their positive experiences online, and dissatisfied buyers will stop their purchases and will not repeat their purchases with the same e-vendor. Trust can be defined as a party's belief that the other party will not be opportunistic in taking advantage of a condition, including in the online context (Ridings et al., 2002). When consumers feel confident in a service in its ability to meet consumer needs in the best way, this will become a separate barrier for competitors to enter, and customers tend to buy exclusively from the best service (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010).

3. RESEARCH FRAMEWORK

In this study, product aspects are based on product quality according to consumer perceptions. Consumers can build perceptions of the quality of a product based on a general evaluation of a number of product-related information such as features, functions, and usage experiences, either personally or others (Zeithaml, 1988) which defines and relates price, perceived quality, and perceived value. The exploratory investigation of quality and value is conducted in the beverage product category. Qualitative data that supplement past studies and serve as the basis for 14 propositions are generated through company interviews, a focus group interview, and 30 in-depth consumer interviews. Empirical evidence supporting and refuting the proposition is reviewed for each proposition. The model suggests a number of strategies that can be implemented to understand and capitalize

on brand quality and value: 1. closing the gap between objective and perceived quality, which requires the firm to view quality the way the consumer does, 2. identifying the key intrinsic and extrinsic cues consumers use to signal quality, 3. acknowledging the dynamic nature of quality perceptions, 4. understanding how consumers encode monetary and nonmonetary prices, and 5. recognizing multiple ways to add value. A quality product is what most consumers expect. As an impact, consumers in general will determine a certain standard of expectations related to the quality of the product or service which in turn will affect the assessment of whether or not the consumer is satisfied with a product or service (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010. The uniqueness, advantages or disadvantages of a product/service compared to similar products/services through differentiation efforts will have the potential to increase customer satisfaction (Parasuraman et al., 1988), considering the consumer's higher perception of the quality of the product / service compared to expectations which are built based on market standards. This argument will be analogous to the aspects of place, price, promotion, and experience. If consumers' perceptions of the performance or advantages of the aspects of place, price, promotion and experience of a product / service are higher than their expectations which are based on the standards of its competitors in the market, it will have an impact on consumer satisfaction with the product / service.

H1a: Product has a positive effect on e-satisfaction

H2a: Place has a positive effect on e-satisfaction

H3a: Promotion has a positive effect on e-satisfaction

H4 : Price has a positive effect on e-satisfaction

H5a: Experience has a positive effect on e-satisfaction

A unique or quality product / service can provide a positive experience to consumers. These positive experiences will gradually make consumers feel comfortable depending on the service which is believed to provide similar experiences in the future. The belief that a service will provide good and satisfying service in the future is what is known as trust (Sultan & Wong, 2012). Positive experiences of uniqueness, performance or service quality in the past will serve as standard norms in the minds of consumers where consumers have the confidence that service providers will still be able to provide such positive experiences in the future (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010. This condition will occur analogously in the aspects of place, promotion, and experience. This analogous condition does not apply to the price aspect considering that the credibility and trust aspects are usually associated with a premium price (Gregg & Walczak, 2010) intention to transact and price premiums. Prior research on online auctions has focused on the use of reputation systems for building trust in online auction vendors and subsequently to generate price premiums. This study examines the extent to which trust can be induced by improving the quality of online auction listings. A survey of 701 eBay users is conducted which compares the price premiums of two nearly identical online auction businesses, one that has online auction listings with a perceived high quality and the other that has substantially lower perceived quality. Results of this study indicate that website quality can explain 49% of the variation in the trust for eBay sellers. In fact, it shows that sellers with good website quality are all perceived to be equally trustworthy regardless of their eBay reputation; whereas sellers with poor website quality are not perceived to be trustworthy even if they have a high eBay reputation score. The results also show that the trust resulting from increased website quality increases intention to transact and results in price premiums of 12% (on average not cheap or competitive prices which are appointed as the price context in this study.

H1b: Product has a positive effect on e-trust

H2b: Place has a positive effect on e-trust

H3b: Promotion has a positive effect on e-trust

H5b: Experience has a positive effect on e-trust

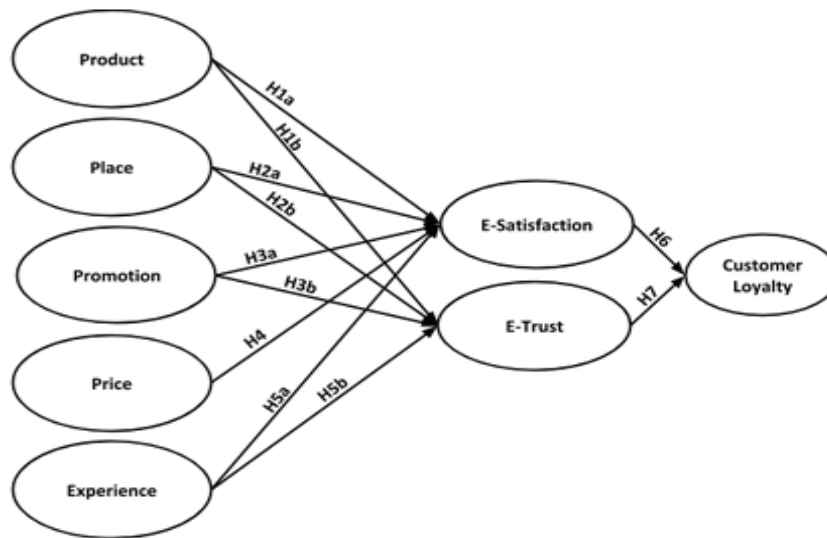


Figure 1. Research Model

Consumer loyalty to a brand can be viewed in terms of attitude, namely the urge to continue relationships with service providers or in terms of behavior shown through re-purchase of products/services or higher intensity of product / service use compared to other offerings in the same category (Yang & Peterson, 2004). The satisfaction construct has long been studied as a strong driver for the formation of consumer loyalty to a service either through direct or indirect relationships (Chen, 2012). Consumers who are satisfied with a product / service, including in the online context, tend to reuse the product / service even with higher intensity and also have a tendency to invite other people to use the product / service (Yang & Peterson, 2004). This condition can also be proven in the context of online groceries applications (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010).

H6: E-Satisfaction has a positive effect on customer loyalty

Consumers who trust in a product / service tend to try to establish long-term relationships with product or service providers because they value previous relationships or avoid potential risks that may occur if they have relationships with other parties who have never interacted (Morgan & Hunt, 1994). Long-term relationships with product / service providers that are considered valuable by consumers as a result of the existence of trust will encourage consumer commitment to continue making transactions with these product / service providers (Chaudhuri & Holbrook, 2001). Online groceries application customers who feel confident tend to be loyal to the application (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010).

H7: E-Trust has a positive effect on customer loyalty

4. METHODOLOGY

The study was conducted with an explanatory descriptive design through empirical testing of a number of primary data collected through cross-sectional online surveys. Data was collected from 160 respondents using the Grab Groceries application in Jakarta. Measurement items were adopted from a number of previous studies with a number of combinations and sentence adjustments adapted to the context of the study in Indonesian. Hypothesis testing is carried out through the Structural Equation Modeling (SEM) approach with the help of AMOS 22 software.

Table 1. Measurement Item

CODE	MEASUREMENT
PRD1	Grab groceries services are comparable to other online grocery applications
PRD2	Grab groceries offers a relatively complete product selection compared to other vendors
PRD3	Grab groceries offering good quality products (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg, 2010)

CODE	MEASUREMENT
PRD4	Grab groceries is a reliable shopping service (van Riel & Ouwersloot, 2005)
PLC1	Grab groceries is an easy choice for my shopping activities
PLC2	I feel that the time when I place an order at grab groceries to delivery is relatively short
PLC3	I think grab groceries have an accurate estimate of order delivery times
PLC4	Items that usually make it difficult for me to buy can be purchased easily through grab groceries services (Moriuchi & Takahashi, 2016)following those of the Europeans and Americans (Salsberg, 2010)
PRM1	I often see commercials for grab groceries
PRM2	The promotion program of grab groceries is interesting (Moriuchi & Takahashi, 2016)following those of the Europeans and Americans (Salsberg, 2010)
PRM3	I often get discount coupons from grab groceries
PRM4	I always get promotional information updates from grab groceries (Pappas et al., 2017)
PRC1	The product prices in grab groceries applications are cheaper than other online grocery applications
PRC2	I feel that I get a good price offer when buying through the grab groceries application
PRC3	The cost offered by grab groceries applications is cheaper than other grocery applications (Moriuchi & Takahashi, 2016)following those of the Europeans and Americans (Salsberg, 2010)
PRC4	The product prices on the grab groceries application are reasonable (Lien et al., 2015)
EXP1	For me, shopping through the grab groceries application is a fun thing
	For me, shopping through the grab groceries application is very exciting
EXP3	Shopping through the grab groceries app makes me feel better
EXP4	Shopping at the grab groceries application is an interesting thing (Pappas et al., 2017)
EST1	I am satisfied with my product choice in the grab groceries application
EST2	I feel satisfied getting the opportunity to shop at the grab groceries application.
EST3	I feel satisfied shopping on the grab groceries application.
EST4	I am satisfied with my shopping experience on the grab groceries application (Moriuchi & Takahashi, 2016)
ETR1	I feel like I can trust the grab groceries app
ETR2	I feel safe when transacting on grab groceries application
ETR3	I feel safe with the payment methods provided by the grab groceries application (Moriuchi & Takahashi, 2016)
ETR4	In general, I can trust the standard of service that the grab groceries app promises. (Mortimer et al., 2016)
LOY1	I am sure of my choice of shopping using the grab groceries application. (Moriuchi & Takahashi, 2016)0
LOY2	I will continue to use the grab groceries app.
LOY3	I would recommend to others to use the grab groceries app.
LOY4	I will use the grab groceries app for the future. (Tao et al., 2018)

5. RESULT

The estimation results of the measurement model as shown in Table 2 indicate that the measuring instruments used have a good level of validity and reliability. All measurement indicators used have a Standardized Loading Factor (SLF) value of ≥ 0.7 , while each construct has a value of Average Variance Extracted (AVE) ≥ 0.5 and a value of Construct Reliability (CR) ≥ 0.7 .

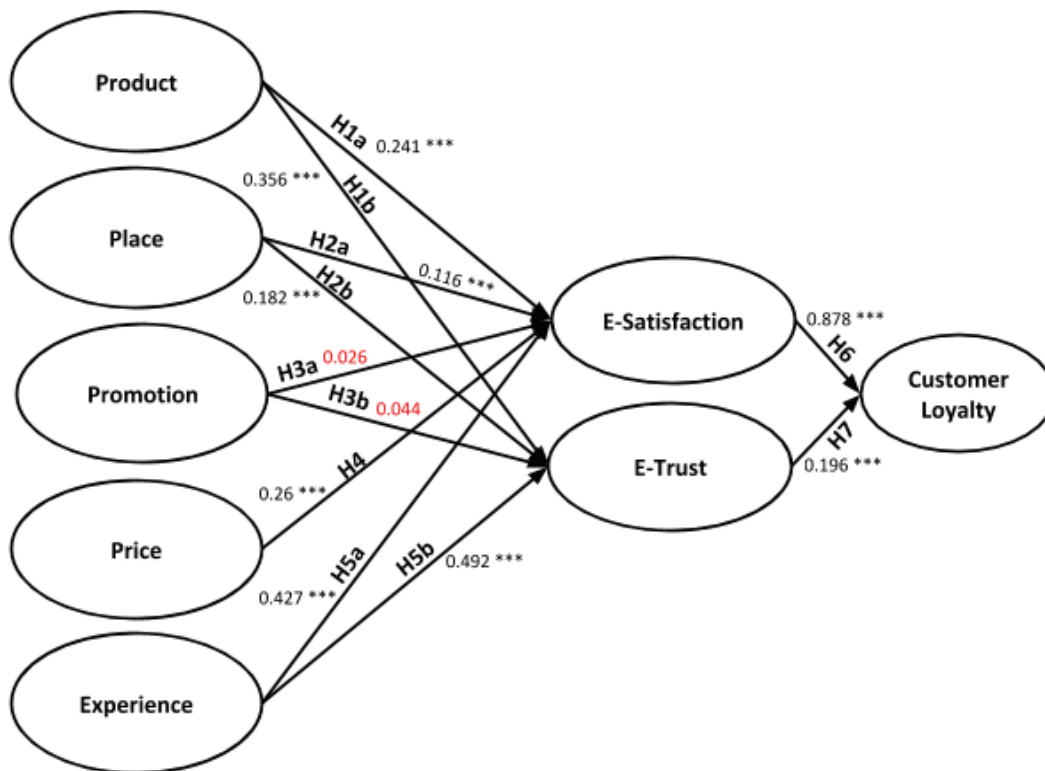
Table 2. Validity and Reliability Test Result

Variable	Indicator	Standardized Loading Factor (SLF) ≥ 0.5	Average Variance Extracted (AVE) ≥ 0.5	Construct Reliability (CR) ≥ 0.7
Product (PRD)	PRD1	0.716	0.633	0.873
	PRD2	0.812		
	PRD3	0.831		
	PRD4	0.819		
Place (PLC)	PLC1	0.775	0.633	0.887
	PLC2	0.82		
	PLC3	0.846		
	PLC4	0.815		
Promotion (PRM)	PRM1	0.805	0.741	0.919
	PRM2	0.847		
	PRM3	0.928		
	PRM4	0.858		
Price (PRC)	PRC1	0.821	0.715	0.909
	PRC2	0.894		
	PRC3	0.852		
	PRC4	0.813		
Experience (EXP)	EXP1	0.929	0.811	0.945
	EXP2	0.924		
	EXP3	0.86		
	EXP4	0.887		
E-Satisfaction (EST)	EST1	0.87	0.801	0.941
	EST2	0.913		
	EST3	0.915		
	EST4	0.88		
E-Trust (ETR)	ETR1	0.869	0.814	0.946
	ETR2	0.937		
	ETR3	0.904		
	ETR4	0.898		
Loyalty (LOY)	LOY1	0.893	0.719	0.911
	LOY2	0.825		
	LOY3	0.842		
	LOY4	0.829		

Tabel 3. Structural Model Assessment Result

Hipotesis	Nama Variabel			Estimate	P	Kesimpulan
H1a	PRD	--->	EST	0.241	***	Supported
H1b	PRD	--->	ETR	0.356	***	Supported
H2a	PLC	--->	EST	0.116	***	Supported
H2b	PLC	--->	ETR	0.182	***	Supported
H3a	PRM	--->	EST	0.026	0.192	Not Supported
H3b	PRM	--->	ETR	0.044	0.149	Not Supported
H4	PRC	--->	EST	0.260	***	Supported
H5a	EXP	--->	ETR	0.427	***	Supported
H5b	EXP	--->	EST	0.492	***	Supported
H6	EST	--->	LOY	0.878	***	Supported
H7	ETR	--->	LOY	0.196	0.004	Supported

Figure 2. Model with Research Result



Based on the results of the structural model estimation, it can be seen that the majority of the proposed hypotheses are supported by data (with a standard significance level of α of 0.05) except for the two hypotheses concerning the promotion construct which have not shown a significant effect on e-satisfaction and e-trust. The product aspect shows a significant positive effect both on E-Satisfaction (with p-value <0.001) and on E-Trust (with p-value <0.001). In line with the product, the place aspect also shows a positive influence on E-Satisfaction (with p-value <0.001) as well as for its effect on E-Trust (with p-value <0.001).

In this study, promotion is the only exogenous construct that has not been able to show a positive influence both on E-Satisfaction (with a p-value of 0.192) and on e-trust (with a p-value of 0.149). This may confirm the dualistic role of sales promotion which has a positive effect in the short term but can have a negative impact in the long run for satisfaction and trust (Moriuchi & Takahashi, 2016) following those of the Europeans and Americans (Salsberg,

2010. Sales promotion, including in the context of online groceries applications, actually has the opportunity to increase the level of customer satisfaction in the short term as the results of previous studies in the retail context (Ubeja, 2014). However, it seems that the sales promotions implemented at Grab Groceries have not been able to exceed consumer expectations compared to other services in the Grab application. Most likely grab groceries service users are also grab food users who are still in the same application. The grab food service has been serving grab application customers for a long time with a wide variety of promotions and a growing number of promos. The number and variety of promotions on grab food services that involve many merchants, of course, can then build a certain expectation about how many and varied promotions should be on similar application services. Meanwhile, the grab groceries service, which currently does not involve a large variety of merchants and does not offer promotions with a large number and variations, makes the performance assessment on the promotional aspect in the minds of customers is still relatively low with the reference standard of the grab food application. The condition of service performance perceptions that is not yet comparable with customer expectations is probably the reason why there is no consistent or significant effect between promotional aspects and e-satisfaction. On the other hand, the number of promotions that are still very limited and inconsistent is thought to be the explanation why consumers have not been able to depend on their trust in grab groceries services, especially in the promotion aspect.

Unlike the facts read on the promotion aspect, the price aspect indicates a positive influence on E-Satisfaction (with p-value <0.001). This condition is logical considering that the price comparison is the market price which is more or less equivalent to the price offered at the grab groceries service unlike promotion where the comparator in the minds of consumers is another service from the grab application that has been more established. The experience aspect in this study is also proven to indicate a positive effect on e-satisfaction (with p-value <0.001) and on e-trust (with p-value <0.001). At the end of the model, this study also succeeded in clarifying the positive influence between e-satisfaction on customer loyalty (with a p-value <0.001) as well as the positive effect between e-trust on customer loyalty (with a p-value of 0.004) in the context of online application services. groceries.

6. RESEARCH IMPLICATIONS

Academically, this research contributes additional aspects of generalization in the form of facts in different country and cultural contexts in previous research on the discussion of online groceries applications which are currently and in the future predicted to be increasingly used especially with the pandemic situation and the emergence of a number of new normal in everyday consumer life. -day. The special thing that is interesting from the results of this study is that there is a potential boundary condition, especially in the promotion aspect, which has not shown any evidence of a significant effect on e-satisfaction or e-trust. The boundary conditions in this case are in terms of the number, variety and intensity of promotions which, if the amount is small, cannot yet have a significant positive impact on e-satisfaction and e-trust. This boundary condition will be more prominent if it is accompanied by a comparison service in the same application such as grab groceries and grab food in this study.

Practically this research can provide several additional insights for marketing strategy decision making, especially in the context of online groceries applications. The first insight, in line with the context of the discussion of marketing in general, this study indicates an important role for satisfaction and then in shaping customer loyalty. Furthermore, based on the comparison of the regression coefficient, satisfaction has a more dominant role than trust in encouraging customer loyalty. This of course does not necessarily indicate that the role of trust is small, but that the aspect of trust is a basic aspect or necessary condition that all competing players generally strive to offer, especially in the context of digital services. With the existence of a trust standard that each player seeks to build on digital application services, ultimately the level of customer satisfaction will be more visible to determine the level of customer loyalty to a digital application service including online groceries application services as examined in this study.

The second insight, product, place, price, and experience aspects have an important role in increasing the level of customer satisfaction. With the highest order of importance, experience is dominated, followed by price, product, then place. Starting from these insights, it is important for groceries online application service managers to maintain a prime experience for customers during their interactions with groceries online application services. A positive customer experience can of course be pursued through many approaches, ranging from applications that are visually attractive, easy to use, reliable (rarely experience lags or crashes), to payment functions that have an error rate of almost 0. Product aspects can be pursued primarily by providing a range of lists and wide variety of products and/or merchants to provide a better one stop shopping experience and better freedom of choice for customers. To increase the uniqueness of the offering in terms of products, service providers can improve service capabilities with detailed product information and illustration functions, including up to the label standards owned by each product, such as halal, green, organic and genetic engineering free certification. For the price aspect in general, it is more straightforward, a price that is competitive with the market in general or at least a similar service is of course the basic thing expected by customers. Meanwhile, in the place aspect, control

on the accuracy of goods sent according to the order as well as the processing and delivery time in the hands of consumers are of course a fundamental thing that service providers and related partners need to strive for. The increase in the four driving aspects of satisfaction on the one hand, of course, on the other hand, will have a positive impact on the formation of trust which in the end also has an impact on increasing customer loyalty.

The third insight, although the promotion aspect in this study has not shown a significant role in the formation of consumer satisfaction and trust, it does not mean that this aspect is not important. As previously discussed, in this study this aspect was not consistent and had a significant impact on consumer satisfaction and trust because of the limited number and variety. If the number and variety of promotions on the online groceries' application can be increased, it is not impossible that this aspect will be one of the important factors that play a role in increasing customer satisfaction and trust. This would play an even more important role if the services offered are still new in the minds of consumers which of course require intense efforts in order to attract consumer attention, educate them and encourage them to try. As has long been known, the promotion aspect is one of the main motivators for marketers in terms of attracting consumer attention and encouraging them to try.

7. CONCLUSION

This study seeks to contribute to the generalization aspects of the satisfaction, trust and loyalty forming factor models in the context of online groceries applications that have been previously proposed in different country and cultural contexts. In general, this study confirms the results of previous studies that production, price, place and experience are important determinants of satisfaction and trust which in turn will have an impact on increasing customer loyalty to online groceries applications. The specific thing revealed in this study is that in the midst of the importance of the promotional aspect in the service introduction process to encourage potential customers to try to adopt a new service, the inadequate intensity and variety of promotions will obscure the role of promotion in increasing consumer satisfaction and trust in online groceries applications. Several managerial implications based on the results of this study as described in the previous section are expected to provide additional insight into managerial decision making, especially in the context of online groceries application services.

In this study, there are several research limitations which certainly open up opportunities for further research. First, this research has only been conducted on one of the online groceries applications in Indonesia, research on similar applications or comparisons between several applications, especially perhaps with a wider variety of promotion intensity and will provide a more in-depth picture that complements the results of this study. Second, this research only raises aspects of product, place, price, promotion, and experience as a driver of e-satisfaction, e-trust, and customer loyalty. The involvement of other aspects that are often raised in the context of digital platforms such as consumer review features both inside and outside the application (word of mouth) will certainly broaden the picture obtained on the pattern of relationships between the constructs involved. Third, this study was conducted with a cross-sectional data approach, research with longitudinal or experimental data will certainly provide a view from another point of view to complement the results of this study and previous research on the context of online groceries applications, which are still not widely carried out in the midst of increasingly intense potential uses especially in the presence of special phenomena such as pandemics.

REFERENCE

- Arini, N. (2018). *Sering Membandingkan Harga Transportasi Online? Aplikasi Ini Akan Memudahkan Penggunaanya*. <https://www.shopback.co.id/katashopback/transportasi-online-makin-digemari>
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of Marketing*, 65(2), 81–93. <http://www.jstor.org/stable/10.2307/3203382>
- Chen, S.-C. (2012). The customer satisfaction–loyalty relation in an interactive e-service setting: The mediators. *Journal of Retailing and Consumer Services*, 19(2), 202–210. <https://doi.org/10.1016/j.jretconser.2012.01.001>
- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of A Scale To Measure The Perceived Benefits and Risks of Online Shopping. *Journal of Interactive Marketing*, 20(2), 55–75. <https://doi.org/10.1002/dir>
- Goyena, R., & Fallis, A. . (2019). *Hasil Survei: Orang Indonesia Belanja Online 5 Kali/Bulan*. *Journal of*

- Chemical Information and Modeling. <https://doi.org/10.1017/CBO9781107415324.004>
- Gregg, D. G., & Walczak, S. (2010). The relationship between website quality, trust and price premiums at online auctions. *Electronic Commerce Research*, 10(1), 1–25. <https://doi.org/10.1007/s10660-010-9044-2>
- Groceries, G. (2020). *Let us do the grocery shopping for you*.
- Ilyuk, V. (2018). Journal of Retailing and Consumer Services Like throwing a piece of me away : How online and in-store grocery purchase channels affect consumers' food waste ☆. *Journal of Retailing and Consumer Services*, 41(May 2017), 20–30. <https://doi.org/10.1016/j.jretconser.2017.11.003>
- Kalyanam, K., & McIntyre, S. (2002). The E-Marketing Mix: A Contribution of the E-Tailing Wars. *Journal of the Academy of Marketing Science*, 30(4), 487–499. <https://doi.org/10.1177/009207002236924>
- Lee, C. H., Ko, E., Tikkanen, H., Phan, M. C. T., Aiello, G., Donvito, R., & Raithel, S. (2014). Marketing mix and customer equity of SPA brands: Cross-cultural perspectives. *Journal of Business Research*, 67(10), 2155–2163. <https://doi.org/10.1016/j.jbusres.2014.04.025>
- Lien, C. H., Wen, M. J., Huang, L. C., & Wu, K. L. (2015). Online hotel booking: The effects of brand image, price, trust and value on purchase intentions. *Asia Pacific Management Review*, 20(4), 210–218. <https://doi.org/10.1016/j.apmr.2015.03.005>
- Morgan, R., & Hunt, S. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38. <http://www.jstor.org/stable/10.2307/1252308>
- Moriuchi, E., & Takahashi, I. (2016). Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade. *Australasian Marketing Journal*, 24(2), 146–156. <https://doi.org/10.1016/j.ausmj.2016.02.006>
- Mortimer, G., Fazal, S., Andrews, L., Martin, J., Mortimer, G., Fazal, S., Andrews, L., & Martin, J. (2016). Online grocery shopping : the impact of shopping frequency on perceived risk. *The International Review of Retail, Distribution and Consumer Research*, 3969(February 2017), 1–22. <https://doi.org/10.1080/09593969.2015.1130737>
- Nabila, M. (2018). *Grab dan HappyFresh Resmikan Kehadiran “Online Grocery” GrabFresh di Indonesia*. <https://dailysocial.id/post/grab-happyfresh-grabfresh-indonesia-resmi>
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Lekakos, G. (2017). The interplay of online shopping motivations and experiential factors on personalized e-commerce: A complexity theory approach. *Telematics and Informatics*, 34(5), 730–742. <https://doi.org/10.1016/j.tele.2016.08.021>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. D. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:SERVQUAL-+A+Multiple-Item+Scale+for+Measuring+Consumer+Perceptions+of+Service+Quality#0>
- Ridings, C. M., Gefen, D., & Arinze, B. (2002). Some antecedents and effects of trust in virtual communities. *The Journal of Strategic Information Systems*, 11(3–4), 271–295. [https://doi.org/10.1016/S0963-8687\(02\)00021-5](https://doi.org/10.1016/S0963-8687(02)00021-5)
- Shofa, J. N. (2020). *Stay at Home, Your Groceries Will Be Delivered to Your Door*.
- Sultan, P., & Wong, H. Y. (2012). Service quality in a higher education context: an integrated model. *Asia Pacific Journal of Marketing and Logistics*, 24(5), 755–784. <https://doi.org/10.1108/13555851211278196>
- Tao, M., Nawaz, M. Z., Nawaz, S., Butt, A. H., & Ahmad, H. (2018). Users' acceptance of innovative mobile hotel booking trends: UK vs. PRC. *Information Technology and Tourism*, 20(1–4), 9–36. <https://doi.org/10.1007/s40558-018-0123-x>
- Ubeja, S. (2014). A Study of Sales Promotion Mix on Customer Satisfaction With Reference to Shopping Malls in Indore. *Global Journal of Finance and Management*, 6(3), 245–252.
- van Riel, A. C. R., & Ouwersloot, H. (2005). Extending electronic portals with new services: exploring the usefulness of brand extension models. *Journal of Retailing and Consumer Services*, 12(4), 245–254. <https://doi.org/10.1016/j.jretconser.2004.07.003>

Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Psychology and Marketing*, 21(10), 799–822. <https://doi.org/10.1002/mar.20030>

Zeithaml, V. (1988). Consumer Perceptions Of Price, Quality, And Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2. <http://www.jstor.org/stable/10.2307/1251446>

THE ROLE OF SWITCHING COST IN INCREASING THE EFFECT OF SERVICE QUALITY TO CUSTOMER LOYALTY

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Abstract

One of challenges faced by the management of telecommunications companies (Telco) is the number of customers stopping subscribing them. The operators make various improvements to the quality of products and services to keep their customers. Because the customers moving to other operators illustrates a low customer loyalty. Various studies have been conducted to uncover this phenomenon but have not yet reached an established framework, thus the opportunities are still open for further investigation.

This research implemented latent variables requiring a number of valid and reliable indicators to be measured. Questionnaires developed from 12 indicators were distributed to get 220 ordinal data samples from Telkomsel customers. Hypotheses about causal relationships between variables formed structural equality models. Lisrel 8.80 was used to test CFA, goodness of fit of model, determination factor of each equation and hypothesis.

The CFA test showed information that all indicators were valid and reliable. The structural model built was fit based on the goodness of fit testing. Customer trust to operator and company image strengthens the influence of service quality perceptions on switching costs, and switching costs mediate the influence of all antecedents on customer loyalty. Based on the t-test, all hypotheses were built were accepted.

Although the perceived quality is the source of customer loyalty, it is not the only thing having the influence. The efforts to improve the quality must also be accompanied by programs to improve company image and customer trust. As success in increasing switching costs has strong and direct impact on customer loyalty

Keywords: Image, Loyalty, Perceived Quality, Switching Cost, Trust.

JEL Classification: M31

1. INTRODUCTION

The high number of customer churns is a common phenomenon experienced by all mobile telecommunications operators. In marketing journals, there are many researches aiming to uncover this phenomenon because the withdrawal of a customer from an operator is a dynamic one. In addition, there is not yet established frameworks for customer loyalty, especially the customer loyalty of high-tech products, such as mobile-phones.

Researches on customer loyalty always gain the same conclusion, - the main source is the quality of products and services (Marakanon and Panjakajornsak, 2017; Eshghi et al., 2007; Aydin and Özer, 2005) industrial business competition causes producers to be aware of quality, price, and variety in developing new products to meet the consumers' needs. This research reviewed the literature on green marketing and proposes a new conceptual framework of customer loyalty. It uses four constructs perceived quality, perceived risk, customer trust, and customer loyalty in the context of environmentally friendly electronics products in Thailand. This research employed an empirical study using the questionnaire survey method to verify the hypotheses. Data were obtained from 420 consumers who bought and used environmentally friendly electronic products, particularly mobile phones, computers, and laptops using a purposive sampling method. The data were analyzed using confirmatory factor analysis (CFA). The operators offer product packages including a combination of connectivity services for voice, data and internet, images and other multimedia content (Klein and Jakopin, 2014). Continuity of customers consuming products offered by an operator depends on how well the customer perceptions to the product quality (Izogo and Izogo, 2017). However, customer perceived service quality does not always have direct effects on customer loyalty (Lai et al., 2009). The relationship between the two requires mediating variables to produce significant total effects.

If the operator provides high-quality products and services, it increases customer trust (Marakanon and

Panjakajornsak, 2017; Rasheed and Abadi, 2014; Eshghi et al., 2007) industrial business competition causes producers to be aware of quality, price, and variety in developing new products to meet the consumers' needs. This research reviewed the literature on green marketing and proposes a new conceptual framework of customer loyalty. It uses four constructs: perceived quality, perceived risk, customer trust, and customer loyalty in the context of environmentally friendly electronics products in Thailand. This research employed an empirical study using the questionnaire survey method to verify the hypotheses. Data were obtained from 420 consumers who bought and used environmentally friendly electronic products, particularly mobile phones, computers, and laptops using a purposive sampling method. The data were analyzed using confirmatory factor analysis (CFA) and the company's image (Lai et al., 2009; Aydin and Özer, 2005). If the customer trusts the company, it is difficult to change operator (Picón-Berjoyo et al., 2016; Aydin and Özer, 2005). This study aims to examine the antecedent model of mobile telecommunications customer loyalty by including trust variables, image, and perceived switching cost as mediating variables strengthening perceived service quality influence on service quality.

2. HYPOTHESIS DEVELOPMENT

Understanding customer loyalty describes the attitudes and behaviour of customers (Namjoo Choi et al., 2015) to consume certain products compared to the same products offered by other companies. In post-paid telecommunications products, customer loyalty is evaluated from the continuity level of customers using telephone numbers and marketing efforts to induce switching to competitors (Izogo and Izogo, 2017). Post-paid telephone revenue growth depends on the ability to maintain the existing customers and to get new customers. The operator receives income from subscription and usage fees paid by existing customers (Haverila, 2011; Sullivan and Kim, 2018). The customer loyalty program is intended to keep existing customers not to churn and switch (García-Mariño and Suárez, 2019; Halima and Gayatri, 2018; Nadarajan et al., 2017). Customer loyalty to post-paid card users is evaluated by whether users continue to pay bills regularly or churn. Whereas, for prepaid card users, loyalty is evaluated through a credit top-up pattern.

Service quality is formed from tangible and intangible aspects of a product and service (Parasuraman et al., 1994). The tangible aspects is evaluated from the appearance is sensed such as product display, customer service officer and room condition (Fernandes and Solimun, 2018; Rahman et al., 2017). Meanwhile, the intangible aspect includes aspects that customers feel when interacting with such as empathy, responsiveness, reliability of products and service equipment, security from risks (Belwal and Amireh, 2018; Kuo et al., 2009). Customer perceptions of service quality aspects fulfillment inherent in products and services generate customer trust. Trust refers to a psychological state comprising the intention to accept vulnerability based upon positive expectations (Bozic and Kuppelwieser, 2019; de Reuver et al., 2015). Trust is the most effective loyalty enhancement strategy when customers perceive high financial switching costs (El-Manstrly, 2016). Like trust, the image will be embedded long on customers' minds when fulfilling the service quality dimensions. Adequate service quality must be well communicated to stimulate public emotional information from external information sources (Villena-Manzanares & Souto-Perez, 2016). The consideration to subscribe an operator is the service quality. Throughout the subscription period, customers evaluate the promised service quality and compare to what they experience. Customer perceptions of the value obtained and direct them to decide to keep subscribing or switch to another operator. In other words, efforts to improve service quality have the potential to increase customer loyalty (Belwal and Amireh, 2018; Izogo and Izogo, 2017; Edward and Sahadev, 2011).

H1: Service quality has a positive and significant effect on customer trust.

H2: Service quality has a positive and significant effect on image of company

H3: Service quality has a positive and significant effect on customer loyalty.

Previous studies mostly included trust and image variables as antecedents of customer loyalty. Both acts as intervening variables strengthening the influence of service quality on the variables afterwards. The role of trust and image roles are interrelated and difficult to be distinguished, thus in this study the two variables are modeled as reciprocally influencing. When service quality has improved the image and trust, the customer will feel bound and affection to move. The higher the trust and image of the customer towards the company, the more it makes customers feel dear to move. Customers having reached this level of trust will feel sacrificed when they have to switch to another operator. The sacrifice occurs when must move to another operator called switching cost (El-Manstrly, 2016; Kaur and Soch, 2018; Miguel Villas-Boas, 2015; Milan et al., 2015) "container-title": "Journal of Service Management", "page": "144-169", "volume": "27", "issue": "2", "source": "emeraldinsight.com (Atypon.

H4a : Image of operator has a positive and significant effect on customer trust.

H4b: Customer trust has a positive and significant effect on Image of operator.

H5 : Trust has a positive and significant effect on switching cost.

The consequence of customers perception about the high sacrifice felt when move to another operators makes them keep subscribing the existing operator. The perception of switching cost is considered as barrier for customers to change operators, thus it is called as switching barriers (Chuah et al., 2017; Dawi et al., 2018; Gautam, 2013; Kim et al., 2018). Relating to trust variables, switching acts as a mediating variable reinforcing the trust influence on customer loyalty (El-Manstrly, 2016; Kaur and Soch, 2018). Switching costs are also intended to retain customers, where to keep customers to continue subscribing (Milan et al., 2015).

H6: Switching cost has a positive and significant effect on customer loyalty.

The hypotheses developed created causal relationships forming structural equation models (SEM) as illustrated in Figure 1.

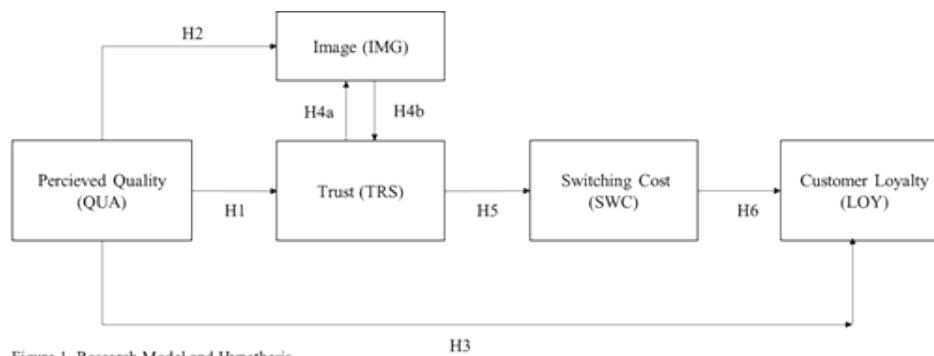


Figure 1. Research Model and Hypothesis
Source: Developed for this Research.

3. METHOD

The questionnaire developed from 12 indicators of latent variables was distributed to postpaid Telkomsel customers who were selected using purposive sampling. Respondents were asked to rate five Likert scales for each questionnaire according to their perceptions during the subscription. A total of 220 returned and complete questionnaires were tabulated as sample data for further testing.

To overcome the problem of normality, the sample data in the ordinal form is converted into polycoric correlation matrix data before a series of tests are carried out (Ghozali, 2014). Lisrel 8.80 (Jöreskog et al., 2016; Joreskog, 2004) was used to analyze confirmatory factors (CFA), test the Goodness of Fit of the model and test the research hypotheses. The Goodness of Fit of the model was conducted by evaluating the absolute fit indices, incremental fit indices, and parsimony fit indices. The indexes produced by the application are then compared with the cut-off value of each parameter. The model is considered to be fit if a minimum of five parameters are met (Hair, 2014). Hypothesis testing was conducted by evaluating the significance of the t-value calculated. The hypothesis is accepted if the t-value of the calculation results is greater than the t-value of the table which is +1.96. The strength of the influence of one variable on other variables can be seen from the regression coefficient. The R^2 value of each structural equation shows how well the independent variable is able to explain the dependent variable.

4. RESULTS AND DISCUSSION

4.1 VALIDITY AND RELIABILITY TEST

Table-1 shows that the indicators used in this study are valid and reliable because the average variance extracted (AVE) is greater than 0.5, and construct reliability (CR) is greater than the criteria which is 0.6.

Tabel -1: Validity and Reliability test

Variable	Qestionnaire Item	AVE	CR
Customer Loyalty	I will go on subscribing this Telkomsel line	0.60	0.62
	If I bought a new GSM line, I would prefer this GSM operator		
Switching Cost	Switching to a new operator causes monetary cost.	0.63	0.72
	If I switched to a new operator, the service offered by the new operator might not work as well as expected		
Image	This company is stable and firmly established	0.62	0.69
	This company has a positive image		
	This company has a social contribution for society		

Trust	I trust this company I feel that I can rely on this company to serve well	0.61	0.75
Service Quality	I Given the quality of your operator's coverage area, how would you rate the coverage area? Given the quality of your operator's customer services, how would you rate the customer? Given the quality of your operator's campaign, how would you rate the campaign for your operator?	0.63	0.74

4.2 GOODNESS OF FIT (GOF) OF MODEL

The GOF shows how well and suitable the model used in representing the covariance matrix on the indicators used. Software provides a series of GOF test results which include absolute, incremental, and parsimony testing. Following Table-2 the parameter numbers 1 through 6 are classified as absolute parameters, 7 to 11 are incremental parameters and the remaining three are parsimony parameters. Compared with the criteria, all parameters reach good fit unless parameters number 1 and 5 are almost fit. Hair et al (2010: 672) requires a minimum of five parameters to achieve good fit to conclude that the model is fit.

Tabel-2: Goodness of Fit Test

Number of Parameter	Goodness of Fit Parameters	Cut-Off Value	Test Result	Remark
1	χ^2 Significance Probability	≥ 0.05	0,012	almost fit
2	GFI	≥ 0.90	0.94	good fit
3	RMSEA	≤ 0.08	0.04	good fit
4	RMR	≤ 0.08	0.057	good fit
5	SRMR	≤ 0.08	0.09	almost fit
6	Nor. Chi-Square (χ^2/DF)	< 3	1.61	good fit
7	NFI	≥ 0.90	0.94	good fit
8	TLI (NNFI)	≥ 0.90	0.97	good fit
9	CFI (RNI)	≥ 0.90	0.97	good fit
10	RFI	≥ 0.90	0.90	good fit
11	IFI	≥ 0.90	0,98	good fit
12	AGFI	≥ 0.90	0.91	good fit
13	PNFI	≥ 0.50	0.70	good fit
14	PGFI	≥ 0.50	0.59	good fit

Source: Result of this research

4.3 HYPOTHESIS TEST

The significance of the path coefficient of each of the hypothesized relationships is evaluated by comparing the t-value of the calculation with the t-value of the table. As shown in Table-3, all hypotheses are accepted because the t-value of each path is greater than 1.96. By the command 'decomposition effect' on simplis, Lisrel 8.80 can provide the path coefficient and t-values of the indirect path $QUA \rightarrow TRS / IMG \rightarrow SWC \rightarrow LOY$ so that the hypothesis H7 can be tested.

Tabel-3: Hypothesis Test

Hypotheses	Relationships	Path Coefficients	T-Values	Conclusion
H1	$QUA \rightarrow TRS$	+0,47	4,22	Accepted
H2	$QUA \rightarrow IMG$	+0,52	3,53	Accepted
H3	$QUA \rightarrow LOY$	+0,46	3,99	Accepted
H4a	$TRS \rightarrow IMG$	+0,66	3,31	Accepted
H4b	$IMG \rightarrow TRS$	+0,66	3,31	Accepted
H5	$TRS \rightarrow SWC$	+0,71	4,61	Accepted
H6	$SWC \rightarrow LOY$	+0,66	4,72	Accepted
H7	$QUA \rightarrow TRS / IMG \rightarrow SWC \rightarrow LOY$	+0,72	6,33	Accepted

The role of switching cost variable is tested by comparing the magnitude of the direct effect of perceived quality variable on customer loyalty variables with the total effect as shown in the following Table-3:

Table 3: The role of mediating variables

Relationships	Direct Effects	Indirect Effects	Total Effects	Role of Switching Cost
QUA -> LOY	0,46	+0,26	+0,72	Strengthening the effect
TRS -> LOY	ns	+0,47	+0,47	Strengthening the effect
IMG -> LOY	ns	+0,23	+0,23	Strengthening the effect
SWC -> LOY	0,66	---	+0,66	

Mediating variables consisting of trust (TRS), image (IMG), and switching cost (SWC) amplify the effect of perceived quality (QUA) on customer loyalty (LOY) from +0.46 to +0.72. SWC has the role to strengthen the influence of TRS on LOY which previously was not significant (ns) to be +0.47. Likewise, the effect of IMG on LOY, which initially had not significant effect (ns), was +0.23. The effect of SWC on LOY it self is +0.66 greater than the direct effect of QUA on LOY.

4.4 STRUCTURAL EQUATION MODELING AND DETERMINATION FACTOR

Testing of the empirical data from the proposed research model produces four structural equations. Each equation is equipped with a termination factor (R-square) which provides information about the ability of each independent variable to explain its dependent variable and the degree of error of variance resulting from the measurement.

The regression coefficient of each independent variable in each equation shows the strength and direction of the influence of each of these independent variables on the dependent variable. All equations show that each independent variable has a positive effect on the dependent variable. For example in equation-1, the regression coefficient for TRS is +0.5 and QUA is +0.55. The termination factor of 0.79 indicates that the TRS and QUA variance is able to explain the IMG variance of 79%, the remaining 21% indicates the variance of measurement error or the possibility that there are other variables that need to be included in the equation system. The regression coefficient illustrates that if there is an increase in variance in TRS and QUA, for example by one unit, it will increase the variance of IMG by 0.50+ 0.55.

1. $IMG = 0.50*TRS + 0.55*QUA$, Errorvar.= 0.33 , $R^2 = 0.79$
2. $TRS = 0.50*IMG + 0.27*QUA$, Errorvar.= 0.33 , $R^2 = 0.74$
3. $SWC = 0.54*TRS$, Errorvar.= 0.71 , $R^2 = 0.34$
4. $LOY = 0.66*SWC + 0.46*QUA$, Errorvar.= 0.14 , $R^2 = 0.87$

5. CONCLUSION

The CFA test shows that all indicators were declared valid and reliable. The structural model that was built was declared fit based on the testing of Goodness of Fit. Customer trust in an operator and company image strengthened the influence of service quality perceptions on switching costs, and switching costs mediate the influence of all antecedents on customer loyalty. Based on the t-test, all hypotheses that were built were accepted.

Although the perceived quality is the source of customer loyalty, it is not the only thing that influences. Efforts to improve the quality must also be accompanied by programs to improve company image and customer trust to operators because both can make customers feel lost if they switch to other operators. Success in increasing switching costs has strong and direct impacts on customer loyalty.

Developing customer trust and operator image must be considered as one packet program because both of them influence each other

REFERENCES

- Aydin, S., Özer, G., 2005. The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *Eur. J. Mark.* 39, 910–925. <https://doi.org/10.1108/03090560510601833>
- Belwal, R., Amireh, M., 2018. Service quality and attitudinal loyalty: Consumers' perception of two major telecommunication companies in Oman. *Arab Econ. Bus. J.* 13, 197–208. <https://doi.org/10.1016/j.aebj.2018.11.003>
- Bozic, B., Kuppelwieser, V.G., 2019. Customer trust recovery: An alternative explanation. *J. Retail. Consum. Serv.* 49, 208–218. <https://doi.org/10.1016/j.jretconser.2019.04.002>

- Chuah, S.H.-W., Rauschnabel, P.A., Marimuthu, M., Thurasamy, R., Nguyen, B., 2017. Why do satisfied customers defect? A closer look at the simultaneous effects of switching barriers and inducements on customer loyalty. *J. Serv. Theory Pract.* 27, 616–641. <https://doi.org/10.1108/JSTP-05-2016-0107>
- Dawi, N.M., Jusoh, A., Streimikis, J., Mardani, A., 2018. The Influence of Service Quality on Customer Satisfaction and Customer Behavioral Intentions by Moderating Role of Switching Barriers in Satellite Pay Tv Market. *Econ. Sociol. Ternopil* 11. <http://dx.doi.org/10.14254/2071789X.2018/11-4/13>
- de Reuver, M., Nikou, S., Bouwman, H., 2015. The interplay of costs, trust and loyalty in a service industry in transition: The moderating effect of smartphone adoption. *Telemat. Inform.* 32, 694–700. <https://doi.org/10.1016/j.tele.2015.02.008>
- Edward, M., Sahadev, S., 2011. Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pac. J. Mark. Logist.* 23, 327–345. <https://doi.org/10.1108/13555851111143240>
- El-Manstrly, D., 2016. Enhancing customer loyalty: critical switching cost factors. *J. Serv. Manag.* 27, 144–169. <https://doi.org/10.1108/JOSM-09-2015-0291>
- Eshghi, A., Houghton, D., Topi, H., 2007. Determinants of customer loyalty in the wireless telecommunications industry. *Telecommun. Policy* 31, 93–106. <https://doi.org/10.1016/j.telpol.2006.12.005>
- Fernandes, A.A.R., Solimun, 2018. The mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty. *J. Manag. Dev.* 37, 76–87. <https://doi.org/10.1108/JMD-12-2016-0315>
- García-Mariño, B., Suárez, D., 2019. Switching mobile operators: Evidence about consumers' behavior from a longitudinal survey. *Telecommun. Policy* 43, 426–433. <https://doi.org/10.1016/j.telpol.2018.12.001>
- Gautam, V., 2013. Linkages Between Switching Barriers and Service Recovery Evaluation: An Indian Exploration. *J. Glob. Mark.* 26, 147–154. <https://doi.org/10.1080/08911762.2013.805859>
- Hair, 2014. *Multivariate Data Analysis New International Edition, Seventh Edition.* ed. Pearson.
- Halima, S., Gayatri, G., 2018. Perceived Justice and Perceived Loss Influence toward Customer Satisfaction in Service Recovery: The Impact on Trust and Switching Intention 14.
- Haverila, M., 2011. Mobile phone feature preferences, customer satisfaction and repurchase intent among male users. *Australas. Mark. J. AMJ* 19, 238–246. <https://doi.org/10.1016/j.ausmj.2011.05.009>
- Izogo, E.E., Izogo, E.E., 2017. Customer loyalty in telecom service sector: the role of service quality and customer commitment. *TQM J.* 29, 19–36. <https://doi.org/10.1108/TQM-10-2014-0089>
- Joreskog, K.G., 2004. *Structural Equation Modeling with Ordinal Variables using LISREL.*
- Jöreskog, K.G., Olsson, U.H., Y. Wallentin, F., 2016. *Multivariate Analysis with LISREL, Springer Series in Statistics.* Springer International Publishing, Cham. <https://doi.org/10.1007/978-3-319-33153-9>
- Kaur, H., Soch, H., 2018. Satisfaction, trust and loyalty: investigating the mediating effects of commitment, switching costs and corporate image. *J. Asia Bus. Stud.* 12, 361–380. <https://doi.org/10.1108/JABS-08-2015-0119>
- Kim, M.-K., Park, M.-C., Park, J.-H., Kim, J., Kim, E., 2018. The role of multidimensional switching barriers on the cognitive and affective satisfaction-loyalty link in mobile communication services: Coupling in moderating effects. *Comput. Hum. Behav.* 87, 212–223. <https://doi.org/10.1016/j.chb.2018.05.024>
- Klein, A., Jakopin, N., 2014. Consumers' willingness-to-pay for mobile telecommunication service bundles. *Telemat. Inform.* 31, 410–421. <https://doi.org/10.1016/j.tele.2013.11.006>
- Kuo, Y.-F., Wu, C.-M., Deng, W.-J., 2009. The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Comput. Hum. Behav.* 25, 887–896. <https://doi.org/10.1016/j.chb.2009.03.003>
- Lai, F., Griffin, M., Babin, B.J., 2009. How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *J. Bus. Res.* 62, 980–986. <https://doi.org/10.1016/j.jbusres.2008.10.015>

- Marakanon, L., Panjakajornsak, V., 2017. Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart J. Soc. Sci.* 38, 24–30. <https://doi.org/10.1016/j.kjss.2016.08.012>
- Miguel Villas-Boas, J., 2015. A short survey on switching costs and dynamic competition. *Int. J. Res. Mark.* 32, 219–222. <https://doi.org/10.1016/j.ijresmar.2015.03.001>
- Milan, G.S., Eberle, L., Bebbler, S., 2015. Perceived Value, Reputation, Trust, and Switching Costs as Determinants of Customer Retention. *J. Relatsh. Mark.* 14, 109–123. <https://doi.org/10.1080/15332667.2015.1041353>
- Nadarajan, G., Bojei, J., Khalid, H., 2017. The study on negative eWOM and its relationship to consumer's intention to switch Mobile Service Provider. *Procedia Comput. Sci.*, 4th Information Systems International Conference 2017, ISICO 2017, 6-8 November 2017, Bali, Indonesia 124, 388–396. <https://doi.org/10.1016/j.procs.2017.12.169>
- Namjoo Choi, Chengalur-Smith, I., Nevo, S., 2015. Loyalty, Ideology, and Identification: An Empirical Study of the Attitudes and Behaviors of Passive Users of Open Source Software. *J. Assoc. Inf. Syst.* 16, 674–706.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L., 1994. Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research. *J. Mark.* 58, 111. <https://doi.org/10.2307/1252255>
- Picón-Berjoyo, A., Ruiz-Moreno, C., Castro, I., 2016. A mediating and multigroup analysis of customer loyalty. *Eur. Manag. J., European Management Research using Partial Least Squares Structural Equation Modeling (PLS-SEM)* 34, 701–713. <https://doi.org/10.1016/j.emj.2016.07.006>
- Rahman, M.S., Osman-Gani, A.M., Raman, M., 2017. Destination selection for education tourism: Service quality, destination image and perceived spirituality embedded model. *J. Islam. Mark.* 8, 373–392. <https://doi.org/10.1108/JIMA-10-2015-0080>
- Rasheed, F.A., Abadi, M.F., 2014. Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries. *Procedia - Soc. Behav. Sci.* 164, 298–304. <https://doi.org/10.1016/j.sbspro.2014.11.080>
- Shafei, I., Tabaa, H., 2016. Factors affecting customer loyalty for mobile telecommunication industry. *EuroMed J. Bus.* 11, 347–361. <https://doi.org/10.1108/EMJB-07-2015-0034>
- Sullivan, Y.W., Kim, D.J., 2018. Assessing the effects of consumers' product evaluations and trust on repurchase intention in e-commerce environments. *Int. J. Inf. Manag.* 39, 199–219. <https://doi.org/10.1016/j.ijinfomgt.2017.12.008>

THE EFFECT OF SERVICE QUALITY OF MY TELKOMSEL TOWARD CUSTOMERS' SATISFACTION AND COMPANY IMAGE AS WELL AS THE IMPACT ON CUSTOMERS LOYALTY

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Abstract

This research was conducted with the aim of knowing the effect of my Telkomsel service quality on customer satisfaction and corporate image and its impact on customer loyalty. The research method used in this research is descriptive quantitative research method with a causality research approach. The population in this study are Telkomsel customers who have used the MyTelkomsel application, who are domiciled in Medan city, North Sumatra Province. The sample used is as many as 110 respondents.

The research results show that there is a positive and significant effect of electronic service quality on Telkomsel customer satisfaction, there is a positive and significant effect of electronic service quality on Telkomsel's corporate image, there is a positive and significant effect of electronic service quality on Telkomsel customer loyalty, there is a positive and significant effect on customer satisfaction. To Telkomsel's customer loyalty, there is a positive and significant effect on the company's image on Telkomsel's customer loyalty. Customer satisfaction can mediate the relationship between electronic service quality and Telkomsel customer loyalty, and company image can mediate the relationship between electronic service quality and Telkomsel customer loyalty.

Keywords: Electronic Service Quality, Customer Image, Corporate Image, Customer Loyalty.

1. INTRODUCTION

Telkomsel is committed to providing the best experience for customers and presenting the latest telecommunication services which will become telecommunication technology trend in the future. As the primary choice of Indonesians for their various needs for all-digital lifestyle services, Telkomsel continues to provide various easy service channels through the MyTelkomsel application, 24-hour Call Center services, and GraPARI presence in all regions of Indonesia.

Customer loyalty is the main key for service companies so that business activities can survive and develop. The competition that occurs can hardly affect customers who have high loyalty to the company and the products it offers. Customer loyalty needs great attention, because loyal customers will always use the company products or services and are reluctant to use products from other companies. However, at this time Telkomsel must pay more attention to customer loyalty issues, because more and more complaints are happening to this cellular company.

Telkomsel company through the MyTelkomsel application can reach customers and is expected to increase customer loyalty. This can be explained in the following table.

No	Top 5 Komplain Digital Service MyTelkomsel Apps	Jan-20	Feb-20	Mar-20	Apr-20
1	K34-Apps can not be accessed	532	224	467	2446
2	K22-Service Fiture can not be used	510	511	712	1787
3	K41-The points can not be redeemed	171	650	484	1406
4	K31-Can Login	705	376	616	1204
5	K41-Can't get bonus	37	205	90	495

Tabel 1. Trend of MyTelkomsel Complaint Data

Based on Table 1.1. seen that the complaints submitted from January 2020-April 2020 increased significantly in April 2020. The complaints condition made by these customers including an alarming condition related to customer loyalty.

Customer loyalty in this study can be influenced by the quality of electronic services, customer satisfaction and corporate image. Electronic service quality is the level of excellence expected and control over that excellence level is to fulfill customer desires. The quality of electronic services is not seen from the point of view of the service provider or service provider, but is based on the perception of the community (customers) who receive the service.

If the service received or felt is in accordance with what is expected, then the service quality is perceived as good and satisfying. If the service received exceeds customer expectations, then service quality is perceived as ideal quality. Conversely, if the service received is lower than expected, then the service quality is perceived as bad. Thus, whether the service quality is good or bad depends on the ability of service providers to meet the expectations of the community (service recipients) consistently.

Customer satisfaction in this study can also affect customer loyalty. If the service level received or felt by the customer is in accordance with what is expected, then the service quality is perceived as good and satisfying by the customer. If the service level received exceeds customer expectations, then service quality is perceived as ideal quality.

MyTelkomsel must provide good service to its customers so that they can provide high satisfaction. The high satisfaction felt by customers can create a sense of loyalty to the company and can also recommend others to use MyTelkomsel. High customer satisfaction can affect customer loyalty.

Company image is another factor in research that can affect customer loyalty. Image is an impression that is obtained through someone's knowledge and experience about something. For companies, image is defined as the public's perception of the company's identity.

Research on customer loyalty and the factors that influence it has been widely studied, but not all of the research results have the same. This can create a research gap and make it possible for other researchers to conduct similar themes. Apart from that, more attention must be paid to Telkomsel's customer loyalty so that the number of customers and customer loyalty can increase in the following years.

2. LITERATUR REVIEW

2.1 ELECTRONIC SERVICE QUALITY

Service quality is a delivery of excellence or superior service aimed at satisfying customers according to their perceptions and expectations (Zeithaml and Bitner, 2013). Service quality according to Wyckoff (in Tjiptono, 2015: 59) is defined as the excellence level expected and control over that excellence level to fulfill customer desires.

Along with the technology and information development, service quality develops into electronic service quality (e-servqual). E-service quality or also known as E-ServQual is a new version of Service Quality (ServQual). E-ServQual was developed to evaluate a service provided on the Internet network. e-service quality is defined as the expansion of a site's ability to facilitate shopping, purchasing, and distribution activities effectively and efficiently

E-service quality is the ability of a service to deliver functional performance when shopping, purchasing, and delivery to customers via electronic media (Lasyakka, 2015; Demurkan et al, 2011; Parasuraman et al, 2005). The quality of electronic service is how high a website's ability to provide an effective and efficient shopping experience, payment, and delivery services (Zeithaml et al., 2013: 115).

According to Tjiptono (2015:28) service has four main characteristics i.e.:

1. Intangibility

Services differ significantly from physical goods. If the item is an object, tool, material or thing that can be seen, touched and felt with the five senses; then service is actually an act, action, experience, process, performance, or business that is abstract in nature.

2. Varies (Heterogeneity)

Services are variable or heterogeneous because they are non-standardized outputs, meaning that the shape, quality and type vary widely, depending on who, when and where the service is produced.

3. Inseparability

Goods are usually produced first, then sold, then consumed. Meanwhile, services are generally sold first, then produced and consumed at the same time and place.

4. Not durable (Perishability)

Perishability means that services are perishable commodities, which cannot be stored for future reuse, resale or return.

The quality of electronic services (e-servqual) according to Parasuraman and Malhotra (2005: 216) is defined as the expansion of the efficiency and effectiveness of site facilities in shopping, purchasing and shipping. Parasuraman et al. (2005) developed an electronic service quality measurement in four dimensions:

1. Efficiency: User can easily use the service easily without consuming a lot of resources.
2. Fulfillment: Fulfillment of service promises such as the conformity of goods obtained by users with the information they obtain.
3. System availability: Services are able to provide operational functions that are used by users to access services.
4. Privacy: The ability of service providers to protect personal information and secure services from crime or damage.

2.2 CUSTOMERS SATISFACTION

According to Kotler (2014: 36) customer satisfaction is a feeling of pleasure or disappointment in someone who arises after comparing their perceptions or impressions of the performance or results of a product and their expectations. Supranto (2010: 44) the term customer satisfaction is a label used by customers to summarize a set of visible actions or actions related to a product or service.

According to Lupiyoadi (2014), there are five main factors that must be considered by company in determining the level of customer satisfaction, namely:

1. Product Quality

Customers will feel satisfied when their evaluation results show that the product they use is qualified. Rational consumers always demand a quality product for every sacrifice made to obtain the product. In this case, good product quality will provide added value in the minds of consumers.

2. Service Quality

Service quality, especially in the service sector, customers will feel satisfied if they get good service or what is expected. A satisfied customer will indicate the possibility of purchasing the same product again. Satisfied customers tend to give perceptions of the company's products.

3. Emotional

Customers will feel proud and get the confidence that other people will be amazed by him when using a product with a certain brand that tends to have a higher satisfaction level. Satisfaction obtained. Not because of the product quality but social value or self esteem that makes customers satisfied with certain brands.

4. Price

Products having the same quality but charge a relatively low price will provide higher value to their customers.

5. Cost

Customers do not need to pay additional costs or do not need to waste time getting a product or service tends to be satisfied with that product or service.

To determine the effectiveness of policies, implementation and procedures of service to consumers, the company must measure the customer satisfaction level regularly. Measuring and monitoring customer satisfaction can be carried out by several methods that can be used by every company. According to Kotler (2014: 148), there are four methods to measure customer satisfaction, i.e.:

1. Complaint and suggestion systems
2. Survey of customers satisfaction
3. Ghost shopping

4. Lost Customer Analysis

There are several strategies that can be combined to achieve and increase customer satisfaction (Tjiptono, 2015: 161), i.e.:

1. Relationship marketing strategy

That is, the transactional relationship between a company and consumers is sustainable, does not end after the sale is completed, where the long-term partnership with the customer is continuous so that it is hoped that a business can be repeated.

2. Strategy of superior customer service

It is a strategy to offer the company's services that are superior to its competitors.

3. Strategy of unconditional guarantees extraordinary

That is a strategy to increase customer satisfaction by developing a good after-sales service for the company.

4. Strategy to improve company performance

Strategies for continuous monitoring and measurement of satisfaction, job appraisal systems, rewards and employee promotions are based on their contribution, empowering employees so that they can make certain decisions related to their duties.

5. Effective complaint handling strategy

Effective treatment provides an opportunity to turn a disgruntled customer into a satisfied customer.

6. Strategy of quality function development

The practice of designing a process in response to consumer needs.

2.3 COMPANY IMAGE

According to Kasali (2009: 30) company image is an identity reflection of an organization or a company, in a company that is able to have several different images in the eyes of the public. Company image is considered as an overall assessment of a company in people's minds (Aydin and Ozer, 2005).

Kasali (2009:28) suggests that an understanding that comes from an incomplete information produces an imperfect image. According to Harrison (2005: 71) complete information about company image includes four elements as follows:

1. Personality: The overall characteristics of a company that are understood by the target public, such as companies that can be trusted, companies that have social responsibility.
2. Reputation: What the company has carried out and is believed by the target public based on their own experiences and those of other parties, such as the security performance of all bank transactions.
3. Value: Value of a company, in other words, corporate culture, such as a management attitude that cares about customers, employees who are responsive to customer requests and complaints.
4. Corporate Identity: Components that facilitate the introduction of the target public to a company, such as logos, colors, and slogans.

Image is a value that society views of a company. The company wants to provide an image in accordance with the corporate identity that supports the sustainability process. According to Sutojo (2011:63) company image is considered as a public perception of the identity of the company or organization. The benefits of a good and strong corporate image are:

1. Solid medium and long-term competitiveness: A company tries to win over market competition by formulating tactical marketing strategies.
2. Being a shield during a crisis: Most people can understand or forgive the mistakes company made in a good image, which caused them to experience crises.
3. To be the attraction of reliable executives, where reliable executives are company assets.
4. Increase the effectiveness of marketing strategies
5. Save on operating costs because of its good image.

The image formation of a company is closely related to the perception, attitude (stance), and public opinion

about a company. There are five factors for shaping the company's image, including:

1. Physical identity, in this case what is seen is visual (name of organization, logo, text of choice of font, color, figure of building, and office lobby), audio (such as organization jingle), communication media (company profile, brochure, leaflet, report annual, and media coverage).
2. Non-physical identity, seen from the organization or company history, philosophy, beliefs, values and culture.
3. Organizational management, such as vision, mission, systems, policies, rules, procedures, technology, human resources (HR), organizational strategy, job design, service systems, product positioning.
4. Quality results, product quality and service.
5. Relationship activities and patterns are assessed from the relationship between organization or company and public, the organization's social responsibility response, communication quality, customer experience, and communication networks.

2.4 CUSTOMER LOYALTY

Mowen and Minor (2002) define loyalty as a condition where customers have a positive attitude towards a brand, have a commitment to the brand, and intend to continue their purchases in the future. According to Uncles and Laurent (1997) in Peter and Olson (2002), loyalty is conceptualized as a measure of attitude (including exclusive purchases and possible repurchases) as well as behavioral measures (including brand preference, likes, commitment and intention to buy).

According to Griffin (2005: 31) states that loyal customers are people who can:

1. Make repeat purchases regularly.

This means customers who have used a product twice or more. They are those who use the same product twice, or buy two different products on two occasions.

2. Buying between product lines or services

It means using all the offered goods or services they need. They use regularly, the relationship with this customer type is strong and long lasting which makes them unaffected by foreign products.

3. Referring to others

It means the goods or services they offer and need, as well as making purchases on a regular basis. In addition, they encourage their friends to use that company's goods or services or recommend the company to others, thus indirectly the brand has done marketing for the company and brought consumers to the company.

4. Shows immunity to pull from competitors

This means that it is not easily influenced by the pull of competitors' products or other similar service products.

One of the most relevant models in measuring loyalty is the four stage loyalty model (Oliver, 1999), which is divided as follows:

1. *The first stage cognitive loyalty*, loyalitas pada tahap ini berhubungan langsung dengan informasi yang tersedia dan barang atau jasa dalam harga dan manfaatnya. Hal ini karena pelanggan sadar atau peka akan harga dan manfaat produk.
2. The second stage affective loyalty, Second stage affective loyalty, for example the convenience of service,
3. cleanliness of the shop, atmosphere, competitive prices, ease of shopping, and so on.
4. The third stage conative loyalty, loyalty relates to commitment to repurchase a specific product. The customer at this stage chooses to commit to purchasing another product or service consistently in the future.
5. The fourth stage: action loyalty, The last stage of customer loyalty is the existence of action, including responsible behavior and behavior. Actions or acts are seen as very important in the previous stages.

2.5 THOUGHT FRAMEWORK



Figure 1. Thought Framework

2.6 RESEARCH HYPOTHESIS

Based on this definition, the formulation of the hypothesis in this research is as follows:

- H1 There is an effect of electronic service quality on the Telkomsel customers satisfaction.
- H2 There is an effect of electronic service quality on company image of Telkomsel
- H3 There is an effect of electronic service quality on customer loyalty of Telkomsel.
- H4 There is an effect of customer satisfaction on Telkomsel's customer loyalty.
- H5 There is an effect of company image on Telkomsel's customer loyalty.
- H6 Customer satisfaction can mediate the relationship between the quality of electronic services and customer loyalty of Telkomsel.
- H7 Company image can mediate the relationship between the quality of electronic services and customer loyalty of Telkomsel.

3. RESEARCH METHOD

3.1 TYPE OF RESEARCH

The method used in this research is quantitative descriptive research with a causality research approach. This study used a survey research design to answer descriptive questions and questions about the relationship between variables.

3.2 OPERATIONAL VARIABLE

This research uses four (4) variables, i.e. one exogenous variable (Service Quality), two independent intermediary variables (Customer Satisfaction and Company Image), and one variable; indigenous dependent (Customer Loyalty)

3.3 POPULATION AND SAMPLE

Population in this research is Telkomsel customers who have used MyTelkomsel application, who domiciled in city of Medan, North Sumatra Province.

The sample calculation uses the Tabachnick & Fidell formula (2014: 123), namely $N \geq 104 + m$, where N = number of samples, and m= number of independent variables. In this study, there are three (3) independent variables (service quality, customer satisfaction, and company image), so that the minimum sample size = $104 + 3 = 107$ respondents. The sample was rounded to 110 respondents.

3.4 ANALYSIS METHOD

Before the data is analyzed, the results of distributing questionnaires that have been compiled in the form of data tabulations, then for the validity, reliability the data that has been compiled is tested, data normality and testing the requirements of classical assumptions, to ensure the data quality when used in research.

In analyzing the effect of service quality, customer quality, and company image on customer loyalty, analysis method of data used in this research using path analysis.

The Path Analysis Stages

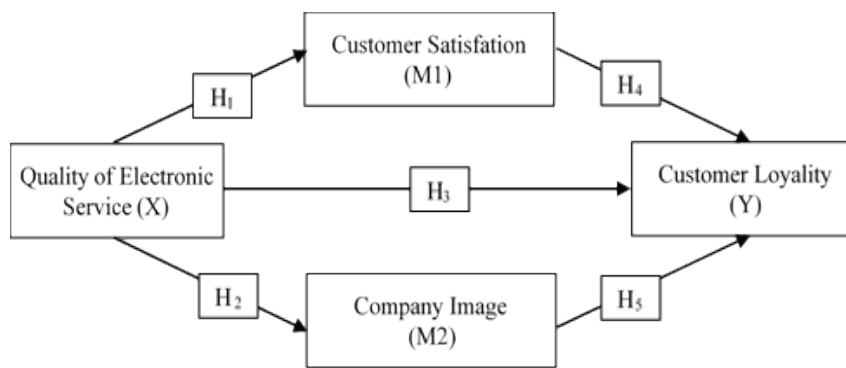


Figure 2. Path Analysis

1. $M_1 = a + bX + e_1$ (Substructural 1)
2. $M_2 = a + bX + e_2$ (Substructural 2)
3. $Y = a + bX + bM_1 + bM_2 + e_3$ (Substructural 3)

Remarks:

X = Quality of Electronic Service

M_1 = Customer Satisfaction

M_2 = Company Image

Y = Customer Loyalty

e_{123} = Error

4. RESEARCH RESULTS

4.1 REGRESSION ANALYSIS OF SUBSTRUCTURE 1

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.376	1.355		4.704	.000
Quality of Electronic Service	.401	.029	.798	13.751	.000

a. Dependent Variable: Customer Satisfaction

Table 2. t-Test Results of Substructure 1

From the calculation results in Table 2. obtained t_{count} value of 13,751 is greater than t_{table} value i.e. $t_{(0,05;110)}$ of 1,982 then H_0 is rejected and H_a is received that meant there is the effect of electronic service quality on customer satisfaction. This case also reflected from significance value 0,000 lesser than 0,05.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798 ^a	.636	.633	2.491

a. Predictors: (Constant), Quality of Electronic Service

Table 3. Coefficient of Determination of (R Square) Substructure 1

The determination coefficient is 0.636, this figure is used to see the effect percentage of electronic service quality on customer satisfaction by calculating $R^2 \times 100\%$. So it can be said that this number means that the effect of electronic service quality on customer satisfaction is 79.8%, while the remaining 20.2% is influenced by other factors not examined.

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1173.541	1	1173.541	189.089	.000 ^a
	Residual	670.278	108	6.206		
	Total	1843.818	109			

a. Predictors: (Constant), Electronic Service Quality

b. Dependent Variable: Customer Satisfaction

Table 4. F-Test Results of Substructure 1

a. From the results of the SPSS output in column F, it is found that F_{count} of 189.089 is greater than F_{table} of 3.929, this means that the quality of electronic services has a significant effect on customer satisfaction.

b. Based on the results of the ANOVA analysis of variance calculation, the value of the significance level of the study is 0.000 lesser than the significance level of 5% ($0.000 < 0.05$), this means that electronic services quality has a significant effect on customer satisfaction.

4.2 REGRESSION ANALYSIS OF SUBSTRUCTURE 2

Coefficients ^a					
Model	B	Unstandardized Coefficients		Standardized Coefficients	Sig.
		Std. Error	Beta	t	
1	(Constant)	1.893	.893	2.119	.036
	Quality of Electronic Service	.387	.019	.889	.000

a. Dependent Variable: Company Image

Table 5. T-Test Results of Substructure 2

From the calculation results in Table 5. Obtained t_{count} value of 20,158 greater than t_{table} value i.e. $(0,05;110)$ of 1,982 then H_0 is rejected and H_a is received that meant there is effect of electronic service quality on company image. This case also reflected of significancy value 0,000 lesser than 0,05.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 ^a	.790	.788	1.642

a. Predictors: (Constant), Electronic Service Quality

Table 6. Coefficient of Determination (R Square) of Substructure 2

The determination coefficient is 0.790, this figure is used to see the influence percentage of electronic service quality on company image by calculating $R^2 \times 100\%$. So it can be said that this figure means that the contribution of the effect of electronic service quality to the company's image is 79%, while the remaining 21% is influenced by other factors not examined.

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1094.939	1	1094.939	406.335	.000 ^a
	Residual	291.024	108	2.695		
	Total	1385.964	109			

a. Predictors: (Constant), Electronic Service Quality

b. Dependent Variable: Company Image

Table 7. F-Test Result of Substructure 2

a. From output SPSS results in F coloumn obtained F_{count} of 406,335 the value is much bigger than F_{table} 3,929 this case meant Electronic Service Quality influencing significantly on company image.

b. The research significance level value of 0.000 is lesser than the significance level of 5% ($0.000 < 0.05$), this means that the quality of electronic services has a significant effect on company image.

4.3 REGRESSION ANALYSIS OF SUBSTRUCTURE 3

Coefficients ^a					
Model	B	Unstandardized Coefficients		Standardized Coefficients	Sig.
		Std. Error	Beta		
1	(Constant)	1.280	1.525		.839
	Electronic Service Quality	.240	.069	.408	3.457
	Customer Satisfaction	.221	.102	.189	2.159
	Company Image	.410	.155	.304	2.638

a. Dependent Variable: Customer Loyalty

Table 8. T-test Results of Substructure 3

a. From the calculation results in Table 8. obtained t_{count} value of 3,457 greater than t_{table} i.e $t_{(0,05;110)}$ of 1,982 then H_0 is rejected and H_a is received meaning that there is effect of Electronic Service Quality on customer loyalty. This case also seen from significance value of 0,001 is lesser than 0,05.

b. From the calculation results in Table 8. obtained t_{count} value of 2,159 greater than t_{table} value $t_{(0,05;110)}$ of 1,982 then H_0 is rejected and H_a is received meaning that there is significant effect of customer satisfaction on customer loyalty. This case also seen from nilai significance value of 0,033 is lesser than 0,05.

c. From the calculation results in Table 8. obtained t_{count} value 2,638 is bigger than t_{table} value of $t_{(0,05;110)}$ of 1,982 then H_0 is rejected dan H_a is received than mean there is significant effect of company image on customer loyalty. This case also seen from significant value of 0,010 lesser than 0,05.

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853 ^a	.728	.720	2.546

a. Predictors: (Constant), Company Image, Customer Satisfaction, Electronic Service Quality

b. Dependent Variable: Customer Loyalty

Table 9. Determination coefficient (R Square) of Substructure 3

The amount of determination coefficient using Adjusted R Square because the number of independent variables is more than two, with a value of 0.720, this figure is used to see the percentage of the effect of electronic service quality, customer satisfaction and company image on customer loyalty. So it can be said that this number means that the effect of electronic service quality, customer satisfaction and company image simultaneously on customer loyalty is 72%, while the remaining 28% is influenced by other factors not examined.

ANOVA ^b					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1838.116	3	612.705	94.509	.000 ^a
Residual	687.202	106	6.483		
Total	2525.318	109			

a. Predictors: (Constant), Company Image, Customer Satisfaction, Electronic Service Quality

b. Dependent Variable: Customer Loyalty

Table 10. F-test Results of Substructure 3

a. From the output SPSS results in F column obtained F_{count} of 94,509 the valued is greater than F_{table} value of 2,69 this case mean that eelectronic service quality, customer satisfaction and company image mutually effecting on customer loyalty.

b. Based on calculation results of *analysis of variance* ANOVA, research significance level value of 0.000 is smaller than the significance level of 5% (0.000 < 0.05), this means that the quality of electronic services, customer satisfaction and company image collectively have an effect on customer loyalty.

A summary of all tests for the effect between exogenous and endogenous variables is presented in the following table:

Variable Effect	Estimation	Probability	Remarks
Endogenous : Customer satisfaction			
Electronic Service Quality	0,798	0,000	Significant
Endogen : Company Image			
Electronic Service Quality	0,889	0,000	Significant
Endogenous : Customer Loyalty			
Electronic Service Quality	0,408	0,001	Significant
Customer Satisfaction	0,189	0,033	Significant
Company Image	0,304	0,010	Significant

Table 11. Testing Results of Exogenous and Endogenous Effects

4.4 RESEARCH DISCUSSION

Based on the research results and the description above, the following will be discussed:

Effect of electronic service quality on customer satisfaction

Based on the test results obtained electronic service quality of 0.798 with a significant value of $0.000 < 0.05$, which indicates that the quality of electronic services has a significant positive effect on customer satisfaction.

The quality of electronic service is how high a website's ability to provide an effective and efficient shopping experience, payment, and delivery services (Zeithaml et al., 2013: 115). The electronic services quality that can meet customer wants and needs can affect customer satisfaction.

The results of this research support the research conducted by Shafiq et al. (2019), Al-Dweeri et al. (2017), Sundaram et al. (2017), which shows that the electronic services quality has an effect on customer satisfaction.

Effect of Electronic Service Quality on company image

Based on the test results obtained electronic service quality of 0.889 with a significant value of $0.000 < 0.05$, which indicates that the electronic services quality has a significant positive effect on company image.

According to Kasali (2009: 30) company image is a reflection of an organization or company identity, in a company that is able to have several different images in the eyes of the public. The electronic services quality that can meet customer wants and needs can affect the company's image.

The results of this research support the research conducted by Darmawan (2018), Ashraf et al. (2018), Anzie and Arifin (2017) who show that the quality of electronic services has an effect on company image.

Effect of electronic service quality on customer loyalty.

Based on the test results obtained electronic service quality of 0.408 with a significant value of $0.001 < 0.05$, which indicates that the electronic services quality has a significant effect on customer loyalty.

If the service received or felt is in accordance with what is expected, then the service quality is perceived as good and satisfying by the customer. It can be concluded that the service quality depends on the ability of service providers to meet the expectations of the community (service recipients) consistently.

Results of this research support the research conducted by Sundaram et al. (2017), Al-Dweeri et al. (2017), Susanto and Subayyo (2019), Anzie and Arifin (2017), Darmawan et al. (2017), Wibowo et al. (2018) which states that the quality of electronic services affects customer loyalty.

Effect of Customer satisfaction on Customer loyalty

Based on the test results, it was found that customer satisfaction was 0.189 with a significant value of $0.033 < 0.05$, which indicates that customer satisfaction has a significant effect on customer loyalty.

Customer satisfaction that has been properly fulfilled by a company can create an emotional attachment to the company so that any products and services offered by a company will be in demand by loyal customers. It can be said that customer satisfaction affects customer loyalty.

This is consistent with research conducted by Al-Dweeri et al. (2017), Susanto and Subayyo (2019), Darmawan et

al. (2018), Anzie and Arifin (2017) which state that customer satisfaction affects customer loyalty.

The effect of company image on customer loyalty

Based on the test results, it is obtained that the company image is 0.304 with a significant value of $0.010 < 0.05$, which indicates that the company image has a significant effect on customer loyalty.

The existence of a corporate image comes from experiences or corporate communication efforts on the basis of company sustainability and profit. If the company image is considered good by community and is embedded in the memory of consumers, it can affect the increase in customer loyalty.

This is consistent with research conducted by Darmawan et al. (2017), Ashraf et al. (2018), Anzie and Arifin (2017) which state that company image affects customer loyalty.

Effect of Electronic Service Quality on Customer loyalty is mediated by Customer satisfaction.

Based on the test results, it was found that the electronic services quality on direct customer satisfaction was 0.798 and customer satisfaction on customer loyalty was 0.189, so that the value of $0.798 \times 0.189 = 0.151$ was obtained. This means that customer satisfaction can mediate the influence between electronic service quality and customer loyalty.

Effect of Electronic Service Quality on Customer loyalty is mediated by Company image

Based on the test results, it is obtained that the electronic services quality on the company image directly is 0.889 and the company image on customer loyalty is 0.304, so that the value of $0.889 \times 0.304 = 0.243$ is obtained. This means that the company image can mediate the effect between electronic service quality and customer loyalty.

5. CONCLUSION AND SUGGESTION

5.1 CONCLUSION

Based on the research results obtained, several conclusions can be stated as follows:

1. There is positive and significant effect of Electronic Service Quality on Customer satisfaction of Telkomsel.
2. There is positive and significant effect of Electronic Service Quality on Company image of Telkomsel
3. There is positive and significant effect of Electronic Service Quality on Customer loyalty of Telkomsel.
4. There is positive and significant effect of Customer satisfaction on Customer loyalty of Telkomsel.
5. There is positive and significant effect of Company image on Customer loyalty of Telkomsel.
6. Customer satisfaction can mediate relationship between Electronic Service Quality to Customer loyalty of Telkomsel.
7. Company image can mediate relationship between Electronic Service Quality to Customer loyalty of Telkomsel.

7.1 SUGGESTIONS

Based on the results of the research and discussion in the previous chapters, some suggestions can be made which are expected to be useful for various parties who need the following:

1. The quality of electronic services directly affects customer satisfaction, company image and customer loyalty. For this reason, it is recommended for Telkomsel management to optimize the MyTelkomsel application such as an application design that can provide detailed information, easy transactions, reliability of applications that can order products directly, transaction security and better services.
2. Directly customer satisfaction affects customer loyalty. For this reason, it is suggested that company management can create high satisfaction for its customers by means of ease of ordering, accurate information, tracking order history and guaranteeing the suitability of the product ordered.
3. Directly company image affects customer loyalty. For this reason, it is recommended for Telkomsel management to optimize the MyTelkomsel application such as application design, application reliability and transaction security so that the company's image is better and sticks in the minds of consumers.
4. For other researchers, it is expected to expand the research object and add several other variables that can affect customer satisfaction, company image and customer loyalty.

REFERENCES

- Al-dweeri, R.M., Z.M. Obeidat, M. A. Al-dwiry, M. T. Alshurideh and A.M. Alhorani. 2017. The Impact of E-Service Quality and E-Loyalty on Online Shopping: Moderating Effect of E-Satisfaction and E-Trust. *International Journal of Marketing Studies*; Vol. 9, No. 2.
- Anzie, L. Purnanta and Z. Arifin. 2017. Pengaruh Kualitas Layanan Terhadap Citra Perusahaan, Kepuasan dan Loyalitas Pelanggan (Study on Nasabah Pengguna Produk Tabungan BCA di wilayah Rungkut Mapan, Surabaya). *PROFIT. Jurnal Administrasi Bisnis. Universitas Brawijaya*. Hal. 9-22.
- Ashraf, Sarfraz, R. Ilyas, M. Imtiaz and S. Ahmad. (2018). Impact of Service Quality, Corporate Image and Perceived Value on Brand Loyalty with Presence and Absence of Customer Satisfaction: A Study of four Service Sectors of Pakistan. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 452–474.
- Aydin, S. and Ozer, G. 2005. The analysis of antecedents of customer loyalty in the Turkish mobiletelecommunication market. *European Journal of Marketing*, Vol. 39 No. 7/8, pp. 910-25.
- Darmawan, Didit, R. Mardikaningsih and S. Hadi. 2017. The Effect of Service Quality, Customer Satisfaction and Corporate Image on Customer Loyalty in the banking sector in Indonesia. *IOSR Journal of Business and Management (IOSR-JBM) Volume 19, Issue 11. Ver. VI*. Hal. 46-51.
- Darmawan, G. Septian. 2018. Pengaruh Kualitas Layanan Terhadap Loyalitas Pelanggan Melalui Citra Perusahaan Dan Kepuasan Pelanggan (Study on Nasabah PT. BRI (Persero) Tbk Unit Bantur). *Jurnal Unitri*.
- Harrison, Shirley, 2005. *Marketers Guide To Public Relations*. New York: John. Willwy And Sons, Inc
- Kasali, Rhenald. 2009. *Manajemen Periklanan, Konsep dan Aplikasinya di Indonesia*. Jakarta: Pustaka Gramedia.
- Kotler, Philip & Gary Armstrong. 2014. *Principle Of Marketing*, 15th edition. New Jersey: Pearson Prentice Hall.
- Kotler, Philip and Kevin Lane Keller. 2016. *Marketing Management*. 15th, Global Edition Pearson Education Inc.
- Lasyakka, Bintang. 2015. Faktor-Faktor Kualitas Eservice yang Berpengaruh terhadap Perceived Value pads Website E-Commere Layada.co.id (Studi Pada Warga Lingkungan Rw.3 Kelurahan Dinoyo Kecamatan Lowokwaru Kota Malang). *Jurnal Administrasi Bisnis (JAB) Vol. 24 No. 2 Juli 2015*
- Lupiyoadi, Rambat. 2014. *Manajemen Pemasaran Jasa*. Edisi 3. Jakarta: Salemba Empat.
- Parasuraman, A, Valerie A. Zeithaml, dan Arvind Malhotra. 2005. E-S-QUAL A MultipleItem Scale for Assessing Electronic Service Quality. *Journal of Service Research*, Volume 7, No. X, Month 20051-21
- Shafiq, Ali, Md I. Mostafiz and M. Taniguchi. 2019. Using SERVQUAL to determine Generation Y's satisfaction towards hoteling industry in Malaysia. *Journal of Tourism Futures*. Published by Emerald Publishing Limited.
- Sundaram, V., D. Ramkumar dan P. Shankar. 2017. Impact of E-Service Quality on Customer Satisfaction and Loyalty Empirical Study in India Online Business. *KINERJA Volume 21, No. 1, 2017 Page. 48-69*.
- Susanto, P. Herlanies dan I. K. Subagja. 2019. Pengaruh Kualitas Layanan, Kepuasan Nasabah Dan Citra Perusahaan Terhadap Loyalitas Nasabah Pt. Bank Central Asia Tbk Kantor Cabang Pondok Gede Plaza. *Jurnal Manajemen Bisnis Krisnadwipayana*. Vol. 7 No. 1. 69-84.
- Sutojo, Siswanto. 2011. *Membangun Citra Perusahaan*. Jakarta: PT Damar Mulia Pustaka.
- Tabachnick Barbara G., dan Linda S. Fidell. 2014. *Using Multivariate Statistics*. Essex: Pearson Education Limited.
- Tjiptono, Fandy. 2015. *Strategi Pemasaran*. Edisi 4. Yogyakarta: Penerbit Andi Offset.
- Zeithaml, Valerie A. And Mary Jo, Bitner. 2013. *Service Marketing: Integrating Cutomer Focus Across The Firm*. Sixth Edition. New York: McGraw-Hill Companies.

- Kotler, Philip dan Gary Armstrong, (2012). *Principles of Marketing*, Edisi 14, New Jersey: Prentice-Hall
- Kotler, Phillip and Kevin Lane Keller, (2016). *Marketing Management*, 15th Edition, Pearson Education Inc.
- Morgan, R.E., Strong, C. and McGuinness, T. (2003), "Product-market positioning and prospector strategy", *European Journal of Marketing*, Vol. 37 No. 10, pp. 1409-39.
- P. Pomsanam, K. Napompech ., S. Suwanmaneepong (2014). Factors Driving Thai Consumers' Intention to Purchase Organic Foods. *Asian Journal of Scientific esearch* 7, 434-446.
- Richards, I., Foster, D. and Morgan, R. (1998), "Brand knowledge management: growing brand equity", *Journal of Knowledge Management*, Vol. 2 No. 1, pp. 47-54.
- Sharif, A.M. (2008), "Information, knowledge and the context of interaction", paper presented at European and Mediterranean Conference on Information Systems (EMCIS), Dubai, 25-26 May.
- Wang, H.-J. (2016), "Green brand positioning in the online environment", *International Journal of Communication*, Vol. 10, pp. 1405-1427, available at: <http://ijoc.org/index.php/ijoc/article/view/3996/1598>.
- Wang, H. J. (2017). A brand-based perspective on differentiation of green brand positioning: A network analysis approach. *Management Decision*, 55(7), 1460–1475. <https://doi.org/10.1108/MD-04-2016-0251>.

GROUP ANALYSIS NON-USER OF INTERNET BANKING USING CONSUMER RESISTANCE TO INNOVATION APPROACH IN INDONESIA

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Abstract

The innovation of internet banking services in line with technological advances that benefit customers, but Internet banking usage rates still less than the awareness of innovation. This study wants to reveal the group of customer non-user internet banking groups that aware use of internet banking in Indonesia using consumer resistance to the innovation approach and create a profile of each group. This study uses a two-step cluster analysis with the variable of demographic segmentation, consumer behavior, and consumer resistance to innovation. This study reaches out to customers across Indonesia and collects 900 responses online questionnaire from non-user of internet banking. This study revealed that non-users of internet banking in Indonesia consists of three groups, firstly Postponer group, customers who know the technology of internet banking but still have not used it, secondly Opponent group, customers who want to use internet banking and still not know when to use them because they weigh the risks of the use, and the third is Rejector group, customers who have a negative view towards internet banking because they were less able to adapt to new technology. This study expected to give a view of the banking industry to approach each customer group.

Keyword: Consumer resistance to innovation, Internet banking, two-step cluster, Consumer Behavior

1. INTRODUCTION

Technology has an important role in today's market. Technological innovations have significantly changed the way services are provided to consumers in various market sectors Bitner et al study (2000, as cite in Guerrero et al., 2005). Banking is one of the sectors that the technological progress is monitored closely and used widespread (Suleymanov, 2019). Banking industry revolution and the globalization of the market have an impact to all companies. Most companies try to attract customers and win the competition in the highly competitive electronics market (Harahap, 2020).

Bank develops services according to customer needs and services develop in line with technological developments and lifestyles. Banks need reliable information systems that can be accessed easily by their customers to support operational success. This information system certainly depends on online information technology such as Internet banking. Internet banking is a banking transaction using the internet network which makes it easier for customers to make transactions (Ayu, 2012). Internet banking answers the customer demands, its serve service fast, safe, convenient, inexpensive, timeless and can be accessed from anywhere, both cell phones, computers, and laptops Suryasa et al., study (2018, as cited in Melaning & Giantari, 2019) internet banking, besides providing value added for their customers, is a means to cut costs and increase efficiency (Laukkanen et al., 2008). Internet banking has attained a widespread acceptance not only in developed countries but also has gained a foothold in developing countries (Patel & Patel, 2018)

Internet banking services in Indonesia have been started since 1998. According to the Indonesian Internet Service Providers Association (APJII), internet user's year of 2018 in Indonesia have reached 171.17 million people. This is equivalent to 64.8% of Indonesia's total population of 264.16 million. Based on the 14th February 2013 MARS Indonesia survey the awareness' of internet banking in Indonesia which is publish in "34% of Customers are Internet Banking Literate", it was revealed that out of 1,710 customers in 5 cities (Jakarta, Bandung, Semarang, Surabaya, Medan), the internet banking awareness level was 34.7% and internet banking penetration was 8.1% and Ngasuko (2019) stated that adult internet banking users are still around 23.41% from total user. Low level of penetration of internet banking usage among bank customers in Indonesia shows that consumers are slow to

change their preferences for bank services to new services. Internet banking as a new banking service does not replace traditional banking services or non-electronic services. Internet Banking is uneven and there are barriers to adopting the service (Hojjati et. al., 2015). All customers do not have the same reaction to the barriers of technology adoption, there are groups of customers who not use, or will use, but have not adopted the internet banking (Brahim, 2015). The innovation resistance is a mediating factor influencing consumers' intention to purchase (Yao and Lee, 2016)

The theory of Consumer Resistance to innovation by Ram and Sheth explains the inhibiting factors in changing consumer preferences. Consumer Resistance to innovation is a common response for consumers because innovation requires changes in habits and practices in using services Ram and Sheth study (1989, as cited in Laukkanen et al., 2007). Consumer resistance to innovation is explained by several different barriers, which inhibit or prevent innovation adoption (Laukkanen et al., 2007) and identifying adoption barriers arguably represent a greater opportunity for practitioners (Laukkanen, 2016).

This study express the contention from the light of the earlier literature to discuss and analyze a group of non-user of internet banking from customer resistance to innovation approach, see the unseen pattern from the cluster of non-user internet banking consumer in Indonesia. This study provides the result, draw the conclusions and present the implications for management.

2. LITERATURE REVIEW

Information communication technology has changed the delivery of banking services through the use of the internet as an effective medium (Chauhan et al., 2019). The use of internet has become vital in the future development of retail banking (Bradley and Stewart, 2003 as cited in Chauhan et al., 2019). Internet banking also called as online banking it is the equivalent of accessing a bank's services via the Internet (Szopiński, 2016), it is a web-based banking method which has been developing with new solutions for security issues replacing the interactive software which allows for home and office banking (Yıldırım, 2017). Internet banking involves several services such as account balance checking, money transfers, payment, and gathering information on several subjects which bank customers can perform from their homes and offices through a telecommunication network Aparikyan's study (2000, as cited in Yıldırım, 2017). Today, banks are being replaced by mobile phones, tablets, and laptops (Keskar & Pandey, 2018)

Consumer resistance model introduced by Ram and Seth (1989) is used to explain consumers' intention to use and consumers' rejection. Consumer resistance to innovation as a form of reaction or negative attitude to new products and services that trigger change or upset the status quo (Ram, 1987; Ram and Sheth, 1989; Heidenreich and Spieth, 2013 as cited in Mani & Chouk, 2018). Heidenreich and Kraemer (2015) argued that consumer innovation resistance is a significant reason for new product failure.

Mittelstaedt et al. study (1976, as cited in Laukkanen et al. 2008) evince three possible reason for non-adoption of an innovation, first when individual decide on the basis of information available that it is not for him, second when individual symbolically accepted but for some reason unable to use the innovation, third is when innovation symbolically accepted but the individual postpone the use until an appropriate or in right situation. Szmigin & Foxall study (1998, as cited in Yao & Lee, 2016) suggesting three form of innovation resistance (rejection, postponement, and opposition) and Laukkanen (2008) categorize the non-adopter of internet banking customer into three groups based on their intentions to start using the service and explored differences in their reasons for not using internet banking, the categories are, postponers, opponents and rejectors.

The first group is postponers or procrastinators, Postponers are those who delay the decision of adopting innovation until a suitable time (Laukkanen et al., 2008), this group are consisting of consumer that intent to use the innovation within a year, they won't do that at soon, because they are waiting for a suitable circumstance and time (Szmigin & Foxall 1998 as cited in Yao & Lee, 2016), postponement refers to the behavior that users postpone adoption even though they find the innovation is acceptable at the moment Gatignon & Robertson study (1989, as cited in Chen, 2019)

The second group is opponents, opponents are who hold a negative attitude toward the innovation (Kleijnen, Lee, & Wetzels, 2009), this group intends to use innovation but do not know when to use it, certainly not within a year, when consumers consider the innovation is unacceptable, they will resist adopting it uncompromisingly, and when they convinced that the new product is in appropriate, they would pass on negative word of mouth to prevent the spreading of this innovation. Opponents is an ambiguous adoption state of users vis-à-vis the innovation. It could either lead to rejection or adoption after a relatively long time (Kuisma et al., 2007 as cited in Chen, 2019)

The last group is rejectors, this group consist of customer that do not have the intention of using innovation at all (Lian & Yen, 2013). Being a rejector doesn't mean the consumers are lack of awareness or ignorance about the

new products, the innovation (Szmigin & Foxall 1998 as cited in Yao & Lee, 2016) rejection implied consumers do not interest on innovations after evaluating the innovations (Rogers 1983, as cited in Yao & Lee, 2016), rejection is the strongest form among the three resistance behaviors (Patsiotis et al., 2013 as cited in Chen, 2019) resistance leads consumers to react in three ways, rejection, postponement, and opponent (Yao & Lee, 2016) and Laukkanen (2016) stated that the adoption barriers (Ram & Sheth, 1989) suggest are empirically being a valid predictors of consumer adoption, postponement, and rejection behavior, and the service type significantly affects consumers' adoption decisions (Nysveen et al., 2005, Laukkanen, 2016).

Rotchanakitumnuai & Speece study (2003, as cited in Laukkanen et al., 2008) state there is a few researches that addressed the barriers to internet banking adoption. Ram and Seth (1989) as cited in Salim (2019) discovered that the causes of resistance to innovation derive from one or more barrier to adoption, these barriers are use, value, risk, image, and traditional barriers. Consumer resistance to an innovation is caused by functional and psychological barriers, the barriers to consumer resistance to innovations consists of functional barriers (usage, value dan risk barriers) and psychological barriers (tradition and risk barriers) Ram & Seth study (1989, as cited in Laukkanen, 2008).

The usage barriers arise when innovation incompatible with work process, practices or habits of existing consumers (Ram & Seth 1989 as cited in Salim, 2019), usage barrier is mostly related to the usefulness of an innovation and the changes required from consumers. Usage barrier could relate to the service's usability and necessary changes from the consumers' perspective (Laukkanen et al., 2007). People adopt new innovations when it is believed to be more useful, such as increasing efficiency and effectiveness (Lin & Chen, 2012). Conflicts with existing usage patterns may cause consumers to postpone their innovation decision (Kleijnen, 2009 as cited in Salim 2019), complexity of the service in general is perceived to prevent some consumers from adopting the service Howcroft et al., Black et al., study (2002, as cited in Laukkanen et al., 2007). Complexity is defined as the extent to which an innovation can be considered relatively difficult to understand and use Rogers & Shoemaker study (1983, as cited in Min et al., 2019).

The value barrier is a resistance to the use of goods or services when they do not meet the perception of performance-to-price value by the consumer (Rammile & Nel, 2012). Value barrier refers to the lack of monetary and performance value of an innovation Ram and Seth study (1989 as cited in Laukkanen, 2008), Consumers have shown more concern about monetary benefits while adopting internet banking (Lee et. al., 2005), if an innovation does not offer a good comparison of performance and replacement price, there is no benefit for customers changing the way they perform their task. Information and direction given by a bank are the real cause of low utilization of internet banking (Karjaluoto et al., 2010), the value barrier is the strongest inhibitor of innovation adoption and usage intention for mobile and Internet banking services (Laukkanen, 2016). Risk barrier is the third functional barrier, risk barrier refers to the degree of threat and danger inherent in an innovation (Laukkanen, 2016) innovation often requires some degree of potential risk, as innovation is inherent in uncertainty. Due to the perception of uncertainty, risk is considered a critical factor that prevents individuals from adopting the innovation (Luo et al., 2010). Tradition barrier has implications for an innovation to cause changes in the daily routine of consumers. This routine can be very important for consumers. Consumers also have social and family values and social norms. Behavior contrary to values and norms will cause obstacles to tradition. Image barrier comes from stereotypical thinking about an innovation. Each innovation achieves a certain identity from its origin, such as including which product category they come from, which country or brand of the innovation. Therefore, in general, the image barrier can be considered as the image of an innovation Ram and Seth study (1989 as cited in Laukkanen, 2008).

Talwar et al., (2020) study customer resistance to digital innovation, they stated that consumer resistant behavior is just as important to understand as adoption behavior. (Abbas et al., 2017) stated that the best communication channels are one of the factors influencing the consumer resistance to innovation. Atienza (2018) study the level of resistance to innovation used five barriers (usage, value, risk, tradition and image barriers) to the user of Internet banking in Philippines with the result that risk barrier was the strongest barrier and usage is the weakest barrier

The theory model of consumer resistance to innovation is a theory that is widely used in research in international journals to examine factors that influence consumers barrier to innovation and then consumer groups can be formed based on the similarity of these factors by grouping consumers based on similar characteristics (Manero, 2018). Customer segmentation is described as the practice of grouping customer into the distinct classes (Makana, 2020). Every customer banking has differences in two segmentation factors, the demographic variable, and consumer behavior. Measuring customers demographic will helps bank to understand group-behavior of the customer and market segmentation can lead to insights about the basic process of consumer behavior (Rashid & Hassan, 2009), Demographic differences among individuals help explain important aspects of human decision-making (Laukkanen, 2016), segmentation is carried out using geographic, demographic, psychographic,

and consumer behavior factors (Kotler & Keller, 2009), this study using two segmentation, demographic and consumer behavior to disclose the initial grouping of bank customers for non- user of internet banking users in Indonesia.

Several studies have examined consumer resistance to internet banking by examining factors that hinder bank customers from using internet banking and classifying non-user of internet banking into groups based on the obstacles in the adoption of Internet Banking Innovations. Laukkanen (2007) study barriers to the adoption of internet banking that become consumer resistance to internet banking, Kleijnen et al. (2009) investigating customer resistance to innovations. Brahim (2015) study the typology resistance to e-banking adoption by Tunisian, Brahim study uses the consumer resistance variable to innovation and cluster analysis to reveal the non-user of internet banking groups, the results show that there are three groups of non-internet users in Tunisia who are divided into postponers (procrastinators), opponent (opponents), rejectors (rejectors) who have different obstacles to the adoption of internet banking innovation. There are also different barriers for each of the three groups of non-users of Internet Banking in Finlandia (Laukkanen et al., 2008).

Based on the three reaction of consumer because of resistance to innovation and the form of innovation resistance (Szmigin & Foxall 1998 as cited in Yao & Lee, 2016), barriers to adoption (Ram and Seth, 1989 as cited in Salim, 2019), and customer demographic and consumer behavior segmentation (Kotler & Keller, 2009) this study wants to analyze a group of non- user customers internet banking with a consumer resistance approach to innovation in Indonesia and investigates the differences in the resistance to internet banking between these group of consumers.

3. METHOD

Based on literature review this study used a descriptive quantitative research method focus on grouping of demographic segmentation, internet user behavior and explore the barrier of consumer resistance to innovation consumer of non-user internet banking. This study employed the survey method in which the questionnaires was developed from consumer resistance to innovation study by Laukkanen et al.(2007) theory of consumer demographic segmentation and consumer behavior expressed by Kotler & Keller (2009), and using internet usage behavior questionnaire questions from the internet user survey conducted by APJII (2014), functional & physical Barriers question developed using Likert scale statement. Data collection was carried out by online questionnaires, sent out to 900 respondents of non-user internet banking in Indonesia. A reliability analysis using Cronbach's alpha was run on a 19 items questions, Pearson Product Moment correlation used for validity test all items of question by comparing r count variable with r table from 900 questionnaires which is equal to 0.065, and all question items are declared valid, and alpha Cronbach's 0.8 greater than 0.7, our variables are reliable.

The main objective of cluster analysis is to place a set of objects into two or more groups based on the similarity of objects on the basis of various characteristics (Hair et al., 2010) through the homogenates, this study focus to three targets, first taxonomy description, data simplification and relationship identification. Two-step cluster technique used to explore and identifies group by pre-clustering and do the hierarchical methods. Şchiopu (2010) used of two-step clusters to identify bank customer profiles. The variables used consisted of metric variables (continuous) and non-metric variables (categorical). The SPSS program provides a Two Step Cluster option to handle cluster analysis that contains metric and non-metric data (Simamora, 2005).

4. RESULT AND DISCUSSION

Result

Two Step Cluster analysis used in this research data form three groups or clusters automatically, 46.7% in the first cluster with 420 respondents, 35% in the second cluster with 315 respondents and 18.3% in the third cluster with 165 respondents (see Table 1.1).

Table 1.1 Cluster Distribution

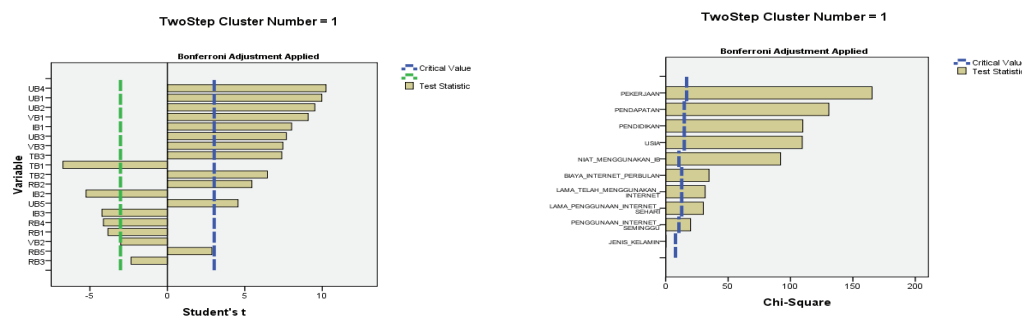
	N	% of Combined	% of Total
Cluster 1	420	46.7%	46.7%
2	315	35.0%	35.0%
3	165	18.3%	18.3%
Combined	900	100.0%	100.0%
Total	900		100.0%

The grouping was carried out on categorical and continuous variables which resulted in the formation of three clusters, then a profile was made of each group that was formed so that analysis and interpretation could be carried out. Profiling of categorical variables was carried out using SPSS 17 using the chi-square test with one

critical line (Critical Value). The variable is considered significant to differentiate a cluster from other clusters if the test results of these variables exceed the critical value. Meanwhile, the formation of profiles on continuous variables was carried out using SPSS 17 with Student's t test with two critical lines. Variables that are considered significant if the test results of these variables exceed the critical line. If the statistical test line is pointing to the right it means the variable made a positive contribution, and if the statistical test line is pointing to the left it means that the variable made a negative contribution. Variables that exceed the critical line then these variables contribute to cluster formation. Chi-square graphs forming the profile of the first cluster or group based on categorical variables (Figure 1.1)

The first cluster consisted of 420 respondents with the most dominating educational status in this cluster are the undergraduate graduates, most of them are private employees with range of age 21 to 30 years old, as many as 193 respondents aged 31 to 40 years as many as 176 respondents, the average income in this group was 2,000,000 to 5,000,000 rupiah, using the internet per month around 100,000 to 300,000, using internet for more than 5 years, daily uses the internet more than 9 hours a day, more than 5 times a week and interested in using internet banking more often.

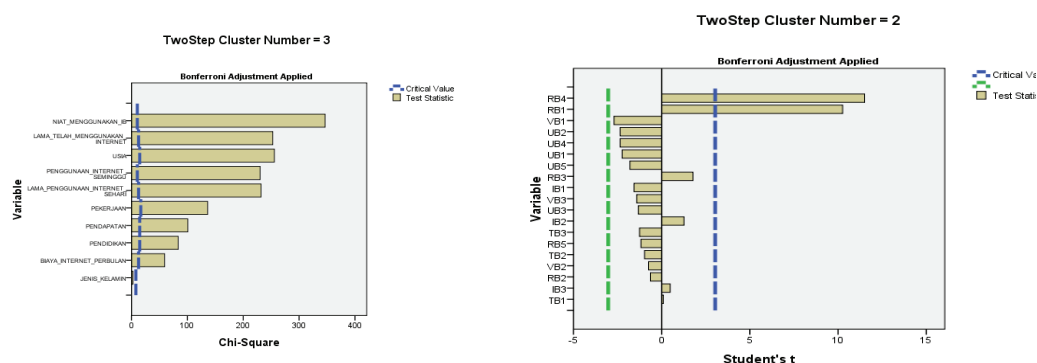
Figure 1.1 Chi-square and Student's t Cluster 1



The first cluster assumed that internet banking was easy to use, not complicated to use, the service was fast, and how to use it was clear and easy to understand, and did not mind if internet banking services required periodic PIN changes. They also think that internet banking is economical and can assist in managing financial matters. The risk in using internet banking is not felt by this first cluster because they are not worried about the disconnection of their internet connection when using the service, there is no concern about losing their internet banking PIN code. They did not like to visit banks and meet tellers to transact in person, they thought that internet banking services were better than customer service and other bank services. They hold a positive view of internet banking services and consider them easy to use, they think that new technology is not complicated to use.

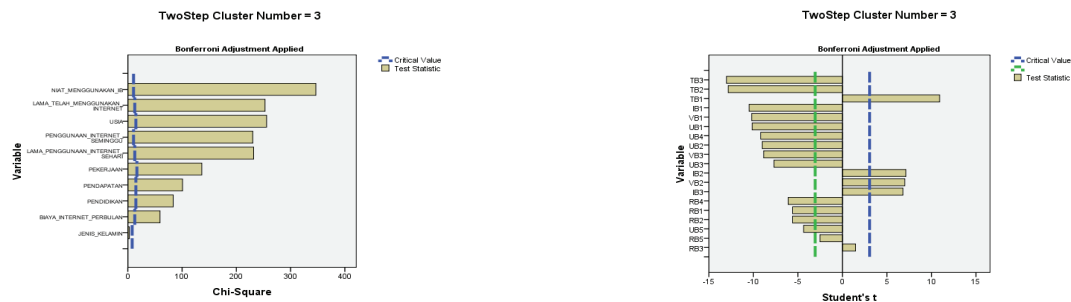
The profile of the results of clusters formed by chi-square and student's t from the second cluster in Figure 1.2, the second cluster consisted of 315 respondents, most of them are Senior High Schools - students from 21 to 30 years old and 17 to 20 years old. The income of this cluster is less than 2,000,000, with average use of the internet is more than 5 years, frequency of using internet more than 5 times a week, more than 9 hours per day, they are interested in using internet banking but don't know when. Respondents in this cluster have a significant variable focusing on the risk of using internet banking they are worried when using internet banking services, the connection will disappear or disconnect which is considered to be detrimental as well as concerns about the risk of losing the internet banking PIN code and fear of being misused by people who not responsible.

Figure 1.2 Chi-square and Student's t Cluster 2



The profile of the cluster results was formed by the chi-square and student's t of the third cluster see Figure 1.3, the third cluster consisted of 165 respondents - 18.3% of the total data. Most of them are the undergraduate graduates who work as entrepreneurs with dominant age range at the age of 41 to 50 years old. The income rate in cluster three is around 5,000,000 to 10,000,000 rupiah with an average monthly internet cost of less than 100,000 rupiah. Most of the respondents use the internet for less than 1 year, use the internet less than 1 hour a day, with 2 to 5 times a week, they are interested in using internet banking more often

Figure 1.3 Chi-square and student's Cluster 3



Respondents in the third cluster stated that using internet banking is difficult and complicated, the service is slow, cluster three objected if the internet banking service required changing PIN periodically because it was a hassle. Respondents in cluster three thought that internet banking was uneconomical and useless in managing financial matters.

There is minimal risk for cluster three in using internet banking because they are not worried about the internet connection being cut off when using the service, they do not believe the receipt from internet banking services can be used as valid proof of payment, and they are not worried about losing the internet banking PIN code.

Discussion

Based on the explanation, it can be seen from the knowledge of cluster one on internet banking, cluster one consists of young adults of productive age who have very broad knowledge of new technology or know the latest technology even though they have not used it but know its function. This cluster already intends to use this service soon or less than 1 year, this group seems delay the decision to adopt the innovation (Laukkanen et al., 2008) and won't adopt it to soon (Szmigin & Foxall 1998 as cited in Yao & Lee, 2016) they postpone adoption even though they find the innovation is acceptable (Gatignon & Robertson, 1989 as cited in Chen, 2019), therefore this group will be named Postponers.

The second cluster consists of adolescents to young adults who are still cautious about the risks of using new technologies that they don't know in depth about, they have an interest in using internet banking but don't know when and for sure not in the near future, this group intends to use innovation but do not know when to use it (Kleijnen et al., 2009) This group will be named as an Opponent (Opponent) cluster where in nature they still do not want to use service because they are still looking for the service.

The third cluster consists of adults to the elderly who do not use technology in their daily lives, their internet usage is less than one hour per day, they don't like new technology because they find it difficult to adapt to using new technology, they prefer transactions that interact directly with tellers and customers services, and have no intention of using internet banking at all. This group do not interest on innovations after evaluating the innovations (Rogers 1983, as cited in Yao & Lee, 2016), they not adopt at all (Lian & Yen, 2013). This third cluster is called the rejector according to its nature this group rejects the interest in using new technology.

Limitation

In this study, segmentation of consumer has not been done specifically, it is necessary to improve the segmentation analysis by comparing the urban and regional areas by examining each province in order to improve the accuracy of data on grouping non user of internet banking customer in every province in Indonesia. This will provide a lot of insight into the right marketing of internet banking for each region, this study just looking at the grouping of non-user internet banking generally in Indonesia using non-probability techniques, further research can use probability sampling for more accurate overview of the group of non-user of internet banking customer in Indonesia.

5. CONCLUSION

This study results is found that non-user of internet banking consumer in Indonesia are divided into three cluster with different characteristics, the first cluster consist of people who know internet banking technology but have not used it and will use it in the near future. The second cluster consist of customers who think about the risks of using internet banking but will still use internet banking because they are still studying internet banking innovation and the third cluster consist of people who have a negative view of internet banking technology because they prefer conventional services.

The first cluster is a potential user for internet banking services, this is insight for banking companies for conducting the marketing strategy based on cluster profile, the preference for internet banking clear and recognizable. Educate about the advantage of internet banking need to be done if we want to target the second cluster, this cluster consist of teenagers and young adults that being the potential user of internet banking, more advertising and introduce the product knowledge will reduce barriers to this cluster in using internet banking services. The third cluster, which consists of many adults to the elderly who do not understand technology, should be focused on being given an approach through the service demonstration so that they can learn, non-users are yet to identify the true benefits of these service innovations or banks have not demonstrated them well enough (Laukkanen, 2016). Banks can either “pull” customers by actively marketing the benefits of the service innovation, or “push” consumers towards online channels by increasing service fees in branch offices (Laukkanen, 2016). Laukkanen and Kiviniemi (2010) demonstrate that the value barrier falls significantly if banks offer sufficient information and guidance.

For future research this study suggest to be more specifically in segmenting, using variables that have not been studied, such as psychographic comparisons between cities and regions by examining each province in order to improve the accuracy of data on bank customer grouping who have not used internet banking in every city in Indonesia.

REFERENCES

- Abbas, M., Nawaz, M. S., Ahmad, J., & Ashraf, M. (2017). The effect of innovation and consumer related factors on consumer resistance to innovation. *Cogent Business & Management*, 4(1), 1312058.
- Atienza, R. P. (2018) Resistance to Mobile and Internet Banking Innovation in Ozamiz City, Philippines. *Journal of Multidisciplinary studies*. Vol 7
- Ayu, S. S. (2012). Pengaruh kepercayaan, persepsi kegunaan, persepsi kemudahan, dan persepsi kenyamanan terhadap minat penggunaan sistem internet banking. *Jurnal Ilmiah Mahasiswa FEB*, 1(1).
- Brahim, S, B. (2015). Typology Resistance to e-Banking Adoption by Tunisian. *Journal of Electronic Banking Systems* Vol 15.
- Chauhan, V., Yadav, R., & Choudhary, V. (2019). Analyzing the impact of consumer innovativeness and perceived risk in internet banking adoption. *International Journal of Bank Marketing*.
- Chen, Q., Lu, Y., & Tang, Q. (2019). Why do users resist service organization's brand mobile apps? The force of barriers versus cross-channel synergy. *International Journal of Information Management*, 47, 274-282.
- Dhorifi, Zumar. (2013). 34% nasabah sudah melek internet banking ([www.marsindonesia.com/new sletter](http://www.marsindonesia.com/new_sletter))
- Guerrero, M. M., Egea, J. M. O., González, M. V. R. (2005). Profiling the adoption of online banking services in the European Union. *Journal of Internet Business*.
- Harahap, D. A. (2020). A Conceptual Model of E-Service Quality at Branchless Banking in Indonesia. *Journal of Internet Banking and Commerce*, 25(2), 1-11.
- Heidenreich, S., & Handrich, M. (2015). What about passive innovation resistance? Investigating adoption-related behavior from a resistance perspective. *Journal of Product Innovation Management*, 32(6), 878-903.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th Edition ed.). New Jersey: Pearson Prentice Hall.
- Hojjati, S. N., Monavvarian, A., & Roozbahani, F. S. (2015). Evaluation of Factors Influencing Internet Banking

- Acceptance by Internet Users in Iran. *International Journal of Advanced Networking and Applications*.
- Karjaluoto, H., Laukkanen, T., & Kiviniemi, V. (2010). The role of information in mobile banking resistance. *International Journal of bank marketing*.
- Keskar, M. Y., & Pandey, N. (2018). Internet banking: a review (2002–2016). *Journal of Internet Commerce*, 17(3), 310-323.
- Kleijnen, M., Lee, N., & Wetzels, M. (2009). An exploration of consumer resistance to innovation and its antecedents. *Journal of economic psychology*, 30(3), 344-357.
- Kotler, P., & Keller, K. L. (2009). *Marketing management*. In P. Kotler, & K. L. Keller, *Marketing management* (p. 7). Pearson Education
- Laukkanen, P., Sinkkonen, S., Kivijärvi, M., & Laukkanen, T. (2007, September). Consumer Resistance and Intention to use Internet banking service. In *Proceedings of the EBRF Conference*, Jyväskylä, Finland (pp. 25-27).
- Laukkanen, T., Sinkkonen, S., Kivijärvi, M., & Laukkanen, P. (2007). Innovation resistance among mature consumers. *Journal of consumer marketing*.
- Laukkanen, P., Sinkkonen, S., & Laukkanen, T. (2008). Consumer resistance to internet banking: postponers, opponents and rejectors. *International journal of bank marketing*.
- Laukkanen, T. (2016). Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the Internet and mobile banking. *Journal of Business Research*, 69(7), 2432-2439.
- Lee, E. J., Kwon, K. N., & Schumann, D. W. (2005). Segmenting the non-adopter category in the diffusion of internet banking. *International Journal of Bank Marketing*.
- Lin, A., & Chen, N. C. (2012). Cloud computing as an innovation: Perception, attitude, and adoption. *International Journal of Information Management*, 32(6), 533-540.
- Lian, J. W., & Yen, D. C. (2013). To buy or not to buy experience goods online: Perspective of innovation adoption barriers. *Computers in Human Behavior*, 29(3), 665–672.
- Luo, X., Li, H., Zhang, J., & Shim, J. P. (2010). Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services. *Decision support systems*, 49(2), 222-234.
- Manero, K. M., Rimiru, R., & Otieno, C. (2018). Customer Behaviour Segmentation among Mobile Service Providers in Kenya using K-Means Algorithm. *International Journal of Computer Science Issues (IJCSI)*, 15(5), 67-76.
- Makana, A. P. (2020). *Customer Segmentation On Mobile Money Users In Kenya* (Doctoral dissertation, University of Nairobi).
- Melaning, A., & Giantari, I. G. A. K. (2019). Technology acceptance application model on internet banking service in BRI Bank Denpasar Indonesia. *International research journal of management, IT and social sciences*, 6(4), 135-146.
- Mohtar, S. B., & Abbas, M. (2014). Consumers Resistance to Innovation. *International Journal of Science and Research (IJSR)*, 3, 12.
- Min, S., So, K. K. F., & Jeong, M. (2019). Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. *Journal of Travel & Tourism Marketing*, 36(7), 770-783.
- Ngasuko, T. A. (2019). *Menakar Pengguna Internet Banking Di Indonesia (Studi Kasus Susenas 2018)*.
- Patel, K. J., & Patel, H. J. (2018). Adoption of internet banking services in Gujarat. *International Journal of Bank Marketing*.
- Puskakom, APJII (2014). *Survey Profil pengguna internet indonesia 2014*. [Online]<http://ajidenpasar.or.id/asset/bankdata/Survey%20APJII%202014%20v3.pdf>

- Rashid, M., & Hassan, M. K. (2009). Customer demographics affecting bank selection criteria, preference, and market segmentation: study on domestic Islamic banks in Bangladesh. *International journal of Business and Management*, 4(6).
- Rammile, N., & Nel, J. (2012). Understanding resistance to cell phone banking adoption through the application of the technology acceptance model (TAM). *African Journal of Business Management*, 6(1), 86-97.
- Salim, B. T. (2019). CUSTOMER RESISTANCE TO INNOVATION ACCEPTANCE. *Редакционная коллегия*, 79.
- Şchiopu, D. (2010). Applying TwoStep cluster analysis for identifying bank customers' profile. *Buletinul*, 62, 66-75
- Simamora, Bilson. (2005). *Analisis Multivariat Pemasaran*. Jakarta : Gramedia Pustaka Utama.
- Suleymanov, Q., Farzaliyev, M., & Nagiyev, M. (2019). The Effects of Innovations on Bank Performance: The Case of Electronic Banking Services. *Recent Trends in Science and Technology Management*, (2), 20-29.
- Szopiński, T. S. (2016). Factors affecting the adoption of online banking in Poland. *Journal of Business Research*, 69(11), 4763-4768.
- Talwar, S., Talwar, M., Kaur, P., & Dhir, A. (2020). Consumers' resistance to digital innovations: a systematic review and framework development. *Australasian Marketing Journal (AMJ)*.
- Yao, C., & Lee, Y. C. (2016). An empirical study on consumers' resistance to mobile shopping service: The case of shopping on WeChat Friends' Circle. *Indian Journal of Science and Technology*, 9(46), 1-5.
- Yıldırım, İ. (2017). Internet banking and financial customer preferences in Turkey. In *Online Banking Security Measures and Data Protection* (pp. 40-57). IGI Global.

THE IMPACT OF CUSTOMER INTERACTIONS IN SOCIAL MEDIA MARKETING ACTIVITY ON BRAND AWARENESS, ELECTRONIC WORD OF MOUTH (EWOM) & PURCHASE INTENTION FOR INTERNET PLAN BASED ON IMEI (TAU PLAN)

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Abstract

Manuscript Type: *Research Paper*

Research Aims: *This study aims to determine the effect of customer interaction in social media marketing activity on Purchase Intention for internet based on IMEI (TAU Plan)*

Methodology: *This research uses quantitative research methods with a causative relationship approach. The sample in this study amounted to 230 respondents with a sampling technique used in this study was purposive sampling.*

Research Findings: *Based on research results, customer interaction on Brand Page Commitment has a positive and significant effect on building Brand Awareness and creating eWOM. While Viral Advertisement & Brand Page Commitment has positive but not directly significant on Purchase Intention. Brand Awareness, Opinion Seeking & eWOM through social media have a positive and significant effect on Purchase Intention for TAU Plan.*

Theoretical Contribution/Originality: *The customer interaction on brand page commitment, Opinion Seeking activity, Viral Advertisement in social media are proven to have direct & indirect effect on Purchase Intention but also has a positive and significant effect through Brand Awareness & eWOM.*

Practitioner/Policy Implication: *In this research, it can be seen that the Indonesian people like to interact on marketing campaign/content from social media. Therefore, Brand Page Commitment, Viral Advertisement & Opinion seeking activity can be leveraged to increase customer interaction so it can be focused more to increase Purchase Intention for TAU Plan.*

Research limitation: *This study only examines Telkomsel prepaid smartphone users, therefore subsequent studies should examine other operators & different internet plan so that more accurate conclusions can be drawn about the characteristics of the Indonesian people in responding to marketing activities via Social Media.*

Keywords: Brand Awareness, eWOM, Opinion Seeking, Purchase Intention, Viral Advertisement

Operators are developing the digital ecosystem in Indonesia through Device, Network & Application (DNA) development in order to achieve digitalized Indonesia people.

Device/handphone is the enabler of going to digital era. 40% of the handphones sold in Indonesia were dominated by Chinese brand smartphone from all segments (GFK, 2017).

The current profile of Indonesia citizens in social media is identified around 120 Million of them are using social media through handphone & 45% of them are active mobile users (We Are Social, 2018).

It shows the correlation between smartphone users & social media users in Indonesia. These active social media users have huge potential to be utilized for certain service promotion or marketing program to increase customer engagement which eventually increasing sales (Yadav & Rahman, 2017); (Trainor, Andzulis, Rapp, & Agnihotri, 2014).

Because of the social media function covers all sales stage, then social media marketing has higher acceptance in marketing activity (Yadav & Rahman, 2017)

The smartphone users mentioned above are the focus of TELKOMSEL in developing DNA Ecosystem in order to

get additional revenue. Composition of smartphone users at TELKOMSEL mostly comes from smartphones with Android operating systems, followed by iOS, and so on. This information is in line with the information conveyed in the GFK data that the highest sales in Indonesia come from Android smartphones (GFK, 2017).

TELKOMSEL recorded 35% from 139 million subscribers are using smartphone. 45% of them are using android smartphone. These 35% smartphone users are potential to be leveraged using a new device plan (Rachman, 2014). Based on this condition, TELKOMSEL launched an innovation in the form of an-based internet plan *IMEI* called the TAU Plan.

The TAU plan is a program brand in the form of internet plans offered to *smartphone* users in the TELKOMSEL with *IMEI* records of the smartphone has been registered in the database. The TAU plan has several variants, namely:

- 1. Regular TAU:** The plan is offered for smartphone customers with *pricing* based on the zone scheme
- 2. TAU Dynamic:** This plan is designed for the *Business to Business* concept, which is offered to partners offered *device* who will later purchase this plan which bundled with starterpack & preloaded bonus for the customers.
- 3. TAU Lite 6 & 7:** This plan aims to make these 2G & 3G customers migrate to *smartphones* 4G.

Since then TAU plan is always associated with every device related initiative from TELKOMSEL.

Based on the projected result 2018/19, the number of transactions and the average monthly subscriptions have not yet showed a positive trend indicated by the average number of transactions per user which has shown consistent decrease. Estimated total TAU plan subscribers only around 0.5 - 1% from total smartphone user population in Telkomsel.

Recently Telkom Indonesia also announced that Telkomsel's total data subscriber decreased 17.4% (111.2 Million subscribers) in Semester I-2019. (Sidik, 2019). Although It's also reported that smartphone users increased in the same period.

Based on above conditions, there is a potential of more than 100 million (excluding smartphone users who have subscribed to the TAU plan) who may not yet have known or understood the TAU plan. Yet if looking at the potential that exists in TELKOMSEL, then this opportunity is big enough to be maximized.

In addition, it is also known that digital marketing communications through social media for TAU plans are still not widely used by TELKOMSEL. So far, the marketing of TAU plan has always been attached with direct selling advertisements carried out by device partners and is limited to offline (retail) marketing strategies.

The marketing activity of TAU plan has never been independent, it always depends on tactical programs initiated by device partners. So that the brand of the TAU plan is not the main message in the promos being run (more as a complementary).

If the current marketing activities are not improved, Telkomsel could lose potential new smartphone users & additional revenues from TAU plan.

To overcome the lack of exploration on social media platforms to achieve targets in marketing programs, it can be through Social media Marketing Activity (SMMA). With SMMA, we can trace the effect on Purchase Intention on the TAU plan.

Based on the potential of *SMMA*, it is also the reason for researchers to uncover patterns of *social media marketing* (Kumar, Bezawada, Rishika, Janakiraman, & Kannan, 2016). Based on the research *SMMA* has been done known that many different definitions of *social media activity* that have an influence on *brand awareness* and *Purchase Intention*.

There are several customer interactions on *perceived SMMA* that affect *Brand Awareness* and *WOM* which have an impact on increasing *Purchase Intention* ((Hutter, Hautz, Dennhardt, & Fuller, 2013); (Jamali & Khan, 2018)) namely *Vlral Advertisement*, *Opinion Seeking*, & *Brand Page Commitment*.

So that research is needed on customer interactions at *Perceived SMMA* to *Brand Awareness*, *eWOM* and *Purchase Intention* so that telecommunications companies such as TELKOMSEL can make *social media marketing plans* more effective and efficient.

This research hypotheses is expected to answer:

1. The influence of *Brand Page Commitment* on *Brand Awareness* in the TAU plan
2. The influence of *Brand Page Commitment* on *electronic Word of Mouth* in the TAU plan
3. The influence of *Opinion Seeking* on *Purchase Intention* in the TAU plan

4. The influence of *Viral Advertisement* on *Purchase Intention* in the TAU plan
5. The influence of *Brand Page Commitment* on *Purchase Intention* in the TAU plan
6. The influence of *Brand Awareness* on *Purchase Intention* in the TAU plan
7. The influence of *eWOM* on *Purchase Intention* in the TAU plan

This study uses a quantitative research method with a causative relationship approach. Quantitative research illustrates how the research objectives are achieved through empirical data in the form of measuring numbers. The correlational approach is used following the objective of this study, namely, to find out the relationship and the level of relationship between the variables studied. Because with knowing the level of relationship, it will help in many decision-making afterward. While according to the time of the study, this study was a cross-sectional study. Cross-sectional is data collection carried out in a coherent period, that is, the data is processed, analyzed, and then drawn conclusions (Indrawati, 2015).

The population in this study are Indonesian people / subscribers of TELKOMSEL using smartphone in Telkomsel network and actively use social media.

This study uses SEM as a tool to analyze. The most popular estimation method used in SEM research is the Maximum Likelihood. The recommended amount so that the results can be trusted when the variables used is four variables at 100-200 (Ghozali, 2014). Because this study uses SEM, the number of samples that researchers use is a minimum of 200 data. While the sampling technique used in this study is Purposive sampling, which is a technique of determining samples with certain considerations. The reason for purposive sampling is because of the research target smartphone users who use social media.

This study received 230 samples from Indonesia.

The data collection technique used in this study is to use primary and secondary data, with the following explanation:

a. Primary data

Primary data is data can be obtained from respondents through multiple tools such as questionnaires, panels, and focus groups, and data from interviews with resource persons, Sujarweni (2015: 89). The primary data in this study is gathering the opinion of respondents through a questionnaire on google form.

b. Secondary Data

According to Sujarweni (2015: 89), secondary data is data obtained from records, books, articles or magazines in the form of financial reports published by a company, government reports, theory books and so on.

The data collected will be tested on its validity & reability with the following explanation:

a. Validity

Validity is the degree of the legality of an indicator in measuring the concept to be measured. In research using the SEM method, two stages must be passed to assess validity and reliability (Hair et al, 2010):

i. With the T-test

The indicator is said to be valid if the -T value is from $\lambda \geq 1.96$

ii. With average Variant Ext (AVE)

The indicator is said to be valid if $AVE \geq 0.6$

$$AVE = \frac{\sum_{i=1}^n L_i^2}{n}$$

b. Reliability

The purpose of a reliability test is to ensure consistency of indicators on each measurement. Reality is done by measuring *Construct Reliability*. The indicator is said to be consistent with the value of *Construct Reliability* (CR) ≥ 0.7

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + (\sum \epsilon_i)} ; CR > 0.7$$

CR : Construct Reliability

λ_i : Loading Factor setiap indikator

ϵ_i : Error pengukuran pada indikator

The researcher used the LISREL 8.80 application to measure the validity and reliability of this study and will be carried out on 230 samples.

The technical data analysis that the researcher uses is SEM (Structural Equation Modeling) using the LISREL 8.80 application. This is what researchers do because the research framework consists of a lot of funding and relationships between complex constructs. Also, with SEM it is possible to analyze a series of relationships simultaneously to provide statistical efficiency.

The analysis technique using the SEM model starts from determining what variables will be used and the indicators used to measure each variable in this study. The variables and indicators taken for research can see research models from previous studies that can be changed by researchers. After determining variables and indicators, relationships between variables can be described as a research model or framework.

The next step is this research will perform Validity & reliability testing to explain the relationship between these variables. Validity test can be done by looking at the results of the loading factor on each indicator and the results of the AVE value for each variable. While for reliability testing can be done by looking at the results of the value of construct reliability on each indicator. The research model used must be tested also for compatibility to be able to show the covariance matrix on each indicator used. The compatibility of the research model can be seen from the GOF assessment which has several criteria.

According to Hair et al (2010: 672), χ^2 , DF, CFI, and RMSEA have enough information to be able to evaluate the research model. The next step is to describe the research model and its indicators after the indicators have passed the validity, reliability, and GOF tests. Testing variables at this stage is also to see how the influence between variables in the research model is following the hypothesis that was made before. The last step is if the overall research model is good, the SEM method can be ended by drawing a conclusion and giving recommendations.

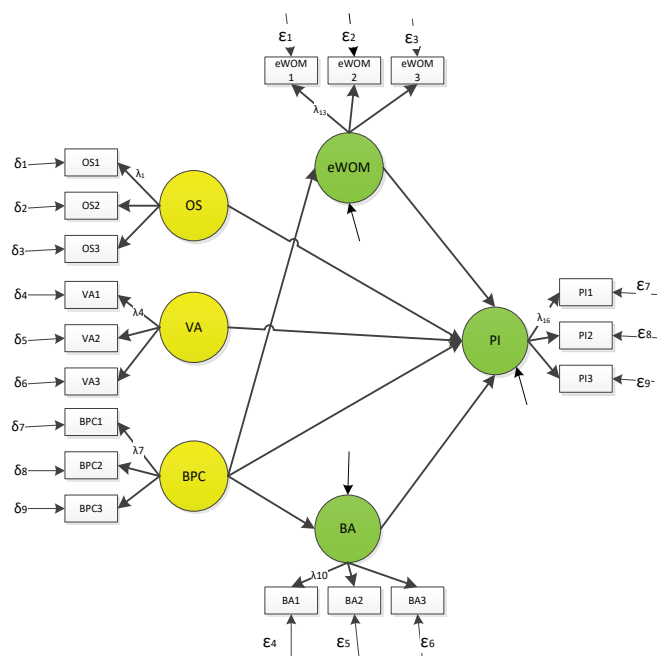


Figure 1. Structural Drawing & Equation

The suitability of the model or Goodness of Fit can be used to assess a research model whether the model falls into the category of fit or does not see the indicators in the LISREL 8.80 software. The model that is stated to be good on one of the Goodness of Fit criteria will not necessarily be stated as well on other Goodness of Fit criteria.

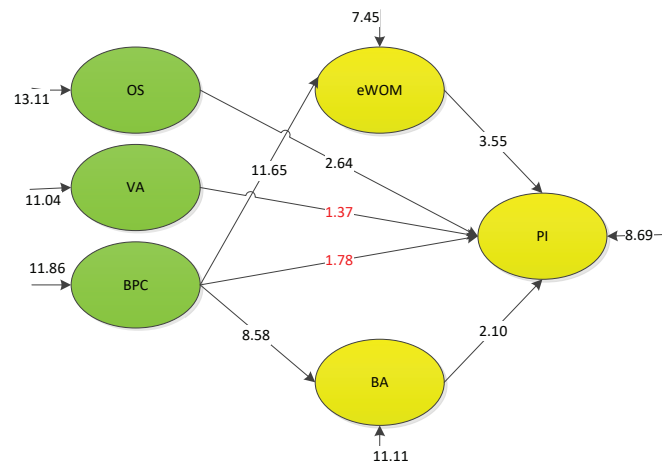


Figure 4. Value of T Structural Model

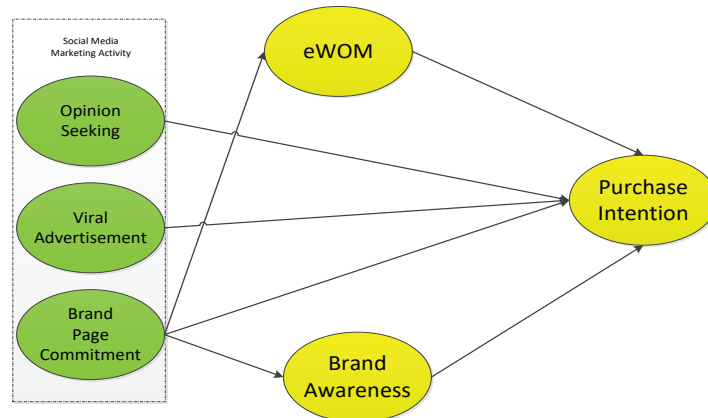


Figure 5. Hypothesis Development by Researcher (2019)

To conclude the hypothesis that is built, it will be indicated by the table as follows:

Table 1. Hypothesis Testing

Hypothesis	Regression Coefficient	T-Value	Validation Result
H1 : BPC+ → BA	0.53	8.58	H1 Accepted
H2 : BPC+ → eWOM	0.68	1.65	H2 Accepted
H3 : OS+ → PI	0.18	2.64	H3 Accepted
H4 : VA+ → PI	0.12	1.37	H4 Rejected
H5 : BPC+ → PI	0.18	1.78	H5 Rejected
H6 : BA+ → PI	0.15	2.10	H6 Accepted
H7 : eWOM+ → PI	0.29	3.55	H7 Accepted

From table 1 it can be concluded that:

1. H1: BPC has a positive and significant effect on the development of *Brand Awareness*
2. H2: BPC has a positive and significant effect on eWOM
3. H3: OS has a positive and significant effect on *Purchase Intention*
4. H4: VA has a positive but insignificant effect on *Purchase Intention*
5. H5: BPC has a positive but not significant effect on *Purchase Intention*
6. H6: BA has a positive and significant effect on *Purchase Intention* directly
7. H7: eWOM has a positive and significant effect on *Purchase Intention*

The relationship between variables contained in a research model will form a structural equation. This research produces structural equations:

$$BA = 0.53*BPC, \text{ Errorvar.} = 0.72, R^2 = 0.28$$

$$EWOM = 0.68*BPC, \text{ Errorvar.} = 0.53, R^2 = 0.47$$

$$PI = 0.29*EWOM + 0.15*BA + 0.18*OS + 0.12*VA + 0.18*BPC, \text{ Errorvar.} = 0.51, R^2 = 0.49$$

After this research was conducted, it was found that there were in accordance with previous studies. The following are the results of analysis by researchers:

1. H1: The result is in accordance with previous research in the smartphone industry (Jamali & Khan, 2018) and the car industry (Hutter, Hautz, Dennhardt, & Fuller, 2013). Brand Page Commitment on Telkomsel social media such as Facebook fan pages, official Instagram and Twitter can increase Brand Awareness for the TAU plan.
2. H2: The result is in accordance with previous research on the Samsung telecommunications industry (Jamali & Khan, 2018) and on research conducted (Hutter, Hautz, Dennhardt, & Fuller, 2013) and (Bamini KPD, Dahnail, & Yi, 2014). The more interaction between Telkomsel and customers on Telkomsel's social media, the more eWOM that customers will do.
3. H3: The result is in accordance with previous research, namely OS plays an important role in influencing customer purchase intentions in research (Farki, 2016), (Ichsan, 2018), (Elwalda & Lu, 2014), (Wijiseno & Ariyanti, 2015), (Bamini KPD, Dahnail, & Yi, 2014) & (Mulyati & Gesitera, 2020)
4. H4: The result is in accordance with previous research on the Samsung telecommunications industry (Jamali & Khan, 2018) where VA does not affect the intention of potential customers to buy certain products. This is also supported by a statement from Abigail Narulita Rahajeng (PressPlay Advertising Agency) that advertisements that are viral at least make people familiar with the product. an increase in sales can sometimes be at the start of a viral increase. However, over time, in reality it could only be temporary. Depending on the product, it is of good quality or not, if not, it will decline (Khoiri, Agniya; CNN Indonesia, 2018). So that the Viral Advertisement on the TAU plan / product does not necessarily increase purchase intention, another thing that needs to be considered in this case could be quality (plan price and quota of the plans offered).
5. H5: The result is in accordance with previous research on the Samsung telecommunications industry (Jamali & Khan, 2018) and in the e-commerce industry (Ramadhita, 2019) where activities at BPC such as Facebook fanpages, official instagram and others do not directly affect potential customers' intentions to buy products. certain.
6. H6: The result is in accordance with previous research on different industries (Bamini KPD, Dahnail, & Yi, 2014), (Hutter, Hautz, Dennhardt, & Fuller, 2013) & (Jamali & Khan, 2018), where activities in BA affect the intention prospective customers to buy a certain product. Strengthening brand awareness on TAU products / plans will help generate purchase intention.
7. H7: The result is in accordance with previous research in different industries (Bamini KPD, Dahnail, & Yi, 2014), (Hutter, Hautz, Dennhardt, & Fuller, 2013), (Jalilvand & Samiei, 2012) & (Jamali & Khan, 2018), where activity at eWOM affects potential customers' intentions to buy certain products. So that Telkomsel needs to consider increasing eWOM through interaction with customers on Telkomsel social media, using celebrities or influencers who have many subscribers / followers and optimizing promoters to increase discussion on personal social media and Telkomsel.

The conclusions that can be drawn from this study are:

1. *Brand Page Commitment* have been able to expand and increase *Brand Awareness* to customers / users of Telkomsel smartphones.
2. *Brand Page Commitment* have been able to trigger eWOM or discussions / discussions & reviews among Telkomsel customers / users regarding the TAU plan.

3. *Opinion Seeking's* such as the results of customer reviews or feedback are very influential in generating *purchase intentions* among Telkomsel customers when discussing / discussing the TAU plan.

4. Viral Advertistment is not a major consideration / influence of Telkomsel customers in generating *Purchase Intention* for TAU plans.

5. The role of BPC such as the Facebook fanpage, Instagram official page, and others does not have a direct influence in generating purchase intention (purchase intention) of Telkomsel customers for the TAU plan.

6. *Brand Awareness* has an effect on creating purchase intentions for Telkomsel customers. the wider the customer's brand awareness of the TAU plan, the easier it is for customers to recall the plan when the customer has an interest / intention to buy it.

7. eWOM in the form of discussion or discussion has a direct effect on Telkomsel's customers in generating *Purchase Intention* for TAU plans.

Theoretical Aspect Recommendation:

1. For further research, you can examine plans or other products owned by Telkomsel.

2. Subsequent research can also examine customer behavior / responses to other operators in order to draw more accurate conclusions about the characteristics of customer service providers in response to digital marketing activities.

Recommendation for Practitioner Aspects:

1. To increase purchase intention for the TAU plan, Telkomsel can do the following:

- a. Through strengthening Brand Awareness and increasing eWOM on the TAU plan. This can be achieved through the following:
 - i. Brand Awareness: Increasing activities on the Brand Page Commitment such as increasing Telkomsel's interactions (represented by social media admins) with customers on Facebook fan pages, Instagram official pages and others. Interactions can be in the form of posting the latest advertising materials, holding plan promos that only apply to members / followers of the social media account. This will strengthen Brand Awareness in TAU's product / plan. Positive Brand Awareness will make it easier for customers to remember the TAU plan and make decisions when buying the plan.
- b. eWOM: The more interactions on the Brand Page Commitment will automatically lead to eWOM among followers on Telkomsel's social media. Telkomsel can also periodically use celebrities / influencers to invite their followers to do special promos for followers who review, repost, retweet, regram promo material on the Telkomsel fanpage.
- c. Take advantage of the influence of Opinion Seeking:
 - i. Telkomsel can use competent influencers / celebrities to review TAU plans. This will make it easier for customers to find out, opinions, recommendations and references related to TAU plans, so that customers will be more easily influenced when they want to buy TAU plans.
 - ii. Another thing that Telkomsel can do is use partner promoters, Telkomsel employees and their families to offer and provide reviews regarding the TAU plan through their respective social media.

2. Through this research it is also known that Indonesian people, especially smartphone users, are easily exposed to information obtained through digital marketing activities, especially through social media. This is in line with Telkomsel's digital marketing strategy which focuses more on digital channel campaigns such as advertising on social media and websites, no longer relies on conventional promotional media such as advertisements in newspapers, billboards, flyers, balighos or promos via SMS.

There are several limitations in this research. First, it focuses only on TELKOMSEL prepaid smartphone users, especially those with social media. Second, the research didn't compare to other similar data plan from TELKOMSEL or other operators. The next phase of the research can explore more on comparison of similar data plan from Telkomsel & other operators.

REFERENCES

- Adhani, I. N., & Indrawati. (2016). Pengaruh Social Media Communication Terhadap Intention To Buy (objek Penelitian Followers Akun Instagram @hijup). *e-proceeding of management*, (p. 1134). Bandung.
- Aluri, A., Slevitch, L., & Larzelere, R. (2015). The Influence of Embedded Social Media Channels on Travelers' Gratifications, Satisfaction, and Purchase Intentions. *Cornell Hospitality Quarterly (CORNELL HOSP Q)*.
- Ariyanti, M. (1999). Usaha - usaha yang dilakukan guna peningkatan loyalitas dan nilai strategik yang diperolehnya. *Jurnal Akutansi dan Manajemen Sekolah Tinggi Ekonomi Bandung*, 30-31.
- Ariyanti, M., & Salma, P. N. (2018). Faktor - faktor yang mempengaruhi minat beli konsumen dalam pembelian produk secara online di LAZADA, Indonesia. *Telkom University*. Bandung.
- Armstrong, G., & Kotler, P. (2015). *Marketing An Introduction Global Edition (12th Edition)*. Harlow, Essex, English: Pearson Education Limited.
- Assael, H. (2004). *Consumer behavior : a strategic approach*. Boston, Mass: Houghton Mifflin Company.
- Bamini KPD, B., Dahnil, M., & Yi, W. (2014). The Impact of Social Media Marketing Medium toward Purchase Intention and Brand Loyalty among Generation Y. *Procedia - Social and Behavioral Sciences Volume 148*, 177-185.
- Barreda, A., Bilgihan, A., Nusair, K., & Okumus, F. (2015). Generating Brand Awareness in Online Social Networks.
- Barwise, P., & Meehan, S. (2010). The one thing you must get right when building a brand. *Harvard Business Review*, 80-84.
- Bearman, B. (2001). *Retail Management: A Strategic Approach*. New Jersey: Prentice Hall.
- Blythe, J. (2006). *Principles & Practice of Marketing*. Cengage Learning EMEA.
- Chafey, D. (2015). *Digital Business and E-Commerce Management: Strategy, Implementation and Practice* (6 ed.). Edinburgh Gate, Harlow, United Kingdom: Pearson Education Limited.
- Cheung, C., & Thadani, D. (2012). The impact of electronic word-of-mouth communication: a literature analysis and integrative model. *Decision Support System*.
- Chu, S., & Kim, Y. (2009). Determinants of consumer engagement in electronic word-of-mouth (eWom) in social networking sites. *International Journal of Advertising*.
- Clark, M., & Canhoto, A. (2013). Customer service 140 characters at a time - the users perspective. *Journal of Marketing Management*, 522-544.
- Constantinides, E., & Fountain, S. (2008). Web 2.0: conceptual foundations and marketing issues. *Journal of Direct, Data and Digital marketing Practice*, Vol. 9 No.3, 231-244.
- Edelman, D. C. (2010). Branding in the Digital Age: You're Spending Your Money in All the Wrong Places. *Harvard Business Review*.
- Elwalda, A., & Lu, K. (2014). The influence of online customer reviews on purchase intention: the role of non-numerical factors. *Proceedings of the LCBR European Marketing Conference 2014*.
- Erkan, I., & Evans, C. (2014). The impacts of electronic word of mouth in social media on consumers purchase intention. In *Proceedings of the International Conference on Digital Marketing (ICODM2014)*, (pp. 9-14). Colombo, Srilanka.
- Farki, A. (2016). Pengaruh Online Customer Review Dan Rating Terhadap Kepercayaan Dan Minat Pembelian Pada Online Marketplace Di Indonesia. *Doctoral dissertation, Institut Teknologi Sepuluh Nopember*.
- Funk, T. (2011). *Social Media Playbook for Business*. Praeger.
- GfK. (2017). *Smartphone Overview Q4*. GfK.
- Ghozali, Imam, & Fuad. (2014). *Structural Equation Modelling: Teori, Konsep, dan Aplikasi dengan program lisrel*

9.10. Semarang: Universitas Diponegoro.

- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis, 7th Edition*. Pearson.
- Hutter, K., Hautz, J., Dennhardt, S., & Fuller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: the case of Mini on Facebook. *Brand Management*.
- Ichsan, M. (2018). Pengaruh Consumer Online Rating and Review terhadap Minat Beli Konsumen pada Marketplace Tokopedia di Wilayah DKI Jakarta. *e-Proceeding Management*, (p. 1828).
- Indrawati. (2015). *Metode Penelitian Manajemen dan Bisnis Konvergensi Teknologi Komunikasi dan Informasi (1st Edition ed., Vol. 1)*. (D. Sumayyah, Ed.). Bandung, West Java, Indonesia: Refika Aditama.
- Ismail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty: the mediation effect of brand and value consciousness. *Asia Pacific Journal of Marketing and Logistics*, 129-144.
- Jalilvand, M. R., & Samiei, N. (2012). The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industri in Iran. *Marketing Intelligence & Planning*, 460-476.
- Jamali, M., & Khan, R. (2018). The Impact of Consumer Interaction on Social Media on Brand Awareness and purchase intention! Case study of Samsung. *Journal of Marketing & Logistic*.
- Joseph, T. (2011). *APPS: The Spirit of Digital Marketing 3.0*. Jakarta: Elex Media Komputindo.
- Keller, K. (2009). Building strong brands in a modern marketing communications environment. *Journal of marketing communications*, 139-155.
- Khoiri, Agniya; CNN Indonesia. (2018, June 10). *Iklan Viral, Produk Belum Tentu Terjual*. Retrieved from cnnindonesia.com: <https://www.cnnindonesia.com/hiburan/20180609205407-220-304912/iklan-viral-produk-belum-tentu-terjual>
- Khoiro, F., Rachma, N., & Hufron, M. (2019). Pengaruh Prmosi Media Sosial Terhadap Keputusan Pembelian dengan Viral marketing sebagai Variabel Intervening (Studi pada Konsume Warung SIJI House and REsto Malang). *Jurnal Ilmiah Riset Manajemen*, 8(13).
- Kim, A., & Ko, E. (2012). Do social media marketing activities enhance customer equity? . *Journal of Business Research*.
- Kim, A., & Ko, E. (2012). Do Social Media Marketing Activities Enhance Customer Equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 1480-1486.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management (15 ed.)*. (S. Wall, Ed.) Upper Saddle River, New Jersey, USA: Pearson Education Limited.
- Kozinets, R., Hemetsberger, A., & Schau, H. (2008). The Wisdom Of Consumer Crowds: Collective Innovation in the age of networked marketing. *Journal of Macromarketing*, Vol. 28 No.4, 339-354.
- Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R., & Kannan, P. (2016). From Social to Sale: The Effects of Firm-Generated Content in Social Media on Customer Behavior. *Journal Of Marketing*, 80(1), 7-25.
- Liu, Z., Lei, S.-H., Guo, Y.-l., & Zhou, Z.-a. (2020). The interaction effect of online review language style and product type on consumers' purchase intentions. *Palgrave Communications* 6, no. 1, 1-8.
- McCoy, S., Everard, A., Polak, P., & Galleta, D. (2007). The Effects of Online Advertising. *Communications of the ACM* , 84-88.
- Mulyati, G., & Gesitera, G. (2020). Pengaruh Online Customer Review terhadap Purchase Intention dengan Trust sebagai Intervening pada Toko Online Bukalapak di Kota Padang. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, 173-194.
- Murray, C. (2006). *The Marketing Gurus: Lessons from the best marketing book of all time*. Penguin Publishing Group.
- Nugroho, Y. A., & Ariyanti, M. (2018). Pengaruh Promosi Airasia Indonesia Melalui Instagram Terhadap Keputusan Pembelian (survei Terhadap Followers Akun Instagram@ airasia_indo). *e-proceeding of*

- management*, (p. 1932). Bandung.
- Pitta, D., & Fowler, D. (2005). Online consumer communities and their value to new product developers. *Journal of Product & Brand Management*.
- Rachman, T. (2014, December 2). Telkomsel Rilis Telkomsel Android United. Republika Online. <https://www.republika.co.id/berita/trendtek/internet/14/12/02/nfxvew-telkomsel-rilis-telkomsel-android-united>
- Ramadhita, Y. (2019). Pengaruh Aktifitas Pemasaran via Media Sosial terhadap Purchase Intention pada Industri E-Commerce: Brand Equitu sebagai variabel intervening.
- Richter, A., & Koch, M. (2008). Functions of Social Networking Services. *COOP '08 : the 8th International Conference on the Design of Cooperative Systems* (pp. 87-98). Carry-le-rouet, France: Institut d'Etudes Politiques d'Aix-en-Provence.
- S, E. E., WIJANTO, & HALIM, R. (2015). THE EFFECTS OF SOCIAL MEDIA ADVERTISING ON ENHANCING PURCHASE INTENTION: An Empirical Study of Facebook Advertising. *Jurnal Bisnis dan Manajemen*.
- S.A, S. (2008). *Dasar-dasar Manajemen Merek*.
- Seo, E.-J., & Park, J.-W. (2018). A Study on the Effects of Social Media Marketing Activities (SMMA) on brand equity and customer response in the airline industri. *Journal of Air Transport Management*, 36-41.
- Sidik, S. (2019, August 15). Total Pelanggan Telkomsel Anjlok Jadi 167,7 Juta, Kenapa? Market. <https://www.cnbcindonesia.com/market/20190814232116-17-92092/total-pelanggan-telkomsel-anjlok-jadi-1677-juta-kenapa>
- Sohn, D. (2014). Coping with information in social media: the effects of network structure and knowledge on perception of information value. *Computers in Human Behavior*.
- Strauss, J., & Frost, R. (2014). *E-Marketing (7th Edition ed.)*. Upper Saddle River, New Jersey, USA: Pearson Education, Inc.
- TELKOMSEL. (2017). *TELKOMSEL*. Retrieved from TELKOMSEL: www.telkomsel.com
- Trainor, K. J., Andzulis, J. M., Rapp, A., & Agnihotri, R. (2014). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*.
- We Are Social. (2018). *Indonesia Digital Landscape* . We Are Social.
- Wijiseno, J., & Ariyanti, M. (2015). Perceived Factors Influencing Consumer Trust and Its Impact on Online Purchase Intention. *International Journal of Science and Research (IJSR)*.
- Yadav, M., & Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industri: Scale development & validation. *Telematics and Informatics*.
- Zalfaraniah, S., Ariyanti, M., & Zuliestiana, D. (2016). Pengaruh Shopping Orientation Instagram Terhadap Customer Online Purchase Intention (studi Kasus Pada Produk Zooeyzhop). *e-Proceeding of Management*, (p. 1376).

ENVISIONING THE ROLE OF LEADERS IN DEVELOPING CORPORATE LEARNING IN POST PANDEMIC ERA

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Abstract

Covid-19 pandemic, such as physical distancing, is already causing speeding up the Industry Revolution 4.0 (IR4.0), especially the utilization of artificial intelligence (AI) and followed by machine learning and deep learning. Society now is becoming more digital, and also data-driven analytic. All management and operational have to change, affecting how to manage people and even develop the corporate learning area.

IR 4.0, especially AI, has already impacted our daily lives, such as chatbot and voice recognition, to replace call center. World Economic Forum predicts that in the decade starting with 2020 will be the era of AI, and many jobs will disappear, such as driver, operator. Some businesses will also vanish, such a call center, banking ordinary, security, etc.. IR 4.0 is killing millions of jobs and creating millions of new jobs that collaborate between humans and AI. Besides, the IR 4.0 will also create new businesses, such as digital platforms, digital services, etc.

What should we do as a person or organization to survive and grow in the new era? As Charles Darwin quotes, "it is not the strongest of the species who survive, nor the most intelligent; rather, it is those most responsive to change." Therefore, we have to change as personal and organization. The next question is, how and why? Learning is the answer to these questions, and this is stated by JRC European commission in 2011 that the future of learning is preparing for change.

LinkedIn Learning's research shows that in early covid-19, the learning department's first job is learning to work from home and maintain mental health & wellness. This research also revealed a significant increase in CEO active championing learning from 27% in 2019 to 70% in 2020.

This paper will summarize how organization leaders develop learning in an organization, significantly organizations that are not born digital, envision learning, implement its learning organization approach, develop corporate learning, and activate learning culture.

Keywords: corporate learning, leadership, learning organization

1. INTRODUCTION

Impact Pandemic

The world suffers from the pandemic, and it is already going to a recession. WEF projected a deeper recession in 2020 and a slower recovery in 2021 [1]. Now, life is implementing physical distancing, which then restricts traveling & face to face meetings, and most countries are implementing lockdown to avoid virus spread. To survive, governments and companies are performing to working and learning from home. This online working & learning are increasing digital infrastructure and IR 4.0 technology, including AI, chatbots, data analytics, etc.

Online learning is stimulating learning anywhere, anytime, any device, any method, and now online is growing very fast. In the early stage of the pandemic, LinkedIn [2] reported that instructor lead training (ILT) or in-person classroom decrease 61% than 2019 but virtual Instructor lead (VILT) training, where live online training delivered in a virtual environment, increased by 66%. Online learning where recorded and on-demand learning content rises 60%. This report also predicted that in the short and long term, ILT would decrease, and VILT and online learning increases significantly. However, moving the blended learning to virtual blended learning is becoming a challenge.

In social learning, physical & social distancing are making people feel more isolated. This was impacting social learning and learning together in a virtual environment is booming. LinkedIn [2] also shows a step-change in how learners interact with their peers online while pursuing a community sense. It is predicted that social learning will be a big part of learning programs going forward. Statistically, LinkedIn reported that there is increasing more

than 300% of professional joining learning groups, and sharing courses increase by 150%.

Technology in supporting online such as video conferences are also still having flaws as people could not see the gesture language and emotional. The solution of these flaws is again booming to reduce increase collaboration and opportunity to collaborate more intents, such as breakout room in an online class platform, web-based or applications on post-it replacement, quiz, survey, brainstorming, and question & answer, appreciation in emoji pictures.

The easiness of working or learning anywhere increases the number of classes, seminars, or meetings significantly. However, this situation is making no or limited physical activities and triggering new concerns: mental health and physical health. These conditions create more learning contexts such as self-awareness, coping with change, managing anxiety, and making an impact and helping all to get through together.

2. METHOD OF RESEARCH AND OBJECTIVES

The research objectives are to understand the basic theory of how a company or organization coping with the changes during pandemics and how leaders & top leaders respond to these changes to survive for themselves and their organization. Methodology research is based on academic papers and reports from prominent institutions. This paper will discuss how leaders envision corporate learning after a pandemic based on the authors' experiences and based on the academic papers and reports from the prominent institutions.

3. CORPORATE LEARNING

In Indonesia, some state-owned companies, government institutions, and big private companies are implementing the corporate university approach in developing learning in their organization. Many organizations are implementing the corpus; it may be concluded that this strategy is the most suitable. Allen [3] defined the corporate university as "an educational entity that is a strategic tool designed to assist its parent organization in achieving its goals by conducting activities that foster individual and organizational learning and knowledge."

Based on the Allen definition, keywords of the corpus are education, strategic, and individual & organizational learning. Referring to the report from Mudakir [4] of 'organizational learning is all about the learning process that transforms the local or individual knowledge into collective knowledge. Learning organization is about the mechanism of contextual to transform external knowledge internal knowledge'. Piyu [5] explains that organizational Learning focuses on learning by experience and knowledge employees who developed and collected from day to day activities. Organizational learning is also having the process and strategies and implementing change throughout an organization

With the covid-19 and pandemic experiences, and the speedy industrial revolution, an organization should also be ready for any changes at any time as the world becomes more vulnerable, uncertain, complex, and ambiguity. In facing this era, the organization has to focus on enhancing its competencies, capabilities, and capacity of employees & organization by cultivating systematic problem solving, testing new approaches, learning from others experiences and successful application, transferring knowledge to each member organization rapidly [5, 6, 7]. An organization with these capabilities called a learning organization, a simple sentence, and a learning organization is a plan to change.

Based on VIMP [8, 9], corporate learning means all education methods, significantly further, and continuing education of the employee in the company environment with the objective is to meet the ideal of learning organization and pursuit of lifelong learning. Therefore, to impact corporate learning, an organization should be organizational learning, which has a learning organization mindset and discipline. Corporate learning should be seen as an organization that always enhances the organization and staff competencies, capabilities, and capacities. In developing corporate learning, an organization could establish a corporate university organization inside an organization to assist the organization.

To ensure that corporate learning will long-lasting, the discipline of learning organization should be understood and become part of the organization's daily life as stated by Antonacolu [10] that the core of learning is individual, and then team, organization, industry or sector, and society. Individual Learning is the most influenced by any layers, and it shows that before becoming a learning organization, there should develop team learning.

According to Peter M Senge et al., learning organization has five disciplines grouped into three [11,12]. First, the group of aspirations which covers personal mastery and shared vision. Personal mastery is a discipline of aspiration that involves formulating a coherent picture of the results people most desire to gain as individuals (the personal vision), alongside a realistic assessment of their lives' current state, learning to cultivate the tension between vision and reality. Shared Vision is a collective discipline that establishes a focus on mutual purpose.

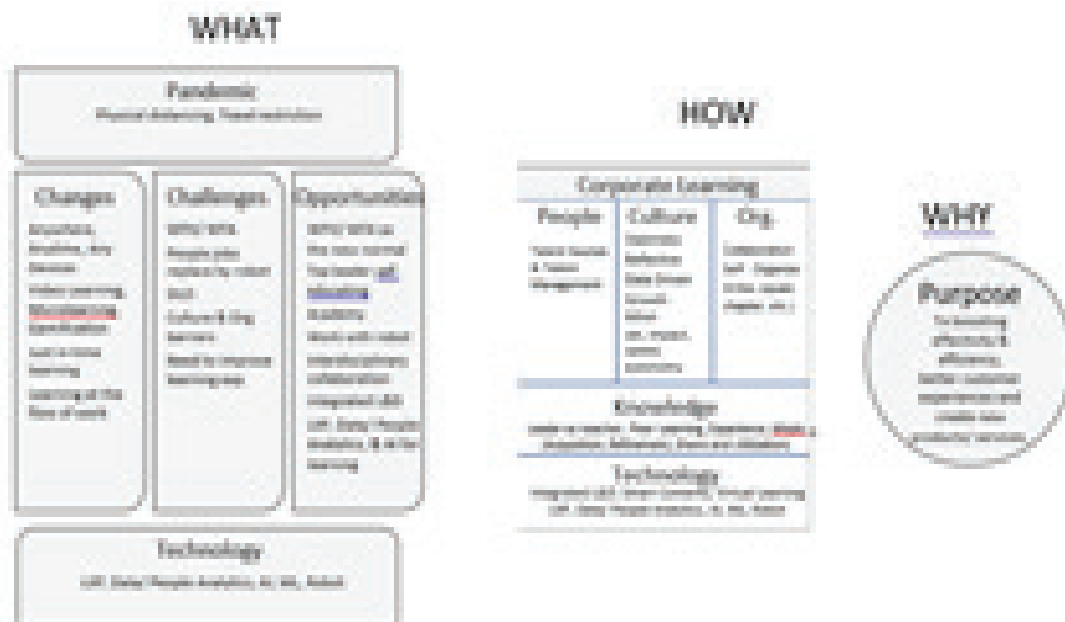
People learn to nourish a sense of commitment in a group or organization by developing shared images of the future they seek to create and the principles and guiding practices to get there.

Second, Working Collaboration, which are mental models and team learning. The mental model is a discipline of reflection and inquiry skills, focuses on developing awareness of the attitudes and perceptions that influence thought and interaction. By continually reflecting upon, talking about, and reconsidering these internal pictures of the world, people can govern their actions and decisions. Team learning is a discipline of how each member of a group performs interaction, which will provide the opportunity for dialogue and skillful discussion, to transform their collective thinking & learning to mobilize their energies and ability more remarkable than the sum of individual members.

Finally, system thinking to deal with complexity. In this discipline, people learn to understand interdependency and change better, thereby dealing more effectively with the forces that shape actions' consequences. Systems thinking is based upon a growing body of theory about the behavior of feedback and complexity, which will be tendencies of a system that leads to growth or stability over time naturally.

4. PROPOSED FRAMEWORK

The proposed framework for leaders in envisioning corporate learning is shown in the following pictures, which based on [13].



Purpose

Leaders of a learning organization have to have committed the critical role of learning and communicate that learning is vital to organizational success. To survive in the IR 4.0 will need efficiencies, better customer experiences, and new products and services. To be able to do this, learning as an organization is a must. The understanding of IR 4.0, shown by [14] that the most prominent mistakes leaders are to view AI as a plug and play technology with an immediate return, therefore, top leaders including CEO has to educate themselves about the potential technology including AI, its impact on the organization now and future.

As reported by [15], the top leaders' role is inevitably to develop their envisioning for their organization, and it is also working in dealing with IR 4.0 era after the pandemic. Thus, the CEO and top leaders will be the first key to understanding, envisioning, and communicating with all staff. Envisioning is the first step in addressing the new technology IR 4.0 & IR 5.0 challenges and pandemic to develop corporate learning. This step aims to create corporate learning to adapt its people, organization, knowledge, and technology and develop a culture to cultivate learning culture.

Develop Corporate Learning Building Blocks

Having envisioned and communicating the vision to all stakeholders and staff, leaders should articulate what and

how to build corporate learning. In this stage, there are five pillars of corporate learning [13].

People

The organization needs people who are having a growth mindset with reflective practitioners Serrat O [13]. Reflective practitioners understand their strengths and limitations and have a range of tools, methods, and approaches for knowledge management and learning, individually and in collaboration with others. Therefore, the organization has to develop personal mastery as one of the 5th disciplines of the learning organization.

Then, this personal learning needs to be transformed into team learning to develop a super team. A growth mindset and reflective condition may be achieved when people got experience psychological safety and trust. On the other hand, it may be diminished when people are exposed by unfair negative criticism and believe that they cannot rely on colleagues. Developing the safety and trust of reflective practice and positive collaboration requires careful attention to relationship building and individual and collective performance management.

Having learning and development for individuals and teams, a learning organization has to have maximum benefit by leveraging learning from others based on their day-to-day work experiences, team meetings, short-term secondments, and membership task groups. Leaders should develop leadership competencies from the top to the lowest staff. Having similar essential leadership competencies will reduce office politics and create more fair competition.

Organization

The organization needs to value organizational effectiveness and have an inspiring vision for learning and a learning strategy that will support the organization in achieving its vision. The structure must be carefully aligned with the company's strategy to avoid silos and minimize unnecessary hierarchy levels. The organization and the values should be communicated well to facilitate lateral information transfer and knowledge transfer across formal structural boundaries.

To stimulate creativity and generate new insights and innovative practices, a learning organization takes a balanced approach to the importance of both planned and emergent learning. The current methods, such as tribe, squad, chapter, can develop a learning organization that will make silo disappear and having more collaborative learning.

Knowledge

Knowledge is always a critical asset in every learning organization because learning is a product of experience and its source. A learning organization recognizes that these two are inextricably linked and manages them accordingly. The units of knowledge production are both the individual and the collective. The knowledge is stored in central repositories of knowledge, which is designed to deliver its products and services that can be used for all learning and to guide any decision-making.

Key (and often underutilized) sources of knowledge in organizations are the data and information that emerge from monitoring systems and the analyses, conclusions, and recommendations that arise from self- and independent evaluations, after-action review, retrospectives product and services surveys, and also the voice of customers. Knowledge transfer methodologies have been proven in human development, such as leader as a teacher, peer learning, sharing experiences & wisdom for acquisition, refinement, share, and utilization.

Technology

Technology in developing corporate learning basically can be divided into two groups;

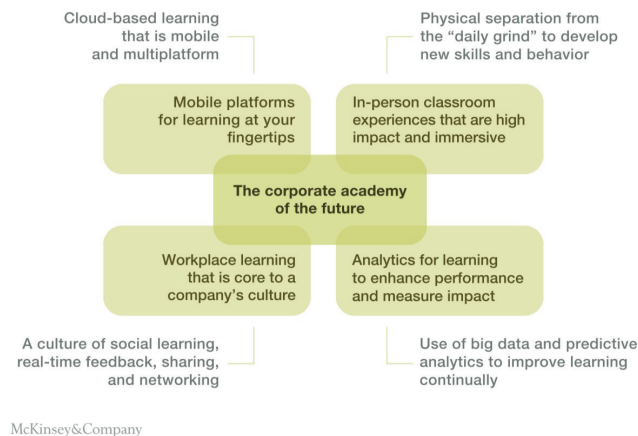
- Technology knows how in learning & development, such as ISD (Instructional System Design), integrated L&D (Learning & Development), data people analytics, AI (Artificial Intelligence), ML (Machine Learning).
- Technology in delivering learning, such as LXP (Learning Experience Platform) and its smart content, virtual learning, augmented Learning.

Technology know-how in L&D is a knowledge and skill to develop the best effective and efficient learning for individuals, teams, and organizations inside an organization. Then, technology learning itself is to support the learning process; currently, the most popular is web-based technology; such as learning management system (LMS), learning experienced platform, video and or audio virtual class platform, e-learning platform, online platform and other application to support the learning to have a similar quality with face to face meeting.

To develop a learning platform, companies may adopt the following concept introduced by McKinsey [16]. The idea provides more mobility and multiplatform base applications, allows companies to develop new skills and behavior, and allows companies to establish social learning, real-time feedback, and sharing and networking;

theses will be supported by data analytics.

The next generation of corporate academies supports learning at the speed of business.



Recent research by Gartner [17] shows that the universe of skills is expanding, and the required skills are changing rapidly. AI drives this evolution of skills by replacing repetitive tasks with technology and application, which are elevated and augmented human behavior. AI is developing and being deployed at an uneven rate, leading some skills, like social-creative, digital dexterity skills, and more future-stable than others. These skills need to be cultivated across roles rather than developing static skillsets for static functions. To proactively plan for rapidly changing skills, organizations have five options for role design: focus, acquire, broaden, redeploy, and downsize. Strategically redesigning roles based on potential AI impact will help HR leaders build their workforce for their future.

Base on the finding, Gartner [17] also recommends that companies need to map the impact of AI on critical roles by determining the importance of social-creative skills and the proportion of digital dexterity skills in each position. This rapid evolution of skills is showed when comparing job descriptions for the same role from 2016 and 2019, where research [17] reveals that 82% of jobs had more than one-third of their required skills disappear and 22% of jobs gained at least 10% new required skills, while 73% of jobs had at least 40% of their abilities change entirely.

Leading companies increasingly adopt the Learning Experience Platform (LXP) [18] for the platform. LXP is a consumer-grade learning software designed to create more personalized learning experiences and help users discover new learning opportunities. By combining learning contents from different sources, support of Artificial Intelligence across the digital touchpoints, e.g., desktop application, mobile learning app, and others, are recommended.

As Josh Bersin concludes in his report in 2018 [18], the LXP market exists because the Learning Management System's paradigm is out of date. People no longer search course catalogs for

"courses" anymore and will explore any topic or themes to help their work, which is called "train and learn in the flow of work" or learning in workflow.

Culture

Having all the four pillars, people, organization, knowledge, and technology, how these pillars can be operated alive with a full meaning needs learning, especially for reflective, openness, data- driven, and growth mindset. This can be done by implementing mentoring and coaching with a leader who is open to ideas and critics. Westerman [19] concluded that digital culture's four fundamental values stand out: impact, speed, openness, and autonomy. Recognizing the immense scalability of digital solutions, digital leaders typically focus on creating the effect, assuming that profit will follow. At their best, these companies revolutionize how people and organizations interact, reinvent industries, and break the power of entrenched gatekeepers.

The other three values support that mission. Speed helps companies stay ahead of competitors and keep up with rapidly changing customer desires. Openness encourages employees to challenge the status quo and work with anyone who can quickly achieve their goals. Autonomy gives people the freedom to do what is right for the company and its customers without waiting for formal approval at every turn. Together, these values can foster an engaged, empowered workforce where employees feel a personal responsibility to change the company continually — and often the world.

In summary, from research papers and prominent research institutions, these are challenges of corporate learning;

Cultivating a mindset of life-long learning, Cultivating a data-driven mindset in any decision making, Encourage and motivate employees in facing work side by side with robots, AI implementation on talent management, Upskilling and reskilling its employees and Invest in R&D

How to make corporate learning

Having envisioning, developing strategy & plan, the leaders should implement the project to achieve its goal. Learning from Cahyana [20] Executing the above framework for the best corporate learning need 4Cs, Content, Context Comprehends, Commit with the following explanation.

CONTENT: All people in all layers in the organization should understand, and some people should demonstrate competence in this learning development, including learning technology, how learning technology works, and also how to analyze the result and outcome of learning.

CONTEXT: In the implementation, all strategies should consider its environment, corporate culture, office politics in the organization, and external organization issues that have to be anticipated. If necessary, we should go back to the Content, review it, and mitigating any potential issues. If there is an employee union, understand their message, and good communication is needed.

COMPREHEND: Knowing the Content and context, leaders should understand comprehensively content and context, culture, office politics, and impact and outcome of learning, and any potential issues from the stakeholder. Understanding all these thoroughly, There should be not many surprises during development, but should be having a lot of fun and happiness.

COMMIT: with understanding content & context, and comprehensively understand, leaders should commit to the implementation. Leaders should show their intention and spirit of changes and provide rewards and punishment (or recognition). The development of corporate learning should be reported to all stakeholders to build common ownership at all levels, including shareholders. In some cases, the organization should inform customers how the organization implements a new learning strategy and ask the customer to provide feedback. It will be a guard from disgrace.

5. CONCLUSION

After the pandemic, top leaders have to have their vision for their company and learning to survive in the new era. Learning is the way to stay and grow. Therefore, learning incorporation is also inevitably needed to survive to increase competences, capabilities and enlarge the capacity. Having implemented the above actions, it is expected to boost efficiency, customers' experiences, and create new products and services, which will ensure the success of organizations.

REFERENCES

- IMF: New predictions suggest a deeper recession and a slower recovery New predictions suggest a deeper recession and a slower recovery, 2020, <https://www.weforum.org/agenda/2020/06/imf-lockdown-recession-covid19-coronavirus-economics-recession/>
- LinkedIn Learning, 2020, Leading with Learning: Insights and Advice About the New State of L&D
- Allen Mark, 2002, the corporate University Handbook, Mark Allen
- Mundakir, Differences in Organization Learning (OL), Learning organization (LO), and faster learning organization (FLO) on nursing services, Student of Doctoral Degree Program at the Faculty of Public Health Airlangga University
- Difference between learning organization and organizational Learning, June 28, 2019, Posted by Piyu (<https://www.differencebetween.com/author/piyu/>)
- Organizational Learning VS Learning Organization, <http://orglearningteam1.pbworks.com/w/page/9330816/Organizational%20Learning%20VS%20Learning%20Organization>
- Yuraporn Sudharatna, 2004, Towards A Stage Model Of Learning Organization Development, thesis for degree of

- Doctor of Philosophy, Adelaide Graduate School of Business The University of Adelaide
- VIMP, Corporate Learning – The Future is Now, 2017, <https://www.vimp.com/en/blog/article/corporate-learning-the-future-is-now.html>
- Deloitte, Corporate Learning redefined Prepare for a revolution, 2014, <https://www2.deloitte.com/gh/en/pages/human-capital/articles/corporate-learning-redefined.html>
- Antonacopoulou, 2006, The limited interrelationships across multiple levels of learning in the three retail banks in the UK, https://www.researchgate.net/figure/The-limited-interrelationships-across-multiple-levels-of-learning-in-the-three-retail_fig2_247748289
- Senge et al., 1999. The Dance of Change: The challenges to sustaining momentum in a learning organization Paperback – Illustrated, March 16, 1999.
- SOL Singapore, WHAT IS ORGANIZATIONAL LEARNING?, <https://www.solsingapore.org/organisational-learning>, downloaded Oct 2020.
- ADB, Serrat O. (2017) Building a Learning Organization. In: Knowledge Solutions. Springer, Singapore. https://doi.org/10.1007/978-981-10-0983-9_11
- [Fountain et al., 2019, Building the AI-Powered Organization
- by Tim Fountaine, Brian McCarthy, and Tamim Saleh, <https://hbr.org/2019/07/building-the-ai-powered-organization>
- Tonda Priyanto¹, Indrawati Ph.D., Agung Sutanto Adi Susetyo, 2020, Role of CEO in talent management to develop new leaders the IR 4.0. SCBTII, Telkom University.
- Bensor- Armer et al., Learning at the speed of business, 2016, <https://www.mckinsey.com/business-functions/organization/our-insights/learning-at-the-speed-of-business>
- Gartner et al. 2020. AI and the Workforce of the Future 2.0, Published April 30, 2020 - ID G00715588, HR Practitioner Research Team, Gartner.
- Josh Bersin, 2019. Learning Experience Platform (LXP) Market Grows Up: Now Too Big To Ignore, <https://joshbersin.com/2019/03/learning-experience-platform-lxp-market-grows-up-now-too-big-to-ignore/>
- George Westerman et al., 2019. Building Digital-Ready Culture in Traditional Organizations, Magazine: Summer 2019 Issue, Research Feature May 21, 2019.
- Cahyana Ahmadjayadi, 2020, Menuju Kebiasaan Baru Dalam Perspektif Industri Internet: Reinventing the Internet in 2020 and Beyond, PANDI

CELLULAR OPERATOR STRATEGIC IN CORONAVIRUS PANDEMIC

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Abstract

Since Covid19 entered to Indonesia, this pandemic has increased day by the day, which changed telecommunication business, especially operators, so they should make new updates on their business. The rule of companies has also changed therefore, their employees have to go to their company at working hours, now everyone has to work commonly from home. This cause a significant increase of data traffic. The pandemic also affects the revenue of all operators. We can see this from the annual report of operators in Indonesia from the last five years period (2015-2020) which consist of two periods, before the pandemic (2015-2019) and during the pandemic (financial reports Q2,2020). Based on this data it is known that the revenue tends to decline for the four major operators in Indonesia, so that this study will try to contribute projections of new strategic proposals for the operators in which their revenue can increase again with large traffic accommodation ability. New strategic proposals are blue ocean strategy (innovation in new technology / 5G) to accommodate big traffic, and cost of leadership strategy (bundling pulse with 5G application and open RAN or RAN sharing) to increase the revenue.

Keywords : Annual Report, Telecommunication, 5G, Blue Ocean Strategy, Cost of Leadership, Marketing, RAN Sharing, Open RAN

1. INTRODUCTION

Since the beginning of February 2020, it has been the start for all countries because the corona is still running all over the world. Recently, this pandemic has become more the worst, Indonesian government has implemented PSBB 1 (April 2020 - May 2020), then we are continuing PSBB 2 (October 2020), thereby creating new regulations for employees such as WFH (Work Form Home) and SCH (School From Home).

Covid-19 as now we have been experiencing for almost nine months, will bring a new normal to our society by making better use of information and communication technology. ITU recently reported that during the pandemic, the social total utility created by ICT particularly telecommunication services has increased significantly. The society perceives more benefit from ICT during the pandemic.

This benefit at least has created six new behaviors of the society nowadays. First, people are now accustomed with work from home / teleworking and this method will be a considerable alternative in the new normal era. Second, people will become increasingly accustomed to shop online, using digital payments as well as utilizing delivery systems to get goods and services. Third, telemedicine is also getting used by society to access healthcare services from their home. People do not prefer to go to hospital or clinic because it may also risk them getting infected by covid-19. Fourth, distance learning is now becoming our part of life. This method actually has existed for years in higher education yet the realization in mass scale for all levels of education is just happening in this pandemic. This method should be considered after the pandemic ends because it can make the education particularly the higher education become more inclusive and the campuses do not have to think about building new classes to afford more students. Fifth, video-meeting is becoming the new normal for socialization. From the formal meetings included assembly up to halal bi halal is now being done with video conference. This behavior may also continue after the pandemic ends because of its simplicity. And the last, the industry 4.0 will be accelerated by covid-19. Industry will become more automated and connected to ensure its production process. IoT, robotics, and even digital twins will be adopted by more enterprises.

OPTIMIZATION OF THE INTERNET ACCESS SERVICES THAT HAVE BEEN ESTABLISHED IN THE 3T AREA AS INFORMATION CHANNEL FOR COVID19

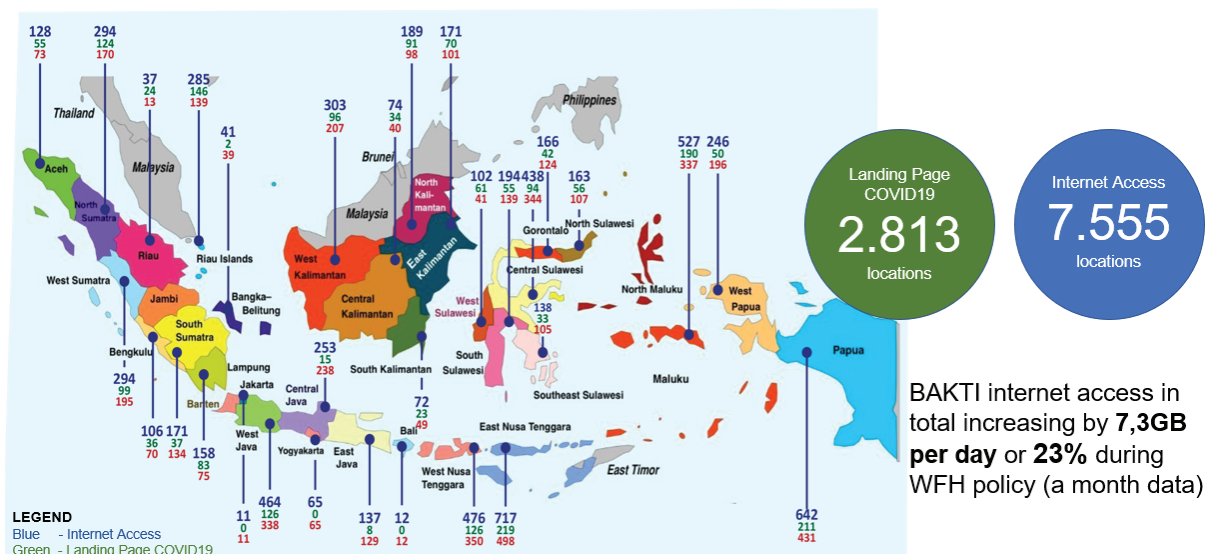


Figure 1. Traffic data during WFH in Indonesia [Bakti Kominfo, 2020]

Based on Figure 1, when the implementation of WFH is running in Indonesia, data traffic has increase significantly. From BAKTI KOMINFO resources, we know that internet access has raise sharply until 7.3GB/day or 23%, during the government policy to enforce WFH and according to statistical data from July 2020, there are 4,57 billions of people are active as active internet users (Statista, 2020a), which is 59% of the total population (Dwivedi, 2020). People use internet data daily for their work, looking for information, accessing social media etc. In other words, as an Operator, it is a good place to take advantage of data packages, because everyone has access to the internet and uses their data packages.

However, in the middle of the pandemic we are fighting, The Operators must think about their marketing strategies for taking the many data packages used by their customers. So, this paper will discuss the marketing strategies that will be used by operators in dealing with this pandemic.

2. METHOD

2.1 ANNUAL REPORT ANALYSIS

Annual reports are very useful as decision makers, they are core values to help investors make economic decisions (Luo, 2018), so this paper takes the annual report from Telecommunication Companies in Indonesia. Based on the company's 2019 annual report, we can find out the market share of telecommunications companies in Indonesia, market share is the number of subscribers of each operator, market share data is divided into 5 companies, they are : Telkomsel 49.22%, Indosat 17.06%, XL Axiata 16, 1%, Hutchison Indonesia(3) 10.64%, Smartfren 6.76%.



Figure 2. Market Share of Indonesian Telecommunication Company (Annual Report 2019)

Based on the market, we can know that the Telecommunication Companies still have chance to get big opportunities, then the businessmen can get revenue for each Operator.

According to the financial analysis for three Big Operator Companies: Telkomsel, Indosat, and XL, which is already represent 82.59% of the total market share of Telecommunications Companies, so they can represent the Telecommunications market as a whole (Heppy, 2018).

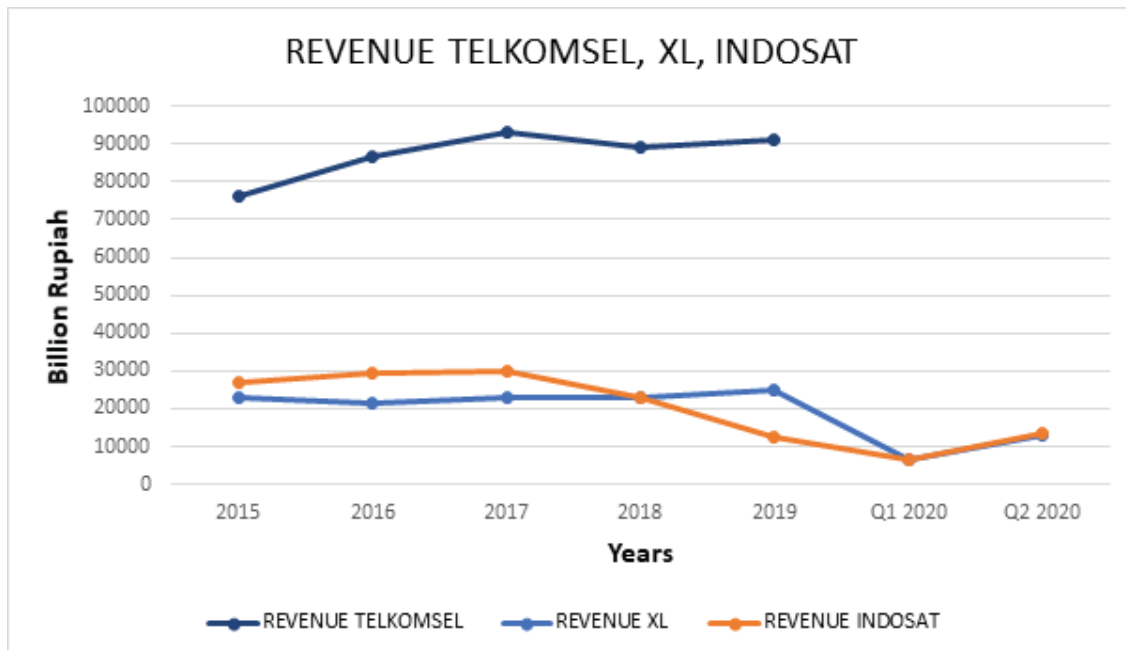


Figure 3. Revenue of Indonesian Telecommunication Companies (Telkomsel, XL and Indosat) (Annual Report 2015 – Q2 2020)

Even though the traffic data increases based on figure 1, the purchasing power of customers has also decreased due to the impact of job reduction [Siswarini, 2020]. This is reinforced by the revenue obtained by the operator. Telecommunication company, Telkomsel has not issued a Financial Report in 2020 (during pandemic of corona), while for PT. XL Revenue has not reached the previous year's revenue that it has decreased, because of the increasing traffic, PT XL has also increased their BTS number to 18-24 thousand to support this WFH [Darmayusa, 2020], then PT Indosat revenue continues decreased since 2017 until now, they are still unable to recover revenue due to the impact of COVID. This is a dilemma for telecommunication operators in Indonesia. This dilemma causes because data packages has increase significantly but not followed by increased revenue.

2.2 MARKETING CONCEPT

Marketing is the basis of the philosophy and ideology of the marketing concept which identifies and responds to consumer needs and wants of targets markets better than competitors (Kotler et al. 2019). More progressive organization have espoused variations of social marketing concept, where the company (this case, the operator) balances the short-run desires of the customer with long-term customer welfare (Kotler and Zaltman 1971; Kotler et al. 2019)

Since this pandemic entered Indonesia, several company regulations have changed which previously we had to come to the office and work from the office, now it has changed to Work From Home (WFH) and Education has changed to School From Home (SCH), this is what causes Traffic data increases according figure 1. In other words, communication is actually limited place, before covid, communication occurred directly, but we communicate only via media such as Skype, WhatsApp and Zoom now. Nowadays, we can purchase any item from offline to online (He. Hongwei and Harris.Lloyd, 2020), so that we can say now is the right moment in social media marketing.

3. RESULTS AND DISCUSSION

3.1 MARKETING STRATEGY

Changes in the marketing environment, before the pandemic, during the pandemic and after the pandemic, have forcing telecommunication companies to always innovate new things so that they will get revenue higher than before. While innovative commentators lauded the need for strategic agility to create new markets that reach

new consumers and customers, namely the blue ocean strategy (Kim and Mauborgne, 2004). The blue ocean strategy, which is more suitable for companies that have large capital such as PT Telkomsel, by providing new innovations in the form of new technology, namely 5G which can carry data with a large throughput capacity of 10.77 Gbps-11.8 Gbps (Situmorang, Anna C, 2019).

The second strategy is the cost leadership strategy, where a popular idea from many handbooks is that companies manage to maintain competitive advantages in the price structure by offering the lowest cost to customers (Coeurderoy, 2004). For this strategy, it can be used with a pulse bundling system with some content from the operator itself or if it is building new technology, it can be bundled with a 5G application. With the price offered is lower than competitors, the volume in sales will increase, so that the operators themselves maintain their advantage in the sales structure. Therefore, companies get a higher economy than their competitors by increasing the cost leadership strategy (Grant, 1998; Hitt et al., 2001). Another solution could be in the form of breakthrough technology. With the existing technology, covering all populations as the connectivity gap will be very expensive. A new approach like Open Radio Access Network (Open RAN) could be the alternative to make infrastructure more affordable. Most of the CAPEX required to deploy mobile broadband is associated with the RAN section. Any reduction in the RAN cost will meaningfully benefit the operators.

Economics of RAN sharing benefits can be divided into three sharing stages include rollout phase, steady state, modernization/obsolescence. Rollout phase is where bulk (assumption >80%) of sites and nodes to be deployed. CAPEX synergy potential is high for passive sharing (site build, mast, rack/ancillary) and medium for active sharing (microwave link/optical fiber, electronics, spectrum, resources). OPEX synergy potential is high by OPEX prevention method in site lease, non-telco services, telco services, energy, and resources. Restructuring cost can be low if little legacy infrastructure is present. Write-off can be relative low exposure if little legacy infrastructure is present. Steady state is where 80% of coverage and sites deployed. Mainly capacity additions and coverage maintenance. CAPEX synergy potential is high for passive sharing and low for active sharing. OPEX synergy potential is high by OPEX saving if absolute number of site locations are reduced. Primarily OPEX prevention in case of site number expansion. Cost restructuring is high by termination (site lease, site restoration, service, contracts, personal cost) and other (JV overhead, legal, etc). As most of the network has been deployed at this stage the write-off exposure can be significant even if equipment can be re-used. Modernization/obsolescence is a sharing stage with active element / node replacement, technology migration, and site consolidation. CAPEX synergy potential is high for passive sharing and medium/substantial for active sharing. OPEX synergy potential is high that can create OPEX saving if absolute number of site locations are reduced. Primarily OPEX prevention in case of site number expansion. Restructure cost can be significant. Although contract termination can be less costly due to longer operational period. If decision for network sharing is taken in the renewal / obsolescence phase write-off exposure can be relative light both for equipment and site-build.

4. CONCLUSION

The current pandemic in Indonesia has an effect on the value of profits earned by cellular operators. This is shown in the graph of the annual report on the 2 largest cellular operators in Indonesia whose curves tend to decline. Some of the things that caused the decline in revenue were the existence of some free quota assistance from the government during the pandemic. To deal with the decline in revenue, it can be suggested that several strategies need to be implemented, such as: blue ocean strategy (proposed new technology 5G) and cost of leadership (Bundling pulse with 5G application and Open RAN or RAN Sharing).

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REFERENCES

- [1] Statista(2020a). Global digital population as of January 2020. Available at <https://www.statista.com/statistics/617136/digital-population-worldwide/>. Accessed on 6 Oktober 2020.
- [2] Dwivedi.Yogesh K.(2020), Setting the future of digital and social media marketing research: Perspectives and research propositions.
- [3] Luo.Jin-hui, Li.Xue, Chen.Huayang (2018). Annual report readability and corporate agency costs.
- [4] Heppy A.Vidyantina, Yuniarti.Diah, Dwiardi.Rahmat Agung, Wardahnia, Gultom. Daulat Amry, Wahyuningsih. Sri, Bastanta S.Reza, Tribroto. Seno, Pradono.Wirianto, Renyta (2018). Analisis Industri Telekomunikasi

Indonesia untuk mendukung efisiensi

- [5] Situmorang, Anna C, Gunawan. Dadang, Anggraini. Vivi G(2010). 5G Trials on 28 GHz Band in Indonesia
- [6] He. Hongwei and Harris.Lloyd(2020). The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy
- [7] Kotler, P., G. Armstrong, L. C. Harris and H. He (2019). Principles of Marketing, (European Edition), London, Prentice Hall.
- [8] Kotler, P. and G. Zaltman (1971). 'Societal Marketing: An Approach to Planning Social Change', Journal of Marketing, 35, 3, 3-12.
- [9] Kim, W. C. and Mauborgne, R. (2004). Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant. Boston: Harvard Business School Press. ISBN 978-1591396192.
- [10] Grant R. Contemporary Strategy Analysis. Blackwell; 1998.
- [11] Annual Report PT Telkomsel 2015-2019 : <https://www.telkomsel.com/en/about-us/investor-relations> (Accessed October 2020)
- [12] Annual Report PT Indosat 2015-2020: <https://indosatooredoo.com/en/investor-relation/informasi-keuangan/laporan-tahunan> (Accessed October 2020)
- [13] Annual Report PT XL Axiata : <https://www.xlaxiata.co.id/en/investor-room/annual-reports> (Accessed October 2020)
- [14] Annual Report PT Smartfren : <https://www.smartfren.com/id/annual-report/> (Accessed October 2020)
- [15] Subscriber PT Hutchison Indonesia 2019: <https://teknologi.bisnis.com/read/20190912/101/1147411/tri-targetkan-jumlah-pelanggan-tembus-40-juta-hingga-akhir-2019> (Accessed October 2020)
- [16] <https://www.baktikominfo.id/> (Accessed October 2020)
- [17] Siswarini, Dian.2020. <https://economy.okezone.com/read/2020/06/17/320/2231491/siapa-bilang-industri-telekomunikasi-untung-selama-covid-19-simak-faktanya>
- [18] Darmayusa, I Gede. 2020 <https://www.cnbcindonesia.com/market/20200518175330-17-159345/industri-telekomunikasi-juga-terdampak-covid-19-ini-faktanya>

CRITERIA OF SUPPLIER SELECTION FOR A SMALL COFFEE SHOP BUSINESS

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Abstract

Various small businesses in the food and beverage sector including coffee shops continue to grow and provide the best products for their consumers. The purpose of this study is to select the best coffee bean supplier to work with Kaikara Koffie in the long run, considering the inconsistent quality of coffee presently offered by Kaikara Koffie. The selection is based on criteria adopted from several previous studies. For this reason, the Analytical Hierarchy Process (AHP) method was used with the help of Expert Choice software. The results showed that criteria are important for determining priorities in the selection of coffee bean suppliers for Kaikara Koffie. The main priority criterion found is quality with a weight value of 0.492, the second priority is service criterion with a weight value of 0.227, the third priority is supplier relationship criterion with a weight value of 0.164, the fourth priority is cost criterion with a weight value of 0.067, and finally, the fifth priority is delivery criterion a weight value of 0.049. The outcomes of this supplier selection indicate that Supplier C (Spill) is considered the best with a weight value of 0.539 followed by Supplier A (Java-G) with a weight value of 0.234, and Supplier B (Halu) with a weight value of 0.227. Therefore, this study concludes that quality criterion is the top priority in supplier selection, and Supplier C (Spill) is the best to work with for a long time. The contribution of this study is to demonstrate the criteria used by a coffee shop SME in selecting their long-term suppliers to obtain the best coffee beans.

Keywords: analytical hierarchy process (AHP), Criteria of supplier selection, Coffee shop, supplier selection, Small business

1. INTRODUCTION

The fast development in the beverage industry has an impact on the business people as they are required to continue to do their best by following trends and maintaining quality to gain consumer trust (Stephanie, 2017). Iqbal (2018) mentioned 8 drinks that are currently trending among Indonesians, namely Milk Coffee, Cheese Tea, Thai Tea, Mango Thai, Monster Milkshakes, Drinks with unique packaging, Unicorn Frappuccino, and King Durian. Meanwhile, according to Krisna (2020), the favorite drinks of Indonesians today are Thai Tea, Iced Milk Coffee, and Brown Sugar Milk. On the other hand, Igiasi (2017) emphasized that coffee-based beverage products such as Milk Coffee always have a place among Indonesian people because coffee has long been known and enjoyed throughout the archipelago. Therefore, it is reasonable that coffee shops are one of the booming businesses today (Zuhriyah, 2019). The coffee shop business, which is included in the food and beverage industry, contributes consistently and significantly to Gross Domestic Product (GDP) (Ministry of Industry, 2017).

The significant growth of coffee shops in Indonesia, especially in the city of Bandung, has made competition in this business increasingly tighter. One of the business units participating in the beverage trend arena in Bandung is Kaikara Koffie, which offers coffee products as its flagship. According to Aditya (2020), the owner of Kaikara Koffie, the trend of coffee shops has spread everywhere and is growing very rapidly. This is supported by a large number of enthusiasts since drinking coffee has become a habit for Indonesian people, especially those in Bandung. Aditya (2020) also stated that many coffee shops including Kiakara Koffie want to be able to process their own coffee beans to maintain quality, reduce costs, resell their coffee products, and become suppliers of coffee beans for their future branches. The role of suppliers in running a business is very important and being able to choose quality suppliers is one of the important bases for maintaining the stability of a business (Erвина, 2019). Every business certainly has several quality suppliers to work together to improve the quality of the company's products for customer satisfaction (Questibilia, 2020). The purpose of supplier selection is to find the right supplier with an efficiency that can meet the needs of the company consistently and minimize the risk of procuring raw materials and components (Pradipta and Diana, 2017), (Handayani and Darmianti, 2017). Therefore, this study aims to find the important criteria needed by a coffee shop as a small business in selecting its suppliers.

2. LITERATURES AND FRAMEWORK

Operations management

The definition of operations management according to some experts such as Heizer et al (2017) is a scientific discipline in which there are a series of activities to create value in the form of goods and services by converting inputs into outputs (results). Stevenson (2015) argued that the notion of operations management is a management system or steps in a product or service manufacturing process.

Supply Chain

Supply chain management is a system that describes how an organization distributes or delivers products and services to customers. According to Rimantho *et al.* (2017), Supply Chain Management (SCM) is a management philosophy that seeks quality or competent sources of business functions to be integrated both inside and outside the company. The supply chain is also a sequence of processes and flows that take place within and between different stages of the supply chain and are combined to meet customer needs for a product (Chopra and Meindl, 2013).

Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process (AHP) is a general multi-criteria decision-making method developed by Thomas L. Saaty, a mathematician from the University of Pittsburg, the United States in the 1970s (Laksana and Zarkasy, 2016), and later developed further by Thomas L. Saaty to help solve complex decision problems by capturing subjective and objective evaluation measures (Dweiri et al. 2016).

According to Kartaman and Rahmawati (2018), decision making using the Analytical Hierarchy Process (AHP) method is arranged based on the hierarchy made by decision-makers to get a solution conclusion through the existing weights. Ishak and Parinduri (2019) stated that there are 3 principles for solving problems with the AHP method, namely (1) the principle of compiling hierarchy, (2) the principle of setting priorities, and (3) the principle of logical consistency.

Ervil and Rahman (2019) revealed that AHP is a decision-making method developed to prioritize several alternatives when several criteria must be considered, and also allows decision making to arrange complex problems into a hierarchy or a series of well-integrated levels. It can be concluded that the AHP method can solve complex problems and decompose them into a hierarchy that is developed to prioritize the criteria considered in several alternatives for decision making.

The criteria of supplier selection used in this study are a combination of the criteria in previous studies from Prawiro (2019), (Susetyo et al. 2019), and (Dweiri et al. 2016). Based on Prawiro's research (2019), the criteria for selecting suppliers are cost, quality, delivery, service, and supplier relationship. The first criterion of cost has two sub-criteria, namely raw material prices (C1) and discounts (C2) (Susetyo et al. 2019). The second criterion of quality has three sub-criteria, namely quality management system (Q1), defect level (Q2), and product suitability (Q3). The third criterion of delivery has three sub-criteria, namely delivery time (D1), delivery error (D2), and on-time delivery (D3). The fourth criterion of service has three sub-criteria, namely renewal/order status (S1), warranty (S2), and geographic location (S3) (Dweiri et al. 2016). And, the fifth criterion of supplier relationship has three sub-criteria, namely supplier condition (R1), supplier reputation (R2), and supplier location (R3) (Prawiro, 2019). Figure 1 below is the framework used in this study:

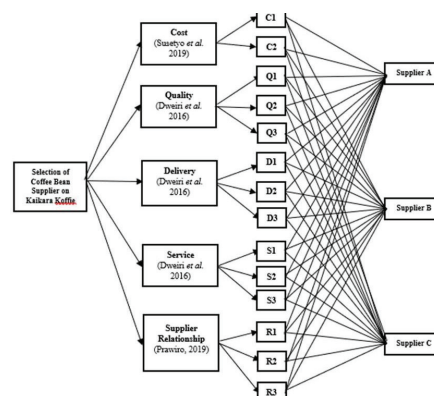


Figure 1 Framework Source: Dweiri *et al.* (2016); Prawiro (2019); Susetyo *et al.* (2019)

Based on the framework in Figure 1, there are several criteria for determining goals and weights in selecting suppliers, including cost, quality, delivery, service, and supplier relationship. Each of these criteria has three sub-

criteria except for the criterion of cost with only two sub-criteria so that the total becomes fourteen sub-criteria. All criteria and sub-criteria are part of the supplier selection process. According to Ningsih (2016), the problem that often arises in the supplier selection process is to ensure the quality of the raw materials that suppliers offer to companies. Therefore, Kaikara Koffie needs to ensure the quality of suppliers by using the existing criteria for selecting the right supplier to support the availability of raw materials, especially coffee beans. The right supplier will be selected based on the ranking of each criterion by looking at the weight value obtained by each of these criteria.

3. METHODOLOGIES

This research uses a quantitative method. Data were obtained through questionnaires distributed to resource persons by researchers. The scale used in this study is the Saaty scale 1-9. The samples were the coffee shop owner, production manager, and logistics manager selected based on the purposive sampling technique. The data obtained were processed using the Analytical Hierarchy Process (AHP) with the help of Expert Choice software. Expert Choice was used because it can help simplify data management and provide better and more measurable results for decision making (Expertchoice.com, 2020). The results of expert choice were validated using the source triangulation technique.

4. RESULTS

The results of the *Analytical Hierarchy Process* (AHP) analysis showed that the most influential criterion in the selection of coffee bean suppliers for Kaikara Koffie is quality with a weight of 0.492. Other influential criteria are service with a weight of 0.227, supplier relationship with a weight value of 0.164, cost with a weight value of 0.067, and finally delivery with a weight value of 0.049. The matrix normalization between these criteria has the correct data *consistency* because the *Consistency Ratio* (CR) is ≤ 0.1 and the value obtained is 0.02. Figure 2 illustrates the results of the matrix normalization between the criteria:

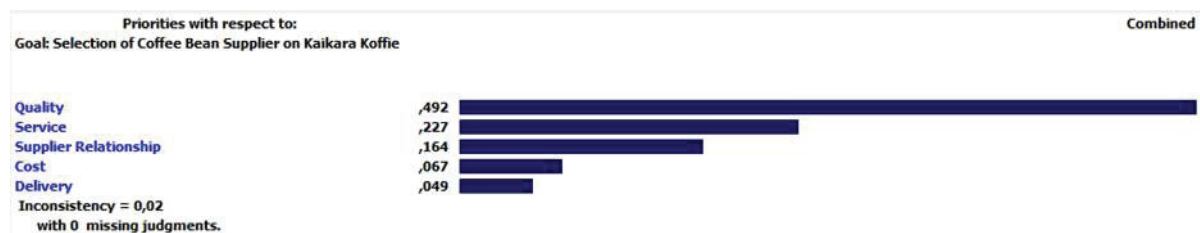


Figure 2 Normalization of the Inter-Criteria Matrix

Based on the criteria and sub-criteria in supplier selection and AHP calculations obtained from three respondents, it can be concluded that supplier C (*Spill*) is the best one with a weight value of 0.539 or 53.9%, followed by supplier A (*Java-G*) with a weight value of 0.234 or 23.4%, and supplier B (*Halu*) with a weight value of 0.227 or 22.7% with the correct data *consistency* because *Consistency Ratio* (CR) ≤ 0.1 while the value obtained is 0.01. These results indicate that the alternative or supplier that can meet the priority of all criteria is supplier C (*Spill*). Figure 3 shows the final results of supplier selection:



Figure 3 Final Result of Supplier Selection 5 Analysis and Discussion

From the results of the Analytical Hierarchy Process (AHP), the most influential criterion in the selection of coffee bean suppliers for Kaikara Koffie is quality with a weight of 0.492. The next influential criteria are service with a weight of 0.227, supplier relationship with a weight of 0.164, cost with a weight of 0.067, and finally delivery with a weight of 0.049. The high weight value of quality criterion in the coffee bean supplier selection shows that Kaikara Koffie prioritizes high-quality raw materials to be used. This is in line with the owner's desire to use good quality coffee because otherwise, it will have an impact on the quality of the coffee served.

The first criterion of cost has two sub-criteria used in the selection of alternatives, namely the sub-criteria of

raw material price (C1) and discount (C2). Of the two sub-criteria, discount (C2) has a weight value of 0.591, and raw material price (C1) only has a weight value of 0.409, which means that discount is more important to respondents than the price of raw materials. Overall, the cost criterion is occupied by supplier C (Spill) as the top priority with a weight value of 0.658, then the second priority is supplier A (Java-G) with a weight value of 0.179, and the last priority is supplier B (Halu) with a weight value of 0.164. This shows that if the company chooses a supplier based solely on the cost criterion, then supplier C (Spill) will be selected.

The second criterion of quality in this study has three sub-criteria, namely quality management system (Q1), defect level (Q2), and product suitability (Q3). Of the three sub-criteria, product suitability (Q3) has a weight value of 0.484, defect level (Q2) has a weight value of 0.283, and the quality management system (Q1) has a weight value of 0.233. Overall in the quality criterion, supplier C (Spill) is the top priority with a weight value of 0.501, then the second priority is supplier A (Java-G)

with a weight value of 0.304, and the last priority is supplier B (Halu) with a weight value of 0.195. This shows that if the company chooses a supplier based solely on quality criterion, then supplier C (Spill) will be selected.

The third criterion of delivery in this study has three sub-criteria, namely delivery time (D1), delivery error (D2), and on-time delivery (D3). Of the three sub-criteria, on-time delivery (D3) has a weight value of 0.590, delivery time (D1) has a weight value of 0.263, and delivery error (D2) has a weight value of 0.148. Overall in the delivery criterion, supplier C (Spill) is the top priority with a weight value of 0.533, then the second priority is supplier B (Halu) with a weight value of 0.254, and the last priority is supplier A (Java-G) with a weight value of 0.212. This shows that if the company selects a supplier based solely on the delivery criterion, then supplier C (Spill) will be selected.

The fourth criterion of service in this study has three sub-criteria, namely renewal/ordering status (S1), warranty (S2), and geographic location (S3). Of the three sub-criteria, geographic location (S3) has a weight value of 0.488, renewal/order status (S1) has a weight value of 0.278, and warranty (S2) has a weight value of 0.234. Overall in the service criterion, supplier C (Spill) is the top priority with a weight value of 0.544, then the second priority is supplier B (Halu) with a weight value of 0.275, and the last priority is supplier A (Java-G) with a weight value of 0.181. This shows that if the company selects a supplier based solely on service criterion, then supplier C (Spill) will be selected.

The fifth criterion of supplier relationships in this study has three sub-criteria, namely supplier condition (R1), supplier reputation (R2), and supplier location (R3). Of the three sub-criteria, supplier reputation (R2) has a weight value of 0.447, supplier condition (R1) has a weight value of 0.338, and supplier location (R3) has a weight value of 0.215. Overall in the supplier relationship criterion, supplier C (Spill) is the top priority with a weight value of 0.608, then the second priority is supplier B (Halu) with a weight value of 0.270, and the last priority is supplier A (Java-G) with a weight value of 0.122. This shows that if the company selects a supplier based solely on the supplier relationship criterion, then supplier C (Spill) will be selected.

Based on the criteria and sub-criteria of supplier selection and AHP calculations obtained from three respondents, it can be concluded that the main criterion chosen by respondents is quality with a weight value of 0.492 or 49.2%. Besides, supplier C (Spill) was chosen as the best supplier with a weight value of 0.539 or 53.9%, followed by supplier A (Java-G) with a weight value of 0.234 or 23.4%, and supplier B (Halu) with a weight value of 0.227 or 22.7%. These results indicate that supplier C (Spill) is the alternative or the supplier that meets all priority criteria. Supplier C (Spill) is the right choice for respondents to supply their coffee raw material needs because supplier C (Spill) fulfills all the criteria and sub-criteria elements specified in the study by obtaining the highest weight value on the main criterion of quality, which indicates that supplier C (Spill) is of high quality. Therefore, supplier C (Spill) is the best supplier to be Kaikara Koffie's long-term partner.

5. 6 CONCLUSION

There are five criteria used for the Kaikara Koffie coffee bean supplier selection process, namely cost, quality, delivery, service, and supplier relationship. Except for the cost criterion which only has two sub-criteria, each of the other four criteria has three sub-criteria, so there are fourteen sub-criteria in total. The two sub-criteria of cost as the first criterion are raw material price and discount. The second criterion is quality which has three sub-criteria of the quality management system, defect level, and product suitability. The third criterion is delivery which has three sub-criteria of delivery time, delivery error, and on-time delivery. The fourth criterion is service which has three sub-criteria, namely renewal/order status, warranty, and geographic location. The fifth and final criterion is supplier relationship which has three sub-criteria of supplier condition, supplier reputation, and supplier location.

Data processing and analysis using the Analytical Hierarchy Process (AHP) method has resulted in priority rankings and weight values for each of the criteria and suppliers of Kaikara Koffie. The results show that the criterion of

quality is the top priority with a weight value of 0.492, and then sequentially followed by the criteria of service with a weight value of 0.227, supplier relationships with a weight value of 0.164, costs with a weight value of 0.067, and delivery with a weight value of

0.049. This shows that quality is the most important criterion in choosing a coffee bean supplier. Then based on data processing, supplier C (Spill) appears as the recommended supplier for Kaikara Koffie

to work together in the long term because it is the top priority supplier with a weight value of 0.539 and has met the existing criteria, especially quality.

Kaikara Koffie deserves to be more selective in choosing raw material suppliers so that their products will always have good and consistent quality considering that quality criterion is their main priority with the highest weight value of 0.492. Although quality is the top priority criterion with a value of 0.492, other criteria must also be considered due to their roles in the selection of coffee bean suppliers for Kaikara Koffie. Future studies can examine supplier selection in other small businesses using the criteria in this study.

REFERENCES

- Chopra, Sunil, and Peter Meindl. 2013. *Supply Chain Management (Strategy, Planning, And Operation)*. USA: Pearson.
- Dweiri, Fikri, Sameer Kumar, Sharfuddin Ahmed Khan, and Vipul Jain. 2016. "Designing An Integrated AHP Based Decision Support System for Supplier Selection in Automotive Industry." *Journal of Expert Systems with Applications* 62: 273–283.
- Ervil, Riko, and Fandy Rahman. 2019. "Analisis Pemilihan Supplier Menggunakan Metode Analytical Hierarchy Process (AHP) (Studi Kasus PT. Gunung Naga Mas)." 19(2).
- Ervina. 2019. "Tips Memilih Supplier Terbaik Untuk Perkembangan Bisnis Anda." https://www.talenta.co/blog/insight-talenta/tips-memilih-supplier/#Mengutamakan_Kualitas (September 5, 2020).
- Expertchoice.com. 2020. "AHP Software for Decision Making and Risk Assessment." <https://www.expertchoice.com/2020> (July 9, 2020).
- Handayani, Rani Irma, and Yuni Darmianti. 2017. "Pemilihan Supplier Bahan Baku Bangunan Dengan Metode Analytical Hierarchy Process (AHP) Pada PT. Cipta Nuansa."
- Heizer, Jay, Barry Render, and Chuck Munson. 2017. *Operation Management: Sustainability and Supply Chain Management*. 12th ed. USA: Pearson.
- Igiasi, Teguh Setiandika. 2017. "Kedai Kopi Sebagai Ruang Publik: Studi Tentang Gaya Hidup." 1(1).
- Iqbal, Reza. 2018. "8 Minuman Kekinian Ini Jadi Paling Favorit Di Indonesia Selama 2017." <https://www.idntimes.com/food/dining-guide/reza-iqbal/8-minuman-kekinian/8> (April 19, 2020).
- Ishak, Aulia, and Syafiah Khairunnisa Parinduri. 2019. "Supplier Selection Using Analytical Hierarchy Process (AHP) And Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)." *International Conference on Engineering and Management in Industrial System (ICOEMIS 2019)* 171: 321–328.
- Kartaman, Asep Toto, and Ayu Nova Rahmawati. 2018. "Penerapan Metode Analytical Hierarchy Process (AHP) Dalam Pemilihan Alternatif Peningkatan Kualitas Produk Electric Cable." *Seminar Nasional IENACO – 2018*.
- Kemenperin. 2017. "Kemenperin: Industri Makanan Dan Minuman Masih Jadi Andalan." <https://kemenperin.go.id/artikel/18465/Industri-Makanan-dan-Minuman-Masih-Jadi-Andalan> (April 19, 2020).
- Krisna, Albertus. 2020. "Tren Konsumsi Minuman "Kekinian"." <https://kompas.id/baca/metro/2020/03/05/tren-konsumsi-minuman-kekinian/> (August 21, 2020).
- Laksana, Tri Ginanjar, and Ma'mun Efendi Zarkasy. 2016. "Sistem Pendukung Keputusan Selesksi Supplier Pemilihan Bibit Ayam Broiler Menggunakan Metode AHP (Study Kasus: CV. CMB)."
- Ningsih, Rahayu. 2016. "Penentuan Pemilihan Supplier Bahan Baku Oli BS150 Menggunakan AHP." *Jurnal Teknik Komputer AMIK BSI* 2.

Pradipta, Aldi Yudha, and Anita Diana. 2017. "Sistem Penunjang Keputusan Pemilihan Supplier Pada Apotek Dengan Metode AHP Dan SAW (Studi Kasus Apotek XYZ)." *Jurnal Sisfotek*.

Prawiro, Ardi. 2019. "Model Seleksi Pemasok Kemasan Berbasis Metode Analytical Hierarchy Process Perusahaan Farmasi." *Journal of Business Economics* 24(2): 168–180.

Questibrilia, Bivisyani. 2020. "8 Prinsip Manajemen Kualitas Dalam Perusahaan Yang Patut Diaplikasikan." <https://www.jojonomic.com/blog/manajemen-kualitas/> (August 26, 2020).

Rimantho, Dino, Fathurohman Fathurohman, Bambang Cahyadi, and Sodikun Sodikun. 2017. "Pemilihan Supplier Rubber Parts Dengan Metode Analytical Hierarchy Process Di PT.XYZ." *Jurnal Rekayasa Sistem Industri* 6(2): 93.

[2-] Stephanie, Kimberly. 2017. "5 Strategi Dalam Meningkatkan Kepercayaan Konsumen." <https://koinworks.com/blog/meningkatkan-kepercayaan-konsumen/> (September 5, 2020).

Stevenson, William J. 2015. *Operations Management*. New York: McGraw-Hill Education.

Susetyo, Joko, C Indri Parwati, and Cintia Noor Asmi. 2019. "Usulan Pemilihan Supplier Bahan Baku Dengan Metode AHP (Analytical Hierarchy Process) Dan TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) Pada Industri Konveksi." *Simposium Nasional RAPI XVIII – 2019 FT UMS*: 42–48.

Zuhriyah, Dewi Aminatuz. 2019. "Startup Kopi Menjamur, Persaingan Bisnis Kafe Di Indonesia Memanas." <https://ekonomi.bisnis.com/read/20190807/12/1133701/startup-kopi-menjamur-persaingan-bisnis-kafe-di-indonesia-memas> (August 28, 2020)

OPTIMIZING SEAPORT CAPACITY FOR CONTAINER LOADING AND UNLOADING IN PT JAKARTA INTERNATIONAL CONTAINER TERMINAL

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Abstract

Indonesia is an island nation also known as a maritime country. Today, Indonesia wants to achieve its vision to become the maritime axis of the world. Indonesia needs highly capable infrastructure, especially in the field of sea transportation. As a country that is also active in international trade, access and infrastructure for sea transportation, especially container ports, has a very important and strategic role for economic growth, especially for international trade. As the best container port in Indonesia, PT Jakarta International Container Terminal (JICT) has an area of 100 Ha and makes it the largest container terminal in Indonesia. PT JICT is also able to handle more than 2.4 million TEUs (Twenty-foot Equivalent Units) per year.

Seeing that logistics activities are increasing because of e-commerce trend and land area is limited, this research aims to know how PT JICT utilizing their land and how the container capacity in PT JICT container terminals. Using a descriptive approach, secondary data from the company will be processed using the calculation formula of Yard Occupancy Ratio (YOR) and Throughput. The data types analyzed have a ratio scale.

The results show that the land utilization in container terminals can be categorized well. This is known by looking at the YOR score that below the company's standard which is 65%.

Keywords: Capacity, Container Port , Optimization, Yard Occupancy Ratio (YOR).

OPTIMAL PORTFOLIO ANALYSIS ON SHARES INCLUDED IN 100 EXCELLENT GROWTH COMPANIES RANKS CATEGORY USING THE SINGLE-INDEX MODEL

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Abstract

Investing is one of the important things in preparing ourselves to guarantee life in the future. In investing, investors have the goal of obtaining profits in the future at a certain level and as expected by delaying current consumption in a certain amount and for a certain period of efficient assets. To reduce the level of investment risk, investors can report through the portfolio by combining the expected return with the lowest risk. This study uses a descriptive quantitative method that aims to see optimal portfolio reporting using the single index model, also portfolio performance evaluation results from the Sharpe index, Jensen index, and Treynor index. The samples of this study use shares listed in 100 Excellent Growth Company Rank category successively in 2018 and 2019. the variables to be studied include excess return to beta, alpha, beta, expected return, Sharpe Index, Jensen Index, and Treynor Index.. This research is based on a theoretical framework and definitions according to experts. The theoretical framework used includes investment theory, rate of return, level of risk, efficient and optimal portfolio, and evaluation of portfolio performance. This research will show the results of the formation portfolio and its performance that can be used as a reference in investing for investors especially using the shares listed in 100 Excellent Growth Company Ranks with a Single-Index Model.

Keywords: Investment, return, expected return, optimal portfolio, Single-Index Model, Sharpe Index, Jensen Index, and Treynor Index.

PRODUCTIVITY AND EFFICIENCY OF ISLAMIC BANKING IN INDONESIA

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Abstract

The development of Islamic Banking in Indonesia tends to show a slow improvement. Data from Otoritas Jasa Keuangan (OJK—Financial Service Authority) in December 2019 shows that there are 14 islamic banks with 20 islamic business units, and more than 800 branch offices and 1.400 auxiliary branch offices. According to Islamic Finance Country Index (IFCI) which is the oldest index in determining countries rank based on Islamic Banking and Finance (IBF) shows that in 2019 Indonesia got the first rank, went up 5 ranks from the previous year which was in 6 place, overtakes Malaysia which since 2011 always in the first place. Based on the rapid improvement, this research needs to be done. This research has two main purposes, first to measure the productivity level of islamic banking in Indonesia. Second, this research is done to see the efficiency level of islamic banking in Indonesia. This research will study the productivity and efficiency of islamic banking in Indonesia during 2010-2019 period. Data that is used in this research is islamic banking financial data which is obtained from financial report and then divided into input and output variable.

Research about the productivity of islamic bank using Malquist index is rarely done in Indonesia, if compared to research of conventional bank. This research will use Malquist Productivity Index (MPI) approach that measure the relation between input and output together. The relation will be stated into ratio from output index towards agregat input index. Meanwhile, efficiency is a way to measure performance theoretically which is a performance that underline whole performance in organization by calculating input and output. This study uses Stochastic Frontier Analysis (SFA) in determining the efficiency of islamic banking expense in that period. Determination of output variable is taken from small business finance, other finance, securities and investment, and other income. While input variables are deposits, fixed assets, and general and administrative expenses. This research will be done by using analysis tool of DEAP 2.1 and Frontier 4.1.

Research result shows that the average productivity tends to decrease and the efficiency of islamic bank expense during reserach sampel increases. This finding shows the importance of islamic bank in Indonesia to be able to minimize input in order to keep their productivity and efficiency level. The result can be a proposition for decision maker that the decrease in productivity can be changed by using new technology including easy usage of ATM, mobile banking and internet banking, therefore it can improve the productivity especially in the utilization of technology.

Keywords: Islamic Banking, Productivity, Efficiency.

ANALYSIS OF FACTORS AFFECTING INTERNET FINANCIAL REPORTING AT LQ 45

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Abstract

The existence of the internet in the current era of globalization is very beneficial for various circles of society. The use of the internet allows people to access the website anywhere and anytime. With the company website, it allows companies to disclose much more information than the traditional way. With developments in the communications industry, corporate reporting activities and investor relations have changed as a result of these increased developments. The use of the internet as a medium for submitting company reports, one of which is the submission of financial reports, known as the Internet Financial Reporting. The factors that influence internet financial reporting are profitability, leverage, and listing age. Company profitability is an indicator of good corporate management, so management tends to disclose more information when there is an increase in company profitability. Likewise leverage and listing age.

The purpose of this study is to determine the effect of profitability, leverage, and listing age to internet financial reporting. This research is included in the type of descriptive research and is causal. The population in this study were LQ 45. LQ 45 is a composite index of 45 issuers with high liquidity, which are selected using several selection criteria. Data were analyzed through linear regression using SPSS. The results showed that simultaneously profitability, leverage, and listing age affect the Internet Financial Reporting. Partially profitability, leverage, and listing age has a significant positive effect on the Internet Financial Reporting.

Keywords: IFR, leverage, listing age, profitability

THE EFFECT OF GOOD CORPORATE GOVERNANCE ON TAX AVOIDANCE

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Abstract

Based on the literature, tax avoidance is a legal action to minimize the tax burden. There are two different points of view, both from the company and government point of view. From the company's point of view, tax avoidance can maximize company profits. However, when viewed from the government's point of view, tax avoidance causes the loss of potential state revenue from the tax sector, this is proven by not achieving the tax revenue target each year. If the company has good corporate governance, it is hoped that it can minimize tax avoidance, so that state revenue from the tax sector will be maximized. In this study, corporate governance is measured using institutional ownership, managerial ownership, and independent commissioner.

This study aims to determine the effect of good corporate governance on tax avoidance. This research is a descriptive and causal research. The population in this study are manufacturing companies listed on the Indonesian Stock Exchange, which are selected using several selection criteria. Data analysis was performed using panel data regression using Eviews 10 software. The results in this study indicate that both simultaneously and partially good corporate governance has an effect on tax avoidance.

Keywords: tax avoidance, good corporate governance, institutional ownership, managerial ownership, independent commissioner

THE EFFECT OF MANAGERIAL OWNERSHIP, INSTITUTIONAL OWNERSHIP, AND INDEPENDENT COMMISSIONERS ON RETURN ON ASSETS (A STUDY OF THE MANUFACTURING COMPANIES IN THE CONSUMER GOODS SECTOR IN 2014-2018)

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Abstract

Every company has the ultimate goal to be achieved, namely obtaining maximum profit or profitability. ROA is one ratio for measuring profitability. Where ROA is defined as the ratio used to measure how much net income will be generated from each rupiah of funds embedded in total assets. This study aims to examine the effect of managerial ownership, institutional ownership and the size of the independent board of commissioners on ROA in the consumer goods manufacturing companies listed on the IDX. The sampling method uses a purposive sampling method with a total sample of 8 companies and a study period of 5 years to obtain a total sample of 40 data units. Data analysis techniques used descriptive statistics and hypothesis testing using panel data regression analysis using the Eviews 9 software application. The test results obtained from this study simultaneously showed managerial ownership, institutional ownership and the independent board of commissioners had a significant effect on ROA. Partially shows managerial ownership, institutional ownership and the independent board of commissioners do not have a significant influence on ROA.

Keywords : Return on Assets; Managerial ownership; Institutional Ownership; Independent Board of Commissioners.

1. INTRODUCTION

Profitability is the basic thing that is seen by investors in valuing a company. Companies with high profitability, stable and tend to increase will certainly be liked by investors. The profitability of a company can be measured using ROA, where ROA is a ratio that shows how much the contribution of assets in creating net profit. In other words, this ratio is used to measure how much net income will be generated from each rupiah of funds embedded in total assets (Hery, 2015: 228).

According to data from the author if the annual report of the company that is sampled in this study, shows that ROA of consumer goods sector companies listed on the Indonesia Stock Exchange in 2014-2018 tended to decline. This decline is due to continued decline in product prices from the consumer goods sector. Besides being caused by a fall in product prices, the level of ROA of the company can also be influenced by how much share ownership of managerial and institutions as well as the proportion of independent commissioners.

According Alfinur (2016), defines that managerial ownership is the percentage of share ownership of the company by the directors, management, commissioners as well as every party directly involved in making decisions in the company. So in this case the management as the manager of the company is also the owner of the company or the company's shareholders.

According Alfinur (2016), Institutional Ownership is ownership of shares owned by parties in the form of institutions such as insurance companies, investment and pension companies, and other institutions can reduce the influence of other interests in the company such as personal interests of managers and debtholders.

The board of commissioners can consist of Commissioners who are not from affiliated parties known as Independent Commissioners and affiliated Commissioners. Affiliated means parties that have business and family relations with the controlling shareholder, members of the board of directors and other board of commissioners.

The purpose of this study was to measure the value of managerial ownership, institutional ownership and the

size of the independent board of commissioners in the consumer goods sector manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018. This study explains how to measure the effect of managerial ownership, institutional ownership, and independent board of commissioners on Return on Assets.

2. LITERATURE REVIEW

2.1 RETURN ON ASSETS

According to Hery (2015) the return on assets is a ratio that shows how much the contribution of assets in creating net income. In other words, this ratio is used to measure how much net income will be generated from each rupiah of funds embedded in total assets. This ratio is calculated by dividing net income from total assets.

$$\text{Return on Assets} = \frac{\text{net income}}{\text{total assets}}$$

2.2 MANAGERIAL OWNERSHIP

Managerial ownership is a number of shares owned by the internal company. Managerial ownership includes shareholders who have a position in the company as creditors or as a board of commissioners, or it can also be said that managerial ownership is shares owned by managers and directors of the company. This ownership will align the interests of management and shareholders, because with the amount of shares owned, management is expected to act more carefully in making decisions (Susanti and Riharjo, 2013).

According Alfinur (2016), defines that managerial ownership is the percentage of share ownership of the company by the directors, management, commissioners as well as every party directly involved in making decisions in the company. So in this case the management as the manager of the company is also the owner of the company or the company's shareholders.

The formula used to calculate the percentage of managerial ownership based on Putrianis (2016) research is as follows:

$$\text{Managerial Ownership} = \frac{\text{Number of Managerial Shares}}{\text{Number of Outstanding Shares}} \times 100\%$$

2.3 INSTITUTIONAL OWNERSHIP

According Alfinur (2016), Institutional Ownership is ownership of shares owned by parties in the form of institutions such as insurance companies, investment and pension companies, and other institutions can reduce the influence of other interests in the company such as personal interests of managers and debtholders.

$$\text{Institutional Ownership} = \frac{\text{Number of Institutional Shares}}{\text{Number of Outstanding Shares}} \times 100\%$$

2.4 INDEPENDENT COMMISSIONER

The board of commissioners can consist of Commissioners who are not from affiliated parties known as Independent Commissioners and affiliated Commissioners. According to the Financial Services Authority Regulation (POJK) Number 33 Article 20 of 2014, states that the number of Independent Commissioners must be at least 30% of the total members of the Board of Commissioners. The composition of the independent board of commissioners is calculated using the following formula:

$$\frac{\text{Number of Independent Board of Commissioners}}{\text{Total Board of Commissioners}} \times 100\%$$

2.5 HYPOTHESIS DEVELOPMENT

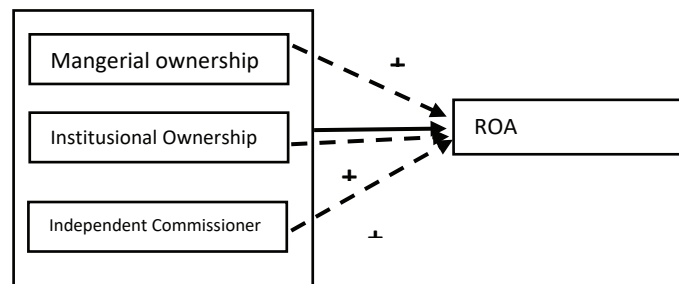


Figure 1. Framework for Thinking

Information :



3. RESEARCH RESULT AND DISCUSSION

3.1 DESCRIPTIVE STATISTICS

Table 1. Descriptive Statistics

	ROA	KM	KI	DKI
mean	0,12897	0,10545	0,37732	0,38021
median	0,07284	0,00673	0,36130	0,33333
maximum	0,64094	0,68275	0,75020	0,50000
minimum	-0,05897	0,00016	0,15461	0,33333
st. Dev	0,17465	0,18100	0,15155	0,07135

3.2 DATA PANEL REGRESSION ANALYSIS

a. Chow Test

Table 2. Significance Test of Fixed Effect

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.203858	(9,27)	0.0000
Cross-section Chi-square	69.860854	9	0.0000

Chow test results in the table above shows, the value of prob (Cross-section Chi-square) of 0.0000 < 0.05 (significance level = 5%). Based on these data, it can be concluded that the panel data regression model used is the fixed effect model which is better than the common effect model.

b. Hausman Test

Table 3. Significance Test of Random Effect

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.608302	3	0.8945

Hausman test results in the table above show, the value of prob (cross-section random) of 0.8945 > 0.05 (significance level = 5%). Based on these results, according to the provisions of the decision that H1 was rejected, so the model used is a random effect model.

c. Lagrange Multiplier Test

Table 4. Lagrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
Test Hypothesis			
	Cross-section	Time	Both
Breusch-Pagan	33.24538 (0.0000)	1.683748 (0.1944)	34.92912 (0.0000)
Honda	5.765880 (0.0000)	-1.297593 --	3.159556 (0.0008)

Lagrange Multiplier test results in the table above shows, the value of prob (Cross-section Breusch-Pagan) of 0.0000 < 0.05 (significance level = 5%). Based on these results, it is according to the decision making provisions that H1 is accepted, so the model used is the random effect model.

Based on the results of tests conducted by researchers using eviws 10. The results obtained through the Chow test, Hausman test and Lagerage Multiplier test get a panel data regression model in the form of Random Effect Model with the following equation:

Table 5. Random Effect Model

Dependent Variable: Y				
Method: Panel EGLS (Cross-section random effects)				
Date: 08/27/19 Time: 22:22				
Sample: 2014 2017				
Periods included: 4				
Cross-sections included: 10				
Total panel (balanced) observations: 40				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.075493	0.112390	-0.671710	0.5061
X2	-0.112603	0.165865	-0.678881	0.5016
X3	-0.016996	0.419767	-0.040488	0.9679
C	0.185880	0.203301	0.914310	0.3666
Effects Specification				
		S.D.		Rho
Cross-section random		0.190710		0.8310
Idiosyncratic random		0.086016		0.1690
Weighted Statistics				
R-squared	0.022016	Mean dependent var		0.028372
Adjusted R-squared	-0.059483	S.D. dependent var		0.080743
S.E. of regression	0.083109	Sum squared resid		0.248659
F-statistic	0.270139	Durbin-Watson stat		1.426708
Prob(F-statistic)	0.846496			

$$ROA = 0,185880 - 0,075493 (KM) - 0,112603 (KI) - 0,016996 (DKI) + e$$

3.3 RESEARCH RESULT AND DISCUSSION

a. Simultaneous Hypothesis Testing Results (F Test)

Based on table V it can be seen that the probability value or F-statistic of 0.022016 is smaller than the significance level of 0.05 (5%). In accordance with the provisions, it can be concluded that the independent variables namely managerial ownership, institutional ownership and the independent board of commissioners have a significant influence on the dependent variable that is ROA simultaneously.

b. Partial Hypothesis Testing Results (t Test)

Based on the results of the t test in table 8, it can be concluded as follows:

- Managerial ownership variable has a probability of $0.5061 > 0.05$, it can be concluded that the managerial ownership variable partially has no significant effect on ROA.
- The variable of institutional ownership has a probability of $0.5016 > 0.05$ so it can be concluded that the variable institutional ownership does not have a significant effect on ROA.
- The independent commissioner variable has a probability of $0.9679 > 0.05$, so it can be concluded that the independent commissioner variable partially has no significant effect on ROA.

c. Discussion

- Effect of Managerial Ownership on ROA

Managerial ownership does not affect the company's ROA because of the data the authors carefully show that managerial ownership in goods and consumption sector companies in 2014-2018 still tends to be small, so the application of managerial ownership to help the unification of interests between managers and owners that can improve performance has not been running effective. it causes managers not moved to always try to improve the performance of their companies which will have an impact on company ROA. Managers think the amount of profits they can keep will be small because their share ownership is also small. The results of this study concur with the results of research by Imas Kusumandari (2016).

- Effect of Institutional Ownership on ROA

Institutional ownership has no effect on company ROA because from the data the authors carefully show that managerial ownership in goods and consumption sector companies in 2014-2018 still tends to be small, causing the manager's monitoring process to be less effective, so that manager's performance in increasing company ROA is not optimal. The results of this study agree with the results of the research Selviana Nugrahawati (2019).

- The influence of the Independent Board of Commissioners on ROA

The independent board of commissioners has no effect on the company's ROA because from the data the author carefully shows that the existence of an independent board of commissioners is smaller than the non-independent board of commissioners chosen by the majority shareholder. This causes the independent board of commissioners not to have a dominant influence in decision making in an effort to increase company profitability. This study agrees with Putra and Nuzula's (2017) research that the proportion of independent commissioners does not have a significant influence on ROA.

4. CONCLUSION AND IMPLICATION

Based on panel data regression it can be concluded that simultaneously the independent variables of managerial ownership, institutional ownership and the independent board of commissioners have a significant influence on ROA. Partially, the effect of each independent variable on the dependent variable ROA in this study is as follows: managerial ownership, institutional ownership and the independent board of commissioners have no influence on ROA.

Based on the results of research that has been done, the authors provide some suggestions for further research as follows:

1. Future studies are expected to use a longer research period, so as to obtain more comprehensive results from the research conducted.
2. Further research can add other research variables that can affect the company's ROA, such as the size of the board of directors and audit committee.

REFERENCES

- Alfinur. (2016). Pengaruh Mekanisme *Good Corporate Governance* (Gcg) Terhadap Nilai Perusahaan Pada Perusahaan Yang Listing Di Bei. *Jurnal Ekonomi Modernisasi*, 12.
- Hery. 2015. *Analisis Laporan Keuangan Pendekatan Rasio Keuangan*. Yogyakarta : Center for Academic Publishing Service.
- Kusumandari, Imas. 2016. Pengaruh Dewan Direksi, Komisaris Independen, Komite Audit, Kepemilikan Manajerial dan Kepemilikan Institusional terhadap Kinerja Perusahaan. *Jurnal Ilmu Manajemen* Volume 1 Nomor 1 Januari 2013.
- Nugrahawati, Selviana. 2019. Pengaruh Struktur Kepemilikan dan Ukuran Perusahaan terhadap Kinerja Perusahaan (ROA). Publikasi Ilmiah.
- Nuzula, Nila Firdausi, Agung Santoso Putra. 2017. *Pengaruh Corporate Governance terhadap Profitabilitas yang Terdaftar di BEI Periode 2013-2015*. *Jurnal Administrasi Bisnis* Vol. 47 No. 1 Juni 2017.
- Pemerintah Indonesia. 2014. Peraturan Otoritas Jasa Keuangan Nomor 33/POJK.04/2014 Tentang Direksi dan Dewan Komisaris Emiten atau Perusahaan Publik. Jakarta : Sekretariat Negara.
- Putrianis, Y. (2016). Pengaruh *Good Corporate Governance* Terhadap Nilai Perusahaan Pada PT. Astra Internasional Tbk.
- Susanti dan Riharjo. 2013. Pengaruh good corporate governance terhadap corporate social responsibility *pada perusahaan cosmetics and household*. *Jurnal ilmu dan riset akuntansi* vol.1 no.1, Januari 2013.

INCOME SMOOTHING ON THE CONSUMER GOODS INDUSTRY COMPANY LISTED AT INDONESIA STOCK EXCHANGE (BEI)

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Abstract

This study aims to determine the effect of cash holding, public ownership, bonus plans, and winner/loser stocks on income smoothing in consumer goods industry sector listed on the Indonesia Stock Exchange in 2015-2018. The method in this research uses quantitative methods with descriptive research type verification. The hypothesis in this study was tested using descriptive statistical analysis and logistic regression analysis using SPSS 25.0 software. The sampling technique used in this study is a purposive sampling technique that resulted in 27 samples of selected companies within a period of 4 years in order to obtain 108 sample units of companies of consumer goods industry listed on the Indonesia Stock Exchange in 2015-2018.

The results of this study indicate that the variable cash holding, public ownership, bonus plans, and winner/loser stocks simultaneously have a significant effect on income smoothing. Partially, cash holding, and public ownership have no significant effect on income smoothing. While the bonus plan variable has a significant effect in a negative way on income, and winner/loser stocks have a significant effect in a positive way on income smoothing.

Keywords: Bonus Plan, Cash Holding, Income Smoothing, Public Ownership, Winner/Loser Stocks

1. INTRODUCTION

Investors for making investment decisions tend to pay attention to the size of the profits generated by the company, because the company's ability to generate profits reflects its ability to manage business activities (Dewi & Suryanawa, 2019). This encourages every company to compete to increase the company's profit in order to attract investors no matter what. One way that management usually does is practice accounting, namely earnings management.

According to Supriyono (2018: 123) earnings management is all the actions used by managers to influence earnings by increasing or decreasing profits according to their goals. There are three types of earnings management strategies according to Subramanyam (2017: 118), namely, (1) Increase, (2) Big bath, (3) Managers reduce profit fluctuations with income smoothing practices. Of the three types of earnings management strategies, management often performs income smoothing to reduce fluctuations in company profits through the choice of accounting procedures, because most investors assume that if the company's earnings fluctuate, investors assume that the company has a high risk. So, it can reduce invest motivation (Revinsia, Rahayu, & Lestari, 2019).

Income smoothing is the practice of deliberately reducing reported profit fluctuations to be at a level considered normal for the company according to Henry (2014: 8). The occurrence of income smoothing is usually caused by the freedom to choose accounting methods or principles as regulated in PSAK 25 concerning accounting policies, changes in accounting estimates, and errors (Putri & Budiasih, 2018).

It is not without reason that company management practices income smoothing, management does this with the aim of: (1) obtaining tax advantages, (2) giving good impressions to owners and creditors on management performance, (3) reducing fluctuations in earnings reporting and reducing risk, (4) generate stable profit growth, (5) maintain the position / position of management in the company (Putri & Budiasih, 2018). In this study, the income smoothing action was tested with the Eckel index (1981), Eckel used the Coefficient Variation (CV) of variable income and variable net sales.

The purpose of this study is to determine whether there is affect simultaneous and partial between cash holding, public ownership, bonus plans, and winner/loser stocks on income smoothing. The benefits of this research

for Company Management are expected to be a suggestion for Company Management to not incorporate Self Interest into company affairs for making decisions, so that the information generated is truly in accordance with the actual situation. Meanwhile, this study for investors is expected to be able to provide information to them about several factors that can affect the company's income smoothing practices, thereby helping investors for making decisions to invest.

This study uses logistic regression analysis. The goal of logistic regression is to create a regression model to predict the size of the dependent variable in the form of a binary variable (nominal data) by using an independent variable whose size is known according to Santoso (2018: 222). Statistical hypothesis by assessing the feasibility of the regression model using the Hosmer and Lemeshow's Goodness of Fit Test. This model is to test the null hypothesis that the empirical data fits or fits the model (there is no difference between the model and the data so that the model can be said to be fit or fits the model) and to assess the fit model, the fit test is carried out to assess the model that has been hypothesized to be fit or not with Ghazali data (2018: 341).

The results of this study indicate that the variable cash holding, public ownership, bonus plans, and winner / loser stocks simultaneously have a significant effect on income smoothing. Partially, cash holding, and public ownership have no significant effect on income smoothing. While the bonus plan variable has a significant effect in a negative direction on income, and winner / loser stocks has a significant effect in a positive direction on income smoothing.

2. THEORETICAL FRAMEWORK

According to Hery (2015:15) Income smoothing is one aspect of earnings management, which is defined as a deliberate reduction of reported earnings fluctuations to be at a normal level. Income smoothing is one of the internal factors that can affect the profits gain by a company. Income smoothing is often used to stabilize the profit that the company gets, if the profit gain by the company is too high, the income will be reduced so that the profit can decrease and is in accordance with the expected profit, whereas if the profit is too low, a fictitious sales invoice will be created, and of course will greatly affect the company's profit (Dwiadnyani & Mertha, 2018). Income smoothing was tested with the Eckel index (1981). The Eckel index can differentiate companies into two groups, namely income smoothing companies and non-income smoothing companies. The Eckel index uses the Coefficient Variation (CV) variable for income and net sales variables. The income smoothing index is calculated by comparing the coefficient of variation for changes in income (CV ΔI) with the coefficient of variation for changes in sales (CV ΔS). In this study, the measurement scale for the income smoothing index uses dummy variables. Group of companies that practice income smoothing is given a value of 1 (one), while groups of companies that do not practice income smoothing are given a value of 0 (zero).

Cash holding is the amount of cash held by the company to carry out various company activities (Mambraku & Hadiprajitno, 2014). The manager's performance can be seen from the actions taken by the manager to keep the stable increase in cash at the company. Managers use cash holding to minimize external funding and company operations. The very liquid nature of cash holding makes cash very easy to disburse and easy to transfer, making it easy for cash to be hidden or used for improper actions. One of the actions taken to keep cash stable is by practice income smoothing. Higher cash holding, so higher the income smoothing practice the company will carry out. This is in line with research conducted by (Natalie & Astika, 2016) and (Dewi & Latrini, 2016) which state that cash holding has a positive effect on income smoothing practices.

Public ownership is the level of ownership of company shares by the public or the general public outside the company environment (Susanta Putra & Suardan, 2016). The high proportion level of company public ownership makes management showing good company performance through corporate financial reporting, and one of them is profit. This occurs because good company performance means that the level of the investor's confidence is high to a company, and because of this management tends to practice income smoothing to make the company perform well in terms of profit, thereby increasing investor's confidence. Higher level of proportion that company ownership owned by the public, the management tends to do income smoothing. This is supported by previous research conducted by (Susanta Putra & Suardan, 2016) which states that public ownership has a positive effect on income smoothing practices, it said higher level of public ownership proportion, the management tends to carry out income smoothing practices.

A bonus plan can be defined as a company's plan of bonus that will give to managers which is calculated from the profits earned by the company (Mukhlisin, 2007). Companies that have a bonus plan will make their management to try their best for generate profits according to predetermined targets, so that management will get a bonus from the company. The existence of bonuses given to managers is thought to encourage managers to do practice income smoothing. The greater bonus plan or bonus compensation received by the manager, the more opportunities for managers to do practice income smoothing will also increase. This statement is supported by the results of previous research conducted (Dewi & Suryanawa, 2019) which states that bonus plans have a

positive effect on income smoothing practices.

Winner/loser stock is a grouping of companies based on the stock returns of each company (Adriani, Putri, & Tenaya, 2018). In the study of (Iskandar & Suardana, 2016), winner stocks are company's stocks that have a stock return is greater than the market average return, which is called a positive return. On the other hand, loser stocks are stocks of companies whose stock return is negative, or has a return that is equal to or smaller than the average market return. Management has the possibility to practice income smoothing if the company is in winner stocks with the aim of maintaining its position in the winner stock position. Meanwhile, even in a loser stock position, the management also has the possibility to practice income smoothing with the aim of increasing the company's value until it is in the position of winner stocks. This is done by management to achieve or maintain shareholder's value. Previous research that is in line with that is the result of research (Supriastuti & Warnanti, 2015) which is the winner / loser stock has a significant effect on income smoothing practices. Winner / loser stock is calculated by calculating stock returns and market returns, then the results of the stock returns and market returns are compared. Winner / loser stock uses a dummy variable with the category $R_t > R_{mt}$ given a value of 1 (one) while $R_t < R_{mt}$ is given a value of 0 (zero).

3. METHODOLOGY

The population in this study was consumer goods sector companies listed on the Indonesia Stock Exchange for the period 2015-2018. The sample was selected using purposive sampling technique with the criteria of companies that have complete data during the study period. The selected sample is 27 companies in a period of 4 years in order to get a total sample of 108 companies. Data analysis techniques using logistic regression. The logistic regression analysis model used in this study is as follows:

$$Ln = \frac{IS}{(1-IS)} = \alpha + \beta_1CH + \beta_2PO + \beta_3BP + \beta_4WLS + \varepsilon$$

$Ln = \frac{IS}{(1-IS)}$: Income Smoothing, (category 1 = companies that do income smoothing, and 0 = companies that not do income smoothing)

α : Constant

$\beta_1\beta_2\beta_3\beta_4$: The regression coefficient of each variable

CH : Cash Holding (Cash + Cash Equivalent / Total Assets)

PO : Public Ownership (Shares owned by the public / Total Company Shares)

BP : Bonus Plan (Ln Remuneration)

WLS : Winner/loser Stock (category 1 = $R_t > R_{mt}$ and 0 = $R_t < R_{mt}$)

ε : Error term

4. RESULT

Descriptive statistical testing is carried out to provide descriptive explanations of each variable used in the study without any correlation between the independent variable and the dependent variable.

Table 1 Descriptive Statistical Test for Independent variables

	N	Minimum	Maximum	Mean	Std. Deviation
Cash Holding	108	.0004423926	.4156242861	.1146968730	.1097427258
Public Ownership	108	.0023002890	.8683895113	.2458638310	.1784648105
Bonus Plan	108	21.20877365	26.22452405	23.77832321	1.255177874
Valid N (listwise)	108				

Source: Output SPSS 25.0

Based on table 1, it can be seen that the mean value of cash holding, public ownership and bonus plans have a higher average value than the standard deviation which means that the variables of cash holding, public ownership and bonus plans do not vary, the distribution of data is relatively homogeneous or grouped, so that indicates fairly good results.

Table 2 Descriptive statistical test for Winner / Loser Stocks variable

Observed	Winner/Loser Stocks	
	Frequency	Percent
loser stocks = 0	69	63.9%
winner stocks = 1	39	36.1%
Total	108	100.0%

Source: Output SPSS 25.0

From table 2 indicates that there are 63,9% of the 108 units of the sample belonging to the loser stocks in 2015-2018. This happens because the stock returns (R_t) is smaller than the market return (R_{mt}), the company's status as a loser stock ($R_t < R_{mt}$). While the sample unit belonging to the winner stocks in 2015-2018 amounted to 36.1% of the 108 units of the sample. This happens because the company's stock return (R_t) is greater than the market return (R_{mt}), so the company is a winner stock ($R_t > R_{mt}$).

Table 3 Test Descriptive statistics of variables Income Smoothing

Observed	Income smoothig	
	Frequency	Percent
non smoother = 0	58	53.7%
Smoother = 1	50	46.3%
Total	108	100.0%

Source: Output SPSS 25.0

From table 3 above shows that there are 58 sample units or 53,7% of the 108 sample units that not practice income smoothing (non-smoother) according to the Eckel Index from 2015-2018. This happens because the value of the income Variation Coefficient is higher than the Sales Variation Coefficient ($CV\Delta I \geq CV\Delta S$). Meanwhile, companies that practice income smoothing (smoother) consist of 50 sample units or 46.3% of the 108 sample units in 2015-2018 according to the Eckel Index. This happens because the value of the income Variation Coefficient is smaller than the Sales Variation Coefficient ($CV\Delta I \leq CV\Delta S$).

There are two models in a logistic regression analysis technique that is testing to assess the feasibility of a regression model using the *Hosmer and Lemeshow* with notice to the value *goodness of fit* measured by the chi-square value.

Table 4 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.556	8	.697

Source: Output SPSS 25.0

Based on test results obtained in table 4 chi-square value amounted to 5,556 with a significance level of 0,697. Due to the level of significance is greater than $\text{Sig} > \alpha (0,05)$, the null hypothesis (H_0) is accepted. This shows that the model is fit and can be used for further analysis because it matches the observation data.

The next step is to assess the feasibility of the model (*overall model fit*). In this test, the value between *-2log likelihood* (-2LogL) at the beginning (Block number = 0) and *-2log likelihood* at the end (Block number = 1) will be compared. This test is used to determine if the independent variable is added to the model if it can significantly improve the data, Ghazali (2018: 333).

Table 5 Overall Model Fit

Overall model fit (-2LogL)	
-2LogL Block Number =0	Has a Value = 149,127
-2LogL Block Number =1	Has a Value = 126,527

Source: Output SPSS 25.0

Table 5 shows that the initial value -2LogL (-2LogL Block Number = 0), where the model just inserts constants, showing the value of 149,127. While the value -2LogL in the next step (-2LogL Block Number = 1), where the model is inserted constants and variables showed a smaller value is 126,527. Comparison of these values can be

seen that the value -2LogL Block Number = 1 is smaller than the value -2LogL Block Number = 0 with a decrease of 22,6 so that it can be concluded that the model is in conformity with the data and proved that the variable cash holding, public ownership, bonus plan, and winners / losers stock can significantly improve the fit model.

a. Simultaneous Testing

Simultaneous testing using the Omnibus Test of Model Coefficients. Hypothesis testing using logit regression enter method significance level (α) of 5%.

Table 6 Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	22.599	4	.000
	Block	22.599	4	.000
	Model	22.599	4	.000

Source: Output SPSS 25

From the results of Table 6 shows that the value of Chi-Square obtained amounted to 22,599 with a degree of freedom = 4 and the level of significance of 0,000 (p -value $< 0,05$). Thus, the research hypothesis $H_{0,1}$ is rejected or hypothesis $H_{a,1}$ is accepted, which means that cash holding, public ownership, bonus plans, and winner / loser stocks simultaneously have a significant effect on income smoothing.

b. Partial Testing

In this study, a partial test was conducted to determine how the effect of cash holding, public ownership, bonus plans, and winner / loser stocks on income smoothing. This test is done by testing the regression coefficient by comparing the significance value with the significance level (α) = 5%.

Table 7 Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Cash Holding	-1.814	1.963	.854	1	.356	.163
	Public Ownership	-.643	1.272	.256	1	.613	.526
	Bonus Plan	-.654	.189	11.958	1	.001	.520
	Winner Loser Stocks(1)	1.140	.463	6.063	1	.014	3.128
	Constant	15.002	4.479	11.221	1	.001	3276568.825

Source: Output SPSS 25

Based on table 7, the regression model equation is obtained as follows:

$$IS = 15,002 - 1,824CH - 0,643PO - 0,654BP + 1,140 WLS + \epsilon$$

- Cash holding obtained a regression coefficient of -1,814 with a significant cash holding value of $0,356 > \alpha = 0,05$ which means that cash holding has no significant effect on income smoothing. The higher cash holdings of a company can't encourage companies to undertake income smoothing, conversely the lower cash holdings of a company does not mean that the company does not perform income smoothing, especially on a sample of this research are industrial companies consumer goods sector listed in Indonesia Stock Exchange from 2015-2018. Cash holding-owned by company is used only for its function is to fund operations, repay debt and pay dividends to shareholders, so that managers can't use the cash for personal use. Public ownership is obtained by a regression coefficient of -0,643 with a significance value of $0,613 > \alpha = 0,05$ which means that public ownership has no effect on income smoothing practices. In which, the higher percentage of public ownership of a company does not affect the company to do the practice income smoothing. On the other hand, companies with a low percentage of public ownership may not necessarily practice income smoothing. These results indicate that, a large percentage of public ownership do not necessarily make management want to practice income smoothing, because it could be that the increasing percentage of public ownership is form of high public trust in the company through a good corporate image or consumer interest in the products produced by the company.
- Bonus plan has a regression coefficient of -0.654 with a significance value of $0.001 < \alpha = 0.05$, which means that the variable bonus plan significantly influence income smoothing practices but does not support the hypothesis because it's resulting negative direction. The bonus plan has a negative effect on income smoothing, it's mean that an increase of bonus plan will reduce management behavior to does income smoothing. Similarly, companies with lower bonus plan tend to practice a high income smoothing. The results of this study indicate that the management has been able to meet operating profit targets set by the company with the possibility

of small through income smoothing practices. This happens because the company can consistently maintain sales levels obtained and the costs incurred in accordance with what has been budgeted, so that management can still get a bonus plan that was previously set.

- c. The winner / loser stocks get a regression coefficient of 1,140 with a significance value of $0.001 < \alpha = 0.05$, it means that the winner/loser stocks have a significant effect on income smoothing practices. Winner/loser stock variables have a positive effect on income smoothing, meaning that companies which have returns on both winner and loser stocks will tend to do income smoothing, because companies that have stable profits can affect changes in stock prices to be stable. In addition, having a stable profit gives investors perception that high stock returns and a low risk level of stock portfolios will make the company's performance level looking good. Companies that are classified as winner stocks will do income smoothing to maintain the stability of winner stock positions and try to avoid from loser stock. Meanwhile, loser stock companies will perform income smoothing to obtain the status of the winning stock by notice to the fluctuations of resulting profit.

5. CONCLUSION & RECCOMENDATION

The results of this study indicate a positive influence between Winner / loser stocks on income smoothing, this means that companies with winner and loser stocks return will tend to practice income smoothing. Therefore, the company can keep an eye on the level of winner / loser stock and for investors when investing that not only focuses on the level winner / loser stocks of a company, but investors can see the whole of the financial statements of a company.

REFERENCES

- Adriani, P. I., Putri, I. G., & Tenaya, G. A. (2018). Pengaruh Ukuran Perusahaan, Profitabilitas, Financial Leverage, Dan Winner/Loser Stock Pada Perataan Laba Perusahaan Manufaktur. *E-Jurnal Akuntansi Universitas Udayana*, 1913-1938.
- Dewi, M. A., & Suryanawa, I. (2019). Pengaruh Leverage, Bonus Plan, Ukuran Perusahaan, Dan Profitabilitas Pada Praktik Perataan Laba. *E-Jurnal Akuntansi Universitas Udayana Vol.26.1.*, 58-84.
- Dewi, N. S., & Latrini, M. Y. (2016). Pengaruh Cash Holding, Profitabilitas Dan Reputasi Auditor Pada Perataan Laba. *E-Jurnal Akuntansi Universitas Udayana Vol.15.3.*, 2378-2408.
- Dwiadnyani, N. M., & Mertha, I. (2018). Pengaruh Bonus Plan Dan Corporate Governance Pada Income Smoothing. *E-Jurnal Akuntansi Universitas Udayana*, 1600-1631.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program Ibm Spss 25*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hery. (2014). *Pengendalian Akuntansi Dan Manajemen*. Jakarta: Kencana Prenada Group.
- Hery. (2015). *Analisis Kinerja Manajemen*. Jakarta: Pt. Grasindo.
- Iskandar, A. F., & Suardana, K. A. (2016). Pengaruh Ukuran Perusahaan, Return On Asset, Dan Winner/Loser Stock Terhadap Praktik Perataan Laba. *E-Jurnal Akuntansi Universitas Udayana.14.2 Februari Issn: 2302-8556* , 805-834.
- Mukhlisin. (2007). Determinan Ekonomi Pemilihan Kebijakan Akuntansi: Analisis Single Motive Dan Multiple Motive (Studi Pada Perusahaan Manufaktur Di Bej). *Diponegoro University Institutional Repository*.
- Mambraku, M. E., & Hadiprajitno, P. (2014). Pengaruh Cash Holding Dan Struktur Kepemilikan Manajerial Terhadap Income Smoothing (Studi Empiris Pada Perusahaan Manufaktur Yang Terdapat Di Bursa Efek Indonesia Tahun 2010-2012). *Diponegoro Journal Of Accounting*, 1-9.
- Natalie, N., & Astika, I. B. (2016). Pengaruh Cash Holding, Bonus Plan, Reputasi Auditor, Profitabilitas Dan Leverage Pada Income Smoothing. *E-Jurnal Akuntansi Universitas Udayana Vol.15.2.*, 943-972.
- Putri, P. A., & Budiasih, I. N. (2018). Pengaruh Financial Leverage, Cash Holding, Dan Roa Pada Income Smoothing Di Bursa Efek Indonesia. *E-Jurnal Akuntansi Universitas Udayana Vol.22.3.*, 1936-1964.
- Revinsia, V. S., Rahayu, S., & Lestari, T. U. (2019). Pengaruh Cash Holding, Profitabilitas, Dan Leverage Terhadap Perataan Laba. *Jurnal Aksara Public*, 127-141.

- Subramanyam, K. R. (2017). *Analisis Laporan Keuangan Edisi 11 Buku 1*. Jakarta: Salemba Empat.
- Santoso, S. (2018). *Mahir Statistik Multivariant Dengan Spss*. Jakarta: Elex Media Komputindo.
- Supriyono, R. (2018). *Akuntansi Keperilakuan*. Yogyakarta: Gadjah Mada University Press.
- Susanta Putra, R. A., & Suardan, K. A. (2016). Pengaruh Varian Nilai Saham, Kepemilikan Publik, Dan Debt To Equity Ratio Pada Praktik Perataan Laba. *E-Jurnal Akuntansi Universitas Udayana Vol.15.3.*, 2188-2215.
- Supriastuti, S., & Warnanti, A. (2015). Ukuran Perusahaan, Winner/Loser Stock, Debt To Equity Ratio, Dividend Payout Ratio Pengaruh Terhadap Perataan Laba. *Jurnal Paradigma Vol. 13, No. 01*, 45-62.

THE EFFECT OF INSTITUTIONAL OWNERSHIP, MANAGERIAL OWNERSHIP AND OWNERSHIP CONCENTRATION ON EARNINGS PERSISTENCY

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Abstract

This study aims to examine the effect of institutional ownership, managerial ownership and ownership concentration on earnings persistence in property, real estate and construction companies listed on the Indonesia Stock Exchange in 2013-2017. The total sample of the study were 17 companies. Data analysis using multiple linear regression and the results of this study indicate that together institutional ownership, managerial ownership and ownership concentration as well as the level of debt and company size affect earnings persistence with a coefficient of determination of 30.18%. Partial test shows that institutional ownership, managerial ownership, ownership concentration and company size negatively affect earnings persistence while the level of debt does not affect earnings persistence.

Keywords: Institutional Ownership, Managerial Ownership, Consentration of Ownership, Leverage, Company Size, Earnings Persistence.

1. INTRODUCTION

Financial reports serve as a source of financial information, company performance, changes in financial position that will be used for business decision making. One of the indicators of company performance is earnings. Earnings can be predicted through financial information and financial ratios contained in financial reports (IAI, 2018). Earnings are one of the triggers for agency conflict, therefore corporate governance mechanism is needed to ensure and oversee the operations of an organization to minimize conflicts of interest between principals and agents (Nurrochman, 2015). Corporate governance can be defined as a system that regulates and controls the company to create value added for all stakeholders, governance also relates to the interactions that occur between government and society. Furthermore, the Financial Services Authority Regulation No.73/POJK.05/2016 states that corporate governance is a structure and process that is used and implemented by corporate organs in order to improve business results and optimize corporate value for all interests in an accountable manner. According to (KNKG, 2006) the principles of good governance include: transparency, accountability, responsibility, independence, fairness

To ensure the implementation of governance, a monitoring mechanism is needed which consists of two mechanisms, namely an internal mechanism as a way to control the company by using internal structures and processes. Meanwhile, external mechanism is a way of influencing the company by controlling the market. Internal mechanisms include the composition of the board of directors and commissioners, managerial ownership, institutional ownership, and executive compensation. External mechanisms include market control and level debt financing. Moreover to prevent agency problems, quality earnings are needed. Quality earnings are profits that are able to predict future earnings. There are four tools to measure earnings quality, namely earnings persistence, predictability, accrual quality and smoothness. Earnings persistence is a measuring tool for assessing the quality of sustainable earnings. Persistent earnings are earnings that tend not to fluctuate and reflect the sustainability of future earnings and are also sustainable for the long term. Persistent earnings are a very important discussion because investors have an information interest in company performance which is reflected in future earnings (Penman & Zhang, 1999).

Earnings persistence is an important thing because the more persistent earnings will have an impact on investors to predict future earnings. The Real Estate, Property and Construction industry sectors in Indonesian stock exchange are experiencing good development (Aliya, 2014). The property and real estate sectors are able to drive

the construction sector to 174 derivative industrial sectors, such as cement, brick, sand, wood, iron, ceramics, paint, to furniture (Hafiyyan, 2015). Based on this, it can be said that the increase and decrease in demand for the property and real estate sector can affect other sectors. Along with the increasing population in Indonesia, this sector will have good prospects in the future, because there will be more developments in various sectors

One of the companies in this sector, Ciputra Development (CTRA), has experienced good development from year to year, as reflected in the company's earnings that do not fluctuate or be persistent. Ciputra Development (CTRA) during the 2013-2017 periods continued to have a stable net profit in the range of 1 trillion and experienced very little fluctuation, then increases and decreases in profits in line with the increase and decrease in sales. This shows that the CTRA has good operations in its company performance to show its earnings persistence. Based on this phenomenon, research is needed to determine the factors that can affect persistent earnings. In addition, previous research still found inconsistencies related to the factors that influence earnings persistence related to institutional ownership, managerial ownership, ownership concentration, level of debt and company size, therefore this study will re-explore these factors in the real estate, property and construction sector companies listed on the IDX from 2013 to 2017.

2. AGENCY THEORY

Agency problems will arise because various parties have their respective interests in achieving their goals, with profits being the expectations of various parties, the way to achieve the profits expected by various parties will lead to agency conflicts. Agency theory itself is built to solve and understand problems that arise when there is incomplete information when making a contract. where in the contract the principal as the shareholder uses agent services, namely management to realize the principal's interests. The manager as the contracted party will take every action to achieve the target

This theory is concerned with solving two problems that can occur in an agency relationship that arise when: (1) the desire or purpose of the principal and agent conflicts, (2) it is difficult or expensive for the principal to verify what the agent is doing. This concept is related to managerial behavior, agency cost and structure ownership (Jensen & Meckling, 1976). With efforts to minimize agency problems, there will be an alignment of objectives between the agent and the principal, this alignment of objectives will improve the performance of both parties which will result in financial statements as a source of information that will be relevant and reliable. To prevent agency problems, it can apply the ownership structure because in managerial ownership a manager owns the company's shares so that the manager will be motivated to maximize performance to increase the profit received by the company because it will have an impact on the welfare that will be received. Likewise, institutional ownership consistently monitors the performance of managers to achieve targets. With the increase in profit, shareholders and management will be prosperous so that there will be an alignment of goals

3. EARNINGS PERSISTENCE

Earnings persistence is profit that has the ability as an indicator of future earnings generated by the company repeatedly over a long period of time. Persistent earnings tend not to fluctuate in each period, fluctuating (not persistent) earnings will reduce the predictive power of earnings to predict the company's cash flow in the future. Decreasing earnings prediction power can result in earnings information for the current year being less useful in predicting future earnings (Nadya & Zultilisna, 2018).

4. CORPORATE GOVERNANCE

According to the Financial Services Authority regulation No.73 /POJK.05/2016 Corporate governance is a structure and process that is used and implemented by corporate organs in order to improve business results, and optimize corporate value for all interests in an accountable manner and based on statutory regulations and values. ethics. The principles of good governance themselves according to (KNKG, 2006) include: a) Transparency is openness in the decision-making and disclosure process, companies must have relevant and material information in an easily accessible and understood way about the company that is easily accessible to stakeholders. b) Accountability, namely the clarity of the function of implementing the responsibility of the company's organs so that the company's performance can run transparently, fairly, effectively and efficiently. c) Responsibility, namely having compliance with statutory regulations and carrying out responsibility for the community as well as the environment so that business continuity can be maintained in the long term. d) The independence of the company is managed independently and professionally and is free from conflicts of interest and the influence of pressure from any party that is not in accordance with the regulations, so that each company organ does not dominate each other and cannot be intervened by other parties. e) Equality and fairness, namely equality, balance and fairness in fulfilling the rights of stakeholders that arise based on the agreement, in carrying out its activities the company must be able to provide opportunities for stakeholders to provide input and express opinions for and provide equal treatment in accordance with benefits and contributions given to the company.

The mechanisms for monitoring corporate governance are divided into two, namely internal and external mechanisms. Internal mechanisms control is using internal structures. Meanwhile, external mechanism is a way of influencing the company in ways such as controlling by companies and the market. The composition of the internal mechanism includes the composition of the board of directors and commissioners, managerial ownership, institutional ownership, and executive compensation. External mechanisms include market control and level debt financing. Corporate governance mechanisms are directed at ensuring and overseeing the operation of a governance system in an organization to minimize conflicts of interest between principals and agents due to the separation of company management (Noor, 2015).

5. OWNERSHIP

Ownership is a socially supported power to hold control over something that is owned exclusively and use it for personal purposes. In this study, the ownership used is the ownership of the company as seen by the number of shares owned in the company, usually a company whose ownership is spread out and is determined by the number of shares available.

Ownership of the company itself can be adjusted to the form of an existing company, including individual companies, CV, firms, limited liability companies and cooperatives. In general, corporate companies have more diverse ownership because this type of company can issue shares according to the company's needs, and anyone is free to invest through investment and financial policies that are reflected in the capital market.

Tandelilin and Wilberforce (2015) state that the company has a very dispersed ownership structure, which effectively separates ownership and decision-making functions. Owner is another person or organization that owns shares in a company or is often referred to as a shareholder, the owner of the company's shares can act as a principal or agent. Ownership itself is binding in accordance with the contract made. The risk of owning ownership can be found in agency problems, which may occur, unaligned agency relationships can cause the manager's performance as an agent to be incompatible with the wishes and needs of shareholders as principal. (Tandelilin & Wilberforce, 2015)

6. INSTITUTIONAL OWNERSHIP AND EARNINGS PERSISTENCE

Institutional ownership is an investor who comes from outside the company and can influence company managers through pressure on certain issues and activities to control the internal decision process through the company's board of directors. Institutional ownership has broader information in the financial sector. Therefore, institutional investors are the parties who can monitor managers to improve performance in generating profits rather than manipulating profits. This means that the greater the number of institutional ownership will increase the persistence of company earnings. (Dewata, Sari & Fithri, 2016)

H1: Institutional ownership has an effect on earnings persistence

7. MANAGERIAL OWNERSHIP AND EARNINGS PERSISTENCE

Managerial ownership can reflect the quality of future earnings because the more management owns the company's shares, the greater the manager's responsibility to be accountable for the financial statements. (Arisandi & Astika, 2019)

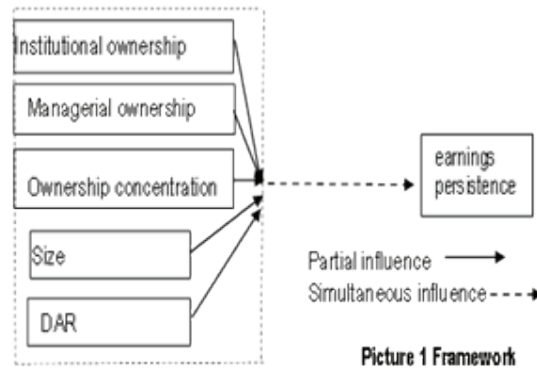
H2: Managerial ownership has an effect on earnings persistence

8. OWNERSHIP CONCENTRATION AND EARNINGS PERSISTENCE

The concentration of ownership is the factor that most influences company control, the majority shareholder controls the company with the aim of supervising managers so as not to behave fraudulently in reporting the company's economic information. The majority shareholder wants the information reported to be relevant and reliable because earnings information in the financial statements is often used by the majority shareholder in determining and making accounting decisions (Junawatiningsih & Harto, 2014). The use of earnings in determining and making accounting decisions should be able to provide a predictive value of how future earnings will be valued. The ability of earnings to predict the future reflects the ability of earnings persistence. Control and supervision carried out by the majority shareholder can guarantee future earnings persistence.

H3: Ownership concentration affects earnings persistence

Below is a picture of the framework in this study:



9. RESEARCH METHODS

This research uses quantitative methods. The population used in this study is the real estate, property and construction sector companies listed on the Indonesia Stock Exchange (BEI) for the period 2013-2017. The sample selection method used was purposive sampling, with the following company criteria:

1. Property, Real Estate and Construction Sector Companies that are consistently listed on the Indonesia Stock Exchange in 2013-2017.
2. Property, Real Estate and Construction Sector Companies that published financial reports on the Indonesia Stock Exchange in 2013-2017.
3. Property, Real Estate and Construction Sector Companies that did not experience losses during 2013-2017.
4. Property, Real Estate and Construction Sector Companies that have complete information required related to calculation indicators which are used as variables in this study.

The variables in this study include:

1. The independent variable (Y) in this study is Earnings Persistence.
2. The dependent variable (X) in this study is Institutional Ownership, Managerial Ownership, and Ownership Concentration.
3. Control variables in this study are Debt Level and Company Size

The operational definitions of the variables in this study include:

1. Earnings Persistent earnings tend not to fluctuate in each period.

Profit persistence as measured by the regression coefficient before tax for the current year against profit before tax for the next year. Then the equation used is as follows. (Arisandi & Astika, 2019).

$$\text{Earnings Persistent} = PTBI_{t+1} = \alpha + \beta PTBI_t + e$$

2. Institutional Ownership

Institutional ownership can be defined as a proportion of the shares owned by both domestic and foreign private institutions (Dewata, Sari & Fithri, 2016).

Institutional ownership is measured by the following formula:

$$KI = \frac{\text{Number of Institutional Shares}}{\text{Total shares outstanding}} \times 100\%$$

3. Managerial ownership

Managerial ownership is defined as the number of shareholdings owned by management and company directors. (Nurrochman & Solikhah, 2015). Managerial ownership is measured by the following formula:

4. Ownership Concentration

Shareholders who own the majority of shares will have higher authority or control (Junawatiningsih & Harto, 2014).

$$= \frac{\text{The largest number of shares}}{\text{Total shares outstanding}} \times 100\%$$

5. Leverage

Leverage describes the extent to which the company's activities are financed with debt. A company that has a high level of debt indicates that the company relies heavily on external loans to finance its assets. (Kasmir, 2017). Leverage measurement can be calculated by comparing debt and company assets.

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Asset}} \times 100\%$$

6. Size

size describes the size of a company indicated by total assets, total sales, average total sales and average total assets. (Arisandi & Astika, 2019).

$$\text{Size} = \text{Ln} \times \text{Total Asset}$$

Data analysis used multiple linear regression analysis techniques, then performed a classic assumption test to ensure that the regression model used was free from problems of normality, multicollinearity and heteroscedasticity.

The form of the multiple linear regression model is shown by the following equation:

$$\text{PRST} = \alpha + \beta_1 \text{KIit} + \beta_2 \text{KMit} + \beta_3 \text{KKit} + \beta_4 \text{Lit} + \beta_5 \text{Sit} + e$$

Keterangan:

PRST	: Earnings Persistence
α	: constanta
KI	: Institusional Ownership
KM	: Managerial Ownership
KK	: Ownership Concentration
L	: <i>Leverage</i>
S	: <i>Size</i>
β_1 - β_5	: Coefficient regresion variable independen
e	: <i>error item</i>
t	: time
i	: company

10. RESEARCH RESULTS AND DISCUSSION

Classic assumption test

a. Normality test

The normality test is considered good if it has a residual value that is normally distributed. The measure is if the significance value is greater than 0.05, the data is declared to have a normal spread residual value.

The following table 1 below shows when the data sample is 76 sample.

Tabel 1 Normality test

Asymp sig (2-tailed)	Keterangan
0,923778	Data berdistribusi normal
Dependent variabel: PL	

Source: evIEWS 10

Based on table 1 above, it shows that the significance value is greater than 0.05, so it can be concluded that the data is normally distributed.

b. Multicollinearity Test

to determine the linear relationship between independent variables. The size uses a tolerance value or VIF (Varian Inflation factor) value. Data is said to be free from multicollinearity if it has a VIF value <10. The results of the multicollinearity test in this study can be seen in the table below:

Table 3 Multicollinearity Test

Variabel	VIF
C	NA
KI	1,520228
KM	1,755706
KK	1,078027
TH	2,038305
UP	2,448628

Source: evIEWS 10

Based on table 3 the multicollinearity test above shows that all independent variables have a VIF value <10, it can be concluded that this study passed the multicollinearity test.

c. Heteroscedasticity Test

To determine whether there is an inequality of the variance of the residuals between observations, a good model is homoscedasticity or heteroscedasticity does not occur, the probability value of each independent and control variable must be greater than 0.05. Following are the results of the heteroscedasticity test in this study.

Table 4. Heteroscedasticity Test

Variabel	Prob.
KI	0,1799
KM	0,3998
KK	0,1735
TH	0,7467
UP	0,2597
C	0,2291

Source: evIEWS 10

Based on table 4 above, it shows that the results of the heteroscedasticity test that the probability of each independent and control variable is greater than 0.05. So that it can be concluded that the data is homogeny.

11. DESCRIPTIVE STATISTICAL TEST AND HYPOTHESIS TEST

Descriptive research is a study that aims to identify and be able to explain or describe the characteristics of the variables studied in a situation from the data that has been collected. This study aims to explain the independent variables, namely institutional ownership, managerial ownership and ownership concentration as well as control variables, namely the level of debt and company size and to determine whether these variables have a significant effect on the dependent variable, namely earnings persistence.

Hypothesis testing consists of 3 tests, the first is the partial test or t test which shows how much influence one independent variable individually has in explaining the dependent variable. The second is with the simultaneous significance test or the f test which shows whether all the independent variables in the study have a joint influence on the dependent variable. Third, with the coefficient of determination or the R² test, this test reflects the magnitude of the correlation between the independent and dependent variables.

The test results can be seen in the table below:

Table 5 Descriptive statistics

Variabel	N	Minimum	Maksimum	Mean	Std. Deviation
KI	76	0,08659	0,99467	0,64472	0,23507

KM	76	0,00000	0,06818	0,01658	0,02031
KK	76	0,14343	0,82410	0,49707	0,17909
TH	76	0,07881	0,77286	0,47841	0,17321
UP	76	26,62761	32,21492	29,49327	1,22553
PL	76	-1,83924	1,74755	0,36141	0,73182

Source: *evIEWS 10*

Table 6 Partial Hypothesis Test Results (t test)

Variabel	Koefisien	t	Signifikansi
Konstanta	7,7096	2,9715	0,0041
KI	-0,9226	-2,4914	0,0151
KM	-11,0642	-2,4023	0,0189
KK	-1,6458	-4,0206	0,0001
TH	0,5637	0,9687	0,3360
UP	-0,2041	-2,2646	0,0266

Source : *evIEWS 10*

12. DESCRIPTIVE STATISTIC

Earnings persistence is earnings that have the ability as an indicator of future earnings that are generated repeatedly in the long term or it can also be interpreted as a revision of expected earnings in the future, persistent earnings tend not to fluctuate in each period. (Penman and Zhang, 1999). The descriptive results of the earnings persistence variable are as follows:

Earnings persistence in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the 2013-2017 period shows that it has a minimum value of -1.83924 and a maximum value of 1.74755. While the mean value of earnings persistence is 0.36141 with a standard deviation value of 0.73182. This shows that the earnings persistence variable has varied data.

Institutional ownership is ownership of a proportion of shares owned by external parties or companies including private, domestic and foreign institutions. In this research, the amount of institutional ownership is measured by the entire institutional ownership of the company divided by the total shares outstanding. The results of the descriptive analysis of institutional ownership variables are as follows:

Institutional ownership in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017 shows that it has a minimum value of 0.08659 and a maximum value of 0.99467. Meanwhile, the mean value of institutional ownership is 0.64472 with a standard deviation value of 0.23507. This shows that the institutional ownership variable does not vary.

Managerial ownership is ownership of a proportion of shares owned by internal parties such as management and company directors. In this study, the number of managerial ownership is measured by the total number of company management shares divided by the total shares outstanding. The results of the descriptive analysis of managerial ownership variables are as follows:

Managerial ownership in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (BEI) for the period 2013-2017 shows that it has a minimum value of 0.0000 and a maximum value of 0.06818. Meanwhile, the mean value of managerial ownership is 0.01658 with a standard deviation of 0.02031. This shows that the managerial ownership variable has varied data.

The concentration of ownership through majority ownership describes how and who has total or most control over the ownership and control over the company's business activities. Shareholders who have a greater proportion of share ownership are the controlling holders of the company. In this study, the amount of ownership concentration is measured by the largest number of ownership by an individual or group divided by the total shares outstanding. The results of the descriptive analysis of the ownership concentration variable are as follows:

The concentration of ownership in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the 2013-2017 period shows that it has a minimum value of 0.14343 and a maximum value of 0.82410. Meanwhile, the mean value of the ownership concentration is 0.49707 with a standard deviation value of 0.17909. This shows that the ownership concentration variable has data that does not vary.

The level of debt or leverage describes how much the company's activities are financed with debt. Companies

that have a high level of debt show that companies are very dependent on loans to finance their assets, while those with low debt levels mean that companies are more likely to finance their own assets (Kasmir, 2017). The results of the descriptive analysis of the variable level of debt are as follows:

The level of debt in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the 2013-2017 period shows that it has a minimum value of 0.07881 and a maximum value of 0.77286. Meanwhile, the mean value of the debt level is 0.47841 with a standard deviation value of 0.17321. This shows that the variable level of debt does not vary.

Company size or size describes the size or size of a company indicated by total assets. Companies with a larger size will attract the attention of shareholders. The descriptive results of the firm size variable are as follows:

The size of the company in the property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the 2013-2017 period shows that it has a minimum value of 26.62761 and a maximum value of 32.219492. While the mean value of the company size is 29.49327 with a standard deviation value of 1.22553. This shows that the firm size variable has data that does not vary.

13. SIMULTANEOUS (F TEST) & COEFFICIENT OF DETERMINATION (R² TEST)

The profitability value (F-Statistic) has a value of 0.000011 or less than the significance value of 0.05. So it can be concluded that the independent variables such as institutional ownership, managerial ownership and ownership concentration as well as control variables of debt level and company size simultaneously have a significant effect on the dependent variable, namely earnings persistence.

The adjusted R-square value is 0.301873 or 30.18%, it can be concluded that the independent variables of institutional ownership, managerial ownership and ownership concentration as well as control variables of debt level and company size can describe the variance of earnings persistence of 30.18% and the rest 69.82% is described by other factors outside the independent variables and control variables in this study.

14. PARTIAL TEST (T TEST)

Institutional ownership has a probability value of 0.0151 where this value is smaller than the significance level of 0.05 with a coefficient value of 0.922 towards the negative. This means that institutional ownership has a significant negative effect on earnings persistence. This is because 76 samples of institutional ownership variables that have values above the mean are 47 samples, while those with values below the mean are 29.

From these data, it can be seen that the value of institutional ownership in companies that are classified as non-persistent are 24 samples and 52 samples are classified as persistent, but 26 samples of companies that are persistent have institutional ownership values below the average. This indicates that institutional ownership has low monitoring of companies and also companies are owned by many institutions.

Institutional ownership in agency theory is stated as minimizing the difference in interests between shareholders and managers because institutional shareholders are considered more capable of controlling company management because they have sufficient knowledge and resources, so that the higher institutional ownership, the company will be expected to have tighter monitoring so that affect company performance which can increase earnings persistence, but in this study the proxy used is the total institutional ownership which involves ownership between different institutions, so that it will have different objectives and decision-making interests, so this is what causes ownership. institutional in this study has no significant effect on earnings persistence. This is in line with research conducted by Dewata, Sari and Fithri (2016) where institutional ownership has a negative effect on earnings persistence.

Managerial ownership has a probability value of 0.0189 where this value is smaller than the significance level of 0.05 with a coefficient value of 11.064 towards the negative. This means that managerial ownership has a significant negative effect on earnings persistence. The average value of managerial ownership is closer to the minimum value of 0.01658, which means that the average managerial ownership in this sample tends to be low.

76 samples of managerial ownership variables that have a value above the mean are 31 samples, while those with a value below the mean are 45. From these data it can be seen that the value of managerial ownership in companies that are classified as non-persistent is 24 samples and 52 samples are classified as persistent but 37 samples Companies that are already persistent have managerial ownership values below the average. This indicates that managerial ownership has a small proportion so that it has low monitoring and contribution to the company. The small ownership of shares owned by managers causes a lack of motivation for management to improve performance so that it negatively affects earnings persistence. Therefore companies are encouraged to provide incentives to managers in the form of company shares so as to increase share ownership by managers which will increase the manager's sense of ownership and responsibility to perform well.

Ownership concentration has a probability value of 0.0001 where this value is smaller than the significance level of 0.05 with a coefficient value of 1.645 which is negative. This means that the concentration of ownership as assessed by majority ownership has a significant negative effect on earnings persistence. Ownership concentration shows that from 76 samples of ownership concentration variables that have values above the mean are 38 samples, while those with values below the mean are 38 samples. persistent but 28 samples of companies that were persistent had ownership concentration values below the average.

This indicates that ownership concentration has low monitoring. and the majority shareholder is deemed unable to control management to produce relevant and reliable information so that the company's performance is also not optimal. So this is what causes majority ownership to negatively affect earnings persistence. Basically, majority share ownership has the discretion to determine the company's goals and determine the manager who runs the company through a general meeting of shareholders. Therefore, when determining the manager, it is necessary to pay attention to the competence and ability of the manager to run the company.

15. CONCLUSION

Based on the simultaneous hypothesis testing, it shows that institutional ownership, managerial ownership and ownership concentration together have an effect on earnings persistence in property, real estate and construction sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2017 with a coefficient of determination by 30.18%. So that there are other factors that can affect earnings persistence so that further research is needed.

Based on the partial test shows that Institutional ownership has a negative effect on earnings persistence in property, real estate and construction companies on the IDX for the 2013-2017 period. Managerial ownership has a negative effect on earnings persistence in property, real estate and construction companies in BEI 2013-017. Ownership concentration has a negative effect on earnings persistence.

REFERENCE:

- Aliya. (2014, Juni 2). IHSG Tumbuh tertinggi di Dunia saham properti paling tinggi. Retrieved from detik.com: <http://finance.detik.com/bursa-valas/2597322/ihsg-tumbuh-tertinggi-di-dunia-saham-properti-paling-kinclong>
- Arisandi, N. N., & Astika, I. B. (2019). Pengaruh Tingkat Hutang, Ukuran Perusahaan dan Kepemilikan Manajerial pada Persistensi Laba. E-Jurnal Universitas Udayana 26 (3) ISSN: 2302-8556.
- Dewata, E., Sari, Y., & Fithri, E. J. (2016). Kepemilikan manajerial dan kepemilikan institusional sebagai determinan struktur modal dan persistensi laba. Jurnal Riset dan Aplikasi: Akuntansi dan Manajemen (JRAAM) 1 (3).
- Hafiyyan. (2015, oktober 8). Properti Sokong PDB Nasional, ini Hitung-hitungannya. Retrieved from bisnis(online): <http://properti.bisnis.com/read/2015/1008/48/480177/properti-sokong-pdb-nasional.-ini-hitung-hitungannya>
- IAI, I. A. (2018). Standar Akuntansi Keuangan. Jakarta: Salemba.
- Jensen dan W. H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics, pp. 305-360, 1976.
- Junawatiningsih, T., & Harto, P. (2014). Analisis pengaruh mekanisme internal dan eksternal corporate governance terhadap persistensi laba. dipenogoro journal accounting vol 3 no 4.
- Kasmir. (2017). Analisis Laporan Keuangan. Jakarta: Raja Grafindo Persada.
- Nurrochman, A., & Solikhah, B. (2015). Pengaruh Good Corporate Governance, Tingkat Hutang dan Ukuran Perusahaan terhadap Persistensi Laba. Accounting Analysis Journal 4 (4).
- Nadya, N. F., & Zultilisna, D. (2018). Analisis Faktor-faktor penentu persistensi laba. Jutnal Akrab Juara 3(3), 157-169.
- Penman, S. H., & Zhang, X. J. (1999). Accounting Conservatism, the quality of earnings and stock returns. University of California, Berkeley.
- Tandelilin, E., & Wilberforce. (2015). Portofolio dan Investasi Teori dan Aplikasi. Yogyakarta: Kanisius.

INTERNAL CONTROL OF FRAUD ACTION WITH ENTERPRISE RISK MANAGEMENT (ERM) AS INTERVENING VARIABLES IN INSURANCE EMITENS LISTED IN INDONESIA STOCK EXCHANGE

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Abstract

Handling fraud committed by certain parties cannot be separated from the role of the internal auditor's catalyst, by continuing to provide escort to the organization to achieve its goals. Risk is one of the uncertainties that often occurs due to the lack of adequate information available about what will happen in the future. One of the ways that companies can do is internal control, which can have a big impact on the disclosure of fraud that will occur. This study aims to test and obtain results regarding internal control against fraud through the Coso ERM Framework as an intervening variable in insurance companies listed on the Indonesia Stock Exchange (BEI) 2017-2019, totaling 15 companies. The sampling technique used a purposive sampling method which resulted in 12 studies during the 2017-2019 period. The data used is secondary data with documentation techniques consisting of the 2017-2019 annual report. The tool was used to test the hypothesis using SPSS Version 22.

The results showed that effectiveness, reliability and firm size had a significant effect on Coso ERM. However, the relationship doesn't effect on Coso ERM and Coso ERM effect on Fraud Disclosure. For further researchers, they can use objects such as banking companies that have a higher potential for fraud.

Keywords: effectiveness; Reliability; Company size; Enterprise Risk Management (ERM); Actions of Cheating.

ANALYSIS OF THE EFFECT OF BANK SOUNDNESS ON STOCK PRICES IN STATED-OWNED COMMERCIAL BANKS FOR THE 2010-2019 PERIOD

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Abstrack

This study aims to determine the effect of bank's soundness, namely RGEC (Risk Profile, Good Corporate Governance, Earning, and Capital) which is projected through the ratio of Non-Performing Loans (NPL), Good Corporate Governance (GCG), Net Interest Margin (NIM), Return On Assets (ROA), and Capital Adequacy Ratio (CAR) to the stock price at the State-Owned Commercial Banks listed on the Indonesia Stock Exchange for the period 2010-2019. The sampling method uses saturated sampling, which is a technique with all members of the population being members of the sample and obtained 4 banks, namely Bank Mandiri, Bank BNI, Bank BRI, and Bank BTN. The analytical method used in this research is multiple linier regression analysis. The results of the partial test research found that Risk Profile, Good Corporate Governance, and Earning had no effect on stock prices while Capital affected stock prices. Simultaneously, Risk Profile, Good Corporate Governance, Earning, and Capital have no influence on stock prices.

Keywords: risk profile, good corporate governance, earnings, capital, stock prices

1. INTRODUCTION

A bank is an institution that has significant influence on a nation's economic growth. The Indonesian Banking Act (Act of the Republic Indonesia Number 10 of 1998 on Banking) states that a bank is a business institution that operates in the financial sector to collect funds from the public in the form of savings and channel them back out in the form of loans or other services. Based on this definition, the bank's business activity can be categorized into 2 types, commercial banks and rural banks. Commercial banks, which operate based on conventional funds or sharia principles, offer payment transaction services and create demand deposits, whereas rural banks (*Bank Perkreditan Rakyat/BPR*), which also operate based on conventional funds or sharia principles, do not offer payment transaction services (Apriani & Hartono, 2019).

Commercial banks are further categorized into 3 types based on their ownership, which are the state-owned banks, private banks, and hybrid banks. State-owned commercial banks are owned entirely or partly by the state government, whereas private commercial banks operate their businesses with the permission of the Minister of Finance. Meanwhile, hybrid banks are commercial banks established by Indonesian citizens which consists of one or more foreign banks (Apriani & Hartono, 2019).

According to the Financial Services Authority (*Otoritas Jasa Keuangan/OJK*) (2019), there are 4 state-owned commercial banks, which are Bank Mandiri, Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI), and Bank Tabungan Negara (BTN). Ricard (2020) of finansial.bisnis.com said that these 4 state-owned banks are named in the top 5 banks with the largest assets at the end of 2019. BRI has the highest asset increase with 9,2 percent, making up to Rp1.416,76 trillion worth of asset, followed by Bank Mandiri with a 9,6 increase and a total of Rp1.318,24 worth of asset. BCA, a private bank, sits in the following position, followed by BNI with a total asset of Rp845,60 trillion and BTN with Rp311,77 trillion. Wiratmini (2020) said that, throughout 2019, state-owned commercial banks managed to dominate Indonesian banking market shares, owning 73 percent of domestic bank assets, compared to private commercial banks with only 27 percent.

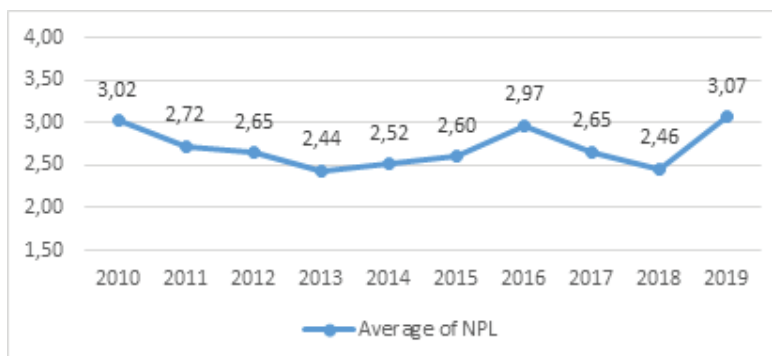
State-owned commercial banks have become one of the most sought-after investment destinations in the capital market. The capital market is the market that trades long-term financial instruments (Indonesia Stock Exchange, 2019). The capital market has an important role in a nation's economy because it performs 2 functions; as a means

to fund businesses and a means for the public to invest in financial instruments such as stocks, bonds, mutual funds, and/or derivatives. One of the forms of capital market investment available in state-owned commercial banks is stock. Stock is the securities that indicate the ownership stock of a company (Indonesia Stock Exchange. 2019).

As business institutions, banks are required to seek as much profit as possible for investors and stockholders, and as financial institutions, banks have the obligation to maintain monetary value, increase economic activities, and expand job opportunities (Apriani, 2019). The assessment of bank performance stability can be observed in the Bank Soundness Level. As Indonesia's bank supervisory institution, the Financial Services Authority – who took over the role formerly held by Bank Indonesia (Financial Services Authority, 2011) – has issued the guidelines for bank performance assessment stipulated in the Circular Letter of the Financial Services Authority Number 14/SEOJK.03/2017 concerning the Assessment of Commercial Bank Soundness Level. The circular letter contains guidelines on the assessment of the implementation of risk management, one of which explains that the bank is obliged to conduct a self-assessment using a risk-based approach (Risk-Based Bank Rating/RBBR) which consists of risk profile, good corporate governance, earning, and capital assessments, known as the RGEC Method.

The first factor is the Risk Profile. Risk Profile is the assessment of risk projected through credit risk using the Non-Performing Loan (NPL) ratio.

Figure 1 NPL State-owned Commercial Banks for the 2010-2019 period

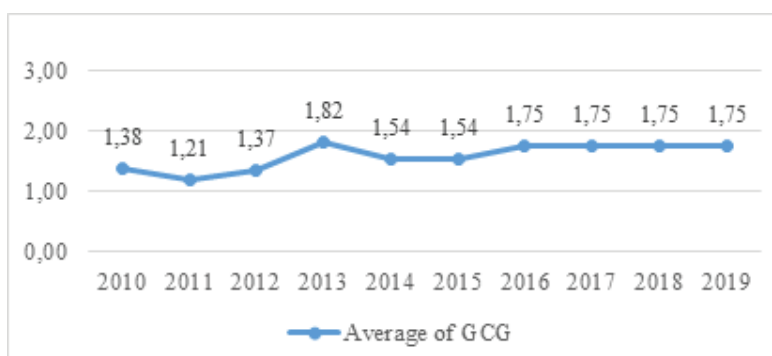


Source: Data Processing Result (<https://www.idx.co.id/>)

As displayed in Figure 1, the NPL ratio experienced both increases and decreases. A bank can be considered as sound or healthy if the NPL ranges between 0 percent to 8 percent. From the graph displayed in Figure 1, it can be observed that the NPL ratio of state-owned commercial banks from 2010 until 2019 reached the lowest point in 2013 with 2,43 percent, while the highest point was reached in 2019 with 3,07 percent. It can then be concluded that the NPL ratio of state-owned commercial banks in the 2010-2019 period is categorized as sound.

Second factor is the Good Corporate Governance (GCG). GCG is the assessment of the bank management quality based of the implementation of 11 aspects of GCG principles using the self-assessment method which will be disclosed to the public.

Figure 3 GCG State-owned Commercial Banks for the 2010-2019 period

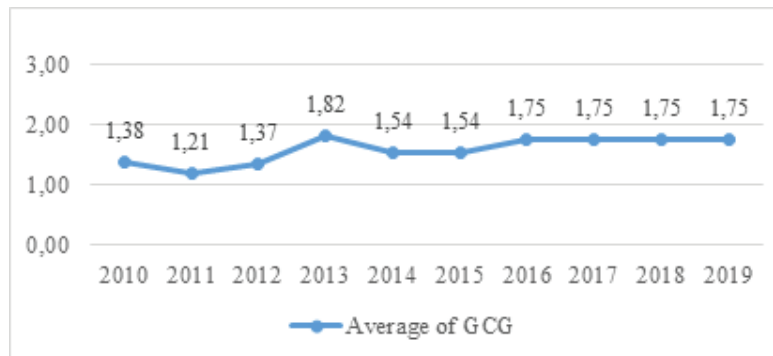


Source: Data Processing Result (<https://www.idx.co.id/>)

As displayed in Figure 2, the GCG Self-Assessment rating tends to become more stable when entering 2019. A bank can be considered sound if the GCG rating ranges from under 1,5 to 3,5. The graph in Figure 2 shows that the GCG rating of state-owned commercial banks from 2010 until 2019 reached the lowest point in 2011 with 1,21 and highest in 2013 with 1,81. It can be concluded that the GCG rating of state-owned commercial banks from 2010 until 2019 is considered sound.

Third factor is Earning. Earning means the bank's ability to increase profit in each period, projected using the Return on Asset (ROA) and Net Interest Margin (NIM) methods.

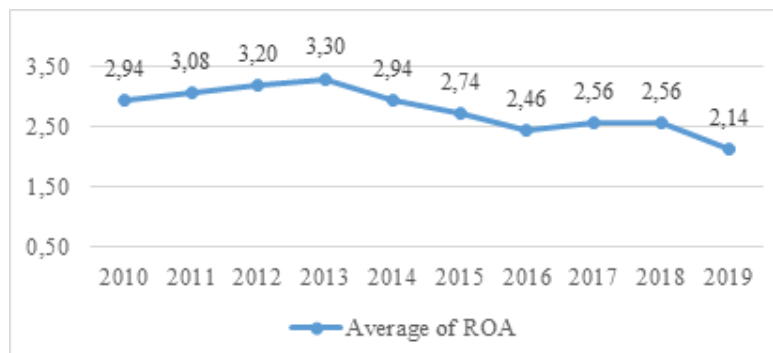
Figure 3 NIM State-owned Commercial Banks for the 2010-2019 period



Source: Data Processing Result (<https://www.idx.co.id/>)

Based on Figure 3 above, the NIM ratio tends to decrease. The NIM ratio can be considered as sound if it is above 1,5 percent. From Figure 3, it can be observed that the NIM ratio of state-owned commercial banks from 2010 until 2019 reached the lowest point in 2019 with 5,02 percent and highest in 2010 with 6,2 percent. It can be concluded that the NIM ratio of state-owned commercial banks from 2010 until 2019 is considered sound.

Figure 4 ROA State-owned Commercial Banks for the 2010-2019 period

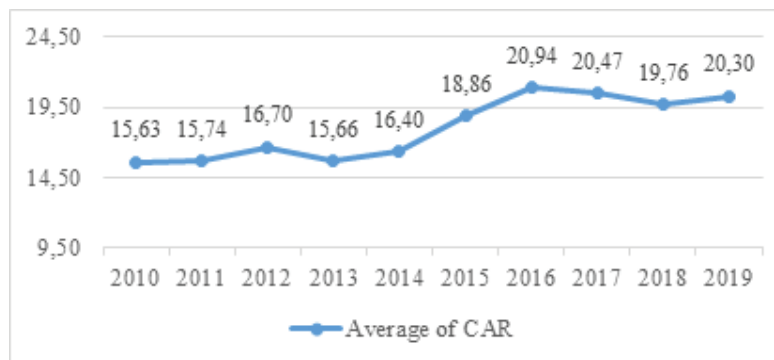


Source: Data Processing Result (<https://www.idx.co.id/>)

Based on Figure 4 above, the ROA ratio also tends to decrease. The ROA ratio can be considered as sound if it is above 0,5 percent. From the graph in Figure 4, it can be observed that the ROA ratio of state-owned commercial banks from 2010 until 2019 reached the lowest point in 2019 with 2,14 percent and highest in 2013 with 3,3 percent. It can be concluded that the ROA ratio of state-owned commercial banks from 2010 until 2019 is considered sound.

Capital assessment is the assessment of the level of adequacy and capital management, projected using the Capital Adequacy Ratio (CAR) (Financial Services Authority, 2017).

Figure 5 CAR State-owned Commercial Banks for the 2010-2019 period

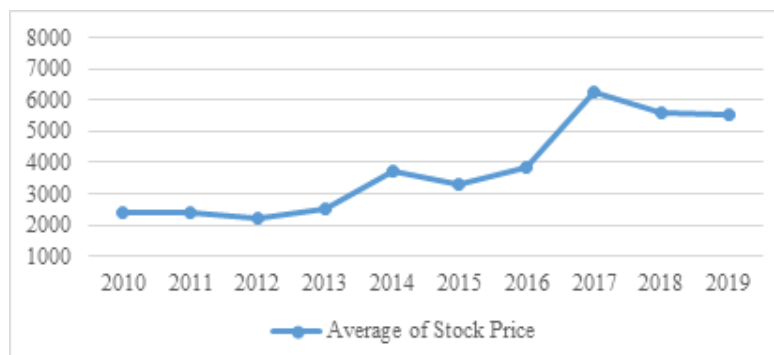


Source: Data Processing Result (<https://www.idx.co.id/>)

As displayed in Figure 5 above, the CAR ratio tends to increase. The CAR ratio can be considered as sound if it is above 8 percent. Figure 5 shows that the CAR ratio of state-owned commercial banks from 2010 until 2019 reached the lowest point in 2010 with 15,6 percent and highest in 2016 with 20,9 percent. It can be concluded that the CAR ratio of state-owned commercial banks from 2010 until 2019 is considered sound.

Financial performance is the determinant of how good or bad the company is managed; therefore, it is perceived as an essential aspect for companies. The value of a company can be reflected by its stock prices in the capital market (Fauziah. 2017)

Figure 6 Stock Price State-owned Commercial Banks for the 2010-2019 period



Source: Data Processing Result (finance.yahoo.com)

Figure 6 shows that the stock prices of state-owned commercial banks from 2010 until 2019 experienced some increases and slight decreases, indicating that companies generally experience increase in value. This is in line with the increase and decrease in the company's financial performance.

The purpose of this study therefore is to analyze the effect of:

1. Risk Profile on the stock price of State-Owned Commercial Banks listed in the Indonesia Stock Exchange.
2. Good Corporate Governance on the stock price of State-Owned Commercial Banks listed in the Indonesia Stock Exchange.
3. Earning on the stock price of State-Owned Commercial Banks listed in the Indonesia Stock Exchange.
4. Capital on the stock price of State-Owned Commercial Banks listed in the Indonesia Stock Exchange.
5. Risk Profile, Good Corporate Governance, Earning, and Capital, simultaneously, on the stock price of State-Owned Commercial Banks listed in the Indonesia Stock Exchange.

2. LITERATURE REVIEW

Bank

As stipulated in the Act of the Republic of Indonesia Number 10 of 1998 concerning Banking, a bank is "a business institution that operates in the financial sector to collect funds from the public in the form of savings and channel

them back out in the form of loans or other services in order to improve the welfare of the people.” Based on this definition, the function of banks can be categorized into 3 types; first, the bank that functions as credit recipients by receiving money and other funds from the public and carrying out lending operations by raising funds from other parties; second, the bank that functions as creditors that provides credit in the form of deposits or savings or other sources of credit, and; third, the bank that functions as credit providers to the community through their own capital, savings, or community savings.

Bank Soundness

Bank Soundness, which reflects the condition and performance of the bank, is a means for the supervisory authority in determining the strategy and focus of bank supervision (Financial Services Authority, 2016). In addition, Bank Soundness is also a concern for all stakeholders, including the owner, the management, and the public, as banking failure can have negative implications on the wider economy.

As Indonesia’s bank supervisory institution, the Financial Services Authority – who took over the role formerly held by Bank Indonesia (Financial Services Authority, 2011) – has issued the guidelines for bank performance assessment stipulated in the Circular Letter of the Financial Services Authority Number 14/SEOJK.03/2017 concerning the Assessment of Commercial Bank Soundness Level. The circular letter contains guidelines on the assessment of the implementation of risk management, one of which explains that the bank is obliged to conduct a self-assessment using a risk-based approach (Risk-Based Bank Rating/RBBR) which consists of risk profile, good corporate governance, earning, and capital assessments, known as the RGEC Method.

According to Appendix II of the Circular Letter of the Financial Services Authority Number 14/SEOJK.03/2017, the Bank Soundness Level rating is based on the following

Table 1 Composite Rating

Composite Rating	Description
PK-1	Very Healthy
PK-2	Healthy
PK-3	Fairly Healthy
PK-4	Less Healthy
PK-5	Unhealthy

Source: Financial Service Authority, 2017

Risk Profile

Risk Profile is the assessment of inherent risk and the quality of risk management implementation within the bank’s operational activities. Risk Profile is projected through credit risk using the Non-Performing Loan (NPL) ratio. NPL refers to the amount of risk that arises due to the inability of the borrower to fulfill its financial obligations to the bank at maturity.

Table 2 Criteria for NPL composite rating

• Composite Rating	• Criteria	• Description
• PK-1	$0\% < \text{NPL} < 2\%$	• Very Healthy
• PK-2	$2\% \leq \text{NPL} < 5\%$	• Healthy
• PK-3	$5\% \leq \text{NPL} < 8\%$	• Fairly Healthy
• PK-4	$8\% \leq \text{NPL} < 11\%$	• Less Healthy
• PK-5	$\text{NPL} > 11\%$	• Unhealthy

Source: Financial Service Authority, 2017

Good Corporate Governance

Good Corporate Governance (GCG) is the assessment of the quality of bank management on the implementation of GCG principles by taking into account 11 elements using the self-assessment method which will be disclosed to the public (Financial Services Authority, 2017). Those 11 elements include (1) implementation of duties and responsibilities of the Board of Commissioners; (2) implementation of duties and responsibilities of the Board of Directors; (3) adequacy and implementation of duties of committees and work units that carry out internal control functions; (4) handling of conflict of interest; (5) implementation of the compliance function; (6) implementation of the internal audit function; (7) implementation of the external audit function; (8) implementation of risk

management; (9) provision of funds to related parties and provision of large funds; (10) transparency of financial and non-financial conditions; and (11) strategic planning. (Financial Services Authority, 2017).

Table 3 Criteria for GCG composite rating

Composite Rating	Criteria	Description
PK-1	$GCG < 1,5$	Very Healthy
PK-2	$1,5 \leq GCG < 2,5$	Healthy
PK-3	$2,5 \leq GCG < 3,5$	Fairly Healthy
PK-4	$3,5 \leq GCG < 4,5$	Less Healthy
PK-5	$4,5 \leq GCG < 5$	Unhealthy

Source: Financial Service Authority, 2017

Earning

Earning refers to the bank's ability to increase profit in each period or to measure the level of business efficiency and profitability achieved by the company. Earning is projected using the Net Interest Margin (NIM) and Return on Asset (ROA) ratios.

NIM is the ratio used to measures the amount of net interest income in comparison to the company's productive assets. The higher the NIM ratio, the higher the interest income on productive assets managed by the bank, and therefore reduces the possibility of the bank getting into a problematic condition.

Table 4 Criteria for NIM composite rating

Composite Rating	Criteria	Description
PK-1	$3\% < NIM$	Very Healthy
PK-2	$2\% < NIM \leq 3\%$	Healthy
PK-3	$1,5\% < NIM \leq 2\%$	Fairly Healthy
PK-4	$1\% < NIM \leq 1,5\%$	Less Healthy
PK-5	$NIM \leq 1\%$	Unhealthy

Source: Financial Service Authority, 2017

ROA refers to the assessment to measure the management's ability to generate profits by comparing profit before tax with the average total assets in a period. A low ROA ratio indicates the bank management's lack of ability in managing assets to reduce costs (Fauziah. 2017).

Table 5 Criteria for NIM composite rating

Composite Rating	Criteria	Description
PK-1	$ROA > 1,5\%$	Very Healthy
PK-2	$1,25\% < ROA \leq 1,5\%$	Healthy
PK-3	$0,5\% < ROA \leq 1,25\%$	Fairly Healthy
PK-4	$0\% < ROA \leq 0,5\%$	Less Healthy
PK-5	$ROA \leq 0\%$	Unhealthy

Source: Financial Service Authority, 2017

Capital

Capital refers to the level of adequacy and capital management, projected using the Capital Adequacy Ratio (CAR). CAR is the tool used to measure the ability of existing capital to cover possible risks in lending activities, including the bank's minimum capital adequacy requirements (Financial Services Authority, 2017).

Table 6 Criteria for NIM composite rating

Composite Rating	Criteria	Description
PK-1	$CAR \geq 11\%$	Very Healthy
PK-2	$9,5\% \leq CAR < 11\%$	Healthy
PK-3	$8\% \leq CAR < 9,5\%$	Fairly Healthy

PK-4	$6,5\% \leq \text{CAR} < 8\%$	Less Healthy
PK-5	$\text{CAR} < 6,5\%$	Unhealthy

Source: Financial Service Authority, 2017

Stock Price

Stock refers to the capital market product in the form of securities that indicate the ownership stock of a company. The stock price is the value referenced by investors in spending their funds to invest in the capital market to earn a profit. The stock price that is listed in the stock exchange at a specific time is determined by market players as well as the supply and demand of related stock in the capital market (Indonesia Stock Exchange, 2019).

Previous Studies

Firstly, Naftali et al. (2018), in *"Pengaruh Tingkat Kesehatan Bank Terhadap Harga Saham Perbankan yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016"*, used multiple regression as the data analysis technique. The results of the study showed that GCG, ROA, and CAR ratios partially and significantly affect stock prices, whereas Risk Profile do not have a partial effect on stock prices. Simultaneously, the bank soundness level, assessed using the RGEC method, significantly affects stock prices.

Secondly, Indriani and Dewi (2016), in *"Pengaruh Variabel Tingkat Kesehatan Bank Terhadap Harga Saham Perbankan di Bursa Efek Indonesia"*, showed that GCG and ROA ratios have a positive effect on stock prices whereas Risk Profile, NIM, and CAR ratios have a negative effect on banking stock prices listed on the Indonesia Stock Exchange in the 2012-2014 period.

Third, Sari et al. (2018), in *"Pengaruh Kinerja Keuangan terhadap Harga Saham (Studi pada Sub Sektor Perbankan BUMN di Bursa Efek Indonesia Tahun 2012-2016)"*, showed that ROA and NIM ratios partially and significantly affect stock prices whereas NPL, LDR, and CAR ratios do not. Furthermore, NPL, LDR, ROA, NIM, and CAR ratios simultaneously and significantly affect stock prices of the banking sector of Indonesia's State-Owned Enterprises.

Fourth, Roswitasari et al. (2017), in *"Banking Subsector: The Effect of Performance Ratio on Bank's Stock Price during the 2010-2014 Period"*, showed that NPL, ROE, and CAR ratios have a positive effect on stock prices, whereas LDR, GCG, and BOPO ratios have a negative effect.

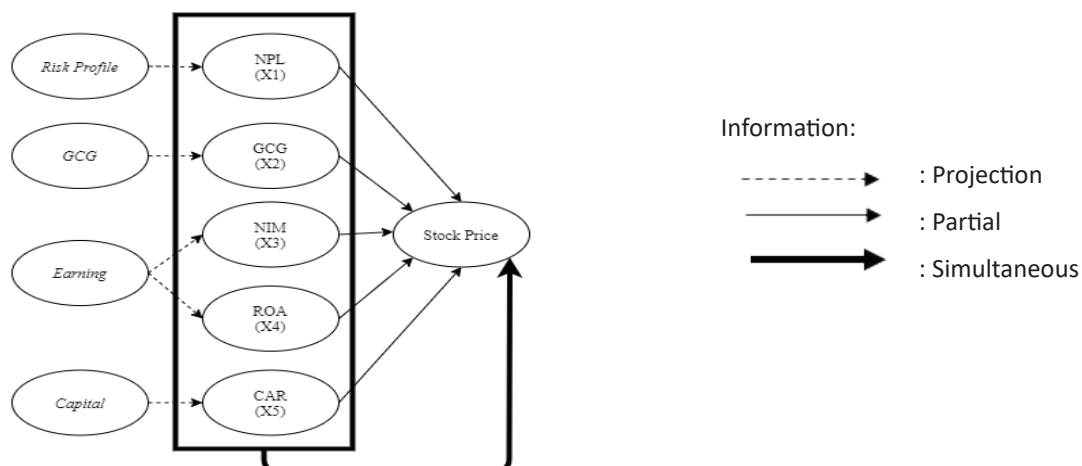
Fifth, Egam et. al. (2017), in *"Pengaruh Return On Asset (ROA), Return On Equity (ROE), Net Profit Margin (NPM), dan Earning Per Share (EPS) Terhadap Harga Saham Perusahaan yang Tergabung dalam Indeks LQ45 di Bursa Efek Indonesia Periode Tahun 2013-2015"*, showed that NPM and EPS ratios have an effect on the LQ45 index stock prices, whereas ROA and ROE ratios do not.

Sixth, Medyawicesar et al. (2018), in *"Analisis Komponen Tingkat Kesehatan Bank Terhadap Harga Saham Bank Umum Swasta Nasional Devisa Yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016"*, showed that NPL and ROA ratios have a positive effect on stock prices, whereas LDR, GCG, NIM, and CAR ratios have a negative effect. Simultaneously, NPL, LDR, GCG, ROA, NIM, and CAR ratios have an effect on stock prices.

Seventh, Akbar (2019), in *"The Effect of Financial Institutions Banking Soundness on Stock Prices"*, showed that ROA and CAR variables significantly and positively affect stock prices, whereas the NIM variable significantly but negatively affects stock prices.

Framework

Figure 7 Framework



Research Hypotheses

H₁: Risk Profile has an effect on stock price changes.

Non-Performing Loan (NPL) refers to the amount of credit which cannot be returned by the creditor or the amount of problematic loans categorized as substandard, doubtful, and non-performing towards the total credit extended by the bank (Fauziah. 2017). From this definition, it can be concluded that if the NPL increases, then stock prices will decrease and vice versa; if the NPL decreases, then stock prices will increase.

H₂: Good Corporate Governance has an effect on stock price changes.

Corporate governance is a system designed to make the company more focused and controlled (Fauziah. 2017). In the GCG assessment, a low composite value indicates that the quality of management in running bank operations is excellent and therefore the bank is very profitable. This means that better GCG performance will earn higher trust level from customers as well as more positive response from investors.

H₃: Earning has an effect on stock price changes.

Net Interest Margin (NIM) is a measuring tool to determine the bank's profitability rate obtained from interest income on productive assets or assets that generate interest (Financial Services Authority, 2017). A high NIM value indicates that the bank is increasingly effective in placing company assets in the form of credit, therefore increasing bank interest income. This information can attract interest from investors to invest in banking stocks which has an impact on stock price increase. Another profitability variable that is thought to affect stock prices is Return on Assets (ROA). ROA is a profitability ratio that can measure the company's ability to generate profit by comparing profit before tax with the average total assets in a period of time (Financial Services Authority, 2017). From this definition, it can be concluded that if the ROA increases, then stock prices will follow suit and vice versa; if the ROA decreases, then stock prices will also decrease.

H₄: Capital has an effect on stock price changes.

Capital adequacy can be projected using the CAR (Capital Adequacy Ratio) which is used to measure the adequacy of bank capital in absorbing losses and fulfilling the applied Minimum Capital Adequacy Requirement (*Kewajiban Penyediaan Modal Minimum/KPMM*) regulations (Financial Services Authority, 2017). Higher CAR ratio indicates that the bank is more capable in facing the risk of loss. From this definition, it can be concluded that if CAR increases, then stock prices will also increase and vice versa; if the CAR decreases, then stock prices will also decrease.

H₅: Risk Profile, Good Corporate Governance, Earning, and Capital have effect on stock price changes.

3. RESEARCH METHODOLOGY

Research Method

Based on the purpose of this study, this study was focused on causality. Causal research is conducted to analyze the relationship between two or more variables (Timotius. 2017). For methodology, this research used the quantitative method. The quantitative method is a research method that observes a phenomenon that can be tested with theories by measuring variables with numbers and analyzing statistical data (Sugianto. 2017).

Research Population and Sample

The studied population included the state-owned commercial banks listed on the Indonesia Stock Exchange in the 2010-2019 period. In selecting the sample, the researcher referred to the non-probability sampling technique. Non-probability sampling is a sampling technique which does not give each population member equal chance of being selected as a sample (Sugiyono, 2018). The researcher also used the saturated sampling technique, which is a sampling technique where each population member is selected as the sample (Sugiyono, 2018). Based on this technique, the researcher obtained the following sample:

Table 7 Sample List

No	Stock Code	Bank Name
1	BMRI	PT. Bank Mandiri (Persero), Tbk.
2	BBNI	PT. Bank Negara Indonesia (Persero), Tbk.
3	BBRI	PT. Bank Rakyat Indonesia (Persero), Tbk.
4	BBTN	PT. Bank Tabungan Negara (Persero), Tbk.

Method of Analysis

The data analysis technique used in this research was the Multiple Regression Analysis with prior testing of the classical assumptions. Testing was conducted to determine whether the data are normally distributed and have no symptoms of multicollinearity, autocorrelation, and heteroscedasticity.

Normality Test

The purpose of the normality test was to determine whether each variable is normally distributed or not. The criteria used for this test was a two-way test, namely comparing the p value obtained with a predetermined significance level (0.05). If $p > 0.05$, then the data is normally distributed (Riyanto. 2020).

Multicollinearity Test

The multicollinearity test was used to determine whether a correlation between the independent variables is found in the regression model. Multicollinearity symptoms can be detected by observing the Variance Inflating Factor (VIF) value < 10 or tolerance value > 0.10 . If these values are obtained, then there is no multicollinearity between variables (Riyanto. 2020).

Autocorrelation Test

The autocorrelation test aimed to determine whether there is a correlation between members of a series of observational data described according to time (time-series). The method used for this autocorrelation test was the Durbin-Watson method. The decision-making criterion was based on the value of $dU \leq d \leq 4 - dU$, meaning that there is no positive or negative autocorrelation.

Heteroscedasticity Test

The heteroscedasticity test was used to determine whether there is an inequality of variants in the regression model from the residuals of one observation to another. The heteroscedasticity test used in this study was the *gleiser* test (Riyanto. 2020). The standard of the *gleiser* test for non-heteroscedasticity was the sig value of $\geq 0,05$.

Multiple Linear Regression Analysis

This method was used to determine the extent of the effect of NPL, GCG, ROA, NIM and CAR values on the stock prices of state-owned commercial banks. The multiple linear regression equation was:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

Coefficient of Determination

Coefficient of determination refers to the extent of the model's ability to explain the variation in the dependent variable (Riyanto. 2020).

Statistical T-Test

The t-test was used to determine the partial effect of the independent variable on the dependent variable by comparing the significance of $\alpha = 0.05$. For the acceptance of the hypothesis using the two-party test, the criterion was that if the $t_{\text{value}} < t_{\text{table}}$ or $-t_{\text{value}} > -t_{\text{table}}$ or $\text{sig} > 0,05$, then H_0 is accepted. Meanwhile, if $t_{\text{value}} \geq t_{\text{table}}$ or $-t_{\text{value}} \leq -t_{\text{table}}$ or $\text{sig} < 0,05$, then H_0 is rejected. (Riyanto. 2020).

Statistical F-Test

The f-test was used to test the effect of the independent variables simultaneously on the dependent variable by comparing the calculated F value with the F table and to determine the feasibility of the multiple linear regression model with the probability level of $\alpha = 5\%$ or 0.05. The criterion for the acceptance of hypothesis was that if F value \geq F table or if $\text{sig} \leq 0,05$, then H_0 is rejected. Meanwhile, if F value $<$ F table or if $\text{sig} > 0,05$, then H_0 is accepted (Riyanto. 2020).

4. RESEARCH RESULTS AND DISCUSSION

Research Results

Normality Test Results

Table 8 Normality Test Result

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			33
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	1765.56165800	
Most Extreme Differences	Absolute	.119	
	Positive	.119	
	Negative	-.059	
Test Statistic			.119
Asymp. Sig. (2-tailed)			.200 ^{c,d}
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. This is a lower bound of the true significance.			

Source: SPSS Data Processing Result

If the sig value ≥ 0.05 , the residual data is normally distributed and if sig < 0.05 then the data is not normally distributed. Based on the results of the normality test, it shows a sig value of 0.200, which means that the sig value ≥ 0.05 , the research data is normally distributed.

Multicollinearity Test

Table 9 Multicollinearity Test Result

Coefficients ^a			
Model		Collinierity Statistics	
		Tolerance	VIF
1	(Constant)		
	NPL	.283	3.539
	GCGSelfAssessment	.746	1.340
	NIM	.199	5.030
	ROA	.106	9.479
	CAR	.810	1.234
a. Dependent Variable: StockPrice			

Source: SPSS Data Processing Result

If $VIF < 10$ or if the tolerance value is $> 0,10$, then there is no multicollinearity between variables. The multicollinearity test obtained the VIF value of 3,539 for NPL, VIF value of 1,340 for GCG, VIF value of 5,030 for NIM, VIF value of 9,479 for ROA, and VIF value of 1,234 for CAR. The VIF value of each variable was less than 10 ($VIF < 10$) and therefore there was no multicollinearity detected in the research data.

Autocorrelation Test

Table 10 Autocorrelation Test Result

Model Summary ^b	
Model	Durbin-Watson
1	1.970
a. Predictors: (Constant), CAR, NIM, GCGSelfAssessment, NPL, ROA	
b. Dependent Variable: StockPrice	

Source: SPSS Data Processing Result

The autocorrelation test obtained the value of $dU < DW < 4-dU$ ($1,1270 < 2,017 < 1,8128$), meaning that there was no autocorrelation in the research data.

Heteroscedasticity Test

Table 11 Heteroscedasticity Test

Coefficients ^a			
Model		t	Sig.
1	(Constant)	.938	.356
	NPL	-1.250	.222
	GCGSelfAssessment	.665	.512
	NIM	.801	.430
	ROA	-1.107	.278
	CAR	.556	.583

a. Dependent Variable: Abs_Ut

Source: SPSS Data Processing Result

If $\text{sig} \geq 0,05$, then there is no heteroscedasticity, whereas if $\text{sig} < 0,05$, then there is heteroscedasticity within the data. The heteroscedasticity test result displayed in Table 4.7 above shows that the sig value for NPL was 0.222, the sig value for GCG was 0.512, the sig value for NIM was 0.430, the sig value for ROA was 0.278, and the sig value for CAR was 0.583. Each variable had a sig value of ≥ 0.05 and therefore the research data did not contain heteroscedasticity.

Multiple Linear Regression Analysis

Table 12 Multiple Regression Analysis

Coefficients ^a			
Model		Unstandardized Coefficients	
B		Std. Error	
1	(Constant)	3284.381	4676.442
	NPL	-759.501	1019.573
	GCGSelfAssessment	-1499.261	917.214
	NIM	-309.722	764.484
	ROA	-247.389	1258.755
	CAR	396.654	143.569

a. Dependent Variable: StockPrice

Source: SPSS Data Processing Result

Based on Table 11, the following equation is obtained:

$$\text{Stock Price} = 3284,38 - 759,50 \text{ NPL} - 1499,26 \text{ GCG} - 309,72 \text{ NIM} - 247,39 \text{ ROA} + 396,65 \text{ CAR}$$

Coefficient of Determination

Table 13 Coefficient of Determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 ^a	.241	.100	1922.10008

a. Predictors: (Constant), CAR, NIM, GCGSelfAssessment, NPL, ROA

b. Dependent Variable: StockPrice

Source: SPSS Data Processing Result

Based on Table 12, the amount of adjusted R^2 was 0.100, indicating that 10% of the variation in stock prices could be explained by variations of the five independent variables (NPL, GCG, NIM, ROA, and CAR) while the remaining 90% was explained by other causes outside the research model.

Statistical t-test

Table 14 t-Test

Independent Variables	Sig.	T _{value}	$\pm t_{table}$	Description
NPL	.463	-0.745	> -2.052	No effect
GCGSelfAssessment	.114	-1.635	> -2.052	No effect
NIM	.689	-0.405	> -2.052	No effect
ROA	.846	-0.197	> -2.052	No effect
CAR	.010	2.763	> 2.052	Effect
Variabel Dependen: StockPrice				

Source: SPSS Data Processing Result

From Table 13, it can be observed that:

1. the t value of NPL was -0.745 and -t table was -2.052 (-t value > -t table) with a sig value of 0.463, which is greater than 0.05 (0.463 > 0.05), meaning that the NPL ratio has no effect on stock prices;
2. the t value of GCG was -1,635 and -t table was -2.052 (-t value > -t table) with a sig value of 0.114, which is greater than 0.05 (0,114 > 0,05), meaning that the GCG ratio has no effect on stock prices;
3. the t value of NIM was -0,405 and -t table was -2.052 (-t value > -t table) with a sig value of 0,689, which is greater than 0.05 (0,114 > 0,05), meaning that the NIM ratio has no effect on stock prices;
4. the t value of ROA was -0.197 and -t table was -2.052 (-t value > -t table) with a sig value of 0.846, which is greater than 0.05 (0,114 > 0,05), meaning that the ROA ratio has no effect on stock prices;
5. the t value of CAR was 2.763 and -t table was 2.052 (t value > t table) with a sig value of 0.010, which is smaller than 0.05 (0,114 < 0,05), meaning that the CAR ratio has effect on stock prices.

Statistical F-Test

Table 1 F-Test

Sig.	F value	F table	Description
0.165 ^b	1.715	< 2,57	No Effect
a. Dependent Variable: StockPrice			
b. Predictors: (Constant), CAR, NIM, GCGSelfAssessment, NPL, ROA			

Source: SPSS Data Processing Result

From the table, it can be observed that F value < F table (1,715 < 2,57) with a sig value of 0,165 (0,165 > 0,05), meaning that H_0 was accepted. From this, it can be concluded that the NPL, GCG, NIM, ROA, and CAR variables simultaneously do not affect stock prices of state-owned commercial banks in Indonesia for the 2010-2019 period.

Discussion

The first hypothesis states that Risk Profile has an effect on stock price. The results obtained from this study indicated that the NPL value, which is the projection of Risk Profile, does not affect stock prices. This is in line with Naftali et al. (2018), Indriani dan Dewi (2016), Sari et al. (2018), and Roswitasari et al. (2017) but contradicts Medyawicesar et al. (2018). According to Indriani and Dewi (2016), NPL or Risk Profile help investors in finding out the amount of risk and the effectiveness of risk management within the banking company. This may happen due to the majority state ownership of state-owned commercial banks which give investors reasons to be less worried of high risks.

The second hypothesis states that Good Corporate Governance (GCG) has an effect on stock price. However, research results indicated that GCG does not affect stock prices. This result is in line with Roswitasari et al. (2017) and Medyawicesar et al. (2018), but contradicts the result from Indriani and Dewi (2016). Roswitasari et al. (2017) and Medyawicesar et al. (2018) stated that GCG cannot be felt directly by the company, but instead will be felt in the long term. Therefore, investors do not generally refer to the GCG for investment decisions.

The third hypothesis states that Earning has an effect on stock price. Earning is projected with Net Interest Margin (NIM) and Return On Assets (ROA). Research results indicated that the NIM value does not affect stock prices. This result is in line with Indriani and Dewi (2016), Medyawicesar et al. (2018), and Akbar (2019), but contradicts the result from Sari et al. (2018). According to Indriani and Dewi (2016), Medyawicesar et al. (2018), and Akbar (2019), profitability information observed through NIM cannot attract interest from investors to invest because banks focused a large portion of their business on Micro, Small, and Medium Enterprises (MSME) and micro loans, which resulted in large operational costs incurred in managing MSME and micro loans.

Furthermore, research results also indicated that the ROA does not affect stock prices. This is in line with Egam et al. (2017) but contradicts the result from Naftali et al. (2018), Indriani and Dewi (2016), Sari et al. (2018), Medyawicesar et al. (2018), and Akbar (2019). Egam et al. (2017) stated that investors do not focus only on the company's internal ability to generate profits, but also to external risks and market conditions. External risks which include inflation, tariff increases, and the supply and demand in the capital market also influence the decision to invest.

The fourth hypothesis states that Capital has an effect on stock price. Research results indicated that the Capital value, projected using CAR, has an effect on stock prices. This is in line with Naftali et al. (2018), Roswitasari et al. (2017), and Akbar (2019), but contradicts the results from Indriani and Dewi (2016), Sari et al. (2018), and Medyawicesar et al. (2018). Naftali et al. (2018) stated that CAR can provide information that helps investors make investment decisions. The higher the CAR value of a bank, the higher the likelihood of that bank covering various risks that might impact the bank by using the capital it owns. The high amount of capital owned by the bank will attract investment from investors because there is a sense of security from the possibility of bankruptcy.

The fifth hypothesis states that Risk Profile, Good Corporate Governance, Earning, and Capital have an effect on stock price. However, research results indicated that Risk Profile, Good Corporate Governance, Earning, and Capital do not affect stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange, hence they would not affect the increase or decrease of stock prices. This contradicts the research results from Naftali et al. (2018), Sari et al. (2018), and Medyawicesar et al. (2018).

5. CONCLUSION AND RECOMMENDATION

Conclusion

The results of this study which observes the effect of bank soundness, measured using the RGEC method and projected using the Non-Performing Loan (NPL), Good Corporate Governance (GCG), Net Interest Margin (NIM), Return on Asset (ROA), dan Capital Adequacy Ratio (CAR) variables, on stock prices of state-owned commercial banks in the 2010-2019 period indicated that:

1. Risk Profile does not affect stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange.
2. Good Corporate Governance (GCG) does not affect stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange..
3. Earning does not affect stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange.
4. Capital affects stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange.
5. Risk Profile, Good Corporate Governance, Earning, Capital simultaneously does not affect stock prices of state-owned commercial banks listed on the Indonesia Stock Exchange.

Recommendation

1. Investors and potential investors should consider the CAR ratio of a company to ensure the bank's effectiveness in covering possible losses using the bank's capital.
2. Customers and potential customers should consider bank soundness to measure the bank's ability to ensure security for customers in saving their money or carrying out other monetary transactions.
3. Banks should increase their capital to cover possible risks that might occur in the foreseeable future to give a sense of security for investors and to convince them that the bank will not go bankrupt.
4. Future researchers should consider taking into account other independent variables which are the projected variables of the Risk Profile, Good Corporate Governance, Earning, and Capital components, such as Core Return on Asset (ROA), Return On Equity (ROE), Load to Deposit Ratio (LDR), and others.

REFERENCES

- Akbar, Abu Bakar. (2019). The Effect of Financial Institutions Banking Soundness Against Stock Price. Vol. 1(1). International Journal of Seocology. [Online]. <https://www.neliti.com/publications/296461/the-effect-of-financial-institutions-banking-soundness-against-stock-price> [18 October 2019]
- Apriani, Rani & Hartanto. (2019). Hukum Perbankan dan Surat Berharga. Yogyakarta: CV Budi Utama.
- Indonesia Stock Exchange. Saham. [Online]. <https://www.idx.co.id/produk/saham/> [15 November 2019]
- Indonesia Stock Exchange. Pengantar Pasar Modal. [Online]. <https://www.idx.co.id/investor/pengantar-pasar-modal/> [15 November 2019]
- Egam, Gerald Edsel Yermia., Ilat, Venjte., & Pangerapan, Sonny. (2017). Pengaruh Return On Asset (ROA), Return On Equity (ROE), Net Profit Margin (NPM), dan Earning Per Share (EPS) Terhadap Harga Saham Perusahaan yang Tergabung dalam Indeks LQ45 di Bursa Efek Indonesia Periode Tahun 2013-2015. Vol. 5(1). Jurnal EMBA. [Online]. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/15455/14998> [7 August 2020]
- Fauziah, Fenty. (2017). Kesehatan Bank, Kebijakan Dividen, dan Nilai Perusahaan: Teori dan Kajian Empiris. Samarinda: RV Pustaka Horizon
- Financial Service Authority. Daftar Alamat Kantor Pusat Bank Umum dan Syariah. [Online]. <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/Pages/Daftar-Alamat-Kantor-Pusat-Bank-Umum-Dan-Syariah.aspx> [30 October 2019]
- Financial Service Authority. (2016). Peraturan Otoritas Jasa Keuangan No. 4/POJK.03/2016 tentang Penilaian Tingkat Kesehatan Bank Umum. [Online]. <https://www.ojk.go.id/id/kanal/perbankan/regulasi/peraturan-ojk/Pages/pojk-tentangpenilaian-tingkat-kesehatan-bank-umum.aspx> [30 October 2019]
- Financial Service Authority. (2017). Surat Edaran Otoritas Jasa Keuangan No. 14/SEOJK.03/2017 tentang Penilaian Tingkat Kesehatan Bank Umum. [Online]. <https://www.ojk.go.id/id/kanal/perbankan/regulasi/surat-edaran-ojk/Pages/Surat-Edaran-Otoritas-Jasa-Kuangan-Nomor-14-SEOJK.03-2017.aspx> [30 October 2019]
- Indonesia Government. (1998). UU No. 10 Tahun 1998 tentang Perbankan. [Online]. <https://www.bphn.go.id/data/documents/98uu010.pdf> [30 October 2019]
- Indonesia Government. (2011). UU No. 21 Tahun 2011 tentang Otoritas Jasa Keuangan. [Online]. https://www.ojk.go.id/id/regulasi/otoritas-jasa-keuangan/undang-undang/Documents/uu2111_1388664376.pdf [30 October 2019]
- Indriani, Ni Putu Lilis & Dewi, Sayu Kt. Sutrisna. (2016). Pengaruh Variabel Tingkat Kesehatan Bank Terhadap Harga Saham Perbankan di Bursa Efek Indonesia. Vol. 5(5) E-Jurnal Manajemen Unud. [Online]. <https://ojs.unud.ac.id/index.php/Manajemen/article/view/20275> [18 October 2019]
- Medyawicesar, Hana., Tarmed, Eded., & Purnamasari, Imas. (2018). Analisis Komponen Tingkat Kesehatan Bank Terhadap Harga Saham Bank Umum Swasta Nasional Devisa Yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016. Vol. 3(1). Journal of Business Management Education. [Online]. <https://ejournal.upi.edu/index.php/JBME/article/view/14244/8210> [7 August 2020]
- Naftali, Sumilat C., Saerang, Ivonne S., & Tulung, Joy E. (2018). Pengaruh Tingkat Kesehatan Bank Terhadap Harga Saham Perbankan yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016. Vol. 6(4). Jurnal EMBA. [Online]. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/21024> 19 October 2019]
- Ricard, M. (2020). Aset 5 Bank Besar: BRI Masih Juara, BCA Tumbuh Paling Tinggi. [Online]. <https://finansial.bisnis.com/read/20200304/90/1208974/aset-5-bank-besar-bri-masih-juara-bca-tumbuh-paling-tinggi> [7 June 2020]
- Roswitasari, Linda Dwi., Achsani, Noer Azam., & Andati, Trias. (2017). Banking Subsector: Performance Ratio Influence to Bank's Stock Price during Period 2010-2014. Vol. 6(2). International Journal of Science and

Research (IJSR). [Online]. https://www.ijer.net/get_abstract.php?paper_id=ART2017602 [20 October 2019]

Sari, Yuni Yolanda., Yanti, Budi., & Zulbahri, Liza. (2018). Pengaruh Kinerja Keuangan terhadap Harga Saham (Studi pada Sub Sektor Perbankan BUMN di Bursa Efek Indonesia Tahun 2012-2016). Vol. 9(1). Jurnal Manajemen dan Kewirausahaan. [Online]. <http://ojs.unitas-pdg.ac.id/index.php/manajemen/article/view/249/158> [7 August 2020]

Sugiarto. (2017). Metodologi Penelitian Bisnis. Yogyakarta: CV Andi Offset

Wiratmini, Ni Putu Eka. (2020). Bank Lokal vs Bank Asing di Indonesia, Siapa Penguasa Pasar?. [Online]. <https://finansial.bisnis.com/read/20200709/90/1263773/bank-lokal-vs-bank-asing-di-indonesia-siapa-penguasa-pasar> [1 July 2020]

Yahoo! Finance. Harga Saham. [Online] <https://finance.yahoo.com/> [10 January 2020]

MAPPING OF CORPORATE SOCIAL RESPONSIBILITY PERFORMANCE BASED ON TRIPLE BOTTOM LINE: AN EVIDENCE FROM INDONESIA

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Abstract

This study aims to describe the performance of companies in Indonesia in terms of implementing Corporate Social Responsibility (CSR) based on the Triple Bottom Line concept. Applying purposive sampling technique, this study took companies listed in the SRI-KEHATI Index of Indonesia Stock Exchange as the samples. This is a quantitative study that uses a content analysis of CSR disclosures in the company's sustainability reports within 2015 to 2019 by applying the Fourth Generation of Global Reporting Initiative Index (GRI G4). The data analysis was done through descriptive statistics. The result of this study is a mapping of their CSR disclosure performances based on Triple Bottom Line concept which includes economic, social, and environmental aspects. This study also shows which of them are classified into high, medium, and low CSR actors. This preliminary study has implications for further research to relate CSR performance with other variables, such as corporate financial performance.

Keyword: Corporate Social Responsibility, performance, Triple Bottom Line

1. INTRODUCTION

Companies today are not only concerned with the interests of shareholders but also must prioritize the interests of stakeholders for its sustainability. The form of attention to stakeholders can be seen from how the company implements Corporate Social Responsibility (CSR) in its responsibility for its business environment (Zhang, Cao, Zhang, Liu, & Li, 2020).

The definition of Corporate Social Responsibility or CSR according to World Business Council For Sustainable Development (WBCSD) is *"continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large"* (WBCSD, 2020).

CSR implementation by applying the Triple Bottom Line (TBL), namely the three interests of sustainability as seen from the sustainability of profits (profit), sustainability of society (community), and environmental sustainability (planet), otherwise known as 3P can be an important tool to achieve sustainability (Elkington, 1998).

CSR performance is commonly assessed by implementing Global Reporting Initiative (GRI) which includes TBL aspects, i.e. profit, planet, and people (Krisnawati, 2013). GRI releases a CSR disclosure standard called GRI Standard G4. There are three indicators and 91 CSR disclosure items; (1) economic performance indicators consist of 9 items, (2) environmental performance indicators consist of 34 items, and (3) social performance indicators consist of 48 items (GRI, 2020).

This study aims to map companies that have implemented a triple bottom line in implementing CSR, assessment indicators by using GRI G4. This research was conducted on companies listed in the Sustainable and Responsible Investment (SRI) -KEHATI stock index. The SRI KEHATI index uses the principles of sustainability, finance, good governance, and concern for the environment as benchmarks in determining which companies can be included in the SRI KEHATI index (KEHATI, 2020). This research uses purposive sampling technique and descriptive analysis. The results of this study are expected to map which companies get high, medium, and low CSR score in their implementation.

2. LITERATURE REVIEW

Legitimacy Theory

Legitimacy theory explained relationship between organization and its environment. Dowling and Pfeffer (1975)

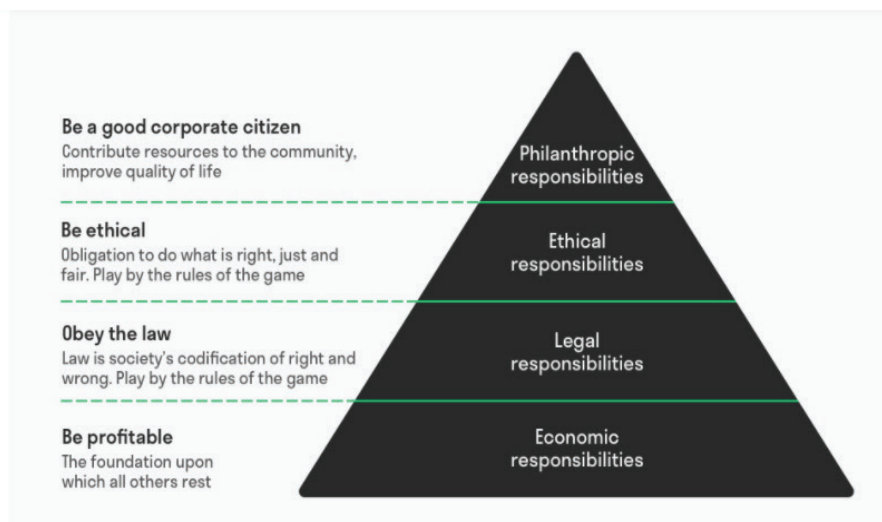
defined that organization (company) is a part of social system in a society. An organization try to conform its norms or value with values, norms, and behavior of society around the organization. In practice, the organization has responsibility to society and has to disclose it. Dowling and Pfeffer (1975) explained there are three things that organization can do to become legitimate. First, output, goals and methods operation of organization can be adjusted to apply definition of legitimacy. Second, organization's practices, output and values can be reflected to definition of social legitimacy. Organization can try communication to society to achieve it. Third, symbols, values or institution can be strong fundamental in social legitimacy, organization can apply communication (Dowling & Pfeffer, 1975).

Stakeholder Theory

Stakeholder theory is a theory that describes which parties the company is responsible for. Company is not an entity that operates only for its own interest, but it provides benefits to all stakeholders, such as society, government, vendor, bank, etc. Freeman (1984) divided this theory into two models; (1) policy model and business planning and (2) model of corporate social responsibility and stakeholder management. Company focuses on developing and expressing strategic decision agreements with groups that support for company's sustainability. Company also has plans and analysis by entering possible external influences for company. The main objective of this theory is to assist company to increase its value as the result of its activities to stakeholders (Freeman, 1984).

Corporate Social Responsibility

Corporate Social Responsibility (CSR) was firstly introduced by Howard Bowen (1953). Bowen stated, "*CSR refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society*" (Bowen, 1953). In practice, company has some motives to perform CSR. Carroll (1991) explained four motives which are arranged into a pyramid; (1) economic responsibility, (2) legal responsibility, (3) ethical responsibility, (4) philanthropic responsibility.



Picture 1. The Pyramid of Corporate Social Responsibility

Source : Carroll (1991)

Economic responsibility is the basic responsibility for company. This responsibility indicates that the company is expected to produce goods or services so that company can make a profit by selling the goods or services. Legal responsibility means that the company has to comply with the existing law and regulation in a country. The third responsibility is ethical responsibility. In conducting its business, the company is expected to carry out good, honest and fair business practices. The norms that exist in society can be used as guidelines by the company. The top responsibility is philanthropic responsibility. The company is required to contribute for society to improve quality life for them (Carroll, 1991).

A company has to conduct CSR initiative for its sustainability. John Elkington proposed measurement for company sustainability in 1998. This measurement is called Triple Bottom Line that consists of *Profit* which represents economic aspect, *Planet* which represents environmental aspect, and *People* which represents social aspect. The most common reason to establish company is to generate profit. Every company will look profit as much as possible for its sustainability. In practice, company must support employee interest. This is an implementation of People. Employee is one of company important assets which running company's operational activities. The last is Planet. When produce output for sell, company will produce waste too. This waste had bad impact to

environment and society where company established. Company must notice this impact because it will impact to sustainability itself (Elkington, 1998).

Global Reporting Initiative (GRI) Standard G4

CSR is an obligation for company. Public company has to disclose implementation of CSR to its stakeholders. Company can use Corporate Social Responsibility Index which issued by Global Reporting Initiative. Global Reporting Initiative (GRI) is an independent international organization which focus in transparency reporting in company. GRI released standard for CSR disclosure, it called GRI Standard G4. This standard developed through process which involves stakeholders from several countries, such as from society, labor, company, government, etc. GRI Standard G4 used to measure company performance which related to law, regulation and norm in society (GRI, 2020).

There are three indicator and 91 items of CSR Disclosure; (1) economic performance indicator, consist of 9 items, (2) environment performance indicator, consist of 34 items, and (3) social performance indicator, consist of 48 items. Social performance indicator has 4 sub categories; labor practices and decent work, human rights performance, society and product responsibility performance. CSR Disclosure can be disclosed in Sustainability Report of company. This research used 91 items of GRI G4. If company disclosed it, scored 1, and if company didn't disclosed it, scored 0. The formula to calculate CSR Disclosure Index is as follow (Filemon & Krisnawati, 2014):

$$CSRDi = \frac{\sum Xi}{n}$$

CSRDi = CSR Disclosure Index

Xi = Total score for items disclosed of company i, using nominal scale
(score 1 for every item disclosed and score 0 for every item not disclosed)

n = Total items of CSR Disclosure based on GRI G.4 (n = 91 items)

3. METHODOLOGY

This quantitative study conducts a content analysis of CSR disclosures in the companies' sustainability reports within 2015 to 2019 by applying the Fourth Generation of Global Reporting Initiative Index (GRI G4). The data analysis was done through descriptive statistics of mean and median value. The objects of this study are the companies listed in Indonesia Stock Exchange which are consistently included in SRI-KEHATI Index of Indonesia Stock Exchange and published the Sustainability Reports within 2015 to 2019. Applying a purposive sampling technique using those criteria, this study is conducted with ten companies as the samples, i.e. PT. Astra International, Tbk (ASII); PT. Bank Central Asia, Tbk. (BBCA); PT. Bank Negara Indonesia (Persero), Tbk. (BBNI); PT. Bank Rakyat Indonesia (Persero), Tbk. (BBRI); PT. Bank Mandiri (Persero), Tbk. (BMRI); PT. Jasa Marga (Persero), Tbk. (JSMR); PT. Semen Indonesia (Persero), Tbk. (SMGR); PT. United Tractors, Tbk. (UNTR); PT. Unilever Indonesia, Tbk. (UNVR); PT. Wijaya Karya (Persero), Tbk. (WIKA).

4. RESULTS AND DISCUSSION

After doing content analysis for calculating CSR Disclosure Index based on GRI G4, we can measure the performance of companies in terms of their CSR initiatives. Thus, the companies can be categorized into high, medium, or low CSR performers. The more items disclosed in a company's Sustainability Report, the higher the company's CSR performance. It means that the higher the CSR Disclosure Index, the higher the category of the company.

The category of high, medium, and low is referred to (Sandhu & Kapoor, 2010). The first step is to find the median value of the data. After finding the median value, we determine the lower limit and upper limit of the range. The lower limit = {median value – (20% x median value)}. The upper limit = {median value + (20% x median value)}.

This section will be divided into four sub-sections which explain the aspects of CSR Disclosure based on Triple Bottom Line concept. The discussion of this study will consist of economic aspect (Profit), environmental aspect (Planet), social aspect (People), and all aspects which accumulate the three former aspects.

Economic Aspect (Profit)

The CSR Disclosure Index of Economic aspect based on GRI G4 in this research is shown by Table 1, as follow:

Table 1. CSR Disclosure Index of Economic Aspect

NO.	Company	Aspect	CSR Index					Mean
			2015	2016	2017	2018	2019	
1	UNVR	Economic	0,02	0,02	0,02	0,02	0,02	0,02
2	BBCA	Economic	0,03	0,02	0,03	0,02	0,01	0,02
3	BBNI	Economic	0,05	0,02	0,02	0,01	0,02	0,03
4	ASII	Economic	0,03	0,03	0,03	0,03	0,03	0,03
5	SMGR	Economic	0,08	0,03	0,01	0,02	0,03	0,04
6	UNTR	Economic	0,04	0,04	0,07	0,01	0,02	0,04
7	BBRI	Economic	0,08	0,03	0,01	0,02	0,05	0,04
8	BMRI	Economic	0,05	0,07	0,02	0,01	0,04	0,04
9	JSMR	Economic	0,04	0,04	0,02	0,04	0,05	0,04
10	WIKA	Economic	0,05	0,04	0,03	0,05	0,07	0,05

Source: data processing

The data has been sorted from smallest to largest. Since there are ten objects in this study, then the median value of this data series is between the mean score of the fifth and the sixth companies, i.e. SMGR and UNTR, that is $(0.04 + 0.04) : 2 = 0.04$. The lower limit is $\{0.04 - (20\% \times 0.04)\} = 0.03$. And the upper limit is $\{0.04 + (20\% \times 0.04)\} = 0.04$. Thus, the constraints of the classification are as follow:

- a) Low performer : < 0.03
- b) Medium performer : $0.03 - 0.04$
- c) High performer : > 0.04

Based on the range, the low CSR performers are UNVR (0.02) and BBCA (0.02); while the medium CSR performers are BBNI (0.03), ASII (0.03), SMGR (0.04), UNTR (0.04), BBRI (0.04), BMRI (0.04), JSMR (0.04); and the high CSR performer is only WIKA (0.05).

Environmental Aspect (Planet)

The CSR Disclosure Index of Environmental aspect based on GRI G4 in this research can be seen on Table 2, as follow:

Table 2. CSR Disclosure Index of Environmental Aspect

NO.	Company	Aspect	CSR Index					Mean
			2015	2016	2017	2018	2019	
1	WIKA	Environmental	0,08	0,00	0,00	0,00	0,08	0,03
2	BBRI	Environmental	0,07	0,00	0,00	0,05	0,05	0,04
3	BBCA	Environmental	0,03	0,05	0,05	0,03	0,11	0,06
4	JSMR	Environmental	0,04	0,03	0,04	0,03	0,16	0,06
5	UNVR	Environmental	0,07	0,07	0,07	0,10	0,08	0,07
6	UNTR	Environmental	0,09	0,11	0,02	0,09	0,09	0,08
7	BMRI	Environmental	0,11	0,12	0,11	0,00	0,07	0,08
8	BBNI	Environmental	0,04	0,02	0,12	0,11	0,13	0,09
9	SMGR	Environmental	0,12	0,12	0,07	0,08	0,10	0,10
10	ASII	Environmental	0,12	0,11	0,11	0,11	0,11	0,11

Source: data processing

The data has been sorted from smallest to largest. Since there are ten objects in this study, then the median value of this data series is between the mean score of the fifth and the sixth companies, i.e. UNVR and UNTR, that is $(0.07 + 0.08) : 2 = 0.075$. The lower limit is $\{0.075 - (20\% \times 0.075)\} = 0.06$. And the upper limit is $\{0.075 + (20\% \times 0.075)\} = 0.09$. Thus, the constraints of the classification are as follow:

- a) Low performer : < 0.06
- b) Medium performer : 0.06 – 0.09
- c) High performer : > 0.09

Based on the range, the low CSR performers are WIKA (0.03) and BBRI (0.04); while the medium CSR performers are BBKA (0.06), JSMR (0.06), UNVR (0.07), UNTR (0.08), BMRI (0.08), BBNI (0.09); and the high CSR performers are SMGR (0.10) and ASII (0.11).

Social Aspect (People)

The CSR Disclosure Index of Social aspect based on GRI G4 in this research is shown by Table 3, as follow:

Table 3. CSR Disclosure Index of Social Aspect

NO.	Company	Aspect	CSR Index					Mean
			2015	2016	2017	2018	2019	
1	SMGR	Social	0,15	0,05	0,03	0,04	0,10	0,08
2	BBNI	Social	0,12	0,09	0,08	0,09	0,07	0,09
3	ASII	Social	0,10	0,11	0,10	0,10	0,10	0,10
4	UNVR	Social	0,09	0,09	0,10	0,13	0,10	0,10
5	WIKA	Social	0,11	0,05	0,07	0,11	0,18	0,10
6	BBCA	Social	0,08	0,10	0,11	0,09	0,16	0,11
7	BBRI	Social	0,20	0,07	0,07	0,16	0,11	0,12
8	UNTR	Social	0,11	0,20	0,15	0,07	0,08	0,12
9	JSMR	Social	0,14	0,14	0,05	0,15	0,13	0,13
10	BMRI	Social	0,29	0,44	0,09	0,11	0,14	0,21

Source: data processing

The data has been sorted from smallest to largest. Since there are ten objects in this study, then the median value of this data series is between the mean score of the fifth and the sixth companies, i.e. WIKA and BBKA, that is $(0.10 + 0.11) : 2 = 0.105$. The lower limit is $\{0.105 - (20\% \times 0.105)\} = 0.084$. And the upper limit is $\{0.105 + (20\% \times 0.105)\} = 0.126$. Thus, the constraints of the classification are as follow:

- a) Low performer : < 0.084
- b) Medium performer : 0.084 – 0.126
- c) High performer : > 0.126

Based on the range, the low CSR performers is only SMGR (0.08); while the medium CSR performers are BBNI (0.09), ASII (0.10), UNVR (0.10), WIKA (0.10), BBKA 0.11), BBRI (0.12), UNTR (0.12); and the high CSR performers in social aspect are JSMR (0.13) and BMRI (0.21).

All Aspects (Economic, Environmental, and Social Aspects)

The CSR Disclosure Index of all aspects (Economic, Environmental, and Social aspects) based on GRI G4 in this research can be seen on Table 4, as follow:

Table 4. CSR Disclosure Index of All Aspects

NO.	Company	Aspect	CSR Index					Mean
			2015	2016	2017	2018	2019	
1	WIKA	All Aspects	0,24	0,10	0,10	0,16	0,32	0,18
2	BBCA	All Aspects	0,14	0,18	0,20	0,14	0,29	0,19
3	BBRI	All Aspects	0,34	0,10	0,08	0,24	0,22	0,20
4	UNVR	All Aspects	0,18	0,18	0,19	0,25	0,20	0,20
5	BBNI	All Aspects	0,22	0,13	0,22	0,21	0,22	0,20

6	SMGR	All Aspects	0,35	0,21	0,11	0,14	0,23	0,21
7	JSMR	All Aspects	0,23	0,22	0,12	0,23	0,35	0,23
8	UNTR	All Aspects	0,24	0,35	0,24	0,16	0,19	0,24
9	ASII	All Aspects	0,25	0,25	0,24	0,24	0,24	0,25
10	BMRI	All Aspects	0,45	0,63	0,22	0,12	0,25	0,33

Source: data processing

The data has been sorted from smallest to largest. Since there are ten objects in this study, then the median value of this data series is between the mean score of the fifth and the sixth companies, i.e. BBNI and SMGR, that is $(0.20 + 0.21) : 2 = 0.205$. The lower limit is $\{0.205 - (20\% \times 0.205)\} = 0.164$. And the upper limit is $\{0.205 + (20\% \times 0.205)\} = 0.246$. Thus, the constraints of the classification are as follow:

- a) Low performer : < 0.164
- b) Medium performer : $0.164 - 0.246$
- c) High performer : > 0.246

Based on the range, there are no low CSR performers, it shows that all of companies have been performing quite well in terms of their CSR initiatives, and most of them are ranked as medium performers, i.e. WIKA (0.18), BBKA (0.19), BBRI (0.20), UNVR (0.20), BBNI (0.20), SMGR (0.21), JSMR (0.23), UNTR (0.24); and the high CSR performers are ASII (0.25) and BMRI (0.33).

Thus, based on the CSR Disclosure Index of Economic, Environmental, Social, and All aspects, we can create a mapping of CSR performance for companies listed in SRI-KEHATI Index of Indonesia Stock Exchange within 2015-2019 as seen on Table 5:

Table 5. Mapping of CSR Performance of SRI-KEHATI Index within 2015-2019

NO.	Company	Category of Performance			
		Economic	Environmental	Social	All Aspects
1	ASII	medium	high	medium	high
2	BBCA	low	medium	medium	medium
3	BBNI	medium	medium	medium	medium
4	BBRI	medium	low	medium	medium
5	BMRI	medium	medium	high	high
6	JSMR	medium	medium	high	medium
7	SMGR	medium	high	low	medium
8	UNTR	medium	medium	medium	medium
9	UNVR	low	medium	medium	medium
10	WIKA	high	low	medium	medium

5. CONCLUSION

Based on the mapping of CSR performance of SRI-KEHATI Index within 2015-2019, it can be seen that there five companies that have been categorized into high performers, i.e. ASII in environmental and all aspects, BMRI in social and all aspects, JSMR in social aspect, SMGR in environmental aspect, and WIKA in economic aspect. However, although SMGR and WIKA are categorized in high performers, yet SMGR is still low in social aspect, and WIKA is still low in economic aspect. Thus, the practical suggestion based on the results of this research is to improve CSR performance in terms of economic aspect for BBKA and UNVR, environmental aspect for BBRI and WIKA, and social aspect for SMGR. The implication for further research is to relate the CSR performance with other variables, such as financial performance of the companies.

REFERENCES

- Bowen, H. R. (1953). *Social Responsibility of The Businessman*. New York: Harper and Brothers.
- Carroll, A. B. (1991). The Pyramid of Corporate Social Responsibility : Toward the Moral Management of Organizational Stakeholders. *Business Horizons, July - August Edition*, 39-48.
- Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *Pacific Sociological Review*, 18, 122-136.
- Elkington, J. (1998). *Cannibals with Forks: The Triple Bottom Line in 21st Century Business*. Gabriola Island, BC: New Society Publishers.
- Filemon, C. N., & Krisnawati, A. (2014). Pengaruh corporate Social Responsibility Disclosure terhadap Return on Assets pada Perusahaan Telekomunikasi yang Terdaftar di Bursa Efek Indonesia . *Jurnal Manajemen Indonesia Vol. 14, No. 3*, 223-232.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- GRI . (2020, October 15). *Global Reporting Initiative*. Diambil kembali dari Global Reporting Initiative: <https://www.globalreporting.org/>
- KEHATI. (2020, October 19). *Indeks SRI-KEHATI* . Diambil kembali dari Indeks SRI-KEHATI : <http://www.kehati.or.id/en/index-sri-kehati-2/>
- Krisnawati, A. (2013). The Triple Bottom Line Concept as A Performance Measurement System of Ethical Business Practices in Indonesia Oil & Gas Industry. *International Conference on Business and Social Science* (hal. 45). Seoul: <http://www.icbass.org> .
- Sandhu, H. S., & Kapoor, S. (2010). Corporate Social Responsibility Initiatives: An Analysis of Voluntary Corporate Disclosure. *South Asian Journal of Management*, 17(2), 47-80.
- WBCSD. (2020, October 15). *World Business Council for Sustainable Development*. Diambil kembali dari World Business Council for Sustainable Development: <https://www.wbcd.org/content/search?searchText=corporate+social+responsibility>
- Zhang, Q., Cao, M., Zhang, F., Liu, J., & Li, X. (2020). Effects of Corporate Social Responsibility on Customer Satisfaction and Organizational Attractiveness: A Signaling Perspective. *Business Ethics*, 29 (1), 20-34.

REGIONAL AND COMMERCIAL BANKS DEVELOPMENT IN INDONESIA AFTER GLOBAL ECONOMIC CRISIS

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Abstract

Regional and Commercial Banks are institutions that have important role as intermediary for various fields related to development of regional and country's economy so that it really requires great attention which can be seen from the bank health. This study aims to examine Regional and Commercial Banks Health level of their financial performance ratios (Capital Adequacy Ratio, Non-Performing Loan, Return on Assets, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Loan to Deposit Ratio) after the third global economic crisis (from 2009 to 2019) by using the Chow Test and Hausman Test. Population of this study was 97 banks and 76 samples which were selected using purposive sampling technique. Based on the results, it can be seen from its ratios and after the global economic crisis, Regional and Commercial Banks have six very healthy financial ratios, while the Loan to Deposit Ratio is quite healthy both in terms of ratio and time. The Chow Test and Hausman Test show that all ratios have a significant effect, except for the ratio of Non-Performing Loan at Regional Banks and Capital Adequacy Ratio at Commercial Banks with adjusted R-squared of 63% and 87%. Comparison of the health of Regional t Banks and Commercial Banks shows that Regional Banks tend to have very healthy performance. It is hoped that this research can provide input for improving the performance of banks in Indonesia so as to reduce the problems faced by banks, especially after the economic crisis.

Keywords: Regional Bank, Commercial Bank, Capital Adequacy Ratio, Non-Performing Loan, Return on Assets, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Loan to Deposit Ratio, Chow Test, and Hausman Test.

1. INTRODUCTION

Law of the Republic of Indonesia No 10/1998 stated bank is a business entity that functions to collect public funds in the form of deposits, then distributed to the public in various forms such as credit with the aim of improving the standard of society (Hery, 2020). So, indirectly, banks have a very large role in the economic activity of a country so that the progress of banking in a country can be used as a benchmark for the progress of the country concerned. The more developed a country is, the greater the role of banks in controlling the country and this shows that the government and society really need the banking sector (Kasmir, 2016).

Along with economic progress, banks must also be able to create various products and services that can facilitate and satisfy their customers. So that banks are now a financial institution that can facilitate and expedite the economic activities of the community as well as what happens to Regional Banks in their respective regions (Kamal, 2019).

Currently, Indonesia has several types of banks as regulated by the Banking Law No 14/1967 and Regional Banks are included in the category of commercial banks based on their function classification (Kasmir, 2016). And the Regional Bank is a commercial bank that shares are owned by the provincial government, where indirectly the Regional Bank plays a very large role in regional development so, its function as a partner of the provincial government in supporting work programs in the financial sector. Thus, the government really hopes that the Regional Bank can assist the government in accelerating regional development because Regional Banks also have factors of proximity, cultural understanding, and regional sociology of their customers.

Investor Magazine 2019 reported that 9 (Nine) Regional Banks became the Best Banks in 2019 and this proves Regional Banks have been able to compete with other banks in Indonesia. From 2016 to 2019, Regional

Development Banks had the lowest assets in 2016 amounting to 5,622,275 billion rupiah and the highest assets were in 2019 amounting to 112,250,729 billion rupiah. During the past 4 (four) years, the total assets owned by Regional Banks have tended to increase by around 5.6% - 7.9%. This condition shows the seriousness of the Regional Bank in Indonesia to progress and strengthen its presence in the community.

In order to maintain progress and existence in society, Regional Banks and Commercial Banks need to pay attention to the assessment of their soundness level as stated in Bank Indonesia Regulation No. 6/10 / PBI / 2004 and Bank Indonesia Regulation No. 13/1 / PBI / 2011 (Octafilia & Wijaya, 2019).

Assessment of the health level of a bank is an assessment to see the ability of a bank to carry out all its operational activities in accordance with applicable banking regulations (Saputra, 2016). One of the indicators that assesses the health of a bank is the financial statement of the bank concerned because financial statements can show the bank's overall financial condition, including its weaknesses and strengths (Gandawari, Areros, & Keles, 2016).

The occurrence of several times the global economic crisis has also had a major impact on the Indonesian banking sector so that the government needs to be more strict in monitoring the soundness of banks. Where to assess the health of a bank can see various aspects including the capital aspect represented by the Capital Adequacy Ratio (CAR), the earning aspect which includes Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Non-Performing Loan (NPL), and Operational Cost of Operating Income (BOPO), as well as the liquidity aspect which includes the Loan to Deposit Ratio (LDR) (Anggraeni & Sudarno, 2010; Gandawari et al., 2016).

Previous research that also examined the health of banks in Indonesia used different methods (CAMEL, CAMELS, and RGEC) and also different periods. In general, there are still few studies that examine the health of Regional Banks both individually and as a whole and are supported by the Chow Test and Hausman Test.

Based on the description above, the purpose of this study is to analyze the health performance of Regional Development Banks after the 2008 global economic crisis using the Chow Test and the Hausman Test.

2. LITERATURE REVIEW

Regional Bank is a financial institution that has a role as a regional economic developer as well as a regional economic development driver in order to improve the standard of living of the community, provide financing for regional development, raise funds and implement and save regional treasury. This is supported by KEPMENDAGRI No. 62 of 1999 concerning Guidelines for the Organization and Work Procedure of Regional Banks, article 2 which states that the Regional Bank is a financial institution that aims to support economic development and drive regional development (Anan & Albarqis, 2017).

Commercial Bank is a bank that has conventional business activities and / or is based on sharia principles through the provision of services in financial transaction activities (Tridiyani, 2011) Non Performing Loan (NPL) where is a bank that in its operational activities applies interest method and can obtain funds from outside parties in the form of demand deposits, deposit on call, transfer funds, shares and obligation. Conventional bank operational activities are done by producing various products that can raise public funds, channel funds that have been collected, and provide financial services (Octafilia & Wijaya, 2020) dari CAMEL, CAMELS menjadi RGEC merupakan strategi Bank Indonesia dalam rangka melindungi sektor perbankan yang rentan terhadap krisis ekonomi. Menarik karena metode RGEC baru diterapkan di sektor perbankan Indonesia dan diketahui dari penelitian internasional yang masih menggunakan CAMELS seperti Vietnam, Afrika Selatan, India dan Bangladesh. Penelitian ini bertujuan untuk menganalisis bank kesehatan konvensional di Indonesia dengan mengkombinasikan metode CAMELS dan RGEC; aset, rentabilitas, likuiditas, solvabilitas, dan sensitivitas risiko pasar. Objek penelitian ini adalah bank konvensional di Indonesia dengan sampel sebanyak 50 bank dan periode penelitian tahun 2012 hingga 2017. Hasil penelitian menunjukkan bahwa rasio aset yang diwakili oleh Capital Adequacy Ratio dan Net Interest Margin sebagian besar berada pada komposit 1 dan 2. tingkat. Rasio rentabilitas yang diwakili oleh Return on Assets dan Net Profit Margin berada pada level komposit 1 dan 3, sedangkan Loan to Deposit Ratio dan Net Performing Loan yang mewakili rasio likuiditas sebagian besar berada pada komposit level 1. Kemudian rasio solvabilitas diwakili oleh Biaya Operasional. Rasio Pendapatan Operasional dan sensitivitas risiko pasar diwakili oleh Risiko Suku Bunga berada pada komposit level 1 secara umum. Artinya bank kesehatan konvensional di Indonesia dari tahun 2012 hingga 2017 sangat sehat atau memadai. Dari hasil penelitian ini diharapkan dapat meningkatkan kepercayaan masyarakat terhadap perbankan sehingga dapat meningkatkan investasi masyarakat di bank yang secara langsung dapat mendukung pertumbuhan ekonomi Indonesia.

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Analysis of bank financial ratios is a form of reporting that provides an overview of the financial condition,

health and business achievements of the bank which aims to analyze the internal and financial conditions of the bank, both in general and specifically. The financial statements presented show several financial ratios including liquidity ratios, activity ratios, profitability ratios, solvency ratios (leverage ratios), and firm value ratios (Mirdhani & Budiyo, 2014).

This study uses the ratios contained in each Regional Bank annual report, namely the capital ratio represented by the Capital Adequacy Ratio (CAR), the earnings ratio represented by Return on Equity (ROE), Return on Assets (ROA), Net Interest Margin (NIM), and the Operational Cost of Operating Income as well as the liquidity ratio represented by Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR).

Capital is one of the most important factors for a bank is having sufficient capital where capital is used to assess a bank's ability to meet its capital. Capital ratio is a ratio to show a bank's ability to provide funds so that it can overcome the risk of loss (Saputra, 2016; Syahputra & Saragih, 2018). The capital ratio in this study uses the Capital Adequacy Ratio (CAR).

Table 1. CAR Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$CAR > 15\%$
2	Health	$9\% \leq CAR < 15\%$
3	Pretty Health	$8\% \leq CAR < 9\%$
4	Less Health	$6\% < CAR < 8\%$
5	Un-Health	$CAR \leq 6\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Earning or rentability is one of the factors used in measuring the soundness of a bank which includes performance, resources, sustainability, and profitability management. Rentability is a ratio used to assess a bank's ability to generate profits (Suhartono, ZA, & Azizah, 2017; Widyaningrum, Suhadak, & Topowijono, 2014). Faktor profil risiko, risiko kredit dengan menggunakan rasio Net Performing Loan (NPL). Rentability ratios in this study use Return on Equity (ROE), Return on Assets (ROA), Net Interest Margin (NIM), and Operational Costs to Operating Income (BOPO).

Table 2. ROE Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$ROE > 20\%$
2	Health	$ROE > 12,5\% - 20\%$
3	Pretty Health	$0,5\% - 12,5\%$
4	Less Health	$0\% < ROE < 0,5\%$
5	Un-Health	ROE NEGATIF

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Table 3. ROA Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$ROA > 1,5\%$
2	Health	$1,25\% \leq ROA < 1,5\%$
3	Pretty Health	$0,5\% \leq ROA < 1,25\%$
4	Less Health	$0\% < ROA < 0,5\%$
5	Un-Health	$ROA \leq 0\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Table 4. NIM Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$3\% < \text{NIM}$
2	Health	$2\% < \text{NIM} < 3\%$
3	Pretty Health	$1,5\% < \text{NIM} \leq 2\%$
4	Less Health	$1\% < \text{NIM} \leq 1,5\%$
5	Un-Health	$\text{NIM} \leq 1\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Table 5. BOPO Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$83\% < \text{BOPO} \leq 88\%$
2	Health	$89\% < \text{BOPO} \leq 93\%$
3	Pretty Health	$94\% < \text{BOPO} \leq 96\%$
4	Less Health	$97\% < \text{BOPO} \leq 100\%$
5	Un-Health	$\text{BOPO} < 100\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Liquidity is an assessment of a bank's ability to pay all its obligations and fulfill all credit applications that are eligible for funding (Yanti, Suwendra, & Susila, 2014). This study uses the ratio of Non-Performing Loan (NPL) and Loan to Deposit Ratio (LDR).

Table 6. NPL Ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$\text{NPL} < 2\%$
2	Health	$2\% \leq \text{NPL} < 5\%$
3	Pretty Health	$5\% \leq \text{NPL} < 8\%$
4	Less Health	$8\% \leq \text{NPL} < 12\%$
5	Un-Health	$\text{NPL} \geq 12\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

Table 7. LDR ranking Criteria Matrix

Level	Description	Criteria
1	Very Health	$\text{LDR} \leq 75\%$
2	Health	$75\% < \text{LDR} \leq 85\%$
3	Pretty Health	$85\% < \text{LDR} \leq 100\%$
4	Less Health	$100\% < \text{LDR} \leq 120\%$
5	Un-Health	$\text{LDR} > 120\%$

Source: Surat Edaran BI No. 6/23/DPNP tahun 2004, 2020

3. METHOD

The data in this study is secondary data where the source of data is from various documents in the form of books, journals, articles, annual reports and banking financial reports which are the object of research and other documents obtained from various media, including the internet.

This study employed purposive sampling data collection technique. Purposive sampling is a technique to determine the research samples based on certain considerations or criteria. The criteria used in this study are complete banking financial statements from 2009 to 2019.

The population used in this study is regional and conventional banking companies that have financial statements from the period of 2009 to 2019 totaling 96 banks. Meanwhile, the banks that became the sample of this study amounted to 69 banks after being selected using several criteria.

The criteria used in determining the sample are (1) regional and conventional banking companies with the 2009-2019 period, (2) banks that have complete financial statements for the period of 2009 to 2019 (Octafilia & Wijaya, 2020) dari CAMEL, CAMELS menjadi RGEK merupakan strategi Bank Indonesia dalam rangka melindungi sektor perbankan yang rentan terhadap krisis ekonomi. Menarik karena metode RGEK baru diterapkan di sektor perbankan Indonesia dan diketahui dari penelitian internasional yang masih menggunakan CAMELS seperti Vietnam, Afrika Selatan, India dan Bangladesh. Penelitian ini bertujuan untuk menganalisis bank kesehatan konvensional di Indonesia dengan mengkombinasikan metode CAMELS dan RGEK; aset, rentabilitas, likuiditas, solvabilitas, dan sensitivitas risiko pasar. Objek penelitian ini adalah bank konvensional di Indonesia dengan sampel sebanyak 50 bank dan periode penelitian tahun 2012 hingga 2017. Hasil penelitian menunjukkan bahwa rasio aset yang diwakili oleh Capital Adequacy Ratio dan Net Interest Margin sebagian besar berada pada komposit 1 dan 2. tingkat. Rasio rentabilitas yang diwakili oleh Return on Assets dan Net Profit Margin berada pada level komposit 1 dan 3, sedangkan Loan to Deposit Ratio dan Net Performing Loan yang mewakili rasio likuiditas sebagian besar berada pada komposit level 1. Kemudian rasio solvabilitas diwakili oleh Biaya Operasional. Rasio Pendapatan Operasional dan sensitivitas risiko pasar diwakili oleh Risiko Suku Bunga berada pada komposit level 1 secara umum. Artinya bank kesehatan konvensional di Indonesia dari tahun 2012 hingga 2017 sangat sehat atau memadai. Dari hasil penelitian ini diharapkan dapat meningkatkan kepercayaan masyarakat terhadap perbankan sehingga dapat meningkatkan investasi masyarakat di bank yang secara langsung dapat mendukung pertumbuhan ekonomi Indonesia.”;author":[{"dropping-particle":"","family":"Octafilia","given":"Yusnita","non-dropping-particle":"","parse-names":false,"suffix":""}],{"dropping-particle":"","family":"Wijaya","given":"Evelyn","non-dropping-particle":"","parse-names":false,"suffix":""}],container-title:"Advances in Economics, Business and Management Research, volume 132 6th Annual International Conference on Management Research (AICMaR 2019.

4. RESULTS AND DISCUSSION

The sample used in this study is a Regional Development Bank registered with Bank Indonesia for the period 2009 to 2019, is included in the category of commercial banks, and has complete data.

Table 1. Regional Bank Financial Ratio

NO	NAMA BANK	CAR	NPL	ROA	ROE	NIM	BOPO	LDR
1	BANK ACEH	19,56	0,88	2,78	22,20	7,53	77,31	80,31
2	BANK DKI	19,11	2,53	2,11	17,58	6,04	80,89	82,21
3	B A N K KALTENG	25,66	0,28	3,70	23,31	8,87	66,19	86,56
4	B A N K KALTIMTARA	21,39	2,26	3,02	16,38	6,71	72,26	80,57
5	B A N K LAMPUNG	21,01	0,57	3,02	28,05	6,45	74,04	94,82
6	BANK BPD BALI	18,61	0,56	3,68	25,98	7,67	67,67	92,81
7	B A N K BENGKULU	20,07	0,12	3,22	26,64	9,80	76,31	92,19
8	BANK BJB	17,88	0,65	2,34	21,94	6,95	81,05	86,32
9	BANK JAMBI	25,02	0,17	3,62	26,10	8,59	67,45	95,76
10	BANK JATENG	17,10	1,21	2,78	26,44	7,62	76,03	88,47
11	BANK JATIM	22,32	2,96	3,58	22,44	7,08	68,37	78,96
12	BANK KALBAR	19,89	0,65	3,23	24,47	8,79	73,10	84,01
13	BANK KALSEL	20,27	3,05	2,35	17,42	6,70	77,74	84,97
14	BANK NTB	22,87	0,39	4,27	25,67	9,15	71,66	98,85
15	BANK NTT	21,99	0,76	3,48	21,20	9,66	71,74	100,39
16	BANK PAPUA	23,66	5,91	1,90	13,50	7,24	82,30	69,35
17	B A N K RIAUKEPRI	20,82	0,32	2,63	20,37	6,77	75,68	89,17

18	BANK SULTRA	26,30	0,56	4,75	28,46	9,46	67,88	97,84
19	BANK SULSEBAR	26,93	0,95	4,35	28,08	10,23	66,41	112,67
20	BANK SULTENG	26,11	0,67	3,23	20,09	8,76	71,15	95,56
21	BANK SULUT	15,37	0,55	2,33	24,80	9,21	83,57	103,02
22	BANK NAGARI	17,19	1,60	2,41	21,97	7,42	80,58	95,64
23	BANK SUMSELBABEL	16,51	2,42	2,15	17,55	8,26	81,23	81,12
24	BANK SUMUT	14,89	1,65	3,02	28,21	8,64	77,19	94,72
25	BANK BPD DIY	18,13	1,19	2,86	19,97	8,27	72,41	78,65

Source: Processed Data, 2020

Table 1 shows that Regional Banks are in composite rank 1 on the ratio of Capital Adequacy Ratio, Return on Assets, Net Interest Margin, Operational Cost of Operating Income, and Loan to Deposit Ratio which means that these five (5) ratios are in very healthy condition. The Return on Assets Ratio is ranked 1/2, indicating that this ratio is in a very healthy condition. Meanwhile, the ratio of Non-Performing Loan is in the composite 1-3 which indicates that this ratio is in a very healthy, healthy, or fairly healthy condition.

Table 2. Commercial Bank Financial Ratio

NO	NAMA BANK	CAR	NPL	ROA	ROE	NIM	BOPO	LDR
1	BANK NEGARA INDONESIA (PERSERO) TBK	17,60	0,74	2,74	18,61	5,85	56,49	81,76
2	BANK RAKYAT INDONESIA (PERSERO) TBK	18,58	1,13	4,28	24,53	8,50	52,01	83,88
3	BANK TABUNGAN NEGARA (PERSERO) TBK	17,54	2,45	1,54	15,21	4,94	67,12	105,25
4	BANK MANDIRI (PERSERO) TBK	17,75	0,66	3,15	20,36	5,61	50,66	81,08
5	BANK RAKYAT INDONESIA AGRONIAGA TBK	21,22	1,78	1,21	9,35	4,60	68,51	84,78
6	BANK ARTHA GRAHA INTERNASIONAL TBK	16,28	2,14	0,51	6,57	4,56	96,15	81,98
7	BANK BUKOPIN TBK	13,47	2,97	1,11	12,21	3,70	89,69	82,56
8	BANK BUMI ARTA	22,63	0,71	1,73	13,14	5,58	68,15	75,54
9	BANK MNC INTERNATIONAL TBK	14,30	3,64	-0,78	-6,73	4,29	107,61	81,85
10	BANK CENTRAL ASIA TBK	18,11	0,26	3,51	21,29	6,15	52,21	71,50
11	BANK CIMB NIAGA TBK	16,42	1,62	1,83	12,75	5,67	64,38	95,83
12	BANK DANAMON INDONESIA TBK	20,16	1,13	2,22	12,04	9,46	61,38	94,37
13	BANK GANESHA	21,54	1,46	0,71	6,68	5,15	74,42	74,69
14	BANK WOORI SAUDARA INDONESIA 1906 TBK	19,46	0,99	2,12	13,01	5,35	51,32	105,18
15	BANK INDEX SELINDO	18,83	1,11	1,80	13,93	5,09	62,30	86,61
16	BANK MAYBANK INDONESIA TBK	15,49	1,65	1,25	10,32	5,19	66,96	90,21
17	BANK QNB INDONESIA TBK	20,82	1,62	-1,02	-2,97	3,34	105,34	86,05
18	BANK MASPION INDONESIA	18,76	0,85	1,43	7,71	5,11	88,45	86,72
19	BANK MAYAPADA INTERNASIONAL TBK	14,54	2,03	1,64	17,13	5,18	66,62	85,58
20	BANK MEGA TBK	19,30	1,92	2,14	14,69	5,57	63,94	60,51
21	BANK MUAMALAT INDONESIA TBK	12,66	3,32	0,62	12,36	3,72	74,14	87,04
22	BANK J TRUST INDONESIA TBK	12,89	3,78	-1,32	-2,30	1,52	113,35	80,28

23	BANK OCBC NISP TBK	18,71	0,70	1,92	12,14	4,62	52,65	89,43
24	BANK PAN INDONESIA TBK	19,14	0,85	1,83	12,43	4,48	64,27	91,68
25	BANK PERMATA TBK	15,64	1,13	0,68	9,97	4,49	74,82	87,39
26	BANK SINARMAS TBK	17,07	2,18	1,14	9,37	6,21	72,35	78,90
27	BANK UOB INDONESIA	17,75	1,91	1,70	11,43	4,60	72,12	91,65
28	BANK BNP PARIBAS INDONESIA	24,17	0,51	2,01	9,77	2,97	71,63	130,34
29	BANK CAPITAL INDONESIA	22,03	1,26	1,01	7,70	4,23	90,32	54,48
30	BANK RESONA PERDANIA	20,33	1,19	2,05	11,80	3,50	79,73	136,68
31	BANK AGRIS	17,70	1,97	0,79	-0,06	4,06	100,38	83,31
32	BANK ARTOS INDONESIA	35,46	2,47	-2,15	-2,71	5,37	102,95	86,63
33	BANK JASA JAKARTA	26,92	0,11	2,63	13,40	4,20	62,89	86,86
34	BANK KESEJAHTERAAN EKONOMI	14,20	1,23	1,20	6,53	6,12	73,24	91,82
35	BANK INA PERDANA TBK	30,50	1,32	0,96	8,64	4,58	73,13	77,80
36	BANK HARDA INTERNASIONAL TBK	16,66	2,58	-0,14	7,23	4,94	81,42	85,23
37	BANK FAMA INTERNASIONAL	26,22	3,30	3,08	12,41	5,50	65,26	92,43
38	BANK SAHABAT SAMPOERNA	24,46	2,43	1,24	9,68	5,95	75,39	87,72
39	BANK MAYORA	23,62	1,11	0,74	7,52	4,51	73,51	74,02
40	BANK MULTI ARTA SENTOSA	41,10	1,49	1,83	12,32	4,67	67,16	81,97
41	BANK NATIONALNOBU TBK	312,36	0,23	0,89	2,01	4,46	89,22	63,25
42	BANK TABUNGAN PENSIUNAN NASIONAL TBK	22,61	0,48	3,47	19,55	11,77	56,49	98,17
43	BANK VICTORIA INTERNASIONAL TBK	17,85	1,85	1,13	10,54	2,00	71,19	65,95
44	BANK YUDHA BHAKTI	17,13	3,30	0,79	4,94	5,91	73,76	88,33

Source: Processed Data, 2020

Commercial Bank Financial Ratio shown in Table 2 shows that the Capital Adequacy Ratio and Operational Cost of Operating Income are in composite 1, which is very healthy. The Non-Performing Loan ratio is in the ½ composite which means very healthy / healthy, while the Net Interest Margin ratio is between 1-3 composites which is very healthy Loan to Deposit Ratio. The Return on Assets and Return on Equity ratios are in the 1st, 2nd, and 5th rank, which means that the two ratios are still in an unhealthy condition. Meanwhile, the Loan to Deposit Ratio is in the composite 1-5, which means that this ratio is in a very healthy to unhealthy condition.

Table 3. Regional Bank Financial Performance in 2009 - 2019

NO	RASIO	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	CAR	21,30	19,54	18,02	18,91	19,06	19,89	22,26	22,11	22,42	22,61	22,10
2	NPL	1,11	0,92	0,83	1,15	0,98	1,41	1,59	1,83	1,88	1,41	1,35
3	ROA	3,70	4,17	3,37	3,15	3,32	3,12	2,76	2,82	2,60	2,45	2,31
4	ROE	26,50	30,62	26,45	26,61	26,16	23,47	21,44	19,71	17,72	16,20	15,41
5	NIM	9,68	10,37	8,74	7,60	8,28	7,91	7,37	7,84	7,29	7,10	6,64
6	BOPO	71,37	70,79	72,90	73,34	71,20	74,43	76,33	76,32	76,56	77,48	77,78
7	LDR	88,20	83,71	72,28	85,38	96,19	92,99	94,58	96,82	90,74	92,37	88,53

Source: Processed Data, 2020

Table 3 shows the financial performance of Regional Banks after the global economic crisis in 2008 where the ratio of Capital Adequacy Ratio, Non-Performing Loan, Return on Assets, Net Interest Margin, and Operational Cost of Operating Income were in very healthy condition. Meanwhile, the Return on Equity ratio was in a very healthy condition from 2009 to 2015 but changed to a healthy condition from 2016 to 2019. The Loan to Deposit Ratio is the only ratio that tends to be in a fairly healthy condition during 2009 to 2019. with 2019.

Table 4. Commercial Bank Financial Performance in 2009 - 2019

NO	RASIO	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	CAR	76,89	29,11	19,33	19,18	22,04	19,00	19,81	21,65	21,94	21,66	24,39
2	NPL	1,84	1,46	1,18	1,20	1,03	1,65	1,60	1,71	1,86	2,06	2,30
3	ROA	1,70	2,00	1,88	1,84	1,66	1,36	1,14	1,02	1,00	1,00	0,70
4	ROE	25,51	16,52	14,91	14,10	9,37	7,39	6,55	4,20	4,83	5,67	1,51
5	NIM	5,66	5,79	5,43	5,35	5,13	4,60	4,89	5,12	4,85	4,83	4,18
6	BOPO	34,96	34,51	37,26	80,51	83,81	87,07	88,73	90,12	90,55	89,19	94,54
7	LDR	78,28	80,27	81,37	85,53	88,24	87,10	91,41	88,57	86,64	90,29	88,12

Source: Processed Data, 2020

Based on Table 4, it can be seen that the financial performance of Commercial Banks from 2009 to 2019 where the Capital Adequacy Ratio, Net Interest Margin, and Operational Cost of Operating Income are in very healthy condition. Meanwhile, the Non-Performing Loan ratio was in a very healthy condition from 2009 to 2017 and was in a healthy condition in 2018 and 2019. The Return on Assets ratio is a ratio that tends to be in a very healthy condition in the 5 years after the global economic crisis and has been in good health since 2014. The Return on Equity ratio was only in a healthy condition in 2019, while after the crisis until 2018, it was in a very healthy condition. For three consecutive years after the crisis, the Loan to Deposit Ratio has shown a healthy condition and from 2012 to 2019 it has been in a fairly healthy condition.

Table 5. Regional Bank Chow Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.695150	0.478870	11.89288	0.0000
CAR	0.019267	0.005498	3.504120	0.0005
NPL	0.018800	0.016233	1.158096	0.2478
ROE	0.046586	0.004800	9.704528	0.0000
NIM	0.111685	0.014223	7.852369	0.0000
BOPO	-0.075677	0.004414	-17.14547	0.0000
LDR	0.006997	0.001706	4.101882	0.0001

Source: Processed Data, 2020

The Chow Test result of the Regional Bank in Table 5 shows that the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the Non-Performing Loan ratio has a positive and insignificant effect, and the Operational Cost to Operating Income has an significant negative effect to Return on Assets with a significance level of below 1%.

Table 6. Commercial Bank Chow Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.488634	0.353467	1.382404	0.1675
CAR	0.000400	0.000477	0.839879	0.4014
NPL	-0.231647	0.041973	-5.518992	0.0000
ROE	0.031186	0.002614	11.92945	0.0000
NIM	0.207942	0.030978	6.712572	0.0000
BOPO	-0.016855	0.001940	-8.690219	0.0000
LDR	0.013259	0.002939	4.511126	0.0000

Source: Processed Data, 2020

Based on Table 6, the Chow Test result of the Commercial Bank shows that the Capital Adequacy Ratio has no significant effect, then Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the Non-Performing Loan and Operational Cost to Operating Income ratios have a significant negative effect on Return on Assets with a significance level of below 1%.

Table 7. Regional Bank Hausman Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.665357	0.496759	11.40463	0.0000
CAR	0.021427	0.005759	3.720686	0.0002
NPL	0.018344	0.016788	1.092653	0.2756
ROE	0.042347	0.005283	8.016198	0.0000
NIM	0.077998	0.015699	4.968292	0.0000
BOPO	-0.076222	0.004444	-17.15147	0.0000
LDR	0.011379	0.001974	5.763552	0.0000

Source: Processed Data, 2020

The results of the Hausman Test for Regional Banks in Table 5 shows that the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the Non-Performing Loan ratio has a positive and insignificant effect, and the Operational Cost to Operating Income has an significant negative effect towards Return on Assets with a significance level of below 1%.

Table 8. Commercial Bank Hausman Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.064786	0.375438	5.499680	0.0000
CAR	0.000960	0.000460	2.088000	0.0374
NPL	-0.135135	0.041717	-3.239340	0.0013
ROE	0.031158	0.002504	12.44199	0.0000
NIM	0.192316	0.029730	6.468645	0.0000
BOPO	-0.032267	0.002537	-12.71832	0.0000
LDR	0.007074	0.002869	2.465932	0.0141

Source: Processed Data, 2020

Table 8 shows the results of the Hausman Test for Commercial Banks where the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the Non-Performing Loan and Operational Cost to Operating Income ratios have a significant negative effect on Return on Assets with significance level below 1%.

Table 9. Regional Bank Koefisien Determinasi (R^2) Result

R-squared	0.867284	Mean dependent var	3.063601
Adjusted R-squared	0.864430	S.D. dependent var	1.084440
S.E. of regression	0.399288	Akaike info criterion	1.025906
Sum squared resid	44.48133	Schwarz criterion	1.115388
Log likelihood	-139.7045	Hannan-Quinn criter.	1.061773
F-statistic	303.8733	Durbin-Watson stat	1.869085
Prob(F-statistic)	0.000000		

Source: Processed Data, 2020

The adjusted R^2 results in Table 9 show that the ratio of Capital Adequacy Ratio, Non-Performing Loan, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Loan to Deposit Ratio of Regional Development Banks has an effect of 86% on Return on Assets. So that 14% Return on Assets is influenced by other factors not examined in this study.

Table 10. Commercial Bank Koefisien Determinasi (R^2) Result

R-squared	0.665725	Mean dependent var	1.388716
Adjusted R-squared	0.627897	S.D. dependent var	1.806961
S.E. of regression	1.102250	Akaike info criterion	3.130344
Sum squared resid	526.0754	Schwarz criterion	3.563058
Log likelihood	-705.9782	Hannan-Quinn criter.	3.300390
F-statistic	17.59881	Durbin-Watson stat	2.377146
Prob(F-statistic)	0.000000		

Source: Processed Data, 2020

Table 10 shows the results of the adjusted R^2 Capital Adequacy Ratio, Non-Performing Loan, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Commercial Bank Loan to Deposit Ratio 63% effect on Return on Assets. So that 37% Return on Assets is influenced by other factors not examined in this study.

5. DISCUSSION

Overall, the performance of all financial ratios of Regional Banks, both in terms of the ratio, and after the global economic crisis in 2008 were in a very healthy condition so that it can be concluded that the performance of Regional Banks is very good.

Commercial banks show that the performance of all financial ratios for commercial banks is in a very healthy condition, even though there are some ratios that are still in unhealthy and even unhealthy conditions. When viewed from the aftermath of the global economic crisis, commercial banks are in a very healthy, sound and healthy enough condition so that it can be concluded that the performance of commercial banks is good.

The results of the Chow Test and Hausman Test for Regional Banks show the same results where the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, meaning that these ratios increase or decrease these ratios very much. increase / decrease assets. Meanwhile, the Non-Performing Loan ratio has a positive and insignificant effect, meaning that the increase / decrease in this ratio will not have a significant effect on assets, and the Operational Cost to Operating Income has a significant negative effect on Return on Assets, meaning that a decrease in this ratio will greatly affect the increase in assets and vice versa.

The results of the Chow Test and Hausman Test for Commercial Banks show different results where the Capital Adequacy Ratio has no significant effect, meaning that the increase / decrease in this ratio has no effect on assets, while the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a positive effect. This means that the increase / decrease in these ratios will greatly affect the increase / decrease in assets. , while the ratio of Non-Performing Loans and Operational Cost to Operating Income has a significant negative effect on Return on Assets, which means that the increase in these two ratios will greatly affect the decline in assets, and vice versa.

The results of the adjusted R^2 of Regional Banks show that the Capital Adequacy Ratio, Non-Performing Loan, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Regional Development Bank Loan to Deposit Ratio have an effect of 86% on Return on Assets. Meanwhile, the adjusted R^2 results of Commercial Banks have an effect of 63% on Return on Assets. This means that the ratio of this study has a greater influence on the Return on Assets of Regional Banks, which means that it supports the results of the analysis based on the ratio and the study period as well as the results of the Chow Test and Hausman Test. Likewise, the adjusted R^2 results for commercial banks which are not as big as regional development banks have been supported by the results of the analysis based on the ratio and the study period as well as the results of the Chow Test and Hausman Test.

6. CONCLUSION

This study can conclude that (1) The financial ratio performance of Regional Banks is generally in very good condition and the financial ratio performance of Commercial Banks is in good condition. (2) After the global economic crisis in 2008, the financial performance of Regional Banks and Commercial Banks showed very healthy conditions. (3) The results of the Chow Test and Hausman Test for Regional Banks show that the Capital Adequacy Ratio, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the Non-Performing Loan ratio has a positive and insignificant effect, and Operational Cost to Operating Income has a significant negative effect on Return on Assets. (4) The results of the Chow Test and Hausman Test for Commercial Banks show that the Capital Adequacy Ratio has a significant positive effect and has no effect, Return on Equity, Net Interest Margin, and Loan to Deposit Ratio have a significant positive effect, while the ratio of Non-

Performing Loan and Operational Cost to Operating Income has a significant negative effect on Return on Assets.

There are several limitations to this study, such as (1) This research has the object of research for Regional Banks and Commercial Banks so that it cannot describe the condition of banking in Indonesia as a whole. (2) The financial ratios used to assess the health performance of a bank are Capital Adequacy Ratio, Non-Performing Loan, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Loan to Deposit Ratio, and Return on Assets while many other factors which is also used in assessing the health of a bank. (3) The period of this research is after the third global economic crisis in 2008, while the first and second global economic crises are not included in the research period so that they cannot describe the development of banking health in Indonesia since the onset of the global economic crisis.

The suggestions that can be given from this research are (1) For academics: the object of research is not only Regional Banks and Commercial Banks as well as the Capital Adequacy Ratio, Non-Performing Loan, Return on Equity, Net Interest Margin, Operational Cost of Operating Income, Loans to Deposit Ratio and Capital Adequacy Ratio with the period from the first global economic crisis to the third global economic crisis in order to describe banking conditions in Indonesia more thoroughly. (2) For the banking industry: in order to maintain a very healthy ratio and increase the ratio that is still in an unhealthy and unhealthy condition while still paying attention to other factors as a whole. (3) For investors: investors can make decisions to invest and increase their investment in Regional Banks and Commercial Banks.

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REFERENCES

- Anan, E., & Albarqis, R. (2017). Tingkat Kesehatan Bank Dengan Pendekatan Metode RGEC Pada Bank Pembangunan Daerah DIY. *JRAK*, 13(2), 117–132.
- Anggraeni, O., & Sudarno. (2010). *Penilaian Tingkat Kesehatan Bank Dengan Menggunakan Metode CAMEL Pada PT. Bank Pembangunan Daerah Jawa Tengah Tahun 2006-2009*.
- Gandawari, Y., Areros, W. A., & Keles, D. (2016). *Analisis Tingkat Kesehatan Bank Menggunakan Metode RGEC Pada PT. Bank Sulutgo Periode 2014-2016*.
- Hery. (2020). *Bank dan Lembaga Keuangan Lainnya* (1st ed.). Jakarta: PT Gramedia Widisarana Indonesia (Grasindo).
- Kamal, M. H. (2019). *Analisis Tingkat Kesehatan Bank Dengan Metode CAMEL (Studi Pada PT Bank Aceh Syariah Periode 2016-2018)*. Universitas Islam Negeri Ar-Raniry.
- Kasmir. (2016). *Dasar-Dasar Perbankan* (14th ed.). Depok: Raja Grafindo Persada.
- Mirdhani, L. P., & Budiyo. (2014). Analisis Rasio CAMEL Untuk Menilai Kesehatan Bank Pada Perusahaan LQ-45 di BEI. *Jurnal Ilmu & Riset Manajemen*, 3(5), 1–22.
- Octafilia, Y., & Wijaya, E. (2019). Kajian Pendekatan Simultan Tingkat Kesehatan Bank Konvensional dengan CAMELS dan RGEC. *COSTING: Journal of Economic, Business and Accounting*, 3(1), 160-174 e-ISSN : 2597-5234.
- Octafilia, Y., & Wijaya, E. (2020). Study of Conventional Bank Health in Indonesia from 2012 to 2017. In *Advances in Economics, Business and Management Research, volume 132 6th Annual International Conference on Management Research (AICMaR 2019) Study* (pp. 64–68). Jakarta: Atlantis Press. Retrieved from <http://creativecommons.org/licenses/by-nc/4.0/>
- Saputra, H. (2016). *Analisis tingkat Kesehatan Bank Dengan Menggunakan Rasio CAMEL (Studi Kasus Pada Bank Rakyat Indonesia (Persero) Tbk*. Pasir Pangaraian.
- Suhartono, D. A., ZA, Z., & Azizah, D. F. (2017). Analisis Tingkat Kesehatan Bank Dengan Menggunakan Metode Risk Based Bank Rating (Studi pada Bank Milik Pemerintah Pusat yang Terdaftar di Bursa Efek Indonesia

- Tahun 2012-2015). *Jurnal Administrasi Bisnis (JAB)*, 46(1), 131–139. Retrieved from administrasibisnis.studentjournal.ub.ac.id
- Syahputra, R., & Saragih, A. F. (2018). Analisis Tingkat Kesehatan Bank Dengan Metode CAMEL Pada PT Bank Artos Indonesia Tbk Periode 2014-2017. *Jurnal Akuntansi Dan Bisnis*, 4(1), 49-63 p-ISSN:2243-3071 e-ISSN: 2503-0337. Retrieved from <http://ojs.uma.ac.id/index.php/jurnalakunbisnis>
- Tridiyani, N. (2011). *Pengaruh Penilaian Tingkat Kesehatan Bank Terhadap Kinerja Bank*. UNIVERSITAS INDONESIA PENGARUH.
- Widyaningrum, H. A., Suhadak, & Topowijono. (2014). Analisis Tingkat Kesehatan Bank Dengan Menggunakan Metode Risk Based Bank Rating (RBBR) (Studi pada Bank yang Terdaftar di Bursa Efek Indonesia dalam IHSG Sub Sektor Perbankan Tahun 2012). *Jurnal Administrasi Bisnis (JAB)*, 9(2), 1–9. Retrieved from administrasibisnis.studentjournal.ub.ac.id%0A
- Yanti, L. P. A. I. P., Suwendra, I. W., & Susila, G. P. A. J. (2014). Analisis Tingkat Kesehatan Bank dengan Menggunakan Metode CAMEL. *E-Journal Bisma Universitas Pendidikan Ganesha Jurusan Manajemen (Volume, 2, 1–7.*

IMPROVING SERVICE-ORIENTED ORGANIZATIONAL CITIZENSHIP BEHAVIOR (NURSES IN REGIONAL PUBLIC HOSPITALS (RSUD) DR. SOEDIRAN MANGUN SUMARSO DISTRICT WONOGIRI CENTRAL JAVA PROVINCE

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Abstract

This study examines the service-oriented Organizational citizen behavior of nurses in the regional general hospital dr. SOEDIRAN Mangun Sumarso District Wonogiri Central Jawa Province. The analysis was carried out using data from questionnaires distributed to 69 nurses. The results showed that there was a positive direct influence between organizational culture on service-oriented Organizational Citizenship Behavior of nurses with a path coefficient value of 0.345. Based on this research, it can be explained that to improve service-oriented Organizational citizen behavior nurses can be started by improving and continuing to improve the organizational culture that is applied in the hospital.

Keyword: Organizational Culture, service-oriented Organizational citizen behavior

1. INTRODUCTION

Health is one of the basic needs of citizens guaranteed by the 1945 Constitution in Article 34 point 3 which reads "The state is responsible for the provision of proper health service facilities and public service facilities. (Undang-Undang Dasar, 1945). The local government is responsible for meeting the basic needs of the community. One of the responsibilities of local governments is to provide public hospitals as health facilities for the community (Grisleda & Tagor, 2007). The provision of health services by public hospitals emphasizes the service delivery system, which is delivering services to citizens whose costs are borne by the state budget. (Abidin & Banga, 2019). Types of health services in public hospitals consist of promotive health services, preventive health services, curative health services, and rehabilitative health services. The choice of service strategy and the type of service offered can be measured by the quality of service. Quality service is indicated by tangible, reliable, responsive, assurance, and empathy (Zeithaml et al., 2012).

Regional General Hospital (RSUD) dr. Soediran Mangun Sumarso has the task "RSUD has the main task of providing health services with efforts to cure, recover, improve, prevent, referral services, research, and development as well as community service (Mangun Sumarso, 2020). Providing quality services at regional public hospitals is not easy. The quality of public services at regional public hospitals is often questioned by the public as consumers. Based on the data obtained from the performance report of dr. Soediran Mangun Sumarso found the community satisfaction index as follows:

Table 1 Achievement of Year Performance of Dr. Soediran Mangun Sumarso Hospital

NO	INDIKATOR SASARAN	SATUAN	TARGET 2017
1	Indeks kepuasan masyarakat (IKM)	Index (%)	82,00

Sumber Data : Review Renstra RSUD dr. Soediran Mangun Sumarso Tahun 2016-2021

Based on the data above, it is obtained that the community satisfaction index has reached 82% for services at the dr. Soediran Mangun Summers. The aspects of the quality of public services in regional public hospitals that are often complained of by the community include inadequate waiting room facilities for patients in polyclinics, irregular queues, inadequate information facilities so that patients are sometimes confused, and the lack of explanation about their rights. -Patient rights and the hospital's obligations in the service process. Health services

in hospitals that are run by government agencies have social motives, namely carrying out basic tasks, and finding solutions to overcome public health problems, although often possessed by political motives, where serving well is a political reputation.

However, to date, only a few studies have investigated the antecedent factors that studied service-oriented Organizational Citizenship Behavior in nurses, especially in Regional General Hospitals. One common limitation of previous investigations is the focus on OCB which can be widely applied in various positions, for example, punctuality and helping colleagues. Hospital is an institution whose services are provided by medical personnel such as doctors, nurses, and so on. Hospitals today are the main alternative for all people in all groups, from the lower, middle, to upper economies to undergo treatment

The concept of service quality has attracted a lot of attention from academics and practitioners, because of this quality of service will create loyalty. In addition to the quality of services and benefits sought, another factor that affects customer satisfaction and loyalty is service-oriented organizational citizenship behavior, which is the behavior shown by employees who do not only do because of their obligations and responsibilities, but employees also play a role that is more than what they are responsible for. answer without any reward or anything from the organization and solely for the benefit of achieving organizational goals (Harsono et al., 2020).

2. LITERATURE REVIEW

2.1 SERVICE-ORIENTED ORGANIZATIONAL CITIZENSHIP BEHAVIOR

The concept of service quality has attracted a lot of attention from academics and practitioners, because of this quality of service will create loyalty. In addition to the quality of services and benefits sought, another factor that affects customer satisfaction and loyalty is Service-oriented organizational citizenship behavior (SOCBs), which is behavior shown by employees who do not only do because of their obligations and responsibilities but employees also do more than what they do. who become their responsibility without any reward or anything from the organization and solely for the sake of achieving organizational goals (Harsono et al., 2020).

Bettencourt, Gwinner, and Mauter (2001) service-oriented organizational citizenship behavior (SOCBs) have three dimensions, namely loyalty, service delivery, and participation. Loyalty, employees act as representatives of the organization and can improve or reduce the image of the organization. For service delivery, employees provide a strategic relationship between the external environment and the internal operations of the organization by providing information about client needs and improving service delivery. Participation, especially employee initiatives in communication, to improve service delivery of organizations, colleagues, and individuals for the company's ability to meet changing client needs. So, for the survival of the company it is necessary to apply these three dimensions to every employee (Gwinner et al., 2005).

Bitner explains SOCBs as follows, service-oriented organizational citizenship behaviors (SOCBs) are service behaviors that go beyond prescribed roles and are believed to enhance customers' experience and service quality (Bitner et al., 1990). Service-oriented organizational citizenship behaviors (SOCBs) are service behaviors that go beyond defined roles and are believed to enhance the experience and quality of service to customers. Gwinner further explained that service-oriented organizational citizenship behaviors as adaptive behaviors correspond to the notion that employees in the service context are expected to proactively evaluate their surrounding tasks and to modify their basic approaches in their interactions with customers (Gwinner et al., 2005). The extra attitude of an employee is working with maximum service orientation, apart from that (SOCBs) is the adaptive behavior of an employee that is following the idea that employees in the service context are expected to proactively evaluate their duties in addition to changing the approach according to the conditions the employee interacts with. with customers.

There have been many studies that prove that service-oriented organizational citizenship behaviors (SOCBs) can improve performance. Service-oriented organizational citizenship behaviors (SOCBs) represent discretionary and adaptive types of behavior (Gwinner et al., 2005) what depends on employee flexibility is the ability and willingness of employees to be flexible to meet the needs of a variety of patients. Service quality for employees, especially service-oriented OCBs, is an important source of an organization's competitive advantage. Service-oriented OCB focuses on being extra friendly, empathic, caring about the well-being of customers (i.e., communal characteristics), as well as solving problems, taking initiative when helping customers, and being conscientious.

While many service-oriented OCBs can be likened to communal behavior, such as showing extra care and empathy, there are also service-oriented OCBs who can be agents. Service-oriented OCBs can be communal or agency. Many agentic characteristics such as charisma, problem-solving, professionalism, and the use of technical skills to solve problems have also been recognized as service-oriented OCB (Torres et al., 2014).

Likewise, many communal characteristics such as friendliness, empathy, caring, and showing concern for

others - have also been recognized as service-oriented OCBs. (Bettencourt & Brown, 1997). Since many service-oriented OCBs can be similar to communal or agency characteristics, evaluation of service-oriented OCBs may be particularly vulnerable to the influence of gender role stereotypes. Gender role stereotypes lead to the expectation that women should engage in communal behavior, such as being friendly, empathetic, and caring for the welfare of others.

Hogan. Hogan and Busch define service-oriented organizational citizenship behaviors (SOCBs) as follows, service-oriented OCB as an active and proactive behavior of service through which service personnel provides high-quality services to satisfy customer requirements enthusiastically and courteously (Hogan et al., 1984). OCB is service-oriented as an active and proactive service behavior where employees provide high-quality services to meet customer needs enthusiastically and courteously. Furthermore, Van Dyne and Bettencourt have presented a new service-oriented OCB model with three dimensions: loyalty, service delivery, and participation. This model presupposes that when an employee takes the initiative to provide information to customers and proposes recommendations for improving the organization to management, this OCB enhances employees' depiction of the organization's image and directly affects purchase intention and customer satisfaction levels. (Kao, 2017). Furthermore, Payne and Weber (2006) replacing the dimensions of participation with altruism in his research claims that altruism is more meaningful in the context of service than participation (Payne & Webber, 2006). In contrast to OCB, which involves civic behavior that benefits the organization or customers, service-oriented OCB is a number of behaviors that emphasize active and proactive service. Service-oriented OCB emphasizes employee loyalty to the organization, enthusiastic service to customers, and altruistic action. As we all know that Organizational Behavior or what we usually call extra behavior in organizations is a science that studies human behavior in an organization and how that behavior impacts the organization. One of the behaviors that have an impact.

2.2 ORGANIZATIONAL CULTURE

Organizational culture is a characteristic that is upheld by organizations and becomes a role model for organizations as a differentiator between one organization and another (Desselle et al., 2018). Organizational culture is also defined as the values and norms of behavior that are accepted and understood jointly by members of the organization as the basis for the rules of behavior contained in the organization. (Jain, 2015). Edgar H. Schein defines organizational culture as follows: Organizational culture is a pattern of shared basic assumptions that a group has learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel about those problems (Indarti et al., 2017). Organizational culture is a pattern of shared basic assumptions that groups have learned for solving problems of external adaptation and internal integration, which have worked well enough to be considered valid and are therefore taught to recruits as the correct way to think and feel about problems. The shared meaning system is adopted by the members that differentiate the organization from others. Furthermore, Schein et.al, quoted by Al-Adaileh, defines organizational culture as follows, organizational culture is an important issue in both academic research and management practice because it is the most important factor that can make the organization succeed or fail (Al-Adaileh & Al-Atawi, 2011). Furthermore, Edgar H. Schein in his work "organizational culture and leadership", which has become a reference for writing about organizational culture, defines more broadly that organizational culture is as follows: A pattern of basic assumptions invented discovered developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valuable and therefore to be taught to new members as the correct way to perceive, think and feel about those problems (Luthans et al., 2012). A basic assumption pattern that was discovered, created, and developed by the group while learning to solve problems with external adaptation and internal integration which is considered sufficiently functional to be considered valuable, therefore it should be taught to new members as the right way to see, think and feel about the problem. Organizational culture is conscious or unconscious assumptions and values that can bind an organization together.

Robert Kreitner and Angelo Kinicki define organizational culture as follows, organizational culture is the set of shared, taken for granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environment (Kreitner & Kinicki, 2010). Organizational culture is a collection of assumptions from an organization that is shared and often ignored, where these assumptions determine how the organization views, thinks and reacts to various conditions. Organizational culture consists of agreed values and beliefs and provides meaning and guidelines for organizational members to behave. To understand comprehensively the understanding of organizational culture, it is better if we refer to experts including Jones defining organizational culture as follows, the set on shared values and norms that controls organizational members' interactions with each other and with people outside the organization (George & Jones, 2012).

Angelo Kinicki and Brian Williams describe organizational culture as follows, organizational culture, sometimes

called corporate culture, is a system of shared beliefs and values that develops within an organization and guides the behavior of its members (Kinicki & Williams, 2016). Organizational culture or often called corporate culture is a system of shared beliefs and values that develop in the organization and guide the behavior of its members. Norms and values that direct the behavior of organizational members. Every member of the organization will behave following the prevailing culture to be accepted by the environment. According to Sarpin, organizational culture is a system of values, beliefs, and habits in an organization that interacts with each other's formal system structures to produce norms of organizational behavior.

Gareth R.Jones defines organizational culture as follows, organizational culture as the set of shared values and norms that control organizational members' interactions with each other and with suppliers customers, and other people outside the organization (Jones, 2013). Organizational culture can be interpreted as a set of shared values and norms that control interactions among members of the organization as well as with customers, suppliers, and other parties outside the organization. Organizational culture is the essence of the social tradition of the organization and norms of behavior. The definition of organizational culture is also said to be agreed upon by Rhenald Kasali, which states that organizational culture is a set of values, a guiding belief in something, understanding, and thinking that are brought together by members of the organization and accepted by new members completely.

3. METHODOLOGY

As mentioned in the background of the problem above, that many variables affect service-oriented organizational citizenship behavior considering the limitations of research in terms of time, cost, knowledge, and energy, this research is only limited to efforts to reveal organizational culture. The research took the object of nurses at the Regional General Hospital dr. Soediran Mangun Sumarso, Wonogiri Regency, Central Java Province. The following is the formulation of the problem in this study, namely Is there a direct influence of organizational culture on service-oriented organizational citizenship behavior (SOBCs)? This study uses a quantitative approach, survey methods, and path analysis techniques. The variables in the path analysis consist of exogenous variables and endogenous variables.

4. RESULT AND DISCUSSION

Organizational culture data has an empirical score range between 114 to 139 so that the score range is 25. The results of data calculations obtained an average of 127.67; a standard deviation of 6,07; the variance of 36.8726; median of 127; and mode of 127. Organizational culture data grouping can be seen in the frequency distribution table as follows.

Tabel 2. Organizational Culture Frequency Distribution

Interval Class			Limit		Frekuensi		
			Under	On	Absolut	Related	Cumulative
114	-	117	113,5	117,5	3	4,35%	4,35%
118	-	121	117,5	121,5	9	13,04%	17,39%
122	-	125	121,5	125,5	13	18,84%	36,23%
126	-	129	125,5	129,5	17	24,64%	60,87%
130	-	133	129,5	133,5	13	18,84%	79,71%
134	-	137	133,5	137,5	11	15,94%	95,65%
138	-	141	137,5	141,5	3	4,35%	100%
					69	100%	

Based on the table above, the histogram will then be made. There are two axes needed in making a histogram, namely the vertical axis is the absolute frequency axis, and the horizontal axis is the score axis for organizational culture. In this case on the horizontal axis, the class boundaries of the interval are written from 113.5 to 141.5. These prices are obtained by subtracting the number 0.5 from the smallest data and adding the 0.5 number for each class boundary to the highest limit. From the data obtained in the field which is then processed statistically into a frequency distribution list, the number of classes is calculated according to the Sturges rule, there are seven classes with a maximum score of 147 and a minimum score of 122 so that the score range is 25. The results of the calculation of the data obtained an average amounting to 135.20; a standard deviation of 6.09; variance of 37.0759; a median of 135; and a mode of 134. Service-oriented organizational citizenship behavior grouping can be seen in the frequency distribution table as follows.

Table 4.1 Frequency Distribution Service-oriented organizational citizenship behavior

No	Kelas Interval			Batas		Frekuensi		
				Bawah	Atas	Absolut	Relatif	Kumulatif
1	122	-	125	121,5	125,5	4	5,80%	5,80%
2	126	-	129	125,5	129,5	10	14,49%	20,29%
3	130	-	133	129,5	133,5	12	17,39%	37,68%
4	134	-	137	133,5	137,5	18	26,09%	63,77%
5	138	-	141	137,5	141,5	12	17,39%	81,16%
6	142	-	145	141,5	145,5	10	14,49%	95,65%
7	146	-	149	145,5	149,5	3	4,35%	100%
						69	100%	

Based on the table above, the histogram will then be made. There are two axes needed in making a histogram, namely the vertical axis is the absolute frequency axis, and the horizontal axis is the score axis for Service-oriented organizational citizenship behavior. In this case on the horizontal axis written the class boundaries of the interval ranging from 121.5 to 149.5. These prices are obtained by subtracting the number 0.5 from the smallest data and adding the 0.5 number for each class boundary to the highest limit.

Normality test.

The data used in compiling the regression model must meet the assumption that the data come from a normally distributed population. The assumption of normality states that a regression model must be normally distributed. The assumption test in this study was carried out by testing the normality of the data from the six regression estimates of the study to be analyzed. The normality test uses the SPSS program to find out whether the Y regression on X is normally distributed or not, the results can be seen in the column Kolmogorov Smirnov (Sig.).

Table 3 Results of Normality Test for Estimated Regression Error

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y Atas X	,056	69	,200(*)	,983	69	,447

The table above shows that the probability value (Sig.) Of all regression estimate errors is 0.200. The probability value is greater than the significant level (α) 0.05, so all the regression estimation error data are normally distributed. From the calculated data for the preparation of a regression equation model between Service-oriented organizational citizenship behavior and organizational culture in Appendix 5, the regression constant $a = 56.55$, and the regression coefficient $b = 0.62$ is obtained. Thus the relationship to the simple regression equation model is $\hat{Y} = 56.55 + 0.62X_2$. Testing the concern of the regression equation Service-oriented organizational citizenship behavior on organizational culture can be seen in the following table.

Tabel 4. Test of Significance of Service-oriented organizational citizenship behavior on Organizational Culture

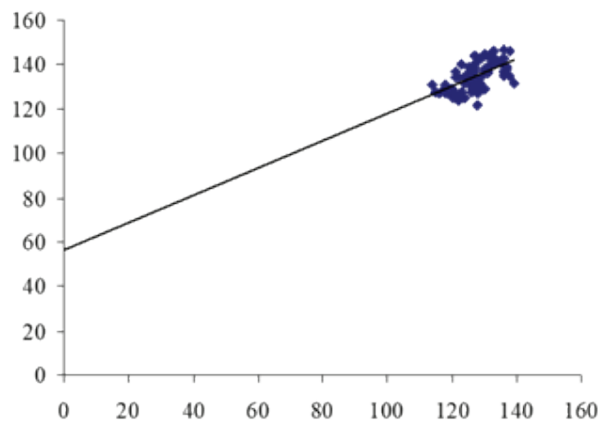
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	951,607	1	951,607	40,622	,000(a)
	Residual	1569,553	67	23,426		
	Total	2521,159	68			

F distribution table using degrees of freedom (db) numerator = 1 and db (db) denominator ($n - 2$) = 67 with a significant level of 0.05. Obtained Ftable of 3.98 and Fcount of 40.622. This shows that $F_{count} > F_{table}$ and the probability value is Sig. (0.000) < significant level (0.05), the regression equation Y on X is declared very significantly. A linearity test is conducted to test whether the two variables have a linear influence or not, the results can be seen in the following table.

Tabel 5. Regression Linear Test Service-oriented organizational citizenship behavior on Organizational Culture

			Sum of Squares	df	Mean Square	F	Sig.
SOBCs (Y) * Organizational Culture (X)	Between Groups	(Combined)	1598,064	23	69,481	3,387	,000
		Linearity	951,607	1	951,607	46,390	,000
		Deviation from Linearity	646,458	22	29,384	1,432	,152
	Within Groups		923,095	45	20,513		
	Total		2521,159	68			

F distribution table using degrees of freedom (db) numerator = 22 and db = 45 with a significant level of 0.05. Obtained F table of 1.78 and Fcount of 1.432. This shows that Fcount < Ftable and the probability value is Sig. deviation from linearity (0.152) > significant level (0.05), then the estimated point distribution forming a linear line is acceptable. Visually, Y regression on X can be seen in Figure 1

Picture 1. Regression Equation Graph $\hat{Y} = 56,55 + 0,62X_2$

The hypothesis being tested is:

$$H_0: \beta_{y1} \leq 0$$

$$H_1: \beta_{y1} > 0$$

The path coefficient value of organizational culture on Service-oriented organizational citizenship behavior is 0.345 with at-count value of 4.34. Because the t-count value is greater than the t-table value at dk = 65 for $\alpha = 0.05$ of 2.00, H_0 is rejected and H_1 is accepted, which means that there is a very significant positive direct influence of organizational culture variables on the Service-oriented organizational citizenship behavior variable.

5. CONCLUSION AND RECOMMENDATIONS

Organizational culture is a series of principle systems that are jointly recognized and applied by all elements of the organization, this is similarly expressed by Che'su quoted by Al-Sada as saying organizational culture has a big role in the formation of attitudes. service-oriented organization citizenship behavior: OCB is important in promoting organizational effectiveness. The absence of OCB may generate negative outcomes, leading to organizational dysfunction such as a decline in work performances, absenteeism, and high turnover. The belief among theorists is that as more employees engage in OCB, the organization becomes more successful. Therefore, factors influencing OCB have been the central theme of many past OCB researchers. organizational culture can influence OCB (Al-Sada et al., 2017). The attitude of service-oriented organizational citizenship behavior is the fruit of a good organizational culture and the high trust of nurses in their colleagues and the organizations where they work. Therefore, if you want to improve the attitude of service-oriented organizational citizenship behavior among nurses, the first step that must be improved or formed is an organizational culture system that is following the conditions and vision, and mission of the organization. Organizational culture refers to values, ideologies, philosophies, beliefs, informal rules, and rituals, which make organizational members into a coherent whole.

The same thing was expressed by Kadar Khan in his research explaining that organizational culture is one of the influencing factors service-oriented organization citizenship behavior; Carmeli stated there is a relationship between organizational culture and withdrawal intentions and behavior. When an employee shows or has

intentions of such behavior it will affect the functioning or productivity of the organization. The study concluded that employee's withdrawal behavior and intentions are partly by-products of organizational culture (Khan & Rashid, 2012). Organizational culture is a series of basic assumptions in the workplace. These assumptions then develop in a group to become a reference for behavior in the organization. This can help create the behavior of service-oriented organization citizenship behavior. When a nurse shows extra behavior it can directly increase organizational productivity. Based on the research that has been done, it is proven and it can be concluded that the extra nurse behavior (OCB) is part of the results of a good organizational culture and runs following the vision and mission of the organization.

A good organizational culture will help shape OCB behavior. One of the functions of culture is to facilitate the growth of commitment to something broader than one's interests. Culture also serves as the stability of the social system and guides in shaping the attitudes and behavior of nurses. This is a tangible form of OCB that nurses can apply. In testing the first hypothesis which states that organizational culture affects OCB. This indicates that the organizational culture variable has a significant effect on nurses' OCB. The results of this study are in line with previous research conducted by Bharata which found that all dimensions of organizational culture have a significant positive effect on OCB (Bharata, Zunaidah, M.Diah, 2016).

REFERENCE

- Abidin, D. S., & Banga, W. (2019). Kualitas Pelayanan Publik Pada Rumah Sakit Umum Daerah Kabupaten Konawe. Universitas Haluleo, 11.
- Al-Adaileh, Raid. M., & Al-Atawi, M. S. (2011). Organizational culture impact on knowledge exchange: Saudi Telecom context. *Journal of Knowledge Management*, 15(2), 212–230. <https://doi.org/10.1108/13673271111119664>
- Al-Sada, M., Al-Esmael, B., & Faisal, Mohd. N. (2017). Influence of organizational culture and leadership style on employee satisfaction, commitment and motivation in the educational sector in Qatar. *EuroMed Journal of Business*, 12(2), 163–188. <https://doi.org/10.1108/EMJB-02-2016-0003>
- Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, 73(1), 39–61. [https://doi.org/10.1016/S0022-4359\(97\)90014-2](https://doi.org/10.1016/S0022-4359(97)90014-2)
- Bharata, Zunaidah, M.Diah, Y. (2016). Pengaruh kepuasan kerja dan budaya organisasi terhadap organizational citizenship behavior di PT Pupul Sriwijaya Palembang. *Jurnal Manajemen Dan Bisnis Sriwijaya*, 14, 258–276.
- Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The Service Encounter: Diagnosing Favorable and Unfavorable Incidents. *JOURNAL OF MARKETING RESEARCH*, 54, 71–84.
- Desselle, S. P., Raja, L., Andrews, B., & Lui, J. (2018). Perceptions of organizational culture and organizational citizenship by faculty in U.S. colleges and schools of pharmacy. *Currents in Pharmacy Teaching and Learning*, xxxx, 0–1. <https://doi.org/10.1016/j.cptl.2017.12.017>
- George, J. M., & Jones, G. R. (2012). *Understanding and managing organizational behavior* (6th ed). Prentice Hall.
- Grisleda, G., & Tagor, M. P. (2007). Analisis Pengaruh Kualitas Layanan Terhadap Kepuasan Konsumen Restoran Pulau Dua. *Jurnal Manajemen UPH*, 2, 39–62.
- Gwinner, K. P., Bitner, M. J., Brown, S. W., & Kumar, A. (2005). Service Customization Through Employee Adaptiveness. *Journal of Service Research*, 8(2), 131–148. <https://doi.org/10.1177/1094670505279699>
- Harsono, S., Prawitowati, T., Rachmat, B., & Widyanoro, H. (2020). Mengembangkan Service Oriented-Organizational Citizenship Behaviour dan Kualitas Layanan. 3, 10.
- Hogan, J., Hogan, R., & Busch, C. M. (1984). How to Measure Service Orientation. *Journal of Applied Psychology*, 69, 167–173.
- Indarti, S., Solimun, S., Fernandes, A. A. R., & Hakim, W. (2017). The effect of OCB in relationship between personality, organizational commitment and job satisfaction to performance. *Journal of Management Development*, 1-12. Advance online publication. <https://doi.org/10.1108/JMD-11-2016-0250>

- Jain, A. K. (2015). Cross Cultural Management: An International Journal Article information: Volunteerism and Organisational Culture: Relationship to Organizational Commitment and Citizenship Behaviors in India. *Cross Cultural Management: An International Journal*, 22(1).
- Jones, G. R. (2013). *Organizational Theory, Design, and Change* (7th ed.). Pearson.
- Kao, R.-H. (2017). Task-oriented work characteristics, self-efficacy, and service-oriented organizational citizenship behavior: A cross-level analysis of the moderating effect of social work characteristics and collective efficacy. *Personnel Review*, 29.
- Khan, S. K., & Rashid, M. Z. A. (2012). The Mediating Effect of Organizational Commitment in the Organizational Culture, Leadership and Organizational Justice Relationship with Organizational Citizenship Behavior: A Study of Academicians in Private Higher Learning Institutions in Malaysia. 3(8), 9.
- Kinicki, A., & Williams, B. K. (2016). *Management: A practical introduction*.
- Kreitner, R., & Kinicki, A. (2010). *Organizational Behavior* (9th ed.). McGraw-Hill Irwin.
- Luthans, F., Doh, J. P., & Hodgetts, R. M. (2012). *International management: Culture, strategy, and behavior* (8th ed.). McGraw-Hill.
- Mangun Sumarso, S. (2020). Tugas Pokok dan Fungsi RSUD dr. Soediran Mangun Sumarso. RSUD Dr. Soediran Mangun Sumarso Kabupaten Wonogiri. <https://rsudsoediranms.com/tugas-dan-fungsi/>
- Payne, S. C., & Webber, S. S. (2006). Effects of service provider attitudes and employment status on citizenship behaviors and customers' attitudes and loyalty behavior. *Journal of Applied Psychology*, 91(2), 365–378. <https://doi.org/10.1037/0021-9010.91.2.365>
- Torres, E. N., Fu, X., & Lehto, X. (2014). Examining key drivers of customer delight in a hotel experience: A cross-cultural perspective. *International Journal of Hospitality Management*, 36, 255–262. <https://doi.org/10.1016/j.ijhm.2013.09.007>
- Undang-Undang Dasar, Pub. L. No. Republik Indonesia, 12 (1945).
- Zeithaml, V., Bitner, M. J., & Gremler, D. (2012). *Service Marketing* (6th ed.). Prentice Hall.

EMPLOYEE'S READINESS AND STRATEGY TO ADAPT DIGITAL TRANSFORMATION

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Abstract

Technological developments have made business data cheaper. This presents a challenge for TT Company to innovate and turn its business into a digital business. This digital change or transformation requires employees to have digital readiness, including digital culture and digital attitudes. The purpose of this research is to see the condition of digital transformation in TT Company as the basis for preparing human resources for digital business. The method of how the data is done through disproportional stratified random sampling. The results showed that the readiness of TT company in facing digital transformation entered the Digital Master category. Strategies for increasing employee readiness emphasize aggressive strategies with several technical programs that can be implemented.

Keywords: Digital Culture, Digital Attitude, Digital Readiness, Digital Transformation

1. INTRODUCTION

The development of digital technology has brought a revolution in the daily life of modern society (Memarzadeh & Jahany, 2014). Every current technological breakthrough encourages companies to improve new solutions for customers, offer a wider variety of opportunities, services, products, and do so at an unprecedented pace (Shaughnessy, 2018). Digital innovation has changed the old way of doing things into a new way that is faster, easier, and cheaper. As a result, even old products are disrupted by new digital products, which then affect the income of old / incumbent product producers. The use of technology to build new business models, processes, software and systems is called digital transformation. This transformation has led the company to achieve more satisfying income, stronger competitive advantage, create customer experience, and higher efficiency. (Schwertner, 2017). TT company is a company engaged in the information and communication sector which was founded on October 23, 1856 by the Dutch government under the name "Post en Telegraafdienst" which was originally a postal and telegraph service institution. The spirit of the transformation of the TT company into a digital company departs from 3 paradigms, namely digital aims to build and strengthen digital business, lean which means more agile, faster, more productive, and customer experience, which is always oriented to provide the best experience for customers.

Disruptive competitive growth or growth based on innovative and out of the ordinary competitiveness is the foundation of the current TT company and for the years to come. Digital disruption is believed to continue so that the company must continue to transform into a digital master if it wants to escape the dangers of disruption and achieve sustainable growth (Rudito & Sinaga, 2017). Currently, TT company is the company with the largest revenue in the data business with the mobile segment being the first contributor to company revenue. Meanwhile, the digital service business, which is categorized in the "Others" segment, only contributed 0.1 percent of the company's total revenue. Meanwhile other companies pushed down prices and even promised free internet to their customers. This makes the company change the way it does business into a digital business. This digital business includes digitizing products, services and also information. With the challenges of digital business and the importance of human resources in the digital transformation process, TT Company has not yet known the digital readiness of the company's human resources (HR). By knowing the digital readiness of HR, TT Company is expected to be able to formulate a strategy to strengthen its HR so that the change from traditional business to digital business can run smoothly and maximize revenue that the company gets. Kwon & Park (2017) also refer to the human factor as the most influential factor in strengthening the company's transformation capacity. Thus, human resources are important to be prepared in transforming into a digital company, given the main difficulties and challenges of companies in making changes to information on technology, but the human factor and employee resistance to change (Schwertner, 2017). The purpose of this research is to map the conditions of the digital culture and digital attitudes of the TT Company in facing digital transformation and formulate strategies

to improve employee digital readiness.

2. LITERATURE REVIEW

Condrobimo (2017) states that digital business refers to the use of internet information technology (IT) in each of its business and industrial value chains. The advantage of digital business in increasing competitiveness requires a transformation or change from a traditional business to a digital business. Digital transformation according to Schwertner (2017) is the use of technology to build new business models, processes, software and systems to achieve more profitable revenue, stronger competitive advantages, create customer experience, and higher efficiency. Mazzone (2014) said digital transformation is the deliberate and continuous digital evolution of a company, business model, idea process, or methodology, either strategically or tactical. Kozina & Kirinić (2018) also added that digital business transformation creates new value for customers. Digital change or transformation contains technological elements at several levels in the organization. These changes include the exploitation of digital technology and digital innovation to improve previous processes and have the potential to change business models (Berghaus & Back, 2016). Meanwhile, Rudito and Sinaga (2017) state that digital transformation is not only about adopting technology but is a comprehensive transformation including changes in strategy, processes, human resources, culture, to leadership. Digital Business Transformation is the process of reinventing the business to digitize operations and formulate an extended supply chain (Schallmo et.al, 2017). From existing sources, it can be concluded that digital transformation is changing. conditions from previously existing to a condition where digital technology is utilized to gain more profitable revenue, achieve stronger competitive advantage, create new value and customer experience, and higher efficiency. This transformation was also followed by changes in strategy, process, model business, human resources, culture, to leadership in balancing the use of digital technology. Cichosz (2020) said that several success factor for digital transformation are leadership, supportive organizational culture, employee and partner engagement, aligning business and IT strategies, process standardization, employee training and skill, agile transformation management.

The ability of companies / organizations to carry out digital transformation is divided into four Westerman quadrants, namely Beginners, Conservatives, Fashionistas, and Digital Masters (Westerman et.al, 2014). This quadrant is formed from two dimensions, namely digital capabilities (DC) and digital leadership capabilities (DL), which are then formed four quadrants, namely:

- a. Beginners is a category that has low digital capabilities and digital leadership capabilities.
- b. Conservatives. Conservatives category companies have high digital leadership capabilities, but they do not yet have capable digital capabilities.
- c. Fashionistas. Slightly different from Conservatives, the Fashionistas category actually has high digital capabilities. They follow the adoption of technological developments, but they do not have sufficient digital leadership capabilities.
- d. Digital Masters. Companies in the Digital Masters category are mature on both dimensions. They are able to adopt technological developments and be able to make it happen in the form of business and financial performance.

Digital capability is the ability to use resources in the form of technology to run or change the way of doing business (Westerman, 2014). Leadership is a role that is able to think through tasks thoroughly from all aspects to achieve the maximum potential of the company (Balan & Cavendish, 2017).

Digital culture is an organizational culture that is conducive to supporting the adoption and development process of digital technology in an organization. Meanwhile, the digital attitude is the way employees perceive the technology that the company uses and implement to do work. Employees are expected to be able to have a positive view in following the development of digital technology and make good use of it and believe that digital technology can be applied by the company (Rudito & Sinaga, 2017). The dimensions of digital culture include anticipation, creativity, innovation, agility, experimentation, open-mindedness and networking. Then the dimensions for digital attitudes include digital knowledge and digital experience.

1. Anticipation is the capacity to anticipate and act quickly in urgent conditions. With this anticipatory ability, when digital disruption occurs, companies or individuals quickly respond, adapt, and make it an opportunity to win the competition. In Rosengren et.al (2017) the ability to anticipate can be seen from how a person continues to develop at any time, is able to adapt to change, thinks about several considerations / factors in making decisions, and has a long-term view
2. Innovation, namely the ability to find ideas about something that creates value (consumers want to buy). Digital technology is used as a catalyst for innovation.
3. Creativity, namely the capacity to turn an imagination into something new and fresh. The creative process is characterized by the ability to see things in a new way, find hidden patterns, or connect an unre-

lated phenomenon (Grzybowska & Łupicka, 2017).

4. Agility, namely the ability to transform continuously and conduct experiments / experiments through a process of trying (trial and error). Agility is a combination of the ability to change, learn continuously, act quickly and flexibly at both the organizational and individual levels (Ulrich & Yeung, 2019). An established organization must encourage agility including the ability of the organization to take advantage of digital business opportunities faster than its competitors (Gimpel, et. al, 2018).
5. Experiment is the willingness to find and try something new related to advances in digital technology and always prioritizing entrepreneurship in responding to digital technology.
6. Open-mindedness, namely the capacity to open up and accept the possibilities offered by advances in digital technology.
7. Networking, namely the capacity to establish relationships with all parties. Technological developments create large amounts of data or big data. This requires companies and individuals to build a network of relationships with all company stakeholders in order to utilize the data / information to create value.

3. METHODOLOGY

This type of research is descriptive exploratory, namely the depiction of a phenomenon, symptoms and conditions without testing the hypothesis to describe the conditions of digital culture and digital attitudes and formulate appropriate strategies. The variable of digital transformation readiness is measured through two variables, namely digital culture as the first variable which includes anticipation, creativity, innovation, agility, experimentation, open-mindedness and networking. While the second variable is digital attitudes which include digital knowledge and digital experience. The samples in this study. The population in this study were permanent employees in the TT company with a sample size of 228 employees who were selected using the proportional random sampling stratified technique based on the level of position in the company.

The steps taken in carrying out a descriptive analysis are as follows:

1. Each indicator assessed by the respondent is given a score as determined. For indicators with positive statements, the score calculation is as follows:
 - a. Score 1 for Very Strongly Disagree
 - b. Score 2 for Strongly Disagree
 - c. Score 3 for Disagree
 - d. Score 4 for Neutral (N)
 - e. Score 5 for Agree (S)
 - f. Score 6 for Strongly Agree (SS)
 - g. Score 7 for Very Strongly Agree (SSS)
2. Whereas indicators with negative statements, score adjustments must be made. However, in this study, there are no indicators with negative statements, so score adjustments are not necessary.
3. Add up the total score of each indicator from all respondents.
4. Calculating the average score in each indicator.
5. Calculating the average score in each sub-variable (the average score of all the average scores of the sub-variable indicators for all respondents).
6. Comparing the average score of each sub-variable against the threshold score for the digital master category, namely 4.30.
7. If the average score of the sub-variables is below the threshold value, namely 4.30, then the sub-variable is said to be not yet in the digital master category. And strategies will be sought to increase the score.
8. If the average score of the sub-variables is above or equal to the threshold value, namely 4.30, then the sub-variable is said to be in the digital master category.

Furthermore, TOWS analysis is an analysis used to analyze and explain factors related to strengths (S), weaknesses (W), opportunities (O), and threats (T) that are owned and faced by companies to formulate employee digital transformation strategies. Before making the TOWS matrix, first determine the EFAS (external factor analysis) and IFAS (internal factor analysis summary) matrices. The company strategic factors obtained are then entered in the EFAS and IFAS tables by weighting each factor of the company's strategy. Internal and external weighting is based on the calculation of the value category of the assessment of each of the company's strategic factors. The sum of all internal and external weights should not exceed 1.00 each. By giving weight, it can be seen which factors have the greatest influence and the smallest influence to provide an assessment. Then the next column is given a rating. The function of weighting and rating is to determine the company's strategic factors that can

have a positive and negative impact. Positive impacts can be a factor of strength (S) and opportunities (O), while negative impacts become weaknesses (W) and threats (T). (Sari, 2015). After getting the weight and rating, the two values are multiplied. The sum of the product of weight and rating of all factors becomes the score value to be mapped in the EFAS and IFAS recapitulation table.

4. RESULT AND ANALYSIS

Respondent Characteristic

Respondent in this study consist of 39% in 26 – 40 years old, 66,23% is bachelor and 72,80% already in company more than 5 years. Detail composition of respondent in this study can be seen on figure 1, figure 2 and figure 3.

Figure 1. Percentage Based on Age

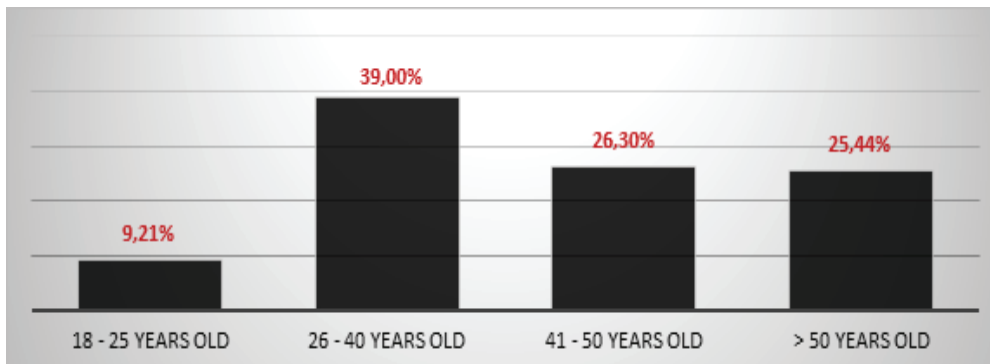


Figure 2. Percentage Based on Educational Background

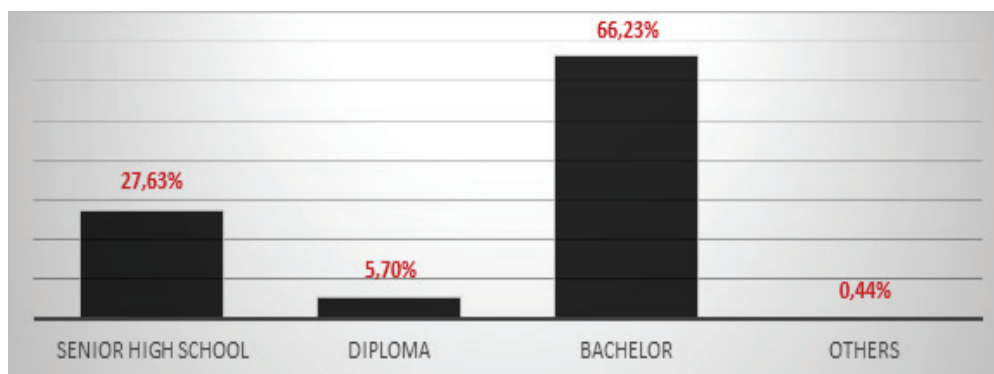
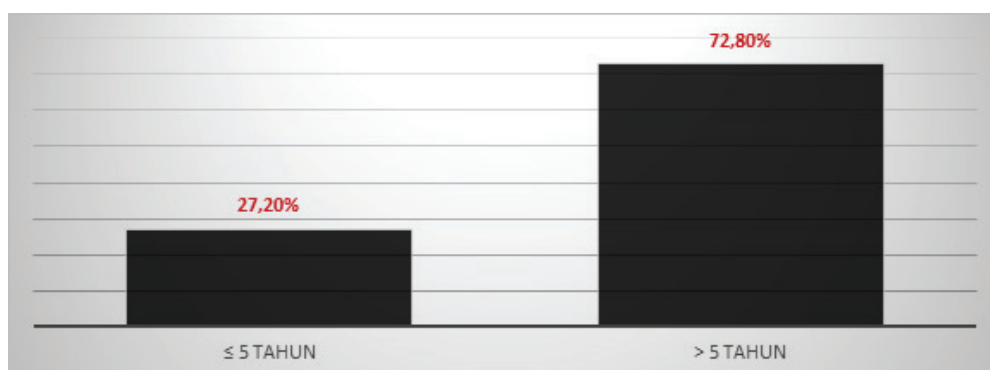


Figure 3. Percentage Based on Tenure



Descriptive Analysis

To explain respondents' responses to the research variables, an analysis of the answers given by respondents was carried out in relation to the statements of each variable. The statement consists of 43 items with 27 items for digital culture variables and 16 items for digital attitude variables. The researcher will describe each statement item separately in the sub-variables and from the analysis it is known that the number of respondents who chose a particular alternative answer and the highest to lowest average score obtained. To explain the respondents' responses to the sub-variables, the researcher used the threshold value previously used by Rudito & Sinaga (2017: 119) in determining the digital master category of an organization. Measuring instruments for respondent responses to research variables are:

1. If Value Response < 4.30 : It means "Not yet Digital Master"
2. If Value Response \geq 4.30 : It means "Digital Master"

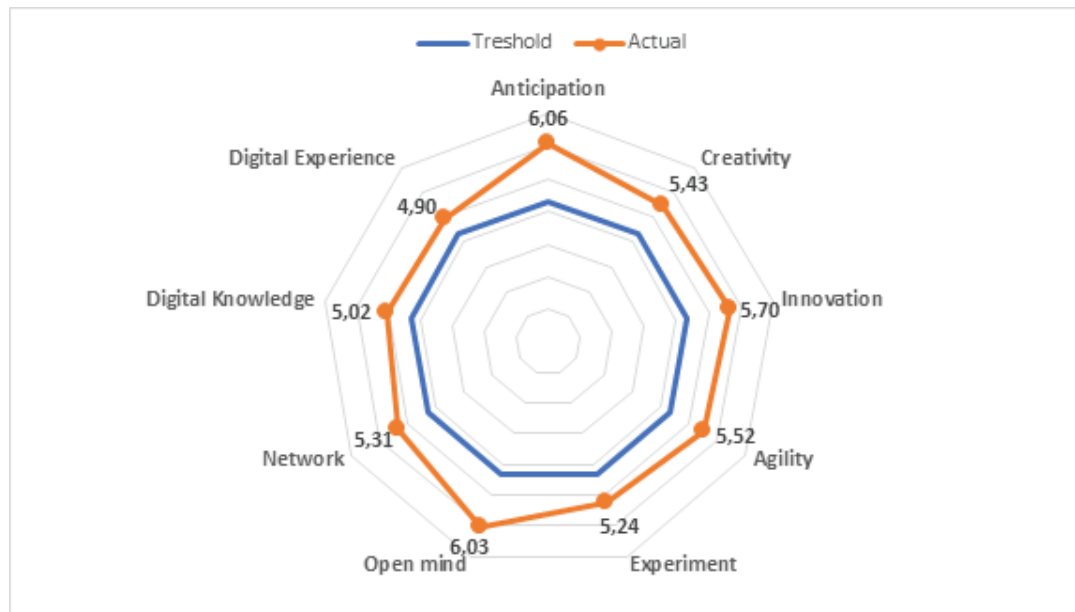
Table 1. Employee's Readiness based on Level Position

Variable	Dimension	Based on Level						Result
		I	II	III	IV	V	VI	
Digital Culture	Anticipation	6,75	6,46	6,25	5,63	5,58	5,70	Digital Master
	Creativity	6,33	5,94	5,52	4,91	4,81	5,08	Digital Master
	Innovation	6,17	6,25	5,72	5,39	5,38	5,28	Digital Master
	Agility	5,30	6,17	5,79	5,24	5,31	5,28	Digital Master
	Experiment	6,00	5,78	5,16	4,74	4,95	4,82	Digital Master
	Open mind	7	6,25	5,98	5,43	5,58	5,95	Digital Master
	Network	6	6,08	5,34	4,89	4,71	4,83	Digital Master
Digital Attitude	Digital Knowledge	5,75	5,25	4,97	4,57	4,71	4,84	Digital Master
	Digital Experience	5,19	5,38	4,82	4,57	4,73	4,71	Digital Master

The results of the study on the cultural variables and digital attitudes of employees in TT companies are separated according to the level of employee position. Here the TT company consistently encourages employees to develop themselves through training and official assignments on leadership to train how to make decisions with various considerations, find new ways to help their operations, participate in innovation events organized by the company, create new ideas and products, open to change, try something new, and collaborate with stakeholders. Meanwhile, the average value of all digital attitude sub-variables also has an average value above 4.30, so it can be concluded that the digital attitude which consists of digital knowledge and digital experience is in the digital master category or ready to face digital transformation. This shows that employees are aware of today's digital technologies from sharing sessions, training, work tools, and products sold by the company. Companies with digital products require employees to know and experience for themselves how the technology works and the benefits of it. Employees also work with the support of digital technology to shorten time, optimize work results, and provide the best service for customers.

If it is depicted in the digital mastery levers diagram, the digital readiness condition of the TT company employees looks like in Figure 4. From data processing for digital culture variables, the highest average value is 6.24 from the indicator "Customers are the core of product development". Meanwhile, the lowest average value is 4.36 from the indicator "I dare to try something new to produce a solution even though there is no data / information". The threshold value for this indicator shows that sometimes employees are not confident enough in finding solutions without the support of clear data and information. what needs to be grown is employee initiative to be active in finding information more broadly from various existing sources. Meanwhile, for the digital attitude variable, the highest average score is 5.70 from the indicator "I have experience using Social Media". While the lowest average value is 4.30 from the indicator "I have experience using Artificial Intelligence technology". This condition shows that employees still need support from the company to gain more experience in using technology.

Figure 4. Digital Master Levers of Digital Readiness



TOWS Analysis

The next analysis is External and Internal Factor Analysis (EFAS and IFAS) as part of the TOWS Analysis formulated by the Human Capital team consisting of Senior Managers, Managers, and Officer units in the TT company. The company strategic factors obtained are then entered in the form of the EFAS and IFAS tables before being weighted. The giving of external and internal weights is based on the calculation of the category value of the assessment of each factor so that it can be seen which has the greatest influence and the least effect. From the results of determining the weight value on the external and internal factors of the TT company, the next step is to calculate the weight value and rating. From the analysis results obtained a score of Strength (Strength) of 1.96; Weakness (Weakness) of 0.73; Opportunity of 2.54; Threat (Threat) of 0.83. By looking at the Strength-Weakness difference of 1.23 and the Opportunity-Threat difference of 1.71, a TOWS analysis diagram can be drawn up with the intersection points on the X, Y axes (1.23,1.71) as shown in Figure 5.

Figure 5. TOWS Diagram



From the digram, a suitable strategy for TT company management to improve employee digital readiness is an aggressive strategy. While the strategy formulation for the TOWS diagram can be seen in Table 2.

Table 2 TOWS Strategy

<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">EFAS</div> <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 10px;">IFAS</div> </div>	STRENGTH	WEAKNESS
	Employees are familiar for using digital tools for work	Employees find it difficult to learn new digital knowledge
	Employees are accustomed to using digital tools for everyday life	Some employees lack the enthusiasm and interest in learning new things because they are approaching retirement age
	Employees have an awareness of the importance of "digital literacy"	Expecting reciprocity for his efforts to learn new things
	Employees' desire to actualize themselves with digital knowledge and become digital talents	Feeling sufficient with the digital knowledge and fluency that they currently have
	Have experience using digital tools to facilitate and streamline work and social activities	The habit of asking other people for help
	Leaders as Role Models have very high digital awareness and actively transmit it to employees	Local company facilities (buildings, devices, etc.) are far from being digital
OPPORTUNITY	S-O Strategy: <ol style="list-style-type: none"> 1. Maximizing programs from the parent company for the development of employee digital culture and skills 2. Create mandatory activities in developing employee digital culture and skills 	W-O strategy: <ol style="list-style-type: none"> 1. Increase employee opportunities to learn digital technology and develop digital culture more regularly within company 2. Utilizing the discourse of relocating the national capital to suggest the parent company to modernize its human resources, facilities and infrastructure for company 3. To promote the vision, belief, and digital programs of the parent company by leaders / role models on a regular basis.
THREAT	S-T strategy: <ol style="list-style-type: none"> 1. Take advantage of external conditions that are less digital as a place to improve conditions for digital culture and expertise 2. Increase employee opportunities to learn digital technology and develop a digital culture more regularly through operational assignments in the office. 	W-T strategy: <p>Increase employee opportunities to learn digital technology and develop a digital culture more regularly through operational assignments.</p>

5. CONCLUSION AND RECOMMENDATION

The digital culture condition of TT Company is ready to face digital transformation because it is included in the digital master category. The condition of the digital attitude of TT Company is classified as ready to face digital transformation because it is included in the digital master category. From the results of the EFAS and IFAS analysis, the TT Company shows that its strengths are higher than the weaknesses and the opportunities that exist are quite large compared to the threats that will arise. These results led TT Company to implement a strategy in quadrant I, namely an aggressive strategy by:

1. Maximizing the company's programs in developing employee digital culture and skills.
2. Creating employee digital skills and culture development activities.

The programs formulated to support this strategy are:

1. Require each head office and branch offices to participate in digital innovation programs that are routinely held by the company. The participation of the unit will be one of the points in the unit performance assessment.
2. Require all employees at every level of position at the head office and branch offices to participate in digital innovation programs that are routinely held by the company. Employee participation will be one of the points in the individual performance appraisal
3. Conduct training, courses, and e-learning on new competencies related to digital such as Youthful Thinking, Data-Driven, Own Your Customer, Global Mindset, Out-of-the Box, Execution Focus, Business Savvy, and Networking.
4. Conducting seminars on an ongoing basis to build digital understanding and strengthen the digital mindset. This can be done by discussing business cases that illustrate realities in the external environment
5. Provide opportunities for every qualified employee to join real projects related to OPEX and CAPEX, synergy projects, start-up incubation projects, or projects that are being financed by the current budget to form key digital behaviours such as agility, anticipation, openness thought, experimentation, innovation, and creativity.

REFERENCES

- Balan, A. C., & Cavendish, K. (2017). Leadership in the Digital and Social Era- A Theoretical Review and Digital Gamification for Employee Development. Program Master pada Universitas Lund. Retrieved from <http://lup.lub.lu.se>.
- Berghaus, S., & Back, A. (2016). Stages in Digital Business Transformation: Results of an Empirical Maturity Study. *MCIS*, 22. Retrieved from <http://aisel.aisnet.org/mcis2016/22>.
- Cichosz, M., Wallenburg, C.M., and Knemeyer, A.M. (2020). Digital transformation at logistics service providers: barriers, success factors and leading practices. *The International Journal of Logistics Management*, 31(2), 209-238. Retrieved from Emerald Publishing Limited 0957-4093 DOI 10.1108/IJLM-08-2019-0229
- Condrobimo, A. Raharto. (2017). Apa Perbedaan Antara Digital Bisnis dan E- Commerce? [Online]. <https://sis.binus.ac.id/2017/08/21/apa-perbedaan-antara-digital-bisnis-dan-e-commerce/>
- Gimpel, H., Hosseini, S., Huber, R., Probst, L., Röglinger, M., & Faisst, U. (2018). Structuring digital transformation: a framework of action fields and its application at ZEISS. *Journal of Information Technology Theory and Application*, 19(1), 31-54
- Grzybowska, K., & Łupicka, A. (2017). Key competencies for Industry 4.0. *Economics & Management Innovations*, 1(1), 250-253
- Kozina, M., dan Kirinić, V. (2018). Measuring Digital Capabilities of the Higher Education Institution Using Digital Capability Maturity Model. 37th International Conference on Organizational Science Development: Organization and Uncertainty in the Digital Age. Portoroz, Slovenia. Retrieved from <http://higherdecision.foi.hr>.
- Kwon, E. H., dan Park, M. J. (2017). Critical Factors on Firm's Digital Transformation Capacity: Empirical Evidence from Korea. *International Journal of Applied Engineering Research*, 12(22), 12585-12596. Retrieved from <http://www.ripublication.com>
- Mazzone, D. M. (2014). *Digital or death: digital transformation: the only choice for business to survive smash and conquer*. Ontario: Smashbox Consulting Inc. Retrieved from <https://books.google.co.id/>
- Memarzadeh, G. R., & Jahany, A. R. (2014). The Presenting a Model for Municipalities E-Readiness Assessment. *International Journal of Management and Business Research*, 4(2), 107-123. Retrieved from <http://ijmbr.srbiau.ac.ir>.
- Rosengren, A., Maher Elsayed, M., & Eklund, N. (2017). Corporate leadership development programs towards sustainability. Thesis pada Blekinge Institute of Technology. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:bth-14780>
- Rudito, P., & Sinaga, M. F. (2017). *Digital Mastery, Membangun Kepemimpinan Digital Untuk Memenangkan Era*

Disrupsi. Jakarta: Gramedia Pustaka Utama.

Schallmo, D., Williams, C. A., & Boardman, L. (2017). Digital Transformation Of Business Models: Best Practice, Enablers, and Roadmap. *International Journal of Innovation Management*, 21(08). Retrieved from <https://doi.org/10.1142/S136391961740014X>.

Sari, Novita Aulia. (2015). Penentuan Strategi Pemasaran Melalui Analisa SWOT dalam Peningkatan Daya Saing di CV. Global Warna Sidoarjo. Tesis pada UIN Sunan Ampel Surabaya. Retrieved from <http://digilib.uinsby.ac.id/id/eprint/2583>

Schwertner, K. (2017). Digital Transformation of Business. *Trakia Journal of Sciences*, 15(1), 388-393. Retrieved from <http://www.uni-sz.bg>.

Shaughnessy, H. (2018). Creating digital transformation: strategies and steps. *Strategy & Leadership*, 46(2), 19-25. Retrieved from <https://doi.org/10.1108/SL-12-2017-0126>

Ulrich, D., and Yeung, A. (2019). Agility: The New Response to Dynamic Change. *Strategic HR Review*, 18(4), 161-167. Retrieved from Emerald Publishing Limited, ISSN 1475-4398 DOI 10.1108/SHR-04-2019-0032

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Boston: Harvard Business Press.

IMPLEMENTATION OF LEAN MANUFACTURING IN INDONESIA

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Abstract

Indonesia has now entered a new normal era and is on the verge of a recession which of course has an impact on companies in Indonesia, to survive in this condition requires an appropriate and fast strategy, the implementation of lean manufacturing and learning organization is one of the strategies that can be used by company. The purpose of this study is to determine how the implementation of lean manufacturing is able to optimize all the resources owned by the company. The method used is a literature review. The results of this study indicate that when a company wants to optimize its existing resources, it can be done by implementing techniques lean manufacturing so that excess inventory can be reduced, so the company can manage and maintain inventory. The implementation of lean manufacturing in the form of processes and equipment, planning and control, supplier relations, human resources and customer relations are important practices in lean manufacturing, practices lean manufacturing in analysing productivity from a multidimensional point of view, lean manufacturing also improves operational performance, cost reduction is considered as the greatest benefits that can be achieved by adopting lean, followed by customer satisfaction, and better delivery times. A way to better understand how the application of practices lean manufacturing certain supports the improvement of capabilities organizational learning in the organization and vice versa.

Keywords: *Lean Manufacturing, Learning Organisation.*

THE EFFECT OF COMPENSATION AND MOTIVATION ON JOBSATISFACTION OF GOJEK BANDUNG DRIVER PARTNER

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Abstract

Gojek Bandung is one of the largest online transportation companies in Bandung. In this study the conditions experienced by Gojek Bandung related to compensation, motivation, and jobsatisfaction for partner drivers that have been found by the authors based on the results of preliminary tests show that compensation for partner drivers is medium, for motivation is quite high, as well as the level of work satisfaction of partner drivers that are in the high category.

The method in this study used quantitative methods. The data collection technique used was through distributing questionnaires to 340 Gojek Bandung driver partners. The questionnaire that has been spread consists of 37 items using five (5) Likert scales. Sampling used a method with incidental sampling. The data analysis technique used descriptive analysis and multiple linear regression to interpreting the result of the study.

Based on the processing of data performed shows that perceptions of compensation is classified in the low category, but motivation and job satisfaction are classified in the high category. Furthermore, the result of the study indicate that there is a positive significant effect of compensation and motivation on jobsatisfaction simultaneously or partially.

TRACING THE PREDICTORS OF WFH PRODUCTIVITY: A STRUCTURAL EQUATION MODELLING

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Abstract

Compared to the productivity of the office as a workplace, the legitimacy of working from home (WFH) productivity is still questioned by many organizations. This paper aims to examine the impact of personal, group, and organizational factors on the productivity of WFH personnel. This raises the question of whether motivation, digital leadership, and performance management are good predictors for WFH productivity? This paper is based on quantitative research which involved 824 respondents who are working from home for the first time. They worked for governmental institutions, state-owned, private, and multinational companies in 32 out of 34 provinces in Indonesia. Data analysis was conducted by using structural equation modelling and SmartPLS version 3. The analysis results revealed that WFH productivity is influenced directly by working motivation of the employee and the digital leadership capability of the supervisor. Performance management was influenced indirectly. By strengthening working motivation and digital leadership as mediators, performance management has an impact on WFH productivity.

JEL: M54

Keywords: Work Productivity, Leadership, Motivation, Performance Management

1. INTRODUCTION

In an intensively connected world, the impacts of the COVID-19 disease beyond morbidity (those who are unable to work for a period of time) and mortality (those who die) have become apparent since the outbreak (McKibbin & Fernando, 2020). The direct impact of COVID-19 outbreaks is slowing down or even making negative growth of the economy. The GDP can drop significantly. The precise number will depend on what proportion of the population get sick, on the mortality rate, and how many people are out of work in order not to get the disease (Wren-Lewis, 2020).

COVID-19 provides a valuable learning experience for today's society. The pandemic has changed all aspects of life globally and has accelerated the growth of digitization. COVID-19 has forced the migration of the workplace from offices into homes. WFH is triggered by the massive growth of Coronavirus-infected victims and is expected to be an effective way to flatten the curve of COVID-19 victims. The Indonesian government asked all working citizens to WFH during the COVID-19 pandemic.

In the United States, only 37 percent of jobs can be done entirely from home (Dingel & Neilman, 2020). The sudden WFH instruction for all working citizens made workers' productivity, business survival ability, and national economic growth drop. The share of jobs that could be conducted from home is an important input for estimating the economic performance during this social distancing period. Individual productivity of the workers may differ considerably when working from home rather than from their usual workplace (Dingel & Neilman, 2020). Based on this point of view, WFH productivity becomes a crucial issue in macro and micro-economic perspectives.

Compared to traditional work arrangement, WFH provides many benefits (e.g. shorter breaks, fewer sick days, less time taken off, reduced carbon emissions) and barriers such as income levels, gender, differing skill levels, job positions, and space levels (Bakker, Du, & Derks, 2019). The study concludes that the higher the skill level and the bigger proportion of professional or managerial staff in the workplace, the more likely WFH is to be offered as a permanent employment option (Felstead, Jewson, Phizacklea, & Walter, 2002). One-third of the productivity increase in WFH is due to having a quieter environment, which makes it easier to process work. Offices are distracting places for working. The other two-thirds can be attributed to the fact that the people at home worked

more hours (Bloom, 2014).

As an alternative working arrangement, WFH productivity is still questioned by organizations, especially for those which have conducted WFH extensively for the first time. Many studies have explained that WFH provides benefits for individuals and organizations. Unfortunately for the organizations, it is not easy to agree with. They need to measure WFH productivity and to identify its influential factors. Many studies also explained there are many predictors influencing WFH productivity. Work duration is an influential predictor. Doing WFH for fewer than 18 hours per week has a larger positive impact on productivity than full-time work (Kazekami, 2018). Reduced communication with co-workers, supervisor's support and trust, suitability of the working place at home, and the possibility to take care of family were found to be influential predictors for WFH productivity (Nakrošienė, Bučiūnienė, & Goštautaitė, 2019).

This paper is based on organizational behavior theory which views WFH productivity as behavior in an organization. As a behavior, WFH productivity is influenced by individual, group, and organizational factors. In remote work arrangement, where supervision from direct supervisor is limited, work motivation is viewed as key element of individual factor which influences work productivity. Because of distance, the influence of direct supervisor's leadership is also limited and filtered. The supervisor is leading his/ her team through the internet. So that's why the digital leadership is a crucial element of work productivity in remote work arrangement. Performance management should be clearly defined and communicated to the employee. Employee need a clear guidance how his or her performance is measured remotely. So that's why, this paper determines that working motivation as personal antecedent, digital leadership as a group antecedent, and performance management as an organizational antecedent. This paper aims to measure WFH productivity and to identify its influential predictors. Are working motivation, digital leadership, and performance management good predictors for WFH productivity?

2. LITERATURE REVIEW

WFH Productivity

WFH was already known in the 1990s as telework, telecommuting, remote working, or virtual work and is defined as a flexible work arrangement that allows people to work from any location other than the traditional office on either a temporary or regular basis (Maruyama, Hopkinson, & James, 2009). In the case of COVID-19, especially in Indonesia, WFH is conducted on a temporary basis. WFH as an alternative work arrangement provides opportunities for protecting people for being infected by diseases in shared spaces and also improves social inclusion by enabling individuals with specific constraints to contribute to the workforce (Bosua, Kurnia, & Moza, 2017).

A number of studies indicate that WFH improves productivity and enhances work-life balance while it also reduces traffic congestion, provides spatial and temporal flexibility, lowers stress levels and infrastructure costs (Baruch, 2000; Marumaya & Tietze, 2012; Troup & Rose, 2012). A study from 11 oil and gas companies located in Malaysia revealed that WFH impacts on job autonomy, work-family balance, work productivity and level of occupation (Khan, Mohammed, & Harith, 2018) Another study revealed that WFH has a weak but positive relationship with better quality of work. It means that other variables can improve the quality of work of employees (Onyemaechi, Chinyere, & Emmanuel, 2018).

Working Motivation

Working motivation is perceived as an influential factor in reaching business success in a dynamic environment (Sitthiwarongchai, Wichayanuparp, Chantaki, & Charoenboon, 2020). Working motivation refers to factors that boost, direct and sustain worker behavior over time. There are three main directors of motivation theory: content, process, and justice-based theory. The content-based theory aims to identify factors positively related with motivation. It includes Maslow's hierarchy of needs, Herzberg's theory of motivator-hygiene factors, and McClelland's theory of needs (Rybníček, Bergner, & Gutschelhofer, 2019). This paper uses McClelland's theory of needs to describe the working motivation. Working motivation is reflected into three needs – need for achievement, need for affiliation, and need for power.

An online survey from 242 employees of public universities in northern Malaysia has proved that motivation has a significant positive effect on employee productivity (Hanaysha & Majid, 2018). The empirical study which involved 276 employees of private companies in Jordan has proved that low morale and low motivation affect productivity and competitiveness (Shaban, Al-Zubi, Ali, & Alqotaish, 2017). Based on the previous research, this study formulates its hypothesis of whether working motivation has a positive, significant impact on WFH productivity.

H1: Working motivation has a significant positive impact on WFH productivity

Digital Leadership

Digital leadership is triggered by technological disruption that not only affects daily life, but also the business life of an organization (Westerman, Bonnet, & McAfee, 2014). Several previous studies defined digital leadership as: (1) key skills managers need for digital transformation (Zeike, Bradbury, Lindert, & Pfaff, 2019); (2) the capability of leaders to create a clear and meaningful vision and to actualize strategies for the digitization process (Zeike, Bradbury, Lindert, & Pfaff, 2019); (3) the ability of the leader to identify strategic digital technology and bring all employees to produce strategic digital capabilities of the company (Rudito & Sinaga, 2017); and (4) a combination of culture and leadership competence in utilizing digital technology for creating value in the firms (Mihardjo, Sasmoko, Alamsjah, & Elidjen, 2019). Based on those definitions, this paper defined digital leadership as the capability of the leader to involve and transform all the employees to utilize digital technology for supporting the company to support sustainable business growth. This paper divides digital leadership into two dimensions: digital attitude and leadership skills (Rudito & Sinaga, 2017).

Previous studies have stated that leadership impacts on work productivity. A study revealed that authentic leadership style affects employee resilience and individual productivity (Zehira & Narcikara, 2016). In Egypt, leadership styles influence employees' satisfaction and team performance, through the mediating role of wise leadership (Elbaz & Haddoud, 2017). In Indonesia, the instructional leadership of principals impacts on the productivity of educators in police language schools (Roniayah, Santosa, & Tantri, 2019). Based on these studies, this paper plans to examine the impact of digital leadership on WFH productivity.

H2: Digital leadership has a significant positive impact on WFH productivity

A study in Korea argued that transformational leadership has a positive main effect on motivation, while transactional leadership did not (Lee, 2020). The study which involved 61 supervisors and their 244 subordinates showed that supervisors' autonomous work motivation was linked with supervisors' transformational leadership which, in turn, was linked with subordinates' autonomous work motivation (Kanat-Maymon, Elimelech, & Roth, 2020). A study in Pakistani software firms which involved 164 supervisor-employee dyads in 31 companies explained that intrinsic motivation played a moderating effect on relationship transformational leadership and employee creativity (Shafi, Lei, Song, & Sarker, 2020). A study in India which involved 493 scientists working in India's largest civilian research and development (R&D) organizations found evidence that there was a positive relationship between leadership, employee autonomous motivation, and employee-level innovation (Gupta, 2020). In the Thai pharmaceutical industry, a study stated that leadership style impacted on employee motivation. The employees prefer a transactional style of leadership than a transformational one (Sitthiwarongchai, Wichayanuparp, Chantaki, & Charoenboon, 2020). Based on the previous studies, this paper aimed to test the impact of digital leadership on working motivation.

H3: Digital leadership has a significant positive impact on working motivation

Performance Management

Performance management is a critical practice of human resource management which intends to accommodate performance and development in organizations (Tseng & Levy, 2019). Performance management is a process of building common understanding about what is to be achieved and how is to be accomplished in an organization. It holds many aspects of organization including environmental dynamics, organizational strategies, business processes, innovation with managers and employees at the process epicenter (Iyswarya & Rajaram, 2017).

An experimental study on captains in the commercial aviation sector revealed that performance monitoring and target setting significantly increased captains' productivity with respect to targeted fuel-saving dimensions (Goesnell, List, & Metcalfe, 2020). In Kenya, a study which involved 972 employees discovered that appraisal feedback, method, and standards influenced employee productivity (Kihama & Wainaina, 2019). A study involving 219 US employees and 203 Mexican employees concluded the fairness of performance appraisal, leader-member exchange, and motivation impact on individual performance of productivity (Selvarajan, Singh, & Solansky, 2018). In line with these studies, this paper aimed to examine the impact of performance management on WFH productivity.

H4: Performance management has a significant positive impact on WFH productivity

A study in Turkey which involved 432 employees of 14 forest products companies stated that performance appraisal was a major predictor of employee motivation and productivity (Aydin & Tiriyaki, 2018). In Manila, a study involving 155 employees from nine companies argued that implementing continuous performance management strongly influences the job autonomy and motivation of employees (Pagdonsolan, Balan, Mariscal, & Chiu, 2020). Considering these studies, this paper intended to diagnose the impact of performance management on working motivation.

H5: Performance management has a significant positive impact on working motivation

A study in Korea explained that transactional leadership has a positive moderating effect on the relationship between performance management on motivation, while transformational leadership does not (Lee, 2020). Based on this empirical study, this paper examined the impact of performance management on digital leadership.

H6: Performance management has a significant positive impact on digital leadership

3. RESEARCH METHODOLOGY

3.1 MATERIALS AND METHOD

This paper was based on a quantitative study of office workers in Indonesia. Data was collected by distributing the digital questionnaires in social media to the professional network of the researchers. The researchers came from eight universities in Indonesia: Universitas Bina Nusantara (Jakarta), Universitas Trunojoyo Madura (Bangkalan), STIE Pariwisata Indonesia (Semarang), Universitas Islam Malang (Malang), Universitas Riau (Pekan Baru), STMIK Indonesia (Padang), Universitas Jember (Jember), and Universitas Widya Mataram (Yogyakarta).

This paper involved 824 office workers as respondents. Most of them (75%) were permanently engaged with an organization (75%) and the rest were professional freelancers. The largest group of respondents were employees of private companies (40%) and government officers (28%). The respondents were mostly in structural positions in their organizations (63%), which were 36% as individual contributors (e.g. staff, officers) and 27 % as structural managers. The rest (37%) were in functional positions (e.g. specialist, expert, advisor). Most of them (70%) were also new to WFH, while only 18.6% of them usually worked from home before the COVID-19 outbreak. The demographic profile of respondent was well-distributed by gender; males were 50.36% and females were 49.64%. Their age was mostly over-30 (64%) with more than five years of service in their organization (72%). They held bachelor's and master's degrees (70%). Most (81%) were domiciled in six provinces – East Java, Central Java, West Sumatra, North Java, Yogyakarta, and Jakarta. Generally, most respondents were from Java (70%) and Sumatra (21%). This paper involved working citizens from 32 of 34 provinces in Indonesia, except Gorontalo and West Papua.

Table 1. Profile of Respondents

Profile of Respondents					Profile of Respondents				
Gender	Male	415	50.36%	50.36%	Institution	Government	230	27.91%	27.91%
	Female	409	49.64%	100%		State-owned	38	4.61%	32.52%
Age	Under 20	12	1.46%	1.46%	Position	Private company	327	39.68%	72.21%
	21 – 30	283	34.34%	35.8%		Foreign company	22	2.67%	74.88%
	31 – 40	259	31.43%	67.23%		Others	207	25.12%	100%
	41 - 50	169	20.51%	87.74%		Staff or officer	295	35.8%	35.80%
	51 – 60	91	11.04%	98.79%		Supervisor	84	10.19%	46%
	Over 60	10	1.21%	100%		Manager	53	6.43%	52.43%
Education	Diploma	67	8.13%	8.13%	Location	Senior Manager	25	3.03%	55.46%
	Bachelor	249	30.22%	38.35%		Director or MD	40	4.85%	60.32%
	Master	330	40.05%	78.4%		Business owner	24	2.91%	63.23%
	Doctoral	79	9.59%	87.99%		Functional	303	36.77%	100%
	Others	99	12.01%	100%		East Java	284	34.47%	34.47%

Years of service	0 - 2 years	94	11.41%	11.41%	Central Java	113	13.71%	48.18%
	3 - 5 years	135	16.38%	27.79%	W e s t			
	6 - 10 years	174	21.12%	48.91%	Sumatra	110	13.35%	61.53%
	11 - 20 years	231	28.03%	76.94%	West Java	56	6.8%	68.33%
	21 - 30 years	135	16.38%	93.33%	Jakarta	54	6.55%	74.88%
	More 30 years	55	6.67%	100%	Yogyakarta	48	5.83%	80.7%
W F H Experience	First timer	572	69.42%	69.42%	Rest of Java	23	2.79%	83.5%
	Ever before	53	6.43%	75.85%	Rest of Sumatra	60	7.28%	90.78%
	Usually do	153	18.57%	94.42%	Kalimantan	39	4.73%	95.51%
	Others	46	5.58%	100%	Sulawesi	16	1.94%	97.45%
					Papua	2	0.24%	97.69%
					Others	19	2.31%	100%

This paper used the principles of partial least squares structural equation modeling (PLS SEM, variance-based SEM) and SmartPLS version 3 application as the statistic tool for testing the research model. The research model is second order in which all variables reflected into dimensions and all dimensions are indicated by several items.

- *WFH Productivity* is adapted from the concept of telework productivity and well-being (Bosua, Kurnia, & Moza, 2017). WFH is reflected into two dimensions: Quantitative Objectives - which are indicated by three items (WFH01, WFH02, and WFH03) and Qualitative Objectives which are indicated by three items (WFH04, WFH05, and WFH06).
- *Working Motivation* is adapted from achievement motivation theory which was developed as an instrument by previous researchers (Rybnicek, Bergner, & Gutschelhofer, 2019). Working motivation is defined into three dimensions and each dimension is measured by two items: Achievement (MOT01, MOT02); Affiliation (MOT03, MOT04); and Power (MOT05, MOT06).
- *Digital leadership* is adapted from a concept developed by previous research (Rudito & Sinaga, 2017) which defined digital leadership into: Leadership Skill (DLE01, DLE02, DLE03) and Digital Attitude (DLE04, DLE05, DLE06).
- *Performance Management* is adapted from a concept developed by previous research (Iyswarya & Rajaram, 2017). Performance management is defined into four main processes: Performance Planning (PER01, PER02); Performance Development (PER03, PER04); Performance Appraisal (PER05, PER06) and Reward Recognition (PER07, PER08).

3.2 MEASUREMENT MODEL

The measurement model of this paper is a second order model in which all variables are reflected into dimensions and indicators. The measurement model is demonstrated in Figure 1. The validity of indicators used outer loading or loading factor. Validity analysis of dimensions and variables used discriminant validity and/or convergent validity which is indicated by AVE. Reliability analysis is based on composite and/or internal consistency reliability which is indicated by Cronbach's Alpha. The results of validity and reliability analysis on the measurement model are available in Table 2 and Table 3. Table 2 displays outer loading (OL), Cronbach's Alpha (CA), composite reliability (CR), and average variance extracted (AVE). Table 3 displays the discriminant validity. An item or indicator is valid when the OL is more than 0.7 for confirmatory research and more than 0.6 for exploratory. Because it is exploratory research, an item is valid when the OL is more than 0.6 (Hair, Hufit, Ringle, & Sarstedt, 2014). Table 2 shows that all indicators of all variables had an OL score of more than 0.7; except the OL score of MOT04 which was 0.659. It is more than 0.6, so all items of the measurement model are valid.

Table 2. Validity and Reliability Analysis

Dimension	Item	OL	CA	CR	AVE	Dimension	Item	OL	CA	CR	AVE
WORK FROM HOME PRODUCTIVITY						DIGITAL LEADERSHIP					
Quantitative Objectives	WFH01	0.864	0.779	0.873	0.698	Leadership Skill	DLE01	0.874	0.861	0.915	0.783
	WFH02	0.908					DLE02	0.901			
	WFH03	0.724					DLE03	0.879			

Qualitative Objectives	WFH04	0.854					DLE04	0.873			
	WFH05	0.905	0.852	0.91	0.772	Digital Attitude	DLE05	0.9	0.868	0.919	0.791
	WFH06	0.877					DLE06	0.894			
WORKING MOTIVATION			0.665	0.781	0.516	PERFORMANCE MANAGEMENT			0.887	0.910	0.559
Achievement	MOT01	0.848	0.65	0.851	0.74	Planning	PER01	0.885	0.755	0.89	0.803
	MOT02	0.873					PER02	0.907			
Affiliation	MOT03	0.897	0.412	0.761	0.62	Development	PER03	0.878	0.725	0.879	0.784
	MOT04	0.659					PER04	0.893			
Power	MOT05	0.87	0.671	0.859	0.752	Appraisal	PER05	0.896	0.75	0.889	0.8
	MOT06	0.865					PER06	0.893			
Note: CA = Cronbach Alpha. CR = Composite Reliability						Reward	PER07	0.902	0.715	0.875	0.777
AVE = Average Variance Extracted. OL = Outer Loading							PER08	0.86			

Table 2 shows all variables and dimensions had AVE score more than 0.5; it means that all variables and its dimensions were convergent valid. Table 3 shows the diagonal bold blue colored scores (squared root of AVE) are higher than its highest correlation with any other constructs. It means that all dimensions of all variables are discriminant valid. Based on items, convergence, and discriminant validity analysis, all items, dimensions, and variables of the measurement model are valid. Table 2 also shows the Cronbach's Alpha score of all variables and its dimensions are more than 0.7; except the Working Motivation variable and its dimensions are less than 0.7. The composite reliability score of all variables and its dimensions are more than 0.7. It means that all variables and its dimensions are reliable in internal consistency and composite; except Working Motivation and its dimensions are composite reliable only. Based on validity and reliability analysis, the measurement model which is used in this paper is valid and reliable.

Table 3. Discriminant Validity

	1	2	3	4	5	6	7	8	9	10	11
1 Achievement	0.86										
2 Affiliation	0.441	0.787									
3 Digital Attitude	0.287	0.26	0.889								
4 Performance Planning	0.239	0.295	0.494	0.896							
5 Performance Development	0.34	0.269	0.489	0.622	0.886						
6 Leadership Skill	0.259	0.253	0.664	0.455	0.475	0.885					
7 Performance Appraisal	0.327	0.315	0.478	0.596	0.602	0.397	0.895				
8 Power	0.314	0.174	0.232	0.246	0.26	0.15	0.251	0.867			
9 Qualitative Objectives	0.525	0.3	0.218	0.191	0.262	0.215	0.215	0.181	0.879		
10 Quantitative Objectives	0.527	0.326	0.242	0.188	0.286	0.244	0.214	0.2	0.78	0.836	
11 Reward & Recognition	0.276	0.258	0.471	0.562	0.608	0.387	0.671	0.201	0.194	0.181	0.882

Table 4 shows the path coefficient, *t*-statistics, and *p*-values of all variables to their dimensions. The scores of the *t*-statistics range from 24.490 to 235.742. The score of the *p*-values is 0.000. If the *t*-statistic is more than 1.96 or the *p*-value is less than 0.05, it means that all path coefficients are significant. WFH productivity is reflected into quantitative (0.937) and qualitative (0.949) objectives significantly and equally. Working motivation is reflected into achievement (0.854), affiliation (0.704) and power (0.636) significantly. Digital leadership is reflected into leadership skill (0.909) and digital attitude (0.916) significantly and equally. Performance management is reflected in performance planning (0.826), development (0.843), appraisal (0.855), and reward recognition (0.841) significantly and equally.

Table 4. Outer Path Coefficient

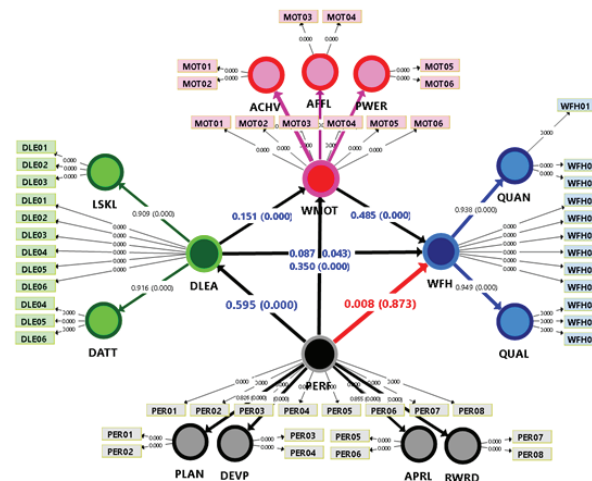
Variable	Dimensions	Path Coefficient	<i>t</i> -Statistics	<i>p</i> -Values	Result
WFH Productivity	Quantitative Objectives	0.937	182.633	0.000	Significant
	Qualitative Objectives	0.949	235.742	0.000	Significant

Working Motivation	Achievement	0.854	70.404	0.000	Significant
	Affiliation	0.704	24.49	0.000	Significant
	Power	0.636	15.642	0.000	Significant
Digital Leadership	Leadership Skill	0.909	115.128	0.000	Significant
	Digital Attitude	0.916	126.288	0.000	Significant
Performance Management	Planning	0.826	52.368	0.000	Significant
	Development	0.843	58.464	0.000	Significant
	Appraisal	0.855	62.681	0.000	Significant
	Reward	0.841	55.308	0.000	Significant

4. RESULTS & DISCUSSION

The research model is demonstrated in Figure 1. It consists of measurement and structural models. The measurement model explains the relationship variables and its dimensions and items. Structural model describes the relationship among variables. Hypothesis testing is conducted to test the structural model. The results of statistical analysis are displayed in Table 5.

Figure 1. Research Model



From Table 5, five hypotheses (H1, H2, H3, H5, and H6) have *t*-statistics of more than 1.96 or *p*-values of less than 0.05. It means that those hypotheses are accepted. Only one hypothesis is rejected. H4 has a *t*-statistic lower than 1.96 or a *p*-value of more than 0.05, so H4 is rejected. Based on the result of hypothesis testing, WFH Productivity is influenced significantly by Working Motivation (H1) and Digital Leadership (H2). Work motivation is influenced significantly by Digital Leadership (H3) and Performance Management (H5). Digital leadership is influenced significantly by Performance Management (H6).

From Figure 1, Working Motivation and Digital Leadership play a mediating role in the relationship between Performance Management and WFH Productivity. Performance Management may not influence WFH Productivity directly, but indirectly through Work Motivation (with indirect impact = 0.170) or Digital Leadership (with indirect impact = 0.052). In the relationship between Performance Management and Work Motivation, Digital Leadership does not play a mediating role. Because the indirect impact ($0.090 = 0.595 \times 0.151$) is smaller than the direct impact (0.350). Working Motivation does not play a mediating role on the relationship between Digital Leadership and WFH Productivity, because the direct impact (0.087) is still bigger than the indirect impact ($0.073 = 0.151 \times 0.485$).

Table 5. Hypothesis Testing

Hypothesis	Path Coefficient	<i>t</i> -Statistics	<i>p</i> -Values	Result
H1: Working Motivation -> WFH Productivity	0.485	12.511	0.000	Accepted
H2: Digital Leadership -> WFH Productivity	0.087	2.053	0.040	Accepted
H3: Digital Leadership -> Working Motivation	0.151	3.437	0.001	Accepted

H4:	Performance Management -> WFH Productivity	0.008	0.168	0.866	Rejected
H5:	Performance Management -> Working Motivation	0.350	7.219	0.000	Accepted
H6:	Performance Management -> Digital Leadership	0.595	20.832	0.000	Accepted

WFH productivity is defined as an achievement of quantitative and qualitative objectives and is influenced directly by working motivation as an individual factor and digital leadership as a group factor. Performance management as an organizational factor does not influence directly. Performance management should be directed to influence the improvement in working motivation of employees and digital leadership of the supervisor in order to impact indirectly on WFH productivity.

This paper has several limitations. For better further research we recommend several things: (1) sampling method should be probabilistic. This study used convenience approach on collecting data from the network of the researcher. It should collaborate with national wide institution such as ministry of workforce or national statistics bureau for applying simple or cluster random sampling for collecting data. (2) using the covariance-based SEM application for testing the research model. This research used SmartPLS as variance-based SEM for testing research model as exploratory study. Covariance-based SEM – such as Lisrel application will confirm the result as confirmatory study, (3) using another variable as individual, group, and organizational antecedents. Digital skill of employee, digital collaboration ability, digital culture, and availability of digital technology at home are essential and interesting issues to be examined.

5. CONCLUSION

WFH productivity in Indonesia is predominantly influenced by individual and group factors rather than organizational factors. Working motivation is a key factor for improving WFH productivity. Business organizations should direct their performance management and supervisor's leadership capability to impact on working motivation in order to improve WFH productivity. For future research, we recommend elaborating other constructs of individual, group and organization factors for expanding the research model.

REFERENCES

- Aydin, A., & Tiryaki, S. (2018). Impact of performance appraisal on employee motivation and productivity in Turkish forest product industry: A structural equation modelling analysis. *Drvna industrija: Znanstveni časopis za pitanja drvne tehnologije*, 69(2), 101-111.
- Bakker, A. B., Du, D., & Derks, D. (2019). Major life events in life, work engagement, and performance: A test of the work-home resources model. *Internal Journal of Stress Management*, 26(2), 238.
- Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work, and Employment*, 15(1), 34-49.
- Bloom, N. (2014). To raise productivity, let more employees work from home. *Harvard Business Review*.
- Bosua, R., Kurnia, S., & Moza, A. (2017). Telework impact on productivity and well-being. In *Social Inclusion and Usability of ICT Services* (p. 201).
- Dingel, J. I., & Neilman, B. (2020). How many jobs can be done at home? *National Bureau of Economic Research*.
- Elbaz, A. M., & Haddoud, M. Y. (2017). The role of wisdom leadership in increasing job performance: Evidence from the Egyptian tourism sector. *Tourism Management*, 63, 66-76.
- Felstead, A., Jewson, N., Phizacklea, A., & Walter, S. (2002). Opportunities to work at home in the context of work life balance. *Human Resource Management Journal*, 12, 54-76.
- Goesnell, G. K., List, J. A., & Metcalfe, R. D. (2020). The impact of management practices on employee productivity: A field experiment with airline captains. *Journal of Political Economy*, 128(4), 1195-1233.
- Gupta, V. (2020). Relationship between leadership, motivation, and employee-level innovation: Evidence from India. *Personnel Review*.
- Hair, J. E., Hufit, G. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS SEM)*. London, New York, New Delhi, Singapore, Washington DC: SAGE Publication, Inc.

- Hanaysha, J. R., & Majid, M. (2018). Employee motivation and its role in improving the productivity and organizational commitment at higher education institutions. *Journal of Entrepreneurship and Business*, 6(1), 17-28.
- Iyswarya, P., & Rajaram, S. (2017). Impact of performance management process on print organizational performance: In India context. In C. C. Satapathy, V. Bhateja, & A. Joshi, *Proceedings of the International Conference on Data Engineering and Computing Technology and Communication Technology* (pp. 661-671). Springer.
- Kanat-Maymon, Y., Elimelech, M., & Roth, G. (2020). Work motivations as antecedents and outcomes of leadership: Integrating self-determination and the full range leadership theory. *European Management Journal*.
- Kazekami, S. (2018). Does teleworking improve labor productivity? *27th Eurasia Business and Economics Society Conference*.
- Khan, F. F., Mohammed, N., & Harith, N. H. (2018). The relationship between the impacts of telecommuting, engagement, and employee performance in the oil and gas industry in Kuantan Pahang. *Malaysian Journal of Social Sciences and Humanities*, 3(5), 1-9.
- Kihama, J. W., & Wainaina, L. (2019). Performance appraisal feedback and employee productivity in water and sewerage companies in Kiambu County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(5), 376-393.
- Lee, H. W. (2020). Motivational effect of performance management: Does leadership matter? *Transylvanian Review of Administrative Sciences*, 16(59), 59-76.
- Marumaya, T., & Tietze, S. (2012). From anxiety to assurance: Concerns and outcomes of telework. *Personnel Review*.
- Maruyama, T., Hopkinson, P. G., & James, P. W. (2009). A multivariate analysis of work-life balance outcomes from a large-scale telework programme. *New Technology, Work and Employment*, 24(1), 76-88.
- McKibbin, W., & Fernando, R. (2020). The Economic Impact of Covid-19. In R. Baldwin, & B. Mauro, *Economics in the Time of Covid-19* (pp. 45-52). CEPR Press.
- Mihardjo, L. W., Sasmoko, Alamsjah, F., & Elidjen. (2019). Digital leadership role in developing business model innovation and customer experience orientation in industry 4.0. *Management Science Letters*, 1749-1762.
- Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*.
- Onyemaechi, U., Chinyere, U. P., & Emmanuel, U. (2018). Impact of telecommuting on employees' performance. *Journal of Economics and Management Sciences*, 54.
- Pagdonsolan, M. M., Balan, D. J., Mariscal, K. D., & Chiu, J. L. (2020). Impact of continuous performance management on job autonomy, motivation, and turnover intention of employees in multinational companies within Metro Manila. *Review of Integrative Business and Economics Research*, 9(2), 63-89.
- Roniyah, S., Santosa, H., & Tantri, F. (2019). The influence of instructional leadership on teachers discipline and productivity in police language school. *International Journal of Education, Information Technology and Others*, 2(1), 57-65.
- Rudito, P., & Sinaga, M. (2017). *Digital mastery: Membangun kepemimpinan digital untuk memenangkan era disrupsi*. Jakarta: Gramedia Pustaka Utama.
- Rybnicek, R., Bergner, S., & Gutschelhofer, A. (2019). How individual needs influence motivation effects: A neuroscientific study on McClelland's need theory. *Review of Managerial Science*, 13(2), 443-482.
- Selvarajan, T. T., Singh, B., & Solansky, S. (2018). Performance appraisal fairness, leader member exchange and motivation to improve performance: A study of US and Mexican employee. *Journal of Business Research*, 85, 142-154.
- Shaban, O. S., Al-Zubi, Z., Ali, N., & Alqotaish, A. (2017). The effect of low morale and motivation on employee

- productivity and competitiveness in Jordanian companies. *International Business Research*, 10(7), 1-7.
- Shafi, M., Lei, Z., Song, X., & Sarker, M. N. (2020). The effects of transformational leadership on employee creativity: Moderating role of intrinsic motivation. *Asia Pacific Management Review*.
- Sitthiwarongchai, C., Wichayanuparp, W., Chantaki, P., & Charoenboon, P. (2020). Impact of organization's leadership style on motivation of its employees. *Systematic Reviews in Pharmacy*, 11(3), 48-56.
- Troup, C., & Rose, J. (2012). Work from home: Do formal or informal telework arrangements provide better work-family outcomes? *Community, Work, and family*, 15(4), 471-486.
- Tseng, S. T., & Levy, P. E. (2019). A multilevel leadership process framework of performance management. *Human Resource Management Review*, 29(4).
- Westerman, Bonnet, & McAfee. (2014). *Leading digital: Turning technology into business transformation*. HBR Press.
- Wren-Lewis, S. (2020). The economic effects of a pandemic. In R. Baldwin, & B. Mauro, *Economics in the time of Covid-19* (pp. 109-112). CePR Press.
- Zehira, C., & Narcikara, N. (2016). Effects of resilience on productivity under authentic leadership. *Procedia-Social and Behavioral Sciences*, 250-258.
- Zeike, S., Bradbury, K., Lindert, L., & Pfaff, H. (2019). Digital leadership skills and associations with psychological well-being. *International Journal of Environment Research and Public Health*. doi:http://dx.doi.org/10.3390/ijerph16142628

THE INFLUENCE OF ISLAMIC RELIGIOSITY ON TURNOVER INTENTION USING SUBJECTIVE WELL-BEING AS INTERVENING VARIABLE AT BANK X HEAD OFFICE

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ABSTRACT

Based on the provisions of the Islamic religion, conventional banking which involves interest or usury results in increased turnover rates in Bank X from 1.22% to 2.97%. The results of the author's observations in gathering facts on the problem of finding former employees of banking companies through the anti-usury community. The reasons of resigning from banking companies because they do not feel happy and do not feel meaningful in working based on the provisions of Islam.

The research method used in this research is quantitative research methods. For the data filling method, the writer distributed questionnaires to 338 respondents. The questionnaire has 34 questions on a 5-point Likert scale. The sampling method used was purposive sampling. Due to the large population, this study also uses cluster sampling, where samples will be taken in each area or group. In explaining the results of this study, researchers used data analysis techniques is path analysis.

This study has the result that there is an effect of Islamic religiosity on turnover intention through subjective well-being. Islamic religiosity has a significant negative effect on subjective well-being. Subjective well-being has a significant negative effect on turnover intention. Islamic religiosity has a significant positive effect on turnover intention.

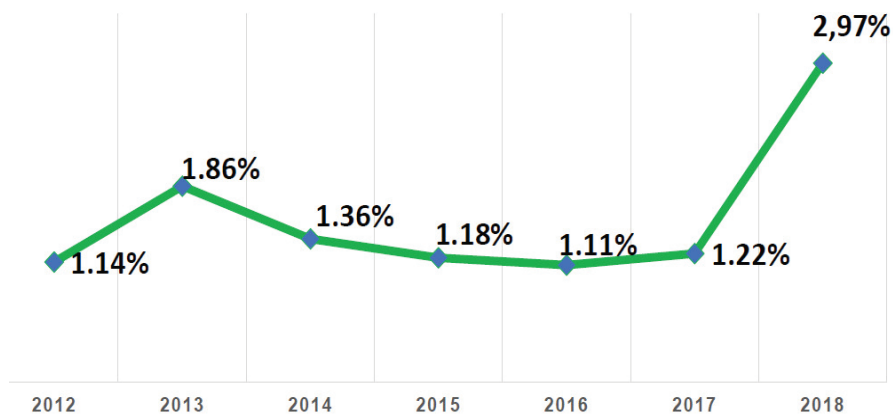
Keywords: Islamic Religiosity; Turnover Intention; Subjective Well-Being; Banking Sector

1. INTRODUCTION

In modern times, relying heavily on technology today affects that information is always moving quickly to be accepted by every human being. Dawah media are increasingly accessible and can be guidelines and changes in human mindset. Islam teaches all its people to obey every rule taught, one of the teachings believed by adherers of Islam is about the issue of compassion or flowering (interest). This order of prohibition of usury is conveyed through the Qur'an (QS Ar-Rum:39, QS An-Nisa:160-161, QS Ali Imron:130 and QS Al Baqarah:278-280). In addition, MUI fatwa No. 1 of 2004 concerning bank interest decided that the practice of flowering is legal, whether done by banks, insurance, capital markets, pawnshops, cooperatives, and other financial institutions or carried out by individuals. In accordance with the Order of the Quran and the explanation of MUI fatwa No. 1 Year 2004 became a guide for employees of The Islamic religion who work in conventional banking companies to leave their jobs because it is required to stay away from usury.

Turnover in general can be influenced by a variety of factors, namely organizational factors that include the size of the organization, the small size of the work unit, payroll, the weight of the workers and the leadership style. Other factors include, job satisfaction, pay, promotion, employment weight, working relatives, attachment to the organization, hope to find another job, intention to leave work, mental stress and work environment (Mobley, 2011:121). However, according to the staff of Human Capital Bank X division there is another factor that causes turnover is the religiosity factor with the resignation carried out due to the desire to change itself so as to get good blessings and practices for the future towards true Islam. This is reinforced by the fact that in 2019, Bank X experienced the highest turnover rate increase in recent years which can be seen in Figure 1.

Figure 1. Turnover Rate Bank X



Source: Company Internal Data (2019)

Previous research has also revealed a significant positive influence between religiosity and turnover intention in the banking sector. As research conducted by (Zafar et al., 2012) proves that there is a significant positive relationship between religiosity and turnover intention in the banking sector. Research conducted by (Zafar et al., 2012) is a study using exploratory studies to find out the relationship between religiosity and turnover intention in banking employees and the first study that discussed the relationship between religiosity and turnover intention in banking employees.

According to the authors' observations in gathering the facts of the problem, found the anti-usury community namely XBankIndonesia with a following of 484,000 people. In general, the reason XBankIndonesia members who are former employees of banking companies to resign is inconvenience, unhappy and have no sense of meaning (Subjective Well-Being) in the job so as to get guidance to follow the teachings and orders of Allah SWT not to earn income derived from usury or all things illegal.

However, according to human capital division staff Bank X stated that there has not been a reason to exit the company because the salary in Bank X is competitive with the market and also competitive at every level, clear career level, there are self-development opportunities, work-life balance facilitated by the company and feel meaning when sharing the company's profits to the government of the Republic of Indonesia which will be allocated again to programs for the poor or less prosperous and help improve the welfare of the Indonesian people indirectly.

According to previous research conducted by (Irwansyah, 2017) quoting from (Diener et al., 1999) confirms that the influence of religiosity can be done using intervening variables with subjective well-being because the meaning and purpose of life is often associated with religiosity and there is a positive correlation between the concept of religiosity and the concept of subjective well-being. In addition, according to research from (Gordon et al., 2018) confirms that one of the variables that can affect turnover intention is subjective well-being. However, there has been no previous research examining the effect of religiosity on turnover intentions by subjective well-being as intervening variables together.

2. LITERATURE REVIEW

Turnover intention is the tendency or intensity of individuals to leave the organization for a variety of reasons and among others the desire to get a better job (Ronald and Milkha, 2014). According to Robbins and Judge (2015), Turnover intention is a trend or level at which an employee has the possibility to leave the company either voluntary or involuntary due to the lack of attractive current work and the availability of other job alternatives.

Mobley, (2011:150) suggests, there are three indicators used to measure turnover intention, namely:

1. Thoughts to stop

It reflects individuals to think out of work or stay in a work environment. Starting with the dissatisfaction of the work felt by the employee, then the employee begins to think about leaving his current place of work resulting in a high intensity of not being present to the place of work.

2. Intention to leave

Reflects individuals looking for work in other organizations. If the employee has started to often think about getting out of his job, the employee will try to find a job outside his company that feels better.

3. Intention to find another job

Reflects the individual who intends to exit. The employee intends to leave if he or she has got a better job, sooner or later will end with the employee's decision to stay or leave his/her job.

Religio comes from the Latin religious word "religio" whose root is religare which means binding. Thus, it means that religion or religion in general has rules and obligations that must be adhered to and carried out by its adherers. All of them serve to bind a person or group of people in relation to God, fellow humans, and the surrounding world (Ghufron, 2012). Gani (2016) defines religiosity as a diversity that means covering various sides or dimensions that not only occur when a person performs ritual behavior (worship), but also performs other activities driven by supernatural forces.

According to (Djamaluddin and Saroso, 2001; cited by Gani, 2016) the dimensions of religiosity are divided into 5 dimensions, namely:

1. The Ideological Dimension

Also referred to as the dimension of faith is the degree to which one accepts dogmatic things in religion, such as belief in God, angels, heaven and hell. Although it must be acknowledged each religion certainly has a different set of doctrinal beliefs than other religions, even with its religion that sometimes seems to understand differently and is often contradictory. Basically, every religion also wants an element of obedience to every believer. As for the religion embraced by a person, the most important meaning is the willingness to obey the rules that apply in the teachings of their religion. So that belief is more of a doctrinal dimension that adheres to by adherents of religion.

2. The Ritual Dimension

Religious practice is the extent to which a person works in his or her religious rituals. The elements in this dimension include worship, culture and things that better demonstrate one's commitment to religion. The realization of this dimension is the public behavior of followers of certain religions in carrying out rituals related to religion. The dimension of practice in Islam can be done by doing prayer, reading the Quran, fasting, alms, zakat.

3. The Experience Dimension

The dimension of the experience is the feeling or experience that has been experienced and felt. For example, feeling closer to God, fearing sin, feeling his prayer granted, being saved by God.

4. Knowledge (The Intellectual Dimension)

The dimension of religious knowledge is the dimension that describes how many people know about the teachings of their religion. Especially in the dimension of religious knowledge is the dimension that describes how much a person knows about the teachings of their religion, especially in the scriptures again. At least someone who is religious should know the basics of the basics of faith, rituals, and traditions.

5. Effect (The Consequential Dimension)

Dimensions that measure the extent to which a person's behavior is motivated by religious teachings in social life, such as whether he visits his sick neighbor, helps a troubled person, donates his property, and so on. The dimension of experience refers to the feeling of having to interact with God, the experience of a person believing there has been a revelation from God, or a strong experience capable of convincing himself, for example because he is out of danger of being saved by God.

Diener (2009) argues subjective well-being is part of happiness and where the individual level assesses his quality of life as something to expect and feel positive emotions. Irwansyah (2017) subjective well-being shows how one's life satisfaction and evaluation of important life domains such as work, relationships and health.

In (Diener, 2009) confirms that subjective well-being has 2 (two) dimensions, namely cognitive dimensions and affective dimensions. The explanation of these dimensions is as follows:

1. Cognitive Dimensions

Life satisfaction is part of the cognitive dimension of subjective well-being. Life satisfaction is a person's cognitive assessment of his or her life, whether life is good or not. It is a feeling of sufficient, peaceful and satisfied from the gap between desire or need and achievement and fulfillment that has been achieved or fulfilled.

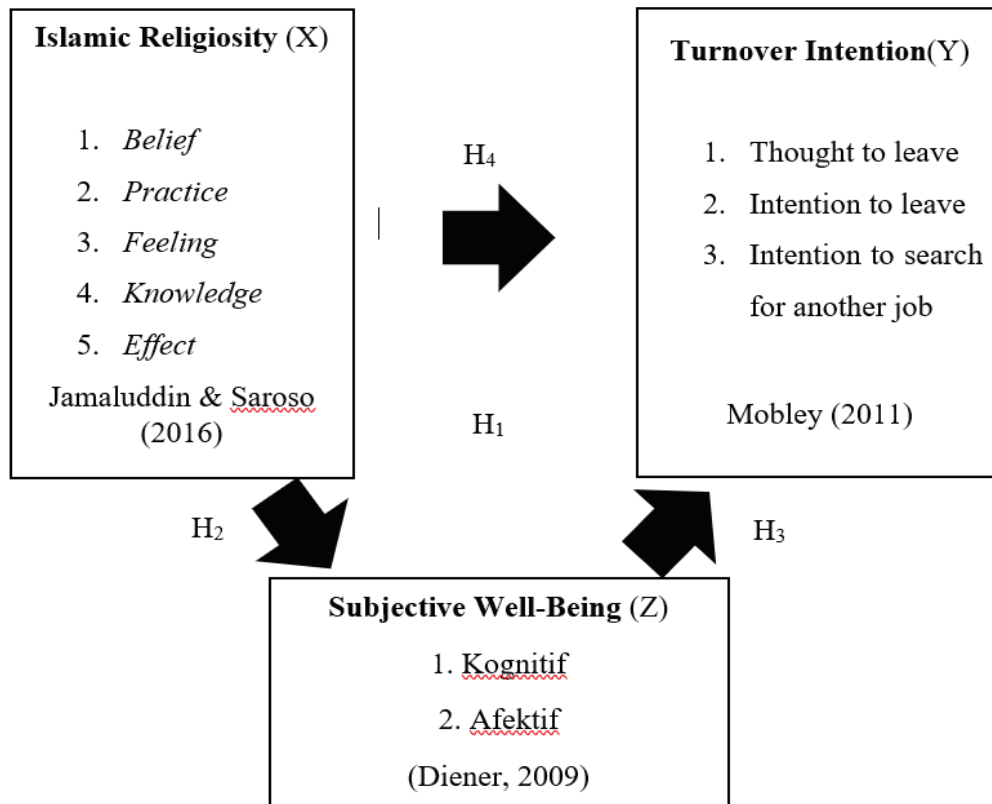
2. Affective Dimensions

The basic dimension of subjective well-being is afek, which includes pleasant or unpleasant moods and

emotions. People react with pleasant emotions when they assume something good is happening within them, and react with unpleasant emotions when they think something bad is happening to them, hence mood and emotion are not only pleasant or unpleasant but also indicated whether the event was expected or not.

Based on the previous theories and studies outlined and previously the basis for this research, the framework of this research comes from a variable measuring instrument that will be examined can be seen in Figure 2.

Figure 2. Framework



Based on previous research and the previously described frame of mind, the authors set a temporary or hypothetical conjecture as follows:

H_1 : There is an Influence of Islamic religiosity (X) on turnover intention (Y) through subjective well-being (Z).

H_2 : Islamic religiosity (X) has a significant influence on subjective well-being (Z).

H_3 : Subjective well-being (Z) has a significant influence on turnover intention (Y).

H_4 : There is an Islamic religiosity (X) influence on employee turnover intention (Y)

3. METODELOGI

3.1 SAMPLE AND DATA COLLECTION

This study selected employees working in Bank X with the criteria of being Muslim, working period of more than 3 years, work from office (research was conducted during the Covid-19 pandemic) and without coercion become respondents because the research topic is very sensitive.

In this research, it was found that the number of respondents was 338 employee who were divided into several directorates. Table 1 summarized the demographic profile of the employee sample.

Table 1. Demographic profile

Variable	Category	Number	Percentage (%)
Sex	Male	212	63
	Female	126	37
Working Period	3-5 years	118	35
	5-10 years	102	30
	10-15 years	49	15
	15-20 years	32	9
	>20 years	37	11
Directorates	Micro business	34	10
	Small, retail and medium business	33	10
	Consumers	33	10
	Human capital	31	9
	Finance	35	10
	Digital, Information Technology and Operations	42	12
	Risk Management	32	10
	Institutional and state-owned enterprises relations	34	10
	Obedience	28	8
	Network and service	36	11

Source: Authors, 2020

3.2 MEASUREMENTS

Islamic religiosity.

Islamic religiosity scale is referred to Djalamudin and Saroso (2016) including belief, practice, feeling, knowledge and effect. There are 14 items. Such as "I know that my religion prohibits usury". We used a five-point scale, ranging from 1, "strongly disagree", to 5 "strongly agree".

Turnover intention.

Turnover intention scale is referred to Mobley (2011) including thought to leave, intention to leave and intention to search for another job. There are 4 items. Such as "I often think about leaving the company". We used a five-point scale, ranging from 1, "strongly disagree", to 5 "strongly agree".

Subjective well-being.

Subjective well-being scale is referred to Diener (2009) including cognitive, positive and negative affective. There are 16 items. Such as "I live in a good and meaningful life". We used a five-point scale, ranging from 1, "strongly disagree", to 5 "strongly agree".

3.3 DATA ANALYSIS

According to Ghazali (2016:52) a validity test is used to measure whether or not a questionnaire is valid if a question on a questionnaire is able to reveal something that the questionnaire will measure. It is therefore necessary to conduct a validity test to find out how valid the instruments used in this study are.

Please explain that an indicator is said to be valid can be seen from the level of significance, if the significance ≤ 0.05 then the indicator is valid and if the significance > 0.05 then the indicator is invalid. Below the authors will describe the validity test results in Table 2.

Table 2. Validity test results

Variabel	Nomor Item	R _{tabel}	R _{hitung}	Keterangan
<i>Islamic Religiosity</i>	Item 1	0,361	0,796	Valid
	Item 2	0,361	0,392	Valid
	Item 3	0,361	0,733	Valid
	Item 4	0,361	0,862	Valid
	Item 5	0,361	0,676	Valid
	Item 6	0,361	0,594	Valid
	Item 7	0,361	0,736	Valid
	Item 8	0,361	0,805	Valid
	Item 9	0,361	0,713	Valid
	Item 10	0,361	0,765	Valid
	Item 11	0,361	0,783	Valid
	Item 12	0,361	0,758	Valid
	Item 13	0,361	0,649	Valid
	Item 14	0,361	0,681	Valid
<i>Subjective Well-Being</i>	Item 1	0,361	0,505	Valid
	Item 2	0,361	0,822	Valid
	Item 3	0,361	0,648	Valid
	Item 4	0,361	0,482	Valid
	Item 5	0,361	0,648	Valid
	Item 6	0,361	0,659	Valid
	Item 7	0,361	0,651	Valid
	Item 8	0,361	0,892	Valid
	Item 9	0,361	0,753	Valid
	Item 10	0,361	0,822	Valid
	Item 11	0,361	0,695	Valid
	Item 12	0,361	0,730	Valid
	Item 13	0,361	0,800	Valid
	Item 14	0,361	0,862	Valid
	Item 15	0,361	0,872	Valid
	Item 16	0,361	0,586	Valid
<i>Turnover Intention</i>	Item 1	0,361	0,807	Valid
	Item 2	0,361	0,860	Valid
	Item 3	0,361	0,805	Valid
	Item 4	0,361	0,800	Valid

Source: Authors, 2020

Ghozali (2016:47) says reliability is a tool for measuring a questionnaire that is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if a person's answer to a question is consistent and stable over time.

The instrument's reliability rate from the test results using the Cronbach method is determined by its correlation coefficient (Silalahi, 2015:471). If the reliability test results show $\alpha \geq 0.7$ then the instrument of that size indicates the feasibility to be used as a research size instrument and if < 0.5 then it is not feasible to be used as a research size instrument. The reliability results of using Cronbach are further described in Table 3.

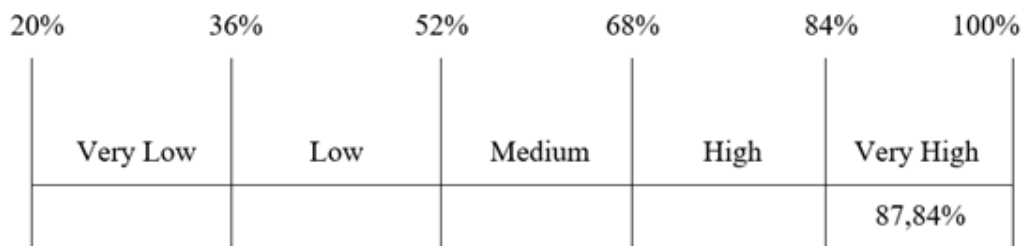
Table 3. Reliability Test Data Processing Results

Variabel	Cronbach's Alpha	Keterangan
Islamic Religiosity	0,923	<i>Reliabel</i>
Subjective Well-Being	0,935	<i>Reliabel</i>
Turnover Intention	0,886	<i>Reliabel</i>

Sumber: Authors, 2020

Based on the results of questionnaire responses on Islamic religiosity assessment in Bank X, the average score of 1484.6 from the ideal score of 1690 with a percentage of 87.84% is categorized as very high. Then it can be seen from the continuum line as follows:

Figure 3. Islamic Religiosity Continuum Line

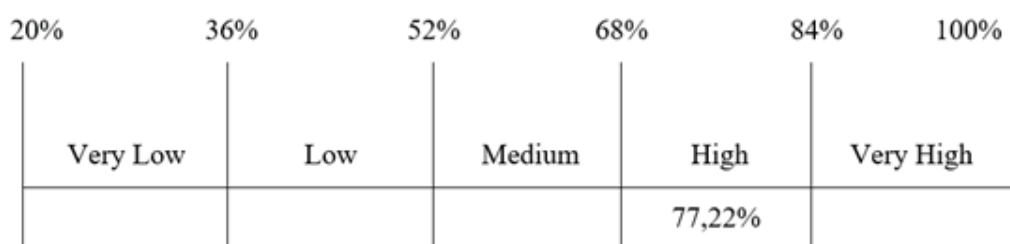


Source: Authors, 2020

The conclusion of the respondents' responses in this study can be found that at the percentage of scores, the Islamic religiosity assessment gets an average total score of 1484.6 or 87.84% and it can be found that the highest percentage is in the first question item of 94.73%, while for the lowest percentage there is on the fifth question item with a percentage of 77.69%. Based on the results of the continuum line has shown that Islamic religiosity assessment in employees at Bank X headquarters belongs to a very high category where the level of religiosity of muslims can be interpreted very highly.

Based on the respondent's response to subjective well-being, the interpretation of the score is displayed in the form of a continuum line as follows:

Figure 4. Subjective Well-Being Continuum Line

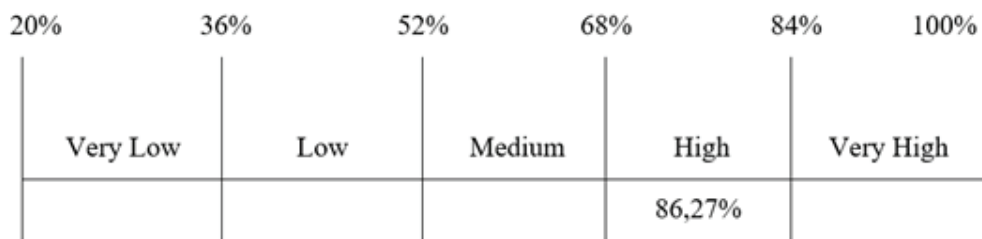


Source: Authors, 2020

In respondents' responses to subjective well-being variables it can be noted that the percentage of subjective well-being scoring scores averaged 1305.1 or 77.22% and it can be found that the highest percentage is found in sixteen question items with a percentage of 82.95%, while for the lowest percentage there is on the ninth question item with a percentage of 73.13%. Based on the results of the continuum line has shown that subjective well-being assessments on employees at Bank X headquarters fall into a high category where the subjective welfare level of the employee can be interpreted as high.

Based on the respondent's response to turnover intention, the interpretation of the score is displayed in the form of a continuum line as follows:

Figure 5. Turnover Intention Continuum Line



Source: Authors, 2020

In respondents' responses to variable turnover intentions it can be noted that the percentage of turnover intention scoring score scoring an average of 1289 or 76.27% and it can be noted that the highest percentage is in the fourth question item with a percentage of 82.60%, while for the lowest percentage there is in the second question item with a percentage of 72.30%. Based on the results of the continuum line has shown that the turnover intention assessment in Bank X employees belongs to a high category where it can be known that Bank X employees have a high tendency to leave the company.

This research uses track analysis. For track analysis testing, there are 2 path structure equations as follows:

A. Path structure Islamic religiosity to subjective well-being.

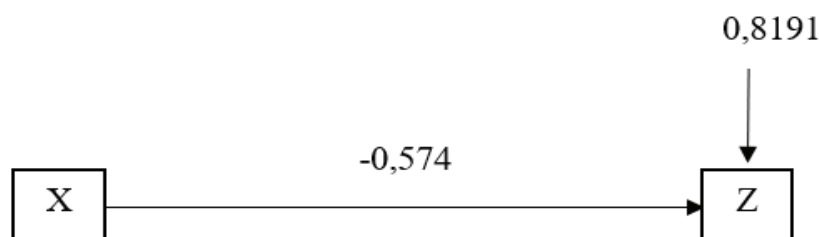
Table 4. Coefficients Islamic religiosity on subjective well-being

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	78.573	1.426		55.085	.000
Islamic Religiosity	-.315	.025	-.574	-12.844	.000

a. Dependent Variable: Subjective Well-being

Source: Authors, 2020

Figure 6. Path structure Islamic religiosity on subjective well-being



Sumber: Authors, 2020

Based on figure 6, So it can be concluded that the first path structural equation that explains the relationship between Islamic religiosity on subjective well-being is:

$$Z = -0,574 + 0,8191$$

$\rho_{zx} = -0,574$ means that the path coefficient value of Islamic religiosity variable (X) is -0,574 which has an effect on variable (Z), so the subjective well-being of Bank X will decrease by 0.574.

$\epsilon_1 = 0,8191$ means that other factors that affect subjective well-being are 0.8191.

B. Path structure Islamic religiosity on turnover intention through by subjective well-being.

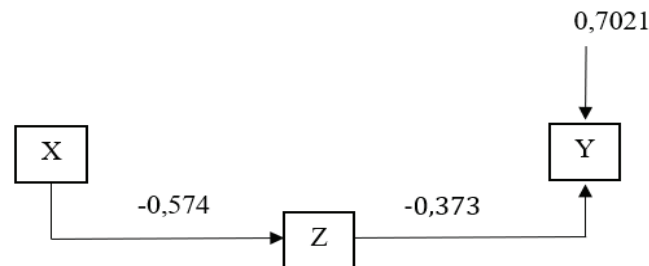
Table 5. Coefficients Islamic religiosity on turnover intention through by subjective well-being

Model		Coefficients ^a		Standardized Coefficients	t	Sig.
		Unstandardized Coefficients	Beta			
B		Std. Error				
1	(Constant)	19.283	1.433		13.459	.000
	Islamic Religiosity	.087	.009	.430	9.177	.000
	Subjective Well-being	-.138	.017	-.373	-7.955	.000

a. Dependent Variable: Turnover Intention

Sumber: Authors, 2020

Figure 7. Path structure Islamic religiosity on turnover intention through by subjective well-being



Source: Authors, 2020

Based on figure 7, So it can be concluded that the first path structural equation that explains the relationship between Islamic religiosity on turnover intention through by subjective well-being is:

$$Y = -0,574 + -0,373 + 0,7021$$

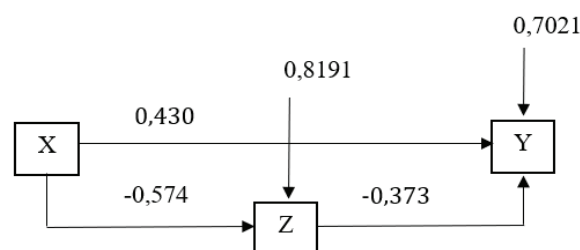
$\rho_{xz} = -0,574$ means that the path coefficient value of Islamic religiosity variable (X) is -0,574 which has an effect on variable (Z), so the subjective well-being of Bank X will decrease by 0.574.

$\rho_{yz} = -0,373$ means that the path coefficient value of *subjective well-being* is -0,373 which has an effect on variable (Y), so the *turnover intention* PT. Bank X will decrease by 0,373

$\epsilon_2 = 0,7021$ means that other factors that affect subjective well-being are 0,7021.

Overall, path analysis can be concluded that as follows figure 4.

Figure 8. Path Analysis



Sumber: Authors, 2020

Correlations were found among the three variables indicating that relationships are present. The correlation between Islamic religiosity and turnover intention directly was positive and significant ($r = 0,430$). The correlation between Islamic religiosity and subjective well-being was negative and significant ($r = -0,574$). The correlation between subjective well-being and turnover intention was negative and significant ($r = -0,373$). The correlation between Islamic religiosity and turnover intention through by subjective well-being indirectly can be calculated by $(-0,547 \times -0,373)$ and it was found positive ($r = 0,214$). Meanwhile, the effect of Islamic religiosity and turnover intention directly was higher than indirect because the correlation between Islamic religiosity and turnover intention directly is ($r = 0,430$).

To calculate how much contribution Islamic religiosity contributes to turnover intention through subjective well-being can be known in R2 model summary table as follows:

Table 6. Determination Coefficient Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712 ^a	.507	.504	2.26361

a. Predictors: (Constant), Subjective Well-being, Islamic Religiosity
Source: Authors, 2020

Based on SPSS output results, it is obtained a value of R² of 0.507 or 50.7%. This means Islamic religiosity against turnover intention through subjective well-being contributes by 50.7% while the remaining 49.3% is influenced by other variables not studied in this study.

4. RESULT AND DISCUSSION

Firstly, in this study proves that one factor in the occurrence of turnover intention is the religiosity factor in banking companies, because Islamic religiosity has a significant positive impact on turnover intention. This study has the same results as research conducted by Zafar (2012) which states that Islamic religiosity has an effect on increasing turnover intention of banking employees. This is caused to the element of usury in the line of business by banking companies.

Secondly, Islamic religiosity has a significant negative impact on subjective well-being. The higher level of Islamic religiosity will be impact to the lower level of subjective well-being. In this study, the employees of Bank X not feel comfortable and not happy while working because the prohibiting of usury in Islam. This study has the same result as research conducted by Brown and Tierney (2009) on elder people in China due the anxiety about intolerance to religious activities during the Chinese cultural revolution.

Thirdly, subjective well-being has a significant negative impact on turnover intention. The higher level of subjective well-being will be impact to the lower level of turnover intention. This study has the same result as research conducted by (Gordon, 2018; Hao, 2013; De Neve and Diener, 2013) which states that subjective well-being has an effect to decrease turnover intention. Subjective well-being is an important variable at the individual level of enterprise's staff, therefore the high level of life satisfaction and meaningfulness will decrease employee turnover intention.

Finally, subjective well-being as intervening variable role on the negative significant relationship between Islamic religiosity and turnover intention. The direct influence of Islamic religiosity on turnover intention is greater than the indirect effect through subjective well-being. That's happened because partially subjective well-being has a negative significant on turnover intention.

Although this study got some meaningful conclusions, but there is still be some limitations. First, the study related to Islamic religiosity on turnover intention in banking companies are very rare. Second, previous research on Islamic religiosity, subjective well-being and turnover intention simultaneous has not been found. Third, there is no update on previous citation, consequently we cited the research 5-15 years ago.

5. CONCLUSION

In this study, we collected data base on the field survey, used correlation and path analysis to the relationship among Islamic religiosity, subjective well-being and turnover intention. These conclusion through analysis were confirmed: Islamic religiosity has a negative significant effect on subjective well-being; subjective well-being has a negative significant effect on turnover intention; Islamic religiosity has a positive significant effect on turnover intention; Islamic religiosity on turnover intention through subjective well-being as intervening variable has a positive effect, however the direct impact is greater than indirect effect.

In this paper, we made the following comments on the practice of human resource management to reduce turnover intention:

Firstly, subjective well-being is an important factor to reduce turnover intention caused by Islamic religiosity. Enterprises should be comply the employees standard of happiness. Because, questionnaires item about happiness are lower than the others item.

Secondly, suggested evaluating the work culture slogan of Bank X. currently there are 5 cultures, there are integrity, professionalism, trust, innovation and consumer satisfaction. This work culture only focuses on improving company performance. It should also be implied that Bank X works for the country and indirectly helps the less prosperous people. So that increasing the meaning of working for employees because, the item of subjective well-being statement regarding meaningfulness "I live a good and meaningful life" can be categorized as low compared to other statement items.

And the last comment, enterprises should do evaluate the recruitment system. Example, conducted a banking perception test in Islam on recruitment process.

Suggestions given by researcher for further research, as follows:

1. In future research, it is expected to develop this research by reviewing or adding other variables such as anxiety, quality of life or work-life balance that can be affect the relationship between Islamic religiosity on turnover intention in banking companies.
2. In the upcoming research, it is expected to conduct research on Islamic religiosity in banking companies because in previous research has never been done in Indonesia. This is very unfortunate because Indonesia is a population with a majority muslim religion.

6. ACKNOWLEDGEMENT

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REFERENCES

- Al-Quran dan terjemahannya.2008 Departemen Agama RI. Bandung: Diponegoro.
- Brown, P., Tierney., B. (2009). Religion and subjective well-being among the elderly in China. *The Journal of Socio-Economics*. doi:10.1016/j.socec.2008.07.014
- Diener, E., Writz, D., Tov, W., Prieto, C, K., Choi, D, W., Oishi, S., Biswas, R. (2009). New Well-Being Measures: Short Scales to Assess Flourishing and Positive and Negative Feelings. *Springer Science Business Media*.
- Gani, M, U., Muchlis, N., (2016). Effect of Religiosity to Intention to Leave of Nursing Staffs. *Demand and Supply In Health Economics eJournal*, Vol. 9, No. 36. Hal. 1-9. ISSN: 1556-5068.
- Ghozali, Imam. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). Cetakan ke VIII. Semarang: *Badan Penerbit Universitas Diponegoro*
- Gordon, S., Tang, C. H., Day, J., Adler, H. (2018). Supervisor support and turnover in hotels, does subjective well-being mediate the relationship. *International Journal of Contemporary Hospitality Management*. doi. org/10.1108/IJCHM-10-2016-0565
- Hao, D. M., Zhu, H., Zhao, Y. (2013). Compensation Equity, Subjective Well-Being and Turnover Intention. *Sixth International Conference on Business Intelligence and Financial Engineering*. DOI 10.1109/BIFE.2013.100
- Irwansyah. (2017). Pengaruh Pelatihan Regulasi Emosi Terhadap Kesejahteraan Subjective Remaja Pondok Pesantren. *Tersedia di Database penelitian FPSI UIN Maulana Malik Ibrahim*. (Nomor: 13410145).
- Mobley, W. H. (2011). Pergantian Karyawan: Sebab, Akibat dan Pengendaliannya. *PT Pustaka Binaman Pressindo*.
- Zafar, R., Altaf, M., Bagram, M, M, M. Hussain, H. (2012). Religiosity, As Determinant of Turnover Intention: An Exploratory Study. *The Journal of Commerce*, Vol. 4, No.4. ISSN: 2218-8118, 2220-6043.

THE INFLUENCE OF ONLINE BEHAVIOR THROUGH KNOWLEDGE SHARING INTENTION ON KNOWLEDGE SHARING BEHAVIOR IN DIGITAL BUSINESS DIRECTORATE AT PT TELEKOMUNIKASI INDONESIA TBK, BANDUNG CITY

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Abstract

Purpose – *The purpose of this paper is to investigate the effects of employee behavior with variable of online behavior through the knowledge sharing intention on knowledge sharing behavior.*

Methodology - This paper proposes using the online behavior by adopting the Theory of Planned Behavior (TPB), social capital theory and information system success model, which uses a quantitative causality method.

Findings - The results reveal that attitudes towards knowledge sharing, subjective norms, website use satisfaction, perceived behavioral control, and social interaction affect the knowledge sharing intentions since the value of p-value < 0.05, while the information/knowledge quality does not since the p-value > 0.05. Information/knowledge quality, social interaction, and knowledge sharing intention affect the knowledge sharing behavior since p-value < 0.05, while perceived behavioural control does not since the p-value > 0.5.

Originality – The previous research majority focuses on the TPB and social capital theory. This study seeks to understand the significances of online behaviour affects the employee behavior of Directorate of DB PT Telkom. We realize that it is important to explain using online media in online behavior on knowledge sharing behaviour through knowledge sharing intention.

Implications - According to the research on the effect of online media in online behavior, data indicates that media YouTube not yet effective in knowledge sharing activities. In addition, data indicate that viewers run into decreased and founding that knowledge sharing activities do not related to work.

Contributions - *The findings of this study will redound to the benefit for the employees of Directors at DB PT Telkom in solving problems in online behavior. From a practical perspective, it is able to increase the level of effectiveness of the media used by the DB Directorate as a means of online knowledge sharing.*

Keywords: Theory of Planned Behavior, Social Capital Theory, Information Success Model System, Knowledge Sharing Intention, Knowledge Sharing Behavior.

1. INTRODUCTION

The current business landscape is very turbulent, global, uncertain, changing, and increasingly competitive. Hence, every company is required to innovate in the field of products and services, Directorate of Digital Business or PT Telkom's DDB continues to develop innovations through knowledge sharing activities. DDB PT Telkom is one of the Directorates in PT Telkom. DDB is a centralized Directorate which handles the implementation of business activities with a focus on managing product scooping development, especially digital product innovation through coherence innovation, discovery, incubation & acceleration (DIA) process, research, standardization & quality assurance (RSQA) process, and big data analytics.

This knowledge sharing activity was carried out on a limited basis and was intended for the DB Directorate called the Innovation Day. Innovation Day is a successful knowledge sharing activity began in 2017 and is still ongoing until 2020. Every employee has the opportunity to share knowledge, receive knowledge and experience from other employees. Besides that, PT Telkom DDB in knowledge sharing activities also brings in experts from outside the company to provide some knowledge in the field of work to improve performance and creating innovation

in each individual.

Currently, the development of information technology has provided many new opportunities. Accordingly, that knowledge exchange can take place even though it is constrained by distance, time, and place (Mao *et. al.*, 2016). One of the latest information technologies that can be used as a solution. Even as a medium for sharing knowledge is the internet with its social media facilities. Social media stores some information which, when accessed by individual serves as a source of knowledge (Ahern *et.al.*, 2016; McLaughlin & Sillence, 2018). Social media serves as a tool for fostering effective communication, interaction, and knowledge sharing at the individual, group, community, and organizational levels. The goals of Knowledge Management (KM) and social media are considered to have similarities as they both generate new knowledge and skills based on various technologies. Social media has brought changes in the way humans interact, communicate, collaborate, and share content (Ahmed *et.al.*, 2018).

DDB PT Telkom initiated the use of social media as a means of sharing knowledge among employees involved in the DB Directorate. One of the social media options for PT Telkom's DB Directorate is YouTube. YouTube is social media with a website that provides various kind of videos created by anyone. Based on Hootsuite data (2019), YouTube ranks second as the social media with the most users. There are two billion YouTube users worldwide.

The Innovation Day YouTube channel is intended for all employees of PT Telkom DDB. Innovation Day provides various kinds of videos that users can view through playlists and live streaming by distributing links to all employees. Based on data supporting the phenomenon through the Innovation Day account YouTube statistics, the number of viewers has decreased significantly; there were 671 viewers compared to 2019 which had an audience of 804 viewers. The decrease of employee interest in watching Innovation Day show. It can be seen by the number of viewers based on a theme that is only dominant in the digital product theme with a total audience of 1,206. Besides that, if it is seen based on gender preference, the male has the largest percentage, it is 67.3%. It is caused by the theme of the Innovation Day program that can not attract the attention of the entire audience segmentation, especially for women and the people under the age of 44 years old.

This means that the Innovation Day program is still not effective in developing knowledge sharing activities among employees of the DB Directorate. Impressions become less attractive or less valuable if they do not contain sufficient knowledge and are needed by employees. The low level of online activity indicates that the Innovation Day program has not been successful in facilitating online knowledge sharing. Therefore, it is necessary to conduct research to test a person's behavior carried out with online media on knowledge sharing behavior.

Based on the pre-research results, it shows that 70% of DDB employees have watched and followed the latest Innovation Day program. However, there are still employees who perceive that Innovation Day is not in accordance with their needs, namely by 30%. There are about 30% of employees stated that the impression of Innovation Day did not increase their productivity. Consequently, it is necessary to do this research to examine an individual's behavior carried out with online media on knowledge sharing behavior. Accompanied by the aim of getting an idea of how the influence of a person's behavior in sharing knowledge through online media, yet it has been done by DB Directorate employees, can be an input for policy development in increasing employee productivity and performance.

This study will examine theories related to online behavior or individual's behavior in online media using several models that integrate the Theory of Planner Behavior (Ajzen., 2004), Social Capital Theory (Chang & Chuang., 2011), Social Cognitive Theory (Chiu *et. al.*, 2006), and the Information System Success Model (ISSM) model (DeLone & McLean., 2003). The final model of online behavior in this paper is the process of assessing knowledge sharing behavior to someone by intermediating one's intention to share knowledge as a basic concept.

Therefore, it can be used as a reference for further research to test theories related to one's behavior in sharing knowledge through online media. This study will test theories related to one's behavior in online media using several models that integrate Theory of Planned Behavior (Ajzen., 2004), Social Capital Theory (Chang & Chuang., 2011), Social Cognitive Theory (Chiu *et.al.*, 2006), and the Information System Success Model (ISSM) (DeLone & McLean., 2003). The final model of this paper is PT Telkom's DB Directorwhich be the final model of online behavior in the process of assessing the behavior of PT Telkom's DB Directorate employees in sharing knowledge with YouTube online media.

2. THEORETICAL BACKGROUND

2.1 KNOWLEDGE MANAGEMENT

In the research of Ahmed *et.al.*, (2018) stated that knowledge management or KM is about building intelligence in organizations to improve one's performance in capturing, sharing, and using knowledge. Meanwhile, based on A. Arbabi (2016) by adopting the model proposed by Nonaka and Takeuchi (2001), it explained that there is

four steps model for creating knowledge, namely: socialization, combination, externalization, and internalization. Socialization is the sharing of experiences as a known process that results in the creation of subjective knowledge and defined skills. A combination is the composition of the conceptual arrangement process in the form of knowledge. Externalization is a process of externalization in which tacit knowledge can be expressed in the form of objective concepts. Internalization is an objective thought that passes through the process of objective knowledge in one's mindset.

The knowledge that is not appropriately managed and shared will result in this knowledge having no value and no use to others. Among other knowledge management processes, sharing knowledge or knowledge sharing has been identified as the most vital thing. As confessed by Asrar-ul-Haq (2016), defining knowledge sharing is part of a building that has a role in organizational success and is adopted as a survival strategy.

2.2 KNOWLEDGE SHARING

Knowledge Sharing (KS) is defined as a medium for sharing relevant organizational information, ideas, suggestions, and expertise between individuals (Podrug *et.al.*, 2017). The concept of sharing knowledge denotes the giving and receiving of information framed in context by source knowledge. Knowledge sharing is considered as an organizational routine when exchanging data, information, skills, feedback, and expertise regarding products, procedures, and processes. According to Aristanto (2017), knowledge sharing is the process of each exchanging knowledge both in tacit knowledge and explicit knowledge. This activity is closely related to increasing the ability of individuals to innovate. Capability or ability in innovation is the ability to adapt, integrate, and reconfigure all skills, functional competencies, and resources. Explicit and Tacit knowledge has a significant effect on the speed and quality of innovation.

2.3 KNOWLEDGE SHARING BEHAVIOR

Knowledge Sharing Behavior in the work environment refers to the actions of employees providing their own knowledge that is relevant for the achievement of goals and collaboration with others. It is needed when they want to solve problems and develop new ideas (Edu-Valsania *et.al.*, 2016). Related to this, according to Abd-Mutalib *et.al.*, (2019), Knowledge Sharing Behavior (KSB) is more likely about how behaviour routine of sharing what they know with everyone. Organizational management can apply knowledge sharing behavior as organizational norms or values. They will emphasize the long-term effects that will bring opportunities for every member of the organization to become part of the companies' assets.

In achieving successful knowledge sharing, it is important to understand further implications related to knowledge sharing behavior. Several challenges are leading to knowledge sharing practices. A study conducted by Nguyen *et. al.*, (2019) which identified as «major crisis barriers» for knowledge-sharing behavior which constitute individual barriers consisting of psychological ownership, lack of motivation, and lack of trust.

2.4 KNOWLEDGE SHARING INTENTION

The intention of sharing knowledge is the basis for every employee before knowledge sharing activities within the organization (Zain *et.al.*, 2019). In the first step, employees must have the intention to share knowledge before they want to share knowledge with colleagues. If employees do not, then it can be argued that the organization cannot function properly as a knowledge-based entity.

Based on a conceptual and practical perspective, understanding the influence of individuals in order to share knowledge yet how organizations can encourage the intention to share knowledge is very important (Zain *et. al.*, 2019). Sharing knowledge in organizations is very important for each individual. Since it can improve organizational performance, increase competitive advantage, organizational learning, and can trigger innovation in the organization.

2.5 ONLINE BEHAVIOR

Online behavior or individual's behavior on online media intermediaries can be influenced by several things based on the model developed. They are: Theory of Planned Behavior (Ajzen, 2004), Social Capital Theory (Chang & Chuang, 2011), Social Cognitive Theory (Chiu *et.al.*, 2006), and the Information System Success Model (DeLone & McLean, 2003). The model will be described in detail as follows:

a. Theory of Planned Behavior

The theory of Planned Behavior (TPB) consists of five components, namely attitudes, subjective norms, perceptions of behavior control, intention, and behavior (Abd-Mutalib *et.al.*, 2019). In TPB, the first three components (attitudes, subjective norms, and perceived behavioral control) are causing behavioral intention, while perceived behavioral control and intention to share are determinants of behavior. Attitude represents

one's belief in the consequences of performing instinctive behavior by evaluating actions.

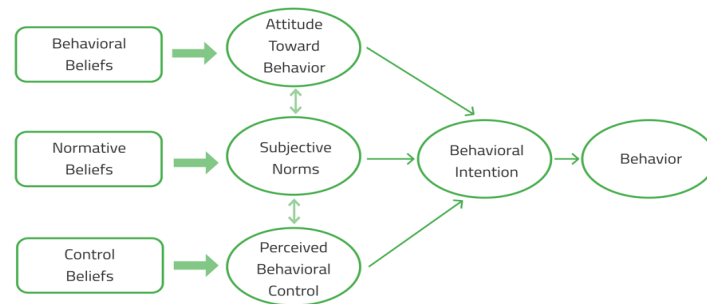


Figure 1. Theory of Planned Behavior Model, Ajzen (2004)

Source: in Xu Cheng research (2017)

Figure 1. is a Theory of Planned Behavior (Ajzen, 2004) model which has been used to study various individual behaviors in social psychology. TPB shows that intention is determined by three constructs there are attitudes, subjective norms, and perceived behavioral control. The intention is defined as readiness to engage in certain behavior. Intention can predict behavior. That is, intention indicates the likelihood that a person will perform a given behavior within a certain period based on TPB (Ajzen, 2004). An attitude refers to a positive or negative evaluation of a person in carrying out a behavior. The more positive the attitude, the stronger the intention to engage in a particular behavior. Subjective norms, or perceived social pressure, refer to an individual's perception to people who are important to them (as a role model for them). They have an ability to judge whether it is good or bad if the role model does such behavior (Ajzen, 2004). The stronger the social pressure that is felt, the greater the intention to perform certain behaviors. Perceived behavioral control refers to the ease or difficulty a person feels in performing a behavior. The greater the perceived behavioral control, the stronger the intention to perform the given behavior.

b. Social Capital Theory

Social capital or the concept of social capital has been used in various social, organizational, and management studies and at various levels of analysis (Lefebvre *et.al.*, 2016). Social capital represents the resources owned by individuals or social entities through their network of relationships (Chang & Chuang, 2006) in Lefebvre *et.al.*, (2016), the social capital theory has been defined in different ways that have been conceptualized and operationalized.

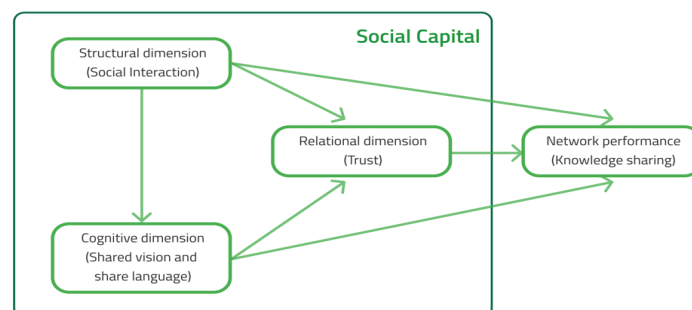


Figure 2. Social Capital Theory Model

Source: in research Lefebvre, *et.al* (2016)

Figure 2. is the research model used by Lefebvre *et.al* (2016) in a study entitled "Social Capital and Knowledge Sharing Performance of Learning Networks" by adopting the concept of social capital. One of the dimensions

contained in social capital, namely structural social capital (social interaction). It refers to the process of building and forming social bonds and having a tendency to establish a relationship. It is assumed that, when information and resources circulate through social ties, a person has the potential to gain access to other people's resources through social interactions.

c. Social Cognitive Theory

Social Cognitive Theory (SCT) is a combination of behaviorism and the concept of social learning concerned by Chiu *et.al* (Liou *et.al.*, 2016). The social cognitive theory argues that the extrinsic environment and intrinsic personal beliefs influence human behavior. Specific strategies for strengthening behavioral, emotional, observational learning, and self-control are derived from social cognitive theory concepts. People must rely on the knowledge, skills, and resources of others when they cannot complete tasks on their own. SCT is a learning theory based on the idea that people learn by observing other people (Wang *et.al.*, 2018). SCT shows how environment, behavior, and person interact with each other. This theory suggests that a wide variety of personal and environmental factors can significantly influence people's behavior.

d. Information System Success Model

In Yasa's research (2017), the Information System Success Model (ISSM) by William H. DeLone and Ephraim R. McLean is a model created to measure the success of implementing an information system. This model was first published in 1992 with the process and relationship of six variables as a measure of the success of a system, namely: system quality, information quality, use, user satisfaction, and individual impact. Individual impact, as well as the organizational impact (organizational impact). This theory was developed in 2003 by adding service quality and combining individual impact and organization impact into net benefits.

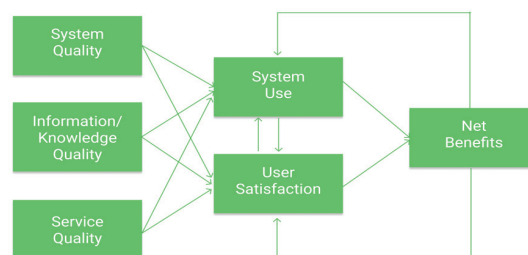


Figure 3. Information System Success Model DeLone & McLean Model (2003)

Source: in research of Rahayu *et.al* (2018)

3. RESEARCH FRAMEWORK

The research framework is a conceptual model of how theory relates to various factors that have been identified as important problems according to Sekaran in Sugioyono (2015: 91). This study uses exogenous latent variables that represent online behavior or individual's behavior through online media. In order to get knowledge-sharing behavior, exogenous latent variables include attitude toward knowledge, subjective norms, website use satisfaction, information/knowledge quality, perceived behavioral control. and social interaction. This study also uses endogenous latent variables, namely knowledge sharing behavior and intervening variables, known as knowledge sharing intention, where these variables become a link between exogenous and endogenous latent variables.

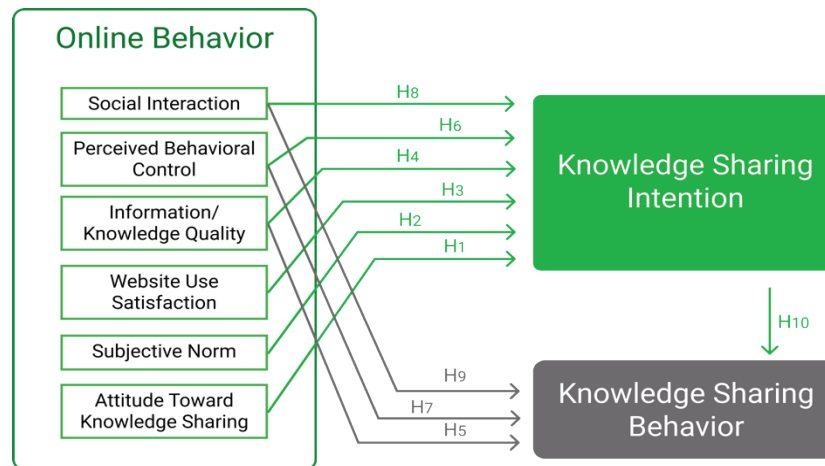


Figure 4. Research Framework

Source: Lefebvre *et.al* (2016) and Abd-Mutalib *et.al* (2019)

This study developed ten hypotheses that describe the relationship between variables in the study. Based on the formulation of the problem concerned, the research hypothesis can be formulated as follows:

- H1: Attitude Toward Knowledge Sharing has a positive effect on Knowledge Sharing Intention.
- H2: Subjective Norm has a positive effect on Knowledge Sharing Intention.
- H3: Website Use Satisfaction has a positive effect on Knowledge Sharing Intention.
- H4: Information/Knowledge Quality has a positive effect on Knowledge Sharing Intention.
- H5: Information/Knowledge Quality has a positive effect on Knowledge Sharing Behavior.
- H6: Perceived Behavioral Control has a positive effect on Knowledge Sharing Intention.
- H7: Perceived Behavioral Control has a positive effect on Knowledge Sharing Behavior.
- H8: Social Interaction has a positive effect on Knowledge Sharing Intention.
- H9: Social Interaction has a positive effect on Knowledge Sharing Behavior.
- H10: Knowledge Sharing Intention has a positive effect on Knowledge Sharing Behavior.

4. RESEARCH METHODOLOGY

This research uses quantitative methods. The quantitative method is a research method based on positivist philosophy. This method is used to research a particular population or sample to get an overview and testing of predetermined hypotheses (Sugiyono, 2018: 15). This study uses a causal relationship approach, according to Sugiyono (2016: 19), quantitative research is looking at the relationship of variables to the object under study is more causal. In order to describe the causes of a problem, whether carried out through experiment or non-experiment by paying attention to exogenous variables, endogenous variables, and intervening variables.

This study uses data analysis techniques, namely Partial Least Squares - Structural Equation Model (PLS-SEM). PLS is a part of SEM. SEM is a model that explains the relationship between latent variables and manifest variables in a structural relationship (Jogiyanto & Abdillah, 2015: 84). The author will use a variant-based SEM analysis technique in accordance with the statistical technique used is PLS. PLS analysis is used in this study since PLS can test research models that do not require normally distributed data, can model many exogenous and endogenous variables, even though the data is not normal (missing value) the results will remain solid and can examine weak theoretical foundations. It can also be used to test different types of scales, namely: nominal, ordinal, and continuous simultaneously in a study. To analyze PLS, the author will use the SmartPLS 3.0 software because the software is suitable for data exploration (Jogiyanto & Abdillah, 2015: 84).

Variable operationalization describes the variables to be studied as well as the measurement scale that will be understood in the operationalization of research variables. Has the aim to facilitate understanding and avoid differences in perceptions in research.

Table 1. Operationalization of Variables

Variable	Dimension	Indicator	Scale
Attitude Toward Knowledge Sharing (Xu Cheng, 2017)	Attitude	1 Conative	Ordinal
		2 Affective	
	Information system quality	3 Ease of user	
		4 Flexibility	
Subjective Norm (Xu Cheng, 2017)	Normative beliefs	5 Consciousness acts	Ordinal
		6 Faith acts	
	Motivation to comply	7 Secondary motive	
		8 Primary motive	
Website Use Satisfaction (Rahayu et.al., 2018)	Satisfaction of use	9 Fill in the content	Ordinal
		10 Accuracy	
	Overall satisfaction	11 Image quality	
		12 Sound quality	
Information/ Knowledge Quality (Rahayu et.al., 2018)	Punctually	13 Use of time	Ordinal
		14 Maximizing time	
	Relevance	15 Conciseness	
		16 Benefits obtained	
Perceived Behavioral Control (Xu Cheng, 2017)	Knowledge creation self-efficacy	17 Understanding ability	Ordinal
		18 Ability to produce	
	Web-specific self-efficacy	19 Confidence in information systems	
		20 Continued confidence in information systems	
Social Interaction (Lefebvre et.al., 2016)	Perceived online relationship commitment	21 The satisfaction received due to online relationships	Ordinal
		22 Commitments built on online relationships	
	Perceived online attachment motivation	23 Impulse of behavior to achieve goals	
		24 Individual willingness to act	
Knowledge Sharing Intention (Zain et.al., 2019)	Sharing experience	25 Understanding of views	Ordinal
		26 To action	
	Sharing knowledge is easy	27 Ease of receiving knowledge	
		28 Ease of sharing knowledge	
Knowledge Sharing Behavior (Abd-Mutalib et.al., 2019)	Knowledge sharing is sure improve workability	29 Happy feeling in sharing knowledge	Ordinal
		30 Positive action in sharing knowledge	
	Tacit knowledge sharing behavior	31 Individual understanding level expertise	
		32 Individual communication skills	
	Explicit knowledge sharing behavior	33 Increased productivity	Ordinal
		34 Know the destination (output)	

4.1 VALIDITY TEST

The validity test in research is used to measure whether a research instrument is valid. According to Sugiyono (2018: 193), a valid instrument means that the measuring instrument used is valid. Valid means that the instrument used is successful in measuring what it should be measured. In testing the validity of the instrument, a sample size of 30 people will be used.

Table 2. Validity Test

Variable	Item Code	Loading Factor	AVE	Evidence
<i>Attitude Toward Knowledge Sharing</i>	X101	0.573	0.555	<i>Valid</i>
	X102	0.888		
	X103	0.734		
	X104	0.751		
<i>Subjective Norm</i>	X201	0.909	0.751	<i>Valid</i>
	X202	0.836		
	X203	0.894		
	X204	0.825		

<i>Website Use Satisfaction</i>	X301	0.871	0.899	<i>Valid</i>
	X302	0.660		
	X303	0.868		
	X304	0.910		
<i>Information/Knowledge Quality</i>	X401	0.857	0.781	<i>Valid</i>
	X402	0.893		
	X403	0.901		
<i>Perceived Behavioral Control</i>	X501	0.887	0.771	<i>Valid</i>
	X502	0.869		
<i>Social Interaction</i>	X601	0.850	0.581	<i>Valid</i>
	X602	0.710		
	X603	0.745		
	X604	0.738		
<i>Knowledge Sharing Intention</i>	Z01	0.829	0.696	<i>Valid</i>
	Z02	0.840		
	Z03	0.874		
	Z04	0.766		
	Z05	0.931		
	Z06	0.750		
<i>Knowledge Sharing Behavior</i>	Y01	0.737	0.690	<i>Valid</i>
	Y02	0.856		
	Y03	0.926		
	Y04	0.791		

Based on the results of the validity test using the SmartPLS software, the indicators on eight (8) variables are declared valid, but there are several indicators when tested are invalid. Due to the outer loading value < 0.7 and the AVE value < 0.5 . According to Ghazali (2015) if there are indicators that have an outer loading value of < 0.7 but above 0.50, then the indicator is still declared valid because the theory is still in the development process. When the validity test was carried out, there were indicators with outer loading values < 0.70 but had a value above 0.50, so the researchers still included these indicators in this study.

4.2 RELIABILITY TEST

According to Silalahi (2017: 462), reliability is a tool for measuring a questionnaire as an indicator of a variable. A questionnaire is reliable if it meets the criteria for the value of Cronbach's alpha or composite reliability must be greater than 0.70 although the value of 0.60 is still acceptable (Hair *et al.*, 2008) according to Jogiyanto & Abdillah (2015: 196). In testing the reliability of the instrument, a total sample of 30 people will be used.

Table 3. Reliability Test

Variable	Alpha Cronbach	rho.A	Compostie Reliability	Evidence
<i>Attitude Toward Knowledge Sharing</i>	0.748	0.903	0.830	<i>Reliable</i>
<i>Subjective Norm</i>	0.889	0.901	0.923	<i>Reliable</i>
<i>Website Use Satisfaction</i>	0.847	0.852	0.899	<i>Reliable</i>
<i>Information/Knowledge Quality</i>	0.860	0.869	0.914	<i>Reliable</i>
<i>Perceived Behavioral Control</i>	0.703	0.705	0.870	<i>Reliable</i>
<i>Social Interaction</i>	0.760	0.781	0.847	<i>Reliable</i>
<i>Knowledge Sharing Intention</i>	0.911	0.916	0.932	<i>Reliable</i>

Based on the results of the validity test that has been done previously, the author found a condition where the outer loading value is < 0.70 but has a value above 0.50. It is still declared valid because the theory is still in the development process to be tested (Ghozali, 2015). The same is the case with the reliability test if the

indicator value is declared valid and fulfilled, so when the reliable test is carried out, it has a reliable indicator value (Cooper *et al.*, 2006).

5. DISCUSSION AND RESEARCH RESULTS

5.1 COEFFICIENT OF DETERMINATION (R^2)

Table 4. r-square results

	r-square	r-square Adjusted
Knowledge Sharing Intention	0,796	0,790
Knowledge Sharing Behavior	0,857	0,854

Based on table 4 regarding the results of the R^2 test that has been carried out on the intervening variable (Z) and the endogenous variable (Y), it is found that knowledge sharing intention (Z) has a strong degree of accuracy with an r-square adjusted value of 0.790, while knowledge sharing behavior (Y) also has a strong degree of accuracy with an r-square adjusted value of 0.854.

5.2 HYPOTHESIS TEST RESULTS

To examine the hypothesis using the simultaneous t-statistic test, which is intended to investigate the effect of exogenous variables (X) through intervening variables (Z) on endogenous variables (Y). This test is done by comparing the T value generated by the calculation of the t-statistic value with the t-table value. The research hypothesis will be accepted if the t-statistic > t-table, otherwise, the hypothesis is rejected if the t-statistic < t-table (Hair *et al.*, 2017). This study will use a 95% confidence level with an error rate of 5% and is one-tailed. The number of samples used in this study was 190 respondents.

This study also examines the inner model to explore the level of significance. It can be concluded that there is a significant effect of exogenous variables on endogenous variables through intervening variables. Meanwhile, the strong influence of the relationship between variables can pay attention to the p-value and the patch coefficient value. If the p-value < 0.05, this variable has a significant effect. Conversely, if the p-value > 0.05, then this variable has no significant impact (Hair *et al.*, 2017).

Table 5. Direct Effect Hypothesis Test Results

Statistic Hypothesis	The Relationship	P a t h Coefficient	t-statistic	p-values	Evidence	Effect
H ₅	Information/Knowledge Quality has a positive effect on Knowledge Sharing Behavior	0,183	3,010	0,001	Accepted	Significant
H ₇	Perceived Behavioral Control has a positive effect on Knowledge Sharing Behavior	0,010	0,156	0,438	Rejected	Not Significant
H ₉	Social Interaction has a positive effect on Knowledge Sharing Behavior	0,187	2,663	0,004	Accepted	Significant
H ₁₀	Knowledge Sharing Intention has a positive effect on Knowledge Sharing Behavior	0,605	9,053	0,000	Accepted	Significant

Based on table 5. related to the results of the direct effect hypothesis test, it can be seen that information/knowledge quality has a positive effect on knowledge sharing behavior since the p-value is: $0.001 < 0.05$. It can be interpreted that the quality of information from Innovation Day show has an influence on the behavior of DDB employees to watch this show. Where to seek knowledge and information has become a habit for DDB employees. Based on the results of Assegaf's research, 2017 states that information/knowledge quality has a contribution to the success or failure of using an information system and shows that the use of social media is mainly influenced by the quality of information available.

Perceived behavioral control does not have a positive effect on knowledge sharing behavior because the p-value: $0.438 > 0.05$. It can be interpreted that DDB employees do not have control over perceived behavior in an attempt to watching Innovation Day show. In view of the fact that some respondents have difficulty getting access or forgetting the Innovation Day broadcast schedule.

Social interaction has a positive effect on knowledge sharing behavior since the p-value is: $0.004 < 0.05$. Social interaction refers to the process of building and forming social bonds and having a tendency to have a relationship. It is assumed that, when information and resources circulate through social ties, a person has the potential to gain access to other people's resources through social interactions (Lefebvre *et.al.*, 2016). This can be interpreted that the social ties of DDB employees are strong, causing an individual to behave to watch Innovation Day show.

Knowledge sharing intention has a positive effect on knowledge sharing behavior on account of the p-values: $0,000 < 0.05$. Previous research conducted by Gunawan *et.al.* (2017) revealed that in general, the intention to share knowledge would shape knowledge sharing behavior. It can be interpreted that DDB employees who have the intention are willing to perform certain behaviors to watch Innovation Day show.

Table 6. Hypothesis Test Results of Indirect Effects through Mediation

Statistic Hypothesis	Relationship	Path Coefficient	t-statistic	p-values	Evidence	Effect
H ₁	Attitude Toward Knowledge Sharing has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	-0,116	1,914	0,028	Accepted	Significant
H ₂	Subjective Norm has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	0,227	2,658	0,004	Accepted	Significant
H ₃	Website Use Satisfaction has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	0,132	1,855	0,032	Accepted	Significant
H ₄	Information/Knowledge Quality has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	0,102	1,452	0,074	Rejected	Not Significant
H ₆	Perceived Behavioral Control has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	0,216	3,250	0,001	Accepted	Significant
H ₈	Social Interaction has a positive effect on Knowledge Sharing Behavior through Knowledge Sharing Intention	0,395	4,406	0,000	Accepted	Significant

Based on table 6 regarding the results of the indirect effect hypothesis testing through mediation, it can be seen that attitude toward knowledge sharing has a positive effect on knowledge sharing intention on account of the p-value: $0.028 < 0.05$. The attitude in sharing knowledge refers to a positive or negative evaluation of a person in carrying out a behavior. The more positive the intention, the stronger one's intention to engage in certain behaviors. Conversely, the more negative the intention, the weaker one's intention to engage in certain behaviors (Cheng, 2016). Based on the response of respondents as a whole that the attitude of the DB Directorate employees affects their intention to watch Innovation Day show. They find it easy to get access to watch this show, so they also feel that watching this show is easy to gain knowledge. With the ease they experience, the attitude of the DB Directorate employees refer to have positive evaluations, which results in their strong intention to watch Innovation Day show.

Subjective Norm has a positive effect on knowledge sharing intention on account of the p-values: $0.004 < 0.05$. Subjective norms or perceived social pressure refer to the individual's perception that people who are important to them think s/he should or should not do certain behavior (Cheng, 2016). The stronger the social pressure that is felt, the greater the intention to perform certain behaviors. Conversely, the weaker the social pressure, the less the intention to perform certain behaviors. It can be interpreted that the subjective norms of the DB Directorate employees affect their intention to watch the Innovation Day program. These impressions have fulfilled their needs of gaining knowledge. Gained in the current field of work and outside the field of work. DB Directorate employees feel socially pressured on people who have an important role to them, such as managers/supervisors

so that they have the urge to watch Innovation Day show.

Website use satisfaction has a positive effect on knowledge sharing intention on account of the p-values: $0.032 < 0.05$. This user satisfaction is responses submitted by users after using the information system to the extent of the performance shown by the system when the user uses the information system. This can be interpreted that the satisfaction of using the information system used in Innovation Day show, namely the YouTube media influences an individual's intention to watch this show.

Information/knowledge quality does not have a positive effect on knowledge sharing intention on account of the p-values: $0.074 < 0.05$. The quality of information or knowledge describes the presentation of information, the relevance of needs, and the ease of understanding. So it can be interpreted that the quality of information from the Innovation Day program does not influence the intention of the DB Directorate employees to watch the program. Based on the response of the respondents as a whole, according to the employees of the DB Directorate, the themes currently presented did not meet their needs. It is because the themes during the broadcast were more directed to the fields of technical work, while the employees of the DB Directorate came from different fields of work.

Perceived behavioral control has a positive effect on knowledge sharing intention on account of the p-values: $0.001 < 0.05$. Perceived behavioral control refers to the ease or difficulty a person feels in performing a behavior. The greater the perceived behavioral control, the stronger the individual's intention to perform the given behavior. Conversely, the smaller the perceived behavioral control, the weaker an individual's intention to perform the given behavior. It can be interpreted that DB Directorate employees have behavioral control that is felt in the ease of watching Innovation Day show.

Social interaction has a positive effect on knowledge sharing intention on account of the p-values: $0,000 < 0.05$. Social interaction refers to the process of building and forming social bonds and having a tendency to engage in a relationship. It is assumed that, when information and resources circulate through social ties, a person has the potential to gain access to other people's resources through social interaction (Lefebvre *et.al.*, 2016). It can be interpreted that the social ties to the employees of the DB Directorate are strong, resulting in someone having the intention of watching Innovation Day show. The interplay between employees can result in a person having high intentions.

6. CONCLUSION

Based on the results of research and discussion that has been stated previously regarding the effect of online behavior through knowledge sharing intention on knowledge sharing behavior at the DB Directorate of PT Telkom Bandung with 10 proposed hypotheses. There is a conclusion that is expected to provide answers to the objectives formulated in this study, namely that 8 out of 10 hypotheses are accepted and have influence. H_1 : Attitude toward knowledge sharing has a positive effect on knowledge sharing intention. H_2 : Subjective norms have a positive effect on knowledge sharing intention. H_3 : website use satisfaction has a positive effect on knowledge sharing intention. H_4 : Information / knowledge quality does not have a positive effect on knowledge sharing intention. H_5 : Information / knowledge quality has a positive effect on knowledge sharing behavior. H_6 : Perceived behavioral control has no positive effect on knowledge sharing intention. H_7 : Perceived behavioral control has a positive effect on knowledge sharing behavior. H_8 : Social interaction has a positive effect on knowledge sharing intention. H_9 : Social interaction has a positive effect on knowledge sharing behavior. H_{10} : knowledge sharing intention has a positive effect on knowledge sharing behavior.

This research is expected to provide answers to practical uses including the development of knowledge-sharing activities, such as PT Telkom's DB Directorate can make shows with a maximum duration of 60 minutes so that employees can focus on receiving knowledge so that it will lead to good behavior, formatting events with webinars, podcast, & talkshow, making general broadcast themes around business, digital & several special sessions for senior leader talk as an effort to provide motivation to employees.

7. LIMITATIONS AND FUTURE DIRECTIONS

The findings of this research have various implications and limitations. These limitations should be considered because they can inversely impact on the generalizability of results. The research was limited to employees of the DB Directorate of PT Telkom, Bandung city and the premiere data of the study were obtained from internal companies and distributed questionnaires. However, a mixture of diverse data collection tools, sources and analytical techniques can offer a richer explanation to future researchers about the use of social networking tools to foster knowledge sharing practices in the workplace. Additionally, the proposed conceptual framework can vary based on the culture, regions, sector and nature of organizational activities.

REFERENCES

- A.Arbabi. (2016). Study the Relation Between Nonaka and Takeuchi Knowledge Management Model and Organizational Strategic Performance from the Perspective Balanced Score Card, Vol. 12, 294-301. Obtained from *Journal of Administrative Management Education and Training*.
- Abd-Mutalib, Mohamed, & Jamil. (2019). Environmental Knowledge and Sharing Behavior of Accounting Students: From the View of a Modified Theory of Planned Behavior, Vol. 2, 51-64. Obtained from *Journal of Modern Trends in Business Research*.
- Abdillah, W., Jogiyanto., H. (2015). Partial Least Square (PLS) – Alternatif Structural Equation Modelling (SEM) dalam Penelitian Bisnis. Andi Offset. Yogyakarta.
- Ahern, L., Feller, J., & Nagle, T. (2016). Social Media As a Support for Learning in Universities: An Empirical Study of Facebook Groups, Vol. 25, 35-49. *Journal of Decision Systems*.
- Ahmed, M. (2018). SMART KM Model: the Integrated Knowledge Management Framework for Organisational Excellence. Obtained from *World Journal of Science, Technology and Sustainable Development*.
- Aristanto, D. (2017). Pengaruh Knowledge Sharing terhadap Individual Innovation Capability dan Kinerja Karyawan, Vol. 5, No. 2, 1539-1545. Obtained from *Journal of EMBA*.
- Asrar-ul-Haq, M., & Anwar, S. (2016). A Systematic Review of Knowledge Management and Knowledge Sharing, Vol. 3, No. 1. Obtained from *Cogent Business & Management*.
- Assegaff, S. (2017). Evaluasi Pemanfaatan Media Sosial sebagai Sarana Knowledge Sharing, 16(3), 271-293. *Jurnal Manajemen Teknologi*.
- Cheng, E. (2016). Intentions to Form Project Partnering in Hong Kong: Application of the Theory of Planned Behavior. 1-8. Obtained from *ascelibrary.org* by University of Technology, Sydney.
- Chiu, C.M., Hsu, M.H., & Wang, E.T.G. (2006). Understanding Knowledge Sharing in Virtual Communities: An Integration of Social Capital and Social Cognitive Theories, Vol. 42, No. 3, 1872-1888. *Decision Support Systems*.
- Edu-Valsania, Moriano, & Molero. (2016). Authentic Leadership and Employee Knowledge Sharing Behavior: Mediation of the Innovation Climate and Workgroup Identification, Vol. 37, No. 4, 487-506. Obtained from *Leadership & Organization Development Journal*.
- Ghozali, I. (2015). Model Persamaan Struktural Konsep dan Aplikasi dengan Program AMOS ver 5.0, Semarang: Badan Penerbit UNDIP.
- Gunawan, A., Fauziati, S., & Nugroho, E. (2017). Analisis Faktor-Faktor yang Mempengaruhi Knowledge Sharing (Studi Kasus di BLK Surakarta), 1-10. Obtained from Seminar Nasional XII "Rekayasa Teknologi Industri dan Informasi".
- Hair Jr, J. F., et.al. (2017). A primer on partial least squares structural equation modelling (PLS-SEM). Sage Publications.
- I Wayan Eka Saputra Yasa. (2017). Analisis Kesuksesan Sistem Informasi Manajemen Daerah dengan Mengadopsi Model DeLone & McLean, Vol. 18, 2505-2533. Obtained from *Accounting E-Journal of Udayana University*.
- Lefebvre, V., Sorenson, D., Henchion, M., & Gellynck, X. (2016). Social Capital and Knowledge Sharing Performance of Learning Networks, Vol. 36, 570-579. Obtained from *International Journal of Information Management*.
- Liou, Chih, Yuan, & Lin. (2016). The Study of The Antecedents of Knowledge Sharing Behavior, Vol. 26, No. 24, 845-868. Obtained from *Internet Research Emerald Insight*.
- Mao, Hao, H., Zhang, J., & Deng, Z. (2016). Information Technology Resource, Knowledge Management Capability and Competitive Advantage: The Moderating Role of Resource Commitment, Vol. 36, No. 6, 1062-1074. Obtained from *International Journal of Information Management*.
- Nguyen, Tuyet-Mai, Nham, Phong, Huang, & Viet Ngu. (2019). The Theory of Planned Behavior and Knowledge

- Sharing: A Systematic Review and Meta- Analytic Structural Equation Modelling, Vol. 49, No. 1, 76-94. Journal of Information and Knowledge Management System.
- Podrug, N., Filipovic, D., & Kovac, M. (2017). Knowledge Sharing and Firm Innovation Capability in Croatia ICT Companies, Vol. 38. Obtained from International Journal of Manpower.
- Rahayu, F., Apriliyanto, R., & Putro, Y. (2018). Analisis Kesuksesan Sistemn Informasi Kemahasiswaan (SIKMA) dengan Pendekatan Model DeLone dan McLean, Vol. 1, No. 1. Obtained from Indonesian Journal of Information Systems.
- Silalahi. (2017). Metode Penelitian Sosial Kuantitatif. Bandung: PT Refika Aditama.
- Sugiyono. (2015). Metode Penelitian dan Pengembangan. Bandung: Alfabeta.
- Sugiyono. (2018). Metode Penelitian Kuantitatif. Bandung: Alfabeta.
- Wang, Wu, Luo, & Li. (2018). Exploring Users' Intention to Use QQ's Various Functions based on Social Cognitive Theory. Wuhan International Conference on e-Business.
- Xu Cheng. (2017). Applying the Theory of Planned Behavior to Influence Auditors' Knowledge-Sharing Behavior. Obtained from University of South Florida Scholar Commons.
- Zain, Rozihana Shekh, et.al. (2019). Factors Affecting Knowledge Sharing Intention Among Academic Staff. Vol. 1. *Proceedings of the Second International Conference on the Future of ASEAN (ICoFA)*.

LEARNING ENGAGEMENT AND E-SATISFACTION: IMPACT OF DIGITAL LECTURING CAPABILITY ON ONLINE LEARNING EXPERIENCE

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Abstract

The Covid-19 outbreak has forced a migration of education, which initially took place centrally on the campus, to become distributed and spread to the homes. Learning engagement and e-satisfaction is becoming a crucial issue for ensuring the effectiveness of education during Covid-19. This article aims to explore further about learning engagement and e-satisfaction along with the factors that affect them. Do the perseverance of the student, collaborative learning capability, and digital lecturing capability of the lecturers have a significant impact? This article is based on a cross-sectional quantitative study, which involved 1.094 students from state, private, and foreign universities. SEM PLS and SmartPLS version 3 is utilized for constructing data analysis. The results recommend that digital lecturing skills have a dominant effect on both e-satisfaction and learning engagement of online learning arrangement. Meanwhile, student perseverance influences e-satisfaction only and collaborative learning affects learning engagement only. Based on the analysis of the results, this study will provide a comprehensive diagnosis of the effectiveness of online learning experiences which will later become new research findings in the form of strategic solution for improve the effectiveness of online learning in higher educational institution.

Keywords : Learning engagement, collaborative learning, e-satisfaction, digital lecturing skill

1. INTRODUCTION

Education, especially high-quality education is the right of citizens and the obligation of the Government, to prepare the nation's children to face the changing needs of the world of work and prepare themselves to face intense global competition and socio-economic changes in the world. Indonesia as part of the world community must be able to play a role in global competition in various fields, including in the field of education. Therefore, education is a long-term investment, which is not only limited to economic benefits but also whole human development. In line with the dynamic nature of society and the order of life in general, the transformation of education needs to be seen as a cycle or a continuous process to ensure that the changes made are relevant and effective in improving the quality of student learning achievement according to the expectations of the wider community.

The end of 2019 and continuing into 2020, with an end that is still yet to be determined, will always be remembered as the era of global lockdown caused by Covid-19. The resulting widespread impact is global social and economic conditions, as well as global education, which is mainly based on the urgent need to protect and save the entire academic and the nation (Dhawan, 2020). The Covid-19 pandemic has changed the way of education, both now and in the future, namely in the form of a) education processes around the world will be increasingly interconnected; b) redefining the role of the educator; c) improvement of life skills in the future; and d) opening up the wider role of technology in supporting (Afriansyah, 2020).

The form of fundamental changes in global education as a result of the Covid-19 pandemic, in particular related to (1) the way education is delivered from face to face to distance learning; (2) innovation in educational management; and (3) new ergonomics as a form of new approach due to digital gap. The transformation of education into online learning using various media (Afriansyah, 2020) is also supported by its various advantages, namely learning: accessibility, affordability, flexibility, learning pedagogy, lifelong learning that allows students to learn anytime and anywhere and is considered a panacea. in facing the biggest crisis in modern human history (Dhawan, 2020).

Acceleration of online education in the world and Indonesia desperately needs support from various parties and fields including political policy, technology support, adequate infrastructure and support from the community so that it continues to run optimally to meet the needs of society. Particularly in Indonesia, the realization of policy Number 4 of the Ministry of Education and Culture in 2020 concerning the Implementation of Education in the Covid-19 Emergency is highly dependent on factors including a) digital literacy capacity; b) inequality in supporting infrastructure for the implementation of online learning, such as internet connection, supporting equipment; c) teacher creativity in designing online learning; d) parental participation (Afriansyah, 2020).

Although online learning has become a new norm in the education system in Indonesia during the Covid-10 pandemic, there is still a gap in student expectations (which determines the level of satisfaction and learning engagement) that has not been fulfilled, namely a more interesting learning design and more ways of delivering more material. right. Particularly because the position of students in the educational process has shifted from being only passive recipients and spectators, to being active participants or partners involved in the educational process by producing decisions or understanding with educators (Speight et al, 2020). By fulfilling this gap, it is hoped that they will be able to a) encourage students to reflect on their aspirations related to learning; b) provide a conducive environment for discussing multiple perspectives; c) guide in exploring, validating and broadening perspectives; and d) guide to develop new roles (Afriansyah, 2020).

Relating to the whole above explanation, this paper aims to elaborate learning engagement and e-satisfaction as the student's response on online learning experience. This paper also supposes to examine the impact of three resources of learning experience on learning engagement and e-satisfaction. Three elaborated learning resources on this paper are personal perseverance as personal resources, collaborative learning as social resources and digital lecturing capability as institutional resources. Do personal perseverance, collaborative learning and digital lecturing skills impact on online learning experience?

2. LITERATURE REVIEW

Learning Engagement

Student involvement in the learning process, which is usually measured by student retention, learning, achievement test scores and graduation rates, has been seen as urgent especially in facing enormous global challenges and meeting educational expectations to be more able to align with the business supply chain and needs the business world and the region for the qualifications of quality graduates (Speight et al, 2020).

There are several factors that influence the retention and online learning experience of students, namely time management skills, a balance between various interests, a sense of autonomy, a sense of belonging, motivation, design and structure of education, as well as lectures and educational institutions (Farrell and Brunton, 2020).

e-Satisfaction

There are several factors that influence the retention and online learning experience of students, namely time management skills, a balance between various interests, a sense of autonomy, a sense of belonging, motivation, design and structure of education, as well as lectures and educational institutions (Farrell and Brunton, 2020). e-Satisfaction as a part of learning motivation is predicted as antecedent of learning engagement. So that's why this paper supposes to examine the impact of e-Satisfaction on learning engagement.

H1: e-Satisfaction impacts on Learning Engagement significantly

Personal Perseverance

Grit is a reflection of perseverance and enthusiasm to continue to achieve long-term goals based on talents and abilities above common standards (Duckworth et al, 2007) so that they can be an inspiration to become a better person, able to develop emotionally, take actions that may be risky and live the best life despite facing difficult challenges. Meanwhile, according to Rogers ((2017) there are several definitions of grit according to experts, namely a) diligent, conscious and personality traits (Roberts et al); b) passion and perseverance based on courage, conscientiousness, endurance, resilience and excellence (Duckworth); c) will based on the ability to complete tasks through a series of systematic steps (Deci and Ryan).

H2: Personal Perseverance impacts on Learning Engagement significantly

H3: Personal Perseverance impact on e-Satisfaction significantly

Collaborative Learning

Collaboration is a way of interaction and personal attitude in which individuals are responsible for their actions, learning, abilities and contribution to the group (Chandra, 2015) to achieve goals greater than their own achievements (Barfield, 2016). Broadly speaking, collaboration includes setting the atmosphere, relationships

among participants, types of behavior, disbursement and honor among participants (Markee and Kasper, 2004 cited by Zalyaeva; and Solodkova, 2014). Based on the description above, the following hypotheses are arranged:

H4: *Collaborative Learning impacts on Learning Engagement significantly*

H5: *Collaborative Learning impacts on e-Satisfaction significantly*

Digital Lecturing Capability

The pandemic related crises have been associated with enormous negative impacts on the health economy, society and security of national and global communities, As well, they have caused political and social disruption (Qiu et al, 2017). And although the term pandemic has not been defined by many medical texts, there are some key features of a pandemic i.e wide geographic extension, disease movement, novelty, severity, high attach rates and explosiveness, minimal population immunity, infectious and contagiousness. Pandemics also represent a serious threat not only to the population of the world, but also its economy through direct costs, long term burdens and indirect costs which further results in instability of the economy (Qiu et al, 2017).

The pedagogical role of lecturers, supported by their digital lecturing capability, is seen as the key to students' success in online learning (Bawane and Spector, 2009 cited by Muller et al, 2016). The value of technology in supporting the effectiveness of digital learning is largely determined by the extent of the authenticity and proficiency of lecturers in using it (Fulton et al., 2004 cited by A-Ruz and Khaswaneh, 2011) as well as the persuasive ability of lecturers to ensure that active learning by optimizing the use of digital facilities, is a fun thing (Speight et al, 2020).

To attract more students' interests and bridge the gap between lecturers as digital immigrants and students as digital savvy, lecturers must be able to build a nuance of the future in their learning material. In this case it is necessary to redesign existing learning content by administrators, policy makers and even the Ministry of Education, to be able to meet the expectations and challenges of increasingly dynamic developments in the digital age (Hashmi, 2018). Strategic steps to improve digital competence in education are through increasing the ability of all parties, providing access to the use of technology supporting infrastructure, and evaluating the effectiveness of using digital infrastructure (Spante et al, 2018). Thus it is hoped that the suitability of learning technology will be built, through the suitability between individual learners and the technology used, both including an understanding of technological mechanisms and learner motivation that are closely related to social psychology and cognitive theory (Yu and Yu, 2010).

H6: *Digital Lecturing Capability impacts on Learning Engagement significantly*

H7: *Digital Lecturing Capability impacts on e-Satisfaction significantly*

3. RESEARCH METHOD AND RESULT

Material and Method

This paper used the principles of partial least squares structural equation modeling (PLS SEM, variance-based SEM) and SmartPLS version 3 application as the statistic tool for testing the research model. The research model is second order which all variables reflected into dimensions and all dimensions are indicated by several items.

Collecting data is conducted by distributing online questionnaire to Binus University students and ask them to do 'snowballing' in which Binus students were asked to invite two of his/her friends who is studying in state or private universities in Indonesia or foreign university in outside Indonesia. This paper is based on quantitative study which involved 1.094 students from Binus University (54%), state universities (21%), private universities (23%), and foreign universities (2%). The respondents are dominated by female (59,2%), undergraduate student (94%), with study in business, management, and finance program (62,6%). They are in first year (35%), second year (26%), and third year (24,7%). Collected data was analyzed by Partial Least Square based Structural Equation Modelling (PLS-SEM).

The respondents are form 29 state university, 52 private universities and 19foreign universities. State university respondents are from (1) Universitas Indonesia, (2) Universitas Gadjah Mada, (3) Institut Teknologi Bandung, (4) IPB University, Universitas Padjajaran, (5) Universitas Diponegoro, (6) Universitas Brawijaya, (7) Universitas Andalas,(8) Universitas Negeri Jakarta, (9) Universitas Negeri Malang, (10) Universitas Negeri Gorontalo, (11) Universitas Sriwijaya, (12) Universitas Airlangga, (13) Universitas Udayana, (14) Universitas Jenderal Sudirman, (15) Universitas Sultan Ageng Tirtayasa, (16) Universitas Sebelas Maret, (17) Universitas Lampung, (18) Universitas Lambung Mangkurat, (19) Universitas Pendidikan Indonesia, (20) Universitas Syiah Kuala, (21) Universitas Sam Ratulangi, (22) Poltek Statistika STIS, (23) Poltek Kemenkes Semarang, (24) Poltek Kemenkes Surabaya, (25) Sekolah Tinggi Akuntansi Negara, (26) Universitas Islam Negeri Jakarta, (27) Universitas Islam Negeri Yogyakarta, (28) Universitas Halu Olee, and (29) Universitas Jambi.

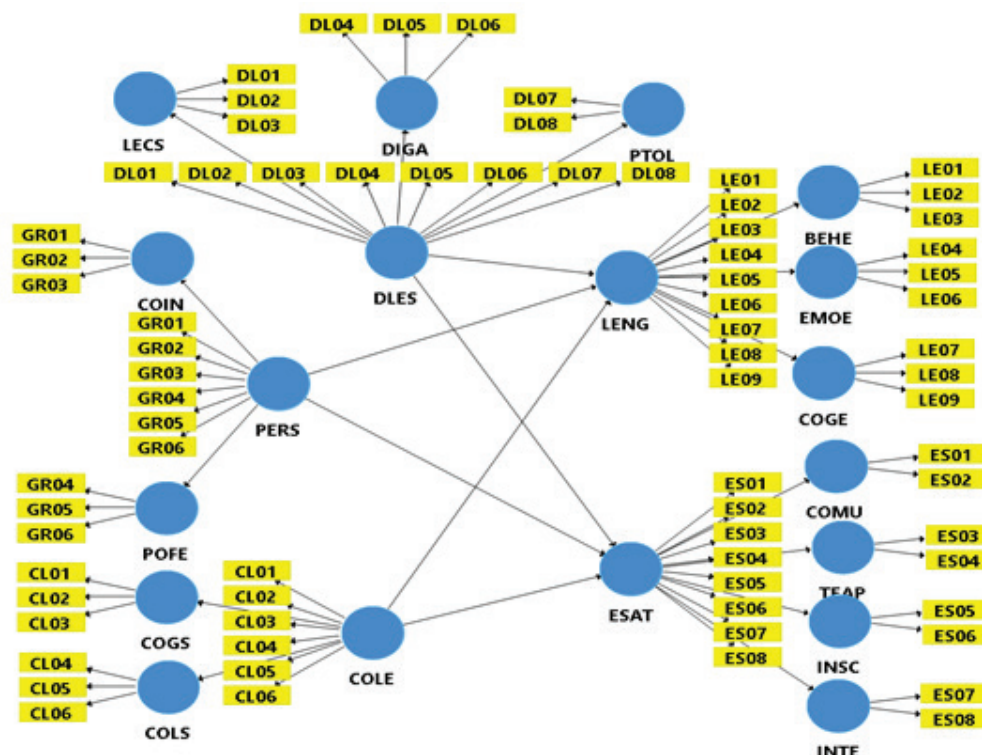
Private university respondents are from: (1) Universitas Trisakti, (2) Universitas Tarumanagara, (3) Universitas Atmajaya, (4) Universitas Mercubuana, (5) Universitas Gunadharma, (6) Universitas Parahyangan, (7) Universitas Telkom, (8) Universitas Maranatha, (9) Universitas Multimedia Nusantara, (10) Universitas Muhammadiyah Jakarta, (11) Universitas Muhammadiyah Yogyakarta, (12) Universitas Muhammadiyah Surakarta, (13) Universitas Muhammadiyah Palembang, (14) Universitas HAMKA, (15) Universitas Esa Unggul, (16) Universitas Ciputra, (17) Universitas Podomoro, (18) Universitas Pertamina, (19) Universitas Budi Mulia, (20) Universitas Budi Luhur, (21) Universitas Buddi Dharma, (22) Universitas BSI, (23) Universitas Ahmad Dahlan, (24) Universitas Al Azhar Indonesia, (25) Universitas 'Aisyiyah Yogyakarta, (26) London School of Public Relation, (27) Universitas Pradipta, (28) Universitas Ibnu Khaldun, (29) Institut Kwik Kian Gie, (30) Universitas Pamulang, (31) Universitas Pancasila, (32) Universitas Pelita Harapan, (33) Universitas Pembangunan Jaya, (34) Universitas Prasetya Mulya, (35) Universitas Nasional, (36) Universitas Trilogi, (37) Universitas YARSI, (38) UPN Veteran, (39) Universitas Sahid, (40) Universitas Sanata Dharma, (41) Universitas Islam Indonesia, (42) Universitas Kristen Indonesia, (43) Universitas Indraprasta PGRI, (44) Universitas Sarimutiara, (45) Universitas Satya Negara Indonesia, (46) Universitas Satyagama, (47) Universitas Singaperbangsa Karawang, (48) Sekolah Tinggi Filsafat Driyarkara, (49) Lasalle College Jakarta, (50) Poltek LP31 Jakarta, (51) Universitas Katholik Soegijapranata, and (52) Sekolah Tinggi Manajemen PPM.

Foreign university respondents are from (1) University of Adelaide, University of Edinburgh, (2) University of Groningen, (3) University of Melbourne, (4) University of Queensland, (5) University of Sunderland, (6) William Angliss Institute Singapore, (7) Taiwan University, (8) Tamkang University, (9) Taylor's University, (10) Tokyo International University, (11) Tokyo University, (13) Monash University, (14) Nanjing Xiaozhuang University, (15) Nicholas Alexander, (16) PSB Academy Singapore, (17) Shoreline Community College, (18) Singapore Institute of Management, and (19) SP Jain School of Global Management.

Research Model

Based on literature review, research model is developed. Figure 1 demonstrates research model holistically which all variables are developed into second order construct.

Figure 1 Research Model



Measurement Model

For second order model, measurement model is defined as logical relationship between variables and its dimensions and between dimension and its items or indicators. For being utilized in this study, the measurement model should be valid and reliable. Validity analysis is based on outer loading (OL) score for items or indicators. For dimension and variable, validity analysis is based on AVE score or Discriminant Validity. For reliability analysis on dimension and variable, it is based on Cronbach Alpha (CA) or Composite Reliability (CR) score. An item is valid,

when its OL score is more than 0,7; Table 1 show that all items in table have OL score more than 0,70. If an item has OL score less than 0,70; the items is excluded from the research model.

Table 1. Validity and Reliability Analysis

Dimension	Item	OL	CA	CR	AVE	Dimension	Item	OL	CA	CR	AVE		
LEARNING ENGAGEMENT			0,86	0,89	0,54	COLLABORATIVE LEARNING			0,75	0,84	0,57		
Behavioural Engagement	LE03	0,80	0,57	0,82	0,70	Cognitive Skill	CL01	0,74	0,71	0,84	0,63		
	LE02	0,87					CL03	0,81					
Emotional Engagement	LE06	0,66					CL02	0,84					
	LE04	0,81	0,68	0,83	0,61	Collaborative Skill	CL05	1,00	1,00	1,00			
	LE05	0,87				DIGITAL LECTURING CAPABILITY			0,91	0,93	0,62		
Cognitive Engagement	LE09	0,91	0,80	0,91	0,84	Lecturing Skill	DL02	0,81	0,76	0,86	0,68		
	LE07	0,92					DL03	0,82					
e-SATISFACTION			0,88	0,90	0,54		DL01	0,83					
Communication & Usability	ES08	0,84	0,50	0,80	0,66	DL04	0,85						
	ES07	0,85				Digital Attitude	DL06	0,87	0,84	0,90	0,75		
Teaching Process	ES05	0,88	0,80	0,91	0,83	DL05	0,88						
	ES06	0,90				Perceived Trust of Learner	DL07	0,90	0,78	0,90	0,82		
Instructional Content	ES03	0,91	0,74	0,89	0,79	DL08	0,91						
	ES04	0,91				PERSONAL PERSEVERANCE			0,53	0,73	0,35		
Interaction and Evaluation	ES01	0,73	0,61	0,84	0,72	GR01	0,69	0,52	0,76	0,51			
	ES02	0,89				Consistence of Interest	GR03				0,72		
NOTE: OL = Outer Loading; CA = Cronbach's Alpha						GR02	0,73						
CR = Composite Reliability; AVE = Average Variance Extracted						GR06	0,73						
						Persistence of Effort	GR05				0,84	0,40	0,77

A variable or dimension is valid when it has AVE score more than 0,500. According to Table 1, Learning Engagement e-Satisfaction, Collaborative Learning, Digital Lecturing Capability and all its dimensions have AVE score more than 0,500.; except Personal Perseverance. It means that all variables and its dimension are valid; except Personal Perseverance. Personal Perseverance is not valid, but all its dimensions are valid. It is a suggestion that for constructing Personal Perseverance in first order construct. For reliability test, this article used Cronbach's Alpha (CA) or Composite Reliability (CR). If a variable or dimension has CA or CR score more than 0,70; it means that variable or dimension is valid. Table 1 shows that CR score of all variables and its dimension. The scores are more than 0,70; it means that all variables and its dimension are reliable. Based on validity and reliability test; all items and dimension are valid. All variables and its dimensions are reliable.

Table 2 shows the path coefficient of variables to its dimensions. All path coefficients have t-Statistics more than 1,96 or p-Values less than 0,05. It means that all variables are reflected significantly to its dimension. The second order measurement model are relevant to be used in hypothesis testing.

Table 2. Measurement Model

Variable	Dimensions	Path Coefficient	t-Statistics	p-Values	Result
Learning Engagement	Behavioural Engagement	0,85	79,28	0,00	Significant
	Cognitive Engagement	0,86	88,38	0,00	Significant
	Emotional Engagement	0,91	129,76	0,00	Significant
e-Satisfaction	Communication and Usability	0,72	38,17	0,00	Significant
	Instructional Content	0,90	126,80	0,00	Significant
	Teaching Process	0,89	124,85	0,00	Significant
	Interaction and Evaluation	0,86	80,12	0,00	Significant

Table 2. Measurement Model

Variable	Dimensions	Path Coefficient	t-Statistics	p-Values	Result
Personal Perseverance	Consistence of Interest	0,86	60,95	0,00	Significant
	Perseverance of Effort	0,70	22,70	0,00	Significant
Collaborative Learning	Cognitive Skill	0,95	257,06	0,00	Significant
	Collaborative Skill	0,76	43,31	0,00	Significant
Digital Lecturing Capability	Lecturing Skill	0,92	126,54	0,00	Significant
	Digital Attitude	0,93	158,59	0,00	Significant
	Perceived Trust of Learner	0,90	107,13	0,00	Significant

4. RESULT AND DISCUSSTION

By using bootstrapping with 1000 subsamples; the proposed seven hypothesizes were tested. Table 3 explains that from seven hypothesizes; three hypothesizes are rejected; and four hypothesizes are accepted. Learning engagement is influenced by e-Satisfaction, collaborative learning, and digital lecturing capability. Meanwhile, e-Satisfaction is only influenced by digital lecturing capability. Digital lecturing capability influenced directly and indirectly to learning engagement.

Table 3. Hypotheses Testing

Hypothesis	Path Coefficient	t-Statistics	p-Values	Result
H1 e-Satisfaction ==> Learning Engagement	0,839	51,28	0,000	Accepted
H2 Personal Perseverance ==> Learning Engagement	0,012	0,65	0,528	Rejected
H3 Personal Perseverance ==> e-Satisfaction	-0,054	1,95	0,061	Rejected
H4 Collaborative Learning ==> Learning Engagement	0,098	4,43	0,000	Accepted
H5 Collaborative Learning ==> e-Satisfaction	-0,019	0,56	0,584	Rejected
H6 Digital Lecturing Capability ==> Learning Engagement	-0,055	2,06	0,047	Accepted
H7 Digital Lecturing Capability ==> e-Satisfaction	0,578	19,30	0,00	Accepted

The results of testing the hypothesis are depicted in Figure 2 below.

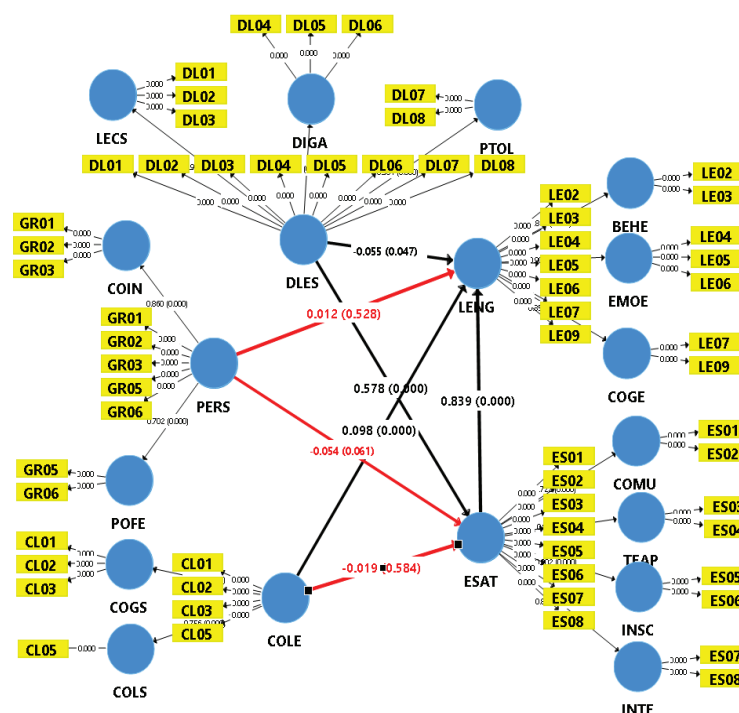


Figure 2. Computed Research Result

Online student satisfaction is one of the important factors that shape the implementation, delivery and design of online learning and almost certainly has an impact on quality. As the dependent variable, online learning satisfaction can even reveal what happens during the process in a holistic manner and can be considered as a key factor in how successful the design is, the technology chosen, the facilitator, and the form and content of the learning delivered.

The results of this study, in some ways, are in line with previous empirical studies, where online learning satisfaction is strongly influenced by personal factors of related students such as competence and self-efficacy. From the studies that have been conducted, it turns out that the level of satisfaction of students who have positive attitudes towards online technology and have adequate ICT competencies is higher than those who do not (Beqiri, Chase & Bishka, 2009). The conclusion is the same as other studies that the level of satisfaction decreased in line with the decline in ICT competence (Pena and Yeung (2010).

Meanwhile, other research reveals that the existence of self-efficacy plays an important role in acceptance and awareness of the meaning and benefits of online learning, which in turn will have an impact on student satisfaction (Jung-Wan and Mendlinger, 2011) This conclusion is supported by other researchers who found that most of the satisfaction is learners come from how students have a high level of self-confidence to learn and communicate online, have a clear awareness of what they need to progress, and have a personal self-perception about the success of online learning (Palmer and Holt, 2009).

Previous research has also found that online learning satisfaction is influenced by external factors such as interaction and learning content. Where it is concluded that online students who are actively involved in structured courses are more satisfied with the structure, while online students who are involved in interactive courses are more satisfied with interpersonal interactions (Lee & Rha, 2009). Another study also found that students value the features of the learning platform and their satisfaction can increase based on the features provided by the learning platform (Palmer and Holt (2010). Therefore, from this study, it can be concluded that the online learners' technical abilities, the teaching process, instructional content, and the usability of the learning platform and the level of interaction all have important roles in determining online learner satisfaction. The level of student satisfaction in the implementation of online learning, especially during the Covid-19 pandemic, can be explained in four aspects, namely (1) communication and usability, (2) learning content, (3) teaching process, and (4) interaction and evaluation. In addition, the level of student satisfaction in online learning is more directly affected by collaborative learning and the magnitude of the crisis. This confirms that e-Satisfaction in the online learning experience is influenced more by social resources than by personal resources. The ability of students in collaborative learning, especially in using collaborative and cognitive skills simultaneously, has a significant effect on satisfaction in the online learning experience. Students with high score grit but lacking collaborative abilities will experience dissatisfaction in online learning during the Covid-19 pandemic in Indonesia

But apart from the research results, we also assume that online learning during Covid-19 is not like the usual online learning program, because Covid-19 makes online learning unplanned or suddenly occurs in regular program students. This is because the Covid-19 pandemic was initially seen as very identical to the black swan phenomenon, namely an unexpected event of large magnitude and consequence and their dominant role in history such as the Black Death in mainland Europe in the 1930s era, swine flu, bird flu, MERS. Black swan theory was developed by Taleb (2017) to clarify a) The disproportionate role of high-profile, hard-to-predict, and rare events that are beyond the realm of normal expectations in history, science, finance, and technology; b) The non-computability of the probability of the consequential rare events using scientific methods (owing to the very nature of small probabilities); and c) the psychological biases that blind people, both individually and collectively, to uncertainty and to a rare event's massive role in historical affairs.

Although the Covid-19 pandemic subsequently categorizes as a White Swan because the scale of its impact and risk can still be determined by the success of most countries in the world controlling it, but it all depends on the ability and seriousness of the countries in the world to overcome them (Roubini, 2020). The biggest obstacle to this is because most people are trapped in a generalization paradigm that does not specifically estimate the potential for certain events, simplify the problem, categorize in general and rule out the possibility of something irrational or impossible (Winston, 2020).

Based on hypothesis testing, the magnitude of the crisis also affects e-satisfaction. During the Covid-19 outbreak, online learning was seen as something that suddenly happened, had a big impact, and conveyed the new normal in their lives. The perception of the Covid-19 outbreak as the magnitude of the crisis has an impact on student satisfaction with the online learning experience. Online learning is seen as the only alternative to maintaining learning activities during the outbreak. Online learning may not provide a comprehensive or better learning experience than in-class or offline learning, but it is still valued as an alternative available. Therefore, students are still satisfied with online learning by lowering their expectations.

5. CONCLUSION

Research Conclusion

Conclusion of Research Result

Student satisfaction on digital learning experience during Covid-19 can be predicted by social resource rather than personal resources. The ability to learning collaboratively and perception on Covid-19 as crisis magnitude will impact on the satisfaction in online learning during Covid-19 outbreak.

Implications for Future Research

Although this research may have limited sampling and also that the suitability of the framework is limited to one private university in Jakarta, Indonesia, the resulting estimation framework is quite reasonable and has the potential to be continued in the form of further studies with a wider number of respondents and variables.

Competing Interests

The authors declare that they have no competing interests

Authors' Contributions

NS: participated in its design, coordination, and critical revision. HS: participated in its design of the study, conceived of the study and paper writing. NS and HS: participated in collecting the data and performed the statistical analysis. All authors read and approved the final manuscript.

REFERENCES

- Afriansyah, Anggi. (2020). Covid-19, Educational Transformation and Its Problems. LIPI-Pusat Penelitian Kependudukan (Research Center for Population)
- Barfield, Andy. (2016). Collaboration. ELT Journal Volume 70/2 April 2016; doi:10.1093/elt/ccv074. © The Author 2016. Published by Oxford University Press;
- Beqiri, M. S., Chase, N. M. & Bishka, A. (2009). Online course delivery: An empirical investigation of factors affecting student satisfaction. *Journal of Education For Business*, 85(2), 95- 100
- Chandra, Ritu, (2015). Collaborative Learning for Educational Achievement. *IOSR Journal of Research & Method in Education (IOSR-JRME)* e-ISSN: 2320–7388,p-ISSN: 2320–737X Volume 5, Issue 2 Ver. III (Mar - Apr. 2015), PP 00-00 www.iosrjournals.org
- Dhawan, Shivangi. 2020. Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*. 2020, Vo. 59(1) 5-22 . The Author(s) 2020. Article reuse guidelines: sagepub.com/journal-permissions DOI: 10.1177/0047239502934018 journals.sagepub.com/home/ets
- Duckworth, Angela L.; Peterson, Christopher; Matthews, Michael D; and Kelly, Dennis R. (2007). Grit: Perseverance and Passion for Long-Term Goals. *Journal of Personality and Social Psychology*, 2007, Vol. 92, No. 6, 1087–1101 Copyright 2007 by the American Psychological Association 0022-3514/07/\$12.00 DOI: 10.1037/0022-3514.92.6.1087
- Farrell, Orna; and Brunton, James. (2020). A Balancing Act: A Window into Online Student Engagement Experiences. Research Article. *International Journal of Education Technology in Higher Education* (2020) 17:25. <https://doi.org/10.1186/s41239-020-00199-x>
- Hashmi, Harwati. (2018). Application of Technology in the Digital-Era Education. *International Journal of Research in Counselling and Education*. Volume 02, Number 01, 2018. ISSN: 2620-5770 (Print)-2620-5769 (Electronic). DOI:10.24036/002za002
- Jung-Wan, L. & Mendlinger, S. (2011). Perceived self-efficacy and its effect on online learning acceptance and student satisfaction. *Journal of Service Science & Management*, 4(3), 243-252.
- Lee, H.-J., & Rha, I. (2009). Influence of structure and interaction on student achievement and satisfaction in web-based distance learning. *Educational Technology & Society*, 12(4), 372–382
- Muller, Claude; Di Giusto, Flavio; Gross, Sandra; and Koruna, Stefan. (2016). Teaching in the Digital Age:

Adaptation and Competence Development for Academics Article -September 2016 DOI: 10.3217/zfhe-11-05/1

Qiu, W; Rutherfords, S; Mao, A.; and Chu, C. The Pandemic and Its Impacts. Article. Health, Culture and Society. Volume 9-10 (2016-2017), OSSN 2161-6590 (Online), DOI 10.5195/hcz.2017.221.

Palmer, S. R. & Holt, D. M. (2009). Examining student satisfaction with wholly online learning. *Journal of Computer Assisted Learning*, 25(2), 101-113.

Palmer, S. & Holt, D. (2010). Students' perceptions of the value of the elements of an online learning environment: Looking back in moving forward. *Interactive Learning Environments*, 18(2), 135-151

Pena, M. & Yeung, A. (2010). Satisfaction with online learning: does students' computer competence matter? *International Journal of Technology, Knowledge & Society*, 6(5), 97-108

Roubini, N. (2020). Coronavirus pandemic has delivered the fastest, deepest economic shock in history, *The Guardian*. <https://www.theguardian.com/business/2020/mar/25/coronavirus-pandemic-has-delivered-the-fastest-deepest-economic-shock-in-history>

Spante, Maria; Hashemi, Sylvana Sofkova; Lundin, Mona; and Algers, Anne. (2018). Digital Competence and Digital Literacy in Higher Education Research; Systematic Review of Concept Use. *Cogent Education*, 5:1, 1519143. <https://doi.org/10.1080/2331186X.2018.1519143>

Speight, Sarah; Moreira, Gillian; and Husebo, Dag. (2020). Listening to Students for Tomorrow, Today: Engaging Students to Define the Future of Higher Education. *Student Engagement in Higher Education Journal* Vol. 3, Issue 1, May 2020

Taleb, Nassim Nicholas. (2007). *The Black Swan: The Impact of the Highly Improbable (Incerto)*. New York Times.

Yu, Tai-Kuei; and Yu, Tai-Yi. (2010). Modelling the Factors that Affect Individuals' Utilisation of Online Learning Systems: An Empirical Study Combining the Task Technology Fit Model with the Theory of Planned Behaviour. *British Journal of Education Technology*. Volume 41, Number 06, 2010.

Qiu, W; Rutherfords, S; Mao, A.; and Chu, C. The Pandemic and Its Impacts. Article. Health, Culture and Society. Volume 9-10 (2016-2017), OSSN 2161-6590 (Online), DOI 10.5195/hcz.2017.221.

Winston, Andrew. Is the Covid-19 Outbreak a Black Swan or the New Normal? *MIT Sloan Management Review*. <https://sloanreview.mit.edu/article/is-the-covid-19-outbreak-a-black-swan-or-the-new-normal/2020>

Zalyaeva; E.O.; and Solodkova I.M. (2014). Teacher-student collaboration: Institute of economics and finance Kazan federal university approach, *Procedia - Social and Behavioral Sciences* ,152, 1039 – 1044

IMPROVEMENT OF PUBLIC SECTOR ORGANIZATION PERFORMANCE THROUGH INNOVATION BASED ON COLLABORATION AND KNOWLEDGE MANAGEMENT

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Abstract

The performance of public organizations in Indonesia is still weak, especially performance at the level of district / city government. The cause of the problem of organizational performance is due to issues related to innovation, collaboration and knowledge management. This study is aimed to analyze the influence of collaboration and knowledge management on innovation and its implications on organizational performance (study of the local government work unit in South Sulawesi). The method that used in this research is descriptive verification method by quantitative approach, with research data were collected by observations and questionnaires to 117 civil servant of the local government work unit in South Sulawesi using by simple random sampling. The analysis technique was using structural equation modeling by Lisrel.

The results showed that knowledge management have a significant effect on both innovation and Performance of Public Sector Organization. Likewise collaboration and innovation has a significant effect on Performance of Public Sector Organization. While collaboration does not have a significant effect on innovation and innovation can not mediated relationship among knowledge management and collaboration on performance. Implications for management: findings can be applied by government to improve organizational performance. Conclusion: results stated that to improve the organizational performance should be made by increase Collaboration, knowledge management and innovation.

Keywords: organizational performance; innovation; Collaboration; knowledge management.

1. INTRODUCTION

Indonesia is a developing country with a relatively low government performance. This statement can be seen from Global Competitiveness Index released by World Economic Forum 2017-2018 period which is put Indonesia in the 36 position from 137 countries. Even though Indonesia's position has increased compared last year's period which ranked 41st, but is still below Thailand ranked 32nd, Malaysia ranked 23rd, and Singapore at rank 3rd. The results of this survey imply that the performance of public organizations in Indonesia is still weak and is one the main factor inhibiting investment in Indonesia.

The global description above is reinforced by public performance of accountability report from the Ministry of State Apparatus Empowerment and Reform The 2017 bureaucracy which shown that public performance is mainly on District / City Government levels have not met expectations. Majority Regency / City Governments in Indonesia, amounting to 85.47% or 406 District / City Governments out of the 475 evaluated scored in under the good category or in other words only 14.63% are performing well. While the level of ministries and institutions has reached 82.93% which is categorized as good and for the level of Provincial Government has reached 64.71% are categorized as good.

The problem of the performance of public organizations has become very urgent to improvements, especially performance at the level of district / city government, given the era The decentralization, the authority, roles and responsibilities of the government district / city becomes very large and must be able to answer the demands for bringing development in all fields and public services quality as its main task as mandated in Law Number 23 of 2014 concerning Regional Government. Organizational performance is a description of the work of the organization in achieving its goals which of course will be influenced by the resources owned by the organization.

The resources in question can be physical such as human and non-physical resources such as regulations, information, and policies, so as to better understand the factors that can affect an organization's performance. Meanwhile, according to Robbins and Judge (2013) the term of organizational performance is used based on the organization of behavior theories. This theory has three important parts of the theory of organizational behavior that is input, process, and output. Input is the initial setting of the situation and the location where the process will take place. This component is defined at the beginning before the work relationship occurs. A process component is an action and decision made by the individuals, groups, and organizations involved in it as a result of input and leads to certain results. Output is the predicted outcome that is affected by some other variables.

In order to maintaining and improving organizational performance, an organization needs to continue for to do something new. These new things can be product development, process, how to market or anything else related to organizational aspects. In short, an organization needs to innovate, because according to Serrat (2017) public organization operates under an exigent set of concerns, demands, interests, pressures, and restrictions that make it a far more open—and therefore complex when not chaotic system. However, not all organizations can afford to innovate. It takes enough resources to make an innovation. For example, South Sulawesi as one of province in Indonesia has made various innovations to improve government performance. however the achievements of innovation by regional apparatus organizations in the Government Districts / Cities in South Sulawesi have not shown any results satisfying, in terms of quantity, the amount of innovation produced by the organization Regency / City regional apparatus in South Sulawesi and registered at kemenpan RB for 2018 only 116 types of innovations.

The current innovation achievements must be used as evaluation material separately for regional apparatus organizations in district / city governments in South Sulawesi province remembers several empirical studies that innovation has a positive effect on organizational performance both in the public and private sector as disclosed by Damanpour, et al (2009) and Noruzy, et al. (2013). In particular in the public sector, innovation has identified as one of the main factors in the increase and performance improvement (Osborne and Gaebler, 1992).

This poor innovation achievement occurs because it shows knowledge management in the organization Regional apparatus in South Sulawesi has not been running well. Even though, the government has issued a regulation that encouraged the government district / city to be able to implement knowledge management optimally. Various previous empirical studies have proven that knowledge management has a positive effect on organizational performance, innovation and intellectual capital in organizations (Reychav and Weisberg, 2009; Andreeva and Kianto, 2011; Noruzy, et al., 2013; Nawab, et al., 2015).

Beside knowledge management, it turns out that this innovation problem is also related to the lack of cooperation activities carried out by device organizations District / City Government areas in South Sulawesi with third parties in outside the scope of district / city government shows that collaboration on district / city government regional apparatus organizations in Sulawesi Province The South is not doing well. While some empirical research shown that collaboration has a positive effect on innovation and organizational performance in organizations (Stuart, 2000; Sanders and Premus, 2005).

Although in fact there are many other factors that affect organizational performance, based on the phenomena that found in the South Sulawesi government, it can be seen that several causes of organizational performance problems are related to innovation, collaboration and knowledge management. Low organizational performance, minimal quality and collaboration achievements of innovations that have not been as expected as described above, no can be separated from the capabilities of the Regional Apparatus Organization within implementing knowledge management that is still not optimal. Insufficient implementation of knowledge management in the organization District / City Government Regional Apparatuses can be observed from the phenomenon, poor management of complaints facilities, is less than optimal activities to explore ideas / ideas from employees, and still minimal the use of information technology in document storage. This too coupled with collaborations that have not been well implemented, are reflected through cooperative activities that have not been optimal.

2. LITERATURE REVIEW

The Grand theory that used in this study is Human Resource Management from Raymond (2015) and Dessler (2003), while Middle range theory using Organizational Behavior theory from Robbin and Judge (2012) and Cross and Carbery (2016).and Strategic Human Resources Management from Mathis and Jackson (2008) Organizational behavior theory is considered appropriate as a middle range theory because it is related with applied theory raised, namely knowledge management theory. Then Strategic Human Resources Management is considered appropriate as a middle range theory because it is related with applied theory raised, namely innovation, collaboration and performance theory.

2.1 ORGANIZATIONAL PERFORMANCE

Tomal and Jones (2015) revealed that organizational performance is the achievement or output of the organization in order to achieve the goals set, influenced by internal factors and external factors of the organization, in order to achieve organizational goals that have been set for a certain period of time. Internal factors that influence include skills, attitudes, employee motivation and performance of employees / work teams, while external factors include technological developments, changes in social and economic conditions, and customer desires. Organizational performance according to Koohang et al. (2017) is a measure of process and development in organizations, organizational performance shows how well the organization achieves its goals.

Anthony and Bhattacharyya (2010) defined organizational performance as a measure of how well the organization is run and measured from the value the organization produces to service recipients and stakeholders. Laihonon and Jaaskelainen (2013) in their article revealed that organizational performance illustrates how well the organization achieves its objectives both in the business sector and in the public sector.

2.2 DIMENSIONS OF PERFORMANCE

Measuring the performance of public organizations is important in the process of management control, especially to find out the level of achievement of organizational goals, performance measurement in public organizations will help leaders and decision makers to evaluate and improve if there are things that are not appropriate and deviate.

Items that are conditioned as dimensions of performance are mainly taken from items or scales that are widely used by previous studies as in the following table.

Table 1 Comparison of Performance Dimensions

Dimensions	Kim (2005)	Nicolas & Cerdan (2011)	Akil (2018)
Internal performance	V	V	V
Internal performance	V	V	V

2.3 INNOVATION

Borghini (2005) revealed that innovation is an effort in the framework of the discovery, experiment and development of new technologies, new products and services, new production processes, and new organizational structures, innovation related to the implementation of new ideas. Innovation is widely known as the development or use of new ideas or habits (Walker, 2006). Innovation is important in organizations because it helps organizations achieve their goals, especially in the face of competition, market changes, scarcity of resources, and the high expectations and demands of the community and other stakeholders for quality products or services (Jansen, et al., 2006).

Innovation is a new structure, a new administrative system, a new program or plan, new policies, and new products and services resulting from internal organization. Organizations give birth to innovations to respond to changes that continue to occur due to changes in the concepts of management and technology, changes in the constellation of competition, increasing community demands, or the existence of directives from organizational leaders in order to improve organizational performance (Damanpour et al., 2009).

Bloch and Bugge (2013) defined innovation in the public sector as renewal in services, operational processes, organizational methods and ways of delivering services to service recipients. Furthermore according to Drucker (2014) Innovation is the activity of creating new products, new services, new work processes, or management procedures to achieve an organization's competitive advantage or organizational goals.

2.4 DIMENSIONS OF INNOVATION

For the selection of innovation dimensions and indicators, this study refers to the dimensions suggested by Murat and Baki (2011) and Hilman and Kaliappen (2015), namely the dimensions of product / service innovation and process innovation as well as several previous studies as in the following table.

Table 2 Comparison of Innovation Dimensions

Dimensions	Mavondo et al. (2005)	Murat & Baki (2011)	Hilman & Kaliappen (2015)	Crowley & McCann (2015)
product / service	V	V	V	V
process	V	V	V	V

2.5 KNOWLEDGE MANAGEMENT

McNabb (2007) defined public sector knowledge management as an effort carried out by government institutions in managing information and knowledge, so that the information and knowledge can be used in order to resolve constraints and problems faced by organizations, as well as in terms of improving innovation and organizational performance government. Whereas Dalkir (2011) defined knowledge management as a series of systematic cycles in obtaining, creating, organizing, sharing, distributing, storing, applying, and updating all forms of knowledge in order to improve organizational performance and create value.

The next definition is expressed by Wang, et.al., (2011) who seen knowledge management as a combination of several aspects incorporated in a learning system and defines knowledge management as a system that integrates people, processes and technology in achieving sustainable performance improvement through learning. Furthermore, according to Dahiya et al. (2012) Knowledge management is a process that starts from gaining knowledge, creating knowledge, storing knowledge, sharing knowledge, and utilizing knowledge to support better productivity, improving financial performance and human resource performance, and achieving sustainable competitive advantage. A more specific view of the notion of knowledge management is outlined by Sprinkle and Urick (2018) who defined knowledge management as the process of transferring specific skills related to the performance of tasks, and also the transfer of knowledge related to organizational behavior that is relevant to the achievement of organizational goals.

2.6 DIMENSION OF KNOWLEDGE MANAGEMENT

For the selection of Knowledge Management dimensions, this study refers to the dimensions suggested by several previous studies as in the following table.

Table 3 Comparison of Knowledge Management Dimensions

Dimensions	Gholami et. al. (2013)	Seleim & Khalil (2011)	Donate & Pablo (2014)
Creating knowledge	V	V	V
Acquiring knowledge	V	V	V
Sharing knowledge	V	V	

2.7 COLLABORATION

According to Thompson (2006), Collaboration is a process of interaction between independent or semi-independent organizations through formal or informal agreements, jointly formulating common rules, patterns of mutual relations and systems of collective work related to important matters relating to mutually beneficial mutual interests. Chiocchio et al. (2012) defined collaboration as a process of mutual influence between communication, work synchronization, and cooperation of two or more entities in the context of achieving common goals. Furthermore Bedwell et al. (2012) defined collaboration as an evolving process characterized by, two or more entities actively and mutually engaging in joint activities in the context of achieving one or more shared goals.

Nissen et al. (2014) added that collaboration is a relationship that is supported by trust and dialogue between several work units in the internal organization or between organizations that work together in the context of carrying out tasks and achieving common goals. Coordination and cooperation are an inseparable part of collaboration; collaboration is a continuation of the process of coordination and cooperation. Cooperation is defined as a joint effort in achieving goals through efforts based on an understanding of the tasks and functions of the parties involved, while coordination is defined as an effort to align activities or programs in the context of achieving common goals that have been set (Gulati et al., 2012). Grimmelikhuijsen and Feeney (2016) defined collaboration in the public sector as a process of interaction and involvement of the community and stakeholders in activities that are compiled by government agencies.

Of the several definitions that have been described above and adjusted to the objects in this study, collaboration is defined as communication, coordination, and collaboration carried out by the Regional Apparatus Organization with stakeholders, other agencies both government and private agencies within and outside the scope of the Regional Government for the achievement of common goals.

2.8 DIMENSION OF COLLABORATION

This study uses inter-organizational and intra-organizational dimensions in measuring collaboration variables as used by Stank et al. (2001) because this dimension is commonly used by previous researchers to measure collaboration such as the following table.

Table 4 Comparison of collaboration Dimensions

Dimensions	Sanders & Premus (2005)	Schleimer & Shulman (2011)	Luzzini et al. (2015)
inter-organizational	V	V	V
intra-organizational	V	V	V

3. HYPOTHESIS DEVELOPMENT AND MODEL

These research are reinforced by several previous studies such as done by Yousif Al-Hakim and Hassan (2013) stated that knowledge management strategy directly influences organizational performance and also indirectly through innovation as a mediating variable. The research results of Yousif Al-Hakim and Hassan (2013) are supported Carolina and Angel (2011) research analyzing the relationship of Strategic knowledge management, corporate innovation strategy and organizational performance in 310 Spanish organizations. The results showed that both knowledge management (codification and personalization) strategies had an effect on the innovation and performance of the organization directly or indirectly. So did Gholami et al.(2013); Jyoti dan Rani (2015); Kasim (2008) stated that knowledge management influences organizational performance. Si did Angelis (2013), Alegre et al. (2011) stated that knowledge management influence innovations.

Ojasalo and Kauppinen (2016) founded that there was a positive effect of collaboration between government organizations and the private sector, non-governmental organizations, and their own communities on the process and service innovations produced by government agencies in various countries. Similarly, research conducted by Faems et. al. (2005), stated that there is a positive effect of collaboration between manufacturing companies in Belgium on the achievement of innovations of companies involved in collaboration. This opinion is also supported by research conducted by Stuart (2000) which results in the finding that collaboration between companies in the United States, Europe, and Asia has a positive effect on innovation in the companies involved in the collaboration. So did Whitford, et al. (2010), Sanders and Premus (2005).

The same research was also conducted by Abdi and Senin (2015), Toillier, et.al., (2015), Nawab, et.al., (2015) whose results supported by the previous research. Meanwhile, Odumeru (2013), Tuan, et.al., (2016), Tajuddin, et.al., (2015), Suhag, et.al., (2017), Torugsa & Arundel(2016), Noruzy et al.(2013) stated that innovation have the positive influence on performance. Further Budiarti (2017) stated that knowledge management give potential opportunities to gain innovation. Budiarta (2015) who stated that knowledge management, human capital and innovative strategy directly influenced the performance of the university.

Some previous research indicated that various research settings and present different results about the factors or variables that affect organizational performance and innovation, so from this gap researchers tried to examine more deeply the factors or variables that affect the level of organizational performance and innovation. Based on the existing phenomena, it is necessary to formulate some hypothesis as follows:

H1: There is influence of knowledge management to innovation in the Regional Government Organizations in South Sulawesi Government

H2: There is influence of collaboration to innovation in the Regional Government Organizations in South Sulawesi Government

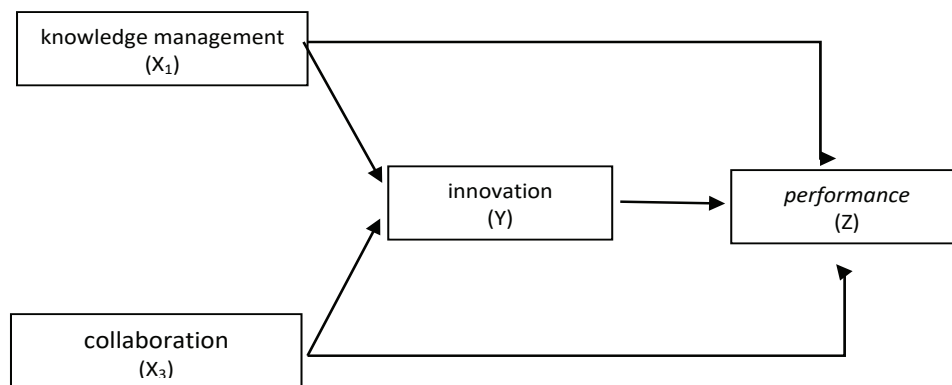
H3: There is influence of knowledge management to innovation in the Regional Government Organizations in South Sulawesi Government

H4: There is influence of collaboration to the organizational performance of the Regional Government Organization in South Sulawesi Government

H5: There is influence innovation on organizational performance in the Regional Government Organization in South Sulawesi Government

H6: Knowledge management and collaboration, either simultaneously or partially, have a positive effect on organizational performance through innovation in the Regional Government Organizations of Regency / City in South Sulawesi Province

Based on the previously described framework of thought which is based on theoretical thinking, it produces a thinking paradigm as shown in Figure 1 as follows:

Figure 1 Hypothesized model

4. METHODOLOGY

4.1 RESEARCH METHOD

Research method according to Creswell (2013) is a way to get the solution to various research problems. The research method which is used in this study is descriptive and verification research. Descriptive research used to analyze data by describing data that has been collected then will be analyzed and interpreted in accordance with the research objectives. Verification research used to test the hypothesis implemented through data collection in the field. This study aims to determine the influence of Collaboration and knowledge management on innovation and its implications on organizational performance.

4.2 DATA COLLECTION AND MEASUREMENT

The data collection method used in this research is as follows:

1. Questionnaire, which is to collect data through distribution of a list of questions to respondents from each regional apparatus organization as previously described.
2. Literature study, namely the collection of secondary data that is considered relevant with this research both sourced from reports and agency documents government, laws and regulations, books and scientific journals.

While the analysis unit in this research is South Sulawesi Government and observation unit is the local government work unit in South Sulawesi. So, the populations which are used in this research are employees in the environment of South Sulawesi Government. Because this research is a pre-survey research then the research sample is done by simple random sampling and got 117 samples according to the minimum requirement of research.

The measurement tool that used in this research is questionnaire that contain variable which is measured by using a Likert scale (scale of measurement that used to measure the respondents' responses to the research object), this scale requires respondents to choose whether they agree or disagree with a series of statements about the variables used in the study using a value of 1 to 5 categories of responses ranging from strongly agree to strongly disagree.

4.3 DATA ANALYSIS

Data analysis and interpretation will be used in this research to answer research questions and hypothesis. So the data analysis is using the causality or relationship model and to test the proposed hypothesis, the analysis technique used is path analysis by SEM (Structural Equation Modeling), because according to Ferdinand (2006) SEM is a combination of factor analysis and multiple regression analysis (Its use in this study is very appropriate because this research is a social research that uses latent variables (variables that cannot be measured directly).

Before analyzing the data obtained from the questionnaire, the data is first tested for validity and reliability to determine whether the variables used are valid and suitable for use. The results of the validity and reliability tests can be seen in the following table.

Table 5 Result of Validity Test

Dimensions	Indicators	Correlations (r)
Knowledge Management		
Creating knowledge	Get ideas from employees (Mp1.1)	.501**
	Get information from service recipients (Mp1.2)	.538**
	Management of complaint facilities (Mp1.3)	.676**
Acquiring knowledge	Document (Mp2.1)	.609**
	Education and training (Mp2.2)	.563**
	Comparative study (Mp2.3)	.630**
	Expert input (Mp2.4)	.557**
Sharing knowledge	Sharing knowledge in organization (Mp3.1)	.580**
	Sharing knowledge in teamwork (Mp3.2)	.555**
	Facilitate the process (Mp3.3)	.538**
Keeping knowledge	Keeping document (Mp4.1)	.517**
	Using of information technology (Mp4.2)	.444*
	Information access (Mp4.3)	.536**
Using knowledge	Decision making (Mp5.1)	.547**
	Overcoming obstacles (Mp5.2)	.551**
	Development of work processes and services (Mp5.3)	.454*
Collaboration		
Intra-organizational	Intra-organizational communication (Ki1.1)	.613**
	Intra-organizational coordination (Ki1.2)	.630**
	Sharing Intra-organizational resources (Ki1.3)	.513**
	Intra-organizational cooperation (Ki1.4)	.635**
	Strategy alignment (Ki1.5)	.479**
Inter-organizational	Inter-organizational communication (Ki2.1)	.513**
	Inter-organizational coordination (Ki2.2)	.571**
	Sharing Inter-organizational resources (Ki2.3)	.448*
	Community and stakeholder involvement (Ki2.4)	.532**
	Inter-organizational cooperation (Ki2.5)	.512**
Innovation		
Service Innovation	New types of services (In1.1)	.561**
	Development from old service (In1.2)	.687**
	Updates to service access ways (In1.3)	.637**
Process Innovation	Update work procedures (In2.1)	.594**
	Use of information technology (In2.2)	.478**
	Change of work team (In2.3)	.659**
	Change in the allocation of organizational resources (In2.4)	.608**
Performance		
Internal performance	Work process improvement (1.1)	.628**
	Output performance (Ko1.2)	.634**
	Quality of work programs (Ko1.3)	.628**
	Quality of use of budget (Ko1.4)	.604**
External performance	Service quality (Ko2.1)	.586**
	outcome performance (Ko2.2)	.638**
	Service recipient satisfaction (Ko2.3)	.588**
	Responsiveness (Ko2.4)	.658**

From the results of the validity test of the data obtained, it can be concluded that the product moment correlation value (r) of all indicators or question items is above 0.3 and is significant at the 95% degree of confidence so that it can be concluded that all indicators are valid and multicollinearity does not occur.

Table 6 Result of Reliability Test

Variables	Reliability value	Statement
Knowledge management	0,842	Reliable
Collaboration	0,730	Reliable
Innovation	0,701	Reliable
Performance	0,770	Reliable

Based on the results of the reliability test as outlined above, the Cronbach's alpha value for all latent variables is greater than 0.7 and from the categorization results according to table 3.9, it is known that the Cronbach's alpha value of knowledge management variables is classified as good, while the other four variables are categorized as quite good. So it can be concluded that all the instruments describing the variables are reliable

While, a goodness of fit indicator is used to assess the suitability of the entire model can be seen as following table:

Table 7 Empirical Model of Goodness of Fit

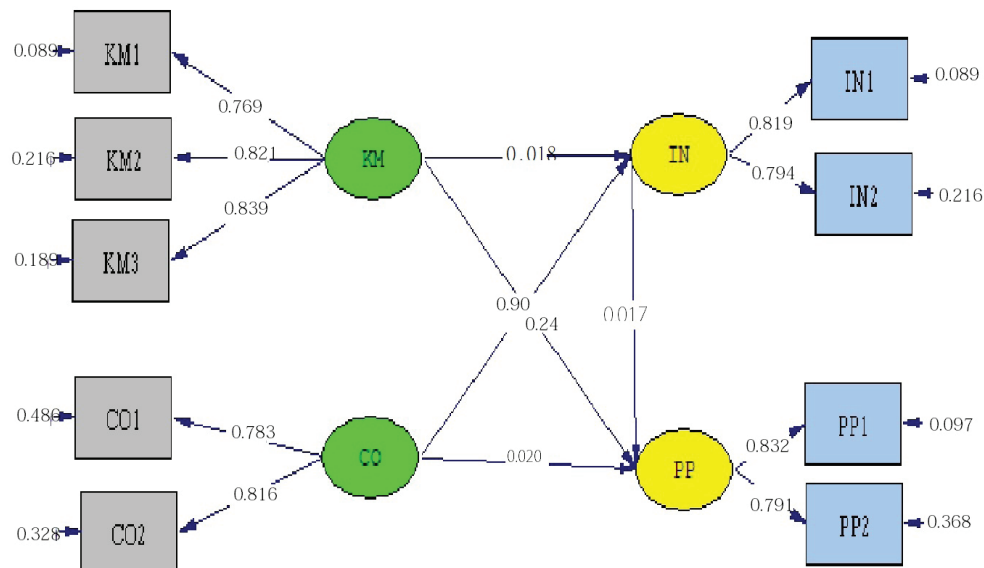
No	Indicators	Cut-off	Calculate	Conclusion
1	Chi-Square	< 279,287 df 242	137,731	Good
2	Probability	³ 0.05	0,073	Good
3	RMSEA	£ 0.08	0,041	Good
4	GFI	³ 0.90	0,884	Marginal
5	AGFI	³ 0.90	0,845	Marginal
6	CMIN/df	≤2,00	1,198	Good
7	TLI	³ 0.95	0,980	Good
8	CFI	³ 0.95	0,983	Good

Form result of data, it can be shown that the model meets the fit criteria, the result of chi-square test in full model obtained chi-square value of 1,377,014 > 137,731 (chi square output). The results show that the overall model meets the fit model criteria. A probability value of 0.073 which is above 0.05 and most other criteria that meets most well. These results show that the overall model in the fit model criteria.

5. FINDINGS AND DISCUSSION

The results of structural modeling based on the results of SEM analysis using the Lisrel software can be seen in the following figure:

Figure 2 Standardize Model Structural



From figure above

$$IN = 0.018 \cdot KM + 0.90 \cdot CO, \text{ Errorvar.} = 0.19, R^2 = 0.81$$

$$\begin{matrix} (0.041) & (0.055) & (0.085) \\ 2.44 & 0.38 & 2.22 \end{matrix}$$

$$PP = 0.017 \cdot IN + 0.24 \cdot KM + 0.020 \cdot CO, \text{ Errorvar.} = 0.95, R^2 = 0.054$$

$$\begin{matrix} (0.30) & (0.081) & (0.24) & (0.54) \\ 2.057 & 2.95 & 2.081 & 1.74 \end{matrix}$$

We applied the measurement model results to evaluate the structural model (Figure 2) after the SEM analysis. Table 6 reports the statistical significance of the standardized regression weights (t-values) for the hypotheses, as well as the R² values for the endogenous variables.

Table 8 Structural model results: direct hypothesis tests

Variables			T-count	t-table	Hypothesis
KM	-->	IN	2.44	1,960	Significant
CO	-->	IN	0.38	1,960	Not significant
KM	-->	PP	2.95	1,960	Significant
CO	-->	PP	2.081	1,960	significant
IN	-->	PP	2.057	1,960	significant

Table 9 Mediating effect of job satisfaction

Variables			Sobel Value	Mediating
KM	IN	PP	1.88	Not Mediating
CO	IN	PP	0.37	Not Mediating

Based on Table 8, shown that the perception of respondents on knowledge management has a positive and significant effect on innovation. It can be seen from path coefficient marked positive 0.018 with t-value $2.44 > 1,96$, its means hypothesis of this research acceptable. These findings support the research of Yousif Al-Hakim and Hassan (2013) are supported Carolina and Angel (2011), Abdi and Senin (2015), Toillier, et.al., (2015), Nawab, et.al. (2015), Angelis (2013), Alegre et al. (2011) stated that knowledge management has a positive and significant effect on innovation

Based on Table 8, shown that the perception of respondents on Collaboration has positive and not significant effect on innovation. It can be seen from path coefficient marked positive 0.90 with t-value $0.38 < 1,96$. Thus the hypothesis of this study is not acceptable. This research is no support research by Stuart (2000) and Faems et. al. (2005), Hartley et al. (2013), Ojasalo dan Kauppinen (2016), found that there is a positive effect of collaboration on the achievement of innovations. The insignificance that occurs between collaboration on innovation can be due to a lack of trust and openness in sharing information, as well as the existence of competition in the learning process from parties involved in collaboration

Based on Table 8, shown that the perception of respondents on knowledge management has a positive and significant effect on performance. It can be seen from path coefficient marked positive 0.24 with t-value $2.95 > 1,96$, its means hypothesis of this research acceptable. These findings support the research of Yousif Al-Hakim and Hassan (2013), Carolina and Angel (2011), Abdi and Senin (2015), Toillier, et.al., (2015), Nawab, et.al., (2015), Gholami et al.(2013); Jyoti dan Rani (2015); Kasim (2008) stated that knowledge management has a positive and significant effect on performance.

Based on Table 8, shown that the perception of respondents on Collaboration has positive and significant effect on performance. It can be seen from path coefficient marked positive 0.018 with t-value $2.44 > 1,96$, its means hypothesis of this research acceptable. This research is support research by Whitford, et al. (2010), Faems et. al. (2005), Sanders and Premus (2005), Ojasalo and Kauppinen (2016) found that there is a positive effect of collaboration on performance.

Based on Table 8, shown that the perception of respondents on innovation has a positive and significant impact on organizational performance. It can be seen from path coefficient marked positive 0.017 with t-value $2.057 > 1,96$, its means hypothesis of this research acceptable. Hypothesis testing resulted in this research proves the existence of significant and positive influence between innovations with organizational performance. These findings support Odumeru (2013), Tuan, et.al., (2016), Tajuddin, et.al., (2015), Suhag, et.al., (2017), Torugsa & Arundel(2016), Noruzy, et. al. (2013) stated that innovation have the positive influence on performance.

Based on table 9, shown the results of the calculation of the Sobel test with the statistical test values are 1.88 and 0.37. Thus it can be concluded that innovation does not mediate the relationship between knowledge management and collaboration on performance. In other words, in improving performance, employees only need to increase knowledge management and collaboration without having to involve existing innovation.

Further, from the equation that measures the amount of performance is only equal to 0.054 or 5,4%. The results of this study indicate that there are other contributing factors towards improving knowledge management, collaboration, innovation and organizational performance, so that further research is still potential and possible examine these other factors in order to enrich knowledge management models, collaboration, innovation and

organizational performance.

Based on the results of the analysis compared with previous research, the findings that can be put forward as a result of research are that the performance can improving with high innovation and supported by knowledge management and collaboration. This study shows that innovation is in the high category. Innovation can improving performance supported by high knowledge management and good collaboration. In summary, these findings can be described as a conceptual model produced in this study, namely: "Conceptualization Model of innovation based on knowledge management and collaboration in Improving Performance of Public Sector Organization ". The model produced is novelty because this research has a novelty with the category of development (innovation).

6. CONCLUSIONS

The result of this study is that based on SEM analysis using Lisrel, known that knowledge management have a significant effect on both innovation and Performance of Public Sector Organization. Likewise collaboration and innovation has a significant effect on Performance of Public Sector Organization. While collaboration does not have a significant effect on innovation and innovation can not mediated relationship among knowledge management and collaboration on performance.

This study has several limitations such as the number of samples is still insufficient representative, information provided by respondents through questionnaires sometimes it does not show the respondent's opinion In fact, this happens because of differences in thoughts, assumptions and different understanding of each respondent, only focused on internal and external performance variables without paying attention to other factors outside of performance, innovation, knowledge management and innovation, should thus be considered a pilot study about Performance of Public Sector Organization scale. The findings of this study are useful for organization, policymakers and employers to address collaboration among employees in organization and improve their knowledge management and innovation and use it to improving Performance of Public Sector Organization. Future research could utilize this study's model to examine the correlation between knowledge management, collaboration and innovation, toward Performance of Public Sector Organization on a broader scale, for example in other sectors both public and private agencies on a larger scale to strengthen generalization. Future research also can test the influence of other variables such as culture organization, leadership, and strategic HRM as aspects that affect innovation and organizational performance, or as moderating variables that affect the relationship of independent variables with the dependent variable.

REFERENCES

- Abdi, K. & Senin, A. A., (2015), The Impact of Knowledge Management on Organizational Innovation: An Empirical Study, *Asian Social Science*; Vol. 11, No. 23; 2015, ISSN 1911-2017 E-ISSN 1911-2025, Canadian Center of Science and Education
- Andreeva, T., & Kianto, A. (2011). Knowledge processes, knowledge-intensity and innovation: a moderated mediation analysis. *Journal of Knowledge Management*, 15(6), 1016-1034.
- Antony, J. and Bhattacharyya, S. (2010), "Measuring organizational performance and organizational excellence of SMEs – Part 1: a conceptual framework", *Measuring Business Excellence*, Vol. 14 No. 2, pp. 3-11. <https://doi.org/10.1108/13683041011047812>
- Bedwell, W. L. Wildman, J. L. DiazGranadoz, D., Salazar, M., Kramer, W. S. & Salas, E., (2012), "Collaboration at Work: An Integrative Multilevel Conceptualization", *Psychology Faculty Publications*. 937.
- Bloch, C. & Bugge, M.M., (2013). Public sector innovation – from theory to measurement. *Structural Change and Economic Dynamics* 27, 133-145.
- Borghini, S., (2005), Organizational Creativity: Breaking Equilibrium and Order to Innovate, *Journal of Knowledge Management* 9(4):19-33 • August 2005
- Budiarta, K., (2015), The Role of Knowledge Management, Human Capital, and Innovative Strategy toward the Higher Education Institution's Performance in Indonesia, *Information and Knowledge Management*, ISSN 2224-5758 (Paper) ISSN 2224-896X (Online), Vol.5, No.5
- Carolina, L.N., & Angel, L. M.C., (2011), Strategic knowledge management, innovation and performance, *International Journal of Information Management* 31 (2011) 502–509

- Chen, P.C., & Wan, H.S., (2014), Collaborative green innovation in emerging countries: a social capital perspective. *International Journal of Operations & Production Management*. Vol. 34 No.3.
- Chiocchio, F., & Grenier, S. & O'Neill, T. & Savaria, K. & Willms, J., (2012). The effects of collaboration on performance: A multilevel validation in project teams. *Int. J. of Project Organization and Management*. 4. 1 - 37. 10.1504/IJPOM.2012.045362.
- Creswell, J.W., (2013), *Research Design : Qualitative, Quantitative, and Mixed Methods Approaches*, SAGE Publications, Inc., London
- Dahiya, D. & Gupta, M. & Jain, P., (2012). Enterprise Knowledge Management System: A Multi Agent Perspective. 271-281. 10.1007/978-3-642-29166-1_24.
- Dalkir, K., (2011). *Knowledge Management in Theory and Practice*. 2nd Edition. Publisher, The MIT Press.
- Damanpour, F. Walker, R., & Avellaneda, C., (2009). Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations. *Journal of Management Studies*. 46. 650-675. 10.1111/j.1467-6486.2008.00814.x.
- Drucker, P., (2014), *Innovation and Entrepreneurship Practice and Principles*. Routledge, New York.
- Faems, D. & Looy, B., (2005). Interorganizational Collaboration and Innovation: Toward a Portfolio Approach*. *Journal of Product Innovation Management*. 22. 238 - 250. 10.1111/j.0737-6782.2005.00120.x.
- Grant & Fuller, (2004), A Knowledge Accessing Theory of Strategic Alliances. *Journal of Management Studies*, 41, 61-84.
- Grimmelikhuisen, S. & Feeney, M. (2016). Developing and Testing an Integrative Framework for Open Government Adoption in Local Governments. *Public Administration Review*. 10.1111/puar.12689.
- Gulati, R., Franz W., & Pavel Z., (2012), "The Two Facets of Collaboration: Cooperation and Coordination in Strategic Alliances." *Academy of Management Annals* 6, 531–583.
- Jansen, J. & Van Den Bosch, Frans & Volberda, H.W., (2006). Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science*. 52. 1661-1674. 10.1287/mnsc.1060.0576.
- Koohang, A., Paliszkievicz, J., & Gołuchowski, J., (2017). The impact of leadership on trust, knowledge management, and organizational performance: A research model. *Industrial Management & Data Systems*. 117. 521-537. 10.1108/IMDS-02-2016-0072.
- Laihonen & Jaaskelainen (2013), Overcoming the specific performance measurement challenges of knowledge-intensive organizations, *International Journal of Productivity and Performance Management* 62(4):350-363 • April 2013
- Luzzini, D. & Amann, M. & Caniato, F. & Essig, M. & Ronchi, S., (2015). The path of innovation: Purchasing and supplier involvement into new product development. *Industrial Marketing Management*. 47. 10.1016/j.indmarman.2015.02.034.
- McNabb, (2007), *Knowledge management in the public sector: A blueprint for innovation in government*. Armonk, N.Y.: Sharpe.
- Minister of State for Administrative Reform and Bureaucracy Reform number 14 of 2011, *Guidelines for the Implementation of Knowledge Management Programs*, Jakarta
- Nawab, S., Nazir, T., Zahid, M. M., & Fawad, S., M., (2015), Knowledge Management, Innovation and Organizational Performance, *International Journal of Knowledge Engineering*, Vol. 1, No. 1, June 2015
- Nissen, H. & Evald, M., & Clarke, A., (2014). Knowledge sharing in heterogeneous teams through collaboration and cooperation: Exemplified through Public–Private-Innovation partnerships. *Industrial Marketing Management*. 43. 10.1016/j.indmarman.2013.12.015.
- Noruzi, A., Dalfard, V.M, Azhdari, B., Nazari-Shirkouhi, S. & Rezazadeh, A. (2013), Relations Between Transformational Leadership, Organizational Learning, Knowledge Management, Organizational Innovation, and Organizational Performance: An Empirical Investigation of Manufacturing Firms, *Int.J.Adv.Manuf. Technol.*, 64: 1073-1085.

- Odumeru, J.A., (2013), Innovation and Organizational Performance, Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 2, No.12; August 2013
- Ojasalo, J. & Kauppinen, H., (2016). Collaborative Innovation with External Actors: An Empirical Study on Open Innovation Platforms in Smart Cities. *Technology Innovation Management Review*. 6. 49-60. 10.22215/timreview/1041.
- Osborne, D., & Gaebler, T., (1992), *Reinventing Government*. New York, NY. Ingrid Schneider Clemson University. Pages 302-304
- Reychav, I. & Weisberg, J. (2009) Good for Workers, Good for Companies: How Knowledge Sharing Benefits Individual Employees. *Knowledge and Process Management*, 16, 186-197.
- Robbins, S.P., & Judge, T.A., (2013), *Organizational Behavior* Edition. 15. New Jersey: Pearson Education
- Sanders, Nada & Premus, Robert. (2005). Modeling the Relationship Between Firm IT Capability, Collaboration, and Performance. *Journal of Business Logistics*. 26. 1 - 23. 10.1002/j.2158-1592.2005.tb00192.x.
- Schleimer, Stephanie & Shulman, Arthur. (2011). When intra-firm and inter-firm collaborations co-occur: Comparing their impact across new services versus new product innovations. *International Journal of Innovation Management (ijim)*. 15. 869-898. 10.1142/S1363919611003325.
- Serrat O. (2017) *Innovation in the Public Sector*. In: *Knowledge Solutions*. Springer, Singapore. https://doi.org/10.1007/978-981-10-0983-9_59
- Sprinkle and Urick, (2018), "Three generational issues in organizational learning", *The Learning Organization*, Vol. 25 No. 2, pp. 102-112
- Stank, T.& Keller, S. & Daugherty, P., (2001). Supply Chain Collaboration and Logistics Service Performance. *Journal of Business Logistics*. 22. 29 - 48. 10.1002/j.2158-1592.2001.tb00158.x.
- Stuart, T. (2000). Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high-technology industry. *Strategic Management Journal*. 21. 10.1002/1097-0266(200008)21:83.O.CO;2-K.
- Suhag, A.K., Solangi, S.R., Larik, R. S. A., Lakho, M. K., & Tagar, A. H., (2017), The Relationship of Innovation With Organizational Performance, *International Journal of Research - Granthaalayah*, 5(2), 292-306. <https://doi.org/10.5281/zenodo.345736>
- Tajuddin, M.Z.M., Iberahim, H, & Ismail, N., (2015), Relationship Between Innovation and Organizational Performance in Construction Industry in Malaysia. *Universal Journal of Industrial and Business Management* 3(4): 87-99, 2015 <http://www.hrpub.org> DOI: 10.13189/ujibm.2015.030402
- Takeishi, Akira. (2001). Bridging Inter- and Intra-Firm Boundaries: Management of Supplier Involvement in Automobile Product Development. *Strategic Management Journal*. 22. 10.1002/smj.164.
- Toillier, A., Bernard, T., Der, D., Syndhia, M., François, R., Koutou, M., & Ludovic, T., (2015), Innovation, knowledge management and researchers' postures: exploring their linkages for improving the performance of innovation platforms, 5th International Symposium for Farming Systems Design 7-10 September 2015, Montpellier, France
- Tuan, N., Nhan, N., Giang, P., & Ngoc, N., (2016), The Effects of Innovation on Firm Performance of Supporting Industries in Hanoi – Vietnam, *Journal of Industrial Engineering and Management JIEM*, 2016 – 9(2): 413-431 – Online ISSN: 2013-0953 – Print ISSN: 2013-8423 <http://dx.doi.org/10.3926/jiem.1564>
- Wang et al. (2014), "Knowledge sharing, collaboration and firm performance", *Management Decision*, Vol. 52 Iss 2 pp. 230 – 258
- Wang, C., Chang, Y.L., Huang Q., and Wang, C.H., (2011), "Assessment on collaboration management for Taiwanese pharmaceutical industry: using GRA and MPI", *African Journal of Business Management*, Vol. 5 No. 7, pp. 2950-2958.
- Yousif Al-Hakim, L. A., & Hassan. S., (2013). Knowledge management Strategies, Innovation, and Organisational Performance: An Empirical Study of the Iraqi Mts. *Journal of Advances in Management Research*, 10(1), 58-71

KNOWLEDGE-BASED TRAINING SYSTEM IN THE NEW NORMAL

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Abstract

Purpose: to propose a knowledge-based training system (KBTS) that triggers the development of knowledge sharing culture through suitable training methodology. The culture led to a higher success rate on converting employees' tacit knowledge about customers into firm's training materials.

Design/methodology/approach: the idea for integrating training practices with knowledge management arose based on literature review. In-depth interviews with bank management and employees were conducted. Focus group discussions with experts were held for evaluating the proposed KBTS.

Findings: KBTS that integrates experts from the sales departments with experts from the human resources department is highly recommended. The KBTS has two main functions. The first is to support HR experts in identifying modifications needed for training materials about adaptive selling, customer networking, communication quality, customer order quality. The second is to support the HR experts in designing and implementing training methodology that lead to knowledge sharing culture.

Originality: System to support the creation of knowledge sharing culture is the key for implementing knowledge acquisition into the practise in the banking industry. Using the system, knowledge sharing culture can be internalized by the employees naturally.

Research limitations/implications: more research is needed to determine KBTS' adaptability when facing rapid changes in customers' behaviours of the banking industry, as the result of Covid-19 pandemic.

Contributions: It is highly needed to convert tacit knowledge about customers from every salesperson to explicit knowledge. The knowledge acquisition process can only happen if every salesperson is willing to share their knowledge. Thus, the bank needs to create a knowledge sharing culture among employees.

Keywords: knowledge-based training system, knowledge sharing culture, training methodology

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1. INTRODUCTION

The demand for using digital technologies in the banking industry is increasing significantly (Craig, 2020). (Gara, 2020) shows that clients under the age of 70 are already familiar with the use of digital technologies in their daily life, thus, they have accepted the change of banks' way in serving its clients. In Indonesia, physical bank statements in the form of a book, as the evidence of the client's money ownership in their account, was gradually replaced by a printed letter sent monthly to the client's house. Then, the sent letter is also replaced with e-mail as the means of delivery. Lately, the clients can use their handphones or smart devices to help manage their financial needs (Gross, 2020).

From the start of pandemic Covid-19, the use of digital technologies are increasing significantly (Bensley *et al.*, 2020). The clients are advised to work from home and conduct social distancing as priority. For sure, the pandemic triggers the banks' need in optimizing the use of digital technologies for serving the clients into significant higher levels. For instance, in the past, a bank supervisor had to sign a money withdrawal form as the means of authorizing the withdrawal process conducted by a teller. Now the process is changed by using high resolution camera technology that captures money withdrawal form signed by the client and sends the pictures to the supervisor's computer. Authorization processes that physically occurred in every branch now become centralized. Banks are trying to cope with COVID-19 by providing new ways of support for clients (LaSala, 2020).

These rapid changes bring different challenges for the bank's salesperson that lead to different training and development needed by them. In the past, the salesperson, as the change agent, is equipped with skills to teach

clients on how to use digital banking tools (Catmull, 2020). They are trained on how to teach the client to log into banks applications with different methods and pace that are suitable with the client characteristics, so every client can learn the logging process comfortably (Bensley *et al.*, 2020). For the case of a key client who put money minimum 500 millions in his/her bank account, the salesperson will visit the client privately to teach them on how to use the digital banking tools. During the process, the salesperson will have more qualified interaction with the client. The salesperson can increase his/her understanding of the client's characteristics and needs. With the information, the salesperson can offer suitable bank products to the clients with higher success rate. Now, the challenge is higher because not all of the key customers are willingly to be visited by the salesperson. Offering bank products to the key customers by phone call or even video call bring more challenges than meeting with them in person.

Based on an in-depth interview with a bank manager from one of the banks in Bandung whose major income is from mortgage services, the biggest challenge is how to make the mortgage lenders to have active banking transactions, instead of only paying mortgage payment. The bank usually gets new clients from its sister company that sells houses in high profile real estate areas. Most of the clients open bank accounts in the bank in order to get easier funding for buying or investing in the houses sold by the sister company. They already have active bank accounts in other banks. Facing the pandemic, the bank finds difficulties in getting new clients who want to buy houses. So, it is highly important to optimize transactions from existing clients. It means the bank needs to find a way in offering the right products that trigger client interest in depositing or investing their money in the bank.

The key success for optimizing the transaction relies on the bank's salesperson capabilities to identify the clients' needs (Alnakhli *et al.*, 2020). Most successful salespeople are able to identify the needs and offer the right program after they know in depth about the clients. They know the clients background and preferences so they can decide the appropriate way in proposing the program. Unfortunately it remains in the head of the salesperson as tacit knowledge. A new challenge arose when the salesperson resigned from the bank. In some cases they even bring the clients to the bank competitor. Thus, the manager finds it is crucial for the bank to be able to obtain and to share the salesperson knowledge about clients. It should be stored in some kind of knowledge management systems (KMS) which can be easily accessed by every salesperson (Utami *et al.*, 2017; Mattiacci *et al.*, 2019).

Supported by the KMS and adequate training, any salesperson can be assigned to handle any existing clients and get the clients' trust faster. Even a new recruited salesperson can use the systems directly in practice (Mattiacci *et al.*, 2019). However, when a salesperson keeps their knowledge about the customers in his/her mind and does not want to share the knowledge with the bank, the bank will not be able to have a good quality of KMS. For successfully obtaining the knowledge from existing salespeople and sharing them among the salesperson, knowledge sharing culture must be encouraged (Luturmas and Indarti, 2017). As a consequence, the bank needs a support system, which is called "knowledge-based training system" (KBTS). The question is what kind of data needs to be collected, how to collect the data and transform it into the information and then into knowledge?

The article provides a theoretical framework and the application of the KBTS that is able to convert the salespersons' tacit knowledge about customers into the bank's training materials. Supported also with other up-to-date training materials, the salesperson will be able to offer the right product to the right customer in the right time.

2. LITERATURE REVIEW

Bank performance can be measured by its profitability (Zarrouk, Ben Jedidia and Moualhi, 2016). To achieve higher profitability, the bank must focus on four main activities: (1) liquidity management, (2) assets management, (3) liabilities management, and (4) capital adequacy (Aviliani *et al.*, 2015). The success rate of those activities depend on the bank salesperson's ability to enhance the clients transactions and retain the clients funds (Rehman, 2012).

The bank competitive advantage comes from the salesperson's knowledge (Mansour, Gara and Gaha, 2014). The salesperson knowledge consists of explicit knowledge and tacit knowledge. The salesperson's explicit knowledge is information that is already put into words, such as the bank products. On the other side, tacit knowledge such as skills to retain existing clients cannot easily put into words (Zaout and Abbas, 2012a).

Knowledge is processed information that resides in employees' heads which is important for value creation (Lee *et al.*, 2020) and will result in "brain drain" if the salespersons take their knowledge when leaving the organization (Fong *et al.*, 2011a). Organizations must facilitate and encourage the salespersons to share knowledge (Caniëls, Neghina and Schaetsaert, 2017) in order to obtain and store the tacit knowledge within the organization.

Lee *et al.*, ((Lee *et al.*, 2020) specify that there are two types of knowledge sharing, namely formal and informal knowledge sharing. Most of the case, explicit knowledge shared through formal knowledge sharing, and tacit knowledge shared through informal knowledge sharing. Employees willingly share explicit knowledge, whereas there is reluctance from employees to share tacit knowledge (Fong *et al.*, 2011a). Explicit knowledge can be easily

shared using technology, but tacit knowledge relies on social relationships between employees (Reychav and Weisberg, 2010).

Some researchers found that organizations can treat explicit and tacit knowledge as separate aspects which complete each other, because tacit knowledge contains experience and best practices from employees that are not easily put into words (Zaqout and Abbas, 2012a). The others empathize that tacit knowledge needs to be shared in the form of explicit knowledge (Thomas, 2019). If the tacit knowledge is stored, combined, and used for improving productive activities, it will lead to increased organizational performance (Gope, Elia and Passiante, 2018).

For successfully transforming tacit knowledge into explicit knowledge, knowledge sharing is the key ingredient. The sales and marketing department's performance in maintaining and enhancing transactions of the clients depend on knowledge sharing about the clients. Better product and service offering strategy is also dependent on the success rate of the department in creating knowledge sharing (Fong *et al.*, 2011a). With the success in sharing the bank's explicit knowledge about their products and the salesperson's tacit knowledge about the clients, salesperson productivity and performance will lead to the bank growth (Lee *et al.*, 2020).

For having a successful knowledge sharing, a salesperson's willingness to share the best practices needs to be supported by adequate organizational culture. (Chi  n, Charles and Morales, 2019) concludes that organisational culture has impacts on the salesperson productivity and performance through knowledge sharing. To achieve the desired work culture, the bank must provide training and development programmes which are designed specifically to increase the salesperson skills and knowledge (Rowland, Hall and Altarawneh, 2017), and the topics are continually updated (Shepherd *et al.*, 2011). Knowledge obtained from the salesperson's tacit knowledge can enhance the knowledge on how to have effective interaction with clients. This knowledge should be given to the person in charge in composing training materials. The person in charge for training and development also needs to update the salesperson profile in order to obtain better understanding of their characteristics. This understanding will lead to better decisions on determining which training methodology will match with each salesperson. Better interaction between the trainer with the salesperson will lead to higher success rate in creating a conducive informal atmosphere. This atmosphere will support knowledge sharing culture. In the end, the training and development programmes will increase the salesperson knowledge sharing in the organization (Gope, Elia and Passiante, 2018).

The right information technology approach is needed for supporting a knowledge sharing environment and transferring knowledge in the form of training and development (henceforth we called this concept as knowledge-based training system or KBTS). Knowledge-intensive system, which is commonly used in this field, is the combination of various techniques in transforming data into knowledge. It is a combination of a knowledge-based system, which is based on if-rules, and data mining. The benefit of combining the techniques is that the best practice obtained from human experts will be cross checked with continuous data analysis. Combination of several techniques are recommended when dealing with complex problem solving (Gunawan, 2010). The combination is mimicking how human experts conduct analysis by using framework and data.

The basic principles for KBTS are based on the solid collaboration between sales and marketing departments with the human resource department, in particular the training and development division. With the good level of collaboration between those departments. Knowledge sharing from the salesperson is the key ingredient. Knowledge sharing between the sales department and training division must be encouraged (Cani  ls, Neghina and Schaetsaert, 2017) and supported by the bank (Jayasingam, Govindasamy and Singh, 2016). Thus, knowledge sharing must become the bank work culture, in which the bank resources are used efficiently (Cani  ls, Neghina and Schaetsaert, 2017).

With the knowledge obtained from the salesperson, the training and development division can modify training methods and the training material. It is important for the training and development division to focus on the most effective ways to train (Reychav and Weisberg, 2010) by having appropriate knowledge from all related departments (Jayasingam, Govindasamy and Singh, 2016) to create the best style of training methodology (Ibrahim, Boerhannoeddin and Bakare, 2017).

The explanation of figure 1 is as follows. Having more access to knowledge sharing, each salesperson, even the new one, can decide faster and accurately on what the client most likely prefers and this leads to better performance (Fong *et al.*, 2011b). Relevant and up to date training material combined with the suitable training methodology will have a significant impact on the performance (Ibrahim, Boerhannoeddin and Bakare, 2017) (Manresa, Bikfalvi and Simon, 2019); (Pousa, Liu and Aman, 2020)(Ibrahim, Boerhannoeddin and Bakare, 2017). For obtaining relevant and up to date knowledge, knowledge sharing is the key ingredient (Rowland, Hall and Altarawneh, 2017). Most of the important knowledge is stored inside the salesperson's mind as the form of tacit knowledge (Zaqout and Abbas, 2012b). The knowledge sharing can be seen from the level of free-flowing

information, trust among salespeople, and prosocial behavior norms (Caniëls, Neghina and Schaetsaert, 2017). However, the salesperson's willingness to share the knowledge is also crucial. In order to influence a salesperson's behaviour to share his/her knowledge successfully, suitable training methodology takes into account (Gope, Elia and Passiante, 2018).

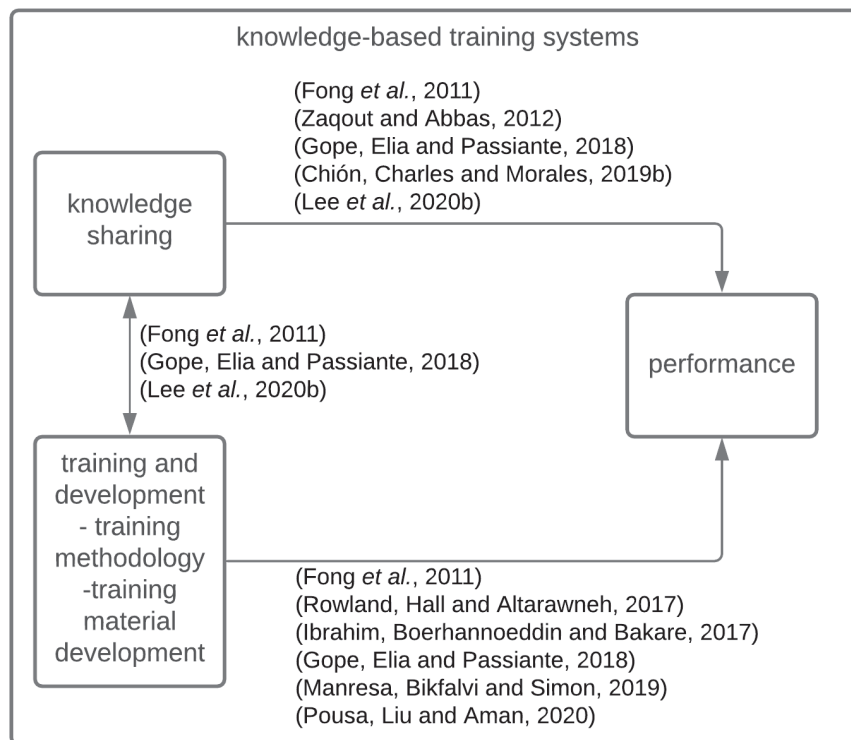


Figure 1. Relationship between Knowledge Sharing, Training and Development, and Performance

3. DATA AND METHODS

The respondents of the research are 14 staff of the whole bank staff (26 staff). For obtaining up to date information technology approach, two people whose specialization of IT was assigned. Data collection techniques used are observations, interviews, focus group discussion, and analyze relevant documents (see the five phases for the research below).

There are five phases for the research. First, in order to have a strong basic foundation for developing the design of the knowledge management system (called KBTS), literature reviews are conducted. The literature study is grouped into four categories, namely: banking performance, knowledge sharing, training and development (specifically on training material development and training methodology), and knowledge-intensive system. Confirmation on the research model that shows relationship between variables is the result of the first phase.

Second, different sessions of interview were conducted to a bank manager (head of the bank), a sales manager, a human resource manager, a person in charge for training and development, the whole salespeople, and two in-house bank trainers. Confirmation on what has been obtained from the interview with the manager/head of department to the bank employees who do the daily routine works was conducted by interviewing the employees. The goal is to get a full understanding about how the existing business process, challenges faced, and how they can overcome the challenges.

Third, the findings of the second phase were compared with the data recorded by the bank. In this phase, revision on the findings of the second phase was done after further discussion with the participants of the second phase. Data recorded by the bank was used as supporting evidence from what has been gathered from the second phase.

Fourth phase is focused on the information system part. Here, we analyse all the data gathered from the previous phases and create a combination between transaction processing system, management information system, and knowledge management into a comprehensive information system model as the basic of module creation. Each module will be designed in order to fulfill what is needed (based on the findings of previous phases). A selection of various data analysis and artificial intelligence techniques was decided and consulted through focus group

discussion with two system analysts and two salesperson as the representatives from the bank (one from sales department and one from training and development department).

Finally, a focus group discussion was conducted with the managers of the bank. The goal is for obtaining confirmation whether competencies needed, knowledge on the bank clients, standard operating procedures has been fully covered by the KBTS (the system design that is proposed to the bank). After accommodating the revision from this phase, the KBTS design will be handed over to the programmers who are assigned by the bank.

The existing procedural data analyzed by constructing a business process model and notation diagram. For obtaining the reliability and validity, cross checked was conducted for the results of (1) relevant documents analysis, (2) interviews, (3) focus group discussions. Nodes are created for analyzing the qualitative data. Proposed KBTS model was constructed by following the knowledge intensive systems approach. Prototype of each module was presented in the final confirmation with top management and the users. The analysis follows a spiral model of the system development lifecycle methodology.

4. RESULTS AND DISCUSSION

Good practice in liquidity management, assets management, liabilities management, and capital adequacy are the essential key for the bank to have good performance. First, liquidity management focuses on ensuring that the bank will have enough money whenever the clients want to withdraw their deposit. Failure to have liquidity management will lead to the clients' distrust of the bank. Second, in asset management, the bank needs to measure the risk rate of the asset before acquiring them and to diversify the asset ownership. Risk management is calculated and conducted with caution for maximizing the asset management. Third, under liability management, the bank needs to make sure that the bank obtains funding with minimal cost. The lower the cost for obtaining the funding, the bigger the profit margin of the bank from lending the money. Finally, capital adequacy management put emphasis on determining the level of capital needed to be managed and on maximizing the effort for obtaining the capital.

Although there is specialization among the bank employees that is organized in order to optimize the practice of those four types of management, each of the employees, in particular the salesperson, needs to put all those four essential keys in their mind. The more experience of a salesperson in the banking industry, the higher success rate of the salesperson in optimizing his/her relationship with the client.

Tacit knowledge of a bank salesperson is very useful for keeping himself competitive, especially for increasing the customer transactions and retaining customer funds in the long term. If all salespeople are able to do these 2 things, the bank will be able to get a good performance. Therefore, the bank realizes that tacit knowledge should not only be stored in the head of the salesperson, in other words it must be shared. In this paper, three modules of KBTS will be discussed.

The first module is for providing information about the most up to date standar of competency needed by each salesperson. In order to make sure that training and development division will have recent standards and prepare the training material based on it, only human resources (HR) staff are allowed to create or to modify data in the first module. Sales manager is only able to view the content of this module. However, the sales manager has a task to review and revise the standard regularly. When the sales manager wants to make a revision, he/she will notify the HR staff. The HR staff needs to understand fully about the changes and then will update the competency standard. Every change will be informed to the training and development division who has a task to update related material training.

The salesperson is ordered to optimize the transaction of his/her clients, in particular the key clients. When the salesperson visits or makes contact with the client, he/she is asked to try suggestive selling, where the salesperson tries to improve customer relationships and customer satisfaction through good experience. The salesperson needs to conduct cross selling by offering different investment products that have a high success rate. When the salesperson finds that the client may be reluctant to buy the product because of the total amount spent, the salesperson may offer different investment products with lower price (conducting down selling).

The second module is for providing information about what has been planned and what was the result of the plan. The salesperson is ordered to report his/her weekly plan and to report any result of the plan. Salesperson needs to make plans to make key clients have more transactions in the bank. The sales plan is made for three goals. First, as a media for the salesperson to think critically on what kind of product and how to offer that product to the specific client. Second, as evidence that will be used for evaluating performance of the salesperson. Third, to build knowledge sharing culture among the salesperson.

In the weekly plan, the salesperson needs to identify what kind of product will be suitable for the specific key client and write down a proposed method for offering the product. The method selection is based on the salesperson's

understanding about the customer (in the KBTS can also be seen in customer profile). After the salesperson fills in the weekly plan (see Figure 2), the sales manager can make an evaluation on the salesperson's active selling level in offering the product to existing customers. This evaluation is part of the salesperson's performance indicator.

Figure 2. Salesperson weekly plan

In module 2, the salesperson also must make a report every day and relate it with the plan. Salesperson needs to record all his activities in detail in the daily report. In the daily report the salesperson will record the suitability between the plan and the results obtained, whether the plan was successful or failed. In addition, they need to describe why the selling is successful or why the selling does not happen. A brief information about how the salesperson offers the product to the client differs from the plan should be reported. Furthermore, the salesperson needs to describe the obstacles he/she faces during the process. Finally, the salesperson needs to write down the suggestion on how to deal with the client in the future (see Figure 3).

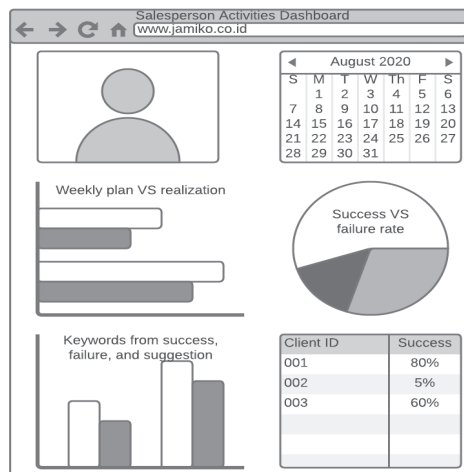
For the salesperson, KBTS will make customer profiles based on the client's reaction to the salesperson plan. By doing this, KBTS will be able to obtain the knowledge possessed by the salesperson regularly. KBTS will provide an overview of the customer profiles to the salesperson so the salesperson can use them as a second opinion. If the salesperson feels the suggestion provided by the KBTS does not match with the salesperson perceived on the clients, the salesperson is allowed to put notes in the system. With an up to date customer profile, the salesperson can modify his sales plan to the specific customer.

For the sales manager, KBTS will not only provide customer profile information but also salesperson profile. KBTS will make each salesperson profile mainly based on (1) his/her planning, (2) result, and (3) suggested corrective action. From the salesperson profile, the sales manager will be able to see the salesperson's tendency, such as how many regular interaction was made between the salesperson and the clients under his/her, what type of media the client is preferably used, what type of selling method that has higher success rate for the client, what is the client put as priority in his/her mind, etc. KBTS will summarize those points and provide scores for the salesperson based on four categories, namely: (1) adaptive selling, (2) customer networking, (3) communication quality, and (4) customer order quality. For the detailed information, KBTS will provide a percentage of interaction with clients that is initialized by the salesperson, percentage of successful sales based on the plan, percentage of the reason for the failure, etc. This information will be used by the sales manager when assigning specific salesperson to follow specific training.

Figure 3. Salesperson daily report

The sales manager also can use the profiles in the form of graphical reports, namely salesperson activities dashboard (see Figure 4). By observing the dashboard, the sales manager can obtain deep insight about the salesperson easily. For instance, the sales manager can identify which client was successfully handled by the salesperson. When the success rate for a specific client reaches a specific standard value, KBTS will put the report into the customer profile. Thus the bank will be able to know which product and which method are preferable for the client. When the sales manager finds that there is a client whom the salesperson mostly fails to offer the products (i.g. low success rate) the sales manager can ask the salesperson to have further discussion. If during the discussion, they agree that the salesperson needs to improve his/her specific sales competencies, then the sales manager will ask the HR department to provide the training for the salesperson. But if the salesperson is no longer able to handle the client, the sales manager may reassign the client into another salesperson.

Figure 4. Salesperson activities dashboard



The third module is for providing information about which salesperson who need to be trained. This module is used for ensuring that the communication between the sales manager and the HR department becomes smooth. Salesperson profile information from the second module will be used as competency mapping. It show information about existing condition and will be compared with the salesperson's result after following the training (to get insight about the training effectiveness)

In the third module, training needs assessment was conducted and stored in KBTS. Training needs assessment focused on identifying training needs before it is conducted. The output of this activity consists of (1) a brief overview about what is the needs of the bank (organizational level) and the needs of the training participants

(individual level), (2) identified gap or special needs that should be taken into concern, (3) training material that suitable for the comprehensive needs, (4) allocation of time for training, and (5) training strategy for optimizing the training.

Based on the output of the second module, the person in charge of training will revise training material. However, in most of the cases, there is still a lot of tacit knowledge kept hidden from KBTS. Indeed the bank can use KBTS to record all activities of the salesperson, however, the more detailed the things that need to be reported by a salesperson, the higher the level of incompleteness or filling errors. Therefore, it is the task of training and development for conducting training and development sessions to build trust between the trainer and the salesperson. The trainer needs to dig more about customer knowledge stored in the head of the salesperson. When the trust is successfully built, free flowing information can occur where the salesperson voluntarily shares his / her knowledge. It is the duty of the trainer to add knowledge obtained through training and development sessions into KBTS.

The success implementation of KBTS depends on the bank leadership in creating organizational culture that nurtures the salesperson's trust for actively involved in knowledge sharing. It is inline with the finding of (Mafabi *et al.*, 2017). The leadership role is really important and cannot be automatically replaced by the KBTS. Thus, the role of leadership and change management strategy become the limitation.

5. CONCLUSIONS AND POLICY IMPLICATIONS

Based on the interview, salespeople often take their customers and tacit knowledge with them to competitors when they resign from their current jobs (from one bank to another). So, before this happens, the Bank needs to ensure that the knowledge possessed by these employees is left behind in the bank so the remaining employees can learn them.

To successfully implement KBTS, solid collaboration between the sales department and the HR department becomes crucial. This finding is inline with the finding from (Haraldsdottir and Gunnlaugsdottir, 2018). The following are three important remarks for minimizing error in KBTS. First, the sales manager must verify which report content needs to be added into the customer and salesperson profile. The process can be automatically run after the sales manager sets the value in the KBTS setting. Here, the sales manager becomes a content expert and the team in the training division acts as a training material developer. Second, based on the data collected by the previous modules, each salesperson's tendencies can be studied, and then becomes the basis to understand more about each salesperson. This becomes the basis for a trainer to determine which training and development should be scheduled for the salesperson and how to deliver the training. Third, by conducting training need assessment with concern also to individual needs, the training and development division needs to put effort in building trust among salespeople and to record additional knowledge obtained during the training.

In order for tacit knowledge to be disseminated, several studies confirm that tacit knowledge needs to be converted into explicit knowledge. This means that recording tacit knowledge is the main thing that must be done. The proposed KBTS use two approach for creating knowledge sharing culture, namely (1) formal approach where the salesperson need to record their planning and realisation as the basis for the performance appraisal, and (2) informal approach where the trainer need to build trust atmosphere by customizing training material and training methodology used. With trust, free-flow of information can be guaranteed.

Although the combination of formal and informal approaches in creating knowledge sharing culture need to be done, in particular for making rapid progress in acquiring the knowledge and sharing the knowledge, from a theoretical standpoint, the combination may bring negative impact. The use of an informal approach may maintain the salesperson's satisfaction rate in a positive level. However, the use of informal approaches need longer time for obtaining the knowledge. It is not easy to build trust. Formal approaches where the salesperson must be obliged to fill in the KBTS (compulsory report) may lead to dissatisfaction, but it is a rapid way to get the knowledge. Further research should be conducted by taking these into consideration.

Another consideration is about the impact of pandemic Covid-19. With the great changes in social and economic aspects of the clients, knowledge about customers gathered before the pandemic may have different patterns during the pandemic. Further research should be conducted by having pandemic as a moderating variable, in particular if research on the effectiveness of KBTS is conducted.

For practical implications, KBTS can be used by banks for obtaining knowledge about customers and salespeople. Having the knowledge, management can make better planning and the right way of offering specific products to the clients. This will lead to better performance, individually and organizationally. Specific weaknesses of the salesperson can be fixed through training and development programs. To support the implementation of KBTS, the bank needs to have a suitable reward and punishment system. The reward and punishment system is needed for motivating the salesperson. Furthermore, tight control on activities of the sales department and HR department

that is related to the KBTS should be conducted, in particular for the first stage of KBTS implementation. This means an abundance of work should be done, at least till the employee feels comfortable. A good change management program should be considered. This is in line with the recommendation of Harnadi (2020).

REFERENCES

- Alnakhli, H. *et al.* (2020) 'From cognition to action: the effect of thought self-leadership strategies and self-monitoring on adaptive selling behavior', *Journal of Business & Industrial Marketing*, 39, p. 88.
- Aviliani, A. *et al.* (2015) 'The Impact of Macroeconomic Condition on The Banks Performance in Indonesia', *Buletin Ekonomi Moneter dan Perbankan*, 17(4), pp. 379–402.
- Bensley, E. *et al.* (2020) *Remaking banking customer experience in response to coronavirus*. McKinsey & Company. Available at: <https://www.mckinsey.com> (Accessed: 29 September 2020).
- Caniëls, M., Neghina, C. and Schaetsaert, N. (2017) 'Ambidexterity of employees: The role of empowerment and knowledge sharing', *Journal of Knowledge Management*, pp. 00–00. doi: 10.1108/jkm-10-2016-0440.
- Catmull, J. (2020) *Banks And Financial Companies Lend Support During COVID-19*, *Forbes*. Available at: <https://www.forbes.com/sites/jaimecatmull/2020/05/01/banks-and-financial-companies-lend-support-during-covid-19/> (Accessed: 29 September 2020).
- Chiñón, S. J., Charles, V. and Morales, J. (2019) 'The impact of organisational culture, organisational structure and technological infrastructure on process improvement through knowledge sharing', *Business Process Management Journal*. doi: 10.1108/bpmj-10-2018-0279.
- Craig, K. (2020) *Data: The Key To Unlocking A Personalized Digital Experience*, *Forbes*. Available at: <https://www.forbes.com/sites/forbesfinancecouncil/2020/07/17/data-the-key-to-unlocking-a-personalized-digital-experience/> (Accessed: 29 September 2020).
- Fong, C. *et al.* (2011a) 'HRM practices and knowledge sharing: an empirical study', *International Journal of Manpower*, pp. 704–723. doi: 10.1108/01437721111158288.
- Fong, C. *et al.* (2011b) 'HRM practices and knowledge sharing: an empirical study', *International Journal of Manpower*, 39, p. 88.
- Gara, A. (2020) *The World's Best Banks: The Future Of Banking Is Digital After Coronavirus*, *Forbes*. Available at: <https://www.forbes.com/sites/antoinegara/2020/06/08/the-worlds-best-banks-the-future-of-banking-is-digital-after-coronavirus/> (Accessed: 29 September 2020).
- Gope, S., Elia, G. and Passiante, G. (2018) 'The effect of HRM practices on knowledge management capacity: a comparative study in Indian IT industry', *Journal of Knowledge Management*, pp. 649–677. doi: 10.1108/jkm-10-2017-0453.
- Gross, E. L. (2020) *Google Pay Partners With Six More Banks With Digital Banking On The Rise*, *Forbes*. Available at: <https://www.forbes.com/sites/elanagross/2020/08/03/google-pay-partners-with-six-more-banks-with-digital-banking-on-the-rise/> (Accessed: 29 September 2020).
- Gunawan, A, Wahdan, MA & van den Herik, HJ 2010, 'Increasing the managerial capabilities in Indonesian garment manufacturing', *International Journal of Economic Policy in Emerging Economies*, vol. 3, no. 4, pp. 346-367.
- Haraldsdottir, R. K. and Gunnlaugsdottir, J. (2018) 'The missing link in information and records management: personal knowledge registration', *Records Management Journal*, pp. 79–98. doi: 10.1108/rmj-05-2017-0013.
- Harnadi, A. (2020) 'Rancangan Sistem Informasi berbasis Human Resources Analytics untuk Training and Development Staff dari Department Marketing PT. Bank X', UNPAR Institutional Repository.
- Ibrahim, R., Boerhannoeddin, A. and Bakare, K. K. (2017) 'The effect of soft skills and training methodology on employee performance', *European Journal of Training and Development*, 39, p. 88.
- Jayasingam, S., Govindasamy, M. and Singh, S. K. G. (2016) 'Instilling affective commitment: insights on what makes knowledge workers want to stay', *Management Research Review*, pp. 266–288. doi: 10.1108/mrr-

03-2014-0060.

- LaSala, W. (2020) *Banks Emerge As The Digital-First Leaders Other Industries Will Emulate*, *Forbes*. Available at: <https://www.forbes.com/sites/forbestechcouncil/2020/08/19/banks-emerge-as-the-digital-first-leaders-other-industries-will-emulate/> (Accessed: 29 September 2020).
- Lee, Y. L. A. *et al.* (2020) 'Demystifying the differences in the impact of training and incentives on employee performance: mediating roles of trust and knowledge sharing', *Journal of Knowledge Management*, pp. 1987–2006. doi: 10.1108/jkm-04-2020-0309.
- Luturmas, J. R. and Indarti, N. (2017) 'UNDERLYING FACTORS OF ATTITUDE AND INTENTION TOWARDS KNOWLEDGE SHARING AMONG EMPLOYEES: THE CASE OF THE HOTEL BUSINESS IN AMBON, INDONESIA', *Journal of Indonesian Economy and Business*, 31(3), pp. 292–306.
- Mafabi, S. *et al.* (2017) 'The mediation role of intention in knowledge sharing behavior', *VINE Journal of Information and Knowledge Management Systems*, 39, p. 88.
- Manresa, A., Bikfalvi, A. and Simon, A. (2019) 'The impact of training and development practices on innovation and financial performance', *Industrial and Commercial Training*, 39, p. 88.
- Mansour, N., Gara, E. and Gaha, C. (2014) 'Getting inside the black box : HR practices and firm performance within the Tunisian financial services industry', *Personnel Review*, 39, p. 88.
- Mattiacci, A. *et al.* (2019) 'Sales capabilities in the wine industry: an analysis of the current scenario and emerging trends', *British Food Journal*, 39, p. 88.
- Pousa, C., Liu, Y. and Aman, A. (2020) 'The effect of managerial coaching on salesperson's relationship behaviors: new evidence from frontline bank employees in China', *International Journal of Bank Marketing*, 39, p. 88.
- Rehman, A. A. (2012) 'Customer satisfaction and service quality in Islamic banking', *Qualitative Research in Financial Markets*, pp. 165–175. doi: 10.1108/17554171211252501.
- Reychav, I. and Weisberg, J. (2010) 'Bridging intention and behavior of knowledge sharing', *Journal of Knowledge Management*, pp. 285–300. doi: 10.1108/13673271011032418.
- Rowland, C. A., Hall, R. D. and Altarawneh, I. (2017) 'Training and development: Challenges of strategy and managing performance in Jordanian banking', *EuroMed Journal of Business*, 39, p. 88.
- Shepherd, C. D. *et al.* (2011) 'Sales manager training practices in small and large firms', *American Journal of Business*, pp. 92–117. doi: 10.1108/19355181111174499.
- Thomas, N. (2019) 'Debates around the nature of knowledge transfer: how well do we know about the construct?', *VINE Journal of Information and Knowledge Management Systems*, pp. 409–425. doi: 10.1108/vjikms-09-2018-0077.
- Utami, T. L. W. *et al.* (2017) 'THE EFFECT OF KNOWLEDGE SOURCES ON INNOVATION CAPABILITIES AMONG RESTAURANTS AND CAFÉ BUSINESSES IN INDONESIA', *Journal of Indonesian Economy and Business*, 32(1), pp. 33–50.
- Zaqout, F. and Abbas, M. (2012a) 'Towards a model for understanding the influence of the factors that stimulate university students' engagement and performance in knowledge sharing', *Library Review*, pp. 345–361. doi: 10.1108/00242531211280478.
- Zaqout, F. and Abbas, M. (2012b) 'Towards a model for understanding the influence of the factors that stimulate university students' engagement and performance in knowledge sharing', *Library Review*, 39, p. 88.
- Zarrouk, H., Ben Jedidia, K. and Moualhi, M. (2016) 'Is Islamic bank profitability driven by same forces as conventional banks?', *International Journal of Islamic and Middle Eastern Finance and Management*, 39, p. 88.

TRAINING PROGRAM EVALUATION BY USING FOUR-LEVEL KIRKPATRICKS METHOD AT A COMPANY IN BANDUNG WEST JAVA INDONESIA

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Abstract

Training is an important activity held to improve new or existing employees capabilities in order to achieve competitive advantages. Evaluation process of training is one of activities should done in order to get highest beneficial of training programs since the trainings itself has spend not only a lot of money but also energi.

The objective of this research is to evaluate the effectiveness of training program by using four-level Kirkpatrick method, consist of reaction, learning, behavior, and result. Research method used quantitatively, by using path analysis to explore the influence of reaction, learning, behavior toward result. The respondent are 108 participants of training program of a company in west java Indonesia.

Result shows that simultaneously and partially Reaction and Learning have significant influence toward behavior, and behavior as intervening variable is also has significant influence to result. This research result indicates that all stages of training process are important to the result. Thus, company in conducting the training should consider all stages of training.

Key words: Reaction, Learning, Behavior, Result

CUSTOMER PROFILE ANALYSIS OF MANEN.ID USING EMPATHY MAP APPROACH METHOD

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Abstract

Customer profile is a way for companies to define customer segments, create value according to the needs of potential customers, deliver value effectively to those customer needs. Empathy maps can be used to analyze customer profiles, empathy map can analyze in more detail how the conditions, behavior, activities, fears, and expectations of customers get the expected value. The research tried using descriptive qualitative research type by observing, documenting, and interviewing with Manen.ID and nine key informants who are under the written predetermined criteria for primary data, while for secondary data the writer uses references to various theories and previous research. In Addition, this research also discussed source triangulation to the results credibility test of this study to clarify who is the target of the interview, where is the place, and when the interview is conducted which supports the research conducted by the author. The results of this research are B2B as the most potential segment, Manen.ID's customer profile are customers who angry, disappointed, dissatisfied and always want compensation when suppliers often make mistakes such as being late until the product arrives. Therefore, they wants products that are cheaper than elsewhere, good quality, and still fresh and also expect their suppliers to work more professionally, have a pay-later system for payment systems, often provide promotions, and products are sent by good quality suppliers. Customer's pain of their suppliers is the process of taking products that is so long that it makes consumer's time inefficient.

Keywords: Customer Profile, Empathy Map, Market Segmentation

1. INTRODUCTION

1.1 BACKGROUND OF STUDY

People who work as farmers in Indonesia always decline every year. The first factor that causes this can be seen from the internal side of the farmer, such as agricultural land which changes of function every year, the agricultural sector is considered less socially prestigious, the income of Farmers are low, dirty, risky, the more children of farmers continue their education to a higher level so that many farmers expect their children not to become farmers. Moreover, there are external factors, such as higher income in non-agricultural jobs, higher prestige when working outside the agricultural sector, and job prospects in cities that have greater opportunities (Susilowati, 2016).

Currently, many digital startup entrepreneurs have chosen the agricultural sector as the focus of their business as one of the existing contributions in overcoming these problems and they claim that they are the answer to problems in the agriculture world. Most of the entrepreneurs in the agricultural digitization sector currently apply the concept of social entrepreneurship.

The social entrepreneurship system in agriculture is a link between farmers and consumers or end customers, namely simplifying the supply chain so that consumers get cheaper and fresher agricultural products and farmers also get an increase in profitability. However, some business actors differentiate and even diversify so that they do not appear the same as competitors so that consumers are more interested in choosing their business than competitors. The author takes one of the many companies that make the agricultural digitization sector the focus of their business as research material. the author does that to find out whether there are problems faced by the company in carrying out its business activities and the authors try to solve these problems through research that the authors do. the author here makes Manen.ID as the company that the author will research

Manen.ID is an agricultural crowdsourcing platform based on web and application that will provide information on agricultural commodity market opportunities according to the number of consumers who want or need that commodities in an area. Manen.ID offers features that can facilitate farmers in determining what commodity

farmers should plant or harvest farmers immediately based on-demand data from consumers who have used Manen.ID and also interested potential consumers. So that with this feature Manen.ID hopes that there will be many agricultural products in each region as well as product price affordability because the sales chain from farmers to consumers is getting shorter (Manen.ID Bank Data, 2020).

The author has conducted observations and interviews with Manen.ID and found the results that currently Manen.ID is still in the application development stage, but Manen.ID has carried out several activities in the pre-introduction phase, including education and training, market research, and beta launching. Manen.ID using a crowdsourcing business model. Because farmers can participate in carrying out activities in Manen.ID business, such as input How many agricultural products have been harvested and will be chosen by Manen.ID and farmers can also determine what commodities will be planted or harvested directly based on demand data collected from consumers and potential consumers who are interested in using this application.

Observations and interviews that the author conducted with Manen.ID also get the fact that currently Manen.ID still has problems especially in determining customer segmentation for Manen.ID. Because of Manen.ID has three customer types and each type of customer has different behavior. This makes Manen.ID also has to adjust Manen.ID products and services according to the segment. Manen.ID already has a plan for what value they will provide to consumers. But, because of the many types of customer segmentation that will be served by Manen.ID, besides Manen.ID does not yet know who is the focus of the customer segment, Manen.ID still does not know whether its planning values are relevant to needs and consumer expectations that will be their focus and also how Manen.ID provides this value according to the needs and expectations of consumers who will be their priority.

The author tries to solve the problem in Manen.ID by analyzing the Manen.ID customer profile. The customer profile has a function to assist in identifying and knowing how to behave or habits of potential customers who are the Manen.ID target. The customer profile will analyze how the customer condition at that time from several internal sides that exist in customer. Manen.ID can determine customer segments in two ways, first Manen.ID makes a product, then Manen.ID to find the market for the product. The second way is to analyze and determine the needs and expectations of Manen.ID customers and after that, Manen.ID makes products and services according to the needs and expectations of potential customers.

Customer profile analysis of Manen.ID is the determination of the customer based on the second way because the customer profile first analyzes the condition of the prospect customer and after that, manen.ID can create value according to customer needs and provide effective value for consumers. Customer profiles can analyze the customer segment not only on demographics, geography, or psychological customer but also can determine from the conditions, needs, hope, fear, and behavior of customers. that is an important aspect for the company in analyzing the customer segment. One example of research on the use of consumer profiles is Elsa Agustine's research which analyzes the customer profile of Ketringan startup to find out the problem of the income gap between individual customers types with the type of large order consumers. So she used a consumer profile to analyze customer internal based on the habits, behavior, and hopes of customers when ordering online food.

Another research conducted by Raihan Mahdi to find out how the consumer profile of household assistant users from a household assistant service provider company in Bandung found the fact that the consumer profile can see what criteria the consumer wants, the results obtained by these authors are the Household assistant service users want household assistants who are skilled, punctual, experienced in work, honest, and service tenants do not hesitate to pay more than household assistants work optimally.

One of the tools that can be used to analyze customer profiles using an empathy map approach. The empathy map aims to get consumer demographic character and developed several definitions such as environment, behavior, and aspirations better. collaboration between consumer profiles and empathy map can be clearer to determine the value that the company will provide to customers because companies are easier to get important information from the customer in detail and the customer easier to convey their aspirations regarding their hopes and needs (Osterwalder and Pigneur, 2017).

An example of research that uses empathy maps as a research analysis tool is a study by Kintaro Aditya Rahmadi which examines the consumer profile of the tenants of the apartment "The Suite Metro" in Bandung. This is because the apartment often receives customer complaints with various problems so that the company wants to know what the deepest hopes and needs of the company's consumers. The results obtained in this study include apartment tenants who want an environment that is not too noisy, complete room service, guaranteed safety for occupants, and apartment cleanliness that must always be maintained. Another example is Widya Ayu Prabasari's research uses empathy maps as her research analysis tool. The results of the research obtained by these authors are that using empathy maps can see the consumer profile of a tourism application called "KITA". The consumer profile of that application are consumers who want lots of discounts and promotions, use the

application efficiently, and they hope complete features according to customer needs.

When researchers analyze customer profiles using the empathy map approach, researchers must bring the same situation to customers at that time, so that companies can more freely explore detailed information about customer aspirations. Customers also comfortable because they convey their aspirations to those who experience the same conditions as they.

Customers can be likened to companies as life partners, meaning when Someone who chooses a life partner must know the ins and outs of a partner their life. If someone does not understand the condition of their life partner, they can not find harmony between them. This is also the same as the condition of the company and consumers if the company does not know much about the ins and outs of consumers, companies cannot meet consumer expectations and needs. From here the company needs an empathy map position to find deep information about consumer needs.

The empathy map makes consumers feel confident that the company is the right place for them to share their hopes and needs. In the future, the company can be the answer to customer problems. Besides that, customers in the future certainly do not hesitate to spend the money they have given to the company because it has met their needs and expectations.

One empathy map only for analyzing one customer segment. The author takes one customer segment that will be served by Manen.ID when the author analyze Manen.ID customer profiles, namely Business to Business (B2B) customer. The reason the author chose this segment over other segments because the first is Manen.ID who said it would enter the existing market and take 10% market share from its competitors. The author made observations to determine the customer segments of Manen.ID's competitors through the Manen.ID competitors website and also several other websites on the internet that discuss customer segmentation of Manen.ID's competitors. After the authors made observations, the authors found data that the majority of Manen.ID's competitors were already focused on B2B customers in their business activities. The author reconfirms the results to Manen.ID and Manen.ID confirmed this.

Another reason is the business model used by Manen.ID is a crowdsourcing business model involving farmers to participate in activities in their business, such as inputting how many agricultural products have been harvested and will be select by Manen.ID and can also determine what commodities have been harvest must be planted or harvested immediately based on the accumulated demand data from consumers and potential consumers who are interested in using this application.

The business model fits the characteristics of B2B customer because B2B consumers buy products in large quantities, buy products repeatedly, B2B consumers have the desire that the products they buy are cheaper than B2C type consumers. So that with the involvement of farmers who have various types of agricultural commodities and the number of harvests from each farmer who is a partner, the characteristics of B2B customers in the quantity of buying agricultural products have been fulfilled. This is what the authors see as an opportunity for Manen.ID to define customer segment characteristics.

2. LITERATURE REVIEW AND FRAMEWORK OF THINKING

2.1 BUSINESS MODEL

The business model is a description of the basic foundation of how the company processes in creating, deliver value, and filter existing values. The nature of the business models aims to implement strategies throughout the organization, processes, and systems. A business model that can be said to be complete if it has the following elements which can be used as a representative company: who it serves, what it provides, how it creates money and profit, how it differentiates itself from its competitors (Osterwalder and Pigneur, 2017).

2.1.1 BUSINESS MODEL BENEFIT

Business models have benefits when companies create or know the business model they use, namely as follows:

1. Decision making can be effective and easier;
2. Can test whether the planned elements have a relationship;
3. Can be useful to see how market conditions and perspectives are carried out by the company;
4. Can see what percentage or urgency of the changes made or made by the company.

2.2 MARKET SEGMENTATION

The definition of market segmentation is a market that is consists of a group of customers where these consumers

have various types of needs and want in common with each other (Kotler, 2017). Meanwhile, according to Kasali (1998), the definition of market segmentation are the stages in grouping the various types of markets into various groups of potential consumers where these customers have the same wants and needs and the same character which has a similar response when it comes to spending money to get out. Osterwalder and Pigneur (2017) state that customers are at the center of all business models. The company cannot survive in the market competition if no customer buys products from the company. One of the strategies that companies often use pamper consumers more by creating consumer groups classified based on certain criteria, for example, based on the same needs, wants, and individual behavior. Also, there are several types of customer segmentation, namely mass market, limited market, segmented, diversified, and multi-sided (Osterwalder and Pigneur, 2017).

2.2.1 MARKET SEGMENTATION CLASSIFICATION

Assauri (2017) assume that market segmentation is divided into four types of variables, namely as follows:

A. Geographical segmentation

Geographical segmentation is the division of market segments based on a location that affects the operational costs incurred by the company and the amount of product demand in the market at a location. In market classification, demographic segmentation is divided into several variables, namely:

1. Territory
2. Climate
3. City or village.

B. Demographic Segmentation

In demographic segmentation, the division of market segmentation is based on demographic elements, such as age, gender, social status, income, creed, and race. Among the types of segmentation, there is demographic segmentation is the one most often used by companies in determining segments its customers.

C. Psychographic segmentation

Psychographic segmentation classifies consumers based on two types of variables, namely community personality, and community lifestyle. As examples of consumers who tend to prefer a thrifty and productive lifestyle, of course, you will choose a product with a low price but good quality. In contrast to consumers who have a luxurious lifestyle consumptive certainly doesn't matter if you buy a product at a high price as long as it can meet self-satisfaction.

D. Behavioral Segmentation

Behavioral segmentation classifies consumers into characteristics or a habit that comes from within them. An example is science possession, insights, experiences or responses, expectations, and wants of consumers against a product that has been used. Behavioral segmentation is a type of segmentation that is viewed from the internal non-psychological side of consumers so can be seen how the characteristics of these consumers.

2.3 CUSTOMER PERCEPTION

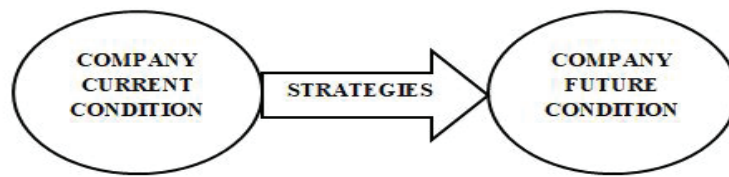
Perception is something that is not based solely on physical stimuli but also based on stimuli that have relevance to the environment in around and how is the state of the individual concerned who receives the stimulus (Kotler and Keller, 2016).

perception is a processor stage that starts when the consumer explains and pays attention to a marketing stimulus and ends up with an interpretation consumer. A marketer who wants a brand message effectively understand the nature of the perception (Hawkins and Mothersbaugh. 2016). Information processing is the activity of sensing stimuli, converting them into information, and storing them. Information processing useful to have four main steps or stages, namely exposure, attention, interpretation, and memory

2.4 BUSINESS STRATEGY

Strategic management is an activity to formulate, define, and evaluate the conclusions between existing elements and those that the organization uses to align the goals the organization wants to achieve with the environmental conditions in which the company is located. The flow in strategic management aims so that what the organization will achieve runs effectively, starting with how current decisions flow, how the company informs alternative strategies, how companies make decision designs and companies can implement these strategies to be effective (Amirullah, 2015:5).

Picture 2.1 Strategy Goals For The Company



Source: Management Strategy (Amirullah, 2015)

2.5 CUSTOMER PROFILE

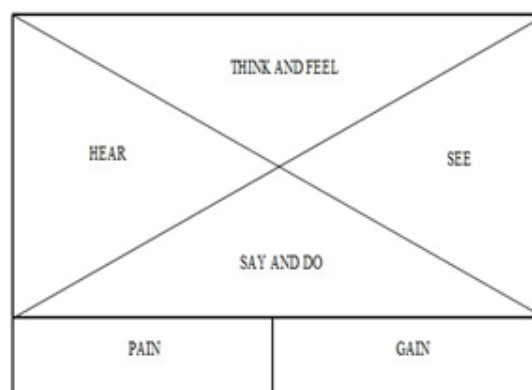
The customer profile has the purpose of classifying consumers' specific criteria based on a structured and detailed business model. Customer profile has three main elements in its division, namely Customer Jobs, Customer Gains, and Customer Pains which have a function to describe how the company's customer segments are (Osterwalder and Pigneur, 2017).

Customer profiles can be decisive customer segmentation specifically on a structured and detailed business model because in the customer profile is divided into three sections that define each of the consumer activity and behaviour (Osterwalder, 2017).

2.6 EMPATHY MAP

The empathy map was first developed by Xplanae a visual thinking company. The empathy map serves a purpose to get a customer's demographic character and develop some definitions such as the environment, behavior, and customers' aspirations for the better. The empathy map has six blocks where each block has questions and can use it to know the wants and hopes of customers or it can be also to find out how the company understands more deeply these customers (Osterwalder and Pigneur, 2017:131). the company create an empathy map to make a business model which be better, because the empathy map can guide in designing the value owned by the company to be better, how to get closer to the consumers who make consumers more comfortable until consumers feel the company does the right way in establishing relationships with consumers. After that, the company can solve customer problems based on what consumers expect and consumers are also satisfied with the value of the company's products or services when compared to the price customers have to pay to buy these goods or services.

Picture 2.2 Empathy Map Framework of Thinking



Source: Business Model Generation, 2017

Table 2.1 Question of Empathy Map

see	the questions here are questions related to what consumers see in their environment..
hear	questions on this element explain how the environment affects consumers.
say and do	the questions on the say and do element explain what the customer might say and how the customer behaves.
think and feel	The questions on this element explain what consumers think about a value they expect and how they react to that value.
pain	The questions on this element are to see what has been making consumers suffer or hurt about a value they expect.
gain	The questions on this element explain what consumers expect regarding the upcoming updates.

Source: Business Model Generation, 2017

2.7 VALUE PROPOSITION

The value proposition has the essence as a strong reason why consumers have the thought of switching to use a product or service from one company to another. the value proposition can answer the problems that have been with customers so that the problem solving that customers experience in other words can satisfy customer needs related to offering value to customers (Osterwalder and Pigneur, 2017).

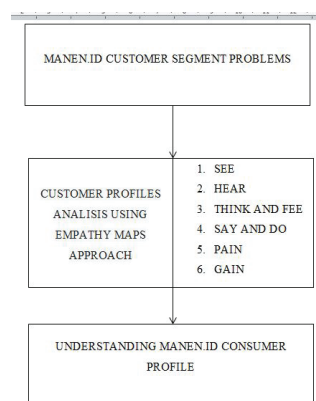
Osterwalder and Pigneur (2017) suggest Several elements can affect how companies create the value customers need

- a. Newtraits
- b. Performance
- c. Adjustments
- d. Finish the job
- e. Design
- f. Brand
- g. Price
- h. Cost reduction
- i. Reduction of risk
- j. Ability to access
- k. Comfort

2.8 FRAMEWORK OF THINKING

The author researched consumer profiles to get the right customer segment information for Manen.ID. The variables that the author use for this study are based on the six elements in the empathy map. Below is the framework that the author made for this research:

Picture 2.3 Research Framework of Thinking



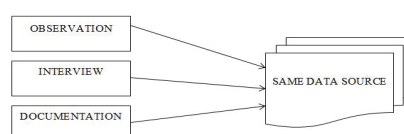
3. METHODOLOGY

The research conducted by the writer used qualitative research, in qualitative research, a researcher functions as an instrument when researching a phenomenon that is scientifically conditioned or experimental. The stages in collecting data by conducting a combination of observation, interviewing, and documentation activities, and inductive data analysis where the data have a qualitative nature and meaning is highly emphasized in the research results that have been found. (Sugiyono, 2018).

The research that the writer did use descriptive qualitative research. The author argues that the purpose of using the descriptive method is because the writer wants to reveal the facts and events in the research, to find out the problems, difficulties, to a desire that comes from the expectations of consumers who use digital business services in the agricultural sector more deeply. The hope that the authors want when this happens is that the author can analyze consumer profiles on Manen.ID more effectively and accurately. In this study, the authors conducted data collection techniques using observation, documentation, and interviews with key informants. In addition to getting primary data from observations, interviews, and documentation, the author also gets secondary data from the Manen.ID data bank, previous studies, reliable articles sourced from trusted sites on the internet that can be justified.

The author conducted a credibility test using the source triangulation or data triangulation approach, where this triangulation type to clarify who is the target of the interview, where is the place, and when the interview is conducted which supports the research conducted by the author. The author conducted interviews with several sources to test the validity of the data's credibility. The author conducted interviews with several sources to test the validity of the data's credibility. Interviews with Manen.ID was to clarify and confirm the Manen.ID problems after the author made observations. Besides, the author also conducted interviews with the customer segmentation Manen.ID who bought agricultural products for them to resell, either directly reselling them or going through the processing stage before they were resold, this segmentation is known as B2B customers. The writer specifies the types of B2B customers to be business actors in the culinary field and shop owners who sell groceries where the two types of B2B customers are very closely related to agricultural product suppliers, domiciled in the Bandung Raya area, that is because of Manen.ID targets customers in the Bandung Raya area, especially some sub-districts around the Telkom University. the prospective participants must have the criteria that the authors wants, whether they have a smartphone in their daily activities, do they know of a digital agricultural product supplier, have they ever used the service of a supplier that provides digital agricultural products, do they want to try other suppliers, and how regularly they buy agricultural produce during the week. The hope that the author wants when classifying this to happen is that the writer can analyze the consumer profile at startup Manen.ID more effectively and accurately.

Picture 3.1 Source Triangulation Approach



Source: Sugiyono, 2018

4. RESULT OF RESEARCH

4.1 INFORMANT CHARACTERISTICS

The characteristics of the informants that the author needs are informants who live in Bandung City and Bandung Regency according to the target area from Manen.ID. Manen.ID is targeting to take a maximum of 10% market share from the three existing competitors. because the market share that Manen.ID want is a maximum of 10% but Manen.ID targets consumers who live in Bandung Raya, the authors chose key informants who are in several sub-districts around the Telkom University for the Bandung regency area. The reason the authors chose several districts around the Telkom University was that the location of the Manen.ID office and factory was inside the Telkom University so that it made it easier for Manen.ID to controlling and attract existing potential customers. The key informants that the author chose for the Bandung Regency area were not only Telkom University students but all entrepreneurs who were in several sub-districts around the Telkom University and met the criteria of the key informant's author wanted. So the key informants who are in Bandung Regency are the surrounding community, be it Telkom University students who have entrepreneurs, residents who have businesses, as well as migrants from other areas who are entrepreneurs in the area. they have businesses in the sale of agricultural products, either directly resold or processed before being resold. For Bandung city, the author conducts interviews that are scattered to each point as representatives in four directions points of the compass. The key informants that the authors interviewed are customers who regularly buy agricultural products for them to resell, either selling directly to the end consumer or processing these products into something before they are sold to the end consumer. the author did this to see if there were one a different perspective on the two types of the informant characteristics although they are all B2B consumer types for Manen.ID.

The author also in determinined the key informants by looking at the scale of their new business in the Greater Bandung area, even though they have several business branches but not outside Bandung Raya. The author chooses respondents who have never tried and have tried using technological developments in ordering agricultural products, whether they use smart phones in their daily activities, if not already ever used the application in ordering agricultural products is there desire to try it, their behavior towards the suppliers they currently use, how often they buy products in a week, and whether respondents wish to try new suppliers. From the description, the author has nine respondents who the author feel are sufficient to represent each of the key informant criteria that the author needs.

Table 4.1 Informants Identity

No	Name	Domicile	Type of Business	Since	Scale	Have a SmartPhone	Routines in Buying Agricultural Products
1.	Yanti Kuswisnu sari	Bandung Regency	Foods and Beverages	2015	Micro Business	Have a SmartPhone	Once in Two Days
2.	Reza Mahardi	Bandung City	Foods and Beverages	2016	Small Business	Have a SmartPhone	Every Day
3.	Fajar Mashuda	Bandung Regency	Foods and Beverages	2016	Micro Business	Have a SmartPhone	Once in Two Days
4.	Wifiani Sukma	Bandung Regency	Foods and Beverages	2017	Small Business	Have a SmartPhone	Once in Three Days
5.	Nunik Khumairah	Bandung City	Foods and Beverages	2016	Small Business	Have a SmartPhone	Every Day
6.	Ahmad Maulana Annafri	Bandung City	Grocery Store	2017	Small Business	Have a SmartPhone	Once in Three Days

Source: Researcher's Data Processed, June 2020

4.2 RESULT OF RESEARCH

After the authors collected data through interviews with respondents are processed the data and analyzed it. The tools that the authors use to process data from the results of these interviews are using TagCrowd. TagCrowd is a useful website for visualizing several words or word frequencies in a more familiar sentence (Tagcrowd, 2006). The author has classified the word groups into the top three words that are most pronounced by the speakers in the word grouping results tables below:

Table 4.2 Result of Think and Feel Block

No	Questions of Think and Feel Block	TagCrowd	Ranking
01	What kind of agricultural products do you think about when buying raw materials from suppliers?	1. High Quality	1
		2. Better Price	2
		3. Fresh	3
02	How do you feel about shipping products from your current supplier?	1. Not Satisfied	1
		2. Disappointed	2
		3. Feeling Sad Because It Often Came Late	3
03	How do you feel when your agricultural product order is not fresh and arrives late at the promised time even though it has been fully paid?	1. Dissapointed	1
		2. Peevish	2
		3. Feel Like Getting Compensated For Supplier Mistakes	3

Table 4.3 Result of Say and Do Block

No	Questions of Say and Do Block	TagCrowd	Ranking
01	What do you do if the product that the supplier sends doesn't meet your expectations and the price is more expensive?	1. Looking For Substitute Suppliers	1
		2. Compare Prices Among Suppliers	2
		3. Excuse The Supplier If The Reasons Make Sense	3
02	Do you need a supplier that can deliver a wide variety of products for your business? can you tell the reason	1. Time Efficiency	1
		2. Price Efficiency	2
		3. Not Confusing Where To Buy Other Items	3

Table 4.4 Result of Hear Block

No	Questions of Hear Block	Tagcrowd	Ranking
01	What comments you often hear from other customers who use the same supplier as yours?	1. The price still expensive	1
		2. Product delivery to consumers is not fast	2
		3. Rarely heard negative comments	3
02	Have you ever heard of agricultural product delivery services other than offline suppliers and the agricultural product order delivery application system that you use?	1. Heard it very often	1
		2. May have heard of it	2
		3. Never heard of it	3
03	What media do you use to access information about the world of agriculture?	1. Social Media	1
		2. News on Television	2
		3. Conversation with the people around them	3

Table 4.5 Result of See Block

No	Question of See Block	TagCrowd	Ranking
01	What are your see on the suppliers that you frequently use to deliver the agricultural products you need?	1. Expensive price	1
		2. Still not professional at work	2
		3. Suppliers selling good products	3

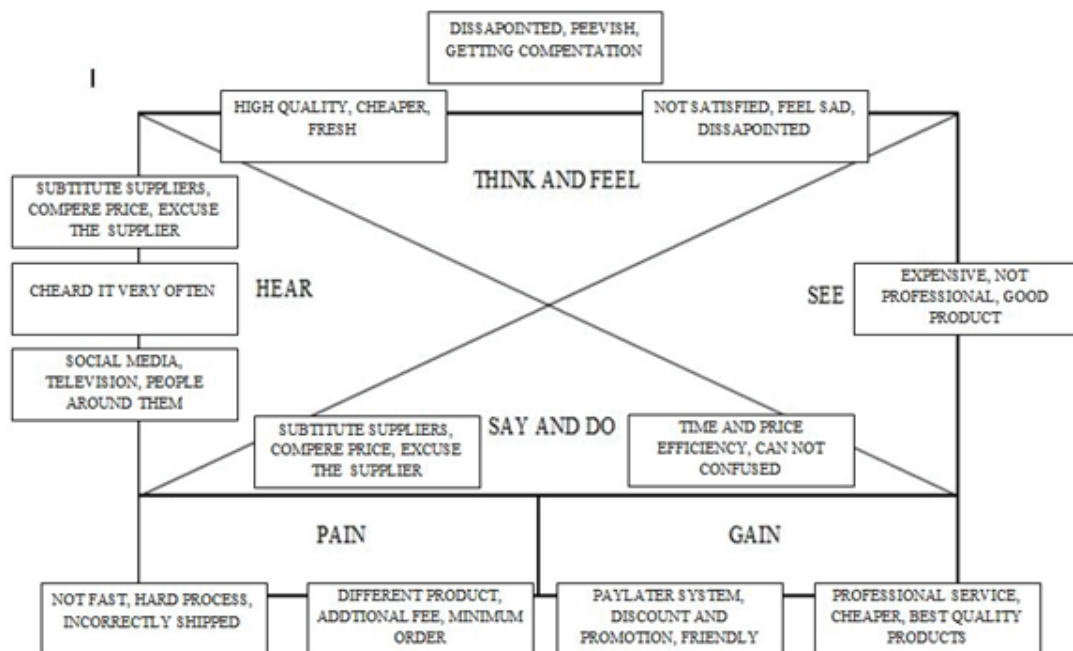
Table 4.6 Result of Pain Block

No	Question of Pain Block	TagCrowd	Ranking
01	What difficulties did you face when ordering products from suppliers?	1. The time it takes for suppliers to deliver orders is not fast	1
		2. The current process will order a product that is not fast	2
		3. Products sent by suppliers are often defective or incorrectly shipped	3
02	What problems did you experience when ordering products from the application or website? (do not come directly to the supplier)	1. The products shipped are different from the samples	1
		2. There is an additional charge for product delivery	2
		3. There is a minimum order	3

Table 4.7 Result of Gain Block

No	Question of Gain Block	TagCrowd	Ranking
01	In your opinion, what are the advantages of the suppliers that you use?	1. Paylater System	1
		2. Discount and Promotion	2
		3. Serve with friendly customer complaints	3
02	What kind of service do you expect when ordering products from suppliers?	1. Friendly and professional service	1
		2. Cheaper price	2
		3. Has a wide variety of products and all of them are of good quality	3

Picture 4.1 Result of Manen.ID Customer Profile



Respondents said the product must be of good quality. For example, the rice must be clean and has not rice lice, packaging that is not broken and does not smell, and it is not mixed rice. If the product is a vegetable it must be it is already clean, there are no broken or falling parts, nothing else caterpillar, and the product according to the sample, and the customers are more concerned about the condition of the packaging,

The majority of respondents wanted a 5% discount price from their current supplier. Respondents said that even though the difference was only 5% or less than 10% it could save their operational costs. Because they buy in large quantities, so they can save the remaining costs they have or use for other activities. Seven consumers said that the low price was one of their thoughts in buying the product.

Five respondents said the products that suppliers send must be fresh. Such as vegetables that have not wilted or are not old stocks that have not been sold. The respondents argued that if the products sent were no longer fresh then most likely when the product arrives they can no longer use it and reduce the stock of raw materials they are supposed to use each time delivery.

Six respondents said they were dissatisfied with the delivery of products from suppliers because still not professional. For example, the item sent was the incorrect amount or there are raw materials that are exchanged with other consumers. Other than that it's very long deep waiting whether the item to be ordered is still in stock on request until the length of the queue or the service that the supplier provides in ordering product.

Six respondents also said that they were disappointed to the supplier because often mistakes in the number of products they ship, products that come in sometimes no longer fresh so that the goods arrive late on purpose.

Five respondents said that suppliers deliver the product are often late and the suppliers always have a reason that they are has carried out their duties properly, but constrained stuck or have to wait for products coming upstream of their supply chain. So that the respondents forgive and give the next opportunity to the supplier.

Four respondents understand that the price of the product rises gradually suddenly when suppliers have reasons that can be accepted by respondents. For example, such as transportation costs that have risen, suppliers must increase the price, or the product is still slightly harvested which results in a lot of demand but still low production.

Eight respondents said that it is a necessary supplier that can provide various types of products because in addition to time efficiency it is also due to price efficiency. usually, if raw materials are ordered from more suppliers then more price to pay. Five respondents also said that if there were suppliers that could provide a variety of products, it would not makes them confused to find a place within buy products because of integrity in one place.

The comments that Respondents often hear about suppliers are suppliers selling at relatively high prices. The point is the product has the same price when the supplier sells to all types of consumers. That what the respondent wants is that the price of the product must be cheaper compared to end consumers who buy products in small quantities.

Six of these respondents also said that the delivery from suppliers not quickly, suppliers not being on time from agreements that have been made or automated on the system or indeed from the supplier who was unable to deliver the time suggested by the respondent.

The rest of the respondents said they did not care about comments given to suppliers both positive and negative comments from other consumers who order from the supplier. They argued that in fact, the suppliers were doing their best to provide the best service, but if there are obstacles, the supplier cannot avoid it, and they also feel it is useless to move to another supplier because of the supplier others according to them also often make mistakes.

Five respondents said they heard a lot there are so many business model that are similar to Manen.ID both the ones they currently using and the ones they don't use. Three out of five respondents said that haven't used another supplier whereas two people said they used but returned to the old supplier because it was valued does not have a significant difference. Meanwhile, the other respondents each stated that it was not heard about the same app with that supplier they use. The reason that they heard but lacked sure if what they hear is a similar business to a supplier they use today. Because they once mistook the application for ordering agricultural products but an agriculture equity crowdfunding application and also a simple farming based training application.

Six respondents actively use social media so they can easily get information whether they knowingly or unintentionally get the information. Five respondents also said they usually see news on television be it advertisements. Four respondents said they often get information directly from people's conversations who are in the environment.

Eight respondents said that suppliers still attach importance to a large personal advantage so that the product they sell is still expensive for those who buy the product to sell back. suppliers do meet the needs of consumers but not the welfare of consumers. Of the eight respondents, seven of them also said that currently, service providers are still not professional in delivering products that do not only happen to respondents but also other consumers. There is only one respondent who saw that the supplier has a good purpose because it meets consumer needs and helps farmers.

Respondents feel hurt to suppliers when the products sent by suppliers arrive late, which makes consumers feel lost because these products are always needed by respondents and very quickly run out when sold. For example, rice and vegetables that do not arrive for the respondents who own the restaurant will make they are hampered in cooking food for consumers, the respondent could buy spare products elsewhere but it will take time wasted a lot and there is no cost-efficiency. Three respondents said that very long lines to buy products sometimes made consumers feel they were not well served, tired of waiting, and not getting the goods because it was sold out even though been waiting in line for a long time. And also found that products that do not meet expectations become taste Respondent's hurt towards suppliers. Products that do not meet the expectations of the respondents also become tastes Resentment towards suppliers.

Four respondents felt when ordering online products or did not see the product directly before buying, the respondent afraid that the quality of the goods delivered is not the same as the sample image they see so they fear fraud. This is based on experience consumer pain when ordering goods from their old supplier. Minimum order that makes respondents have to pay more. Respondents were afraid and sick be careful if the product ordered is excess and can not use it because exceed the capacity required by the respondent, other than that

shipping costs that are usually calculated based on the weight of the goods make the price of the product they ordered to be expensive because they have to pay additional costs.

Five respondents said that their supplier has a paylater feature. Paylater features owned by their suppliers of various kinds. Some use what limits the maximum owed and it depends on the membership status of the consumer, there is also, that do not require a limit but must be paid in a short time and no consumers cannot pay it in installments. Three respondents also said that often the suppliers they use provide discounts or sales promotions, which is also a strong reason why the respondents still maintain their suppliers. because not directly the products they buy become cheaper. three respondents said that the services provided by suppliers in responding to customer complaints were considered polite even though they were these suppliers often make mistakes. According to the respondents because polite and friendly suppliers when there are consumers who complain will make respondents become melted and their emotions decline about the wrongdoing done by the supplier.

Six of the respondents expected that they had a professional supplier to minimize errors during the ordering process and when the product arrives at the respondent's place. Four respondents also said that they expect the supplier to have a product that is as diverse and as good as that of a clean product, odorless, non-wilted, usable, and fresh, and not a product remaining unsold. And the last four respondents said that the suppliers should be fixing a cheaper price to sell to consumers, it could be with countless promotions and discounts, absence or downsizing of the system minimum order, or no shipping costs for the product respondent messages. But even so, the respondents said that if so prices from suppliers could not be cheaper for fear the loss of market balance and the price is indeed the cheapest the respondent will compare through the quality of the product that the supplier sends what is under the price and also see from how suppliers serve consumers, not only because they provide needs But consumers are also present because of answers to values that suppliers cannot long time fulfill.

5. CONCLUSION

Of the many types of target customers for Manen.ID, the type of Business to Business (B2B) customer is the most potential segment for developing Manen.ID. Customer profile from Manen.ID is B2B customer who want high-quality products and are still fresh when they arrive at the customer's place. Also, customers from Manen.ID considers that they will try to use a new supplier if the supplier is professional in running his business, especially product delivery. This is because of Manen.ID customers think that professionalism is the main thing to attract their attention.

Manen.ID customers want low prices, either because the prices are cheap or suppliers often provide discounts or promotions. But customers are aware that in reality, cheap products are difficult for them to get, so they will see the supplier from the service point of view and the products that the suppliers send are under the prices offered by the suppliers. So far, customers have persisted with their former suppliers for two reasons, firstly because suppliers often compensate for mistakes made by suppliers and secondly because customers feel that each existing supplier has no advantages over other suppliers, so it makes them feel useless to change suppliers. they also said that if a supplier can create the needs of those customers they would be happy to try using a new supplier.

REFERENCES

- Amirullah. (2015). *Manajemen Strategi*. Jakarta: Mitra Wacana Media.
- Assauri, S. (2017). *Manajemen Pemasaran*. Jakarta: Rajagrafindo Persada.
- Fadila, D., & Ridho, S. (2013). *Perilaku Konsumen*. Palembang: Citrabooks Indonesia.
- Hawkins, D., & Mothersbaugh, D. (2016). *Consumer Behaviour: Building Marketing Strategy, 13th edition*. New York: Mcgraw-Hill Education.
- Kasali, R. (1998). *Membidik Pasar Indonesia: Segmenting, Targetting, Positioning*. Jakarta: Gramedia Pustaka Utama.
- Kotler, P., & Keller, K. (2016). *Marketing Management 16 Edition*. New Jersey: Pearson.
- Mahdi, R. (2016). *Pemahaman Profil Konsumen Pengguna Jasa Asisten Rumah Tangga Di Kota Bandung Menggunakan Bantuan Peta Empati*. Bandung: Telkom University Open Library.

- Osterwalder, A., & Pigneur, Y. (2017). *Business Model Generation*. Jakarta: Elex Media Komputindo.
- Prabasari, W. A. (2020). *Identifikasi Profil Konsumen KITA (Wisata Keliling Indonesia) Dengan Metode Peta Empati*. Bandung: Telkom University Open Library.
- Qamarani, E. (2020). Analisis Profil Konsumen Stratup Ketringan dengan Pendekatan Desain Proposisi Nilai. *Jurnal Sekretaris dan Administrasi Bisnis*, 131-145.
- Rachmadi, K. A. (2016). *Analisis Profil Konsumen Pengguna Jasa Sewa Menyewa Unit Apartemen The Suite Metro*. Bandung: Telkom University Open Library.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Susilowati, S. H. (2016). Fenomena Penuaan Petani dan Berkurangnya Tenaga Kerja Muda Serta Impikasinya Bagi Kebijakan Pembangunan Pertanian. *Forum Penelitian Agro Ekonomi*, 46-49.

BUSINESS STRATEGY OF YOUNG ENTREPRENEUR ACADEMY INDONESIA IN THE NEW NORMAL ERA

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Abstract

When COVID-19 outbreaks happened in early 2020, the education sector was one of the most impacted by health and safety measures. Face-to-face meetings in the class were restricted, making many firms in the education and training industry cannot conduct their business. Young Entrepreneur Academy Indonesia, also known as YEA, was one of them. Providing entrepreneurship courses with experiential learning method requires the company to hold various activities that involve face-to-face meetings, which was restricted. To cope with the situation, the company needs to formulate new strategies to stay in business.

Author represents YEA in doing this qualitative research that uses case study method. The focus of the study is how the organization can manage to cope with the new normal era. Data are collected using interviews, survey, focus group discussions, observations, and other documents and reports related to the case as well. Internal and external analysis is done by considering the resources, values, products and services, organization, customers behaviour, competitiveness, and various other factors, to propose strategies for YEA to shift their way of doing business. The chosen strategy is product differentiation. While keeping the core value to provide quality entrepreneurship learning, courses are delivered in an interactive online course format and branded as YEA Virtual. After conducting a trial and gathering feedback from customers for validation, the proposed strategy was considered effective. This pivotal strategy not only retains existing customers but also gives the opportunity to reach new customer segment.

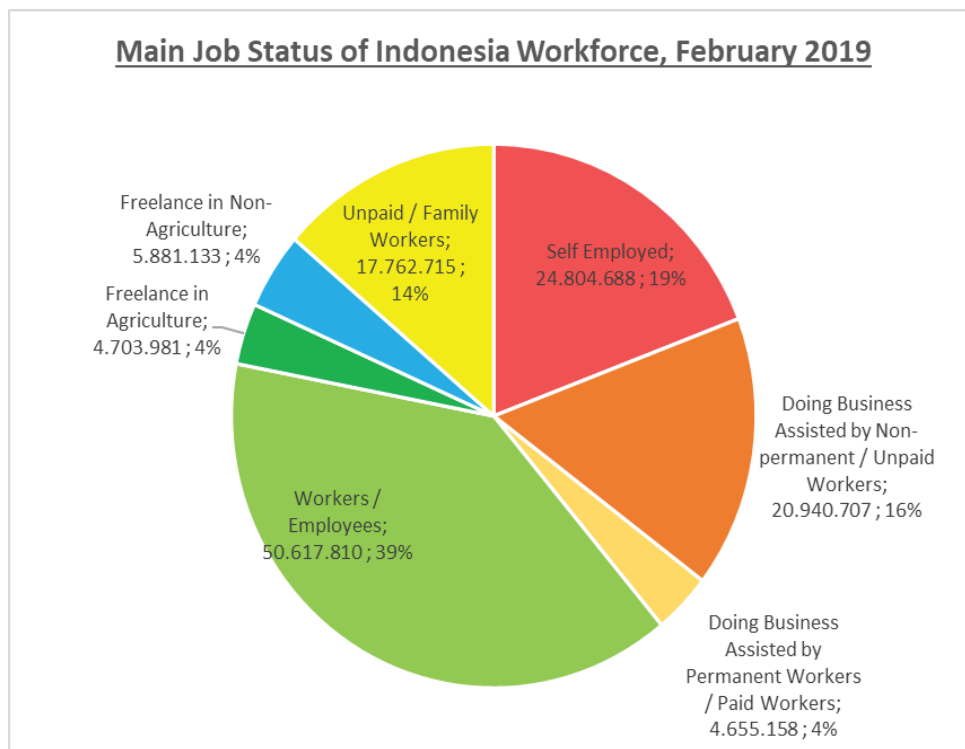
Keywords: COVID-19, entrepreneurship learning, business strategy, online course

1. INTRODUCTION

In developing countries, the level of entrepreneurial activities correlates positively with growth in GDP and employment. Meyer (2017) come up with this insight when researching this topic in BRICS countries. This fact drives governments to increase entrepreneurial activity in their countries. Since Indonesia has similar characteristics with BRICS countries, the same insight could apply here as well.

According to Badan Pusat Statistik Indonesia (BPS, 2019), unemployment rate in Indonesia is 5,28%, and numbered 6.816.840 individuals, majority of them are high school graduates. From the total workforce of 129.366.192 persons, 50.400.553 identified as self-employed or doing business. This seemed like a big number, but figure 1 shown that those who do a proper business with permanent or paid workers are only about 3,6%.

Figure 1. Main Job Status of Indonesia Workforce, February 2019



(source: BPS, processed by author)

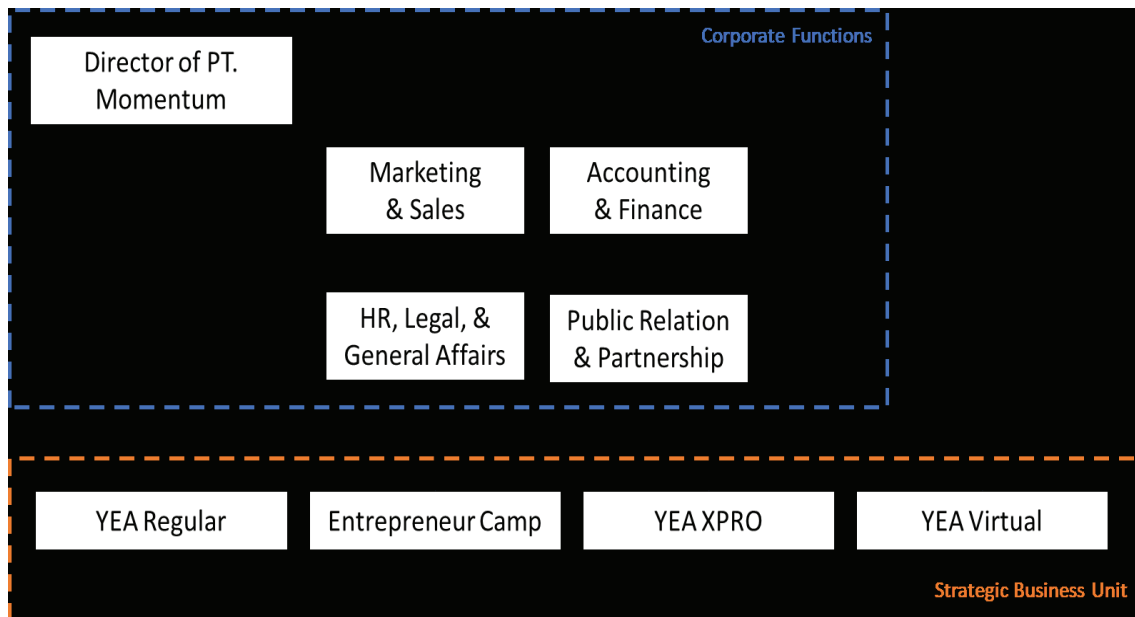
Reported by Katadata (2019), the ratio of Indonesian entrepreneurs is currently at 5%, quite far behind the government target of 14%. To reach the target number of entrepreneurs, Indonesian Government have attempted a lot of entrepreneurship development programs involving various ministry, including education, funding, training, exhibition, tax incentive, and many more. Not only the government, various private organizations also contribute to reduce the gap.

Entrepreneurship education contribute quiet well in this matter. Numerous education institutions shifted to be entrepreneurial university. The younger generations also seemed to follow the trend of starting or having their own business. Their paradigm shifts from seeking jobs, to creating jobs.

PT. Momentum Entrepreneur Mindset with its brand Young Entrepreneur Academy (YEA) try to fit in this sector by providing non-formal entrepreneurship education programs for youth. The company was first established in 2005 in the field of finance business and entrepreneurship coaching, while the YEA brand itself was first known on 31 October 2007, right when the first batch of YEA program is started on Batam city. In 2009, the operation of the company moved to Bandung as the city is considered to have better environment for learning creative entrepreneurship. Since 2007, mostly everything is going well, and the company grow steadily. Now, it has several products and services, namely YEA Regular Program, Entrepreneur Camp, YEA Virtual, YEA XPRO, and customized programs for corporate. The company profile can be seen on their website www.yea-indonesia.com.

To manage the business, the company setup so that each products and services are treated as a strategic business unit with their own program director that answer directly to the Director of PT. Momentum Entrepreneur Mindset. Meanwhile, basic corporate functions such as marketing and sales, accounting and finance, human resources, legal, general affairs, and public relations are treated as divisions that support the strategic business units. The organization structure is shown in figure 2.

Figure 2. Organization Structure of PT. Momentum Entrepreneur Mindset



(source: Company internal data)

With this structure, the company hoped that each strategic business units and corporate functions to be able to operate in synergy. Despite the organization structure, every team member support each other units regardless of their position.

However, the COVID-19 pandemic changed the situation. Industries continues to deal with the effects of the lockdown measures that are in place to stem the spread of COVID-19. Young Entrepreneur Academy, as an educational institution, also suffered from the impact of the pandemic. Government advised that face-to-face in class activities are put on hold since March 2020 to help slow the virus spread. This means all of YEA services are halted. Even though some class activities can be shifted to live online class using conferencing app, things are not looking good.

Moreover, people may behave differently than they did before the crisis. Certain attitudes and habits may have changed which may have a significant and lasting impact on education industry. The economic activities shifted to what called low touch economy.

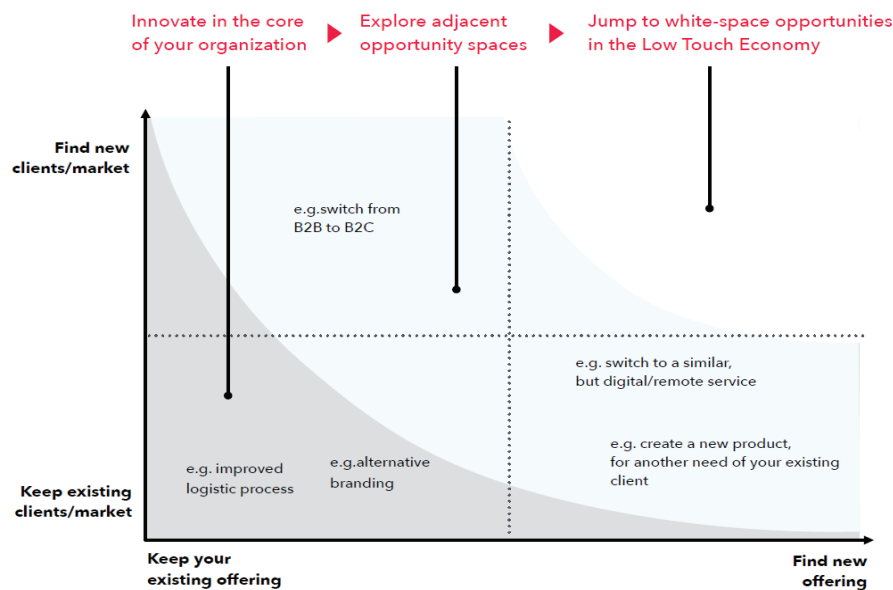
The new normal era brought by the pandemic situation raised questions: (1.) What kind of strategy should be taken by YEA to cope with the new normal era? (2.) What kind business model should YEA adapt to align with that strategy? (3.) How should YEA implement that strategy? Furthermore, the firm must also prepare for the post-pandemic situation as well.

2. LITERATURE REVIEW

Low Touch Economy

When the COVID-19 outbreak happened, people's behavior changed quite drastically, shifting how economy works. People do less activities with direct interaction. Board of Innovation (2020) called this phenomenon the Low Touch Economy, and suggested businesses to re-think their strategies. The firm proposed a tool to assess the impact of COVID-19 pandemic to an organization and a matrix of how to adapt the strategies. This matrix is shown in figure 3.

Figure 3. Low Touch Economy Strategy Matrix



(source: Board of Innovation, 2020)

VRIO Analysis

VRIO framework is a theoretical framework that explains and predicts firm-level competitive advantages. Rothaermel (2015) suggested that a firm can gain a competitive advantage if it has internal resources that fulfill four attributes. The attributes of VRIO analysis can be described in the following details:

1. Valuable (V). A resource is considered valuable if it can increase the value of the product or services.
2. Rare (R). A resource is considered rare if it is unique and difficult to find in the market.
3. Costly to Imitate (I). A resource is considered costly to imitate if it difficult and/or take a long time to develop or obtained at a reasonable price.
4. Organized to capture value (O). This criterion is related to the organizational readiness to be organized to capture the value of the resources.

If a firm's resources meet the four VRIO criteria, that resources are considered as sustained competitive advantages.

Value Chain Analysis

Value chain analysis is the internal activities a firm engages in while transforming inputs into outputs, where each of the activities adds incremental value (Rothaermel, 2015). It consists of two main activities: the primary activities that directly add values; and the support activities that indirectly add values.

PESTLE Analysis

PESTLE analysis is a tool that can be used by companies to track the environment they are operating in or are planning to launch a new project/product/service. It is the abbreviation of political, economic, sociocultural, technological, law, and environment. (PESTLEAnalysis.com, 2016).

Porter's Five Forces

Porter's Five Forces analysis is a framework that helps analyzing the level of competition within a certain industry. According to this framework from Porter (2008), competitiveness does not only come from competitors. Rather, the state of competition in an industry depends on five basic forces: threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products or services, and existing industry rivalry.

SWOT Analysis

SWOT analysis is a framework to synthesize insights obtained from an internal analysis of a company's strengths and weaknesses (S and W) with those from an analysis of external opportunities and threats (O and T) (Rothaermel, 2015). SWOT analysis is typically followed by creating TOWS matrix to formulate actionable strategies and tactics utilizing the internal and external factors.

Generic Business Strategy

M. E. Porter (1980) stated that there are two fundamentally different generic business strategies:

- Cost leadership strategy

A cost leadership strategy seeks to create the same or similar value for customers by delivering products or services at a lower cost than competitors, which enables the firm to offer lower prices to its customers.

- Differentiation strategy

A differentiation strategy seeks to create higher value for customers compared to the value created by competitors, which achieved by delivering products or services with unique features while keeping costs at the same or similar level.

Business Model Canvas

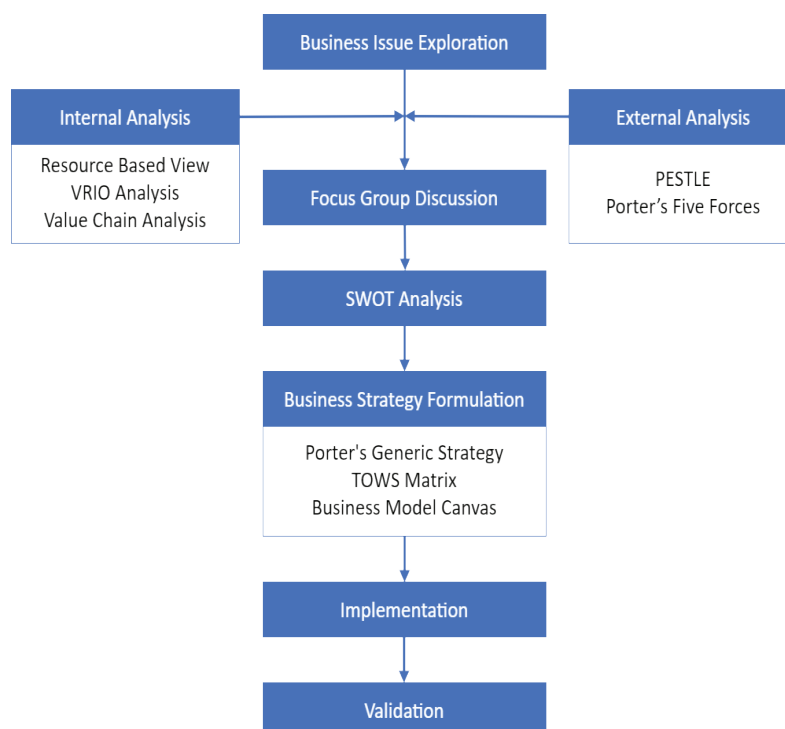
Osterwalder (2010) introduced a visual reference model that can describe four main elements of a business: customers, offers, infrastructure, and financial. These elements are mapped into nine building blocks called Business Model Canvas to describe how an organization do their business. The nine building blocks are Customer Segments (CS), Value Proposition (VP), Channels (CH), Customer Relationships (CR), Revenue Streams (R\$), Key Resources (KR), Key Activities (KA), Key Partnerships (KP), and Cost Structure (C\$). When mapped, the business model canvas can be used to design, invent, pivot, improve, or innovate a business.

3. METHODOLOGY

This qualitative research uses the case study method. Some sort of ethnography method also applied by blending into the studied organization activities. The focus of the study is how the organization can manage its strategies to cope with the new normal era. Data are collected using interviews, survey, focus group discussions, observations, company's documents and reports, and external reports data related to the case as well. The collected data is used to explore and describe the case. In this case, author represents YEA to act as a researcher to help the company formulate and implement the new strategy. The research was conducted between April 2020 when the outbreaks began, until early October 2020 when the strategies are validated.

The methodology of this research can be described with conceptual framework, which is a structure that author believes can explain how this research is conducted. It is linked with the concepts, theories, tools, and empirical research used to formulate the results. The conceptual framework of this research is shown on figure 4.

Figure 4. Conceptual Framework of the Research



The research begins with business issue exploration, where information gathered using internal and external analysis. For internal analysis, Resource Based View, VRIO Analysis, and Value Chain Analysis are used. For external analysis, PESTLE and Porter's Five Forces are used to understand the situation outside of the company. After having the fact from the preliminary analysis, a focus group discussion involving internal team of Young Entrepreneur Academy is conducted. It is then followed by SWOT Analysis to compile the major factors that need to be considered to discuss what strategy should be taken.

In the business strategy formulation stage, several tools are used, including Porter's Generic Strategy, TOWS Matrix, and Business Model Canvas. The proposed strategy then implemented and validated by gathering feedback from customers to get valuable insights. This feedback is gathered through interviews done by author and YEA team to 23 out of 31 participants of the new product and services.

4. ANALYSIS

4.1 INTERNAL ANALYSIS

4.1.1 RESOURCE BASED VIEW AND VRIO ANALYSIS

To analyse the competitive advantage of the firm, the company most important resources are listed and then VRIO analysis is used. Each important resource was determined if they are valuable, rare, costly to imitate, and organized to capture value. Should they fulfil the four criteria, the resource can be considered a sustained competitive advantage. The analysis is shown in Table 1.

Table 1. VRIO Analysis – Young Entrepreneur Academy

Resources	Valuable?	Rare?	Costly to imitate?	Organized to capture value?	VRIO Result
Facilities	Yes	Yes	No	No	Temporary Competitive Advantages
Human Resources	Yes	Yes	Yes	No	Temporary Competitive Advantages
Teaching Equipment	Yes	No	No	No	Temporary Competitive Advantages
Network of mentors	Yes	Yes	Yes	No	Temporary Competitive Advantages
Curriculum	Yes	Yes	Yes	No	Temporary Competitive Advantages
Learning method & tools	Yes	Yes	Yes	No	Temporary Competitive Advantages
Core Values	Yes	Yes	Yes	Yes	Sustained Competitive Advantages
Reputation	Yes	Yes	Yes	Yes	Sustained Competitive Advantages

Based on the VRIO analysis, core values and reputation are the resources considered as sustained competitive advantage. This is due to the company consistent focus on entrepreneurship for more than ten years. However, human resources, network of mentors, curriculum, and learning method also have potential to become sustained competitive advantage if they can be organized to capture value. Curriculum and learning method are typically not costly to imitate, but in this case, they need certain skillset from the human resource who conducted them. In YEA, these human resources are trained internally in a long period, with a low turnover rate, which makes it costly to imitate.

4.1.2 VALUE CHAIN ANALYSIS

The value chain of Young Entrepreneur Academy is shown in figure 5. All primary activities in Young Entrepreneur Academy are conducted by internal team, including marketing and sales activities. There are some partnerships to support the activities, but it does not affect the activities greatly even if the partnerships ended. In this way, the strategic plan can be aligned on all business units.

Figure 5. Value Chain Analysis of Young Entrepreneur Academy

4.2 EXTERNAL ANALYSIS

4.2.1 PESTLE ANALYSIS

The PESTLE analysis in this research examines the entrepreneurship education industry, particularly the factors that can possibly impact Young Entrepreneur Academy right now and in the future. The summarized analysis is shown in table 2.

Table 2. PESTLE Analysis for Young Entrepreneur Academy

Political	Economic	Sociocultural	Technological	Law	Environmental
<p>Government scrutiny due to responses to COVID-19.</p> <p>Changes in trade policy and budget.</p> <p>Kartu Prakerja encourage people to gain new skills.</p> <p>Ministry of Education policy is expected to lean towards entrepreneurial & digital learning activities.</p>	<p>Capital market crashed.</p> <p>Massive layoffs (Tirto.id, 2020).</p> <p>Decreased economic output.</p> <p>Bank Indonesia decreased interest rate.</p> <p>Online learning business on the rise.</p>	<p>Projected demographic bonus in 2025.</p> <p>Travel fear.</p> <p>Tendency to stay home.</p> <p>Low touch behavior.</p> <p>People engaging in remote work and learning (McKinsey, 2020).</p> <p>Increase in e-learning adoption (BCG, 2020)</p> <p>Remote learning expected to stick around post COVID-19.</p>	<p>Advances in virology.</p> <p>Increased PCR test capacity.</p> <p>Better treatment for COVID-19 patients.</p> <p>Possible COVID-19 vaccine in shorter time.</p> <p>Accelerated technology adaptation by people.</p> <p>Increase in internet usage.</p> <p>Increase in laptop sales.</p> <p>New remote collaboration technologies.</p>	<p>Cooperation from partners to distribute learning materials.</p> <p>Obligation to obey restrictions and health protocol.</p>	<p>Increase in electrical energy consumption.</p> <p>Pollution from power plants increase, pollution from vehicle decreases.</p> <p>Decrease in paper waste.</p> <p>Increase in medical waste.</p>

4.2.2 PORTER' FIVE FORCES

Porter's Five Forces helps analysing the level of competition within a certain industry. In this research, the one that will be analysed is the entrepreneurship education industry which YEA focus on. The Porter's Five Forces analysis can be summarized on figure 6.

Figure 6. Porter's Five Forces Analysis of Entrepreneurship Education Industry

Threat from New Entrants	Bargaining Power of Suppliers	Bargaining Power of Buyers	Threat of Substitutes Product	Rivalry among Existing Competitor
Low to medium	Medium	Low to medium	Medium	Medium
<ul style="list-style-type: none"> Does not require big capital. Require certain expertise and network, takes long time to build up. Experience on online learning platform will be different. 	<ul style="list-style-type: none"> Quite dependent on manpower. Mentors might be picky, maintaining relationship is important. 	<ul style="list-style-type: none"> Customers can check & compare prices with some effort. Quota is limited. Switching costs are relatively low. Brand loyalty is generally high. Price sensitivity is relatively low, concern more about quality of program. 	<ul style="list-style-type: none"> Alternative 1 is formal college (business & management major). Cost higher. Alternative 2 is online course about business & entrepreneurship. Generally cost cheaper. 	<ul style="list-style-type: none"> Many firm in the industry. Each firm has some pricing power with differentiated products. Industry's growth is steady. Government encourage entrepreneurship.

(source: Author)

As the five forces threat are mostly considered as medium, it means that a firm in this industry need to continuously improve and innovate themselves to be competitive.

4.3 FOCUS GROUP DISCUSSION

To discuss the problems faced by the company, an unstructured focus group discussion was conducted in form of a meeting involving all YEA team member who were in Bandung that time. Each FGD participant would share their concerns and the information they had.

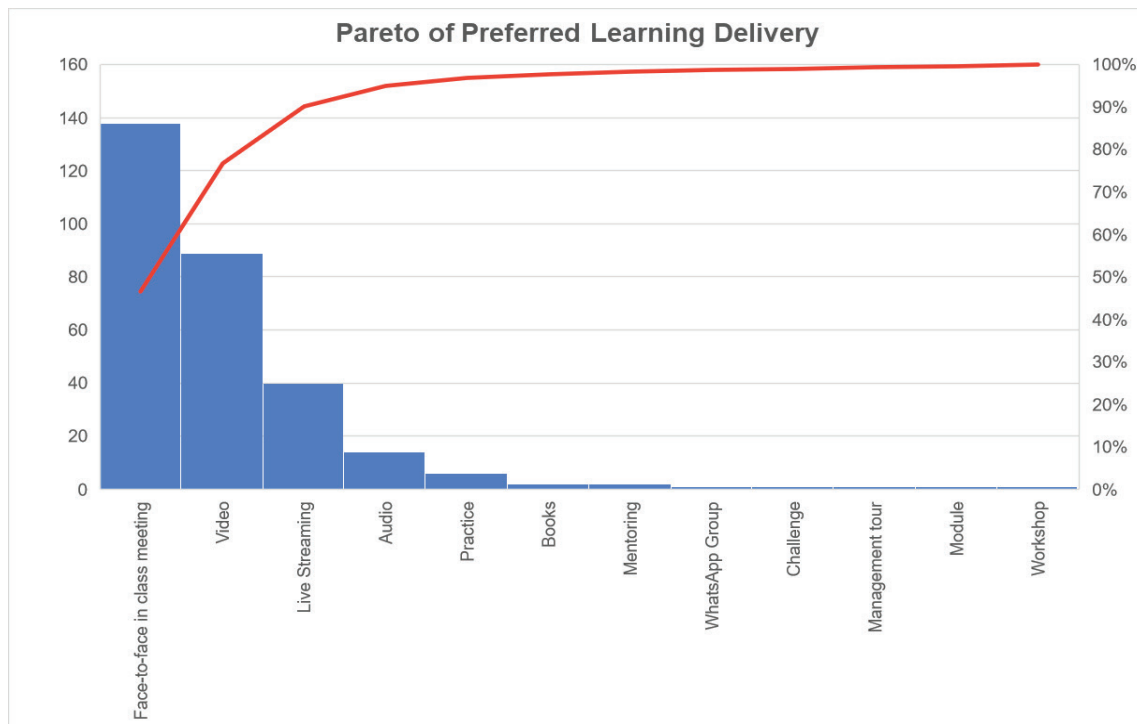
From this FGD, it is known that the main concerns for this COVID-19 pandemic situation for the company were:

1. The value proposition of YEA programs is that it offers a complete package of entrepreneurship learning for beginner. Currently, YEA do not offer individual subjects as a single product.
2. The capacity for YEA Regular is only at 20-30 participants per semester. Entrepreneur Camp at 20-40 participants per batch and conducted 10 times each year. YEA XPRO is even lower at a maximum of 20 participants per batch. This limitation is necessary to maintain the quality of delivery and because the limited space and human resource to conduct them. The only product that has no limitation of customer number is YEA Virtual, since it is a retail product.
3. Currently, YEA Regular and Entrepreneur Camp contribute about 70% of company revenue, but they are expected to go down because of the pandemic.
4. Offline class should be avoided to minimize health risks. Restrictions from authorities are likely to get stricter in the following months.
5. Entrepreneur Camp and YEA XPRO are postponed until the situation is safe. YEA Regular is switched to online class.
6. Class activities are hindered due to improper remote teaching equipment.
7. Since the pandemic is predicted to last for quite a long time, opening offline class for the next terms maybe unlikely.
8. After some calculation, the company is projected to be able stay in business for a year without revenue before the cash reserve run out.
9. Some facilities and assets of YEA become underutilized since the pandemic began.
10. The administration system in YEA is unoptimized, which make inferring insights from customer quite difficult. Should the customer's data managed right, it can be used for the company's advantage.
11. The YEA community has strong relationship among its participants but need to be organized more properly, starting from updating the database and then doing community activities. The community environment itself is already good for learning entrepreneurship.

The immediate concern at the beginning of the pandemic is that the learning activities should continue. Because the delivery method needs to change, YEA need to know the preference of their customers. With author's help,

the company have conducted a survey to 177 potential customer that have been in contact with the company. They were the customer segment of YEA Regular program, mostly youngsters aged 18-25, have not started their business yet, and have known Young Entrepreneur Academy either directly or via social media. The survey was on April-May 2020, when restriction of activities due to COVID-19 begin. The survey intended to know their preferred delivery method (each person can answer more than one method) if they are going to learn about entrepreneurship. From the survey, it was found that majority of them, 138 out of 177, still preferred face-to-face in class meetings. For a note, in class meeting in YEA includes training, workshops, challenges, practice, coaching, and mentoring. The next preferred learning delivery is through video and live streaming. The data was plotted into a pareto diagram shown in figure 7.

Figure 7. Pareto of Preferred Learning Delivery Method in YEA



(source: Company internal data, processed by author)

However, face-to-face in class meeting was restricted at the time and possibly until the pandemic is over. To work around this, the company need to design a remote learning that can be as engaging as the usual face-to-face class in YEA.

In the discussion, the company agrees that it need not only to cope with the pandemic impact, but also prepare for the likely upcoming recession, the potential economic rebound after that, and restructuring for the post-pandemic world. But the urgency at the time is the sustainability of the company. The upper management realize that certain education technology start-ups get a massive growth because of the pandemic, and there are new firms established to take on the opportunity. However, most of them are more focused on general skills or higher education exam preparation, not on entrepreneurship topic like YEA do. The upper management believes that in the long run, maintaining sustainability by focusing on strong core values will be more beneficial for YEA and there is no need to get caught in the hype.

4.4 SWOT ANALYSIS

In addition to the previous internal and external analysis, discussion with the company's team are also conducted to examine the SWOT factors. The SWOT analysis of Young Entrepreneur Academy business issue is shown in figure 8.

Figure 8. SWOT Analysis of Young Entrepreneur Academy

<p><u>STRENGTH:</u></p> <p>(S1) Strong core values (S2) Focus on entrepreneurship education (S3) Good reputation as entrepreneurship educator (S4) Unique curriculum and learning method (S5) Good relationship with network of mentors (S6) Experienced and dedicated human resources (S7) Low manpower turnover rate (S8) Strong community environment for learning entrepreneurship</p>	<p><u>WEAKNESS:</u></p> <p>(W1) Limited student capacity (W2) Dependence on some mentors (W3) Most activities require face-to-face meeting (W4) Unoptimized facilities and assets (W5) Lack of e-learning platform and equipment (W6) Unoptimized administration system</p>
<p><u>OPPORTUNITY:</u></p> <p>(O1) People are engaging in remote learning. (O2) Remote learning is expected to stick around post-pandemic. (O3) Face-to-face (synchronous) learning is more preferred than just watching a course. (O4) Government encourage entrepreneurship. (O5) Projected demographic bonus. (O6) Rising trend on entrepreneurship (O7) Accelerated technology adoption due to the pandemic situation.</p>	<p><u>THREATS:</u></p> <p>(T1) The pandemic effect decreases majority of Indonesian people's buying power. (T2) Restriction on various activities. (T3) Disruption in education industry. (T4) New entrants in entrepreneurship education industry, particularly in online platform.</p>

5. BUSINESS SOLUTION

5.1 STRATEGY FORMULATION

Referring to Porter's generic strategy (Porter, 1980), the most suitable business strategy for YEA is product differentiation. The programs offered by YEA are rather unique, and currently, no other institution offers the same programs. There are a few private firms who tried to imitate YEA's programs, but they did not sustain even though they offer cheaper price. On the other hand, they also deliver differently because they do not have human resources with the same qualification. YEA see this phenomenon and consider that price leadership is not the strategy to go, but rather focus on product differentiation.

To formulate the product differentiation strategy, TOWS Matrix is used. This tool leverages the SWOT analysis by formulating actionable strategies and tactics utilizing the internal and external factors. It is shown in figure 9.

Figure 9. TOWS Matrix of Young Entrepreneur Academy

<p>GOAL: YEA can cope with the New Normal Era situation</p>	<p>STRENGTH: (S1) Strong core values. (S2) Focus on entrepreneurship education. (S3) Good reputation as entrepreneurship educator. (S4) Unique curriculum and learning method. (S5) Good relationship with network of mentors. (S6) Experienced and dedicated human resources. (S7) Low manpower turnover rate. (S8) Strong community environment for learning entrepreneurship.</p>	<p>WEAKNESS: (W1) Limited student capacity. (W2) Dependence on some mentors. (W3) Most activities require face-to-face meeting. (W4) Unoptimized facilities and assets. (W5) Lack of e-learning platform and equipment. (W6) Unoptimized administration system.</p>
<p>OPPORTUNITY: (O1) People are engaging in remote learning. (O2) Remote learning is expected to stick around post-pandemic. (O3) Face-to-face (synchronous) learning is more preferred than just watching a course. (O4) Government encourage entrepreneurship. (O5) Projected demographic bonus. (O6) Rising trend on entrepreneurship (O7) Accelerated technology adoption due to the pandemic situation.</p>	<p>S-O STRATEGIES</p> <ul style="list-style-type: none"> • Expand the market to reach unserved potential customers. • Pivot to digital, shifting from physical to virtual training. • Create live online entrepreneurship course based on YEA core values. • Leverage existing knowledge as learning content. • Offer entrepreneurship course products based on trending issues. • Use YEA brand to leverage new product and services. 	<p>W-O STRATEGIES</p> <ul style="list-style-type: none"> • Procure e-learning equipment. • Prepare e-learning platform. • Repurpose classroom into online course studio. • Create more learning content utilizing internal resources.
<p>THREATS: (T1) The pandemic effect decreases majority of Indonesian people's buying power. (T2) Restriction on various activities. (T3) Disruption in education industry. (T4) New entrants in entrepreneurship education industry, particularly in online platform.</p>	<p>S-T STRATEGIES</p> <ul style="list-style-type: none"> • Prioritize company sustainability rather than growth. • Create product with lower pricing and cost. • Strengthen product differentiation in entrepreneurship learning. 	<p>W-T STRATEGIES</p> <ul style="list-style-type: none"> • Prepare a retail product with low barrier to entry for customer • Gather customer data and feedback more properly to improve YEA products and services

The strategy formulation suggest that the company should pivot to digital, shifting from physical to virtual training. This strategy would allow the company to keep existing customers while also reach previously unserved customers. However, the company must implement this strategy in a way that would still focusing on core values to keep the good reputation. Creating new online course by leveraging existing knowledge and the YEA brand itself should be suitable. Company sustainability should also be prioritized rather than growth. The upper management believes if the company can sustain, then growth will come along. To support the creation of the online course products, some resources will need to be repurposed or procured.

5.2 PRODUCT AND MARKET SELECTION

To implement the strategy, YEA need to redefine the existing product and design new product and services. The existing product of YEA and their future implementation plan are as follow:

1. YEA Regular program includes six months entrepreneurial training course which is designed to be interactive and based on experiential learning method where 70% of the learning process are practical activities and the other 30% are delivery of business theories. It is for pre-startup – business starting stage, so the course cover subjects of business mindset, fundamentals, marketing and sales, product and operational management, finance, human resource, and personal development that can be used to start, manage, and expand a business. This course is intended for younger participants aged 17-25 years old, currently not in marriage, not in employment in other company, have not started their own business, and can stay in Bandung during the course. This is required because they will need to be willing to spare at least six months to focus enrolling on the program. The course is conducted around six business projects, starting from selling, digital marketing, business analysis, internship, event organizing, and home business. At the end of the program, the students are expected to have run their own business. YEA Regular program itself is priced at Rp 24.600.000.
2. This program is set to reopen in July 2020 with health protocol and shift system for students. The class will utilize hybrid system, where half of the students attend the class in person and the other half attend remotely using online conferencing app. Maximum number of students in class is 15 persons with physical distancing and masks are made mandatory.
3. Entrepreneur Camp is a three days and two nights training program to form an entrepreneurial mindset. Participants in this program range from young people who are not yet entrepreneurs, entrepreneurs who want to develop themselves and their businesses, employees who want to become entrepreneurs, to prospective retirees. There is no demographic limitation for joining Entrepreneur Camp if the participant is mentally and physically in good condition. This program is full of simulations and applies NLP (Neuro Linguistic Programming) to instil the mindset of entrepreneurs. Each batch of Entrepreneur Camp usually range between 20-40 participants. This training is priced at Rp 4.950.000. To reopen, strict health protocol must be applied.

4. YEA XPRO is a two months extension program for business mastery with the direct guidance of entrepreneur mentors. The goal of the program is to incubate or accelerate the business growth and intended for business in managing – expanding stage. In this program, participants are people who already have a business and want to develop the business or solve problems that are being experienced in their respective businesses. They will learn about business management in four sectors: sales and marketing, operation, finance, and human resources in strategic level. At the beginning of the program, participants will be assessed with a business diagnostic tool from YEA XPRO, where each participant will be rated based on how well they manage their business. The diagnostic rate their business financial performance, marketing, product and operation, human resource management, and the business outlook, by giving a score from 0 to 5 for each of the 33 scoring components. The diagnostic result points out each participant's business areas that need to be improved. With the direction of entrepreneur mentors, the business development process is expected to be faster. The YEA XPRO program is intended for those 23-50 years old, already running a business, and passing the personal and business assessment.
5. Since gathering people from various area every week posed high risk in the pandemic situation, it is decided that YEA XPRO will be postponed and its resources will be allocated toward developing the new online course program. The existing knowledge and tools will be leveraged in the new products. The curriculum and the business diagnostic tool from YEA XPRO will be adjusted and used in the new programs.

Meanwhile, the new products being developed are as follows:

1. YEA Virtual will be re-launched with new concept in form of live interactive entrepreneurship online course series. The class will utilize live conferencing app and various online collaboration tools. YEA set up a studio to conduct the class in hope that the participants will get different experience from other webinars that only utilize webcam and broadcasted from home. The business diagnostic tool from YEA XPRO will be used here. The program is priced more affordable at around ¼ of YEA Regular pricing. The duration for this program is two months and each batch can accommodate 50 participants. But once the program is standardized, it is expected to be able to accommodate even 100 participants per batch.
2. This concept replaces the previous version of YEA Virtual. The old version was a self-learning course in form of a six series multimedia book, distributed using DVD and downloadable file. The course covers most of the subjects taught in YEA Regular program using curriculum of year 2013, except the practice part. Back then, the product sold for more than 6000 copies. It is not going to be scrapped, but rather get a remake and possibly re-branded. Since then, the curriculum has been updated. To accommodate the change, the new retail version of YEA Virtual subjects and delivery model will be updated.
3. YEA Class is a short online class that discuss trending issue on entrepreneurship in 2-4 hours, and offered as free or very affordable paid class, depending on the topic. The topic can be niche, such as social media marketing, culinary business, financial analysis for MSME, and other specific issue based on trending demand. This new service act as sales funnel to gather new potential customer for the other products and services.

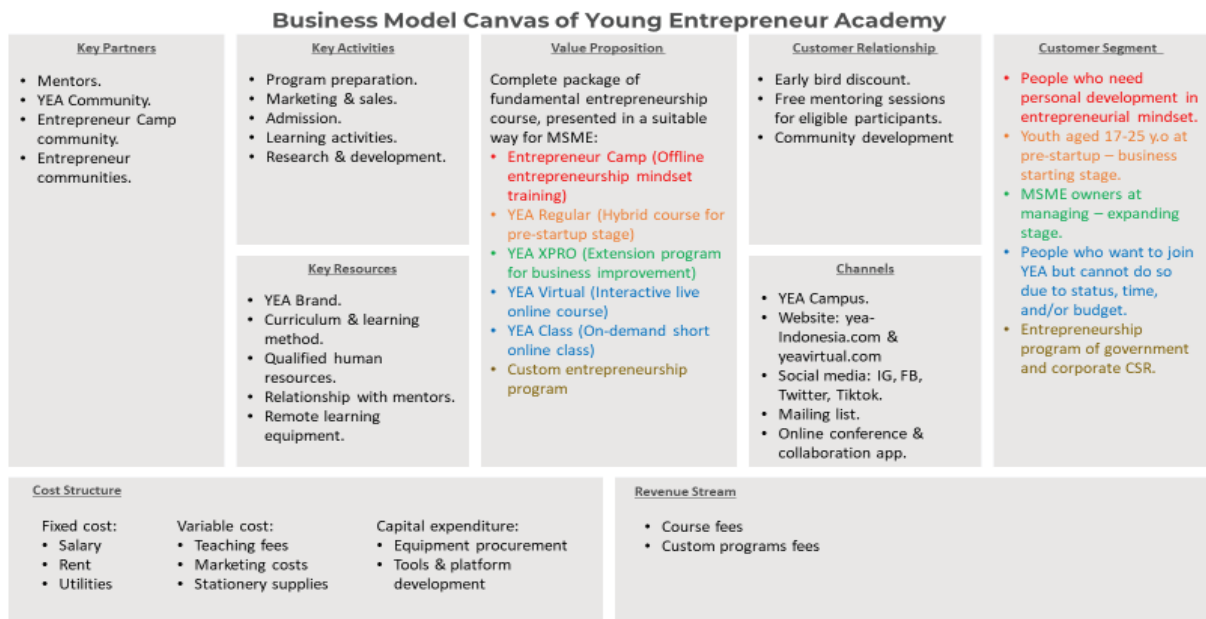
A side from all those programs, YEA also conduct custom entrepreneurship program for government institution and corporate clients. Up until now, has conducted these custom programs for various clients in form of training, workshop, business coaching, community development, and business competition. The custom program itself could be derived from the combination of existing programs.

All the subjects covered in YEA courses might also be found in business major on reputable universities. The key difference is that they are presented in a way that make it easy for MSME in Indonesia to understand and implement them.

5.3 BUSINESS MODEL

To accommodate the change of business strategy, the business model of Young Entrepreneur Academy also changed. To illustrate it, the business model canvas tool (Osterwalder, 2010) shown in figure 10 is used.

Figure 10. Business Model Canvas of Young Entrepreneur Academy



In this business model, the YEA Virtual online course is added to the value proposition of YEA. This online course is aimed at a wider customer segment that previously not captured by YEA Regular and XPRO, with no demographic limitation or requirement to pass certain assessment. As seen on the figure, each value proposition and their respective customer segment are colour coded. To deliver the value, YEA use online channels such as website, social media, live conference app, and online collaboration app. In the customer relationship, early bird discount is given, and participants who can finish the course are given free mentoring sessions regularly. Main revenue streams come from the course fee that the customer pay, while custom programs fees contribute as secondary revenue. Both are non-recurring revenue streams, except if the government and corporate clients keep using YEA's services.

To make sure the front end of the business model can be conducted, the company need to have the necessary back end part. The key resources of YEA business model are its brand, curriculum and learning method, its qualified human resources, and the firm's access to mentors. YEA will also need to procure new resources to conduct the proper online class. The key activities that need to be done are program preparation, marketing and sales, admission process, the learning activities itself, and research and development for continuous improvement. Meanwhile, the key partners needed are the mentors, YEA and Entrepreneur Camp community which numbered more than 6000 members, and other entrepreneurial communities. This back end part of the business model require a cost structure consisting salary, rent, and utilities as fixed cost, teaching fees, marketing cost, and stationery supplies as variable cost, and capital expenditure to procure equipment and developing the learning tools and platform.

With this business model, where the values are delivered via online channels, the company can offer products and services at more range of prices, from affordable to premium price, and target a wider range of customer segment. Meanwhile, the cost in the long run can also be reduced. In the future, the company may need to consider creating recurring revenue streams.

6. IMPLEMENTATION AND VALIDATION

Implementation

Existing products of YEA were reopened, and the new product got launched. YEA Regular reopened in July 2020. The class utilize hybrid system, where half of the students attend the class in person with health protocol and the other half attend remotely using online conferencing app. Most simulation that previously require in class presence, can now be done virtually using some online collaboration app. Maximum number of students in class is 15 persons with physical distancing and masks are made mandatory. Up until September 2020, there is no COVID-19 infection case from this learning activities, and the company hope to keep it that way by tracing the students and facilitators activities regularly. Gradually, the learning activities are shifted towards full online class activities.

Entrepreneur Camp got reopened in July, August, and September 2020 with strict health protocol. Due to the

pandemic condition getting worse in Indonesia, Entrepreneur Camp is decided to be postponed again to avoid the risk of COVID-19 infection.

YEA XPRO were originally prepared to reopen in November 2020, but it eventually got postponed again until the pandemic situation gets better in Indonesia. Meanwhile, the resources for YEA XPRO are allocated for developing the new version of YEA Virtual, both the online class and the new retail product.

YEA Virtual launched live interactive online class and managed to get 31 participants. The first batch was conducted in June-August 2020, for a total duration of two and half month, divided into 25 session. The subjects delivered includes business foundation, marketing and sales, product and operation management, finance, and human resources management for SME. To promote this program, YEA launched the www.yeavirtual.com website and also offer the new program to potential customer that previously has shown their interest to enrol in other YEA programs but was unable to do it because of the condition. For the first batch, this version of YEA Virtual were offered at a discounted price of Rp 5.200.000. The second batch is offered at normal price of Rp 6.200.000 and start at October 2020. It eventually got 40 participants, 29% increase from the first batch.

Beside the live online class, the new retail multimedia book version of YEA Virtual are also being prepared. It is planned to be an upgrade from the old version. The course's subjects and delivery platform will be updated using curriculum of year 2020. The development process on this YEA Virtual retail product are still ongoing and projected to be launched in Q1 2021.

Validation

To validate the new product and services, near the end of the YEA Virtual first batch of live online class, 23 out of 31 participants were able to be interviewed in an unstructured phone call interview. The interview mainly discuss about: 1. Their business problem; 2. How they are using what they get in YEA Virtual for their business; 3. Their expectation and satisfaction of the program; 4. What can be improved; and 5. What they think about the price they paid to participate in YEA Virtual.

Most of interviewee shared that their concern at this moment are mostly about marketing, sales, and managing to survive during the pandemic. This is in line with the YEA business diagnostic for the participants at the beginning of the program, where the average marketing management score for this batch is one of the lowest (1.51 out of 5) compared to the other management sectors which got a score of more than 2.3 out of 5. The lowest average score is the human resource management score (1.41 out of 5), which is understandable because majority of them have less than five persons in their organization, thus their human resources management system is not developed yet.

All interviewee was satisfied with the program. They were expecting a one-way communication like other online class they had try before, but instead, they got a highly engaging interactive online class. The participants said they enjoy live collaboration session on several subjects and suggest that similar approach should be implemented on other subjects as well. Other suggestion was regarding the class schedule because some of them must work on certain days and cannot attend the class. To accommodate them,

Seven participants said the price of YEA Virtual program should be more expensive, considering the value they got. Only one person said that the price is too expensive for him. The 15 other interviewees said that the price is right.

YEA Class launched in September 2020, with the first class about how to manage a business to survive during the pandemic, offered for free. It managed to get 90 participants. The paid class is launched in October 2020 with social media marketing topic and it managed to get 80 participants.

In the last discussion, the company consider this strategy implementation as temporary success that will need improvement over time. The key insights from this pivotal business strategy are as follows:

1. Focusing on core values gives the company a better sense of credibility from its customers and keep the good reputation.
2. Decreasing the barrier – by providing more affordable price and less requirement – for customers to access new products and services can ease their adoption process.
3. Knowing the participant's problems in their business greatly helps with determining what and how to teach them.
4. By standardizing the delivery method of the new YEA Virtual program, it can be replicated and developed with adjustments for future programs.
5. The COVID-19 pandemic situation accelerates the technological adaptation in the company.

7. CONCLUSION AND RECOMMENDATION

Conclusion

The conclusion of this research are as follows:

1. To cope with the new normal era, Young Entrepreneur Academy should stick with product differentiation strategy.
2. To align with that strategy, Young Entrepreneur Academy should adapt its business model by switching their offering to similar but online services to their existing market while trying to grab new market with new products and services.
3. To implement that strategy, Young Entrepreneur Academy should re-allocate their resources, develop new product and services by switching from physical to virtual, quickly test and validate the new products, make improvements, and prepare to scale.

Recommendation

This research was based on the analysis and findings in Young Entrepreneur Academy until early October 2020. In the future, the company's strategy and business model might be updated again if necessary. Further research regarding the online course delivery method may be needed, so the company can improve the course delivery for higher number of audiences, more than the current capacity.

REFERENCES

- Badan Pusat Statistik. (2019). *Tingkat Pengangguran Terbuka (TPT) Menurut Provinsi, 1986-2018*. Available from: <https://www.bps.go.id/indicator/6/543/1/tingkat-pengangguran-terbuka-menurut-provinsi.html>
- Badan Pusat Statistik. (2019). *Pengangguran Terbuka Menurut Pendidikan Tertinggi yang Ditamatkan 1986 – 2018*. Available from: <https://www.bps.go.id/statictable/2009/04/16/972/pengangguran-terbuka-menurut-pendidikan-tertinggi-yang-ditamatkan-1986---2018.html>
- Badan Pusat Statistik. (2019). *Penduduk 15 Tahun Ke Atas Menurut Status Pekerjaan Utama 1986 – 2018*. Available from: <https://www.bps.go.id/statictable/2009/04/16/971/penduduk-15-tahun-ke-atas-menurut-status-pekerjaan-utama-1986---2018.html>
- Board of Innovation. (2020). *Low Touch Economy Report: The Gold Rush on the New Normal*.
- Boston Consulting Group. (2020). *BCG COVID-19 Consumer Sentiment Survey 2020*; BCG Center for Customer Insight Analysis.
- Katadata. (2019). *HIPMI Siap Dongkrak Jumlah Pengusaha Baru di Indonesia*. Available from: <https://katadata.co.id/berita/2019/06/28/hipmi-siap-dongkrak-jumlah-pengusaha-baru-di-indonesia/>. [Accessed: June 14, 2020].
- McKinsey. (2020). *McKinsey and Company COVID-19 Indonesia Consumer Pulse Survey 2020*.
- Meyer, Natanya & Meyer, Daniel F. (2017). *An Econometric Analysis of Entrepreneurial Activity, Economic Growth and Employment: The Case of the BRICS Countries*. International Journal of Economic Perspectives, 2017, Volume 11, Issue 2, 429-441.
- Osterwalder, Alexander. (2010). *Business Model Generation*. New Jersey: John Wiley & Sons. Inc.
- PESTLEAnalysis.com. (2016). *What is PESTLE Analysis? A Tool for Business Analysis*. Available from: <https://pestleanalysis.com/what-is-pestle-analysis/>. [Accessed: July 21, 2020].
- Porter, M.E. (1980). *Competitive Strategy. Techniques for Analyzing Industries and Competitors*. New York: Free Press.
- Porter, M.E., (2008). *The Five Competitive Forces That Shape Strategy*. Harvard Business Review. January 2008. Reprint R0801E, 24-41.
- Rothaermel, Frank T. (2015). *Strategic Management 2nd edition*. International Edition, McGraw-Hill.
- Tirto.id. (2020). *Bagaimana Pandemi COVID-19 Memengaruhi Angka Pengangguran RI*. Available from: <https://tirto.id/bagaimana-pandemi-covid-19-memengaruhi-angka-pengangguran-ri-fK3e>. [Accessed: July 14, 2020].

EXPLORING ONLINE TEACHING AND LEARNING PROCESS DURING COVID-19 IN INDONESIAN HIGHER EDUCATION INSTITUTIONS

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Abstract

Beginning of year 2020 has seen an unprecedented disruption of society in entire world due to the coronavirus disease 2019 (COVID-19). This is no exception to higher education institutions (HEIs) which have immediately pivoted to online teaching and learning entirely, working from home for majority of employees, and closed innumerable public areas. This lockdown circumstance requires management educators to be able to utilize technology in their teaching. Thus, this study aims to explore how management educators conduct the online teaching and learning process; and what challenges and barriers they face during online teaching and learning. Transformative learning theory is adopted as a theoretical lens to investigate whether transformation process takes place in the online teaching and learning processes during the lockdown. Online surveys have been employed with 100 academics from Indonesian HEIs to grasp their perspectives and experiences on online teaching and learning process. This study reveals that various online teaching platforms were adopted. Some barriers and challenges from different aspects were identified, among others are the use of technology, internet connection, educators and students' engagement. Additionally, this study identifies that most of the Indonesian HEIs provide supports to online teaching and learning; and various teaching and learning styles were adopted. In terms of transformative learning, this study discovers that transformation process takes place during the online teaching and learning process. This study also brings a practical contribution to the enhancement of online teaching and learning processes.

Keywords: online teaching and learning, transformative learning, COVID-19, HEIs

THE INFLUENCE OF BUSINESS INCUBATOR ON STARTUPS' PERFORMANCE (STUDY ON INCUBATOR X - BANDUNG)

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Abstract

One alternative way that can be done to advance the economy in Indonesia is by increasing the number of start-up businesses. The development of startups in Indonesia has grown rapidly in the past five years, but few have survived or succeeded in running their businesses. Business incubators becoming one vehicle to help startups deal with problems, to grow, and survive.

This research aims to discover the influence of the business incubator of X Incubator in Bandung, on the performance of startups incubated in their incubation program. The business incubators itself consist of four constructs, namely Infrastructure and Facilities, Financial Support Service, Network and Connectivity, and Business Management Advice.

The research method used is a quantitative method with the purpose of conclusive research. The population in this study is all startups incubated at X Incubator Bandung. Sampling technique using a saturated sampling technique that uses the entire population to sample with the number of samples thirty-six startups. The data analysis technique is a multivariate technique through Structural Equation Modeling (SEM) Partial Least Square (PLS) analysis tool. For data analysis using SmartPLS version 3.2.9.

The results of this study showed that the incubator program as a whole had a positive and significant impact on Startup performance, but partial analysis toward its dimensions shows that only Infrastructure and Facilities dimension having a positive impact on startups' performance, while the other three dimensions of Incubator such as Network and Connectivity, Financial Support Services and Business Management Advice did not have a positive effect toward startups' performance.

Keywords: Business Incubator, Startup Performances, Infrastructure and Facilities, Financial Support Service, Network and Connectivity, dan Business Management Advice.

1. INTRODUCTION

The growth of Startup development in Indonesia happens very fast in the last five years, some of them that have been recognized worldwide and become the notable unicorn of decacorn (cnbcindonesia.com). With its large number of startups in Indonesia, has already make Indonesia to become the fifth in startups' number in the world (Startup rank 2019).

However, the startup success rate is very low, according to Wisono (2019) among 1,700 startups in Indonesia, only 1% successfully sustaining their business, while the other 99% fail. Another study shows that the startup incubated in a business incubation program has a relatively higher success rate ranging from 15% to 29% (Sudiana et al 2020). There are at least five things that put a startup on the verge of collapse: poor business performance, founders were continuing on a bad idea, did not pay attention to consumer's voice, the high-flown plans compare money they have, difficulty to have investors from the beginning (Damar, 2016).

To increase the survival rate of startups, business incubator centers were established. These centers aim to help supporting entrepreneurs to survive and thrive running their business. Many parties have established business incubators, ranging from private companies, non-government organizations, local as well as central governments. Business incubators are becoming one of the efforts in growing and nurturing new businesses. They support new entrepreneurs by providing facilities, coaching support, advice, connections, and intensive mentoring.

However, other study shows that business incubators are not effectively helping the new entrepreneurs (Bank

Indonesia, 2006), while other studies show that Business Incubators are having a positive impact on startup performance (Supangkat 2011, Mungai & Njeru 2016, Mahani 2019). Therefore, this study is intrigued to discover the influence of business incubator on startup performance, especially studying the case of Incubator X in Bandung.

2. LITERATURE REVIEW

2.1 STARTUPS

According to Soemohadiwidjojo (2018), startups are companies that have just been founded and are in the development phase, startup companies are identical with technology-related business, or newly established digital business. While Ramadhan (2016) defines that a startup is a company founded by an individual or institution to sell new products or services in highly uncertain conditions. From those definitions above it can be concluded that startups are companies that have just been founded and are in the development phase, established by individuals or institutions to sell new products or services based on technology.

According to Soemohadiwidjojo (2018) startup companies have some characteristic such as the age of the company is less than three years, the number of employees is less than twenty people, income is less than USD 100,000/year, generally doing business in technology, with marketing utilizing the web and products in the form of digital applications, and the company is in the developing stage.

2.2 STARTUP PERFORMANCE

Performance is a result of work that has a strong relationship with the strategic purpose of the organization, customer satisfaction, and give a contribution to the economy (Hamali 2016). While according to Mahani (2019), observing startup performance before and after entering the incubator, it is considered a success by observing from (1) an increase in sales, (2) an increased number of workers and for the last (3) increased ease in obtaining business funding.

Adhrevi & Wessiani (2018) studied startup performance measurement through an Integrated Performance Measurement System (IPMS) approach. IPMS is an information system to help the performance management process function effectively and efficiently. Key goals set in digital startups generically includes, (1) Increased customer satisfaction with products, (2) increased customer conversion rates, (3) increased startup revenue, (4) improved startup cost efficiency, (5) improved technology quality in product development, (6) improvement of HR quality, and (7) improved network cooperation with business partners. According to Mahani (2019) was identifying startup performance before entering the incubator and after entering the incubator in the category successfully when looking at (1) increased turnover, (2) an increase in the number of workers, and the last (3) increased ease in obtaining business financing.

2.3 BUSINESS INCUBATOR

The term incubator and incubation was first used in medicine for the treatment of newborn babies, A small box-shaped room whose condition is controlled to meet the living needs of the baby inside is called an incubator and then the activity is called incubation (Tontowi, 2016). While a business incubator is a business support process that can accelerate the success and development of startups by providing the necessary service resources. The accelerator bears a resemblance to an incubator. What sets only three main things apart is the size and quality of the mentoring network, pressure, and discipline, as well as future capital funding facilities (Adiningsi 2019).

Moreover, the Ministry of Cooperatives and MSMEs of Republic Indonesia stated that: Incubation is a process of coaching for small businesses or the development of new products carried out by business incubators in this case the provision of business facilities and infrastructure, business development, and management support as well as technology. The ministry also stated that Incubator is an institution engaged in the provision of facilities and business development, both management and technology for small and medium enterprises to increase and develop their business activities and develop new products to develop into a resilient entrepreneur and or new product that is highly competitive.

2.4 BUSINESS INCUBATOR CONSTRUCT

According to the Cooperative Department and small entrepreneurs, 1998/1999 in the ministry of KUKM in 2002, the incubator is a corporate institution that provides 7 (seven) S, called 7S namely: Space, Shared, Services, Support, Skill development, Seed capital, and Synergy As for 7S are:

1. Space, the incubator provides startups a place to operate the business at an early stage.
2. Shared Facilities, the incubator provides office facilities that can be used together, e.g. reception, meeting rooms, conference room, telephone system, facsimile, computer, and security.

3. Services, covering management consulting and market issues, financial and legal aspects of trade information and technology.
4. Support, incubator helps startups to access to research, professional networking, technology, international, and investment.
5. Skill Development, can be done through the practice of preparing business plans, management, and other capabilities.
6. Seed Capital, can be done through internal rolling funds or by assisting small businesses to access to existing funding sources or financial institutions.
7. Synergy, tenant cooperation, or competition between tenants and networks with universities, research institutions, private businesses, professionals, and with the international community.

On the other view, Hasbullah et al (2015) set a construct of incubator into four perspectives:

1. Internal perspective, (facilities and infrastructure, management team, and incubation activities).
2. Innovation and development perspective, (incubator performance and tenant business performance).
3. Financial perspective of the Incubator, (financial efficiency).
4. Perspective of tenant satisfaction, (level of tenant satisfaction and business growth).

Based on Mungai & Njeru (2016) in business incubation program there are:

1. Infrastructure and Facilities, in which the incubator as an office equipped with meeting service, reception service, internet access, etc. Incubator also optimizes the use of a common room to open an informal network between startups, financial support services, subsidy, sponsor, and suspended income.
2. Building contact networks and partners in the financial sector, giving startups advice about how to find capital funding.
3. Network and Connectivity, Network service helps encouraging startups to develop, helps to provide information and exchanging ideas, helps the startups who feel isolated, and help to lobby a good business environment.
4. Business Management Advice, management advice helps the incubator to obtain experience from successful companies, that can provide business expertise access which provides the best business consultation service, giving guidance and helping the startups solving the problems they have.

2.5 GENERAL PROBLEM FACTORS OF BUSINESS INCUBATOR

Implementation of small business development program through a business incubator in Indonesia both concept and operationalization is not by the basic concept of the incubator, this is partly due Panggabean (2005):

1. Coaching is done generally on an outwall. Whereas ideally done inwall.
2. The autonomous status of the institution that handles the incubator is unclear.
3. The incubator manager has not worked full time.
4. Facilities are limited because it has not fully utilized the facilities owned by the college.
5. Lack of commitment and support of all parties (local government, business world, etc.) in the operationalization of incubator programs.
6. Startup development through incubators is partially implemented, inconsistent, and unsustainable.

The problems commonly faced in tenant incubation are as follows: the first problem is not having adequate supporting facilities/infrastructure, the second problem is that the manager has not worked full time, the next problem of the institution that handles the incubator is not autonomy, the fourth problem is that the technology is still at a modest level up to the municipality, then the fifth problem in the tenant is not having a wide network among others in terms of marketing, the sixth problem is administration (Panggabean, 2005).

The problems faced by tenants in business incubation programs are usually Panggabean, 2005): Still weak business skills and skills, still weak in the capital, not able to access the market, not yet able to access with technology.

2.6 SUCCESS FACTORS OF BUSINESS INCUBATOR

According to Supangkat (2011), Business incubators of various types require measuring success indicators, to know the extent of the success that has been achieved in carrying out the incubation process. The management

of incubators needs to have the ability to evaluate the activities that have been carried out. Indicators of success indicators that can be expressed as a benchmark for incubator success include (1) new business growth, (2) job creation, (2) economic turnover, (3) failure rate of new business development, and (4) ability to obtain investment funds. Manalo (2011) pointed out factors supporting the success of incubators in some countries, such as:

1. Government policy and operational strategy for the construction of incubators.
2. Support local or regional governments in the form of development funding, facilities, physical incubators, and long-term soft credit for incubator management.
3. Support of financial institutions both government and private in the form of business loans for incubator tenants.
4. A commitment of universities and research institutions to develop technology and technology experts for incubator tenants.
5. Synergy with a science park or technology park built simultaneously with the construction of incubators.
6. Establishment of an incubator legal entity with a team of indicator managers working full, professional, and efficiently, and given a proper award
7. Selection of the right location in the central business district.
8. Complete support of information technology facilities and infrastructure.
9. Provision of startup business support facilities.

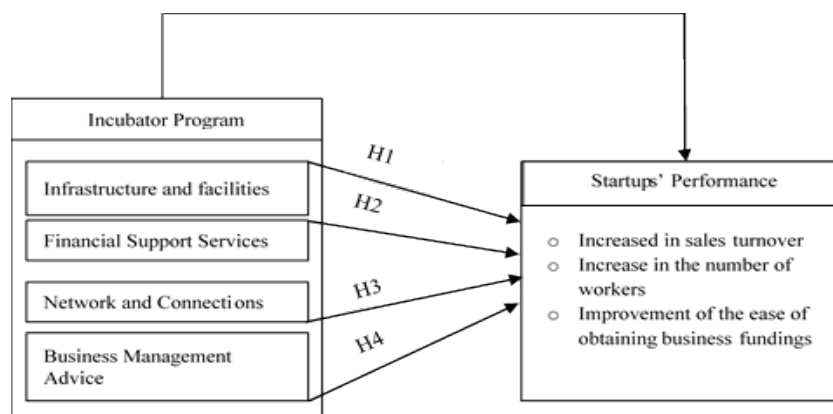
3. RESEARCH FRAMEWORK AND HYPOTHESIS

For Incubators construct, this study uses indicators that previously employed by Dorcas Njoki Mungai and Dr. Agnes Njeru (2016), which consisted of: (1) infrastructure and facilities, (2) financial support services, (3) Network and connections, and (4) business management advice. For analyzing Startup Performance this study used three main indicators namely: (1) increased sales turnover, (2) increased workforce, and (3) increased ease in obtaining business fundings as previously used by Mahani (2019)

The research hypothesis takes the form of a statement sentence formulated from a frame of mind based on theories. The frame of thought in research is used as a basic foundation for compiling research hypotheses, in research using adoption from several sources such as books and journals. This research aims to determine the effect of incubator programs on the performance of X-built startups. Based on the above research framework, the hypothesis in this study is as follows:

- H1: Incubator's infrastructure and the facility has a positive impact on the startup's performance.
- H2: Incubator's financial support service has a positive impact on the startup's performance.
- H3: Incubator's network and connections have a positive impact on the startup's performance.
- H4: Incubator's business management advice has a positive impact on the startup's performance.
- H5: Incubator as a whole has a positive impact on the startup's performance.

Figure 1. Research Framework



4. RESEARCH METHODOLOGY

The population in this study refers to the number of all startups present in incubator X with a total of 36 startups focusing on the ICT sector. Thus a full population or Saturation sampling was employed. Saturation sampling is a technique in determining sample if all population members are used as samples, this is often used when the population is relatively low in number that all the whole population is used as samples (Sugiyono, 2017). Data were gathered through (1) Interview, to find the issues that should be addressed researched, and also if the researcher wants to know everything about the respondents and the number of respondents is small or small and (2) Questionnaire, In this research we publish the questionnaire through Google Form (online-based). Statistical analysis techniques used were: Partial Least Square (PLS) with Hypothesis Test (F Test and T-Test) at 5% significant level.

4.1 VALIDITY TEST.

A validity test is used to know the feasibility of several indicators of a constructed question in defining a variable. Validity is defined as how far the decision and precision of a measuring instrument are in performing its measuring function (Tarjo, 2019). All items were valid concerning the r-test.

Table1. Validity Test of Operational Variable Items

No. Item	(r)calc	(r)table	Explanation
1	0,736	0,361	Valid
2	0,920	0,361	Valid
3	0,820	0,361	Valid
4	0,553	0,361	Valid
5	0,781	0,361	Valid
6	0,852	0,361	Valid
7	0,818	0,361	Valid
8	0,917	0,361	Valid
9	0,878	0,361	Valid
10	0,937	0,361	Valid
11	0,866	0,361	Valid
12	0,895	0,361	Valid
13	0,859	0,361	Valid
14	0,794	0,361	Valid
15	0,927	0,361	Valid
16	0,840	0,361	Valid
17	0,902	0,361	Valid
18	0,860	0,361	Valid
19	0,806	0,361	Valid

4.2 DATA RELIABILITY

Reliability is a value to evaluate the consistency and stability of respondents to answer related to the details of questions formed in the questionnaire (Rukajat, 2018). According to Indrawati (2015), reliability is one of the characteristics of measuring instruments in research can be said to be good, this is because the concept of reliability is the extent to which the measuring instrument in the research can be trusted or the measurement results are free from measurement errors. From the explanation of the definition expressed by experts can be concluded the realization test has the purpose to know how far the measuring instrument can be trusted and relied upon to measure a research concept.

To measure reliability, researchers used Cronbach's Alpha technique, according to Abdillah (2018) Cronbach's Alpha technique is a technique used to measure how far internal consistency is with multiple-item scales. The coefficient in Cronbach's Alpha technique that is considered good enough is at least 0.70 (Indrawati, 2017). So it can be concluded that Cronbach's Alpha value exceeding 0.70 is considered valid, and can be seen in the following table.

Table 2. Validity Test of Operational Variable

Variable	Cronbach's Alpha (CA)	N of Item	Conclusion
Infrastructure and Facility	0,757	4	Reliable
Financial Support Services	0,877	4	Reliable
Network and Connections	0,791	2	Reliable
Business Management Advice	0,876	4	Reliable
Startups' Performance	0,981	5	Reliable

All variables were declared as reliable since that Cronbach's Alpha value was greater than 0.7. Thus, all the questions in the research questionnaire was good and well to be used as measuring instruments in research.

5. RESULT AND DISCUSSION

Based on the hypothesis testing, it appears that only one independent latent variable in the study has a positive relationship and is significant to the dependent latent variable. Here is the amount of effect between independent latent variables to the dependent latent variable: Business Management Advice to Startup Performance is 0.18, Financial Support Services to Startup Performance is -0.2, Infrastructure and Facilities to Startup Performance is 0.61, Network and Connectivity to Startups' Performance is 0.15. Based on hypothesis testing, it can be stated that the Infrastructure and Facility variable is the only variable that has a positive influence on Startup Performance.

Table 3. T-test Calculation

No	Paths	B e t t a Standardized	t-value	Sig.	Conclusion
1.	Infrastructure and Facilities =>Startup Performance	0,61	2,757	0,010	Significant
2.	Financial Support Services =>Startup Performance	-0,2	1,124	0,288	H2, denied
3.	Network and Connectivity => Startup Performance	0,15	0,612	0,552	H3, denied
4.	Business Management Advice => Startup Performance	0,18	0,701	0,478	H4, denied
			f-value	f-table	Conclusion
5.	Infrastructure and Facilities, Financial Support Services, Network and Connectivity, Business Management Advice => Startups' Performance	n/a	8,240	1.42	H5, accepted

Financial support service variables have negative values, this condition happens considering that the incubated startups are still in their early stages, so they do not need support from financial institutions, especially in the form of loans from banks which will bring difficulties for them.

For Network and Connectivity as well as Business Management Advice dimensions were not significant in supporting Startups' Performance. These conditions might be as a result that the incubator was not performing well in those dimensions in serving their incubatee. This could be a room for improvement for the incubator to enhance their service.

But overall, all of the independent variables simultaneously have a positive and significant effect on startups' performance. These findings indicate the importance of incubator managers to synergize all programs and infrastructure harmoniously so that they can have a positive effect on their startups.

6. CONCLUSIONS

The purpose of this study was to know the effects between Infrastructure and Facilities, Financial Support Services, Network and Connectivity, Business Management Advice variables on startups' performance. Data collection and data processing has been done so that these conclusions are obtained: Based on the analysis performed, in the

case of X Incubator in Bandung, researcher could make some conclusions as follow: Infrastructure and Facilities affects startups' performance positively, Financial Support Services does not affect startups' performance, Network and Connectivity do not have a positive effect on startups' performance and Business Management Advice also does not influence startups' performance positively.

Meanwhile, the f test showed that the Incubator as a whole has a positive effects on startups' performance.

7. LIMITATION AND FURTHER RESEARCH.

he limitation in this study is that all of the population were coming from one Incubators, it is recommended to conduct further research with a higher size of the respondents and coming from several incubators so that better generalization can be made.

REFERENCE

- Abdillah, W. (2018). Metode Penelitian Terpadu Sistem Informasi Pemodelan Teoritis, Pengukuran, dan Pengujian Statistis. Yogyakarta: Andi.
- Adhrevi, A., & Wessiani, N. A. (2018). Pengembangan Sistem Pengukuran Kinerja Startup Digital pada Tahap Seed and Development dengan Pendekatan Integrated Performance Measurement System. *Jurnal Teknik ITS*, 7(1).
- Adhrevi, A., & Wessiani, N. A. (2018). Pengembangan Sistem Pengukuran Kinerja Startup Digital pada Tahap Seed and Development dengan Pendekatan Integrated Performance Measurement System. *Jurnal Teknik ITS*, 7(1).
- Adiningsih, S., Lokollo, E. M., Setiaji, S. N., Ardiansyah, S. R., & Islam, M. (2019). Transformasi Ekonomi Berbasis Digital di Indonesia. Jakarta: Gramedia Pustaka Utama.
- Andrian, B., & Ghina, A. (2015). Analisis Perkembangan Alumni Tenant Setelah Proses Inkubasi(Studi Kasus Pada Bandung Digital Valley 2015).
- Anggeraeni, R. (24 September 2019). Sri Mulyani: Indonesia Lima Besar Dunia Sebagai Pencetak Startup. *sindonews*. [online]
- Bhaskara, A. (4 Oktober 2016). Mengapa Foodpanda dan Beberapa Start-up Lain Gagal? *Tirto.id*. [online]
- Bl. (2006). Kajian Inkubator Bisnis dalam rangka Pengembangan UMKM. Bank Indonesia. [online]
- Damar, A. M. (17 November 2016). 5 Alasan Mengapa Startup Gagal. *Liputan6*. [online]
- Gozali, Lina., Masrom, Maslin., & Haron, Habibah. (2015). A Framework of Successful E-business Incubator for Indonesian Public Universities. *The Asian Journal of Technology Management*, Vol. 8.
- Gunadi, W. (2018). Pengembangan Kewirausahaan Usaha Mikro, Kecil Dan Menengah Melalui Inkubator Bisnis . *Jurnal M-Progress*, 31.
- Hamali, Afif. Y. (2016) 2016). Pemahaman Manajemen Sumber Daya Manusia. CAPS.
- Indrawati, R., & Yaniawati, P. (2014). Metode Penelitian Kuantitatif, Kualitatif, dan Campuran untuk Manajemen, Pembangunan, dan Pendidikan. Bandung: Refika Aditama.
- Kristianingsih, Sumarwan, U., & Hasbullah, R. (2017). Faktor-Faktor yang Memengaruhi Kinerja dan Kepuasan Tenan di Inkubator Bisnis IPB. *MANAJEMEN IKM: Jurnal Manajemen Pengembangan Industri Kecil Menengah*, 12(1), 84.
- Mahani, S. A. E. (2019). Kinerja Pendampingan Usaha Rintis Binaan Pada Orangenest Incubiz. *Jurnal Manajemen dan Bisnis (Performa)*, 16(1), 16-28.
- Mungai, D. N., & Njeru, A. (2016). Effect of Business Incubator Services on Performance of Business Ventures at Nairobi Incubation Lab, Kenya. *International Journal of Science and Research (IJSR)*.
- Mungai, D. N., & Njeru, A. (2016). Effect of Business Incubator Services on Performance of Business Ventures at Nairobi Incubation Lab, Kenya. *International Journal of Science and Research (IJSR)*.

- Oetomo, B. S. (2017). Kegagalan Bisnis Rintisan. Indonesia Menulis.
- Sedarmayanti. (2017). Perencanaan dan Pengembangan : Sumber Daya Manusia untuk Meningkatkan Kompetensi, Kinerja dan Produktifitas Kerja. Refika Aditama.
- Soemochadiwidjojo, A. T. (2018). Sop Dan Kpi Untuk Umkm&Startup. Jakarta: Raih Asa Sukses.
- Sudiana, K., Sule, E. T., Soemaryani, I., & Yunizar, Y. (2020). Discovering support needed for startups in their early stages using on Penta Helix framework. *Business: Theory and Practice*, 21(1), 212-221.
- Sugiyono. (2017). Metode Penelitian : Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta.
- Tarjo. (2019). Metode Penelitian. Yogyakarta: Deepublish.
- Tontowi, A. E. (2016). Desain Produk Inovatif & Inkubasi Binsis Kompetitif. Yogyakarta: Gajah Mada Unviersity Press.

VALUE CREATION IN ONLINE SMES BUSINESS FACING THE COVID-19 PANDEMIC IN WEST JAVA

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Abstract

MSMEs have a strong role in providing income to the country in the form of foreign exchange, where these MSMEs can absorb labor so that it helps increase people's income. This proves that MSMEs have a strategic role in fighting poverty and unemployment. Covid-19 is an epidemic that has a huge impact on all aspects of life. Including obstruction of activities in the economic sector which in turn affects state revenues. On the other hand, the community experienced a decline in demand and purchasing power which had an impact on the production and trade processes. Data shows the impact of COVID-19 in reducing the turnover of the non-culinary MSMEs sector by 30-35%. This change causes MSMEs to be able to adopt and adapt to circumstances. Switching to the online model is an alternative to be able to survive amid economic difficulties during COVID-19. Creating customer value with a business domain and a collaborative network is one strategy in creating value creation from MSMEs in the midst of a pandemic. Kotler and Keller (2016) explain that the creation and delivery of value are divided into three phases: 1). Choosing the value, 2). Providing the value, 3). Communicating the value. These three phases will try to analyze the value creation strategies of West Java MSMEs to survive against COVID-19 through online businesses. The method used in this research is quantitative with an explanatory survey. Meanwhile, the unit of observation is MSME actors in West Java. The results of this research can obtain data on the value creation strategy of West Java MSMEs in dealing with COVID-19 so that it becomes findings and input to enrich business strategy management knowledge, especially the adaptation of online businesses in the era of the COVID-19 pandemic.

Keywords: Business Strategy, COVID-19. MSMEs, Value Creation, West Java.

ORGANIZATIONAL ATMOSPHERE THAT SUPPORT HUMANE ENTREPRENEURSHIP IMPLEMENTATION CASE STUDY IN INDONESIAN SMALL AND MEDIUM ENTERPRISE

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Abstract

Purpose- This paper start with the question “How the enterprise can implement Humane Entrepreneurship (HE) completely, what kind of situation that must be exist or create?”. Humane Entrepreneurship is a model of Ki Chan Kim that suggest to combine entrepreneurship cycle with human cycle. Main ide of this model is the happiness of people in the enterprise will bring the great performance of the enterprise if leader also take a good role in entrepreneurship.

Methodology- survey conducted to 114 small and medium enterprises in Indonesia. Questionnaires related to humane enterprise and organization atmosphere used as a main data collecting in this research. Linear and multi-linear regression were used to evaluate the proposed model.

Humane entrepreneurship model declared by ICSB global in 2017 and become a main agenda in any activities of ICSB globally. In Indonesia, HE research still few and need more exploration to confirm the HE concept become a main approach in developing small and medium enterprise in Indonesia.

Finding- HE implementation need openness and trust from leader to member of the enterprise. A spirit to find a better solution, a new product or services supported by positive thinking, optimistic, and willingness to learn from every sources and every accident. Empowering always need trust, but also need a great spirit of learning. Discussion about all factors in HE show the importance of human-centered entrepreneurship-a new era of managing enterprise.

Keywords: Humane Entrepreneurship; organization atmosphere; entrepreneurship; human-centered, human resource management; change management

THE EFFECT OF FAMILY BACKGROUND ON ENTREPRENEURIAL INTENTION IN PSYCHOLOGY STUDENTS OF JAKARTA STATE UNIVERSITY

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Abstract

The aim of this study was to determine the effect of family background on entrepreneurial intentions. This study used a quantitative approach by providing participants with a research instrument. This study's sample amounted to 59 final year students of the Faculty of Psychology Education at the Jakarta State University. This study used a measuring tool for entrepreneurial intention and family background. This study's results indicate that there was an effect of family background on entrepreneurial intentions with a contribution of 16.5%. The results of this study imply that parents' background could be one of the supports for a person to become a successful entrepreneur. Although it is proven that family background could influence entrepreneurial intentions, further research is needed regarding variations in family backgrounds.

Keywords: entrepreneur, entrepreneurial intention, family background, students

1. INTRODUCTION

Entrepreneurship has become one of the most researched topics in the research literature because entrepreneurship is an essential part of economic development and can motivate someone to open up opportunities for success (Natalita & Slamet, 2019). Therefore, various scientific approaches also research the relationship between this science and the topic of entrepreneurship, including psychology.

In psychology, of course, entrepreneurship is very close because entrepreneurs are inseparable from one's behavior. Several studies have discussed the relationship between certain variables in the field of psychology and entrepreneurial variables. For example, it is related to an entrepreneur's personality, which can predict the type of personality with entrepreneurial intentions. This will later describe the success of an entrepreneur based on his personality.

Furthermore, several studies looking at the relationship of entrepreneurial found that it is influenced by several factors. Some studies looked at individual factors, including personality, internal motivation, and other variables that come from a person's internal. However, some studies looked at the relationship between individual environmental factors and entrepreneurial intentions. For instance, the family background factor because to be a successful entrepreneur, it needs a long and mature process.

Becoming an entrepreneur is a career choice that can be considered for students who will or will graduate soon (Nguyen, 2018). Becoming an entrepreneur is certainly not easy. It needs the interests and expertise that one needs to have. Several factors influence a person to become an entrepreneur. One of them is family background. According to Bullough et al., (2014), several significant supporting factors among students and female students towards entrepreneurial intentions are family background, personality, and efficacy. Family background plays a vital role in influencing a child's intention to have a strong preference for entrepreneurship (Krueger, Reilly, and Carsrud, 2000).

Researchers who studied the influence of family factors on entrepreneurial intentions seemed to focus on the influence of modeling and family history of these entrepreneurial activities (Akanbi, 2013). A person who lives in a family that models his parents' entrepreneurial activities may have entrepreneurial intentions.

Family background is a form of social learning for someone, where someone who has a business in his family can lead to personal experiences in entrepreneurship (Sucipta et al., 2018). Therefore someone who has a family background will tend to have the intention of entrepreneurship.

Research conducted by Sucipta et al., (2018) showed that there were significant direct and indirect effects of family background and entrepreneurial education on entrepreneurial intentions through the intervening variable entrepreneurial self-efficacy. Other research related to family background influencing entrepreneurial intentions is shown by (Prastiwi, 2004), which demonstrated that there were significant direct and indirect effects of family background on entrepreneurship's intention through perceived feasibility and perceived desirability. Other research showed that family background and gender were moderating variables that positively affected individual entrepreneurial orientation (Marques et al., 2018).

The intention of entrepreneurship is a creative and innovative process in adding product selling value, creating job opportunities, increasing productivity, revitalization, market diversity, increasing social welfare, more broadly, i.e., to develop the economy (Guerrero et al., 2008). Entrepreneurial intention is defined as a conscious state of mind that precedes action and directs attention to entrepreneurial behavior such as starting a new business and becoming an entrepreneur (Moriano et al., 2012).

This study aimed to determine the influence of family background on entrepreneurial intentions in final year students of the Faculty of Psychology Education at the State University of Jakarta. The results of this study are expected to map entrepreneurial intentions based on family backgrounds so that, in the future, interventions can be made to foster interest in entrepreneurship. This research is important to map the results and follow up with the results by providing appropriate interventions to improve Indonesia's young entrepreneurs.

2. METHOD

This research was quantitative. This study aimed to see the effect of family background on entrepreneurial intentions. The sample in this study amounted to 59 psychology students at the State University of Jakarta. The sampling technique in this study used *purposive sampling* because the participants who participated in this study were under predetermined criteria, i.e., students of Psychology and the final year. The way to obtain data in this study was to distribute research questionnaires using Google form distributed based on research criteria.

The instrument in this study used an instrument of entrepreneurial family background and entrepreneurial intentions adapted from (Prastiwi & Agustina, 2004) with the respective reliability coefficients of 0.711 and 0.732. An example of the instrument statement on entrepreneurial family backgrounds was, "Parents provide views and examples of how to become an entrepreneur from an early age." An example of the entrepreneurial intention statement instrument was, "I will choose a career to be an entrepreneur."

In this study, data processing was carried out using a statistical calculation software SPSS (*Statistical Package for Social Science*) version 24. Descriptive analysis was also carried out on research demographic data to provide an overview of the research sample. Hypothesis analysis was using *regression*. This analysis was used to determine the effect and size of influence on the research variables.

3. FINDINGS AND DISCUSSION

3.1 FINDINGS

Based on the statistical calculation findings, there were several characteristics of the 59 participants collected. Characteristics of participants based on gender (table.3.1.) and entrepreneurial experience (table. 3.2) are as follows;

Table. 3.1. Descriptive statistic

Sex	N	%
Male	19	32.2
Female	40	67.8
Total	59	100.0

Table. 3.2. Descriptive statistic

Entrepreneurial Experience	N	%
Yes	44	74.6
No	15	25.4
Total	59	100.0

Next will be presented the table of the results of the statistical regression calculations. The results of the model calculation are in table.3.3., and Anova calculations are in table 3.4. as follows:

Table. 3.3. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.406 ^a	.165	.150	1.167
a. Predictors: (Constant), family background				

Table. 3.4. Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	15.284	1	15.284	11.232	.001 ^b
Residual	77.564	57	1.361		
Total	92.847	58			
a. Dependent Variable: entrepreneurial intention					
b. Predictors: (Constant), family background					

Based on table 3.4., Anova shows that the value of sig.0.01 <0.05, indicating an influence between family background on entrepreneurial intentions. Then based on table 3.3., the summary model shows that the research results contributed 16.5%.

3.2 DISCUSSION

Based on the findings above, several things will be discussed to provide further enrichment for research. This study's findings are in line with the results of research conducted by Prastiwi and Agustina (2004), stating that there was an influence of family background on entrepreneurial intentions. In their research, they stated that the influence of family background is considerable on entrepreneurial intentions; therefore, parents' role is significant to contribute to creating a child who is interested in entrepreneurship.

In this study, it shows that the contribution of family background to entrepreneurial intentions was 16.5%. These results indicate that parents' role is sufficient to contribute to creating an entrepreneur from an early age. Providing support and motivation is what parents can do with their children. In addition to a child being the successor of their parents' business, many entrepreneurs will also create more jobs and help the government economy.

The results of this study are also supported by Krueger, Reilly and Carsrud (2000), which asserted that family background played an important role in influencing a child's intention so that the child has a strong preference for entrepreneurship. The preferences that come from parents also play a critical role because parents are the closest people to a child. Parents' backgrounds also positively affected entrepreneurial intentions in a child (Farrukh et al., 2018).

In family life, of course, there are processes of mutual interaction and social learning processes that can increase the transfer of knowledge about entrepreneurship. This is in line with Sucipta et al., (2018) research, which showed that a family background is a form of social learning for someone, where someone who has a business in his family can lead to personal experiences in entrepreneurship.

The process of transferring knowledge and experience certainly requires full support from parents. Therefore, parents who have experience or an entrepreneurial background are very possible and supported by the existing situation to create young entrepreneurs who can continue the entrepreneurial work of their parents.

This study's limitations are that the number of participants was minimal, and variations in family backgrounds had not been explored much. Further research is suggested to explore family backgrounds, for example, first, second, or third-generation families in an entrepreneurial organization.

4. CONCLUSION

This study's conclusion is that there was an influence of family background on entrepreneurial intentions with a 16.5% contribution. Parents who provide motivation and support also contributed to the creation of entrepreneurs from an early age.

REFERENCES

- Akanbi, S. T. (2013). Familial Factors, Personality Traits and Self-efficacy as Determinan of Entrepreneurial Intention Among Vocational Based College of Education Students in Oyo State, Nigeria. *Journal of the African Educational Research Network*, 13(2), 66–76.
- Bullough, A., Renko, M., & Myatt, T. (2014). Danger zone entrepreneurs: The importance of resilience and self-efficacy for entrepreneurial intentions. *Entrepreneurship: Theory and Practice*, 38(3), 473–499. <https://doi.org/10.1111/etap.12006>
- Farrukh, M., Alzubi, Y., Shahzad, I. A., Waheed, A., & Kanwal, N. (2018). Entrepreneurial intentions: The role of personality traits in perspective of theory of planned behaviour. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 399–414. <https://doi.org/10.1108/APJIE-01-2018-0004>
- Guerrero, M., Rialp, J., & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1), 35–50. <https://doi.org/10.1007/s11365-006-0032-x>
- Krueger, N. F. J., Reilly, M. D., & Carsrud, A. L. (2000). Competing Models of Entrepreneurial Intentions. *Journal of Business Venturing*. *Journal of Business Venturing*2, 15(98), 411–432. https://s3.amazonaws.com/academia.edu.documents/44050220/Competing_Models_of_Entrepreneurial_Inte20160323-24359-16ngo0q.pdf?response-content-disposition=inline%3Bfilename%3DCompeting_models_of_entrepreneurial_inte.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-A
- Marques, C. S. E., Santos, G., Galvão, A., Mascarenhas, C., & Justino, E. (2018). Entrepreneurship education, gender and family background as antecedents on the entrepreneurial orientation of university students. *International Journal of Innovation Science*, 10(1), 58–70. <https://doi.org/10.1108/IJIS-07-2017-0067>
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A Cross-Cultural Approach to Understanding Entrepreneurial Intention. *Journal of Career Development*, 39(2), 162–185. <https://doi.org/10.1177/0894845310384481>
- Natalita, C., & Slamet, F. (2019). Pengaruh Latar Belakang Keluarga , Kepribadian , dan Efikasi Diri Terhadap Intensi Berwirausaha Mahasiswa. *Manajerial Dan Kewirausahaan*, 1(4), 778–787.
- Nguyen, C. (2018). Demographic factors, family background and prior self-employment on entrepreneurial intention - Vietnamese business students are different: why? *Journal of Global Entrepreneurship Research*, 8(1). <https://doi.org/10.1186/s40497-018-0097-3>
- Prastiwi, I. A. (2004). *Latar Belakang Keluarga Wirausaha dan Niat untuk Berwirausaha*. 578–589.
- Prastiwi, I. A., & Agustina, T. S. (2004). Latar Belakang Keluarga Wirausaha dan Niat untuk Berwirausaha. *Frma*, 4(2), 578–589.
- Sucipta, Ahman, E., & Budiwati, N. (2018). Metode Guided Discovery Learning terhadap Tingkat Berpikir Kritis Siswa Dilihat dari Motivasi Belajar. *Indonesian Journal Of Economics Education*, 1(1), 1–8. <https://doi.org/10.17509/jurnal>

SELF-EFFICACY, RISK-TAKING AND ENTREPRENEURIAL INTENTION AMONG STUDENTS

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Abstract

As a developing country, Indonesia is still much that needs to be improved from all sectors that must be achieved so that Indonesia can compete with other countries. One of them is the unemployment rate. A country's economy cannot run optimally if the number of entrepreneurs is still relatively low. This study aimed to determine the relationship between self-efficacy and risk-taking on entrepreneurial intentions. Participants in this study were 260 students, consisting of undergraduate students of Universitas Negeri Jakarta, who used incidental sampling technique and quantitative approach methodology. This research measurement used the General Self-Efficacy Scale of Schwarzer and Jerusalem (1995), Linan and Chen's Entrepreneurial Intention Questionnaire (2009), and DOSPERT (Domain-Specific Risk-Taking) adopted from Weber & Blais (2003). The statistical analysis used in this study is multiple linear regression analysis.

The results of the study provided a significance value F count of 29.056. This value is greater than the F table with df_2 , which is 257, with a value of 0.05. Another result obtained was the significance value of 0.000, smaller than 0.05. It showed that there was a very significant relationship between self-efficacy and risk-taking toward entrepreneurial intentions. This research implied that the higher self-efficacy and risk-taking, the higher the entrepreneurial intentions among students

Keywords: self-efficacy, risk taking, entrepreneurial intention, students.

1. BACKGROUND

Being in the Industrial Revolution era 4.0, Competition between nations is getting tougher because technology and industry are developing rapidly. As a developing country, Indonesia still needs to be improved in all sectors to compete in the international world. Several indicators must be achieved so that Indonesia can compete with other countries, even becoming a developed country. One of them is the unemployment rate. A country's economy cannot run optimally if the number of entrepreneurs is still relatively low.

Indonesia is a developing country that is still experiencing unemployment problems. Research results from (Novalia, 2018) explain that unemployment occurs because the available employment opportunities are not proportional to the existing workforce. Indonesia's unemployment rate can be seen from the Central Statistics Agency (BPS, 2020), which includes labor force data. The workforce is the population aged 15 years and over who is actively working, temporarily not working, or not having a job. The latest data published in February 2020, there are 137.91 million people who belong to the labor force, of which 6.88 million people are unemployed.

According to (Pratomo, 2017), one of Indonesia's characteristics is high unemployment with higher education. This is commonly referred to as educated unemployment. The number of secondary school and tertiary school graduates is increasing every year, while the number of jobs in Indonesia is limited and unable to accommodate all graduates so that the educated unemployment rate is getting out of control. Uneducated unemployed are residents who have completed their education level, but are not yet working, are looking for work, or have got a job but have not started work. Secondary schools (general and vocational) accounted for the largest percentage of educated unemployment by 8.92 percent, followed by college graduates of 5.73 percent.

Pratomo (2017) stated that the background to the phenomenon of educated unemployment, namely the long transition between education and the labor market, as well as difficulties in entering the labor market, several conditions that exacerbate this transition is the lack of training institutions and institutions that channel the skilled labor force into the job market. In other words, Indonesia has an open unemployment rate until recently.

Responding to this, efforts are needed to overcome it. The Minister of Trade, Enggartiasto (2018) said in republica.co.id that Indonesia has a low level of entrepreneurship. Currently, Indonesia is ranked 94th out of 137 countries.

This is due to the lack of Indonesia's education system in encouraging students to develop into entrepreneurs. This means that Indonesia still needs many new entrepreneurs to create jobs, reduce open unemployment, and reduce poverty in Indonesia. Bahlil Lahadialia (2017), as chairman of the Indonesian Young Entrepreneurs Association (HIPMI), revealed in kompas.nasional.com that the number of entrepreneurs in Indonesia is still small, from the younger generation who are oriented to civil servants or office employees.

Hidayatullah et al., (2018) explained that the millennial generation is the generation born between 1980 to 2000. The age range of the millennial generation is between 20-40 years old. This age is following the average age of students who are currently studying in college. The millennial generation is at the most productive age to contribute to the economy. According to (Hidayatullah et al., 2018), the millennial generation's characteristics have a positive view of technology and information that can affect their lives. Millennial generation can get information easily by taking advantage of existing technological advances. According to ajzsn, the millennial generation is expected to prepare and respond to any changes that will occur, seize the available opportunities, and maximize the moments created by the increasingly rapid cyclical flow of information and technology. Therefore, the access of students included in the millennial generation to information for entrepreneurship is open.

Government has responsibility for the phenomenon of unemployment has attempted to provide a stimulus so that university graduates have the knowledge and skills before entering the world of work. One form of stimulus provided by the government is working with universities in creating the Student Creativity Program. This program has seven types of activities according to the student's interests. Likewise, the university provides courses to hone students' abilities to be oriented to become job creators. To increase the entrepreneurial intention of students, since 1998, the Director General of Learning and Student Affairs, Ministry of Research, Technology and Higher Education, has held a Student Creativity Program divided into several fields, one of which is entrepreneurship. In 2009 the government again developed the Student Entrepreneurship Program (PMW). This program became a forum that facilitates students interested and talented in entrepreneurship to start entrepreneurship by making science and technology the basis. The facilities provided are in the form of entrepreneurship training in the form of an apprenticeship program, preparation of plans to start a business, and capital assistance and business assistance. This program aims so that college graduates are not only job seekers but can become job creators by fostering entrepreneurial motivation among students, building an entrepreneurial mentality, improving student skills in the business world, fostering new, highly educated entrepreneurs, creating new business units based on science, technology, and business, and building business networks between business people, especially startup entrepreneurs with established entrepreneurs. The program was formed to encourage students' interest in entrepreneurship to increase the intention to open their own entrepreneurship.

Researchers' interviews with several Jakarta State University students stated that entrepreneurial intentions were quite important among students. According to them, teaching science about entrepreneurship can help in developing students' creative mindset. Entrepreneurship can be used as a stepping stone and an alternative for students to implement creativity. The most important thing is that students dare to take one step further than before.

Graduates who have been equipped with the insights described above are expected to pay attention to job openings. If you have paid attention, there will be an inner urge to make changes. This is what researchers call the intention (intention). Ajzen and Fishbein (1975) stated that intention is the degree of a person's strength to manifest a certain behavior and how much effort the person makes to realize the intended behavior. Furthermore, according to (Sarwoko, 2011), the intention has a relationship with how hard a person tries to plan the next behavior. Syaifuddin, Mahmudin, and Zaid (2016) suggested that entrepreneurship is an activity carried out by a person who can see and assess business opportunities, looking for the necessary resources to make a profit. Hisrich (2008) defined an entrepreneur as an individual ready to take risks to start something new. (Indarti and Rostiani, 2008) stated that entrepreneurial intention is a process of seeking information that can be used to achieve the goals of forming a business. Before someone starts a business, it takes a strong commitment to start it. Therefore, entrepreneurial intention represents planned actions to carry out entrepreneurial activities (Tubbs and Ekeberg, in Gozukara and Colakoglu, 2016).

Intention (intention) is the first part before humans do any work. So that intention can be said as the strength that is in each individual. Because with this intention, you will realize that there is a very large force that drives you to achieve your goals and dreams (Cahyono, 2016). Intention (intention) is a struggle to achieve one goal, characteristics that can be distinguished from psychological processes, which include a reference or relation to an object (Chaplin in (Evendi & Dwiyantri, 2013).

Intention is a motivational factor that affects behavior. Entrepreneurial intention is the motivational factors that influence individuals to pursue the results of entrepreneurial Hisrich, Peters & Sheperd in (Fadhilah & Way, 2015) and their desires in a person to show entrepreneurial behavior (Farida and Mahmud, 2015).

According to Kadiyono (in Nisa, 2018), the entrepreneurial intention is the most appropriate predictor to see whether individuals have a tendency to carry out entrepreneurial behavior in the future. Hattab in (Agustin, 2017) said that entrepreneurial intention is a state of mind that directs and guides individuals in developing and applying new business concepts. Entrepreneurial intentions can also be intended as the first step in building a business that generally takes a long time. Entrepreneurial intention represents a person's responsibility for starting a new venture and is a central issue to consider in understanding the entrepreneurial process of establishing a new Lee & Wong venture; Krueger in (Cahyono, 2016).

Adhimursandi (2016) stated that to build entrepreneurial intentions, it is necessary to instill things that can also build an entrepreneurial spirit, among others, by providing more motivation and support to be able to generate entrepreneurial intentions. So that if the individual has the intention to channel his entrepreneurial spirit, he has a tendency to be interested in things related to a business.

Based on several experts' opinions above, the authors conclude that the intention can be said to be the degree of measure a person can measure in seeing his efforts to realize a certain expected behavior. Meanwhile, entrepreneurship is an activity taken by someone who feels that he can overcome risk in every step he chooses in running a business. The intention of entrepreneurship is the intention of someone who can see an opportunity presented by a resource that can provide an advantage for himself, for others, and for the country. As well as planting a strong commitment in an entrepreneur, to make up his mind in entrepreneurship, and to take the risks that will be faced.

Even though the government has provided a platform to facilitate students who want to become entrepreneurs, the percentage of entrepreneurs in Indonesia is far from other Asian countries. Based on data obtained from the Global Entrepreneurship Index (2018), which is an annual index that measures the health of entrepreneurial ecosystems in 137 countries, Indonesia is in 94th position compared to other ASEAN countries, namely Singapore, at 27th, Malaysia at 58th place, Thailand on the ranking. 71, and the Philippines, which was ranked 84. These platforms have made it easier for students to develop independently in their lives to start an entrepreneur, but this has led to the lack of entrepreneurs in Indonesia because there is still a culture of job seekers embedded in students. This is a common problem for the government and educational institutions in Indonesia.

Satrya and Suwandana (2015) said that cultivating an entrepreneurial spirit can be started from intention, which is accompanied by self-efficacy. Without both, individuals will find it difficult to develop ideas and creative ideas to develop and manage a business. Currently, there are many ways to grow by individuals themselves independently. Based on the theory (Bandura, 1977), the formation of self-efficacy is obtained from the experience of individual success, imitating someone's success by reading books, and watching informative videos from people who have been successful first, then being in an environment that can have a positive influence to encourage and convince individuals. In carrying out a certain task and creating conditions for oneself to avoid anxiety, there will be positive energy that can build self-determination and self-efficacy that can help students develop their own entrepreneurship through the self-confidence they have obtained.

In his book (King, 2010) said that self-efficacy is a person's belief that he can master a certain situation and produce various positive results. Hisrich (2008) revealed that people who believe that their abilities will show good results so that an entrepreneur must have high self-efficacy. Hisrich (2008) continued, individuals with high self-efficacy have a greater chance of success than individuals who always feel that they will fail. Self-efficacy is something that was coined by Bandura (1977) based on social cognitive theory. Therefore individuals with high self-efficacy have embedded themselves to be able to deal with problems effectively, are willing to accept failure as a fault in themselves and will fix it again, likes challenges and new situations, and is persistent in carrying out a job in a sense, someone who has high self-efficacy has a feeling of being able to control certain situations and can minimize the negative impact of the behavior. Self-efficacy has an important role in human life to influence individual efforts to do something by measuring and predicting the success that can be achieved. This self-confidence can help students determine the behavior raised and think about how the reaction will be obtained after the behavior appears.

Bandura (1977) said that someone with high self-efficacy will be more optimistic. This needs to be owned by students as prospective entrepreneurs to develop their ideas and ideas. Self-efficacy can help individuals measure the extent to which they can manage the business they are going to run and the extent to which individuals can reduce the negative impact of the steps taken. So if it is drawn broadly, self-efficacy is a person's ability to control situations and conditions to get good results and as much as possible suppress the possibility of negative results arising from any resulting behavior.

Creativity and innovation in students need to be released and manifested in the form of a product or service that will later help themselves and others. Several previous studies also raised the topic of self-efficacy and entrepreneurial intentions by Sarwoko (2011) with the title "Empirical Study of Student Entrepreneurial

Intention". The analysis results obtained a regression coefficient value of 0.244, with a significance value of 0.012. A significant value of $0.012 < 0.05$ indicates a 5% error rate. Self-efficacy has a significant effect on entrepreneurial intentions. Furthermore, Karimah's (2016) research entitled "The Relationship Between Self-Efficacy and Entrepreneurial Intention in Students of the Faculty of Psychology, Muhammadiyah University of Surakarta" states that the results of the data analysis indicate that there is a very significant positive relationship between self-efficacy and entrepreneurial intentions in students. This means that the higher the self-efficacy, the stronger the entrepreneurial intention of the students. Conversely, if the lower the self-efficacy, the lower the entrepreneurial intention of the students.

Then research by Indarti and Rostiani (2008) entitled "Student Entrepreneurial intention: Comparative Study Between Indonesia, Japan, and Norway", the study results found that the factors that influence entrepreneurial intentions differ from one country to another. Self-efficacy has been shown to affect the intentions of Indonesian and Norwegian students. However, this study found that self-efficacy did not significantly affect the entrepreneurial intentions of Japanese students. Furthermore, Hutasuhut's (2018) research entitled "The Roles of Entrepreneurship Knowledge, Self-Efficacy, Family, Education, and Gender on Entrepreneurial Intention" shows that self-efficacy, family background, and educational background simultaneously influence entrepreneurial intentions. Another study conducted by Rachmat (2012) entitled "Entrepreneur as a Career Choice for North Maluku Students: The Role of Self-Efficacy and Personality" showed that the path coefficient between self-efficacy and intention to become an entrepreneur was not significant at 5% ($0.0273, p. > 0.05$). This means that statistically, self-efficacy has no significant effect on entrepreneurial intentions. From the results of the research above, there were still differences of opinion regarding the relationship and the effect of self-efficacy on student entrepreneurial intentions. Based on the description of the problem above, researchers are interested in finding out more about the relationship between self-efficacy and entrepreneurial intentions in students.

Furthermore, several recent empirical studies have shown that entrepreneurial intentions, some of which consider students a source of entrepreneurship in the future. Their attitudes and knowledge about entrepreneurship are likely to shape them to start their own business in the future (Wang and Wong, 2004). This is following the Theory Planned Behavior (TPB), where according to Hamidi, Weennberg & Berglund (in Vemmy, 2012), quoted by Kristiadi, Sudarma, & Khafid (2016) stated that "the theory of planned behavior can be used to predict employment status choice intention. " The TPB theory explains that behavioral attitudes, subjective norms, and self-efficacy are variables that precede intention.

Furthermore, several other studies have shown the analysis of internal factors that determine individual entrepreneurial intentions, including if the individual has personal and social awareness, manifested by an understanding of self-efficacy, self-confidence, self-motivation, and having a fighting power in life (Douglas, 2002). ; Yurtkorua, Acarb, & Teramanc, 2014). The existence of a person's intention to be entrepreneurial raises an interest in entrepreneurship, which is the tendency of individuals who have the courage and desire to create a business field through creative, innovative ideas then plan, organize, manage, assume risks and develop new businesses to achieve goals, and can see opportunities existing and able to manage it by working hard, with high enthusiasm (Shoimah, 2019). However, several students have their own concerns in realizing their intention to become entrepreneurs. The fear of facing risks is one reason that students do not dare to become entrepreneurs.

The tendency to take risks (risk-taking) is one of the characteristics or characteristics of entrepreneurship. Some experts classify the tendency to take risks as an inseparable part of entrepreneurship (Wijaya, Nurhadi, & Kuncoro, 2015). Yates explained that risk-taking behavior is how someone behaves in a risky situation, where this situation contains a high level of uncertainty and possible loss. According to Stelmach & Vroon of risk-taking, another definition is any behavior that is controlled consciously or unconsciously with a perception of uncertainty about the outcome (Kurniawan, 2011).

According to (Wijaya, Nurhadi, & Kuncoro, 2015), the nature of risk-taking is not worrying about facing an uncertain situation where the business will not necessarily result in success. Dare to take risks of failure and always anticipate the possibility of failure through careful consideration, innovative nature that is always working hard to find new ways to improve performance.

Because entrepreneurial orientation tends to face more uncertainty, there are often some risks involved in the entrepreneurial process; hence, the higher the tendency to quantify risk, the higher the entrepreneurial intention should be (Sagie and Elizur, 1999). According to Smejkal and Raise (in Kozubíková, Dvorský, Cepel, & Balcerzak, 2017), risks were characterized differently. Some of them are the probability or probability of loss or failure and the variability of the possible outcome or the uncertainty of its achievement.

However, most students do not yet have the courage to become entrepreneurs even though they understand the risks that will occur in the future. Although various ways have been made to foster an entrepreneurial spirit in students, many students do not yet have the intention to become entrepreneurs. Yuwono and Partini (2008)

stated that people who have higher education are less interested in becoming entrepreneurs.

Research conducted by Gunawan and Puspitowati (2019), Douglas and Shepherd (2012) proved that to predict an individual's desire to become an entrepreneur can see from the individual's tolerance for risk, where it is said that the more tolerant the individual is in facing risks, the more individual desires increase is to become an entrepreneur. In line with this, Vemmy (2012) proved that the risk-taking variable has a significant effect on entrepreneurial intentions. Also, Triawan & Sumaryono (2008) stated that risk-taking has a positive and significant effect on becoming entrepreneurial. The tendency to take risks and independence shows individuals' great intention of starting entrepreneurship (Ertuna and Gurel, 2010). Likewise, the results of research conducted by Agbim, KC, Oriarewo, GO, & Owocho, M. (2013) proved that the courage of an individual in taking high risks means that the entrepreneurial intention of the individual is also high.

Based on the exposure of several experts related to the notion of risk-taking, the researchers concluded that risk-taking is an action that must be taken by a person when faced with situations that have uncertain results. The intention or desire of students to become entrepreneurs, coupled with taking courses on entrepreneurship, and the holding of the Student Creativity Program (PKM) as a form of government support in accommodating and channeling student interest, so that researchers are encouraged to conduct research related to the effect of risk-taking students have on their entrepreneurial intention.

2. METHODS

This type of research was a quantitative study with a correlation research method. This study's variables were self-efficacy and risk-taking as independent variables and entrepreneurial intention as the dependent variable. The population in this study were students of DKI Jakarta. Meanwhile, for the sample, students at the State University of Jakarta. This study's sampling technique used *nonprobability sampling*, a sampling technique that does not provide equal opportunities or opportunities for each element or member of the population to be selected as samples. The sampling technique used in this research is an incidental sampling. Incidental sampling is a sampling technique based on chance, in which anyone who accidentally or incidentally meets the researcher can be used as a sample if it is considered that the person who happened to be met is suitable as the source of the data.

Collecting data in this study used an instrument technique in the form of a questionnaire. Researchers used the Entrepreneurial Intention Questionnaire instrument (EIQ) to measure entrepreneurial intentions. General Self-Efficacy Scale (GSE), which has 10 statement items. Schwarzer and Jerusalem (1995) to measure self-efficacy. Researchers used the DOSPERT (instrument domain-Specific Risk Taking) developed by Weber and Blais (2006) to measure risk-taking.

The data analysis technique used multiple linear regression analysis to determine the independent variable's influence on the dependent variable. The multiple regression coefficient test criteria if $F_{count} > F_{table}$ and the significance result < 0.05 show a significant influence between the independent variable on the dependent variable. Conversely, if $F_{count} < F_{table}$ and the significance > 0.05 , then there is no significant influence between the independent variable on the dependent variable. The analysis aimed to determine whether the research hypothesis that has been prepared is acceptable or not.

3. RESULTS AND DISCUSSION

This study's subjects were 260 students with 187 women (71.9%) and 73 men (28.1%). Based on the results of processing the descriptive data on *final* entrepreneurial intentions, the data obtained are as follows:

Table 1. Descriptive Analysis			
Statistical Measurement	Entrepreneurial Intention	Self Efficacy	Risk Taking
Mean	30.73	30.58	90.35
Median	32	30.00	91.00
Skewness	0.715	0.238	0.058
Cutorsis	0.535	0.220	0.192
Deviation standard	7.088	3.620	11.592
Variance	50.236	13.102	134.366
Minimum	6	21	59
Maximum	42	40	126
Sum	119.068	138.76	512.558

Table 2. Multiple Linear Regression Analysis

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2399.505	2	1199.753	29.056	.000 ^b
	Residual	10611.649	257	41.290		
	Total	13011.154	259			

a. Dependent Variable: ENTREPRENEURIAL INTENTION

b. Predictors: (Constant), RISK-TAKING, SELF-EFFICACY

Based on the research results conducted by researchers using multiple linear regression analysis, it can be concluded that the hypothesis is accepted, which means that there is a relationship between self-efficacy and risk-taking towards entrepreneurial intentions in students. So it can be said that the higher the level of student's self-efficacy and risk-taking, the higher the entrepreneurial intention that is felt. So that if students have entrepreneurial intentions, the tendency to analyze and be aware of the risks that will be faced is also getting bigger.

Based on the results obtained, it shows that the F count is 29,056. This value is greater than the F table with df2, which is 257, with a value of 0.05. Another result obtained is the significance value of 0.000, which is smaller than 0.05. Therefore it can be concluded that $29.056 > 0.05$ and $0.000 < 0.05$, so there is a significant influence between the self-efficacy variable, risk-taking on the entrepreneurial intention variable.

This study's results have a positive relationship, which means that the higher the self-efficacy, the entrepreneurial intention also increases. The same results can also be seen in the risk-taking variable, which shows that the higher the risk-taking, the higher the entrepreneurial intention will be. This is in line with the research of Wijaya, Nurhadi, Kuncoro (2015) with the title "Student Entrepreneurial Intention: Risk-Taking Perspective," which shows the tendency to take risks affects entrepreneurial intentions significantly.

The research and discussion results contain the findings in the study that are considered important and main, and the interpretation of the research results. Students are a population with a higher education level who will face professional career choices (will graduate) tend to show a greater tendency towards Roynald entrepreneurship in (Linan & Chen, 2009). The close relationship between risk-taking and entrepreneurial intentions shows that students with high entrepreneurial intentions are followed by their behavior towards the risks to be faced.

Different tests on demographic data in this study show that there are differences in entrepreneurial intentions with gender. The same result is also found in the variable, risk-taking *behavior*, which states that there are differences in entrepreneurial intentions with gender. This shows that gender affects a person's propensity both towards entrepreneurial intentions and risk-taking.

Different results were generated in different tests on entrepreneurial intentions in demographic data on age, year of generation, regional origin, and parent's occupation. The different test shows that there is no difference in entrepreneurial intentions in the four demographic data. Likewise, with the results of different tests of risk-taking on demographic data. There is no difference between risk-taking with the factors of age, year of generation, regional origin, and parent's occupation. The results of this study are in line with research conducted by Linan & Chen (2006) entitled "*Testing the Entrepreneurial Intention Model on a Two-Country Sample*," which shows that although there are significant cultural differences between Spain and Taiwan, there is no direct effect on entrepreneurial intentions.

4. CONCLUSION

Based on the results of the research and data analysis carried out in this study, the researcher can conclude that there is a significant relationship between self-efficacy and risk-taking with students' entrepreneurial intentions. This means that the higher the self-efficacy and risk-taking, the higher the entrepreneurial intention. Conversely, the lower the self-efficacy and risk-taking, the lower the entrepreneurial intention.

The implication of this research is that as a student who will face a professional career ladder in the future, entrepreneurship is an option to have a job while creating new jobs to help the government reduce unemployment. By paying attention to self-efficacy and risk-taking, students who have entrepreneurial intentions can think of business strategies to reduce the risk level.

Although self-efficacy is only one factor in entrepreneurial intentions, self-efficacy, which can be built from the environment, can be of greater concern to educational institutions. Taking risks really needs to be considered

by students to build entrepreneurial intentions in students. For example, by following courses related to entrepreneurship and the need for an entrepreneurial activity assistance program from the campus for students. Based on the research results that have been done, researchers hope that students can have entrepreneurial intentions. Then students can do small businesses such as selling credit, online marketing, and so on.

REFERENCES

- Adhimursandi, D. (2016). Faktor-faktor yang Mempengaruhi Niat Kewirausahaan. *Kinerja : Jurnal Ekonomi dan Manajemen*.
- Agustin, E. E. (2017). *Hubungan antara Pengambilan Risiko dengan Intensi Berwirausaha pada Mahasiswa*. Malang: Skripsi. Fakultas Psikologi Universitas Muhammadiyah.
- Ajzen, I., & Fishbein, M. (1975). *Belief, Attitude, Intention, and Behavior: an Intriduction to Theory and Research. Chapter 7: Formation of Intentions*. London, England: Addisom-Wesley Publishing Company.
- Bandura, A. (1977). *Self-efficacy : Toward a Unifying Theory of Behavioral Change*. 84(2), 191–215.
- Blais, A.-R., & Weber, E. U. (2003). DOSPRT Domain-Specific Risk Taking. *Journal of Behavioral Decision Making*.
- Budiati, I., Susianto, Y., Adi, W. P., Ayuni, S., Reagan, H. A., Larasaty, P., Setiyawati, N., Pratiwi, A. I., & Saputri, V. G. (2018). *Profil Generasi Milenial Indonesia*. 1–153. www.freepik.com
- Cahyono, H. (2016). Membangun Entrepreneurial Intentions Mahasiswa. *RI'AYAH*.
- Douglas, E. J. (2002). Self-Employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization. *Entrepreneurship Theory and Practice*, 81-90.
- Evendi, R., & DwiYanti, R. (2013). Hubungan antara Hardiness (Kepribadian Tahan Banting) dengan Intensi Turnover pada Karyawan PT Sumber Alfaria Trijaya Tbk di Wilayah Gombong Kabupaten Kebumen. *PSYCHO IDEA*.
- Gozukara, I., & Colakoglu, N. (2016). Enchancing Entrepreneurial Intention and Innovativeness of University Students: The Meditating Role of Entrepreneuria Alertness. *International Business Research*, 9(2), 34. <https://doi.org/10.5539/ibr.v9n2p34>
- Hidayatullah, S., Waris, A., & Devianti, R. C. (2018). Perilaku Generasi Milenial dalam Menggunakan Aplikasi Go-Food. *Jurnal Manajemen Dan Kewirausahaan*, 6(2), 240–249. <https://doi.org/10.26905/jmdk.v6i2.2560>
- Hisrich, R. D., Peters, M. P., & Sherperd, D. A. (2008). *Entrepreneurship: Kewirausahaan*. Jakarta: Salemba Empat.
- Hisrich. (2008). *Entrepreneurship Research and Practice: A Call to Action for Psychology*. May. <https://doi.org/10.1037/0003-066X.62.6.575>
- Hutasuhut, S. (2018). The Roles of Entrepreneurship Knowledge, Self-Efficacy, Family, Education, and Gender on Entrepreneurial Intention. *Dinamika Pendidikan*, 13(1), 90–105. <https://doi.org/10.15294/dp.v13i1.13785>
- Indarti, N., & Rostiani, R. (2008). Intensi Kewirausahaan Mahasiswa: Study Perbandingan antara Indonesia, Jepang dan Norwegia.
- Indonesia, B. (2019). Statistik Indonesia 2019. *BPS Indonesia*.
- Indonesia, B. (2016). *Tingkat Pengangguran Terbuka (TPT)*. <https://www.bps.go.id/pressrelease/2019/05/06/1564/februari-2019--tingkat-pengangguran-terbuka--tpt--sebesar-5-01-persen.html>.
- Karimah, N. U. (2016). *Hubungan Antara Efikasi Diri Dengan Intensi Berwirausaha Pada Mahasiswa Fakultas Psikologi Universitas Muhammadiyah Surakarta*. Skripsi.
- Kozubíková, L., Dvorský, J., Cepel, M., & Balcerzak, A. P. (2017). Important characteristics of an entrepreneur in relation to risk taking: Czech Republic case study. *Journal of International Studies*, 220-233.

- Kristiadi, S., Sudarma, K., & Khafid, M. (2016). Pengaruh Sikap Berperilaku, Norma dan Efikasi Diri terhadap Intensi Kewirausahaan pada Siswi melalui Motivasi di SMK Negeri 1 Pati. *Journal of Economic Education*.
- Krueger, Reilly, & Casrud. (2000). *Competing model of entrepreneurial intentions*. New York: Elsevier Science Inc.
- Kurniawan, T. D. (2011). Intensi Berwirausaha Siswa Sekolah Menengah Kejuruan (SMK) Negeri 22 Jakarta: Peran Self Efficacy, LoC, Risk Taking Behavior, EQ, dan AQ. *Skripsi*.
- Linan, F., & Chen, Y.-W. (2006). *Document de Treball: Testing the entrepreneurial intention model on a two-country sample*. Universitat Autònoma de Barcelona.
- Linan, F., & Chen, Y.-W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*.
- Nisa, R. A. (2018). *Hubungan antara Risk Taking Behavior dengan Intensi Berwirausaha pada Mahasiswa UIN Sunan Ampel Surabaya*. Surabaya: Skripsi. Universitas Islam Negeri Sunan Ampel Surabaya.
- Novalia, S. (2018). *Meningkatnya Pengangguran di Ibu Kota Jakarta*. December.
- Sagie, A., & Elizuir, D. (1999). Achievement Motive and Entrepreneurial Orientation: A Structural Analysis. *Journal of Organizational Behavior*, 375-387.
- Shoimah, S. (2019). Pengaruh Self Efficacy, Lingkungan Keluarga dan Pendidikan Kewirausahaan terhadap Minat Berwirausaha Mahasiswa Fakultas Ekonomi Unisda Lamongan. *J-MACC : Journal of Management and Accounting*.
- Pratomo, D. S. (2017). Fenomena Pengangguran Terdidik di Indonesia. *Sustainable Competitive Advantage*, 7(September), 642–648.
- Rachmat, M. (2012). Entrepreneur Sebagai Pilihan Karir Mahasiswa Maluku Utara: Peran Efikasi Diri Dan Kepribadian. *Ajie*, 1(3), 186–197. <https://doi.org/10.20885/ajie.vol1.iss3.art7>
- Sarwoko, E. (2011). Kajian Empiris Entrepreneur Intention Mahasiswa. *Jurnal Ekonomi Bisnis*, 16(2), 126–135.
- Satrya, I., & Suwandana, I. (2015). Potensi Kewirausahaan Mahasiswa Di Fakultas Ekonomi Dan Bisnis Universitas Udayana. *E-Jurnal Manajemen Universitas Udayana*, 4(12), 244877.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. *Measures in health psychology: A user's portfolio. Causal and control beliefs*, 1(1), 35-37.
- Syaifuddin dkk, D. T. (2016). *Buku 6. Kewirausahaan.pdf* (Vol. 1, Issue 1, pp. 28–208). https://www.academia.edu/35168990/Buku_6._Kewirausahaan.pdf
- Wang, C. K., & Wong, P. K. (2004). Entrepreneurial Interest of University Students in Singapore. *Technovation*, 163-172.
- Wijaya, T., Nurhadi, & Kuncoro, A. M. (2015). Intensi Berwirausaha Mahasiswa: Perspektif Pengambilan Risiko. *Jurnal Siasat Bisnis Vol. 19 No. 2*, 109-123.
- Yurtkorua, E. S., Acarb, P., & Teramanc, B. S. (2014). Willingness to take risk and entrepreneurial intention of university students: An empirical study comparing private and. *Procedia - Social and Behavioral Sciences*, 834-840.
- Yuwono, S. (2008). Pengaruh Pelatihan Kewirausahaan Terhadap Tumbuhnya Minat Berwirausaha.

IDENTIFICATION OF THE EFFECTIVENESS OF SMART CITY PROGRAM INFORMATION DELIVERY THROUGH INSTAGRAM WITH SENTIMENT ANALYSIS APPROACH (BASED ON THE GOVERNOR OF CENTRAL JAVA PROVINCE INSTAGRAM ACCOUNT @GANJARPRANOWO FOR THE PERIOD OF JANUARY 20, 2019 TO FEBRUARY 20, 2020)

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Abstract

The purpose of this research is to find out the image of captions uploads on Instagram as well as the mapping of smart city programs informed by Ganjar Pranowo's Instagram account that impacts the public response in response to information about smart city programs viewed from Ganjar Pranowo's Instagram account. The methodology used by the researcher is qualitative, and the data collection in this method is obtained through crawling data and processed using pythons. The results of this study are expected to help the development and application of science on sentiment mapping analysis of the delivery of information of the governor in using sentiment analysis to know the community's response to the program information submitted by the leader and as a reference and reference for other research that is more in-depth and also know the mapping of information delivery by the governor in the use of Social media Instagram The Governor of Central Java Province in communicating the Smart City program based on the results of the sentiment analysis Instagram owned by Ganjar Pranowo.

Keywords: Social Media, Smart City, Leadership, Mapping, Instagram.

1. PRELIMINARY

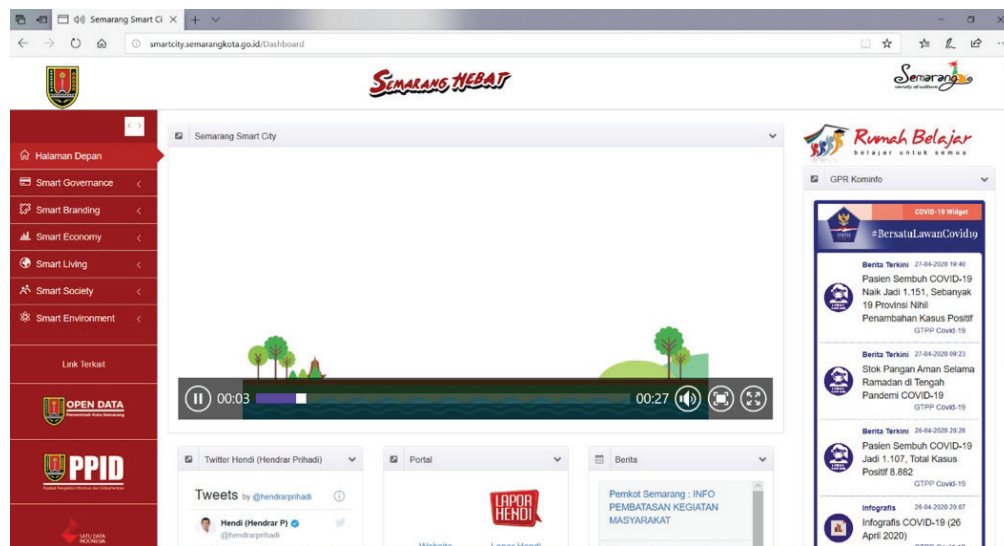
The era of globalization that is currently happening affects the lifestyle of today's society; This can be seen from the use of the internet today. In 1995 internet users worldwide were less than 1%. In 2013, internet users increased tenfold. Its users have increased rapidly from year to year, and currently, around 45% of the world's population has used an internet connection (Emarsys, 2019). Technological developments and people's lifestyles affect cities' development, where every country wants to create a city with excellent and modern urban infrastructure both physical and easy government services in serving the community, which is also called a smart city. One of the most critical determinants in a smart city is technological development. The internet provides much information that can be used as an essential and needed resource in all aspects and form perceptions, opinions, insights, and knowledge. In the current globalization era, information is increasingly easy to obtain on the internet and social media platforms. Social media changes how people live their lives, starting from how we react when we see news and how we interact with other people (Mohsin, 2019). According to Budiarti et al. (2016), social media has a significant influence on a person's life. Someone small initially can make it big with social media or vice versa. Social media provide feedback openly, provide comments, and share information in a fast and unlimited time. With data on social media users dominated by ages 18-34 and have a significant influence, government leadership must adapt to this new phenomenon. Digital technology is currently a significant change that is happening now; a good leader is a leader who can understand the conditions and understand the situation, including transforming

into the digital realm (Brett, 2019).

Many Indonesian people use social media, namely Instagram, including Central Java Province. It is hoped that the public's use of Instagram has been used optimally in obtaining information about smart cities. People who generally like fast, easy, and cheap are expected to contribute to smart cities' development. Based on this phenomenon, many leaders use social media as a tool to communicate with the public, and many people aspire to their opinions through comments on Instagram. With the increasing number of population in an area, cities, and provinces, leaders' use of Instagram can be considered a significant step to communicate their work programs and to know about people's responses directly and quickly by knowing people's responses quickly, precisely, and efficiently. To illustrate the public's response regarding the delivery of the smart city program and the government is expected to be responsive and quick in responding to people who provide solutions or have problems regarding the smart city program, which is socialized by the government through the Ganjar Pranowo Instagram account.

In Indonesia, several cities have implemented the Smart City concept, including DKI Jakarta, the City of Tangerang Government, the City of Bandung Government, the City of Balikpapan Government, the City of Makassar Government, the City of Stone Government, the City of Surabaya Government, Central Java Provincial Government, and other Provincial / District / City Governments. Central Java Province is an example of implementing the first smart province in Indonesia. As many as 13 countries/cities in Central Java are picked as smart city models. The 13 districts/cities selected are Surakarta City, Banyumas Regency, Batang, Blora, Grobogan, Pati, Sukoharjo, Pemalang, Boyolali, Kudus, Jepara, Kendal, and Magelang. Collaboration and coordination between districts/cities that have been selected as raw models for the Movement Towards 100 Smart Cities are needed. It takes commitment from all regional heads and the governor to intensify and provide counseling and campaigns in implementing the smart city movement to the community. The smart city movement runs well and is implemented by all Central Java provincial governments and Central Java people. "The city of Semarang, as the capital of Central Java, is one of the pilot cities in implementing the smart city concept. The goal is to improve services for the community at the Movement Towards Smart City Summit 2017," said Director General of Post and Information Technology, Ahmad M Ramli, at a discussion on the theme of improving digital infrastructure in Semarang, Central Java. According to him, the smart city concept applied by Semarang's city is applied in various online service systems. <https://mediaindonesia.com/read/detail/140225-semarang-jadi-contoh-smart-city>).

Figure 1. Semarang Smart City Web



The smart city program in Semarang city is an example of applying other smart cities in Central Java. The application of smart city programs in Semarang city, namely: Smart Governance, Smart Branding, Smart Economy, Smart Living, Smart Society, and Smart Environment.

This study wants to look at the relationship between the Smart City program's socialization and the use of Instagram in the people of Central Java Province and the public response to the smart city program's communication. Many social media are used by Central Java Province people such as Twitter, Facebook, Instagram, or other social media. However, in this study, Instagram was chosen because it has characteristics that make it easier for people to write captions and are free to enter photos and videos. Mr. Ganjar Pranowo has more followers than his other social media. The sentiment analysis technique used this analysis, so the information on Instagram analysis was

drawn. It was then analyzed so that its expectations would result from positive, neutral, or negative influences on public opinion in social media regarding the Smart City program. This sentiment analysis approach is used to map the community's response to the program conveyed by Ganjar Pranowo through Instagram social media. The benefits to be achieved from this research are to help parties such as the Government in seeing public responses. This study will take several data samples (captions) and comments on the data (captions) from the Governor of Central Java, namely Ganjar Pranowo. Leadership is one of the factors for the success of a Smart City. Ganjar Pranowo is a figure of the Governor who is open to interacting using social media with Central Java Province. Especially through his personal Instagram account. Thus, the research questions are:

1. What is the caption's description of the photo or video uploaded by Ganjar Pranowo in communicating and disseminating the Smart City program to the people of Central Java Province?
2. How is the presentation of the Smart City program of the Governor of Central Java Province Ganjar Pranowo in implementing Smart City based on communication and socialization carried out on Instagram?
3. How is the public response to the upload of the Smart City program that is mostly communicated by the Instagram account Ganjar Pranowo with the Sentiment Analysis Approach?

Thus, this research has the following objectives:

1. To find out the description of the captions on photos or videos uploaded by Ganjar Pranowo in communicating and disseminating the Smart City program to the people of Central Java Province.
2. To find out the orientation of the Smart City program, the Governor of Central Java Province Ganjar Pranowo, in implementing Smart City based on communication and socialization carried out on Instagram.
3. This is to find out the public response to the most uploaded Smart City programs communicate by Instagram account Ganjar Pranowo with the Sentiment Analysis Approach.

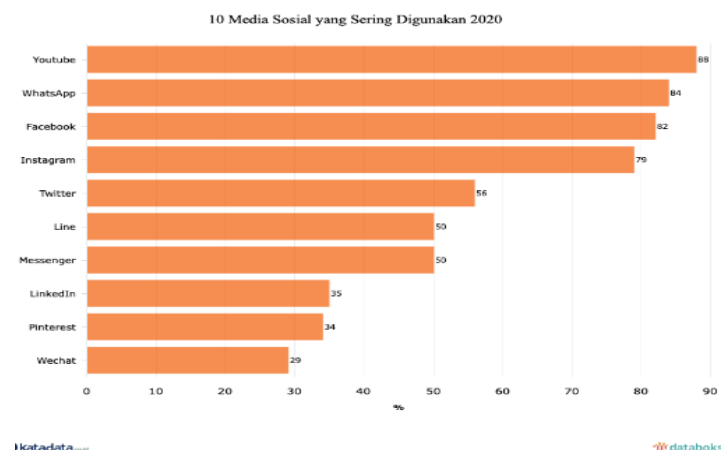
This research will be organized as follows. First, we will review and build a research framework for analyzing research questions, then propose appropriate research methods to implement the research framework. Furthermore, it will be concluded by suggesting research hypotheses, implications of existing theories and practices, and providing further research suggestions.

2. LITERATURE REVIEW

Smart cities result from intensive knowledge development and creative strategies in improving the socio-economic, ecological, and competitive qualities of cities. The emergence of a smart city is the result of a combination of human capital (such as an educated workforce), infrastructure structure capital (such as high-tech communication facilities), social capital (such as open communication networks), and entrepreneurial capital (such as creative business activities). & Nijkamp (2012).

Social media is Internet-based media that allows users to interact and present themselves, either real-time or delayed, with a broad audience or not, which encourages them to get value from user-generated content and the perception of interactions with other people. (Carr & Hayes, 2015).

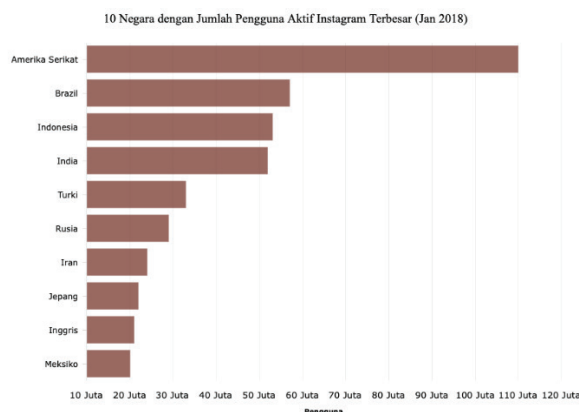
Figure 2. Social Media Frequently Used 2020



Youtube is the platform most frequently used by social media users in Indonesia aged 16 to 64 years. The percentage of users accessing Youtube reaches 88%. The next most frequently accessed social media were WhatsApp at 84%, Facebook at 82%, and Instagram 79%.

For information, the average time Indonesian people spend accessing social media is 3 hours 26 minutes. The total active social media users are 160 million, or 59% of Indonesia's total population. 99% of social media users surf through cellphones (katadata.co.id, 2020).

Figure 3. Countries with the Largest Number of Active Instagram Users 2018



According to the picture above, the survey results from WeAreSocial.net and Hootsuite, Instagram is the social media platform with the seventh-highest number of users globally. Apart from being a social network for sharing photos, Instagram is used to market business products. The total number of Instagram users in the world reached 800 million in January 2018.

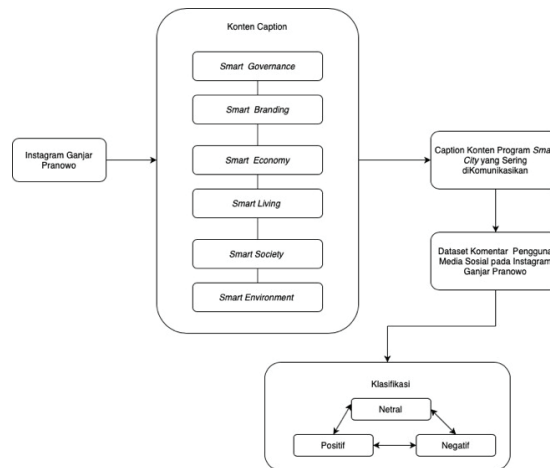
The largest number of active Instagram users come from the United States, as many as 110 million. They are followed by Brazil, with 57 million active users, and Indonesia in third place with 55 million. In Indonesia, Instagram is the fourth most-used social media after Youtube, Facebook, and Whatsapp (<https://databoks.katadata.co.id/datapublish/2018/02/09/berapa-pengguna-instagram-dari-indonesia>).

Instagram is an application used to share photos and videos. Instagram itself is still part of Facebook, which allows our Facebook friends to follow - our Instagram account. Social media Instagram is a message delivery tool (application) to communicate with a broader audience by sharing photos or videos, including other features such as DM (direct message), comments, love, etc.

According to Amirullah (2015: 167), while the theory is related to leadership, people who have the authority to give assignments can persuade or influence others through good relationship patterns to achieve predetermined goals. Meanwhile, according to Tjiptono (2011: 67), leadership style is a method used by leaders in interacting with their subordinates. Meanwhile, another opinion states that leadership style is a pattern of behavior (words and actions) of a leader that is felt by others (Hersey, 2004). According to (Liu 2012), the definition of sentiment analysis or opinion mining refers to a broad field of natural language processing, linguistic computing, and text mining. It aims to analyze a person's opinion, sentiment, evaluation, attitude, judgment, and emotions whether the speaker or writer is pleased with a particular topic, product, service, organization, individual, or activity. The sentiment analysis task is to group text into sentences or documents and then determine the opinions expressed in the sentences or documents analyzed, whether positive, negative, or neutral (Dehhaf, 2010). Sentiment analysis also uses algorithms to process and classify the data built. In sentiment analysis research using many algorithms. Ten best algorithms are commonly used, including C4.5, The K-Means, Support Vector Machine, Apriori, Maximum Entropy PageRank, AdaBoost,

From some of the opinions above, it can be concluded that sentiment analysis is a process to determine a person's sentiment or opinion, which is manifested in text form and can be categorized as a positive or negative sentiment. As previously written, internet users write a lot about their experiences, opinions, and other concerns. Writing about what they feel is positive, neutral, and negative feelings expressed in quite complex ways (Troussas et al., 2013). From the related theories above, the following is an overview of the framework that the authors get.

Figure 4. Research Framework



Ganjar Pranowo uses Instagram to communicate Smart City's Central Java Province programs to the people of Central Java Province. There are six priority areas for Semarang Smart City, namely:

1. Smart Governance
2. Smart Branding
3. Smart Economy
4. Smart Living
5. Smart Society
6. Smart Environment

Based on the description of the framework of thought above illustrates the concept of research, namely, the object of this research is the content caption in the Ganjar Pranowo Instagram account related to the smart city run by the smart city pilot city, namely the city of Semarang, then from the results obtained programs that are often communicated, after focusing on The program communicated by Ganjar Pranowo then the researcher collected comments from Instagram users to be able to map the clusters contained in the classification using the sentiment analysis approach, on Instagram Ganjar Pranowo will describe the response of using Instagram to the delivery of Ganjar Pranowo in delivering Smart City programs in Java Province Middle and will classify the response which will generate positive sentiment, net sentiment and negative sentiment that will be obtained by the largest classification group from the sentiment analysis on comments on Instagram Ganjar Pranowo in delivering Smart City programs in Central Java Province.

3. RESEARCH METHODOLOGY

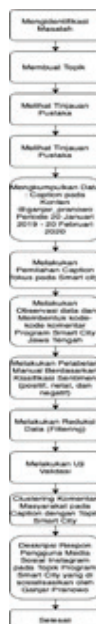
This study's research approach is a qualitative research method with descriptive research based on the type of sentiment analysis inquiry. Researchers conducted an analysis and literature review of previous studies that discussed the smart city and sentiment analysis. Most of the studies that researchers review are in the form of journals, both national and international. Besides, in this study, the researcher tries to analyze the effectiveness of delivering smart city program information via Instagram with a sentiment analysis approach based on the @ganjar_pranowo Instagram account for January 20, 2019.

Until February 20, 2020, the tools used in this research are Python to facilitate data processing and determine the word could or words often communicated by Instagram @ganjar_pranowo or those often communicated by the public.

According to Sugiyono (2018: 2), the research method is a scientific way to get data with specific purposes and uses. The research method used is to use the causal associative method. By using causal associations, it can be seen the relationship between two or more variables that can explain symptoms, namely testing ICT literacy on critical thinking skills.

The research stages in this study are described as follows:

Figure 5. Research Implementation Stages



The stage in writing this research begins by looking for the problem phenomena that occur, and the problem is identified and then determining the research topic. In making it easier for researchers to understand this research before the data collection process begins, the researcher conducts literature studies and previous research to get an idea of what this research will look like. The next stage is qualitative data collection. The researcher collects caption data on image/video content uploaded on Ganjar Pranowo's personal Instagram and comments made by followers of the Ganjar Pranowo account on social media Instagram relating to the delivery of socialization about Smart City during January 20, 2019, the period until February 20, 2020.

Furthermore, the filtering or reduction stage is carried out on the collected captions. The filtering stage aims to obtain captions that contain relevant content to Smart City through content analysis techniques using code as keywords. The caption containing relevant content with Smart City programs will be processed again to find comments submitted by Instagram users. Then the results are classified based on the cluster with the sentiment analysis approach. It is known how the response to the use of Instagram Ganjar Pranowo's social media on Smart City.

The object of this research is the Instagram account of Ganjar Pranowo @ganjar_pranowo and the Governor of Central Java Province 2018-2023.

Account name	: @ganjar_pranowo
Number of Followers	: 2,616,695 followers as of October 8, 2019
Number of Uploads	: 1,129 uploads as of March 24, 2020
Number of Following	: 3 followings as of May 12, 2020
Name of the owner	: Ganjar Pranowo
Position	: Governor of Central Java (2017-2022)
Upload Period	: 20 January 2019 to 20 February 2020

Researchers use secondary data, according to M. Hussein Umar (2013: 42) secondary data is: "Secondary data is primary data that has been further processed and presented either by primary data collectors or by other parties, for example in the form of tables or diagrams." Meanwhile, according to Nur Indrianto and Bambang Supomo (2013: 143), secondary data are: "Secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties)." In this study, only secondary data obtained from uploads and comments of social media users Instagram on the Instagram account of Ganjar Pranowo during the period January 20, 2019 - February 20, 2020. Books, journals, internet, research results, and other resources regarding the use of social media in communication between people and the government are also being used to enhance understanding of the study.

Table 1. Number of Uploads @ganjar_pranowo (Period 20 January 2019 - 20 February 2020)

No.	Smart City Program	Total Uploads @ganjar_pranowo
1	<i>Smart Governance</i>	36 Uploads
2	<i>Smart Branding</i>	120 Uploads
3	<i>Smart Economy</i>	10 Uploads
4	<i>Smart Living</i>	22 Uploads
5	<i>Smart Society</i>	50 Uploads

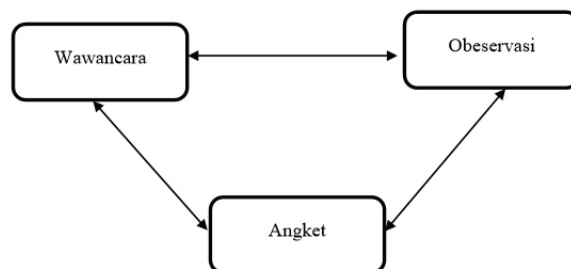
This study uses triangulation techniques to prove the truth of the data. According to Sugiyono (2017, p. 273) that "Triangulation is defined as checking data from various sources in various ways and at various times." In this study, triangulation was conducted by comparing interviews, observations, and documentation conducted by researchers with different data sources.

In this study, the authors used the following triangulation techniques:

1. Source Triangulation

Triangulation of sources to test the credibility for data done by checking data obtained through multiple sources. The source at this Triangulation stage is to compare three sources. Data from these three sources cannot be averaged but described, categorized, which are the same views, which are different and specific from the three sources. The data that has been analyzed by the researcher is asked for an agreement (member check) with the three data sources and produces conclusions. The source triangulation processing process is carried out based on the image below:

Figure 6. Triangulation Processing Process



2. Technical Triangulation

Technique triangulation aims to test the data's credibility by checking the data to the same source with different techniques, such as interviews, observations, and questionnaires.

This research's data source comes from the captions and comments of Instagram social media users on Instagram Ganjar Pranowo, written by him as the Governor of Central Java Province, so the data used can be trusted. To improve the accuracy of collecting caption data sources, researchers also collected data on Smart City, which is used as a pilot in Central Java Province, to match the two data. Researchers also used different techniques in testing the validity of the data, namely, by using qualitative content analysis techniques and using PYTHON. Thus, this study uses the validation test technique of source triangulation and technical triangulation.

Qualitative research requires many data sources in researching because it can provide a deeper picture of the research process. The data obtained in this qualitative research can be collected and classified according to the need for further description in a report. According to Bogdan (in Sugiyono, 2017, p. 244):

Data analysis is the process of systematically finding and compiling data obtained from interviews, field notes, and other materials so that they can be easily understood. Others can share their findings. Data analysis is done by compiling data, describing it into several units, synthesizing it, arranging it into patterns, choosing which ones are important and what will be studied, and making conclusions that can be shared with others. Then, in other words, data analysis is the process of identifying data, which is then arranged in an idea that is contained in the data obtained during the research process.

For this study, researchers used a tool that helps in analyzing data called Python. Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. (source python.org) The use of

the python programming language is very popular because:

1. Free (Opensource)
2. Can be used on any platform.
3. Easy to learn
4. Work fast
5. Lightweight.

Advantages:

1. Can interact with other programming languages
2. Multifunctional
3. Lightweight
4. More efficient
5. Easy to learn
6. Many libraries

Deficiency:

1. when compared to the programming language R python is still lacking in terms of package availability

Figure 7. System diagrams built to operate Python



Figure 7 shows the flow of the system built in this study to process data using Python tools. The first step is taking every post uploaded to the Instagram account @ganjar_pranowo. From this data retrieval, it produces data on the overall posting of rewards. The data is then filtered based on the period they want to take, starting from

January 20, 2019, to February 20, 2020, explicitly discussing smart city programs. After obtaining the post data that has been submitted, the posting data is mapped based on the smart city program that is communicated and retrieved with the most number of posts about smart city communication that is often informed. After communicating the smart city program, the data is reprocessed by taking comments from Instagram users who comment on the frequently communicated smart city program. The data obtained will be divided into 2, namely research data to build models and predictive data to obtain positive, negative, and neutral sentiment information from the @ganjar_pranowo Instagram account.

Furthermore, manual labeling of the research data will be carried out. Research data that already has a label will be processed with data such as tokenization, stopwords removal, lowercase conversion, and stemming. After data processing, the research data is then processed in the TF-IDF feature weighting process. Then the data obtained from the final process is divided into test data and training data to build a multi-class SVM classification model.

4. RESULTS AND DISCUSSION

In digitalization, social media is often used by regional and city leaders in delivering government programs. Instagram is one of the social media used by Ganjar Pranowo in communicating with the people of Central Java Province. He conveyed many things through his account, one of which was about the Central Java Smart City programs. Based on the caption data of Ganjar Pranowo for the period January 20, 2019, to February 20, 2020, the Central Java Smart City programs communicated will be described as follows.

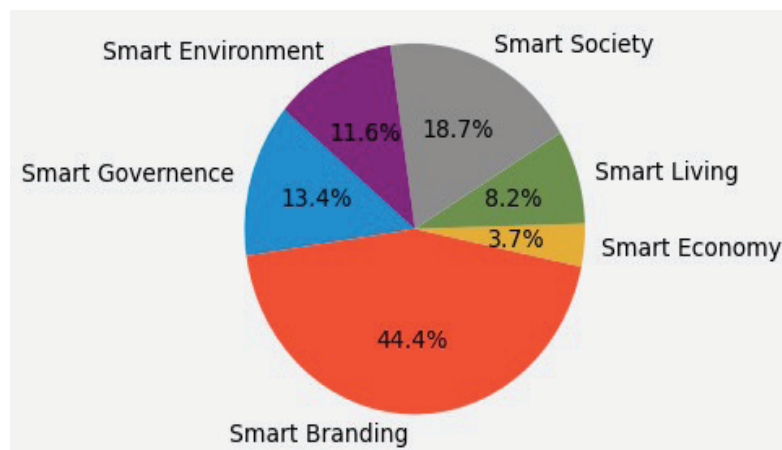
Table 2. Caption Overview of Ganjar Pranowo Regarding the Smart City Program

No.	Program Smart City	Caption
1.	Smart Governance	Central Java is starting to pioneer electronic signatures, with this it is hoped that it will be more effective and bye-bye 📁📁 heaps of tiring file with conventional signatures. OK or not? @BSSN_RI @BSrE_ID #JatengGayeng https://t.co/95UxGoqh2lada is a public servant (12 December 2019)
2.	Smart Branding	We will start by making this Esemka commercial car for the benefit of our assistance to farmer groups, fishermen and UKM players. These steps are important in an effort to make Esemka the national car. I can't wait for the newest non-commercial products, such as SUVs and other products. I want to buy quickly, and feel the car made by the nation's children. Maybe it could be the official car of the governor and regent mayor in Central Java. (6 September 2019)
3.	Smart Economy	Let's sell your own crops through the Agro Jowo Application !! .. Launching the Agro Jowo Application at the opening of # SAE2019 (04/07/2019) @SBanendro @provjateng @kominfo_jtg #JatengGayeng https://t.co/tAJJ7feaWh (5 July 2019)
4.	Smart Living	Reducing the risk of flood disasters & anticipating predictions of @bmkg_semarang in the next week (05-12 / 01/20), Kadis @ ekoyunianto1055 checks the waru pump @pemkotsmg (1 May 2020)
5.	Smart Society	Reposted from @ humas.jateng - The online PPDB stage for SMA and SMK Negeri in Central Java has started. One of the steps is taking accounts for both SMA and SMK. . Regarding the zoning route for SMA, in Central Java it is 90 percent by prioritizing 20 percent for prospective students who live in the zone. In addition, there is also a selection on the achievement pathway outside the zone as much as five percent, and the path for moving parents by five percent.. Meanwhile, PPDB SMK does not use a zoning system.. Complete information about PPDB SMA / SMK Negeri in Central Java can be accessed through the ppdb.jatengprov.go.id website. If you are confused, please contact the Provincial PPDB Online Posko 024-86041265. Listen carefully to the information, ok ... slide ... Governor @ganjar_pranowo Deputy Governor @tajyasinmz. #JatengGayeng # PPDBJateng2019 #PPDBOnline - #regrann (22 June 2019)

6.	Smart Environment	<p>Hello #SahabatTangguh. Let's take a look at @bnpb_indonesia's explanation regarding the following Disaster Cycle (Pre-Disaster). Is this info important for you? #SiapUntukSelamat #KenaliAncamannya #SreparedStrategy https://t.co/6qhErsDihc</p> <p>(January 22, 2020)</p>
----	-------------------	---

Based on the data in Table 1, the Smart Branding program is the program most frequently communicated through the Instagram account Ganjar Pranowo with a total of 119 captions, followed by the Smart Society program with 50 uploads, then Smart Governance with 36 uploads, and Smart Environment with 31 uploads from 268 uploads discussing Central Java Smart City.

Figure 8. Percentage of Captions Per Priority Area of Central Java Smart City










The data in Figure 8 shows that the Smart City Central Java Priority Area that is most often communicated by Ganjar Pranowo is Smart Branding with a percentage of 44.4% or 119 captions from a total of 268 uploads discussing Central Java Smart City. The Smart Economy priority area has the lowest percentage at only 3.7%.

Based on the data in Table 1, the greater the number of captions, the more it illustrates that these programs are often communicated between @ganjar_pranowo and the community. Conversely, the fewer captions, the less a Central Java Smart City program is communicated. The more information is communicated, the public will better understand and know the program. It is hoped that this will increase public awareness and participation in the program's implementation so that the program can run according to its function.

Based on the data obtained from Figure 8, the Smart City Central Java program that is often communicated is Smart Branding. Other programs have not been communicated maximally in the caption uploaded by Ganjar Pranowo. However, it can be said that the data above shows that the implementation of Smart City programs is running quite well. The following are some of Ganjar Pranowo's captions regarding the awards he received regarding the Central Java Smart City programs running well, according to Table 3.

Table 3. Ganjar Pranowo Award Table in Advancing Central Java Province.

No.	Appreciation	Picture	Caption
1	Award as Public Service Builder in the Very Good category from Kemenpan-RB	 <p>Figure 9.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Yesterday (5/11) received an award as a Public Service Builder in the Very Good category from Kemenpan-RB.</p> <p>All of the public services that the Central Java Provincial Government are doing now can report and complain through social media, the bureaucracy is cut-off so that public services can run easily, cheaply, quickly and completely.</p> <p>Now in the millennial era, people want to report, complain, or even just chat with us (government, ed) via social media. So we have to be ready, currently the regulation is every OPD (Regional Apparatus Organization) is obliged to respond to public complaints a maximum of 1x24 hours. If it is more than 1x24 hours, they already know the risk.</p>
2	The award was won by Central Java as the most innovative province in 2019 in the Innovative Government Award 3 from the Ministry of Home Affairs	 <p>Figure 10.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Alhamdulillah, Central Java became the most innovative province in 2019 in the Innovative Government Award 3 from the Ministry of Home Affairs last Monday (7/10). Smart Government which is the focus in Central Java is implemented in Easy, Cheap and Fast services. The point is accountability and transparency. HR is increasingly well, and the community is well served.</p>
3	Award as the first province to have regional regulations on Smart Central Java Province	 <p>Figure 11.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Reposted from @tajyasinmz (@get_regrann) - Central Java, the first province to have a smart Central Java provincial perda.</p> <p>Hopefully this regional regulation will further improve services to the community quickly, easily and cheaply. - #regrann</p>

4	Award as the province with the best Regional Planning and Development (PPD) 2019 by Bappenas.	 <p>Figure 12.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Today, at the Musrenbangnas, Central Java received an award as the province with the best Regional Planning and Development (PPD) 2019 by Bappenas.</p> <p>I received the award from President Joko Widodo with superior values in Central Java in terms of planning, innovation, poverty reduction and program integration.</p> <p>The bureaucratic reform that we have formed is the pioneer and key to this award.</p> <p>This is just the beginning, let's carry on what we have built together. #ganjarpranowo</p>
5	Provincial Public Service Innovations	 <p>Figure 13.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Innovation Guarantees Doctors Come on Time through TELE APIK (TEyeng ndeLeng Queue Registration and Polyclinic) won the Top 45 Public Service Innovation Award in the Provincial Category, Congratulations to friends ASN @provjateng, especially @rsudmargono 🙏</p>
6	The Top 45 Public Innovation Award presented by the Vice President	 <p>Figure 14.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>Yesterday, the application of the innovation results of the Dr. Margono Hospital, received the Top 45 Public Innovation award which was handed over by the Vice President @jusufkalla</p>
7	Received a very good predicate and appreciated by Kemenpan RB with 3 functions; governance, service to the community and the business world.	 <p>Figure 15.</p> <p>Upload Award Received by the Governor of Central Java</p> <p>Source:Instagram @ganjar_pranowo, 2019</p>	<p>I am happy that my friends from the Central Java Provincial Government are serious about handling our bureaucracy that migrates using electronics. Today received a very good predicate and appreciated by Kemenpan RB with 3 functions; governance, service to the community and the business world.</p> <p>With this achievement, hopefully it can be used by the community and integrate the services we provide according to procedures, easy, cheap and fast. #jatenggayeng</p>

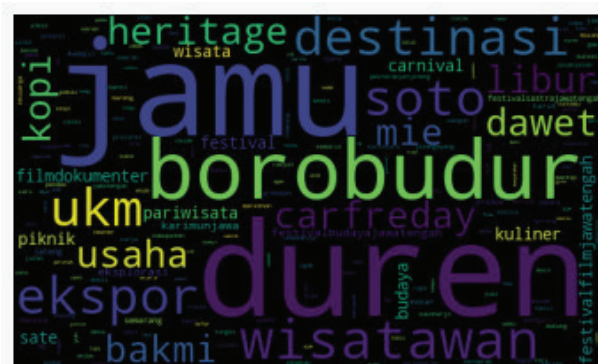
Based on the caption in Ganjar Pranowo's uploads in Table 3, it is illustrated that the implementation of the Central Java Smart City through its programs has been running well, as evidenced by receiving awards showing progress in developing the province. However, when viewed from the data in Figure 8 regarding the Number of Captions for Central Java Smart City Programs, some programs are already running. However, the communication delivered by Ganjar Pranowo is not evenly distributed because it tends to highlight one smart city, namely smart branding, that is continuously being socialized and communicated.

Figure 16. Word Could Caption Smart City *account @ganjar_pranowo*



From the entire caption uploaded by the @ganjar_pranowo account, the word could as above is formed which features tourism and culinary, which means that Pranowo's reward communicates more often with smart branding, it can be seen from the word could which is formed from smart branding below:

Figure 17. Word Could Caption Smart Branding account @ganjar_pranowo

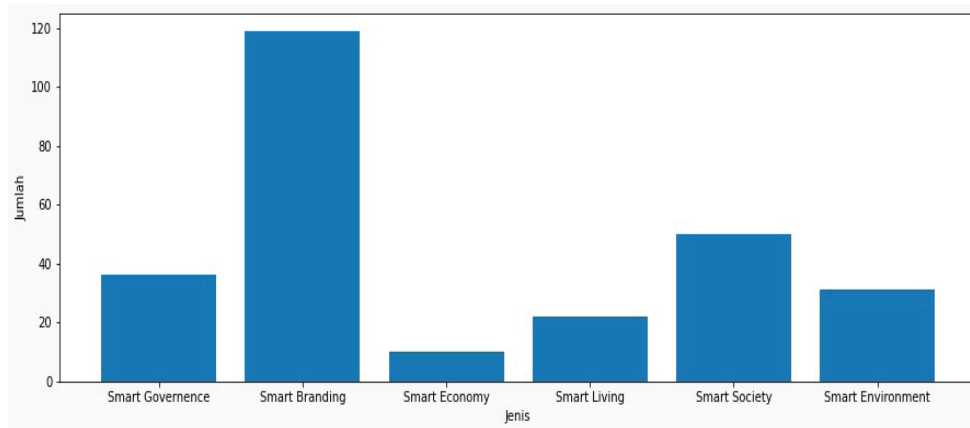


After the Central Java Smart City program was described, the researchers then carried out an accumulation to determine the categories of High Priorities, Moderate Priorities, and Low Priorities for the Central Java Smart City area. The Central Java Smart City priority areas, namely:

- a. Smart Governance
- b. Smart Branding
- c. Smart Society
- d. Smart Economy
- e. Smart Living
- f. Smart Environment

PYTHON is used to make it easier to calculate the number of captions of programs that are categorized as supporting the priority areas of Central Java Smart City through crawling data on Instagram belonging to @ganjar_pranowo for each Central Java Smart City program. As shown in Figure 18, The following is a comparison of the six areas.

Figure 18. Smart City Category Bar Charts Communicated by @ganjar_pranowo Through Instagram.



In categorizing priority areas based on High Priorities, Moderate Priorities, and Low Priorities, a calculation is determined based on Figure's accumulated captions. Table 4 shows the terms determined by determining the calculation based on the accumulated information using the three quartile calculation with the average calculation as below:

<i>Smart Governance</i>	:	$\frac{36}{268} \times$
100% = 13,4%		
<i>Smart Branding</i>	:	$\frac{119}{268} \times$
100% = 44.4%		
<i>Smart Society</i>	:	$\frac{10}{268} \times$
100% = 3.77%		
<i>Smart Economy</i>	:	$\frac{22}{268} \times$
100% = 8.2%		
<i>Smart Living</i>	:	$\frac{50}{268} \times$
100% = 18.7%		
<i>Smart Environment</i>	:	$\frac{31}{268} \times$
100% = 11.6%		

and obtained with an average result (average) 16.7%

1. Calculating the percentage value

The presentation value is calculated by calculating three quartiles. The caption score per variable is assumed to be a number jump distance. The communicated number of Smart City areas is valuable. This study obtained the following percentages:

$$Q_1 : \frac{1}{4}(n+1) = \frac{1}{4}(6+1) \\ = \frac{1}{4} \times 7 = 1,75 \sim > 2$$

$$Q_2 : \frac{1}{2}(n+1) = \frac{1}{2}(6+1) \\ = \frac{1}{2} \times 7 = 3,5 \sim > 4$$

$$Q_3 : \frac{3}{4}(n+1) = \frac{3}{4}(6+1) \\ = \frac{3}{4} \times 7 = 5,25 \sim > 5$$

2. The classification of the scores in this study is described as follows:

Table 4. Priority Area Category on The Provinions.

No	Priority Category	Caption Number Characteristics
1	<i>High Priorities</i>	> 22 Caption
2	<i>Moderate Priorities</i>	22 - 50 Caption
3	<i>Low Priorities</i>	<50 Caption

Based on this classification, the classification results can be described in the form of a continuum line as follows:

Figure 19. Quartil Line

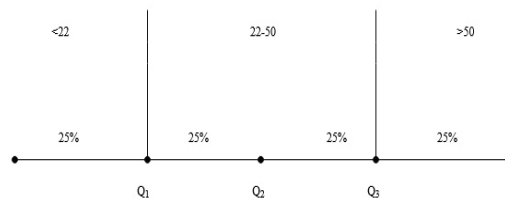


Table 5. Category Six Priority Areas in Central Java Smart City

<i>High Priorities</i>	<i>Moderate Priorities</i>	<i>Low Priorities</i>
- Smart Branding	Smart Environment Smart Society Smart Governance	Smart Economy Smart Living

Table 5 shows the following six categories of priority areas for Central Java Smart City based on the data caption @ganjar_pranowo from January 20, 2019 - February 20, 2020, the high, medium, and low priority areas are described. The following is an explanation of the three priority categories.

a. High Priorities

There is one area of highest priority, namely Smart Branding. It shows that from January 20, 2019, through February 20, 2020, in @ganjar_pranowo communication activities to the people of Central Java Province via Instagram, > 50 (greater than 50) captions were delivered @ganjar_pranowo for that area. So that the Smart Branding area is the area most communicated by @ganjar_pranowo compared to the other five areas, it can be concluded that the more these areas are communicated, the more likely they are to be prioritized.

b. Moderate Priorities

There are three medium priority areas, namely Smart Society, Smart Governance, and Smart Environment. It shows that from January 20, 2019 - February 20, 2020, in the communication activity @ganjar_pranowo to Central Java Province people via Instagram, as many as 22-50 captions were delivered @ganjar_pranowo for that area. Smart Society, Smart Governance, and Smart Environment are the second areas after High Priorities, which are mostly communicated by @ganjar_pranowo

c. Priorities

There are two lowest priority areas, namely the Smart Economy and Smart Living. It shows that from January 20, 2019 - February 20, 2020, in the communication activity @ganjar_pranowo to Central Java Province people via Instagram, as many as <22 (less than 22) captions were delivered @ganjar_pranowo for that area. So that the Smart Economy and Smart Living areas are the area least communicated by @ganjar_pranowo compared to the other five areas. It can be concluded that the less the area is communicated, it indicates that the area is less prioritized.

After getting the areas most frequently communicated by Ganjar Pranowo, the caption data is processed through the PHYTON tool to get comments and responses from Instagram users. The following are examples of comments submitted or typed by Instagram users.

Table 6. Caption Overview of Ganjar Pranowo and Community Response Regarding the Smart City Program

No.	Smart City Program	Caption	Comment
1.	Smart Governance	Central Java is starting to pioneer electronic signatures, with this it is expected to be more effective and bye-bye the tedious pile of files with conventional signatures. OK or not? @BSSN_RI @BSrE_ID #JatengGayeng https://t.co/95UxGoqh2lada is a public servant (12 December 2019)	irayunita.sari: "Okey more steady"; purnama.herri: "This signature should not be mistakenly used by irresponsible persons who include your name and signature."; aryapurwati: "is it definitely safe ndoro?" ...
2.	Smart Branding	We will start by making this Esemka commercial car for the benefit of our assistance to farmer groups, fishermen and UKM players. These steps are important in an effort to make Esemka the national car. I can't wait for the newest non-commercial products, such as SUVs and other products. I want to buy quickly, and feel the car made by the nation's children. Maybe it could be the official car of the governor and regent mayor in Central Java. (6 September 2019)	ahmadsaefulaziz: "Starting from you ... if you dare to use the national car with esemka products ... then go down to the Central Java government ... who don't want to use a brush, sir, don't give the national car facility if you don't want to use it"; syifa.faaa: "CHANGAN's car haha. Esemka + Changan = Esem Kacangan"; ali.shodikin.798: "Excellent"
3.	Smart Economy	Comeon,sellyourowncropsthroughtheAgroJowoApplication!!... Launching the Agro Jowo application at the opening of #SAE2019 (04/07/2019) @SBanendro @provjateng @kominfo_jtg #JatengGayeng https://t.co/tAJJ7feaWh (5 July 2019)	romaemae: "Hopefully all regional leaders in Indonesia will get better, in fact, like Pak Ganjar #amin"; endrabagusw: "Great ... Central Java style tenan. Let's be a farmer ..."; agusya91: "Mantapppp sir. I will study this latest application sir. I will market the product of combat coffee to make it even more famous"
4.	Smart Living	Reducing the risk of flood disasters & anticipating predictions of @bmkg_semarang in the next week (05-12 / 01/20), Kadis @ ekoyunianto1055 checks the waru pump @pemkotsmg (1 May 2020)	anabele.lucky.006: "never told you to shake hands, friendly, smiling, handsome again"; ndutzcrochet: "Proud to be a resident of Central Java, the governor is on the fly..not there"; sheno769215: "The governor who sono pump is not even functioning ,, auto floods ... koyo ngono cah SD yo iso thinking ,,"

5.	Smart Society	<p>Reposted from @ humas.jateng - The online PPDB stage for SMA and SMK Negeri in Central Java has started. One of the steps is taking accounts for both SMA and SMK. .</p> <p>Regarding the zoning route for SMA, in Central Java it is 90 percent by prioritizing 20 percent for prospective students who live in the zone.</p> <p>.</p> <p>In addition, there is also a selection on the achievement pathway outside the zone as much as five percent, and the path for moving parents by five percent.</p> <p>.</p> <p>Meanwhile, PPDB SMK does not use a zoning system.</p> <p>.</p> <p>Complete information about PPDB SMA / SMK Negeri in Central Java can be accessed through the ppdb.jatengprov.go.id website. If you are confused, please contact the Provincial PPDB Online Posko 024-86041265.</p> <p>.</p> <p>Listen carefully to the information, ok ... slide ...</p> <p>.</p> <p>Governor @ganjar_pranowo Deputy Governor @tajyasinmz</p> <p>.</p> <p>#JatengGayeng #PPDBJateng2019 #PPDBOnline - #regrann (22 June 2019)</p>	<p>nisaul.husna: "Sir ganjar. Elementary school children who want to go to junior high school but are not accepted by the nearest school in our area declare that they have dropped out of school. Due to the Zoning system. Already directed to private schools do not want. Poor sir ☹️"</p> <p>ayuni9362: "Sir, I agree with zoning ... but mbok, don't say it is 90%, please gradually ... keep using the National Examination scores so that the 3 year old students are rewarded ... sorry for being active in studying the National Examination ... kepakai.. good grades but the distance from home to public schools is far away ... maybe you can't get a public school, sir..nuwun ";</p> <p>ameliapradana: "Sir, I am willing to tutor every day to get a good nem sir :(eh it turns out using zoning is useless sir :)))"</p>
6.	Smart Environment	<p>Hello #SahabatTangguh. Let's take a look at @bnpb_indonesia's explanation regarding the following Disaster Cycle (Pre-Disaster). Is this info important for you? #SiapUntukSelamat #KenaliAncamannya #SreparedStrategy https://t.co/6qhErsDihc (January 22, 2020)</p>	<p>atmojo.agustri: "Disaster mitigation education and training will be held for the rt..rw community"; erwin.id363: "Mr. @ganjar_pranowo, how do I as a waste researcher want to provide technology information for overcoming waste into clean water and energy, large amounts of waste can be broken down without residue, I DM yes sir @ganjar_pranowo"; defanoer8: "Hopefully the program runs smoothly sir'e Governor @ganjar_pranowo .. ☺️"</p>

These comments will result in positive, neutral, and negative comments. Comments taken are based on the smart city area that is Ganjar Pranowo's priority or the one most frequently communicated by the @ganjar_pranowo Instagram account. The following image below is a picture of the negative words contained in the Instagram account upload comment @ganjar_pranowo.

Figure 20. Negative Word Response Upload the @ganjar_pranowo account.

```
def myFunc(e):
    return e['value']
counter = 1
temp = newNegList[0]
newDict = {}
for word in newNegList:
    if(word == temp):
        counter+=1
    else:
        newDict.append({'key': temp, 'value':counter})
        counter = 1
        temp = word
newDict.sort(key=myFunc, reverse=True)
newDict
```

```
{'key': 'duren', 'value': 26},
{'key': 'kopi', 'value': 23},
{'key': 'mie', 'value': 20},
{'key': 'daerah', 'value': 18},
{'key': 'usaha', 'value': 17},
{'key': 'mahal', 'value': 17},
{'key': 'wisata', 'value': 16},
{'key': 'gak', 'value': 14},
{'key': 'jawa', 'value': 9},
{'key': 'ga', 'value': 8},
{'key': 'niku', 'value': 5},
{'key': 'kalo', 'value': 5},
```

Figure 20 above shows the word from Instagram users' response regarding the upload of a reward that disagrees with or supports uploading the Instagram account @ganjar_pranowo. The words that are often typed in negative comments are Duren (26 words), coffee (23 words), noodles (20 words), area (18 words), business (17 words), and expensive (17).

Figure 21. Response Words Neutral Upload the @ganjar_pranowo account

```
test = recounter(newNetList)
dict(sorted(test.items(), key=operator.itemgetter(1), reverse=True))
```

```
{'piknik': 267,
'wisata': 261,
'pariwisata': 259,
'ekspor': 166,
'swasta': 165,
'kelola': 164,
'usaha': 163,
'cfd': 149,
'gak': 131,
'ga': 119,
'makan': 112,
'ajak': 99,
'sing': 86,
'nopo': 82,
'niku': 74,
'ketemu': 74,
'ora': 71,
'gk': 70,
'kota': 69,
'biar': 69,
'ndak': 69,
'mie': 67,
'anak': 65,
'dereng': 61,
'up': 60,
```

Based on the image above is a neutral response submitted by Instagram users in response to Ganjar Pranowo's upload. In this neutral response, there are words such as picnic (267 words), tourism (261 words), tourism (259 words), export (166 words), and private (165 words).

Figure 22. Positive Word Response Upload the @ganjar_pranowo account.

```
import operator
test = recounter(newPosList)
dict(sorted(test.items(), key=operator.itemgetter(1), reverse=True))
```

```
{'kopi': 2807,
'bakso': 1984,
'kuliner': 1940,
'mie': 1922,
'wisata': 1902,
'borobudur': 1783,
'kota': 895,
'inget': 749,
'jawa': 746,
'gak': 681,
'mampir': 671,
'kalo': 629,
'wonogiri': 586,
'ken': 582,
'orang': 575,
'banget': 564,
'jalan': 535,
'ngih': 527,
'bpk': 516,
'ga': 504,
'sukses': 497,
'desain': 495,
```

The picture in 22 above is a form of positive response words conveyed by the public (Instagram users) in response to Ganjar Pranowo's upload. In this positive response, there are examples of words, namely coffee (2007 words), meatball (1984 words), culinary (1940 words), noodles (1922 words), and tourism (1902 words).

Figure 23. Number of Word Comments on the @ganjar_pranowo account upload

```
[20] persenPositif = (len(positifComments)/37000)*100
    persenNegatif = (len(negatifComments)/37000)*100
    persenNetral = (len(netralComments)/37000)*100
    totalPersen = persenPositif + persenNegatif + persenNetral
    print(f'Positif: {persenPositif}%')
    print(f'Negatif: {persenNegatif}%')
    print(f'Netral: {persenNetral}%')
```

Positif: 98.15945945945947%
 Negatif: 0.5324324324324324%
 Netral: 11.05945945945946%

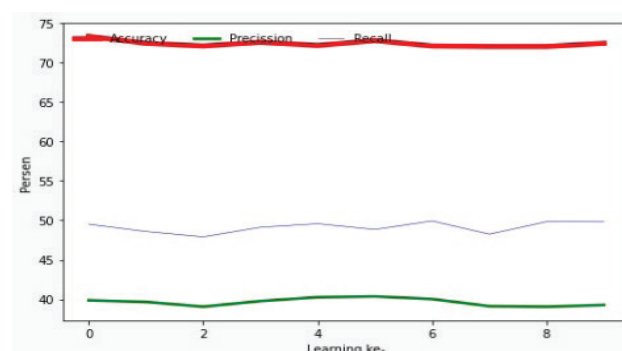
All comments submitted by Instagram users (the community) in Figure 23 above show the positive response words submitted by the public (Instagram users) in response to Ganjar Pranowo's uploads dominant than neutral or negative responses. The results above show that many people have responded positively to the uploads communicated by @ganjar_pranowo regarding the Smart Branding priority area in Central Java Province.

To assess the performance of the classification results on the effectiveness of the delivery of the Smart City program in Central Java Province, data that is only related to Smart Branding is implemented in Central Java Province. The dataset will be done using a method, namely by Naïve Bayes, which produces an accuracy calculation as below:

Figure 24. Accuracy Indicator

Accuracy	Precision	Recall
73.3244	39.8523	49.5162
72.4531	39.6496	48.5852
72.118	39.054	47.9058
72.5871	39.7582	49.1254
72.185	40.2495	49.5755
72.7882	40.3555	48.8445
72.118	40.0154	49.93
72.0509	39.1162	48.2415
72.0509	39.0462	49.8328
72.4531	39.266	49.8121

Figure 25. Accuracy Indicator Chart



It can be seen in Figure 25 above that the accuracy results obtained from Python tools using the Navie Bayes method have an average accuracy of 72%.

Study on the Effectiveness of Information Delivery through Instagram on Public Response Based on the Proportion of Smart City Programs Frequently Communicated by Ganjar Pranowo in Central Java Smart City Using the Sentiment Analysis Approach.

Word cloud is a method for displaying text data visually. The word cloud works by displaying a set of words whose frequency often appears in an exciting but still informative form. The more the word appears, the bigger the word

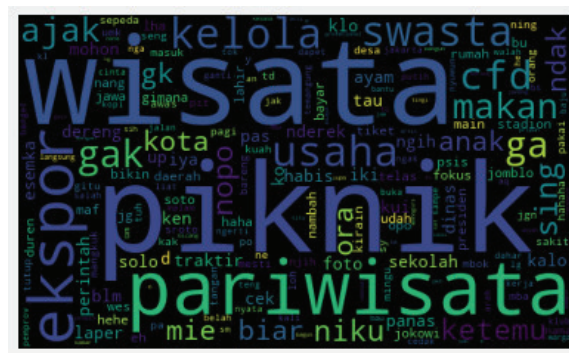
cloud size (Tantriyanti, 2018). There are 268 captions uploaded by the @ganjar_pranowo account on January 20, 2019 - February 20, 2020; the program most frequently communicated is the Smart Branding program, which generates comments or responses from Instagram users. The researcher processed several comments that were often typed by responders including in the following image:

Figure 26. Word Cloud Response Upload @ganjar_pranowo account



From the Word Cloud above, it can be seen that the overall responses submitted by Instagram users or those that are often typed by the public (Instagram users) who comment on the @ganjar_pranowo account include: coffee (2007 words), bakso (1984 words), culinary (1940 words), noodles (1922 words), and travel (1902 words).

Figure 27. Word Cloud Neutral Response Upload @ganjar_pranowo account



From the results of the Word Cloud, the neutral response above, it can be seen that the overall neutral responses submitted by Instagram users or those often typed by the public (Instagram users) who comment on the @ ganjar_pranowo account include: picnics (267 words), travel (261 words), tourism (259 words), export (166 words), and private (165 words).

And it can be seen from the response of the neutral comments that the Word Cloud, which is formed, is more conical than all the comments if it is put together into Word Cloud.

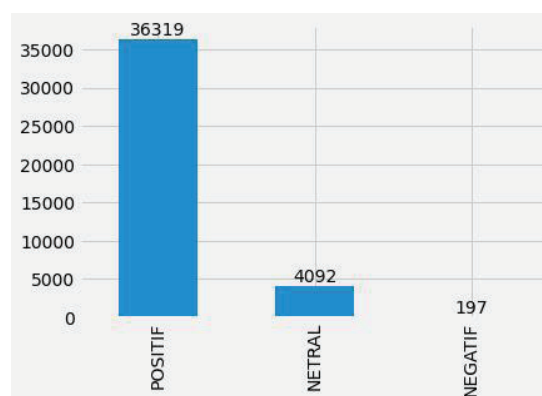


Figure 28. Instagram User Response Graph on Instagram @ganjar pranowo account upload

The results of the comments obtained in the graphic image above show that the responses received by the Instagram account @ganjar_pranowo tend to have positive responses or comments, indicated by the number of positive comments many as 36319. Then neutral comments as many as 4092, and the smallest negative comments are 197 comments from total comments 40608

5. DISCUSSION

Social media is one of the fastest and easiest tools for disseminating information in the current era of globalization. Compared to reading newspapers or printed newspapers, today's society prefers to read news via the internet and social media because there is no need to carry and buy. Just open and search for information using a simple smartphone and always carried everywhere, making it easier for people to get the desired information. Social media is a huge source of information. And it is increasingly being used by governments, companies, and marketers to understand how people think. Sentiment analysis aims to determine the attitude of a group of people who use one or more social media platforms concerning a particular topic (Tartir, 2017). Therefore, many leaders now create accounts on social media and are active in campaigning for government programs through their respective social media accounts. The activeness of regional leaders on social media makes the community respond happily by following the regional leaders' media accounts, as evidenced by the regional leaders who have very many followers or followers in their social media to millions of followers. The delivery of information using social media is considered very efficient because of its fast delivery and reaching all active social media people.

Instagram is a social media for sharing images, photos, and videos. Having many active users from all walks of life, from general users, artists, and public figures to senior officials, make Instagram the most popular photo-based social media globally. Besides, to share submissions, Instagram users can also provide likes and comments to other users' posts (Bimantara, 2019). Based on the big picture of the caption uploaded by Instagram, Ganjar Pranowo socializes, or communicates government program programs on his social media accounts, Instagram. One of the delivered programs is smart city programs. Kourtit & Nijkamp (2012) states that a smart city is a description of a strong and trustworthy government accompanied by creative and open-minded people who will increase local productivity and accelerate a city's economic growth. The delivery of a smart city that Ganjar Pranowo communicates highlights smart cities, namely, smart branding. But the response (comments from Instagram users or the public) delivered by the public is very enthusiastic and good can be seen from Figure 28, which shows a graph that positive is superior to neutral or negative. There are priority areas that support the efficiency of political, social, and cultural infrastructure development, namely Smart Governance, Smart Branding, Smart Economy, Smart Living, Smart Society, and Smart Environment, to realize Smart City during the Ganjar Pranowo era. In this case, it can be said that the application of the Smart Province is at the implementation stage, which is quite good. However, not all smart city sectors have been communicated properly and often because the smart city in Central Java has not been implemented optimally and evenly. However, only a few have been used and highlighted to boost economic growth and introduce Central Java; therefore, smart branding is more emphasized than other smart cities.

This phenomenon can prove that in terms of delivery of information conveyed by Ganjar Pranowo has a very positive response. The Governor of Central Java Province Ganjar Pranowo can be indicated as being active in social media use because he can exercise a situational leadership style that can be seen from the use of Instagram social media as a means of communication to the community, especially millennials.

A leader like Ganjar Pranowo is very popular with the community because he has a humble and prevalent attitude who listens to all his people's aspirations, from the elderly to millennials. Ganjar Pranowo also operates all of his social media accounts such as Instagram, Twitter, and Facebook, not managed by the admin. It means that the people's responses will be read and replied to by Ganjar Pranowo himself so that the interactions that occur can be heard and replied directly by Ganjar Pranowo. Besides, the number of active Instagram users ranks third globally in social media based on social networks / social networks. It is ranked third in Indonesia as the social media most used by its users, dominated by millennials aged 18-34 years. Therefore, Ganjar Pranowo can adjust his leadership style to the current situation.

Based on the classification comments, which are divided into 3, namely positive, negative, and neutral. Many Instagram users give positive responses, as evidenced by the bar graph image in Figure 28. comments divided into three classifications, and those that are not classified are categorized as residues or words that are not needed. It is comparable to what was conveyed by Faradhillah (2016)) which states that "Comments that have been given by the public will be classified into three types of sentiment, namely positive, negative, and neutral. Positive, negative, and neutral labels are given to comments containing the sentiments of these words. For the type of comment which does not contain any sentiment or has nothing to do with it is labeled unrelated".

The basis of sentiment analysis is the polarity classification of a sentence, text, or document. Classification is carried out simply, namely by determining positive, negative, or neutral. A more complex classification can

determine emotions, where the text reflects the emotions of anger, sadness, or happiness (Syaifudin, 2017). The sentiment is done by comparing the many positive and negative words in the data. If the number of positive words is more than negative words, then the data has a positive sentiment and vice versa. Thus a list of positive and negative words is very important in research (Tantriyati and Tanone, 2018). From this statement, it can be found that the sentiment obtained from the research that the author takes produces positive sentiment, as evidenced by the comments of Instagram users showing a positive response, which can be seen in Figure 28.

Figure 24 illustrates the amount of accuracy of the method used, namely Naive Bayes, which produces an accuracy rate of 73% in the classification of positive, negative, and neutral sentiments. Syaifudin (2017) said that "Naive Bayes is a classification technique based on Bayes theory with independent assumptions among predictors. In simple terms, the Naive Bayes classifier assumes that a certain feature in a class is not related to another feature's presence. For example, if three features describe an object, then the three features independently contribute to the probability of describing the object, called "Naive." The Naive Bayes model is useful for large data sets. These accuracy results depend on the accuracy of reading and sharing informant data based on their classification. The results of positive and negative classification of comments are said to be "true" if the system manages to recognize and classify comments according to the training data class (Salma, 2018). The approaches and tests show that the semantic approach, even when dealing with little sentiment to analyze posts, can better understand the overall picture of a particular entity (Tartir, 2017). True positive (TP) and true negative (TN) values are the correct classification results. The false-positive value (FP) is the value where the result is predicted as class-1 but is class-2. At the same time, a false negative (FN) is the value where the prediction classifies as class-2 but is classified as class-1 (Hidayatullah, 2014). This distribution of values can explain the image in Figure 24, which measures the magnitude of the accuracy, precision, and recall indicators.

Word Cloud, which is formed on neutral comments, is more conical in the smart city while the Word cloud on all comments is still less conical than in Figure 26 and Figure 27. Word Cloud is a method for displaying text data visually. The word cloud works by displaying a set of words whose frequency often appears in an exciting but still informative form. The more the word appears, the bigger the word cloud size (Tantriyati and Tanone, 2018). The word that is formed in the word cloud, which has a large size, is the word that most often appears, namely the words tourism, tourism, picnic, Borobudur, and others, which show that smart branding gets an accurate response.

6. CONCLUSIONS AND SUGGESTIONS

Conclusions that can be drawn based on the results of data processing and analysis that have been carried out can provide conclusions to answer research questions in this study, namely: During the period January 20, 2019 - February 20, 2020, there were six priority areas for the Central Java Smart City program that had been communicated by the Provincial Governor Central Java Ganjar Pranowo to the public through a caption in each upload on his personal Instagram social media. Central Java Priority Area The Smart City that Ganjar Pranowo communicates most often is Smart Branding, with a percentage of 44.4% or 119 captions from a total of 268 uploads that discuss Central Java Smart City. The Smart Economy priority area has the lowest percentage, which is only 3.7%, with 222 captions out of 268 total captions. The responses given by the community tend to be positive in responding to every pranowo reward upload related to Smart Branding. The results of the comments obtained in this study show that the responses obtained by the @ganjar_pranowo Instagram account tend to have positive responses or comments, indicated by the number of positive comments as many as 36319. Then neutral comments as many as 4092, and the smallest negative comments, namely as many as 197 comments from the total. 40608 comments.

The Central Java Smart City priority area category is High Priorities, which is the Smart Branding area. Moderate Priorities are Smart Society, Smart Governance, and Smart Environment. Meanwhile, Low Priorities are Smart Economy and Smart Living.

Practical Suggestions

Based on the analysis and discussion and conclusions obtained, the author submitted several suggestions to the parties involved in this study. The practical suggestions that the authors suggest in this study are addressed to the Governor of Central Java Ganjar Pranowo Based on Instagram caption data on each upload for the period January 20, 2019 - February 20, 2020. Ganjar Pranowo tends to highlight one smart city, namely, smart branding. Therefore, it is recommended that Ganjar Pranowo increase the socialization of other smart city programs such as the smart economy and others so that the public's information on Instagram is evenly distributed from the six smart city categories in Central Java and the practical advice. The author shows to local governments Central Java Province to support the communication that Mr. Ganjar Pranowo did by reposting all people. Especially Central Java, which can reach every upload of Mr. Ganjar Pranowo related to the smart city, can carry out sustainable activities and information.

Academic Advice

Here are some academic suggestions that are useful for future researchers: Researcher's suggestions in this study are intended for those who will examine the sentiment of the subsequent analysis. To not use many classifications because the accuracy value that appears will be lower if the classification is getting less. The greater the accuracy value obtained will be. Suggestions to the next researchers are that this research can be a reference or other research material with research from different points of view, such as knowing smart cities from the community's organization and the business community.

REFERENCES

Amirullah. (2015). Pengantar Manajemen.

Jakarta : Mitra Wacana Media.

Bimantara, Alhamda et, al. (2019). Sentiment Analysis of Cyberbullying on Instagram User Comments. Journal Of Data Science And Its Applications.

Brett, J. (2019). Evolving Digital Leadership. Forest Lodge, New South, Australia : Apress.

Budiarti, S, M., Wilga S, R, P., Nunung, N, R. (2016). Pengaruh Media Sosial Terhadap Perilaku Remaja. Jurnal enelitian & Pengabdian Kepada Masyarakat. 3 : 47-51.

Bimantara, Alhamda et, al. (2019). Sentiment Analysis of Cyberbullying on Instagram User Comments. Journal Of Data Science And Its Applications.

Carr, Caleb. dan Hayes, R, A. (2015). Social Media: Defining, Developing, and Divining. Atlantic Journal of Communication.

Dehhaf. (2010). Sentiment Analysis, Hard But Worth It. Available at: http://customerthink.com/sentiment_analysis_hard_but_worth_it/

Emarsys. (2019). Top 5 Social Media Predictions for 2019. <https://emarsys.com/learn/blog/top-5-social-media-predictions-2019/>.

Faradhillah, Nuke, et, al. (2016). Eksperimen Sistem Klasifikasi Analisa Sentimen Twitter Pada Akun Resmi Pemerintah Kota Surabaya Berbasis Pembelajaran Mesin. Seminar Nasional Sistem Informasi Indonesia.

Hersey. (2004). Kunci Sukses Pemimpin Situasional. Jakarta: Delaprasata.

Hidayatullah, Ahmad, et, al. (2014). Analisis Sentimen Dan Klasifikasi Kategori Terhadap Tokoh Publik Pada Twitter. Seminar Nasional Informatika 2014 (semnasIF 2014) ISSN: 1979-2328 UPN "Veteran" Yogyakarta.

Husein Umar. (2013). Metode Penelitian untuk Skripsi dan Tesis. Jakarta: Rajawali

Indriantoro, Nur., dan Supomo, Bambang. (2013). Metodologi Penelitian Bisnis Untuk Akuntansi & Manajemen. Yogyakarta: BPFE.

Kourtit, Karima. dan Nijkamp, P. (2012). Smart cities in the innovation Age Introduction. The European Journal of Social Science Research.

Liu. (2011). Sentiment Naliysis and Opinion Mining : Bing Liu Departmen Of Computer Science University III inoise at Chicago.

Mohsin, Hasan. (2019). Blockchain authentication of network applications: Taxonomy, classification, capabilities, open challenges, motivations, recommendations and future directions. Publisher : North-Holland.

Salma, Abu, et, al. (2018). Analisis Sentimen Data Komentar Sosial Media Facebook Dengan K-Nearest Neighbor (Studi Kasus Pada Akun Jasa Ekspedisi Barang J&T Ekspres Indonesia). Prosiding SINTAK 2018 ISBN: 978-602-8557-20-7

Samir Tartir et, al. (2017). Semantic Sentiment Analysis in Arabic Social Media. Journal of King Saud University : Computer and Information Sciences 29 (2017) 229–233.

- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta, CV.
- Syaifudin et, al. (2017). Twitter Data Mining For Sentiment Analysis On Peoples Feedback Against Government Public Policy. International Journal of Science and Technology ISSN 2454-5880 : <https://dx.doi.org/10.20319/Mijst.2017.31.110122>
- Tantri, Vita, et, al. (2018). Pemanfaatan Sentiment Analysis Menggunakan Data Twitter untuk Melihat Tren Positif dan Negatif pada Kampanye Pemilihan Gubernur Jawa Tengah. Jurnal Humaniora Yayasan Bina Darma.
- Tjiptono, Fandi. (2011). Total Quality Management. Yogyakarta : Andi.
- Troussas, Christo. Virvou, Maria. dan Alepis, Efthymios. (2013). Comulang: Towards a collaborative e-learning system that supports student group modelling. SpringerPlus.
- Wu, Shiliang. Mickyle, J. Jacob, J. Rind, David. Streets, G. (2008). Effects of 2000–2050 changes in climate and emissions on global tropospheric ozone and the policy-relevant background surface ozone in the United States. Journal of Geophysical Research: Atmospheres.

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