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PREFACE

Proceedings of 3rd International Conference on Inter-Disciplinary, Economy, Education, Engineering, Business, Technology and Social Sciences 2021 (ICEBTS2021)

It is my pleasure to welcome you to the 3rd International Conference on Inter-Disciplinary, Economy, Education, Engineering, Business, Technology and Social Sciences 2021 (ICEBTS2021). **ICEBTS2021** aims to provide a platform for connecting academic scholars and industry practitioners world-wide to share the research findings from various disciplines and create a space for intellectual discussion, exploration and reflection of key issues that are shaping the world today. This is a great opportunity for delegates to expand knowledge, plan and implement innovative strategies, overcome barriers and move forward with the initiatives that benefit the community. There will be huge opportunities for networking, informed dialogues and collaborations.

Your participation in this conference and submission of research papers is greatly appreciated and on behalf of the Organizing Committee, I wish you all the safety and health and together we must strive to get over with the Covid-19 pandemic challenge as soon as possible. Our research works must endure despite these challenges to continue contributing to the body of knowledge from new research ideas, methods and problem resolutions.

Thank you.

Dr. Safaie Mangir
Conference Chairman



ABSTRACT

The objective of this conference is to provide a platform for scholars, intellectuals and professionals from various academic and industrial disciplines to share the research findings from various disciplines and create a space for intellectual discussion, exploration and reflection of key issues that are shaping the world today. The conference welcomes all authors from related fields of research to submit and/or present the research papers. All accepted papers will be published in the conference proceeding book with ISBN number. More importantly, the accepted papers will also be published in refereed journals indexed by Malaysia Citation Centre (MCC). Papers that have the merits for publication in high index journals will be selected for publication in SCOPUS-indexed journals.

The conference has attracted a number of participations and accepted research papers from various research disciplines for publication in proceeding book and journals. All submitted papers were reviewed by the review committee and the corresponding acceptance notifications were emailed to the authors upon acceptance approval by the review committee. Subsequently all accepted papers will be published in conference proceeding book which is targeted to complete by end of October 2021. All accepted papers correspondingly, will be published in December 2021 Issue of the refereed journals. The proceeding (with ISBN) will be provided in PDF format while the journal is online and the related online URL links will be provided via email upon successful journal publication of the papers.



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A STUDY ON ONLINE FOOD DELIVERY SERVICE BEFORE AND DURING COVID-19 PANDEMIC IN PHNOM PENH

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Abstract: *The advent of the coronavirus disease 2019 (COVID-19) outbreak has brought a significant change to urban mobility. This study examines the impact of the COVID-19 pandemic on the operational services of online food delivery (OFD) drivers in Phnom Penh. We used several approaches such as the mean comparison and semi-log regression model to analyze the data collected from the survey on 154 OFD drivers in the city during the pandemic. The results from both paired t-tests and semi-log regression analysis showed that drivers' monthly revenue was slightly declined by 11% for the group of drivers who worked under the COVID-19 situation compare to the group of drivers who worked before the COVID-19 pandemic. In addition, the drivers expressed the difficulties in their livelihood during the pandemic, and requested for possible supports from the company and government. This study provided different viewpoints on analytical methods to discover the impact of the COVID-19 pandemic on society as well as provided key insights to help private sectors plan effective management strategies for their operational services. Moreover, from the findings of this study could be beneficial for policymakers and the government to guide ways towards relevant urban transport policies in response to the ongoing pandemic and such changes in the future.*

Keywords: OFD Service, COVID-19 Pandemic, Semi-log regression, Phnom Penh.

1. Introduction

The development of new technology of smartphones with Global Positioning System (GPS), internet, and the available digital road maps has enabled business operators to provide delivery services via an online platform. Meanwhile, the booming growth of the Internet has facilitated e-commerce and online shopping for years (Tunsakul, 2020). App users are increasingly accessing online services as their disposable income grows, digital payments become more secure, and the number of providers and delivery networks expands. (Li et al., 2020).

Food delivery service has become one of delivery services that have become popular in many cities recently. According to reports, the global online food delivery services market is predicted to rise at a 3.61 percent annual pace from \$107.44 billion in 2019 to \$111.32 billion in 2020 (Research and Markets, 2020). In Cambodia, it has been seen a boom of new food delivery, grocery delivery apps, and websites enter the market since 2018 (B2B-Cambodia, 2020). The number of Cambodian internet users reaches 15.8 million in 2020. Correspondingly, e-commerce users were approximately 7.8 million by 2020 (Ecommerceasean, 2020). In Cambodia, the disruptive innovation of Online Food Delivery (OFD) services has experienced a surge and consolidation in the e-commerce business these recent years because Cambodian people are changing from offline



buying to get convenient with providing a lot of information about food or drinks online (Ren et al., 2020).

This study is organized as follows: the first and second sections provide an introduction and literature review, respectively. The third section describes the methods, including the data collection. The fourth section presents the results and discussion. And the final section is the conclusion.

2. Online Food Delivery Services in Cambodia

Online Food Delivery (OFD) refers to “the process whereby food that was ordered online is prepared and delivered to the consumer” (Li et al., 2020). Food consumers today have the option of selecting from a variety of foods from a variety of food providers listed in the e-commerce sector, anywhere and at any time. The convenience for consumers such as no minimum order value and many options of payment like net banking, digital wallets, and cash on delivery all have increased consumer convenience (Thamaraiselvan et al., 2019). In Cambodia, OFD services have been in operation since 2011 in cities like Phnom Penh (B2B-Cambodia, 2020). According to Statista, the revenue from the online OFD segment in Cambodia is projected to reach USD21 million in 2021 (Statista, March 2021). It is showing the trend of increase for online OFD services in the country over the years. However, the COVID-19 pandemic has caused unprecedented measures to be taken by many countries, such as travel restrictions and restrictions on social gatherings. In 2020, the COVID-19 outbreak was a surge in these apps being used as restrictions coming into play in Cambodia and social distancing became more standardized to minimize the impact of the outbreak. The mobility trends in Phnom Penh between February 15, 2020, to March 9, 2021, was declined for places like Retail & recreation (e.g., restaurants, cafes, shopping centers, cinemas) by 30% compared to the baseline (Phun et al., 2021). By the middle of March 2020, restaurants and bars could still operate freely, but more had decided to offer self-delivery or through OFD apps (B2B-Cambodia, 2020). During the global 2020 COVID-19 outbreak, the advantages of OFD were obvious, as it facilitated consumer access to prepared meals and enabled food providers to keep operating (Li et al., 2020). Therefore, OFD has played an active role in the city during the pandemic.

Table 1: List of Delivery Apps in Cambodia

No.	Apps	Enter Year	Modes
1	YPP Express	2011	F&D
2	Meal Temple	2013	F&D, RH
3	Instafoodkh	2015	F&D
4	Tuk Out	2016	F&D
5	The Speed Delivery	2016	F&D
6	Nham 24	2018	F&D
7	Muuve	2018	F&D
8	BLOC	2018	F&D
9	E-Gets	2018	F&D
10	Food Panda	2019	F&D
11	Hungry	2020	F&D
12	YUMNOW	2020	F&D



13	WOWNOW	2020	F&D
14	GoodToGo	2020	F&D

Note: F&D= Food and Drinks Delivery, RH= Retail Home Delivery

Source: <http://play.google.com>; B2B-Cambodia

2.1 Problem Statement

The COVID-19 pandemic has caused unprecedented measures to be taken by many countries, such as travel restrictions and restrictions on social gatherings. Most of the governments in the world have decided to temporarily stop the operation of public transport modes and flights, close shopping malls, and restaurants (except for online OFD services), and suspend classes to fight against the spread of the COVID-19 pandemic. Cambodia has inevitably been facing with the COVID-19 outbreak. In March 2020, after announced of the first case of Covid-19, private institutions and public institutions are closed, travel restrictions, social distance, few citizens traveling, avoiding citizens crowd (Ministry of Health, 2020). Many studies have been conducted to explore the effect of the COVID-19 pandemic on the transport sector, and how the government should correspond to the crisis (Sharifi & Khavarian-Garmsir, 2020; Zhang, 2020). Otherwise, there is quite limited study on the impact of the pandemic on food delivery service in a developing country such as Cambodia. This study examined the impact of COVID-19 on online food delivery services in Phnom Penh. We used several statistical approaches (e.g., t-tests and semi-log regression) to analyse the data collected from 154 food delivery drivers in Phnom Penh.

3. Method

Regression analysis is a powerful tool that enables the researcher to learn more about the relationships within the data being studied and has been used by various researchers (Smith, 1999). It is one of the most widely used statistical tools because it provides a simple method for establishing a functional relationship among variables. There are many texts that describe this technique (Hogg and Ledolter, 1992), and the theory behind its use will not be discussed in detail here. In this instance multiple linear regression will be used to determine the statistical relationship between a response and the explanatory variables.

Semi-log models also have wide application in natural resource science. These models are appropriate when the dependent variable increases at an increasing rate with the independent variable, and the dependent variable decreases at a decreasing rate with the independent variable (Guthery & Bingham, 2007). The semi-log structural pricing model has several advantages over its linear counterpart. The principal advantage is that it permits the value of a given characteristic to vary proportionately with the value of other characteristics. An advantage of the semi-log form is that the model's coefficients are easily interpreted. The percentage change in the value of the pricing for a unit change in the dependent variable (Sopranozetti, 2015). In this study, we used the semi-log model for the statistical analysis. The semi-log specification is widely used in many studies, thus allowing comparability of results and can be explained results as the percentage (Phun and Chalermpong, 2009).

The typical procedure is to express the natural logarithm of y as a simple linear function of x . This model is called semi-log model because only one variable appears in the logarithmic form:

$$\ln(y_i) = \beta_0 + \beta_1 x_{i1} + \dots + \beta_p x_{ip} + \varepsilon_i \quad (\text{Eq.1})$$

Where $i=1,2,3,\dots,n$ and assumes as following:

y_i is the response that corresponds to the levels of the explanatory variables x_1, x_2, \dots, x_p at the i^{th} observation.

$\beta_0, \beta_1, \beta_2, \dots, \beta_p$ are the coefficients in the linear relationship. For a single factor ($p=1$), β_0 is the intercept, and β_1 is the slope of the straight line defined.

$\varepsilon_1, \varepsilon_2, \dots, \varepsilon_n$ are errors that create scatter around the linear relationship at each of the $i=1$ to n observations. The regression model assumes that these errors are mutually independent, normally distributed, and with a zero mean and variance σ^2 . It is important that this constant variance assumption holds, but in reality, this is sometimes difficult to achieve.

3.1 Materials

This study was conducted in Phnom Penh, the capital city of Cambodia. A questionnaire-based survey was conducted with OFD drivers from January 16 to 20, 2021. The questionnaire was divided into four sections such as section-1 was about the OFD service, section-2 was about OFD service before and during COVID-19 pandemic, section-3 talked about deliverer behaviors, and section-4 was about personal information of the drivers.

Seven data collectors, who were trained to fully understand the questionnaire, visited several locations around the city such as markets, major intersections, schools, hotels, blocks of buildings, and general public places along the city streets. A simple random sampling technique was adopted to select the respondents who were willing to join the survey. A variety of information was collected from drivers at several different locations in the city. Due to the constraints of budget and time as well as risks of being infected by the COVID-19, we tried to maximize our sample size during the survey period; however, only 156 respondents voluntarily participated in the survey. The drivers rejected our requests because they were busy, tired, and waiting for the customer. Respondents were recruited with an incentive gift (i.e., a pen or face masks). On average, each respondent took 15-20 minutes to answer the questionnaire. After screening the information, only 154 samples were fully completed and satisfactory for further analyses.

3.2 Characteristics of Respondents

According to Table 2 there are about 98.7% of drivers were male and 1.3% were female. Majority of the interviewed drivers (83.10%) aged between 19-30. Their levels of education were 9.09%, 14.94%, 40.91%, and 34.42% for primary school, secondary school, high school, and university, respectively. The drivers could earn between \$100 to \$900 per month. Our results showed that only 17.50% of drivers had a driving license. Furthermore, about 99.35% of the drivers had no insurance. At least 20.13% of the drivers had experienced traffic accidents. The drivers experienced driving overspeed and disobedience of the traffic light with 55.84% and 51.95%, respectively.

During the pandemic, Cambodia has seen a boom in new OFD services. Companies try to promote their services and OFD drivers try to get more orders. As a result, company competitions and driver competitions could lead to unsafe driver behaviors. Companies need to survive by maintaining their orders/customers, so they do marketing strategies such as cheaper price and faster delivery time, which in turn forces drivers to work more, drive faster, and accept a cheaper delivery fee. In response to this, drivers need to survive too, so they need to comply with the company's rules. For instance, Foodpanda delivery drivers will get a high rate fee when they get a good rate score from customers. Likely, the E-GetS delivery drivers will get additional bonus and extra charge when they get good rate score and reach the required number of orders from the company. In section-3 of the questionnaires, the drivers were asked to express their behaviors related to traffic crashes and violations during their working time. Table 2 showed the majority of the interviewed drivers (53.24%) aged between 19-25. It is observably known that OFD is a representative job with a high ratio of youth workers.

Table 2: Characteristics of Respondents (N=154)

Variable	Percentage	Variable	Percentage
Male	98.70%	Insurance	
Martial status		Yes	0.65%
Single	75.30%	No	99.35%
Married	24.04%	Driving license	
Other	0.65%	Yes	17.50%
Age		No	82.50%
19-25	53.24%	Experience of traffic accidents	
26-30	29.86%	Never	79.87%
31-40	15.60%	One time	9.74%
>40	1.30%	Two time	7.79%
Education level		Three time	2.60%
Never	0.65%	Break the speed limit	
Grade 1-6	9.09%	Never	44.16%
Grade 7-9	14.94%	1-5 Times	45.46%
Grade 10-12	40.91%	6-10 Times	9.09%
Bachelor	34.42%	> 10 Times	1.30%
Income level(\$/month)		Disobey of traffic light	
100-300	22.08%	Never	48.05%
301-500	46.74%	1-5 Times	48.70%
501-700	22.73%	6-10 Times	2.60%
701-900	8.45%	Missing	0.65%

According to Table 3, the number of the orders had slightly increased during the COVID-19 compared to before the COVID-19 pandemic. Following Figure 2, the drivers also expressed that the number of orders and number of drivers were likely increase during the COVID-19 pandemic. To get more income and bonus, the delivery drivers need to get more orders and provide on-time delivery to customers in order to get satisfied rate scores from their customers. Drivers may ignore the traffic light and speeding. Correspondingly, Byun et al. (2020) stated that OFD has provided employment opportunities for many OFD workers. However, this opportunity has also impacted traffic systems by increasing congestion on the roads. Owing to the online OFD platform’s commission and management systems, the delivery people often race against the clock to meet delivery deadlines and to obtain higher commissions which can, thereby, impact road safety as riders may ignore traffic lights and fail to ride to road conditions, increasing the possibility of traffic accidents.

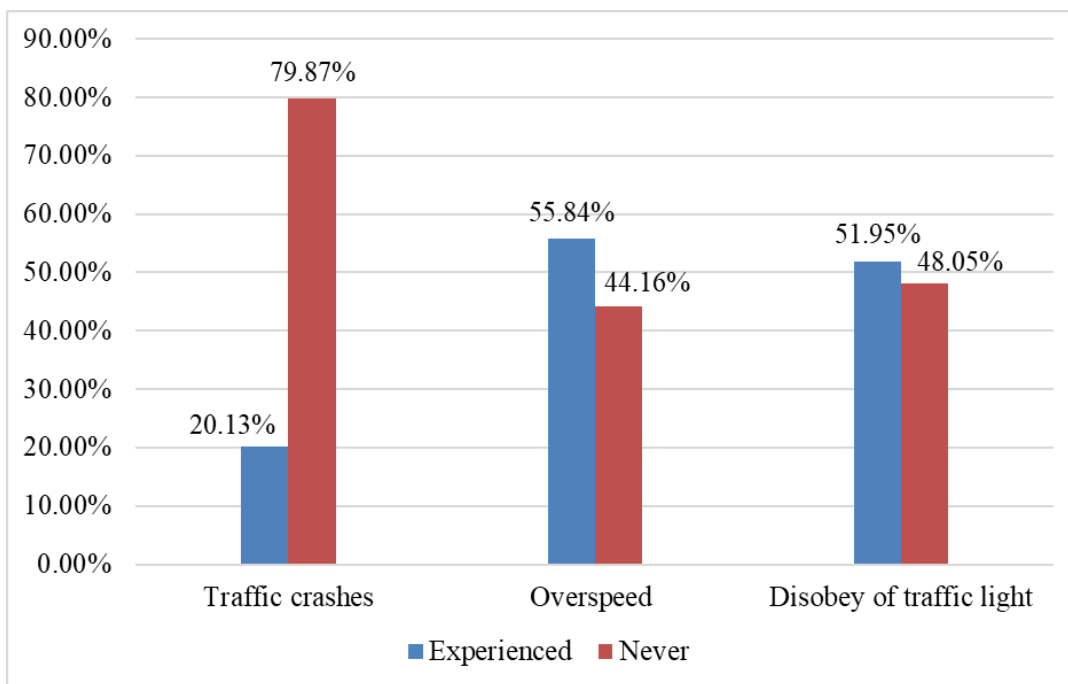


Figure 1: Experience of Traffic Crashes and Violations of Drivers

3.3 Semi-log Regression Model

In this study, we used the semi-log model for the statistical analysis. The semi-log specification is popular in many studies, thus allowing comparability of results and can be explained results as the percentage (Phun and Chalermpong, 2009). Equation .2 uses the natural log of the hedonic price, which is regressed on transformed independent variables. The equation is given below:

$$\ln(Y_i) = \beta_0 + \beta_1 X_i + \beta_2 AFT_{it} + \beta_3 DM_{mi} + \varepsilon_i \quad (\text{Eq.2})$$

Where Y_i : is dependent variable (Monthly income)

AFT_{it} : is a COVID-19 period dummy variable (1 if the time t is during COVID-19 pandemic and 0 otherwise)

DM_{mi} : is a married status dummy variable (1 if the m is married and 0 otherwise)

X_i : is vector of explanatory variables of drivers (Working hours, Number of daily order, Distance per day and Age)

ε_i : is the error term.

4. Results and Discussion

4.1 Results

4.1.1 Perceived Impact of COVID-19 Pandemic

The perceived impact of the COVID pandemic on OFD drivers were evaluated on several subjective questions, based on the 5-point scale (1: very unlikely, 2: unlikely, 3: neither, 4: likely, 5: very likely). Figure 2. reported their evaluation scores for 9 subjective questionnaire items, related to the general impact of the COVID-19 pandemic on their services, and career satisfaction. The majority of the drivers rated high scores of 1 or 2 for item 1 (69%) and item 2 (69%), indicating that the advent of the COVID-19 pandemic had been perceived to have a substantial influence on general order and OFD drivers in Phnom Penh. Some certain OFD drivers (79% gave scores of 4 and 5 for item 3), who did not accept all orders (or rejected the orders) during the pandemic.

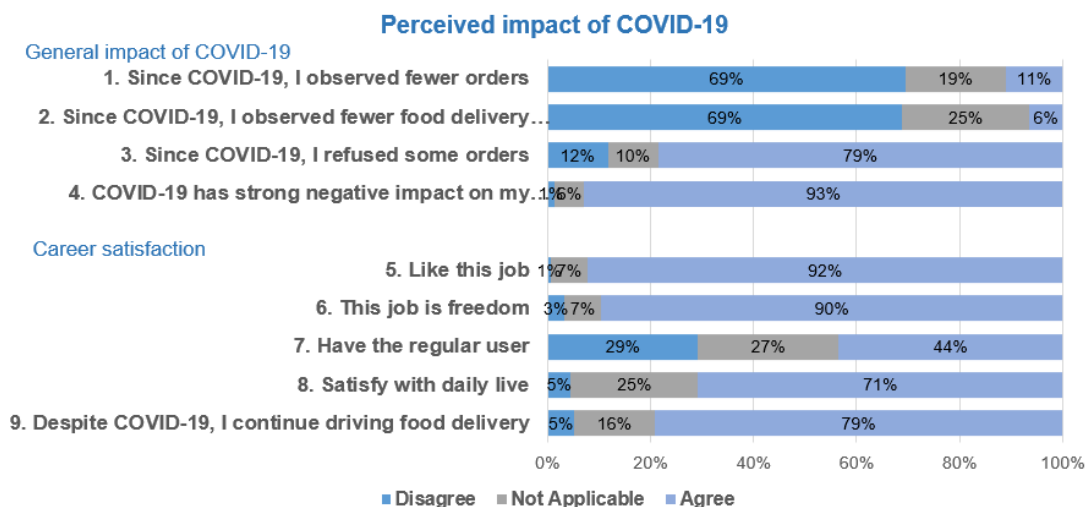


Figure 2: Subjective Responses from Interviewed OFD Drivers in Phnom Penh (N=154)

Despite so, most (93% gave a score of 4 and 5 for item 4) claimed that the advent of COVID-19 pandemic had a strong negative impact on their operational services.

Under the COVID-19 pandemic period, these informal drivers faced a high risk of infection as they continued to provide their services and exposed more to general citizens. In line with this situation, they should be named as a key worker who deserved to receive substantial care. They expected some sorts of supports (e.g., services and equipment to protect themselves against the pandemic) from the stakeholders, including the government although the majority claimed that they liked the career as OFD drivers (92%) and that enjoyed the freedom with this career (90%), 71% (scores 4 or 5 for item 8) appeared to satisfy with their living condition. Despite the presence of COVID-19 pandemic, the majority of drivers (79% rated scores of 4 or 5 for item 9) still had intention to continue providing OFD services to general citizens.

In addition, the OFD drivers also expressed their difficulties during the pandemic. We requested the respondents to freely describe three major difficulties they faced in section 2 of the questionnaire. Finally, 125 mixed responses were received and were classified into the categories as shown in Figure 3. From these responses, we could expect a negative impact of the COVID-19 pandemic on OFD services. 47.2% of the majority reported that they were fearful of COVID-19 infection. Following the fear of COVID-19 infection, 6.4% of drivers expressed that the customer requested for distancing when they arrived to drop off the food. Moreover, 16% of the drivers reported that they faced the problem with high goods price/daily expense, while 8% of them had lost their work before starting as OFD drivers. 12.8% of drivers reported the decline in their orders/income, following the decline in their orders/income about 3.2% were facing a financial issue, they must pay a bank loan.

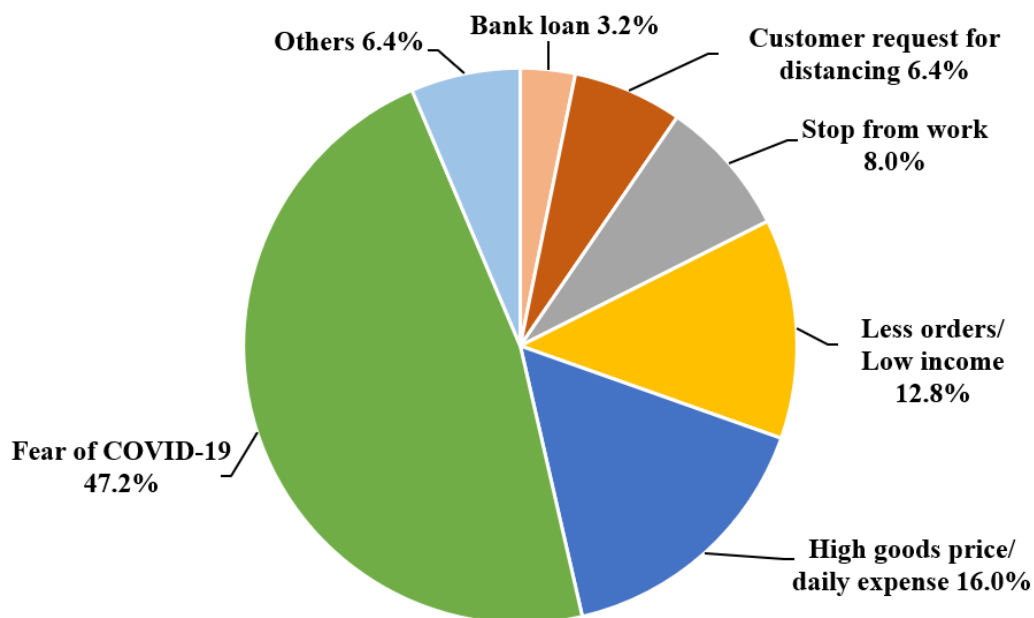


Figure 3: The Difficulties During the COVID-19 Pandemic Reported by OFD Drivers

4.1.2 Operational Service for OFD Service Before and After the Advent of COVID-19

The drivers were requested to report only the changes in their delivery services before vs. after the advent of the COVID-19 pandemic. Following this, it should be noted that only 58 samples were used for these analyses while the remaining drivers who started their careers during the COVID-19 pandemic were not considered in this analysis. Table 3 showed the results from mean comparison tests. It was found that there was difference for the variable of monthly revenue ($p > 0.05$). On the other hand, daily working hours, breaking for lunchtime, the number of daily orders and daily cruise distance were not significantly different ($p > 0.1$). Before the advent of the COVID-19 pandemic, on a daily average, the interviewed OFD drivers worked 10.08 hours with 22.06 minutes for the lunch break. They made up to 30 (average of 15.77) trips and transported up to 200 (average of 73.71) kilometers per day. The drivers could earn from \$135 to \$850, with an average of \$522.32 per month. Their monthly expenses (i.e., operational costs) ranged from \$35 to \$300, with an average of \$140.13. Their monthly income and expenses varied, depending on the number of orders and the trip characteristics (e.g., cruise distance of each trip). The drivers who made more trips each month would have longer travel distances, which in turn increasing their monthly income along with the expenses (gasoline and vehicle maintenance) associated with their operational services.

The study also investigated the changes in the operational services of OFD drivers, following the advent of the COVID-19 pandemic. The changes were computed based on the proportional difference in their operational services before and after the advent of COVID-19 pandemic—i.e., $\text{diff} = [(\text{Mean2} - \text{Mean1}) / \text{Mean1}]$, and its negative value indicates a proportional reduction in Mean2 (e.g., After the advent of COVID-19 pandemic) relative to Mean1 (e.g., before the advent of COVID-19 pandemic). Table 3 demonstrated comparative results for the changes in their operational services following the advent of the COVID-19 pandemic. The drivers' average working hours decreased from 10.08 hours to 10.16 hours per day, equivalent to an increase (or proportional difference) in their daily working hours by 0.79% [= $(10.16 - 10.08) / 10.08$]. The average time for lunch break increased by 1.77%. These findings suggested that, under the current working conditions (i.e., after the advent of the COVID-19 pandemic), the drivers appeared to work similar hours per day, while taking a bit longer time for the lunch break. In addition, there was a slight increase in the average number of orders by 1.46%. The average monthly revenue was also found to decrease from 522.32 USD to 492.93 USD, equivalent to a reduction of 5.63%. The drivers' monthly expenses also stable. In sum, the comparison results initially indicated that the advent of the COVID-19 pandemic had a slightly negative impact on OFD drivers.

Table 3: Operational of OFD Service Before and After Advent of COVID-19

Variables	Before COVID-19					After advent of COVID-19					Mean comparison	
	N	Mean	SD	Min	Max	N	Mean	SD	Min	Max	Difference	t-test
Daily working duration, in hr	58	10.08	1.52	3	13	58	10.16	1.76	5	13	0.79%	0.3
Breaking for lunch time, in m	58	22.06	12.9	10	60	58	22.45	15.7	10	60	1.77%	0.19
Number of daily order	58	15.77	5.33	8	30	58	16	5.82	4	35	1.46%	0.35
Daily cruise distance, in kilo	58	73.71	40.6	6	200	58	76.09	49	20	300	3.23%	0.76
Monthly revenue, in USD	58	522.32	170	135	850	58	492.93	177	175	900	-5.63%	1.75*
Monthly expense, in USD	58	140.13	48	35	300	58	140.62	60	30	400	0.35%	0.09

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4 illustrates the results from mean comparison test show significantly difference for variable of monthly revenue ($p < 0.05$). On the other hand, daily working hours, breaking for lunch time, number of daily orders, daily cruise distance and monthly expense were not significantly different ($p > 0.1$). In this test, we want to observe on two groups of drivers and two timeframes. Driver group 1 refers to the group of drivers who worked before the COVID-19 situation. Driver group 2 refers to the drivers who worked under the COVID-19 situation.

Table 4: Operational Service for Food Delivery Service of Drivers Work Before COVID-19 and Drivers Work During COVID-19

Variables	Driver group 1					Driver group 2					Mean comparison	
	N	Mean	SD	Min	Max	N	Mean	SD	Min	Max	Difference	t-test
Daily working duration, in hours	58	10.08	1.525	3	13	154	9.8	1.879	4.5	14	-2.78%	1.11
Breaking for lunch time, in minutes	58	22.06	12.890	10	60	154	19.78	16.335	10	120	-10.34%	1.07
Number of daily order	58	15.77	5.325	4	35	154	15.53	5.878	6	35	-1.52%	0.31
Daily cruise distance, in kilometres	58	73.71	40.575	6	200	154	74.7	42.012	20	300	1.34%	-0.15
Monthly revenue, in USD	58	522.3	170.400	135	900	154	464.8	165.700	175	900	-11.02%	2.21**
Monthly expense, in USD	58	140.1	48.044	35	300	154	130.7	59.759	30	400	-6.73%	1.19

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Before the advent of COVID-19 pandemic, in daily average, the interviewed food delivery drivers worked 10.08 hours with 22.06 min for lunch break. They made up to 35 (average of 15.77) trips and transported up to 200 (average of 73.71) kilometres per day. The drivers could earn from \$ 135 to \$ 900, with the average of \$ 522.32 per month. Their monthly expenses (i.e., operational costs) ranged from \$ 35 to \$ 300, with the average of \$ 140.10. Their monthly income and expenses vary, depending on the number of orders and the trip characteristics (e.g., cruise distance of each trip). The drivers who made more trips each month would have longer travel distance, which in turn increasing their monthly income along with the expenses (gasoline and vehicle maintenances) associated with their operational services. The drivers were also asked about their cruising behaviors. Table 4 reports comparison results for the changes in their operational services following the advent of COVID-19 pandemic. The drivers' average working hours decreased from 10.08 hours to 9.8 hours per day, equivalent to increase (or proportional difference) in their daily working hours by -2.78% [= (9.8 - 10.08) / 9.8]. The average time for lunch break decreased by -10.34%. These findings suggest that, under the current working conditions (i.e., after the advent of COVID-19 pandemic), the drivers appeared to work similar hours per day, while taking a short time for lunch break. In addition, there was a slightly decrease in the average number of orders by -1.52%, from average 15.77 to 15.53 orders per day. The daily cruise distance also increased by 1.34%, from average 73.71 kilometres to 74.7 kilometres per day. Otherwise, the average monthly

revenue was also found to decrease from \$ 522.32 to \$ 464.80, equivalent to a reduction of 11.02%. The drivers' average monthly expenses also decreased by 6.73% from \$ 140.10 to \$ 130.70. This is reasonable that when the drivers earned less income, they spent less than before.

4.1.3 Result of Semi-log Regression Analysis

Table 5 lists the summary of the descriptive statistics data, include Daily working duration in hours, Number of daily orders, Distance per day, Age and D_Married (1 if Married and 0 otherwise).

Table 5: Summary of Descriptive Statistics of Variables

Variable	Obs.	Mean	SD	Min	Max
<i>ln</i> (Income)	116	6.16	0.36	4.9	6.8
Before	58	6.19	0.37	4.9	6.8
After	58	6.13	0.36	5.16	6.8
Working hours (hours per day)	116	10.12	1.64	3	13
Before	58	10.08	1.52	3	13
After	58	10.16	1.76	5	13
Number of orders (orders per day)	116	15.88	5.56	4	35
Before	58	15.77	5.33	4	35
After	58	16	5.82	8	30
Distance per day (kilometer)	116	74.9	44.78	6	300
Before	58	73.71	40.57	6	200
After	58	76.09	48.95	20	300
Age	116	28.03	4.71	21	41
D_Married (1 if married, 0 otherwise)	116	0.72	0.45	0	1

Table 5 reported the summary statistics of variables used in the linear regression model. Various specifications were tested for the model. The semi-log was selected as the functional specification for the regression analysis because it allows the interpretation of regression coefficients as the percentage change due to marginal increase in the value of explanatory variables (Phun & CHALERMPONG, 2009).

Table 6 reports the results from Ordinary Least Square estimation, using the natural logarithm of drivers' income as the dependent variable (i.e., semi-log). The estimated models fit the data reasonably well, with the *R*-square of 52.38% and adjusted *R*-square 49.76%. Most variables included in the models are statistically significant ($p < 0.05$) with expected signs; except dummy variable *AFT* ($p > 0.1$) and *D_Married* are insignificant ($p > 0.05$). Based on the results from linear regression analysis, it is considered that the model performs better for explaining the impact on food delivery drivers' income.

Table 6: Result of Semi-log Regression Analysis for $\ln(\text{Income})$

Variable	Coefficient	Standard error
AFT	-0.0728	0.0484
Working hours	0.0993***	0.0159
Number of orders	0.0301***	0.0043
Distance per day	-0.0016**	0.0007
D_Married	0.1316*	0.052
Age	-0.0160**	0.0072
Intercept	5.1964***	0.3015
Observations	116	
<i>R</i> -square	0.5238	
<i>Adj. R</i> -square	0.4976	

Note: AFT = After the advent of COVID-19

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The coefficient of daily working hours is significantly positive ($p < 0.01$), suggesting that food delivery drivers could earn 9.93% more monthly income for every one extra hour of working per day. Similarly, they could increase their monthly income by 3.01% for every one extra order per day. These results are reasonable because drivers who worked longer hour per day, likely to get more orders, and thus they would be able to increase their monthly income.

The coefficient of Age is negatively significant ($p < 0.05$), suggesting that drivers with one year older experienced some 1.60% decline in their monthly income. One possible explanation is that the older drivers may have less enthusiastic in finding more orders during the pandemic, or the pandemic itself creates an environment, in which the older drivers faced fewer orders.

4.2 Discussion

This study examined the impact of the COVID-19 pandemic on OFD services in Phnom Penh. Paired *t*-tests and linear regression model were successfully estimated in examining the impact of COVID-19 on OFD service and also drivers' livelihood. Results from Paired *t*-tests and semi-log regression analysis were similar, after the advent of the COVID-19 pandemic, the drivers experienced decreasing in monthly income. The results of decreasing monthly income could be contributed to other factors such as the increase of OFD drivers as stated in Figure 2 (item 2) and the drop of the service fee from the company. These contributions were plausible since the increased amount of drivers can lead to fewer orders and the drop-down service fee per trip even though their orders keep not changing compare to before and after the advent of the COVID-19 pandemic.

In addition, according to Fig.1., the result of traffic crashes of food delivery drivers is pointed at 20.13% among of 154 drivers, which equals to 31 drivers who experienced with traffic crashes. This number is smaller compare to the result from a study of Byun et al. (2017) about motorcycle crashes of 1310 food delivery workers in Korea and a study of riding behaviors among delivery riders in China which confirmed that 69,1% among 824 delivery riders' involvement in traffic crashes (Zheng et al., 2019). In parallel, the drivers also experienced in driving overspeed and running at traffic red light with 55.84% and 51.95%, respectively. Compare to the result of Byun et al. (2020), 12.9% of 1317 motorcycle riders performing food delivery have involvement with traffic violations. Correspondingly, Papakostopoulos & Nathanael (2021) found that 30% of food delivery riders had running a red light in Athens, Greece. Although the number of traffic crashes is low compare to other studies and number of traffic violations is considered a bit high, the injury prevention policies of food delivery workers should be proposed. This preliminary information in Figure 1 is expected to be useful for injury prevention policies and guidelines in the OFD industries, and provide a better guideway for policymakers and government in formulating the regulation to prevent motorcycle crashes of OFD workers.

5. Conclusion

This study examined on operational services of OFD drivers before and during the COVID-19 pandemic, who operated in Phnom Penh city. The study was investigated by various approaches, using the survey data collected from 154 OFD drivers. It was found that the advent of the COVID-19 pandemic had a slight impact on the operational services of OFD drivers in Phnom Penh city. The drivers' monthly revenue was slightly declined by 11% for the group of drivers who worked under the COVID-19 situation compare to the group of drivers who worked before the COVID-19 pandemic. The impacted drivers also expressed their difficulties during the pandemic and requested possible supports from the government and company. For recommendations, the drivers should widely practice contactless delivery means. The digital payment or credit card payment for goods can be made in advance, the driver can leave the goods on the doorstep and communicate with the customers remotely via a mobile phone application and standing 1.5 meters away to wait for the customer to pick up the food. Besides this, OFD drivers should wear face masks and gloves and frequently apply hand sanitizers to minimize the spreading of the virus.

This study provided different perspectives on analytical methods to discover the impact of the COVID-19 pandemic on society and as well as provided the key insights to help private sectors for developing their effective management strategies for their business. Moreover, the results from this study could be beneficial for policymakers to guide ways towards relevant urban transport policies on how to best respond to the ongoing pandemic and the new normal situation. However, this study is the first research to examine the impact of COVID-19 on OFD service in Phnom Penh, there are still some limitations that requires further studies to complement. Future studies should broaden the questionnaire items so that they can cover several aspects of online OFD services during the COVID-19 pandemic. Finally, it is also needed that future study should investigate the delivery driver's behavior because it would be valuable insight for the urban transport policies and government in formulating national strategies to control and manage the delivery driver's behavior, avoiding traffic accident and minimize traffic congestion in the urban area.



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ABSORPTIVE CAPACITY, DYNAMIC CAPABILITIES AND INNOVATIVE PERFORMANCE OF INDUSTRY LOCATORS IN LAGUNA

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Abstract: *This study developed a model that identified factors that will enhance the innovative performance of Industry Locators in the Province of Laguna. Specifically, it investigated the innovative performance of industrial locators, their dynamic capability in terms of sensing, seizing and managing threats and reconfiguration. Further, the study determined as well as the industrial locators' absorptive capacity in terms of acquisition, assimilation, transformation and exploitation. To attain these goals, the researcher utilized descriptive-correlational research design. The locale of the study is the manufacturing companies in the Philippine Economic Zones situated in Laguna. The 267 respondents consisted of team leaders who work in any of these departments in the industrial locators: research and development, planning, manufacturing, on-site assembling, engineering, maintenance and service. Based on the findings, Industrial locators in the Province of Laguna obtained high level of innovative performance, dynamic capabilities (sensing, seizing and managing threats and reconfiguration) and absorptive capacity (absorption, assimilation, transformation and exploitation). Through Structural Equation Modelling, it was found that acquisition and transformation have both direct and indirect effect to innovative performance. On the other hand, exploitation has indirect effect to innovative performance and must be mediated by dynamic capability to amplify its effect to the latter.*

Keywords: absorptive capacity, dynamic capability, innovative performance, industrial locators, SEM.

1. Introduction

The current global market has been very competitive that a firm must sustainably develop its competitive advantage. A firm's survival depends on knowledge (Senivongse, C., Bennet, A., & Mariano, S, 2019), adaptability (Lis, A., & Sudolska, A. 2015) and innovation (Senivongse, C., Bennet, A., & Mariano, S, 2019; Pai, F-Y., & Chang, H-F. 2013). Businesses are constantly being challenged to successfully adapt to the ever-changing business environment. This challenge is coupled with excitement on the part of the business leaders because with change, comes the opportunity to innovate. It is therefore imperative for organization leadership teams to prepare themselves to adapt successfully to a rapidly changing business environment. Companies must find ways to possess and/or enhance their capability to adapt to dynamic business environment. Organizations therefore must be adaptive and innovative in nature.



With the world on the verge of a fourth industrial revolution also known as Industry 4.0, it is expected that the pace and momentum on this evolution will be turbulent, unique and exponential. The survival and growth of a business greatly depends on how a firm will balance its innovation and market exploitation and the extent on absorbing external knowledge (Mahmood, T., & Mubarik, M. S, 2020). In addition, innovation also supports a firm's sustainability and competitiveness (Ariana, L., & Asmara, I. J, 2018; Pai, F-Y., & Chang, H-F., 2013). Teece as cited by Lis, A., & Sudolska, A. (2015), highlighted that the competitive advantage of firms in today's economy stems not from the market position but from the difficulty of competitors to replicate knowledge assets their rivals possess and the manner by which this knowledge is deployed.

Innovation is the main way to maintain a company's competitive advantages. Today, as competition has become globalized, costs of production are no longer different among companies, and the secret to success is innovation. Moreover, absorption and innovation operation are dynamic capacity for businesses and a business should have an effective knowledge management framework to promote knowledge innovation in order to succeed in the age of the competition for knowledge. An organization acquires or develops an essential index to gain new information adapted from environmental development.

2. Objectives

This research determined the innovative performance, absorptive capacity and dynamic capability of Industrial Locators in the province of Laguna. Moreover, it developed a structural model that will enhance the innovative performance of Industrial Locators.

3. Materials and Methods

The descriptive-correlational design was employed in the study to assess the absorptive capacity, dynamic capability, and innovative performance of industrial locators. This was accomplished by virtually distributing questionnaires to the study's 267 respondents, who are either the head or team leaders of industrial locators in Laguna working in any of the following departments: research and development, planning, manufacturing, on-site assembling, engineering, maintenance, and service. Furthermore, the study utilized structured questionnaires based on Saunila, M. (2017); Garrido, I., Kretschmer, C., Vasconcellos, S., & Gonçalo, C. (2020); Lowik, S., Kraaijenbrink, J., & Groen, A. J. (2017), and Flatten, T. C., Engelen, A., Zahra, S. A., & Brettel, M. (2011); Arias-Pérez, J., Lozada, N. and Henao-García, E. (2020) to assess innovative performance, dynamic capabilities, and absorptive capacity.

The questionnaire was validated by the adviser and the panel of evaluators. After validation a pilot test among 30 respondents from industrial locators in Batangas was conducted to test the reliability of the questionnaire as measured by the Cronbach alpha. The resulting Cronbach alpha is presented in Table 1. The data was analyzed using weighted mean and structural equation modeling.

Table 1. Reliability test of elements

Elements	Number of Items	Cronbach's alpha
Innovative Performance	11	.909
Sensing Capability	10	.964
Seizing Capability	10	.955
Managing threats and reconfiguration	10	.955
Acquisition	10	.964
Assimilation	10	.949
Transformation	10	.968
Exploitation	10	.992

4. Results and Discussion

4.1 Innovative Performance (IP)

The innovative performance of industrial locators is high with a composite mean of 3.24. The highest level of innovative performance with the mean of 3.32 was obtained on the indicator stating that industrial locators have refined their organizational structure to facilitate teamwork. The factor stating that the industrial locators have developed new products with technical specifications and functionalities which are totally different from the current ones got the lowest mean of 3.09.

4.2 Dynamic Capability (DC)

The dynamic capability of industrial locators in terms of sensing capability is high with 3.29 mean. The industrial locators continually seeking and exploring new technologies, and they clearly investing resources for information study and analysis are the two factors that obtained the highest mean of 3.36. Industrial locators constantly invest in research and development activities to identify new technologies on the other hand, obtained the lowest mean of 3.22. Industrial locators seizing capability was high having obtained a mean of 3.30. The factor stating that the industrial locators take very good advantage of the opportunities obtained the highest mean of 3.36. On the other hand, the factor that states industrial locators constantly developing new products or services to take advantage of new technological and market opportunities got the lowest mean of 3.19. Lastly, in terms of Managing threats and opportunities, a mean of 3.26 was obtained indicating that industrial locators are high in this dynamic capability. The factor stating that the industrial locators adopt the right procedures to avoid transferring the technology and intellectual property of the company to their partners of got the highest mean 3.35. On the other hand, the factor stating that the industrial locators recombine their resources to adjust to changes and to the growth of the business got the lowest mean of 3.13

4.3 Absorptive Capacity (AC)

The absorptive capacity of industrial locators in terms of acquisition presents the factor that stated that the industrial locators easily identify the new knowledge that is most valuable to use obtained the highest mean of 3.37. While the factor that stated that the industrial locators search for relevant information concerning their industry is an every-day business in the company got the lowest mean of 3.16. In terms of assimilation, the factor that states that the industry locators' employees in different departments get along well when communicating with each other on matters of cross departmental concerns got the highest mean of 3.29 when they shared lingo for intracorporate communication obtained the lowest mean of 3.03. in terms of transformation, the factor which stated that the industry locators' own tools to analyze and interpret new knowledge got the highest mean of 3.33. While the factor that stated that industry locators' employees have the ability to structure and use the collected knowledge obtained the lowest mean of 3.14. Lastly, in terms of exploitation, the factor which stated that the industry locators strive to convert innovative ideas into patents got the highest mean of 3.31, on the other hand, the factor which stated that the industry locators launch innovative products/services resulting from research obtained the lowest mean of 3.14.

4.4 AC-DC-IP Model

Structural equation modelling (SEM) techniques was used in testing model of AC-DC-IP model. In order to ensure the measurement validity and reliability of the theoretical framework, criteria on internal consistency and indicator reliability, have been evaluated. In terms of internal consistency, all of the composite reliability values and Cronbach's α values were all >0.90 as shown in Table1. To evaluate the structural model, the collinearity was examined, the coefficient of determination (R^2), the significance of path coefficients, direct and mediation effects (Hair Jr, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. 2014). All of the R^2 scores were above 0.1, which further shows that multicollinearity is not an issue for the model.

Figure 1 below presents the expected model of the study based on the hypothesis drawn. Through the expected model, it aims to test the direct and indirect relationship between absorptive capacity and innovative performance and the mediating effect of dynamic capability between the two variables.

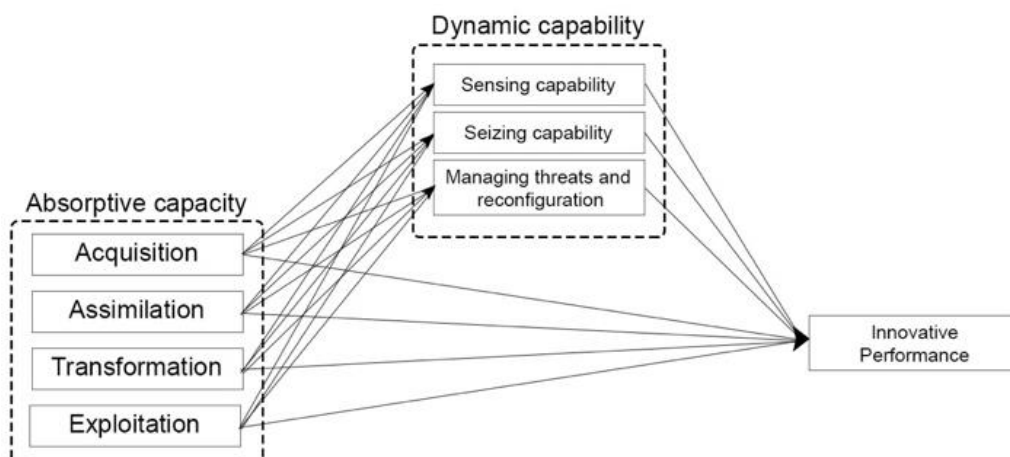


Figure 1: Expected Model

Figure 2, on the other hand, presents the adjusted model generated after two runs of test, covariance and regression weights, which were both used to come up with a good model. Compared to the expected model, the adjusted model establishes that among the three absorptive capacities, only acquisition and transformation have direct effect to innovative performance. Transformation has a negative impact on innovative performance (-.17) while acquisition has a positive impact (.19). In the case of exploitation, the adjusted model shows that exploitation has an indirect effect to innovative performance through dynamic capability. In each of the paths in the adjusted model, the estimate coefficients are shown. These estimate coefficients explain the impact of the independent to the dependent variable. All the paths shown in the adjusted model are significant.

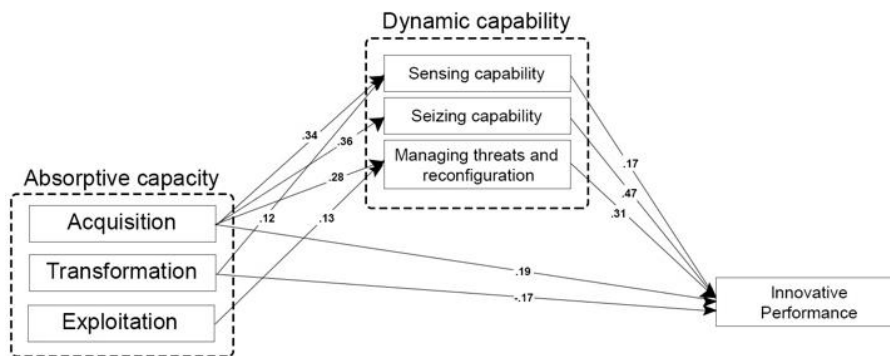


Figure 2: Adjusted Model

Table 2: Fit Measures

Fit Measure	Value	Fit Index
P	.76	Good
χ^2/df	1.13	Good
RMSEA	.02	Good
SRMR	.00	Good
GFI	.99	Good
CFI	.99	Good
NFI	.97	Good
AGFI	.96	Good
TLI	.99	Good
IFI	.99	Good

As indicated in Table 2, the adjusted model in Figure 2 shows a good fit. This is attested by the resulting values in each of fit measures. Harrington (2008) stated that “assessing the measurement model validity occurs when the theoretical measurement model is compared with the reality model to see how well the data fits”. Measurement model validity can be determined with several tools and indicators such as standardized the factor loadings, t-statistics, chi-square test and popular goodness-of-fit indices which includes Root Mean Square Error Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Goodness of Fit Index (GFI), the comparative fit index (CFI), Normed Fit Index (NFI), Adjusted Goodness of fit Index (AGFI), Tucker-Lewis Index (TLI), Bollen’s Incremental Fit Index (IFI), and etc.

It can be seen in Table 2 that the four staple measures which include chi square degree of freedom, RMSEA, SRMR, and GFI all obtained good fit measures. This implies that the suggested model from the findings of the study fits well with the theoretical factors.

Table 3: Regression for the Adjusted Model

	Variables	Estimate	S.E.	C.R.	p-value
1	Acquisition → Sensing Capabilities	.34	.061	5.555	***
2	Transformation → Sensing Capabilities	.12	.045	2.713	.007
3	Acquisition → Seizing Capabilities	.36	.067	5.316	***
4	Acquisition → Managing Threats and Reconfiguration	.28	.065	4.297	***
5	Exploitation → Managing Threats and Reconfiguration	.13	.043	3.018	.003
6	Seizing Capabilities → Innovative Performance	.47	.067	6.980	***
7	Managing Threats and Recon → Innovative Performance	.31	.069	4.536	***
8	Sensing Capabilities → Innovative Performance	.17	.072	2.304	.021
9	Acquisition → Innovative Performance	.19	.077	2.399	.016
10	Transformation → Innovative Performance	-.17	.053	-3.243	.001

*Chi-square = 10.176; degree of freedom = 9; probability level = .336
p-value of *** is less than .001*

Table 3 presents the path estimates of the adjusted model which are significant as indicated by p-value less than .05. For path 1, this suggests that acquisition positively and significantly affects sensing capability (estimate of .34; p-value = ***). This implies that when the industrial Locators identify and evaluate information it significantly affects the capability to develop and assess technology and opportunities in the market. Path 2 suggests that transformation positively and significantly affects sensing capability (estimate of .12; p-value = .007). Path 4 implies that acquisition positively and significantly affects managing threats and reconfiguration (estimate of .28; p-value = ***) the results further imply that when industrial locators continuously identify, look and evaluate knowledge outside the company, it enables growth by reassembling and reconfiguring the resources and organizational structures of companies in a constantly changing industrial environment.

Meanwhile, path 5 suggests that exploitation positively and significantly affects managing threats and reconfiguration (estimate of .13; p-value = .003). Path 6, on the other hand, suggests that seizing capabilities positively and significantly affects innovative performance (estimate of .47; p-value = ***). This suggest that when industrial locators made new products, services and processes, it significantly affects innovative performance. For path 7, it suggests that managing threats and reconfiguration positively and significantly affects innovative performance (estimate of .31; p-value = ***). While path 8 suggests that sensing capability positively and significantly affects innovative performance (estimate of .12; p-value = .007). Then path 9 suggests that acquisition positively and significantly affects innovative performance (estimate of .12; p-value = .007). Surprisingly, the 10th path indicates that transformation negatively and significantly affects innovative performance (estimate of .17; p-value = .001). This suggests that the more industrial locators convert newly acquired knowledge into something purposeful, the lower their innovative performance.

Table 4: Dynamic Capabilities as Mediator between each of the Absorptive Capacities and Innovative Performance

	DE	p-value	IE	p-value	TE	p-value	Result
Ac to IP	.19	.02	.31	.00	.50	.00	P
As to IP	-	-	-	-	-	-	n/a
E to IP	-	-	.04	.00	.04	.00	F
T to IP	-.17	.00	.02	.07	-.15	.00	P

*DE = Direct Estimates, IE= Indirect Estimates, TE = Total Estimates

** P = Partial Mediation, F = Full Mediation

Table 4, on the other hand, presents the regression of the adjusted model in Figure 2. Acquisition significantly and positively affects innovative performance while transformation negatively and significantly affects innovative performance. The direct impact of acquisition to innovative performance is .19 and that is significant with a p-value of .02. Moreover, the indirect impact of acquisition to innovative performance through dynamic capabilities is .31 and that it is significant with a p-value of .00. Assimilation, on the other hand, presents no direct or indirect impact to innovative performance which means that the result is not applicable. This means that assimilation has no effect on innovative performance, either directly or indirectly. Exploitation obtained indirect estimates of .04 and p value of .00. This implies that exploitation has indirect effect to innovative performance and must be mediated by dynamic capability to amplify its effect. The acquisition and innovative performance are partially mediated by dynamic capability. Transformation obtained direct estimate value of -.17 and the p-value of .00. Additionally, it obtained indirect estimate value of .02 and the p-value of .07. Since both p-values are lower that the level of significance of .05, this means that both direct and indirect values are significant. The transformation and innovative performance are partially mediated by dynamic capability.



5. Recommendation

The following recommendations offered by the researcher based on the findings and conclusion to further enhance and strengthen absorptive capacity, dynamic capability and innovative performance of Industry Locators in the Province of Laguna

It is recommended to further improve knowledge acquisition of the firms by constantly identifying, looking and evaluating knowledge from outside the company as well as the exploration of relevant information connected to business and industry. It is also recommended to strengthen intracorporate communication, as collaboration with organizations with resources that firm can leverage can help with creating novelty products or services. Additionally, it is recommended to organize seminars and trainings that can strengthen the ability of the employees to structure and use the collected knowledge.

Transformation must be carried out effectively to avoid the adverse effect to innovative performance because of related factors like change costs, learning costs, switching costs to a new organizational system, cultural conflicts, complaints of members or work inefficiency until a new system becomes accustomed. It is hereby recommended to further enhance transforming capacity of industrial locators but attention must be given particularly on the aforementioned factors while translating the existing knowledge and the newly acquired and assimilated knowledge into new process, idea or product and services. Moreover, employees must have a very high level of ability to structure and use the collected knowledge while absorbing useful and purposeful new knowledge.

It is recommended to further improve the exploitation capacity of industrial locators by trying new ways of doing things, such as searching, variation, risk-taking, experimentation, flexibility, discovery as well as providing support for the development of prototype. The industrial locators must invest in R&D to launch innovative products/services in the market resulting from well refined research.

It is recommended to improve the dynamic capability of the industrial locators by constantly investing in research and development activities to identify new technologies. This will help the firm to effectively identify changes in technological and industrial market. Moreover, it is recommended to utilize resources either raw materials or human capital in order to efficiently adjust to the changes in the environment. Knowledge obtained from the market becomes the resource that firms can use to ensure continuous innovation. Future researchers may adopt the model developed in this study in which they can anchor their investigation.



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ANALYSIS OF FACTORS AFFECTING USE BEHAVIOUR OF MOBILE BANKING SERVICE: AN EVIDENCE FROM INDONESIA

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Abstract: *Mobile banking is recently an important and growing medium for carrying out banking transactions and has high potential in a developing country like Indonesia. Many previous studies used the unified theory of acceptance and use of technology (UTAUT) in examining mobile banking adoption predictors but found contradictory results in the UTAUT relationships. This study analyses the factors affecting use behaviour of mobile banking services in Indonesia and applied meta-UTAUT as the modified version of UTAUT model. The research model used attitude as core construct and extended the model with customer related constructs such as personal innovativeness, anxiety, trust, grievance redressal, and perceived risk as an external factor. The data was collected from 293 mobile banking potential users. The structural equation modelling (SEM) technique has been carried out to determine the effect of factors on use behaviour of mobile banking services. The results show that, performance expectancy and behavioural intention as significant positive predictor of customer use behaviour towards mobile banking. Moreover, behavioural intention was significantly affected by attitude, social influence, and facilitating condition. This study provides empirical evidence to the banking industry in formulating its marketing strategy. The respondents in this study are limited from only adopters of mobile banking technology in Indonesia, and majority have an educational background who are computer or internet literate. This research also focused only on the perspective of customer but has not viewed from bank as service provider. The use of meta-UTAUT model in this study has answered the research gap in previous studies on the variable relationships and found that behavioural intention towards mobile banking was not significantly affected by perceived risk as an external factor.*

Keywords: mobile banking, use behaviour, meta-UTAUT.

1. Introduction

Banking industries have developed various electronic banking channels to conform to various customer needs, such as one of the latest channels is mobile banking which provides various financial services for customers through information and communication technologies (Hanafizadeh et al., 2014; Sitorus et al., 2019). The use of mobile banking facilitates saving time for customers and gives convenience in various customer situations (Komulainen & Saraniemi, 2019). Mobile banking provides innovative offerings that bring on convenience, effectiveness, and cost savings (Sharma et al., 2017).

Many Indonesian banks have low adoption of mobile banking based on interviews conducted with several Indonesian bank managers and it was found that many of their customers had not fully adopted the mobile banking services, i.e., they do use the services continually (Sitorus et al., 2017). Banks can only enjoy the benefits of mobile banking if their customers utilize the service, therefore the more customers use these services on a continual basis, the more benefits this brings to the banks (Sitorus et al., 2019).

Alalwan et al. (2018) and Kwateng O. et al., (2019) investigated factors of the mobile banking adoption in using the UTAUT2 model and found that all UTAUT2 factors are significant factors of the behaviour intention to use mobile banking, except social influence factor. Based on the above previous studies, this study will fill in gaps in research. The conceptual model used is Meta-UTAUT which represents a unified model with attitude as a new mediating variable and is more comprehensive and less complicated than UTAUT and includes several additional constructs such as anxiety, trust, personal innovativeness, and grievance (Patil et al., 2020). The objective of the study is to analyse the factors affecting mobile banking services adoption intention by collecting data from the existing mobile banking users in Indonesia to uncover their various drivers and inhibitors. The findings emerging from this study could be of significant interest to various stakeholders within the mobile banking ecosystem such as bankers, banking technology providers, marketers, and policymakers.

2. Literature Review

A basic review of previous research related to technology acceptance, the UTAUT model was developed by Venkatesh et al. (2003) by empirically evaluating eight competing models - namely, TRA, TAM and TAM2, theory of planned behaviour (TPB) and decomposition. theory of planned behaviour, combination of TAM and TPB (C-TAM-TPB), diffusion of innovation theory, motivation model, PC utilization model and social cognitive theory. The latent variables included in UTAUT (facilitating conditions, performance expectancy, social influence and effort expectancy) are used to make predictions on users' behavioural intention to adopt and use technology in an organization moderated by experience, gender, voluntary use and age (Venkatesh et al., 2012).

Despite its completeness and popularity, UTAUT-based theory has many inherent limitations (Tamilmani et al., 2020). Dwivedi et al., (2019) stated that previous research has acknowledged the limits of UTAUT both explicitly and implicitly during their empirical investigations. They re-examined the UTAUT model through a combination of meta-analysis and structural equation modelling (MASEM) techniques to overcome some of these limitations, further research was carried out on a model that was re-examined as a meta-UTAUT.

Mobile banking is the use of mobile devices such as cellular phones, smartphones, and tablet computers to access the banking network through a wireless application protocol that allows customers to interact and connect to the bank for financial service transactions (Laukkanen, 2017; Shaikh et al., 2015). When compared with traditional banking at branch offices, or computer-based internet banking, mobile banking offers benefits such as true freedom from time and place, and efficiency for banking transactions (Laukkanen, 2017).

Several previous studies related to digital financial transaction services such as internet banking, mobile banking, and mobile payments used UTAUT theory and its modifications to see the effect of the main variables used, such as performance expectancy, effort expectancy, social influence, facilitating conditions. The research results on average indicate a significant positive relationship between the variables used in the research model but have contradictory results on several variables in relation to behavioral intention as shown by the research gap in Table 1.

Table 1: Previous Research Gap

No	Title	Author	Research Object	Research Model	Relationships	Results
1	Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust	Alalwan (2017)	Mobile Banking	Extending UTAUT2	Social influence → behavioural intention Effort expectancy → behavioural intention Performance expectancy → behavioural intention	Not positively affect Positively affect Positively affect
2	Acceptance and use of mobile banking: an application of UTAUT2	Kwateng et al (2018)	Mobile Banking	UTAUT2	Social influence → behaviour intention Effort expectancy → behaviour intention Performance expectancy → behaviour intention Facilitating conditions → behaviour intention	Not affect Not affect Not affect Not affect
3	Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk	Alalwan et al (2018)	Internet Banking	Extending UTAUT2	Social influence → behavioural intention Effort expectancy → behavioural intention Performance expectancy → behavioural intention	Not positively affect Positively affect Positively affect
4	Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal	Patil et al (2020)	Mobile Payment	Extending Meta-UTAUT	Social influence → behavioural intention Facilitating conditions → behavioural intention	Positively & significantly affect Positively & significantly affect

In a study conducted by Patil et al., (2020), social influence was proven to have a significant positive effect on behavioral intention, this result is different from previous studies conducted by Alalwan (2017; Alalwan et al. (2018); and Kwateng O. et al. (2019). Likewise with facilitating conditions, Patil et al., (2020) obtained the results that there was a significant positive influence of these variables on behavioral intention, unlike the research conducted by Kwateng O. et al. (2019). As for effort expectancy and performance expectancy, it is proven to have an influence on behavioral intention (Alalwan, 2017 and Alalwan et al., 2018), in contrast to the research conducted by Kwateng O. et al. (2019).

2.1 Problem Statement

Based on the research background, the problem is how to find out and analyze factors that affect use behavior in mobile banking services, due to increasingly rapid technological developments which will increasingly demand high competition among mobile banking service providers in providing services as required by users.

3. Method

The research is an empirical study with a conclusive quantitative approach using descriptive research. Timeline research design will use a single cross sectional because the information is taken only once at a certain time in a population. This study intends to determine what factors influence the use behaviour of mobile banking services by using previous research as a reference conducted by Patil et al. (2020).

3.1 Materials

This study uses a population of customers who have operational bank accounts at commercial banks. The criteria that become respondents in this study are customers who have a mobile banking application on their smartphone and usually use mobile banking services frequently.

3.1.1 Samples

The data was collected from 293 mobile banking potential users. The sampling method used is the convenience sampling method from the non-probability sampling approach. The number of samples to be taken is at least 5 times of the number of available questions (Ferdinand, 2002).

3.1.2 Site

This research was conducted in cities and regions in Indonesia, with consideration of the ease of data collection from respondents and aims to describe conditions that represent the behaviour of banking customers in Indonesia. The region was divided into Jabodetabek (Greater Jakarta), Java Island (non-Jabodetabek), and outside of Java Island.

3.1.3 Procedures

The conceptual model is a modification of the UTAUT model, namely Meta-UTAUT which represents a unified model with attitude as a new mediating variable and is more comprehensive and less complicated than UTAUT (Patil et al., 2020). Research conducted by Patil et al. (2020) include several additional constructs such as anxiety, trust, personal innovativeness, and grievance. This study also refers to the research of Alalwan et al. (2018) which uses Extending UTAUT2 with the risk of internet banking adoption. Alalwan et al. (2018) assumes that perceived risk will affect behavioural intention, namely reducing customer intention to adopt internet banking, which will also be applied in this study. Based on the two previous research, this study will use the synthesis of the model shown in Figure 1 which continues to use the research model of Patil et al. (2020) as the main model, by adding the perceived risk variable to the research used by Alalwan et al. (2018).

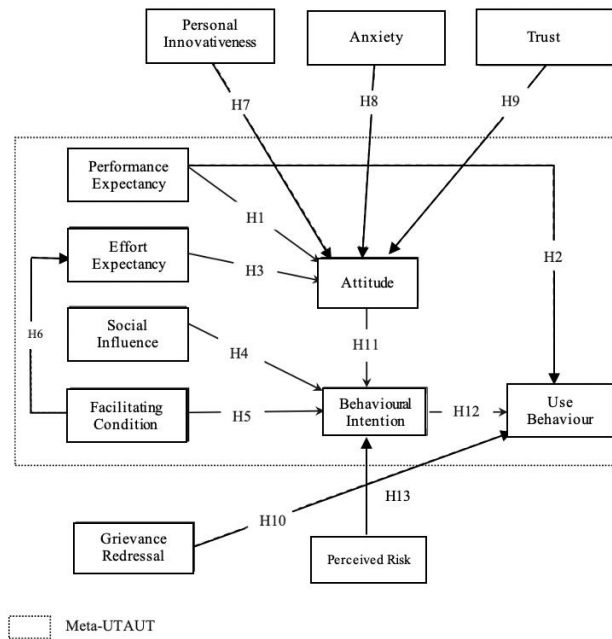


Figure 1: Research Model

Performance expectancy (PE) is defined as the level at which an information system or technology will offer benefits to consumers in carrying out certain activities (Alalwan, 2017; Baabdullah, 2019; Venkatesh et al., 2012). Patil et al. (2020) then considers that perceived usefulness is one of the strongest substitutes for performance expectancy, then based on these findings the following hypothesis is proposed:

H1. Performance expectancy will have a positive effect on customer attitudes

It still considering that perceived usefulness is one of the strongest substitutes for performance expectancy, if it is applied to mobile banking services, the formulation of the hypothesis is as follows:

H2. Performance expectancy will have a positive effect on customer use behaviour

Effort expectancy (EE) is defined as how easy it is to use technology (Venkatesh et al., 2012). Patil et al., (2020) argue that the effect of effort expectancy on consumer attitudes will be significant in the context of the level of difficulty in using it, so that the following hypothesis can be built:

H3. Effort expectancy will have a significant positive effect on customer attitudes

Slade et al. (2015) found social influence (SI) as the strongest predictor of non-adopter behavioural intention. Therefore, when applied to mobile banking, the following hypotheses can be formed:

H4. Social influence will have a significant positive effect on customer behavioural intention

Facilitating conditions (FC) refer to consumers' trust in the resources and support available for them to perform a behaviour (Dwivedi & Lal, 2007; Venkatesh et al., 2012). It can also support the following hypothesis on mobile banking:

H5. Facilitating conditions will have a significant positive effect on the customer's behavioural intention

Stefi (2015) examines developer adoption to use existing software components and finds facilitating conditions to reduce developer efforts when integrating existing components. It can support the following hypothesis:

H6. Facilitating conditions will have a significant positive effect on effort expectancy

Thakur & Srivastava (2014) found personal innovativeness (PIN) to be a significant predictor of the intention of existing mobile payment users and insignificant to the intention of non-users towards mobile payment adoption in India. A hypothesis for mobile banking services can be formulated as follows:

H7. Personal Innovativeness will have a significant positive effect on customer attitudes

Anxiety (ANX) refers to the fear of losing data or making serious mistakes while using technology (Venkatesh & Davis, 2000). Korobili et al. (2010) found a strong and negative relationship between anxiety and attitudes. Therefore, the following hypothesis is formulated:

H8. Anxiety will have a significant negative effect on customer attitudes

Trust (TR) is an important factor for a person when facing a risky, uncertain situation or when an undesirable outcome may occur (Mcknight et al., 2011). Trust shapes customer decisions to adopt innovations (Wang et al., 2013; Zhou, 2013). Based on this information, the following hypothesis was formed:

H9. Trust will have a significant positive effect on customer attitudes

Kumar et al. (2018) found that the complaint handling system or grievance redressal (GR) had a positive and significant effect on continued intention to use mobile wallets in India. Therefore, the following hypotheses can be formulated based on the discussion above:

H10. Grievance redressal will have a significant positive effect on customer use behaviour

Schierz et al. (2010) found a significant and positive relationship between attitudes (AT) and consumer intentions towards the use of mobile payment services. Based on this information, this research on mobile banking proposes the following hypothesis:

H11. Attitude in use will have a significant positive effect on customer behavioural intention

A study conducted by Alalwan (2017) assumes that the actual adoption of mobile banking can largely be predicted by the willingness of users to adopt the system. Sivathanu (2018) on mobile payments have assessed the effect of behavioural intention (BI) on use behaviour (UB). The following hypothesis was formulated:

H12. Customer behavioural intention will have a significant positive effect on customer use behaviour

Perceived risk (PR) can be defined as the possibility that customers will suffer losses in pursuing the preferred consequences of implementing internet banking (Featherman & Pavlou, 2003). Based on this information, a similar hypothesis is formed for the following mobile banking:

H13. Perceived Risk will have a negative effect on customer behavioural intention

3.2 Measurement

The questionnaire was distributed online using google forms via a cross-platform messaging application. The scale used to assess each measurable variable from the questionnaire is a Likert scale with a value of 1 – 7. It has obtained a total of 308 respondents, of which only 293 used mobile banking. From the total data of respondents who are eligible as many as 258 people.

3.3 Data Analysis

The data analysis process will be carried out in two stages, namely the measuring instrument testing stage (pre-test) and the processing stage (main test). At pre-test stage of testing the measuring instrument, the validity and reliability of the variables used were tested by analysing data with SPSS from a smaller sample size, at least 30 respondents. The pre-test result showed that the reliability and the validity of the scale used to measure each variable has been reliable and valid. At the second stage of data analysis with a larger amount of data will use Structural Equation Modelling (SEM) because the SEM model can evaluate several independent multiple regression equations.

3.3.1 Validity and Reliability

Outer Loading Value

In measuring the construct to be declared valid, the indicators that can be used in the model must have a factor loading value > 0.5. Table 2 shows that all indicators used have been declared valid.

Table 2: Outer Loading Value

Anxiety		Attitude		Behavioural Intention		Effort Expectancy	
ANX1	0,871	AT1	0,848	BI1	0,884	EE1	0,809
ANX2	0,860	AT2	0,885	BI2	0,880	EE2	0,876
ANX3	0,900	AT3	0,809	BI3	0,795	EE3	0,857
ANX4	0,894	AT4	0,800			EE4	0,901
		AT5	0,771			EE5	0,844
Facilitating Conditions		Grievance Redressal		Perceived Risk		Performance Expectancy	
FC1	0,757	GR1	0,876	PR1	0,847	PE1	0,825
FC2	0,797	GR2	0,928	PR2	0,856	PE2	0,860
FC3	0,579	GR3	0,890	PR3	0,866	PE3	0,744
FC4	0,697			PR4	0,876	PE4	0,765
				PR5	0,740		
				PR6	0,861		
				PR7	0,884		
Personal Innovativeness		Social Influence		Trust		Use Behaviour	
PIN1	0,845	SI1	0,872	TR1	0,868	UB1	0,827
PIN2	0,886	SI2	0,905	TR2	0,888	UB2	0,775
PIN3	0,917	SI3	0,890	TR3	0,919	UB3	0,777
PIN4	0,823					UB4	0,823

Average Variance Extracted (AVE) dan Composite Reliability

Reliability can be shown from each construct with the fulfilment of Cronbach's Alpha value > 0.6 , Composite Reliability value > 0.7 and Average Variance Extracted (AVE) value > 0.5 . In this study, the results of Cronbach's Alpha, Composite Reliability and Average Variance Extracted assessments for each construct can be seen in Table 3.

Table 3: Variable Reliability Value

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Anxiety	0,905	0,933	0,777
Attitude	0,881	0,913	0,678
Behavioural Intention	0,813	0,889	0,729
Effort Expectancy	0,910	0,933	0,736
Facilitating Conditions	0,685	0,803	0,507
Grievance Redressal	0,880	0,926	0,807
Perceived Risk	0,935	0,947	0,720
Performance Expectancy	0,811	0,876	0,640
Personal Innovativeness	0,891	0,925	0,754
Social Influence	0,870	0,919	0,791
Trust	0,873	0,921	0,796
Use Behaviour	0,815	0,877	0,642

4. Results and Discussion

T-Value dan P-Value Evaluation

The data in Table 4 shows that there are variables that have no effect on other variables including effort expectancy on attitude, grievance redressal on use behavior, perceived risk on behavioral intention and personal innovativeness on attitude. For variables that have a direct relationship with use behavior, the variables that have an effect are only performance expectancy and behavioral intention.

Table 4: T-value & P-Value

Relationships	Original Sample (O)	T Values	p values	Results
Anxiety → Attitude	0,099	2,128	0,034	Significant
Attitude → Behavioural Intention	0,423	5,061	0,000	Significant
Behavioural Intention → Use Behaviour	0,182	3,193	0,001	Significant
Anxiety → Attitude	0,099	2,128	0,034	Significant
Attitude → Behavioural Intention	0,423	5,061	0,000	Significant
Behavioural Intention → Use Behaviour	0,182	3,193	0,001	Significant
Effort Expectancy → Attitude	0,074	0,825	0,410	Not significant
Facilitating Conditions → Behavioural Intention	0,172	1,993	0,047	Significant
Facilitating Conditions → Effort Expectancy	0,577	12,325	0,000	Significant

Relationships	Original Sample (O)	T Values	p values	Results
Grievance Redressal → Use Behaviour	0,049	0,975	0,330	Not significant
Perceived Risk → Behavioural Intention	-0,032	0,856	0,392	Not significant
Performance Expectancy → Attitude	0,236	3,591	0,000	Significant
Performance Expectancy → Use Behaviour	0,577	10,282	0,000	Significant
Personal Innovativeness → Attitude	-0,016	0,374	0,708	Not significant
Social Influence → Behavioural Intention	0,209	3,611	0,000	Significant
Trust → Attitude	0,626	7,246	0,000	Significant

Hypothesis testing aims to obtain answers to research questions that have previously been formulated into hypotheses, so that it can be seen how the relationship and influence of each hypothesis is. Figure 2 shows the results of measuring p values in the research model, which results that out of 13 hypotheses there are 4 hypotheses that do not have a significant relationship. In the model drawing, the relationship between variables that are not significant is indicated by a dotted line.

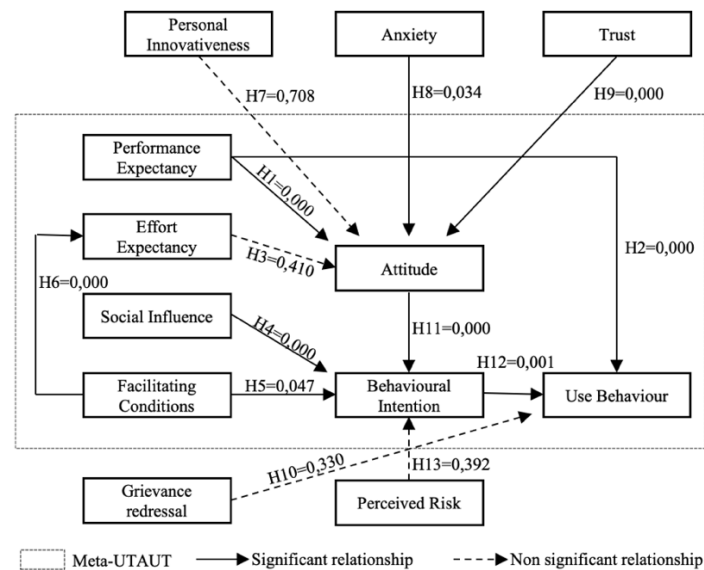


Figure 2: Hypotheses Test Results

The suitability of the results of the analysis with the formulation of the hypothesis can be seen from the data obtained and the results of the evaluation of the structural model as shown in the following table:

Table 5: Hypotheses Test Results Evaluation

	Hypotheses	Original Sample (O)	p-values	Results
H1	Performance expectancy will positively affect customer attitude	0,236	0,000	Accepted
H2	Performance expectancy will positively affect customer use behaviour	0,577	0,000	Accepted
H3	Effort expectancy will positively & significantly affect customer attitude	0,074	0,410	Rejected
H4	Social influence will positively & significantly affect customer behavioural intention	0,209	0,000	Accepted
H5	Facilitating conditions will positively & significantly affect customer behavioural intention	0,172	0,047	Accepted
H6	Facilitating conditions will positively & significantly affect effort expectancy	0,577	0,000	Accepted
H7	Personal innovativeness will positively & significantly affect customer attitude	-0,016	0,708	Rejected
H8	Anxiety will negatively & significantly affect customer attitude	0,099	0,034	Rejected
H9	Trust will positively & significantly affect customer attitude	0,626	0,000	Accepted
H10	Grievance redressal will positively & significantly affect customer use behaviour	0,049	0,330	Rejected
H11	Attitude in using will positively & significantly affect customer behavioural intention	0,423	0,000	Accepted
H12	Customer behavioural intention will positively & significantly affect customer use behaviour	0,182	0,001	Accepted
H13	Perceived risk will negatively affect customer behavioural intention	-0,032	0,392	Rejected

The overall results of hypothesis testing show that of the 13 hypotheses, there are 8 hypotheses that can be accepted. The accepted hypothesis has p values > 0.05 so that it can be declared significant with the appropriate original sample values including: H1, H2, H4, H5, H6, H9, H11, and H12. Based on the tests that have been carried out, it can be seen that the behaviour of using mobile banking services can be directly influenced by behavioural intentions and also the performance expectations of users. Behavioural intentions of users of mobile banking services will be directly influenced by several factors including the influence of the user's social environment, conditions that can facilitate (which determine user expectations of service performance), and the formation of user attitudes themselves. User attitudes will be directly influenced by the expectations they have on the performance of mobile banking services and the level of user trust. The level of user trust will indirectly affect the behaviour of using mobile banking services through the formation of attitudes and behavioural intentions.



Likewise, social influence factors will indirectly affect the behaviour of using mobile banking services through the behavioural intentions that are formed. Overall, the factors that determine how the behaviour of using mobile banking services originate from internal conditions and are related to things that are felt by users. The strongest determining factor is how users set expectations for the performance of the mobile banking services provided, this of course needs to be a concern from the service provider's side to provide performance that can accommodate what is needed by users, such as ease and convenience of transactions, as well as completeness of features provided.

5. Conclusion

The factors that can significantly influence use behaviour in mobile banking services consist of performance expectancy, social influence, facilitating conditions, attitude, behavioural intention, and trust. The factors that can directly affect use behaviour are performance expectancy and behavioural intention. Factors in the form of social influence, facilitating conditions, and attitude, can influence use behaviour through behavioural intention or intention to adopt mobile banking services. While the trust factor will affect the behavioural intention and use behaviour through the attitude factor first.

5.1 Managerial Implications

The performance expectancy is related to the internal factors of mobile banking services, so it is very necessary to be a major concern for the mobile banking service providers. When viewed from the indicators that exist in it, the largest factor loading value among each indicator is related to the ease with which users make transactions. Therefore, mobile banking service providers are expected to truly provide service performance that prioritizes ease of transaction so that it can have a significant positive influence on the behaviour of using mobile banking services.

5.2 Limitations and Suggestions

Demographically, the respondent's domicile area was still dominated in the Jabodetabek (Greater Jakarta) area (64.34%), this can be assumed due to the availability of supporting facilities for mobile banking services such as a more adequate internet network in the Greater Jakarta area. Based on that condition, the distribution of the questionnaire can be completed with initial questions related to the condition of supporting facilities such as the availability of internet networks according to the respondent's domicile area, so that it can provide an overview of the conditions that affect the uneven distribution of the number of mobile banking users in each region.

Respondents were not directed to refer to the mobile banking application that is often used before answering the variable indicator questions section, it is assumed affected research results for relationships between variables such as effort expectancy and attitude, or grievance redress and use behaviour. To overcome this condition, respondents need to be directed in advance to provide answers that refer to the most frequently used mobile banking applications, this in addition to making it easier for respondents to answer questions, it is also necessary to get the results of the questionnaire according to the actual condition of the respondents.

The perspective of this research only focuses on the perspective of the user or customer but not from the perspective of the service provider or bank, especially in terms of what problems are usually faced by the service provider. It is necessary to have a perspective from the service provider's perspective so that it can further clarify aspects that are mainly related to the successful implementation of both parties, namely customers and service providers.

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CROWDFUNDING AND FINANCIAL INCLUSION : A SYSTEMATIC LITERATURE REVIEW AND A CONCEPTUAL FRAMEWORK

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Abstract: *Crowdfunding has emerged as a new business model for individuals and corporations seeking funding over the last decade. In fact, this topic still lacks a lengthy and accurate literature review. The purpose of this paper is to provide a systematic review of the theoretical and empirical literature on Crowdfunding as it relates to financial inclusion. This will result in a review of the Crowdfunding literature, with conceptual reflections structured by the main actors (capital seekers, capital providers, and intermediaries), as well as the presentation of key issues that need to be addressed in future research, with a focus on the financial inclusion potential of Crowdfunding.*

Keywords: Crowdfunding, Financial inclusion, microfinance, social inequality, fintech.

1. Introduction

Crowdfunding was primarily used to fund artists from various fields (Agrawal, Catalini, & Goldfarb, 2013; Harzer, 2013; Meinshausen, Schiereck, & Stimeier, 2012). The emergence of various internet Crowdfunding platforms in the music industry (e.g., ArtistShare, SellaBand) has made this type of funding appealing to musicians. As a result, other artistic and creative fields (such as film and journalism) have embraced the concept. Since 2010, there has been a lot of talk about crowdfunding for businesses, and it is being studied in both practice and theory. Crowdfunding is viewed as a way of closing the funding gap in the early stages of new businesses (Hemer, Schneider, Dornbusch, & Frey, 2011, p. 30; Meinshausen et al., 2012; Röhler & Wenzlaff, 2011).

The new form of Crowdfunding has risen to prominence as a result of the convergence of modern technology and the effects of the 2008 financial crisis, opening up new avenues for innovation. Crowdfunding platforms, prompted by the ongoing digitalisation of processes and communication, as well as the emergence of internet communities, acting as facilitators, connecting entrepreneurs with potential funders. According to various studies, funding new development ideas has always been a major constraint for small businesses. Thus, according Cosh & al. (2009), it remains difficult for young entrepreneurs to receive external funding, particularly during the pre-start-up and start-up phases: First, the post-2008 financial crisis has resulted in a shortage of bank loans significantly due to relatively strict credit regulations and collateral requirements.



Furthermore, the lack of product viability and value for new businesses means that the use of venture capital or angel investments is virtually limited during the start-up phase (Berger & Udell, 1998). As a result, many companies remain unfunded (Belleflamme & al. ,2010) and rely only on funding from the “5F’s” Family, Friends, Founders, Fans and Fouls (Harrison, 2013).

Crowdfunding has fully emerged in developed countries, but it has only recently begun to take off in some emerging markets and developing economies. If given a safe and supportive environment, it has the potential to benefit the financially excluded and unserved or underserved by improving funding, creating cheaper community-based insurance products, and making digital investments accessible to people who currently have no options for realizing financial returns on their savings.

This paper aims to map the global phenomenon of Crowdfunding, explain its main characteristics and modalities in the context of the role of economic inclusion, and highlight areas that require special attention from policy makers.

1.1 Defining Crowdfunding

The definition of crowdfunding is still up for debate, seeing as a newly emerging business investment model. Literally Crowdfunding is inspired by concepts such as microfinance (Morduch, 1999). It is made up of the words “crowd” and “funding”, which refer to the crowd and financing, respectively; in other words, it is financing by the crowd. Nonetheless, the term derives from the concept and word “crowdsourcing” (Poetez & Schreir, 2012). The term was used for the first time by Jeff Howe (2006).

Schwienbacher and Larralde (2010) define Crowdfunding as “an open call, primarily through the internet, for the provision of financial resources, either as a donation or in exchange for some form of reward and / or voting rights, in order to support initiatives for specific purposes”. Even this broad definition, still yet, may exclude examples that researchers in various fields have referred to as “Crowdfunding,” such as peer-to-peer lending on the internet (Lin and Viswanathan, 2013) and fundraisers initiated by internet fans for a music group (Burkett, 2011), among many others.

In terms of entrepreneurship, Crowdfunding refers to efforts made by individuals, organizations, or enterprises to raise funds to finance their ideas, programs, or products. These fundraising events are now carried out via the internet, precisely platforms. These platforms act as an intermediary for linking an investor with a project whose realization is hampered by equity constraints. As a result, the transactions are completely dematerialized and disintermediated. Of course, crowdfunding does not replace traditional subscription or even investment solutions, but it does contribute to a new type of diversification in terms of savings and profitable investments. In general, the growth of Crowdfunding can be seen as a natural and legitimate trend in a global context where collaborative consumption and collaborative production are becoming increasingly important.

1.2 Models of Crowdfunding

Crowdfunding can take many different forms. These forms are determined by the nature of the contribution (donation, loan, or equity) as well as the nature of the consideration (proceeds, interest, or dividends), if any. The logic behind Crowdfunding aids in determining which of the forms is best suited to the funding requirement. Based on the nature of the contribution. The first category of Crowdfunding is reward-based, and it is an asset class in exchange for a reward, gifts, or products. The second one is the equity-based investment, which aims to provide investors with a percentage stake. Moreover and because of information asymmetry and a lack of publicly available data in the traditional sense, this form appears to be the riskiest. The third type is based on lending. Crowdlending is the granting of a loan to a company or an individual. It is also known as peer-to-peer credit, which refers to loan granted without the involvement of a bank. The last form is donation-based or charity giving. The donations are simple, unrequited gifts that are typically used to fund ideas and projects in the social and charitable fields. Nonprofit organizations (Macht and Weatherston, 2015; Pichler and Tezza, 2016), or individuals are frequently recipients, for example, to fund medical treatment.

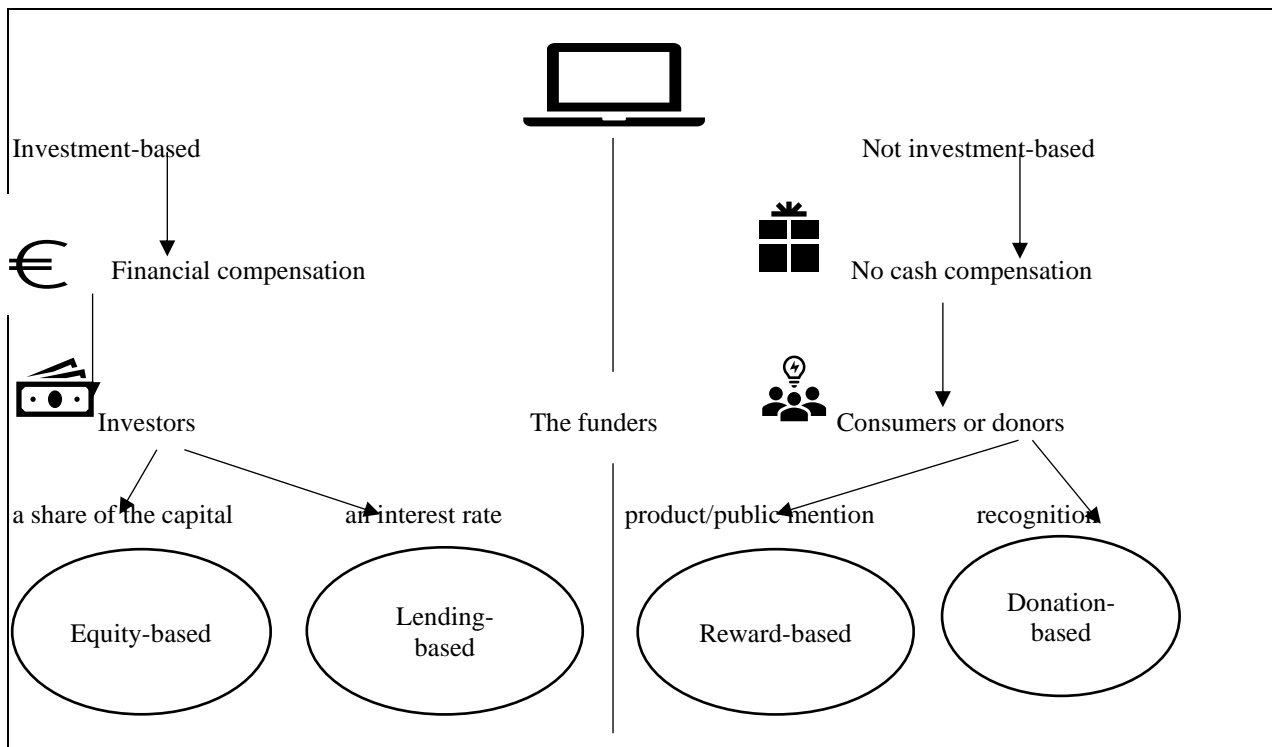


Figure 1: Models of Crowdfunding Based on the Nature of the Contribution

1.3 Relevance of Crowdfunding

Crowdfunding (CF) culture arose as a result of the financial climate change that followed the 2008 financial crisis. Strict lending policies imposed by banks following the recession, as well as the difficulties small businesses faced in obtaining credit, have compelled people to seek alternative lending methods in order to avoid bank lending. The amount of money raised by crowdfunding campaigns around the world has increased year after year.

The industry has grown from \$530 million raised through crowdfunding in 2009, to more than \$5.1 billion at the end of 2013. The market is expected to reach \$25,800 million by 2027, according to forecasts.

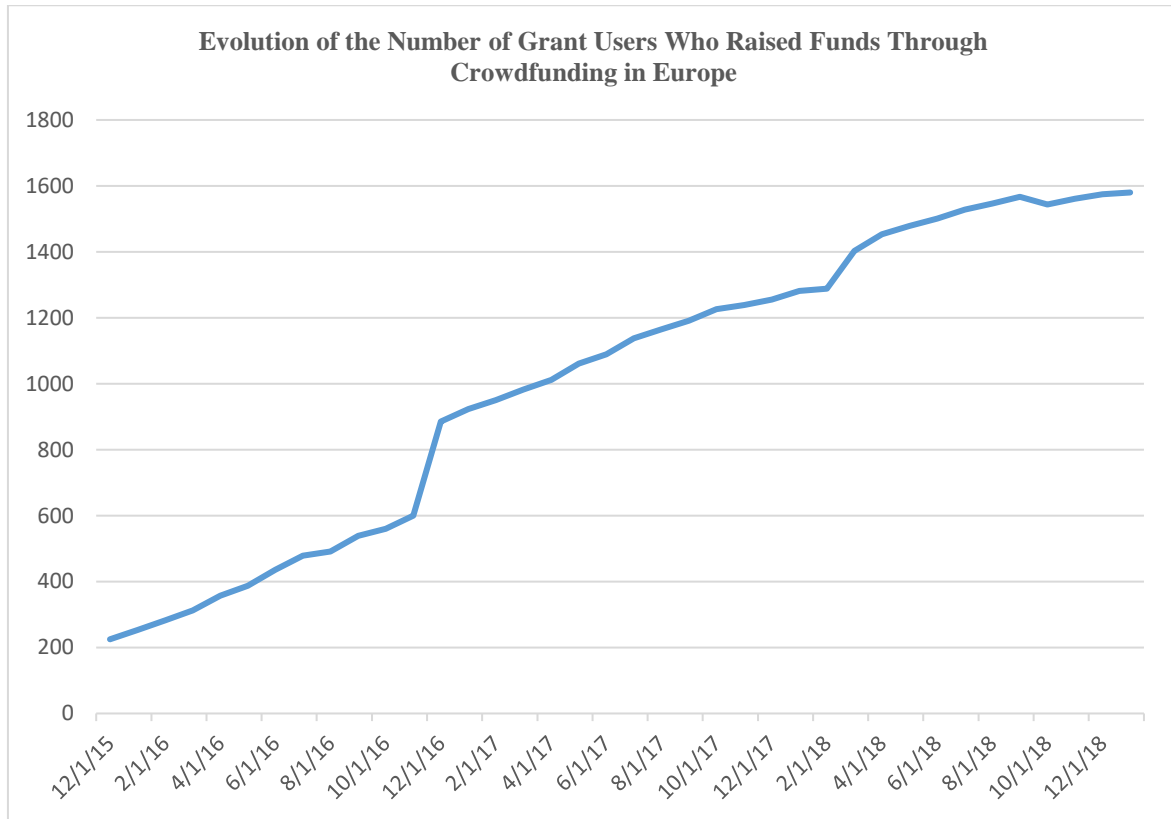


Figure 2: The Growth of Crowdfunding Users Between December 2015 and December 2018

The number of people using crowdfunding has increased significantly, according to the Bank of France. Real estate-based crowdfunding had the highest transaction value among European crowdfunding platforms in 2020. (Alternative finance market segments.) The total transaction value of equity-based CF reached 280 million U.S. dollars, while reward-based CF deals were valued at 262 million U.S. dollars.

2. Method

The research uses a Systematic Literature Review (hereafter “SLR”) approach as recommended by Tranfield et al. (2003). The review was of 60 academic papers published between 2010 and 2020. Papers were gathered from four academic databases and published in 65 journals. The review focuses on theory, models, key actors, financial inclusion, findings, and gaps.



2.1 Materials

We began by searching the EBSCO Host and Scopus databases. This search was limited to articles that included the keywords “Crowdfunding”/“financial inclusion “success” and “financial inclusion”/“crowdfunding”/“performance”, articles that were written in English and were either already published in peer-reviewed journals or were “In Press” at the time of the search. Then we conducted a complementary search using Google Scholar, followed by a snowball process of retracing in-article references, which resulted in the identification of 26 additional articles. The majority of these articles were missed because they did not clearly match the original search criteria.

2.1.1 Samples

Our search for relevant research only focused on peer-reviewed journal articles and excluded conference papers, book chapters and working papers. 49 articles were excluded from the analyses because they were not related to the combinations we searched for, were irrelevant.

2.1.3 Procedures

The selected papers were thoroughly read and joined into a database in a systematic and factual manner, specifying the following elements: authors, years, title, paper type, journal name, journal (ABS) ranking, research design, theory(s) used, hypothesis/research questions, CF business model (namely reward, donation, equity, and lending), link with financial inclusion, CF platform, location (which is a country, international, or unspecified), type of data (i.e. web-scraping, survey, qualitative interviews).

3. Data Analysis

According to the studies gathered, research interest has been increasing exponentially, particularly since mid-2013, with 52 of the articles published between 2016 and 2017. A timeline corresponding to the emergence of two prominent platforms—Prosper, which oversees peer-to-peer lending (founded in 2005), and Kickstarter, which oversees reward CF (established in 2009).

In terms of methods, the majority of the 42 articles used empirically oriented quantitative analyses, twelve used qualitative analyses, one used a moderate method, and five were conceptual in nature.

	Qualitative	Quantitative	Conceptual	mixed
Reward	7	27	1	0
Donation	1	5	0	1
Lending	3	3	0	0
Equity	1	6	4	0
Mix	0	1	0	0
Total	12	42	5	1
				60

Table 1: Publication Distribution Based on Research Approach and Crowdfunding Model

4. Results and Discussion

There are two reviews of the crowdfunding literature. Bachmann et al. (2011) discuss the main findings of 43 peer-to-peer lending scholarly articles. Feller, Gleasure, and Treacy (2013) structure the crowdfunding research quantitatively based on the various forms of crowdfunding without taking into account the specific content of these studies. There is no comprehensive review of the crowdfunding literature that focuses on businesses as capital seekers.

4.1 Theory-Related Results

Broadly speaking, CF does not yet have an accepted theory of its own, despite initial efforts in this direction (Kshetri, 2015; Strausz, 2017). Nevertheless, and even more specifically, there is no single theoretical framework dedicated to explaining or predicting CF success, and most current studies has drawn on theoretical approaches endorsed out of a wide range of disciplines.

Most papers fall into the first category namely social theories, which are: Social capital theory (Bourdieu, 1986; Coleman, 1988; Nahapiet and Ghoshal, 1998; Portes, 1998; Hazleton and Kennan, 2000; Putnam, 2000; Adler and Kwon, 2002; etc.). The social network theory (Granovetter, 1983; Marsden and Campbell, 1984; Hoang and Antoncic, 2003; Greve and Salaff, 2003; etc.), Influence in society (Cialdini and Trost, 1998; Cialdini and Goldstein, 2004), social identity theory (Tajfel, 1974; Tajfel and Turner, 1979; Sindic and Condor, 2014), social proximity/homophily (Flippen & al., 1996 ; Dovidio & al., 1997 ; McPherson & al., 2001 ; etc.), and shared social values (Flippen & al., 1996 ; Dovidio & al., 1997 ; McPherson & al., 2001 ; etc.) (Meglino & al., 1989; Haslam & al., 1996; Stangor & al., 2001; etc.)

The second set of theories is associated with economics or behavior psychology. Those most important theories are signaling and information asymmetry reduction (Akerlof, 1970; Spence, 1978; Leland and Pyle, 1977; Ross, 1977; Baum and Silverman, 2004; Michael, 1973; Connelly & al., 2011; Mavlanova & al., 2012; and so on), then Discrimination biases—Statistical discrimination (Phelps, 1972; Arrow, 1973; Bertrand & al., 2005 (Becker, 1957; Dovidio & al., 1997; Small and Loewenstein, 2003; Small & al., 2007; etc.) and the affective event theory (Weiss and Cropanzano, 1996; Pirola-Merlo & al., 2002; Dickert & al., 2011; etc.).

The other sets of theories are mostly, motivation theories, like the theory of communication (Schulz Von Thun, 2000; etc.) and institutional theories, namely Institutional theory (Scott, 1991; Scott et al., 2000; etc.)

Theories are organized into conceptual clusters depending on different types of human decision-making and behavior explanations. As a result, social theories investigate the impact of social phenomena and an individual's interactions with his or her social environment on human behavior. Economic psychology is concerned with the impact of psychological characteristics and circumstances on economic behavior. Motivation theories are concerned with the motivations for human behavior in general (not necessarily economic). Communication and persuasion theories investigate the impact of message content, structure, communication formats, and medium on human decision-making.

The far more widely accepted theories in various studies are those unfolding to economic psychology in general and signaling (Leland and Pyle, 1977; Spence, 1978), discrimination biases. There are indeed theories about social aspects in general, both social capital (Bourdieu, 1986; Coleman, 1988) and networks (Bourdieu, 1986; Coleman, 1988). (Granovetter, 1983.) Finally, communication and persuasion theories, specifically the Elaboration Likelihood Model (Petty and Cacioppo, 1986).

4.2 Structured Classification of the Literature Review Based on the Main Actors in Crowdfunding

Throughout the review, we could distinguish, literature review based on motivations and legal framework for capital seeking, investors and the platforms.

4.3 Motivations for Capital Seeking Side

The capital-seeking literature on crowdfunding is primarily concerned with the motivations for crowdfunding, the determinants of success, and the legal restrictions on equity-based crowdfunding.

According to Hemer et al. (2011), crowdfunding provides the opportunity to obtain funding in the early stages of a company's life cycle, thereby filling the gap in the early stages. Other crowdfunding themes that have been identified include the speed and flexibility of funding, the lack of formal obligations, the market testing of the product, multiplicative effects, positive signaling effects, and the use of "crowd wisdom" for various business tasks (Hemer et al., 2011; Hienerth & Riar, 2013; Macht & Weatherston, 2014; Surowiecki, 2004).

While for the legal framework for equity-based crowdfunding varies by country and is quite diverse. In most countries, including the EU, the issuance of shares through equity-based crowdfunding is either prohibited or associated with high transaction costs for the issuer due to strict legal requirements. De-Buysere, Gajda, Kleverlaan, and Marom (2012), Klöhn and Hornuf (2012), and Röhler and Wenzlaff (2012) discuss the measures needed to implement equity-based crowdfunding in the EU (2011). The regulation proposal at the EU became effective on 10 November 2020. The rules will go into effect on November 10, 2021, and will apply directly across the EU.

4.4 Motivations for Investors

For these categories, scientific research has mainly focused on the motivations of capital providers to participate in crowdfunding, as well as the factors that influence investment decisions.

Crowdfunding capital providers are motivated by more than just financial considerations. The social reputation and intrinsic motivations play an important role (Allison & al., 2014; Lin & al., 2014). The motivations for participating in crowdfunding are heterogeneous and vary depending on the type of crowdfunding used (Lin & al., 2014; Ordanini et al., 2011). The desire to interact in social networks has been identified as a significant motivator for capital providers to participate in crowdfunding transactions. It has been demonstrated that social networks reduce information asymmetries and thus increase the likelihood of funding (Everett, 2010; Freedman & Jin, 2008, 2014; Lin et al., 2009, 2013; Liu & al., 2013; Zvilichovsky et al., 2013).



4.5 Crowdfunding Platforms

The involvement of a crowdfunding platform as an intermediary in transactions offers benefits to both applicants and lenders. Platforms serve as a portal for information, communication, and execution in addition to providing a standardized process. As a result, platforms can reduce information asymmetry and, as a result, the risks borne by participants (Allen & Santomero, 1997; Berger & Gleisner, 2009; Elsner, 2013; Haas, Blohm, & Leimeister, 2014; Leland & Pyle, 1977).

4.6 Crowdfunding and Financial Inclusion

Financial inclusion is the opposite of financial exclusion. When we define financial exclusion as an individual or firm's inability to access financial products and services that meet their needs, financial inclusion is defined as a state in which individuals or firms have effective access to financial products and services that meet their needs (European Commission, 2008; World Bank, 2014).

The review of the literature on this combination was rare. Crowdfunding can contribute to financial inclusion via different ways. First, because banks are based on a revenue model, they are likely to discriminate against poor and low-income customers. Lending-based crowdfunding can be a useful platform to diminish financial exclusion. Then, attempts to overcome the problems of traditional finance, as well as recent technological advancements, have played a critical role in the emergence of new financial alternatives such as crowdfunding. Crowdfunding has the potential to close the supply-demand gap for entrepreneurial finance (Bruton et al., 2015).

Lending-based crowdfunding hinders not only capital-seeking options, but also offers more deals and industry diversification, as well as lower commissions and fees (Hollas, 2013). According to Bholat and Atz (2016), lending-based crowdfunding competition can benefit consumers by lowering the cost of unsecured loans and encouraging banks to improve their digital offerings.

Though since equity-based crowdfunding is focused on providing equity financing to businesses, it is best suited for start-ups and SMEs. Many studies have shown that equity-based crowdfunding has a role to play in entrepreneurial finance. According to the World Bank (2013), "developing economies have the potential to drive growth by upgrading the traditional capital market structures and financial regulatory regimes of the developed world" (p. 9).

According to Schwartz (2013), "securities crowdfunding is an ideal platform for bringing venture capital to rural areas". Crowdfunding removes the geographic constraint that has long hampered rural entrepreneurship by allowing rural entrepreneurs to connect and obtain financing from angel investors via the internet (pp. 292–293).

By loosening traditional regulations governing the sale of securities, early stage ventures overshadow social losses.



Marchese (2014) also stated that “the main advantage for both entrepreneurs and investors lies in the low intermediation costs of crowdfunding, which makes it a cheaper source of finance compared to loan and loan guarantors” (p. 17), emphasizing that “women, migrant, young, and low-educated entrepreneurs experience difficult access to credit and credit conditions” (p. 23).

When it comes to charity-based Crowdfunding Donation-based crowdfunding is based on charitable contributions to a public good. A donation-based crowdfunding platform acts as a middleman between charities and non-governmental organizations (NGOs). Crowdfunding could provide seed funding for a variety of programs that promote women’s financial inclusion, such as increasing financial literacy, providing life skills and business training, or improving health and safety (RoigTierno et al., 2015).

5. Conclusion and Implications for Future Research

Disparities in the literature are outlined throughout the literature review, but instead cementitious potentials for future research enhancements and improvement are articulated. Generally speaking, our paper contributes to the burgeoning field of CF research and success, as it offers a holistic review of research on crowdfunding models, theories, actors’ motivations and its contribution to financial inclusion.

The study does, nevertheless, have some restrictions that should be addressed. To actually start, our research survey treated just published in peer-reviewed academic journals. It excluded books and presentations which may be interesting when it comes to newer research.

Second, we could use different languages for our research papers, such as Chinese, Spanish, and Arabic, which could shed more light on contexts that are currently underrepresented in English publications.

5.1 The Implications of Our Work

Collecting data from national platforms is encouraged in order to better represent the majority of market actors, rather than data from the few exceptional global platforms that have been the primary research focus thus far. Such efforts would assist us in better understanding the industry’s most familiar actors, allowing us to produce observations which are even more meaningful for stakeholders at the local level.

Finally, about financial inclusion, Crowdfunding, on the other hand, is said to be a promising way to promote financial inclusion. Crowdfunding is regarded as an instant and economical method of raising funds, and its potential audience reach is limitless, thanks to the widespread adoption of digital innovations such as smartphones. Lending-based crowdfunding works to alleviate poverty by lending to low-income and low-income customers who are unable to access traditional sources of finance. Capital-seeking individuals benefit from lower interest rates as a result of communication with lenders, and they improve their bond rating as a result of their strong willing to repay loans. Equity-based crowdfunding provides an opportunity for small businesses that are underserved by traditional donors to replenish the shortfall for the common people.

However, despite the fact that the potential benefits mentioned, there has yet to be a significant impact of crowdfunding on financial inclusion. From a development standpoint, the key test of crowdfunding is how much of it is used to promote and support financial inclusion and economic growth rather than to generate funds quickly and cheaply to finance risky and unsustainable investment opportunities.

Unlike microfinance, which was created with the specific goal of reaching the poor, financially excluded, and underserved, only a small percentage of crowdfunding platforms are designed to reach this demographic. Inadequate legal and regulatory frameworks, untested credit scoring models, limited access to technology, and a lack of awareness and trust are among the challenges. These issues are not limited to crowdfunding and may affect broader areas in some jurisdictions.

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DEVELOPMENT OF AN INSTRUCTIONAL MODEL BASED ON EXPERIENTIAL LEARNING TO ENHANCE READING FOR COMMUNICATION ABILITY OF UNDERGRADUATE STUDENTS

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Abstract: *The purposes of this research were to 1) develop an instructional model based on experiential learning to enhance reading for communication of undergraduate students, 2) evaluate the students' attitude towards the use of instructional model based on experiential learning. The sample were 50 undergraduate students at Suratthani Rajabhat University by simple random sampling. The research instruments were the reading for communication test and questionnaire. The data were analyzed using t-test. The findings of this study were as follows: 1) After studying through the developed instructional model based on experiential learning, the post-test mean scores of students' English reading communication ability were higher than their pre-test mean scores at the statistically significance at .05 level. 2) The students' attitude towards the use of instructional model based on Experiential Learning was at a high level.*

Keywords: instructional model, Experiential Learning, reading for communication ability.

1. Introduction

Thai language is the national language in Thailand. People read write, listen, speak in Thai. It is the official language. The students in Thailand use English only in the classroom. They don't have more opportunities to use English outside classroom. The experiential learning and scaffolding technique were selected to design the instructional model which aims to develop reading for communication ability of the Thai undergraduate students in the university. The important of English proficiency in communication in both social and academic contexts in Thailand has been increase. English is an international language and English as a lingua franca in ASEAN. The official language of ASEAN. As a poor in English skills may cause the opportunity in higher education or the occupation. Since their emergence in the early 1970's, the principles and concepts of experiential learning outlined above have been used to create curricula and conduct educational courses and programs in K-12 education (McCarthy, 1987), undergraduate education (Mentkowski, 2000), and professional education (Reese, 1998; Boyatzis, Cowan, & Kolb, 1995). Experiential learning approaches have been implemented in virtually every discipline from accounting to zoology (Kolb & Kolb, 2006). Many of the non-traditional educational innovations that have flowered during this period have used experiential learning as their "educational platform" college programs for adult learners, service learning, prior learning assessment, and outdoor adventure education. Similarly, experiential learning principles and concepts provide theoretical grounding to the practice of education in EFL classroom. In the following section, we offer some considerations for adopting experiential learning as an educational approach and crafting experiences that promote student ownership of the learning process EFL. Becoming an



Experiential Educator To apply principles and practices of ELT is to become and experiential educator. For many this requires a reexamination of one's teaching philosophy and teaching practices. Those who think of experiential learning as techniques and games miss the deeper message that the foundational scholars of experiential learning were trying to convey. The practices of experiential learning are most effective when they are expressions of this fundamental philosophy captured in the following four propositions. Educating is a relationship. In the midst of the multitude of educational theories, learning technologies, and institutional procedures and constraints, it is easy to lose sight of the most important thing teaching is above all a profound human relationship. We can all think of teachers who have had a major impact on our lives and in most cases, this involved a special relationship where we felt recognized, valued, and empowered by the teacher. Parker Palmer (1997) described the courage necessary for a teacher to fully enter into learning relationships with students as a willingness to expose one's inner world; to honor students as complex, relational beings; and to masterfully weave these worlds together with the course content.

Educating is holistic. It is about educating the whole person. Educating the whole person means that the goal of education is not solely cognitive knowledge of the facts, but also includes development of social and emotional maturity. In ELT terms it is about facilitating integrated development in affective, perceptual, cognitive and behavioral realms. Rather than acquiring generalized knowledge stripped of any context, learning is situated to the person's life setting and life path (Lave & Wenger, 1991) John Dewey (1897) Educating is learning-oriented. The crisis in Thailand education has led to an excessive emphasis on performance and learning outcomes often resulting in rote memorization and "teaching to the test" while ignoring broader developmental activities such as music and the arts. This is in strong contrast to the experiential learning view stated at the outset of this chapter that it is the process of learning that should be the primary focus. Education should focus on how students are arriving at answers by focusing on fundamental concepts, the process of inquiry, critical thinking and choiceful creation of values. Educating is learner centered. ELT scholars put forward a constructivist view of knowledge and learning that emphasizes the importance of organizing the educational process around the experience of learners. This entails meeting them "where they are" in their understanding and building their confidence and competence to the point where they become independent, self directed learners.

1.1 Objective

1. To compare English Reading for Communication Ability before and after using the Instructional Model Based on Experiential Learning of Undergraduate Students
2. To evaluate the students' attitude towards the use of instructional model based on experiential learning.

1.2 Research Question

How to use an English Instructional Model to enhance reading for communication ability for undergraduate students?



2. Literature Review

2.1 Using Experiential Learning Model in the Design and Conduct in EFL Classroom

In effect, the role they adopt helps to create a learning space designed to facilitate the transition from one learning mode to the other. Often, this is done in a recursive fashion, repeating the cycle many times in a learning program. The cycle then becomes a spiral with each passage through the cycle deepening and extending learners' understanding of the subject. Hunt (1987) suggested that a learning spiral is shared between individuals in human interaction. People relate to one another in a pattern of alternating 'reading' and 'flexing' that mirrors the experiential learning process. When one person is reading receiving feedback (CE) and formulating perceptions (RO) the other person is flexing creating intentions based on those perceptions (AC) and acting on them (AE). As the exchange continues, both parties alternate between reading and flexing. Based on the actions they take, educators can activate different learning modes in students based on their patterns of reading and flexing (Abbey, Hunt, & Weiser, 1985). Selecting the appropriate role to enact at the appropriate time is an art. Educators must consider multiple factors in the moment-to-moment choices they make about how to respond to students.

Educators must balance the learning mode they intend to elicit with signals students send about how they expect the educator to behave (Kahn, Wolfe, Quinn, & Snock, 1964; Gaff & Gaff, 1981). Selection of a teaching role is also impacted by role-specific identity - one's selfknowledge specific to certain educational settings such that educators have a tendency to assume roles that align with their preferred teaching role and learning style (Nicoll-Senft & Seider, 2010). Finally, aspects of the learning space also influence teaching role selection, particularly physical configurations, temporal constraints, and instructional norms associated with various disciplines. As mentioned above, educators can gain flexibility in enacting the four teaching roles. Just as students can gain proficiency in integrating multiple learning modes, educators can gain flexibility in shifting fluidly among the four teaching roles. First, narrowly defined assumptions about teaching and learning tend to result in an imbalance in teaching role enactment. Challenging one's current beliefs about the purpose and process of education could lead to an expanded philosophy that naturally encapsulates more teaching roles. This also applies to students who have their own beliefs about education. The extent to which students are encouraged to understand the learning process and their own learning styles and teaching role preferences will determine the possible range of effective teaching roles. Second, empathy is important for responding appropriately to the role requirements of a learning situation (Mead, 1934). Empathy is the ability to sense others' feelings and perspectives, and take an active interest in their concerns (Boyatzis, 2009).



In an educational context, this begins with understanding the class composition age, gender and learning styles; selected major/minor or concentration; previous exposure to course content; students' previous work experiences; future career goals; and any other variable that might affect academic performance. Empathic responses are even more likely when the teacher gets to know each student as an individual. Information available through these interpersonal relationships allows the teacher to adapt their teaching role to the developmental needs of the students, as well as monitor optimal levels of challenge and support (Sanford, 1968). Third, educators can use mechanisms to facilitate smooth transitions between teaching roles. The first mechanism is to explain the experiential learning cycle and four teaching roles up front so students understand how to respond when they perceive changes in a teacher's behavior toward them. Another mechanism is to establish predictable patterns of role shifting. This can be accomplished by displaying an agenda for each class so that students can follow along and anticipate role shifts. Class routines also assist with establishing predictability. For example, opening each class with a guided reading exercise or quiz helps students assume the appropriate learning mode. A final mechanism deals with utilizing changes in physical location. Physical movement between different spaces, such as large group instruction and small group breakouts or the classroom and the field, often cues a change in learning mode and facilitates smooth teaching role transitions. Fourth, team learning is a method to achieve enactment of all four teaching roles. Team learning must go beyond simply taking turns lead It also provides role modeling for student to learn.

In summary, the four teaching roles facilitator, expert, evaluator, and coach provide a holistic framework for implementing experiential learning. Teaching role selection is influenced by desired student learning mode, student signals, one's teaching identity, and demands of the learning space. Because teaching roles are fluid rather than fixed, mechanisms for shifting among the roles can be employed. The instructional model to deal with the constraints and challenges instructors and students encounter as they adopt experiential learning as an instructional design framework. They offer an instructional design model that incorporates a broad range of learning activities that leads students through the full cycle of learning, thus giving teachers a rich array of instructional choices, as well as the benefit of offering students a more complete learning experience gained from multiple perspectives. The model is also useful in responding to the one of the key challenges of the experiential methods the understanding of the role of the student in the learning process. As the model suggests, teachers are able to design the learning activities based upon how much student involvement would be appropriate given the time constraint most instructors face. Activities at the outer rim of the learning cycle allows for a greater student involvement, while those close to the center involve limited student participation. The concept emphasizes that learning is not one universal process but a map of learning territories, a frame of reference within which many different ways of learning can flourish and interrelate. It is a holistic framework that orients the many different ways of learning to one another.



The process of experiential learning can be viewed as a process of locomotion through the learning regions that is influenced by a person's position in the learning space. One's position in the learning space defines their experience and thus defines their "reality". In our recent research we have focused on the characteristics of learning spaces that maximize learning and development and have developed principles for creating them (Kolb & Kolb, 2005). For a learner to engage fully in the learning cycle, a space must be provided to engage in the four modes of the cycle feeling, reflection, thinking, and action. It needs to be a hospitable, welcoming space that is characterized by respect for all. It needs to be safe and supportive, but also challenging. It must allow learners to be in charge of their own learning and allow time for the repetitive practice that develops expertise.

Learning Flexibility Another important aspect of learning style is learning flexibility, the extent to which an individual adapts his or her learning style to the demands of the learning situation. As we have seen above, learning style is not a fixed personality trait but more like a habit of learning shaped by experience and choices it can be an automatic, unconscious mode of adapting or it can be consciously modified and changed. The learning style types described above portray how one prefers to learn in general. Many individuals feel that their learning style type accurately describes how they learn most of the time. They are consistent in their approach to learning. Others, however, report that they tend to change their learning approach depending on what they are learning or the situation they are in. They may say, for example, that they use one style in the classroom and another at home with their friends and family. These are flexible learners. Learning flexibility is the ability to use each of the four learning modes to move freely around the learning cycle and to modify one's approach to learning based on the learning situation. Experiencing, reflecting, thinking and acting each provide valuable perspectives on the learning task in a way that deepens and enriches knowledge. This can be seen as traveling through each of the regions of the learning space in the process of learning. Learning flexibility can help us move in and out of the learning space regions, capitalizing on the strengths of each learning style. Learning flexibility broadens the learning comfort zone and allows us to operate comfortably and effectively in more regions of the learning space, promoting deep learning and development. The flexibility to move from one learning mode to another in the learning cycle is important for effective learning. Research on flexibility using the Adaptive Style Inventory (ASI; Boyatzis & Kolb, 1993) found that individuals who balance the dialectics of action reflection and concrete abstract have greater adaptive flexibility in their learning (Mainemelis, Boyatzis, & Kolb, 2002). Individuals with high adaptive flexibility are more self-directed, have richer life structures, and experience less conflict in their lives (Kolb, 1984)



3. Research Methodology

3.1 Design

This is quantitative approach which uses statistical data. This study will be conducted using one group pretest-posttest design. It is a kind of experimental method.

3.2 Participants

The selected participants of the study were 50 undergraduate students of Suratthani Rajabhat University

3.3 Sampling Technique

The study used simple random sampling technique in choosing the students.

3.4 Procedure

The data was collected by using the pretest and posttest before and after using an English Instructional Model to compare the learning achievement in reading for communication ability

3.5 Research Instrument

The information and data needed in the study was gathered through pretest and posttest in reading for communication ability and questionnaire.

3.6 Data Analysis

The data were statistically processed and analyzed by mean, standard deviation and t-test for dependent

4. Findings

The students' reading communication ability was identified using reading test the results were showed in the table.

Table 1: Students' Reading for Communication Ability

	N	\bar{X}	S.D.	t	p-value
Pre - test	50	25.26	4.902		
Post - test	50	31.06	3.408	14.027	.000**

*p<.05

The result of the study found that reading for communication ability after learning by using an English Instructional Model Based on Experiential Learning were higher than that before significantly at the .05 level.



5. Discussion and Conclusion

Understanding of the experiential learning process will empower students to feel more capable and be more effective at maximizing learning of EFL classroom. The second strategy for empowering involvement in the learning process is to create engaging learning environments using a variety of instructional methods. Curricula that emphasize active involvement, a variety of learning activities, and an element of choice tend to engender personal investment in learning. A word of clarification must be offered here. Popular practice suggests that curriculum should be designed to match the learning style of learners. While this idea is recommended by many learning style models other than ELT and is the basis for testing the validity of the learning style concept for some researchers (Pashler, et. al., 2008); it is not the recommended approach in ELT. The ELT approach is to build curriculum around the cycle of learning in such a way that all learning modes are used and all styles of learning are engaged. In this way, every program, course, or class session has something to engage and connect with learners of every style. Learners are also encouraged to develop learning style flexibility and to move freely around the learning cycle. Svinick and Dixon (1987) describe a comprehensive instructional model to deal with the constraints and challenges instructors and students encounter as they adopt experiential learning as an instructional design framework. They offer an instructional design model that incorporates range of learning activities that leads students through the full cycle of learning, thus giving teachers a rich array of instructional choices, as well as the benefit of offering students a more complete learning experience gained from multiple perspectives.

The Teaching Role Profile (Kolb & Kolb, 2011) was created to help educators understand their preferred teaching role and plan for how they can adapt to teaching around the learning cycle. The self-report instrument is based on the assumption that preferences for teaching roles emerge from a combination of beliefs about teaching and learning, goals for the educational process, preferred teaching style, and instruction. Although referred to as “teaching” roles, this model is not limited to individuals in a social position of teacher or professor.

This framework can be extended to individuals in educational systems who have teaching roles as advisors, administrators, student affairs professionals, peers, tour guides. A teaching role is a patterned set of behaviors that emerge in response to the learning environment, including students and the learning task demands. Each teaching role engages students to learn in a unique manner, using one mode of grasping experience and one mode of transforming experience. In the facilitator role, educators draw on the modes of concrete experience and reflective observation to help learners get in touch with their own experience and reflect on it. Subject matter experts, using the modes of reflective observation and abstract conceptualization, help learners organize and connect their reflection to the knowledge base of the subject matter. They may provide models or theories for learners to use in subsequent analysis. The standard setting and evaluating role use abstract conceptualization and active experimentation to help students apply knowledge toward performance goals. In this role, educators closely monitor the quality of student performance toward the standards they set, and provide consistent feedback.



Finally, those in the coaching role draw on concrete experience and active experimentation to help learners take action on personally meaningful goals. These roles can also be organized by their relative focus on the student versus the subject and action versus knowledge as illustrated in highly effective educators do not rely solely on one role. Rather, they organize their educational activities in such a manner that they address all four learning modes experiencing, reflecting, thinking, and acting. As they do this, they lead learners around the cycle; shifting the role they play depending on which stage of the cycle they are addressing.

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DISCOUNT PRICE SEGMENTATION BASED ON AREA OF SALES USING CLUSTER ANALYSIS FOR AUTOMOTIVE DEALERS IN INDONESIA

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Abstract: *Price is one of the components considered by the customers before they decide to buy products or services. Price becomes important for the business owner, as it should meet customer needs but still provides optimal profit for the business. This research examines the price-fixing process in a car dealer in Indonesia. The discount price is one of those pricing components that are adjustable. Thus, this research focuses on the discount values that might give the best profit for the dealer. Using clustering analysis with k-modes, this study collected four years of historical sales data with additional data such as area, car models, and customer gender. This study provides information regarding the combination of models and areas of the vehicle in each cluster that corresponds to the level of discount given so it might help the dealer to use their discount budget optimally. This research produces a list of discount recommendations for each region with the discount level and value. The list is then calculated for the gain / loss opportunities based on the existing discount submission data which is Rp 123,628,650,083 as the cost savings obtained from applying the segmentation result level discount. The number is the total nominal for discount application data for 4 years, with a nominal variance each year. Unfortunately, the demographic data such as age, occupation, income, marital status are not completely available to support this research. Though the existing data are able to produce the segmentation and discount level suggested for selected car models, the completeness of demographic data will provide more representative results. The results of this study can be used as implications for the management of the automotive dealer company as a marketing strategy that can be applied while still providing benefits and attractive promotions for customers.*

Keywords: clustering analysis, automotive, discount.

1. Introduction

In 2008, Indonesia has become one of the strengths of the ASEAN automotive industry sector along with other countries, namely Thailand and Malaysia (Gaikindo, 2020). The automotive industry is one of the many mainstay sectors that spur national economic growth, especially through the achievement of export values. The development of the automotive industry is also supported by the increasing number of other supporting industries such as spare parts, painting, batteries. Since the beginning of its development in 1969, up to now, there are 1,500 automotive component companies in Indonesia, which are divided into Tier 1, Tier 2, and Tier 3 which are spread throughout Indonesia (Kemenperin, 2019).



Currently, there are 35 car brands sold in Indonesia, with dozens of variants and types (Otoflik, 2021). With the increasing number of car brands being marketed as well as competition between car dealers in Indonesia, the pricing strategy is something that needs attention. One of the components of pricing is the discount component. Discounts are a form of sales promotion provided by sellers to consumers. In the history of marketing, discount pricing has tended to be more acceptable to consumers than simply low prices (Gabler et al., 2017).

This research will examine the discount scheme of one of the automotive dealers in Indonesia which provides a discount on each sales transaction by utilizing historical data for the last 4 years and available demographic data. Using the clustering method, the results of this study aim to determine customer segmentation for discounts that have been given based on the type of vehicle and sales area carried out by dealers and make price optimization and schemes, especially price and discount schemes, as a standard reference in determining discount limits and budgets. for the said automotive dealer using the existing parameters, which will then be presented in the form of a suggestion for the relevant automotive dealer.

2. Literature Review

The Development of the Automotive Industry in Indonesia

The automotive industry is one sector that can help national economic growth, one of which is through export value. This is in accordance with Making Indonesia 4.0 where the automotive industry is one of the 5 manufacturing sectors that receive attention to continue to be developed in order to be able to produce global quality products in the industrial era 4.0. There are 1,500 automotive component companies spread across Indonesia that are part of the supply chain for original equipment manufacturers (OEM) and after-sales services for the motor vehicle industry, with a very wide market share both domestically and for exports (Kemenperin, 2019).

Car sales in Indonesia cannot be separated from the role of dealerships that has the right to sell and distribute cars to customers. In Indonesia, the rights of import, marketing, sales, distribution are held by the ATPM (Brand Holder Sole Agent). ATPM does not have the right to sell vehicles directly to end-customers, but must go through dealers as local distributors of vehicles. There are many car dealership companies of various brands spread across Indonesia. The increasing sales target of car units, as well as the higher demand for car ownership, the more the number of dealers in Indonesia will increase.

Discount Leveling

Giving discounts as a form of sales promotion is important for business people in the midst of a lot of competition. Research conducted by Mat Zaib et al. (2013) regarding the pricing strategy shows that the higher the number of business people, the tighter the price competition that occurs. Therefore, it is necessary to create a competitive advantage by making level discounts. The existence of this strategy shows that the higher the price competition in the market, the more discount levels are used.



The next question is what kind of discount level is the most optimal that can be given to customers. Research conducted by Drozdenko & Jensen (2005) shows that the optimal discount level variance is 0 to 80% based on product categories and distribution channels. Respondents also consider the quality, condition, and source of the product when deciding which discount level to use.

Sales Promotion

Promotion is an important part of an organization because it is considered as a way to communicate with consumers, which can then influence consumer behavior and views of the organization / company. Sales promotion is the core campaign of an organization which usually has a short period of time, designed to stimulate consumer purchases (Kevin Lane & Kotler, 2016). The three main classifications of sales promotions according to Kevin Lane & Kotler (2016), namely:

- Consumer promotion, including: gifts, free sample products, coupons, sweepstakes, premiums, and others.
- Trade promotion, which includes: other incentives for retailers, merchandise, discounts, equipment assistance, or wholesalers.
- Salesforce promotion, an example of a sales contest.

A trade promotion in the form of a discount is a form of sales promotion that is often applied by marketers which is more aimed at the end consumer. Consumers like discounts because consumers get reduced losses from direct price cuts of a product (Lowe, 2010). In other words, giving discounts can be a factor for consumers in making decisions to buy products. The greater the discounted value, the happier the consumer will be, so the more likely they are to buy the product. Giving the right discount schemes and prices to consumers, will help salesforce to encourage consumers to consider their decisions.

Demography

Demography is a scientific study of the population related to fertility, mortality and mobility. Demographic coverage is population, geographical distribution, population composition and demographic characteristics and how these factors change over time (Soeroso, 2005). Demographics focus on studying population problems quantitatively, such as the number, structure, composition, and size of the population which require good calculation techniques (Armansyah, 2019). Utilization of demographic data in this study is used to support historical sales data by looking at consumer characteristics. With this demographic data, the results of the research in the form of scheme recommendations and discount prices can be grouped based on the demographic data that has been collected.

Segmentation

Segmentation is the process of dividing the population of possible customers into different groups. Groups of customers who are in the same segment have common characteristics that can help companies target these customers so that they can market their products effectively (Lovelock & Wirtz, 2011). Segmentation is important because business people can see the diverse characteristics of their customers, so that they can be studied and analyzed so that they can provide appropriate services / products / offers.

There are several common ways that are often done to segment by combining the following variables:

- Demographic data such as age, gender, income, marital status, geographic location, religion, education, are often used. This is because consumer needs and desires are easier to measure (Prasetyo et al., 2017). However, the combination of these variables is not always representative because there are different needs even though the demographic data is the same.
- Psychographic that represents lifestyle, behavior, and habits.
- Behavioral segmentation is based on behavior related to product consumption and can include frequency, volume and type of product use
- Needs-based segmentation groups customers based on common needs and wants, or benefits sought, related to a particular product or consumption context.

Cluster Analysis (Clustering)

According to Han et al. (2012), clustering is the process of partitioning a set of data objects (or observations) into a subset. Each subset is a cluster, so that in one cluster there are objects that are similar but different from other clusters. Clusters of clusters that result from cluster analysis can be referred to as clustering. Different grouping methods can result in different groupings on the same data set. Partitioning is performed by a grouping algorithm which can lead to the discovery of previously unknown groups in the data. Cluster analysis is widely applied in business intelligence, image patterns, web search, and so on. The results of this clustering implementation can be used to base business strategy decisions on a particular company or business.

The simplest and most basic version of cluster analysis is partitioning or partitioning methods, which organize objects from a set into exclusive groups or clusters. To keep the problem specification concise, we can assume that the number of clusters is given as background knowledge. This parameter is the starting point for the partition method. Formally, given a dataset, D , of n objects, and k , the number of clusters to be formed, the partition algorithm arranges the objects into k partitions ($k \leq n$), where each partition represents a cluster. Clusters are created to maximize objective partitioning, so that objects in the cluster can be similar but not the same as objects outside other clusters in terms of data set attributes. Some of the most commonly used partition methods are k -means, k -medoids, and k -modes depending on the type of data to be processed.

K -modes is the method chosen for the partition clustering process in this study. Likewise, with Harish & Malathy (2020) in their research entitled Pre-launch Insurance Customer Cluster Analysis using K -Modes with Different Initialization Methods which describes similar research, with the aim of providing the right insurance products to prospective buyers. The research focuses on customer clustering analysis by utilizing demographic, behavioral, and risk data that is processed in such a way that it can produce predictions of customer insurance premium prices. They also compared the results using certain initial methods. While in this study, clustering with the k -modes method is used to determine the optimal discount value for prospective buyers, which is seen from the history of vehicle sales transaction data with a high level of complexity and a large number of them. In addition, the research also uses demographic data to support customer segmentation.

2.1 Problem Statement

Based on the research background, here are the problems:

1. How to find out and analyze customer segmentation in the form of grouping car types, regions, with demographic data such as gender, through discounts provided by dealers
2. Utilizing the new segmentation results obtained to provide recommendations in the form of strategies for determining schemes and discount values that are more appropriate for the dealer.

3. Method

Data segmentation is carried out after grouping or classifying discount level on sales transactions from 2017 to 2020. There are 359,325 sales data with various discount nominal and level. There are 4 categories of transaction data which will then be processed to determine the clusters.

Table 6: Sales Transaction Data Category

Customer Type	Categorized into; companies and individuals. Types of corporate consumers are consumers who buy vehicles on behalf of companies / agencies, while individuals are consumers who buy vehicles on personal behalf consisting of male and female consumers.												
<i>Region</i>	Divided into 5 regions, namely DKI, West Java, East Java, Kalimantan & Bali, and Sumatra												
Model	Data masking for the top 5 vehicle models consisting of: <table border="1" style="margin: 5px auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px 5px;">Model</th> <th style="padding: 2px 5px;">Type</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">Hatchback</td> </tr> <tr> <td style="padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">MPV</td> </tr> <tr> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">MPV</td> </tr> <tr> <td style="padding: 2px 5px;">4</td> <td style="padding: 2px 5px;">MPV</td> </tr> <tr> <td style="padding: 2px 5px;">5</td> <td style="padding: 2px 5px;">SUV</td> </tr> </tbody> </table>	Model	Type	1	Hatchback	2	MPV	3	MPV	4	MPV	5	SUV
Model	Type												
1	Hatchback												
2	MPV												
3	MPV												
4	MPV												
5	SUV												
Discount Level	These 5 models represent 70% of sales at the dealership. Classification of discount levels with 5 categories (Azwar, 2012), namely Very Low, Low, Medium, High, and Very High												

The categorized sales data is then processed using Jupyter Notebook for clustering using the k-modes method. There are steps to proceed the data to finally produce data clustered based on sales area, as shown in workflow below:

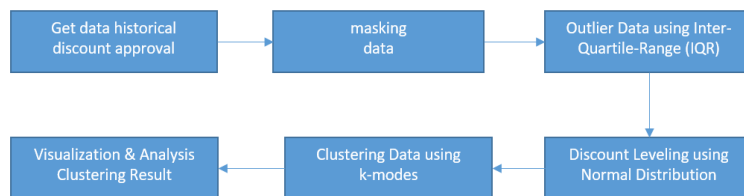


Figure 4: Data Proceeding Workflow

Based on the categories that have been defined as in table 6, data proceeding along with k selected as many as three clusters, the k-modes method produces clustering with examples as in table 7 as follows:

Table 7: Sample data clustering with k-modes

Customer No	Customer Type	Region*	Model	Discount Level	Cluster	Cluster Level
20698405	Individual	1	2	Low	1	Low
20731999	Individual	4	1	Low	1	Low
20509065	Individual	6	2	Low	0	Medium
17529192	Individual	4	2	Low	0	Medium
20724846	Individual	3	1	Low	1	Low
20647404	Company	1	2	Low	1	Low
20084654	Company	1	2	Low	1	Low
20565682	Individual	6	2	Low	0	Medium
20618597	Individual	6	2	Low	0	Medium
20184748	Company	1	2	Low	1	Low
20698405	Individual	1	2	Low	1	Low
20731999	Individual	4	1	Low	1	Low

*Keterangan: Region 1 (DKI 1), Region 2 (DKI 2), Region 3 (Jawa Barat), Region 4 (Jawa Timur), Region 5 (Kalimantan & Bali), Region 6 (Sumatera)

4. Results and Discussion

The results of clustering are then visualized in each region to see the percentage of the recommended discount level. The results of segmentation are differentiated based on the type of consumers, namely companies and individuals. Furthermore, the types of individual consumers are then differentiated based on male and female gender. Clustering is carried out annually to see more detailed segmentation results, so that it can be analyzed more deeply and can be used as the basis for managerial strategies in the following year. These are the results for each region:

DKI

The clustering results for the DKI region are divided into 2 large areas, namely DKI 1 which consists of North Jakarta, East Jakarta, Central Jakarta, Bekasi, and Cikarang areas. Meanwhile, DKI 2 consists of the areas of West Jakarta, South Jakarta, Tangerang, BSD, Depok, and parts of Banten.

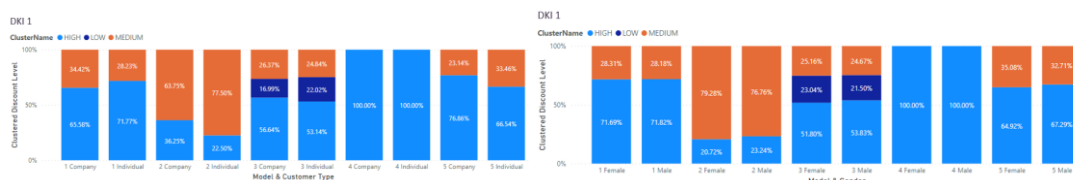


Figure 5: Segmentation for DKI 1 (2017 – 2020) by Customer Type & Gender

It can be seen in the visualization of Figure 5, there is a significant difference in the level of discount given where for DKI 1 it is dominated by giving discounts with a HIGH level, especially for vehicle type 4 for each type of consumer

Likewise, if seen in more detail based on types of individual consumers consisting of men and women, it is dominated by the provision of HIGH level discounts, especially on vehicle model 4.

Then clustering for DKI 2 can be seen in Figure 6 as shown below:

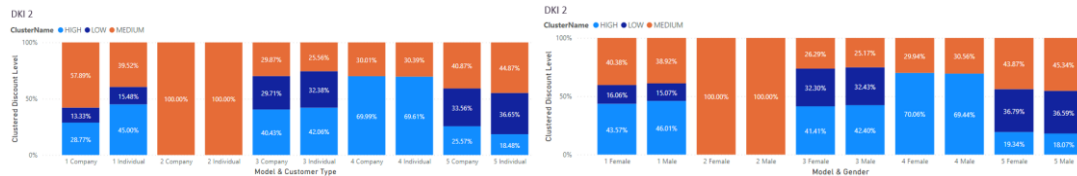


Figure 6: Segmentation for DKI 2 (2017 – 2020) by Customer Type & Gender

In detail based on gender, shows that the most dominant discount levels given are the MEDIUM and HIGH levels.

West Java

The 4-year summary data segmentation can be seen in Figure 7 where the MEDIUM level discount is the most dominant given and is found in vehicle model 2 for all types of consumers. Then the other dominance is the provision of HIGH level discounts on almost all vehicle models.

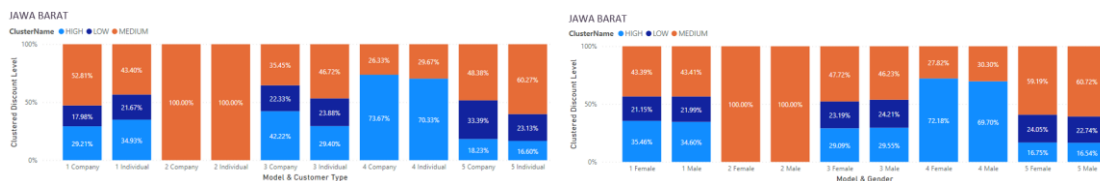


Figure 7: Segmentation for West Java (2017 – 2020) by Customer Type & Gender

More details in where the results of the segmentation of giving for the West Java region based on gender. It can be concluded that in general for the West Java region, discounting is dominated at the MEDIUM level for all types of vehicles, especially in vehicle model 2 where the MEDIUM discount rate is at 100%.

East Java

4-year data clustering of all models, especially the highest dominance is in model 3. The visualization of the 4-year discount segmentation can be seen in Figure 8.

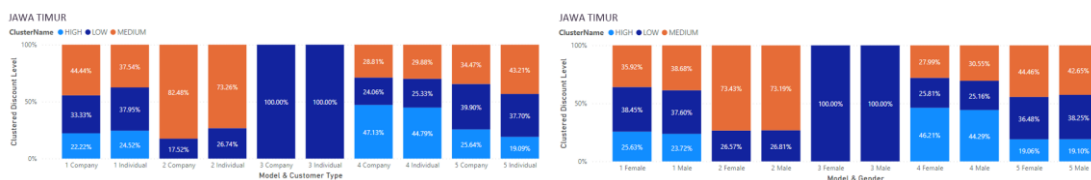


Figure 8: Segmentation for East Java (2017 – 2020) by Customer Type & Gender

In more detail on the segmentation of discount by gender shown that the results of segmentation in the East Java region on average are dominated by giving discounts at the LOW level on almost all types of vehicles, especially model 3 where the percentage reaches 100%. This is followed by a MEDIUM level discount for model 2.

Kalimantan & Bali

Total data for 4 years of segmentation visualization is shown in Figure 9. Discounts with a value of 100% are at the MEDIUM level for vehicle model 2, which is then followed by a HIGH discount level for vehicle types 4 for all types of consumers.

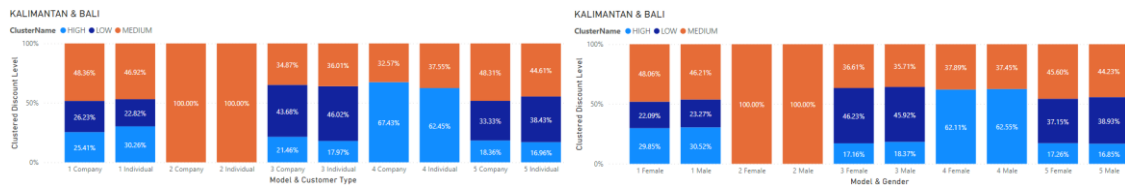


Figure 9: Segmentation for Kalimantan & Bali (2017 – 2020) by Customer Type & Gender

More details based on gender, for vehicle model 3, the type of individual consumers is dominated by giving a MEDIUM discount level followed by a HIGH level which is evenly distributed in almost all vehicle models.

Sumatera

The total segmentation of 4-year data for the Sumatera region shows the MEDIUM discount level with LOW and HIGH variations on vehicle models 3 and 4. The visualization can be seen in Figure 10.

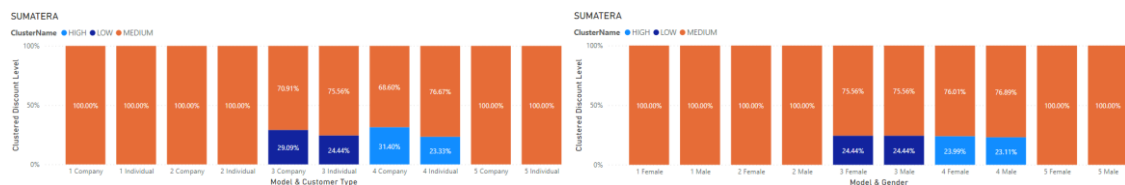


Figure 10: Segmentation for Sumatera (2017 – 2020) by Customer Type & Gender

In more detail at gender, shows the percentage of LOW and HIGH discount levels not greater than the percentage of discounting with a MEDIUM level

The results of the clustering above show several variations of discounting which are influenced by many factors. In this study, the differences in sales area looks very influential on the discount level, especially outside Java. This could mean that there are differences in customer behavior in each region which of course cannot be generalized, especially regarding the issue of offers or promotion strategies for selling four-wheeled vehicles in Indonesia. Cultural differences between regions can also be a factor in the differences in reactions to promotional strategies applied to certain regions. This is also stated by (Laroche et al., 2002), where various cultural sub-groups will react differently to different promotional strategies.

The difference in the model of the vehicle being sold and the type of consumer from the customer also seem to have an effect in determining the level of discount that can be offered. Choo & Mokhtarian (2002) in their research also concludes that the type of hardworking consumer who is not interested in short-distance personal trips prefers the small car (hatchback) and/or mid-size car (MPV) type. These characteristics of consumers are often found in big cities with high economic movements such as Jakarta. Therefore, discounts for small car and mid-size car types are likely to be given more to consumers considering the many prospects that can be targeted. Region or location of car sales does not affect the number of buyers of a certain gender as indicated by the results of clustering where the number of buyers with a female gender ratio is almost the same as that of a male gender, as previously explained.

There is also the type of vehicle being sold, such as an SUV, which usually has a higher price than other models. Choo & Mokhtarian (2002) suggest that household income is positively related to expensive cars such as luxury cars and SUVs, meaning that higher household income will allow consumers to buy SUVs. The relatively higher price makes the discount level segmentation almost all dominated at the MEDIUM level except for DKI 1 at the HIGH level

This result can then be used as a guide or suggestion in the process of giving discounts in each region by looking at the gender and model of the vehicle you want to buy. The following is an example of the suggested discount optimization from the results of clustering based on the model and type of consumer for each region or sales area, the value of which is taken from table 5 of the level discount classification.

Table 8: Recommended Discount Optimization

Region*	Model	Customer Type	Gender	Discount Level Suggested	Average Discount Value Suggested (Rp)
1	1	Company	Company	HIGH	10.017.803
1	1	Individual	Female	HIGH	9.412.685
1	1	Individual	Male	HIGH	9.495.258
1	2	Company	Company	MEDIUM	24.420.498
1	2	Individual	Female	MEDIUM	21.029.611
1	2	Individual	Male	MEDIUM	21.237.299
1	3	Company	Company	HIGH	10.926.485
1	3	Individual	Female	HIGH	10.422.153
1	3	Individual	Male	HIGH	9.662.472
1	4	Company	Company	HIGH	28.614.015
1	4	Individual	Female	HIGH	27.125.539
1	4	Individual	Male	HIGH	27.099.542
1	5	Company	Company	HIGH	12.445.577
1	5	Individual	Female	HIGH	9390.400
1	5	Individual	Male	HIGH	9.835.998
2	1	Company	Company	MEDIUM	8.802.628
2	1	Individual	Female	HIGH	11.848.291
2	1	Individual	Male	HIGH	11.822.572
2	2	Company	Company	MEDIUM	24.687.264
2	2	Individual	Female	MEDIUM	23.279.162



2	2	Individual	Male	MEDIUM	23.228.159
2	3	Company	Company	HIGH	11.738511
2	3	Individual	Female	HIGH	11.710.362
2	3	Individual	Male	HIGH	11.693.879
2	4	Company	Company	HIGH	28.838.518
2	4	Individual	Female	HIGH	26.938.940
2	4	Individual	Male	HIGH	27.087.594
2	5	Company	Company	MEDIUM	13.855.954
2	5	Individual	Female	MEDIUM	13.203.043
2	5	Individual	Male	MEDIUM	13.851.896
3	1	Company	Company	MEDIUM	8.182.568
3	1	Individual	Female	MEDIUM	8.173.558
3	1	Individual	Male	MEDIUM	8.111.131
3	2	Company	Company	MEDIUM	25.246.147
3	2	Individual	Female	MEDIUM	22.681.407
3	2	Individual	Male	MEDIUM	22.648.813
3	3	Company	Company	HIGH	11.974.251
3	3	Individual	Female	MEDIUM	8.730.962
3	3	Individual	Male	MEDIUM	8.719.105
3	4	Company	Company	HIGH	29.250.220
3	4	Individual	Female	HIGH	27.982.002
3	4	Individual	Male	HIGH	28.347.274
3	5	Company	Company	MEDIUM	13.435.188
3	5	Individual	Female	MEDIUM	12.453.080
3	5	Individual	Male	MEDIUM	13.007.684
4	1	Company	Company	MEDIUM	8.899.712
4	1	Individual	Female	LOW	5.685.519
4	1	Individual	Male	MEDIUM	8.810.017
4	2	Company	Company	MEDIUM	25.900.135
4	2	Individual	Female	MEDIUM	23.804.676
4	2	Individual	Male	MEDIUM	23.837.542
4	3	Company	Company	LOW	9.148.377
4	3	Individual	Female	LOW	8.169.863
4	3	Individual	Male	LOW	8.108.788
4	4	Company	Company	HIGH	29.835.515
4	4	Individual	Female	HIGH	27.208.877
4	4	Individual	Male	HIGH	27.394.554
4	5	Company	Company	LOW	11.211.670
4	5	Individual	Female	MEDIUM	9.654.089
4	5	Individual	Male	MEDIUM	9.681.716
5	1	Company	Company	MEDIUM	8.490.139
5	1	Individual	Female	MEDIUM	7.971.314
5	1	Individual	Male	MEDIUM	7.793.150

5	2	Company	Company	MEDIUM	25.040.701
5	2	Individual	Female	MEDIUM	21.226.572
5	2	Individual	Male	MEDIUM	21.958.544
5	3	Company	Company	LOW	9.754.719
5	3	Individual	Female	LOW	9.556.387
5	3	Individual	Male	LOW	9.385.665
5	4	Company	Company	HIGH	27.319.040
5	4	Individual	Female	HIGH	24.782.018
5	4	Individual	Male	HIGH	25.462.339
5	5	Company	Company	MEDIUM	13.641.116
5	5	Individual	Female	MEDIUM	14469.694
5	5	Individual	Male	MEDIUM	15.276.301

**Note: Region 1 (DKI 1), Region 2 (DKI 2), Region 3 (Jawa Barat), Region 4 (Jawa Timur), Region 5 (Kalimantan & Bali), Region 6 (Sumatera)*

From the results of segmentation and visualization that has been done, several points can be drawn as follows refers to a recommended discount optimization list in table 8 above:

- The segmentation results show that in the DKI 1 area, the most frequent discounting is MEDIUM for vehicle model 2, and HIGH for vehicle models 1, 3, 4, and 5. There is no LOW level discount for the region. DKI 1.
- In DKI 2 area, the most frequent discounting is MEDIUM for vehicle models 2 and 5, and HIGH for vehicle models 1, 3, and 4. Similar to DKI 1 area, there is no LOW level discount for DKI area 2.
- In the West Java region, discounting is dominated by the MEDIUM level, namely for vehicle models 1, 2, 3, and 5, and HIGH for vehicle models 4. Similar to DKI 1 and DKI 2 areas, that there is no discount LOW level for the West Java region.
- The most frequent discounting in East Java is LOW for vehicle model 3, MEDIUM for vehicle model 1, 2, and 5, and HIGH for vehicle model 4.
- In Kalimantan & Bali region the results are the same as in the East Java region, namely the most frequent discounting is LOW for vehicle model 3, MEDIUM for vehicle model 1, 2, and 5, and HIGH for vehicle model vehicle 4.



- In Sumatra, the most frequent discounting is MEDIUM for all vehicle models. Table 8 shows that there are no LOW or HIGH discount levels for the Sumatra region

5. Conclusion

Based on the results of research and discussion regarding the segmentation of discount pricing for one of the car dealers in Indonesia, it can be concluded that:

- From the data on applying for discounts, regions, vehicle models, and other supporting data such as gender and type of consumers, customer segmentation can be done using clustering with the k-modes method.
- The results of the segmentation are then used as a reference for making price optimizations and discount schemes presented in the form of a list as a standard reference in determining discount limits and budgets for automotive dealers.
- West Java, Kalimantan & Bali are the regions with relatively small discounts compared to other regions, while the highest discounts are given to DKI 1.
- There are differences in the behavior of giving discounts for each sales area based on geographical location, which shows that cultural differences are suspected to have a strong enough role in the pattern of giving discounts in various regions in Indonesia.
- There is no significant difference between men and women in the pattern of giving discounts. This is in accordance with what is stated by Belch & Willis (2002), that the decision to buy a car is no longer a specialty for men, but has become a joint decision, so that male and female buyers tend to have the same pattern in applying for nominal discounts.
- Likewise, with the types of customers, there are no significant differences between companies and individuals. Although there is a bigger difference compared to gender, the difference in discount levels between companies and individuals only occurs in vehicle models 1 and 5 in certain regions.

Managerial Implications

- This research can support the conclusion that giving the right and optimal level of discount in addition to saving the company's costs, is also felt by customers as part of a sales promotion in the form of price discounts.
- The existence of segmentation will provide an overview for the company to implement discount pricing which can be used as an annual review material for marketing strategies in the following year

Limitation

Despite meeting the objectives that were set out for this research, there are a few limitations that were encountered during the study. This research focuses on generating a discount value level that might give the best profit for the dealer using clustering analysis with k-modes. This study collected four years of historical sales data with various additional data such as area, car models, and customer demography. But unfortunately, the demographic data such as age, occupation, income, marital status are not completely available to support this research.

Though the existing data are able to produce the segmentation and discount level suggested, the completeness of demographic data will provide more representative results. Thus, in the future, the car dealer company is expected to complete the customer demographic data that can be used for further research. In addition to incomplete historical data, the COVID-19 pandemic has also affected the car sales industry in Indonesia. Thus, the result above might not represent the normal condition before the pandemic.

6. Acknowledgement

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IMPLEMENTATION SHARIAH COMPLIANCE AT THE MUI CASH WAQF AGENCY FOR THE SPECIAL REGION OF YOGYAKARTA

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Abstract: *In Law No. 41 of 2004 about waqf, The President of Republic Indonesia mention there are two types of waqf objects namely immovable objects and movable objects, an example of a movable object waqf is money. There is one of the largest cash waqf institutions in the Special Region of Yogyakarta namely the Cash Waqf Agency MUI DIY. Cash waqf continues to grow for the welfare of human, the development of cash waqf requires the role of a waqf institution that has strong credibility in the eyes of the community, In realizing the credibility of a waqf institution indicators are needed in shari'ah compliance. Shari'ah compliance often juxtaposed with banking financial institutions, waqf institution is one of the Islamic financial institutions that requires sharia compliance status for the credibility of the waqf institution. This study aims to determine the implementation of sharia compliance at the Cash Waqf Agency (BWU/T) MUI at Yogyakarta in managing and collecting cash waqf funds. This research method is descriptive qualitative research, with data collection techniques Observation, Interview and Documentation. The results of the study indicate that BWU/T MUI DIY has fulfilled shariah compliance in terms of contracts, waqf fund management, economic activity reports, and financed businesses and the existence of DPS as an operational supervisor of activities and sources of halal funds in manage and collect cash waqf funds. Based on the results of the study, it was concluded that BWU/T MUI DIY should be able to maintain and improve aspects of shari'ah compliance in order to continue to gain trust from both wakif and mauquf alaih and the management of cash waqf to be more effective and efficient.*

Keywords: Waqf, Cash Waqf, Waqf Board, Shariah Compliance.

1. Introduction

1.1 Background

Waqf is one of the Islamic philanthropic institutions that plays a very important role in empowering the people's economy (Afif, Khilmia, et al., 2021). In Law No. 41 of 2004 concerning waqf, The President of Republic Indonesia mention there are two types of waqf objects namely immovable objects and movable objects, an example of a movable object waqf is money. In Indonesia's population census in 2010, 87,18 % of the total population of Indonesia are Muslims (Viva Budi Kusnandar, 2021). This shows that the Indonesian state has enormous potential in collecting and managing waqf. According to data from the Indonesian Waqf Agency (BWI) the potential for waqf assets per year reaches Rp. 2000 trillion with waqf land area reaching 420,000 ha, Meanwhile, the potential for cash waqf can reach the range of IDR 188 trillion per year the funds that have been



realized are only Rp. 400 billion (Sakina Raham, 2020). From the dominant Indonesian Muslim population, they should be able to collect cash waqf greater than what has been collected from the BWI data above.

This happens for several reasons. First, the lack of public understanding of cash waqf management. Second, the lack of public trust in the management of cash waqf institutions (Afif, Khilmia, et al., 2021). In fulfilling the public's trust, a waqf institution has strong credibility in the eyes of the community. In realizing credibility, a waqf institution needs indicators in sharia compliance (Afif, Triyawan, et al., 2021). Sharia compliance is often juxtaposed with banking financial institutions, waqf institutions are one of the sharia financial institutions that require sharia compliance status to strengthen the credibility of cash waqf institutions (Mohd Izzudin Mohd Noor, 2019).

There is one cash waqf nadzhir institution in the Special Region of Yogyakarta namely the Cash Waqf Agency MUI DIY. BWU/T MUI DIY is a nazhir waqf officially registered at the DIY Ministry of Religion Regional Office in 2019, The DIY MUI Cash Waqf Board is able to raise funds of IDR. 627,352,991, with the number of wakif 1854 people, but only IDR.119,796,000 has been distributed. This shows the need for a money waqf institution with a shariah compliance label to increase the credibility of the community in cash waqf institutions (Harsoyo, 2019). From the background stated, this study tries to examine the implementation of sharia compliance at the MUI Cash Waqf Agency (BWU/T) Yogyakarta in managing and collecting cash waqf funds.

1.2 Objectives

Cash waqf continues to grow for the welfare of human. The development of cash waqf requires the role of a waqf institution that has strong credibility in the eyes of the community. In realizing the credibility of a waqf institution indicators are needed in shari'ah compliance. Shari'ah compliance often juxtaposed with banking financial institutions, waqf institution is one of the Islamic financial institutions that requires sharia compliance status for the credibility of the waqf institution. This study aims to determine the implementation of sharia compliance at the Cash Waqf Agency (BWU/T) MUI at Yogyakarta in managing and collecting cash waqf funds.

2. Literature Review

2.1 Background Theory

Definition of Cash Waqf

Waqf in Arabic is (*waqf*) which has various meanings including: stop (*al-sukun*), prevent (*al-mana'a*), withhold (*al-habs*) (Hydzulkifli Hashim dan Ashmak AB. Rahman, 2012). Waqf in terms is a form of legal action by giving up part of his property to be used forever or for a certain period of time and used according to sharia purposes (Faizatu Almas Hradiyantari, 2018). The Fatwa Commission of the Indonesian Ulema Council issued a fatwa regarding cash waqf regarding (Ahmad Muhsin Kamaludiningrat, 2011).

- a) Cash waqf is waqf carried out by a person, group of people, institutions or legal entities in the form of cash
- b) Included in the definition of cash waqf are securities.
- c) Money waqf is legal
- d) Cash waqf can only be channeled and used for things that are permitted by sharia
- e) The principal value of cash waqf must be guaranteed for its sustainability, not sold, donated, or inherited.

Shariah Compliance

In general, there is no clear understanding of the term shari'ah compliance. However, it can be understood as the status given by certain parties to organizations that carry out activities in accordance with Islamic law (Mohd Izzudin Mohd Noor, 2019). Sharia compliance is the fulfillment of all sharia principles in all activities carried out as a manifestation of the characteristics of sharia financial institutions. Meanwhile, sharia compliance by sharia banks is the fulfillment of sharia principles in the activities carried out by sharia banks. In a sharia bank, sharia compliance is at the core of the integrity and credibility of a sharia bank, so that it is obliged to carry out sharia compliance thoroughly and consistently (Siti Asmaul Usnah, 2015).

Indicator Shariah Compliance

Shari'ah compliance as explained by Asmaul that is the fulfillment of all shari'ah principles in all activities carried out as a manifestation of the characteristics of shari'ah financial institutions. In Adrian Sutedi's book and written by Asmaul, there are several indicators that can assess the shari'ah compliance of an Islamic financial institution, including (Siti Asmaul Usnah, 2015):

- a) The contract is in accordance with the principles of Shari'ah
- b) Management of waqf assets in accordance with sharia principles
- c) Reports on economic activity according to shari'ah accounting
- d) Businesses and businesses that are financed according to sharia
- e) DPS as supervisor of operational activities
- f) Halal source of funds

2.2 Previous Studies

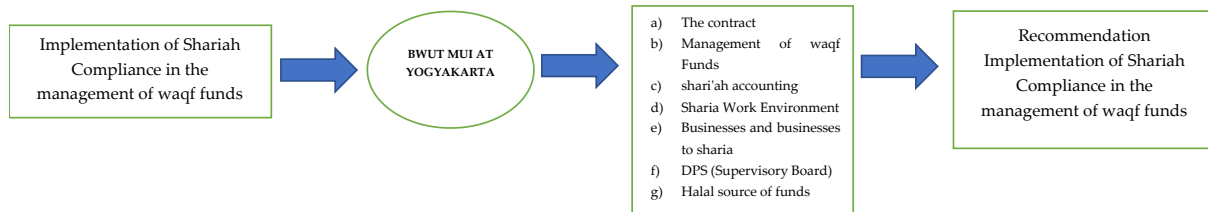
In the implementation of Sharia Governance, Rahman El Junusi is related to the reputation and trust of Islamic Banks, where the problem in this study is how to apply sharia governance and the reputation and trust of Islamic banks with the object being Bank Muamalat which operates in Java Central (Semarang, Solo, Purwokerto). The research sample was 200 respondents using analytical judgment techniques. Measurement of the instrument using a Likert scale of 1-5, from strongly disagree (STS) to Strongly Agree (SS). First, to determine the application of sharia governance, quantitative descriptive analysis was used using the average (mean). Second, to examine the effect of implementing sharia governance on the reputation and trust of customers in Islamic banks, the Structural Equation Model (SEM) with the AMOS 4.0 Engineering Structural Equation Modeling (SEM) program is used, which consists of two types of analysis techniques, goodness of fit and regression weights. on SEM to assess model estimation based on the measurement of the significance level of several goodness of fit good and bad in a model, so that the degree of model accuracy is determined by the cut off value. This study concludes that the calculation of the total assessment of the application of Islamic Governance for Islamic banks (Bank Muamalat) shows an average score of 3.42 7 in the good category. This shows that sharia compliance is an indicator that provides the largest contribution to the implementation of Islamic governance. Compliance with sharia is the main factor for customers in establishing partnerships with sharia banks and deciding to maintain sharia banks (El Junusi, 2012).

The same as what was said Akhmad Faozan, the implementation of shariah governance in shariah bank is based on five (5) principles which they are the transparency, accountability, responsibility, professionalism, and normality or fairness. Whereas shariah bank in its shariah compliance's implementation, there are should be no usury (riba), uncertainty (gharar), and gambling (maysir) in all its transactions, operates the business which bases on halal (permissible by the shariah) profit, runs the mandate which was given by the customer to the bank, manages zakat (wealths purification), infaq (spending in Allah's way), and sadaqah (alms) in trusted way (Faozan, 2014). The purpose of this study is to measure the level of effectiveness of supervision in the implementation of shariah compliance by the Shariah Supervisory Board in Islamic banks and to examine legal developments and problems in the supervision of shariah compliance by the Shariah Supervisory Board (DPS). The approach method used by the researcher in writing this law is an empirical juridical approach (Damayanti & Ro'fah Setyowati, 2016).

The purpose of this research aims to determine whether the shariah compliance (X1) and good corporate governance (X2) affect the loyalty of customers of (Y) bank BRI Syariah Kantor Cabang Sidoarjo. The sample used in this research were 80 respondents from the customers of bank BRI Syariah Kantor Cabang Sidoarjo. The data collection method used in this study was by distributing questionnaires or numbers via online Google Form to the customers of bank BRI Syariah Kantor Cabang Sidoarjo who has any product at there. This research used the Instrumen Test, Multiple Regression Analysis Test, and Hypothesis Test. The results of this study indicate that shariah compliance has a positive effect on loyalty of the customers (Ibrahim & Rachmawati, 2020) and also in research on the implementation of shariah compliance in non-bank sharia financial institutions: KJKS-BMT analysis of Al-Mubarak Candi Sidoarjo conducted by Vahlevi, Dewi Riza Lisvi.

This study uses a qualitative method, namely literature research on shariah compliance in non-bank sharia financial institutions which is a component of the soundness of sharia financial institutions, so research is needed to find out how obedient KJKS Al-Mubarak is to sharia principles. The results of this study found that after being given ten questions of sharia compliance, KJKS Al-Mubarak got a score of 9, so that KJKS Al-Mubarak could be said to be compliant with sharia principles (Vahlevi, 2015).

2.3 Conceptual Framework



3. Methodology

3.1 Method

This research is a field research. The method used is qualitative research conducted by descriptive analysis using interviews, observation and documentation as a data collection tool. After the data has been collected, it is analyzed using qualitative analysis techniques by describing it in the form of simple sentences so that it can be interpreted to get conclusions as a result of the research. The data obtained directly from data collection on the subject, namely some interview data with the Chairperson, Secretary, *Wakif*, *Mauquf Alaih*, and the Sharia Supervisory Board (DPS) of the Cash Waqf Board of the Indonesian Ulema Council of the Special Region of Yogyakarta.

4. Results and Analysis

Implementation of Shariah Compliance at BWU/T MUI DIY

4.1 The Contract is in Accordance with the Principles of Shari'ah

Transaction or contract is taken from Arabic language which means engagement, agreement, contract, or agreement, and transaction (Manan, 2012). In *fikih muamalat*, *Aqd* is a connection or meeting of consent and *qabul* which results in legal consequences. *Ijab* is an offer submitted by one of the parties. *Kabul* is the response to the approval given by the contract partner in response to the first party's offer (Ika Yunia Fauzia, 2013). The *Mudharabah* contract was carried out between *Nadzhir* and the Islamic Financial Institution - Cash Waqf Recipient (LKS-PWU) in collecting funds which *Nadzir* then invested in an investment savings account and deposited in BPD DIY Syariah under the name of BWU/T MUI DIY. With the *mudharabah* contract, the benefits (profit sharing) are distributed to the *mauquf alaih* in need.

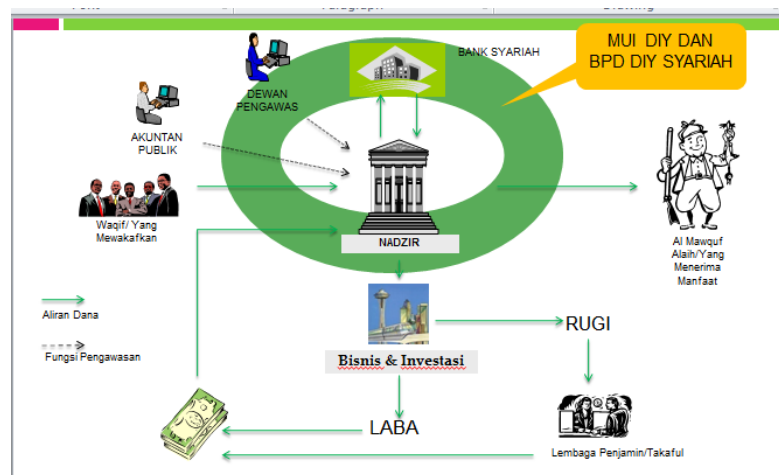
Accordance with Law No. 41 of 2004 concerning Waqf, the contract used in the common gayr contract which is considered the same as al-ariyah credit is not muabbad. Fundraising activities are divided into 2 types of contracts, namely (*Interview with Zaki Ghufron, S.Pd.I Secretary of BWU/T MUI DIY, 2021*):

- a) Permanent Waqf (*Mutlaq*) is wakif donate the money permanently, so that someone who has donated his money cannot be taken back or returned to the wakif. The nature of the money has become the right of *mauquf 'alaih*.
- b) Temporary Waqf (*Muqayyad*) is a wakif waqf his money with the provisions of the time determined by the wakif, if the distributed assets have arrived at a predetermined time then the property is returned to the wakif.

4.2 Management of Waqf Assets in Accordance with Sharia Principles

Since the signing of the MoU between Bank BPD DIY and BWU/T MUI DIY, the mechanism for the flow of waqf management carried out by BWU/T MUI DIY can be explained through the following scheme (Harsoyo, 2019):

Figure 1: Mechanism of Waqf Management Flow in BWU/T MUI DIY



Source: Nazhir Progress Report on Cash Waqf at BWU/T MUI DIY 2020

The following are the functions of the parts from image above:

- a) Nadzir: receives funds from waqif, manages it productively and maintains its value, distributes profits to *al mauquf 'alaih* and publishes financial reports.
- b) Sharia Bank: As a depositor and circulation of funds.
- c) Public Accountant: Conducting financial audit to *Nadzir*.
- d) Supervisory Board: supervise BWU/T so that it does not come out of Islamic sharia.
- e) Guarantor Institution: Covers *nadzir* losses caused by things beyond their control.

In the management of cash waqf in addition to collection, the distribution of benefit funds (profit sharing) is also carried out. Fund distribution activities are divided into 2 types, namely:

- a) Productive, consisting of distribution for real business and investment in Islamic financial products
- b) Social, consisting of distribution for education and health

There are various types of productive fund distribution programs, namely Productive Loans Without Collateral and Fees (PROTAB) Regular 1, 2, Group, Spread, and Syirkah Futures Investment Ridho All (ISYKARIMA). The distribution program is in the form of social, namely Grants and Business Partner Assistance.

4.3 Reports on Economic Activity According to Shari'ah Accounting

Accounting in the management of waqf assets is not specific as in zakat, infaq, and shodaqoh management organizations because the distribution is not limited to a binding matter such as zakat. Specific matters in accounting management include: the existence of a policy to retain waqf property or maintain its sustainability (Rifqi Muhammad, 2018). In BWU/T MUI DIY distributes wakif assets that have been managed through the BPD DIY Syari'ah bank, the results (profit sharing) from savings and deposits in BPD DIY Syari'ah are distributed to the mauquf alaih. In this case BWU/T MUI DIY has retained the waqf property as it should be. Since its establishment until 2020, BWU/T has raised funds of Rp. 632,567,794 which Nadzir then invested into an investment savings account at BPD DIY Syariah under the name of BWU/T MUI DIY. Details for investment in Mudharabah Savings amounting to Rp. 29,567,794 and Mudharabah Deposits amounting to Rp. 603 million.

In the Regulation of the Minister of Religion Number 1 of 1978, Nazhir as a public institution must have (Windu Mulyasari, 2017):

- a) Accounting and financial management systems

Especially productive waqf objects need to have systematic management and accounting. In this case, BWU/T MUI DIY has attempted a systematic accounting management. There has been a general journal balance with Microsoft Excel in recording all activities of collecting and distributing cash or cash waqf that have been balanced.

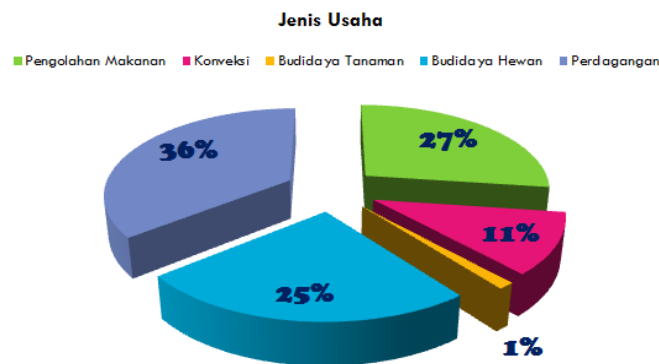
- b) Transparent audit system

Nazhir can be audited internally by the Ministry of Religion or externally by a public accountant or an independent audit agency. In the structure of BWU/T MUI DIY, there are three independent accountants, namely Drs. H. Herman Legowo, M.Sc., Akt., Dr. Ibnu Qizam, S.E., M.Si., Ak., CA, Faiz Zamzami, SE. Akt., M.Acc. in charge of auditing the collection and distribution of cash or cash waqf activities at BWU/T MUI DIY.

4.4 Businesses and Businesses that are Financed According to Sharia

Seeing small traders who still depend a lot on capital assistance from banks, cooperatives and so on, has motivated BWU/T MUI DIY to assist in the welfare of small communities to all remote areas in DIY. Not only in charge of the welfare of small communities, BWU/T MUI DIY also teaches them that small traders are also able to take part in waqf. Because unlike zakat, those who pay zakat are those who are materially capable and have reached the nishab, whereas in waqf anyone can do waqf and there is no limit to the amount of property specified in the waqf. The following is a graph of several types of businesses that have been financed through cash waqf profit sharing BWU/T MUI DIY (Harsoyo, 2020).

Figure 2: Percentage of Types of Businesses Funded by BWU/T MUI DIY



From the percentage picture above, it can be seen that the type of business financed through various programs (profit sharing) is the dominant cash waqf benefit, which is 36%. Trading is one of the jobs recommended by Allah SWT and His Messenger. With other types of business such as food processing 27%, animal cultivation 25%, convection business 11%, and plant cultivation business which reaches 1%.

4.5 DPS as Supervisor of Operational Activities

The existence of the Sharia Supervisory Board (DPS) as a form of representation of scholars in assisting the supervision of waqf institutions (Departemen Ekonomi Keuangan Syari'ah, 2016). The Sharia Supervisory Board (DPS) is an independent body placed by the National Sharia Council (DSN) in Islamic banking and financial institutions. DPS members must be experts in the field of sharia mu'amalah who have knowledge in the field of banking economics (Fitra Nelli, 2015).



Apart from being a direct supervisor or Supervisor in sharia compliance, DPS has several important roles including, DPS as an Advisor, every year a Rakerda forum is held to report on the evaluation and work program of BWU/T MUI DIY to MUI and the chairman of DPS is the chairman of MUI, through forums This BWU/T MUI DIY can consult some problems and solutions. Several times, associations of staff and members of the DPS were held to control the activities and programs running in accordance with the laws and government regulations regarding cash waqf. In addition, DPS as a Marketer, with one or more DPS members who must participate in the socialization of cash waqf in various places. Furthermore, DPS as a Supporter, DPS always supports all types of BWU/T MUI DIY programs and their development physically and mentally. As for DPS as players, DPS members are also permanent wakif in BWU/T MUI DIY, although they have not yet reached the stage of becoming investors or developers of waqf products (*Interview with Zaki Ghufron, S.Pd.I Secretary of BWU/T MUI DIY, 2021*).

4.6 Halal Source of Funds

Since the establishment of BWU/T MUI DIY in 2008 until now, it has had wakif as many as 1854 people. The average wakif comes from bank employees and most of the employees of BPD DIY shari'ah, because the office located in BPD makes it easier for wakif employees of BPD DIY shari'ah bank to make deposits. There are also agency office employees such as Ministry of Religion employees, civil servants, the general public (traders), and even partners who receive waqf (*mauquf alaih*) and eventually become wakif after experiencing the benefits (profit share) of cash waqf. There were also those who came alone, perhaps because the wakif who was a customer of BPD DIY sharia then saw the brochure, started asking questions and started to become wakif (*Interview with Harsoyo, M.Si, Head of BWU/T MUI DIY, 2021*). In ensuring that the source of funds for the wakif is lawful, BWU/T MUI DIY asks the candidate for wakif to fill out a form in which the work of the wakif is listed (*Interview with Zaki Ghufron, S.Pd.I Secretary of BWU/T MUI DIY, 2021*).

5. Conclusion

Based on the discussion that the researchers have compiled and also based on the formulation of problems related to the Implementation of Shariah Compliance at BWU/T MUI DIY, it can be concluded that the management of cash or cash waqf in empowering MSMEs in BWU/T MUI DIY is realized into programs for distributing benefits in form of Productive Loans Without Collateral and Fees (PROTAB) Regular 1 and 2 (monthly installments for 1 to 2 years); Productive Loans Without Collateral and Fees (PROTAB) Sebrakan (shorter repayment period); Growing Grants; and Business Assistance Partners (education, and training). The management of cash/cash waqf at BWU/T MUI DIY is in line with the indicators of compliance with sharia (Shariah Compliance) namely: contracts, management of waqf assets, reports on economic activities, financed businesses that are in accordance with sharia, the existence of a DPS as supervisor operational activities, and halal sources of waqf funds.

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INTERACTIVE MODULE FOR SLOW LEARNERS IN CREATIVE SEWING PROGRAMME

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Abstract: *Every human being on earth is born with diverse ability, skills, knowledge and specialty which makes them unique from each other. Each of these differences must not be look down upon and shall be respected. When learners attend early school years, educators may start to identify the learners based on their abilities and skills. There are several types of learners such as fast learners, average learners and slow learners. Learners learning variances may be attributable from poor memory, lack of awareness in education, lack of fundamental knowledge or psychological factors. These obstacles shall be overcome if the educator knows how to attract slow learners in order to bring out their inner talent, also, to make them understand and to be interested in the subject. By overcoming the obstacles, learners will appreciate and enjoy the learning that they had accomplished during lesson. This article attempts to solve the issues of slow learners' in sewing college. The educators are facing with lots of obstacles in order to make the slow learners to understand the sewing process although the step had been shown to them in detailed steps. Although the educator had guided them in stages where they will be guided as in one to one, some learners could not complete the sewing process in order to make it as the end product. Howard Gardner (1983) quoted saying that "Anything that is worth teaching can be presented in many ways. These multiple ways can make use of multiple intelligences". In this circumstance, as an educator, we must create interesting interactive module to assist learners to improve their understanding and to enhance their interest in order for the learners to complete their sewing project.*

Keywords: Interactive module, sewing process, slow learners.

1. Introduction

Slow learners are children who face or have a developmental delay from birth. Rahmat Kurniawan (2020) mentioned that there are two factors detected with slow learners which are either internal factor or external factor. One of the developments that is affected can be seen from their smile. Slow learners will attain a slow development in smiling and slow to respond to sounds or voices. These learners also show slow in giving and grasping response even after they are more than three years old. This has been happening since infancy and has not disappeared even though the baby is over three months old. These slow learners are usually unable to keep up with learning and teaching taught by teachers using common methods. This is because they are not able to focus and show interest in the learning and teaching process.



One of the characteristics of slow learners is, they are not able to communicate like normal learners. They also have a lower level of intellectual compared to normal learners. Slow learners are also not active and almost quiet at the most of the time. They do not talk much and prefer to be alone. Slow learners will also be at risk in leaving out the syllable in letters or words when they read or write.

A Vasudevan (2017) pointed out that slow learners show weakness in so many parts of in the lesson such as thinking, finding similarity, reasoning, poor development of concept, language and memory. Slow learners are also unable to follow lessons in the classroom, curriculum or in the regular classroom because these slow learners are too slow to achieve a simple teaching objective or short-term objectives and they have strong stimulus which are weak and low to absorb the information in the classroom.

These slow learners also find it difficult to accept instructions. Therefore, educators are advised to give short and simple instructions. In addition, these slow learners often pronounce letters incorrectly or interchangeably. The frequency of errors in spelling, punctuation is a common thing for slow learner.

Various teaching and learning strategies that can be formed by educators, one of it is the interview method. The interview method will include parents or guardians and an educator itself. This method can identify real problems and educators can intervene to these slow learners. On the other hand, by using an interesting worksheet will also improvise the concentration and memory of slow learners.

According to Korikana, A. (2020), slow learners should get an equal opportunity in education in order to make sure that they will succeed and have a better future by improving their skills and knowledge because this factor is an important contribution to a country's development. Hence, as an educator, they need to prepare and provide activities or teaching aids that are created creatively to ensure the engagement of the slow learners. This is because slow learners are not special needs children, nevertheless they need special engagement technique to attract their interest in learning. Educator must get the student to understand the process and the flow of every project that they need to complete.

Standing on the above elaboration, this research aims to analyse the effectiveness of interactive video and tool such as simple photo book used as teaching aids for helping them to understand better towards the lesson stated in the syllabus. By preparing a module and interesting teaching aid for slow learner, it will enhance the learning style and its environment which will assist educators to support slow learners where slow learners will get to install vigorous spirit in their learning session. This is because slow learners are more attracted to something that are visually shaped. It is easier to understand and fun to watch compared to teaching aids which consist of too many texts and words.



2. Literature Review

Student development involves the process of listening, observing and speaking. For the development of motor skills, most students will better understand the teaching method by observing and practicing it over and over again. The situation for creative sewing students they need approaches such as repetitive acts or behaviors to ensure they understand each step of the work being taught. Making skirt is one of the topics in the new upcoming syllabus for students of creative sewing programmed, then the textbook or any reference material is still not available for students to make reference. Therefore, this module was created to help students with disabilities understand and be able to practice the skirt sewing process better.

Clover and Stalker (2007) point out that process of making trained students on justice the situation around, especially when they've grown up and being with people. They will be more mature and know how to solve the problem with surrounding. While doing this, educator must give freedom to the students to produce their work so that they do not feel bias. In addition, educator can also do discussion session in the classroom so that they are accustomed to receiving opinions openly. Therefore, through this discussion or as known as 'art criticism' is one way for them to know clearly about the information from their counterparts of other races.

This module involves 3 elements namely, photo book, interactive video of skirt production work step process and worksheet. Students will get to know the equipment and sewing materials next to the work steps of skirt production through the picture book provided. At the same time, students can also view videos that have the same functionality as picture books. The difference is that the video has a background song that can engage slow learner students to listen and view pictures as well as videos. Indirectly, they will recognize and know the items used and the sewing steps in the same time. For the video section, the sewing work steps will have subtitles and conversations related to the work steps and processes. It's like a conversation in class but more focused on the skirt making process only.

In class, after the lecturer makes a description through a picture book, the lecturer will make a demonstration of skirt production. If students still do not understand what is taught in class, students can refer to the video provided at home. students can watch and replay the video many times at home if they still do not understand the learning process in the classroom.

The worksheet aims to further strengthen students' understanding and knowledge of the skirt production process. This worksheet can be distributed before or after the skirt production briefing and demonstration session.

By using motor skill activities, it can also help the teacher to make students more understanding, more respect and recognize the value lesson process. In fact, with these activities as well, the students get to know the process of skirt production by viewing the video repeatedly and they can make a challenge among them with who will complete the skirt first. According to Najwana Lee (2012), every activity that provides opportunities for all students to construct their own meaning which each of artwork it symbolically to the specific and profound impact in communication within the classroom.



2.1 Problem Statement

Situations that occur to learners in the creative sewing program available at the Community College under the Ministry of Higher Education Malaysia. Most of them, prior to joining the classes, they come with zero knowledge and background on sewing where they just enrol themselves as creative sewing learners because they want to add some value in themselves so that they have some skills to practice in the future. These skills are important for their future as it will help them in continuance as their survival skills when they do not have any parents or guardians to be depended on later in their life journey. Abdul Salim Choiri (2017) mentioned that slow learner is a group of students who have limited intellectual ability that affects their learning process. Some of them can carry out the directed activities with constant guidance from the educators but some of these slow learners need more attention so that they can get a better understanding and can carry out the activities as well as planned it and be able to complete their project by following the timeline given.

As everyone knows, slow learners may easily lose focus in their learning. Regardless of whether the learning involves them to read, to count or even in applying skills. They are easily bored and this cause them to no longer want to continue learning in the classroom. This situation will make them to lose interest and will not continue learning on that day. Then the time period given to complete a project cannot be achieved because they have lost focus on the day of their learning in class.

Slow learners also have problem in understanding some things, especially in a short time. They will learn something today and will forget it tomorrow. Therefore, educators are facing with this challenging situation where they must repeat the same learning repeatedly. This causes the method of delivery from the educator to be inconsistent and it can cause these slow learners to become unsettled and confused. It was supported by Sunardi (2017), saying that the slow learners limited intellectual capacity affects their reading abilities and as in the normal practice, the educator will provide notes and some worksheets with full of written text which makes them struggle to understand the material and the instruction in the notes provided.

Furthermore, in a situation where the country is hit by a pandemic and this situation has not yet fully recovered where the current situation will always change depending on the number of cases. During normal physical lesson, face-to-face classes were implemented but, in an alternative scenario, when the Ministry of Education ordered all learning institution such as schools and colleges to close down temporarily where educators need to conduct and implement the process of teaching and learning from home through online lessons where the educators will start to find ways and methods of effective delivery to deliver the lessons to students so that they will not lag behind and they could perform well as they normally would. According to Fitri Dwi Arini (2017), to provide an appropriate learning towards slow learner needs is crucial in order to reach their full potentiality. However, as an educator, they must find ways to assist the learners to have good achievement in their learning.



3. Method

The element of research follow are component technique and technique methods, component equipment and teaching aids and component learning activities that are included in Interactive Module for Slow Learners in Creative Sewing Programme. However, in this study researcher want to add new component for slow learners in order to make sure all creative sewing programme in Community College around Malaysia will use this module and yet this module can be acceptance to disabilities student as well. This module can give student exposure about interactive multimedia usage. Slow learners also can get the experience by producing their own basic skirt. This module can help lecturer to have the guideline in order to make the enjoyable environment in the classroom.

3.1 Materials

This study used the qualitative approach to design the instruments that are used in this study. The instruments used are semi-structured interview, observation and document analysis.

An observation to determine either the module and the teaching aids will support the slow learners or vice versa. A pre-test and post-test observation will be conducted by the educator. Five slow learners will start their basic skirt project with the usual teaching technique for a month and after that the same five of slow learner will be given with the interactive module and the teaching aids for basic skirt sewing process. Comparisons can be seen between before using the module and teaching and after using module and teaching aid.

3.1.1 Samples

This study was conducted among creative sewing lecturer in Raub Community College. The respondent was selected using the purposive sampling. According to Fraenkel, Wallen and Hyun (2012), purposive sampling involves individuals who possess specific qualification of some sort. Researcher used two group of sampling which is consist of the lecturer teaching this programme and five slow learners of creative sewing programme. The document analysis by choosing of five slow learners and two lecturers will be collected. Five slow learners need to answer several simple verbal questions given related to their knowledge and understanding of sewing process and the lecturer need to filled up the form given by researcher and few verbal questions. Findings from document analysis can be used as a rubric to grade or to score the document.

3.1.2 Site

Since the researcher is a lecturer at Raub Community College, the data collection site was implemented at the creative sewing workshop of Raub Community College. This is because Raub Community College offers creative sewing programs for the slow learners. Therefore, it makes it easier for researchers to monitor and experiment on their own students.



3.1.3 Procedures

Researcher was formulating the idea to design and develop the Interactive Module for Slow Learners in Creative Sewing Programme. The module is subsisted of Photo Book, Interactive Video and Worksheet.

At the first place, researcher was named this module as i-SLM. Then, researcher created the design of front and back cover for the photo book by using Canva as well as the layout inside the book and also the design arrangement for the interactive video.

After the design of front and back cover and also the design layout was chosen, researcher will go to the next step which is to find and arrange the content of the module. Researcher will refer the content of the basic skirt to the previous reference sewing book which is have the flow of making skirt and researcher will simplify it in order to make slow learners have a better understanding.

The content will be aligned by following the most important thing first such as the materials and tool. Researcher also prepared the Interactive Video when completing the Photo Book of Basic Skirt. This is because, to make sure the content in Photo Book of Basic Skirt is synchronised with the content in Interactive Video. At the same time researcher are construct the worksheet related to the photo book and the interactive video.

After the Interactive Module for Slow Learners in Creative Sewing has been done, researcher will meet up the lecturer to hand over the sets of modules for conducting five sample of student and observe their first impression towards the photo book and the video. The lecturer will distribute the first worksheet as an opening to attract slow learner's interest. After that, lecturer will provide the photo book to the five slow learners for some briefing and get reaction from them about the photo book. Once lecturer done with the photo book, the demonstration of making basic skirt will start. Lecturer will show to the slow learners about QR Code to access the interactive video that bring them to watch the flow of making basic skirt repeatedly.

All of the five slow learners will be interview by researcher after the learning session has been done. The time needed to evaluate the five slow learners by using Interactive Module for Slow Learners in Creative Sewing programme was around 2 days and the interview session will take about 15 minutes to answer the question given. The question in interview session is consist of the strength and weaknesses of the module. Slow learners need to answer the simple question given.

After the researcher got all the feedback by semi structured interview from the lecturer and five slow learners, it will be as a data and reference for researcher to have an evidence about the effectiveness of the Interactive Module for Slow Learners in Creative Sewing Programme.



Design: This study used the Qualitative design. Researchers conducted a semi-structured interview with five participants who are slow learners and with the creative sewing lecturer as well. The selected student were 2 males and 3 females who enrolled in creative sewing program in Raub Community College, Pahang and 1 female lecturer of creative sewing programme. The participants for this study were initially selected based on their behaviours a. In this session, a face-to-face interview was conducted with the participants. As suggested by Charlie Marshall (2016), the face-to-face interview are very effective to get a deeper insight for specific answers. The real reaction and answers from the learners will be collected, analysed and be used to create an interactive module to incorporate with teaching aids.

This research was used the qualitative approach. Qualitative research is a generic term for methodologies of investigation in which it was described as ethnographic, naturalistic, anthropological, field, or research participants from the observer. It stressed the importance of studying the variables in the natural environment in which it is found. Interactions between variables is important to get the best result. Researcher used the semi structured interview in order to collect the data. In this session, researcher will conduct the interview to the participant by face to face. As suggested by Creswell (2014), face to face interview will get the solid data which is researcher will know the participant's voice, faces reaction, the intonation and the movement. It is useful and help researcher a lot in order to complete the data collection.

Variables: In this study, the interactive module for slow learners in creative sewing programme can be improved from time to time depends on slow learners needed. The design cover and the layout can be change if those things not functional to attract slow learner's interest. Same goes to the content as well which is researcher can change any content if there is any part that failed to communicate with slow learners.

Power and sample size: Five slow learners are chosen as a sample for this interactive module for slow learners in creative sewing programme. They are a student in Raub Community College for creative sewing programme.

3.2 Measurement

This study is measured by using the semi structured interview from the feedback of five slow learners and creative sewing lecturer before and after using this Interactive module. The data will be collected from the interview session between the five slow learners, creative sewing lecturer and the researcher. The interview session will be recorded and the foam for the five slow learners that filled up by researcher for agree and disagree answer will be collected. For the lecturer side, they will be filled up the foam by themselves.

3.3 Data Analysis

Data analysis is a process of check out, restore, revamp, and create data with the intention of invent useful information, informing conclusions, and aiding decision making. Data analysis has multiple feature and approaches, enveloping varied techniques under a range of names, and is used in different business, science, and social science domains.

In this statistical analysis, researcher was separated the two different group of samples to get the best result. It consists of five slow learners and creative sewing lecturer. The statistical analysis can be seen as below.

3.3.1 Five Slow Learners

Based on pre-test scores, five slow learners were teaching with the traditional learning style like previous which is, lecturer need to brief and explain related to the topic for beginning of class without any figure or picture then they will be doing practical part which is lecturer will show step of making basic skirt and ask five slow learners to record the process by themselves. After that, five slow learners will use the sets of modules for basic skirt.

The pre-test and post-test results were compared as mean score of the five slow learners are synchronised or not. Perceptions about the sets of modules for slow learners in creative sewing programme were analyse using pie chart below.

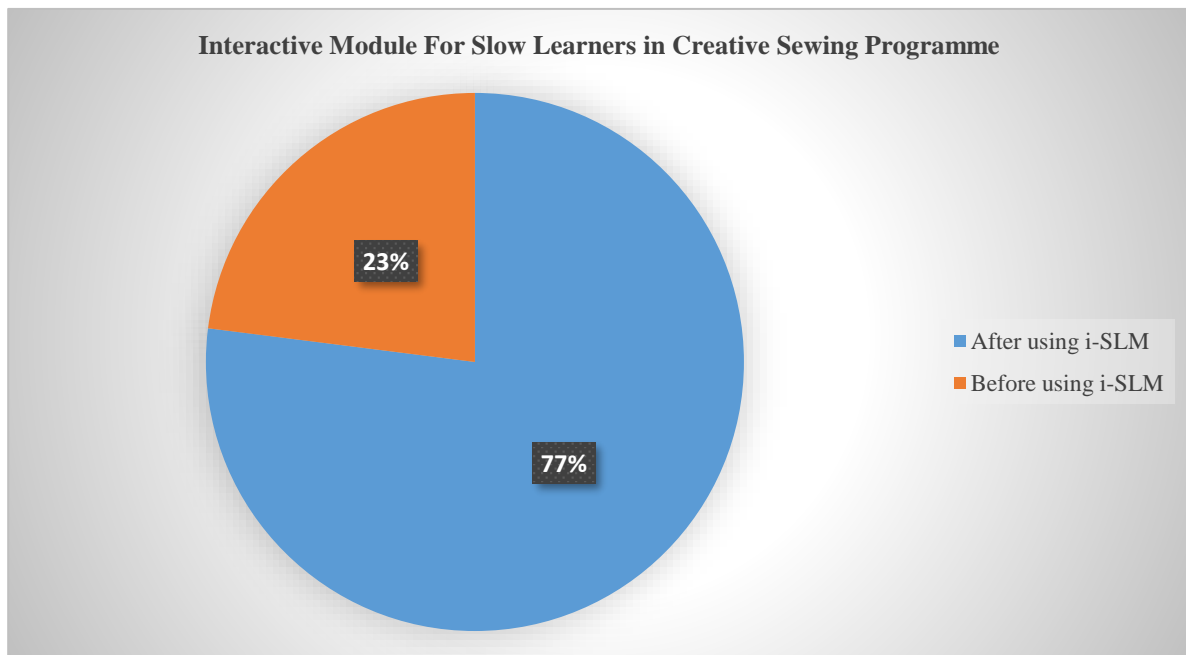


Figure 1: Change in Average Scores of Pre-test and Post-test of i-SLM for Creative Sewing Programme in Raub Community College

3.3.2 Creative Sewing Lecturer

Based on pre-test scores, lecturer identified that most of the student are lack of understanding by using traditional method. That is because lecturer just give an explanation without any reference photo or video. Furthermore, the traditional method is bored and cannot get engage and attract student interest towards the topic.

The pre-test and post-test results were showing the differences and improvement before using the sets of modules and after using i-SLM. Perceptions about the sets of modules for slow learners in creative sewing programme were analyse using the table below.

Table 1: Creative Sewing Lecturer’s Feedback Based on Close-Ended Questions

No.	Responses of lecturer towards slow learners	Agree	Disagree
1	Photo book helps slow learners to recognize tools and material	98%	2%
2	Interactive video is synchronized to photobook	95%	5%
3	Interactive video easier to understand and follow	100%	0%
4	Worksheet related with the task (Practical process)	95%	5%
5	Photobook related with the topic and easy to understand	100%	0%
6	Activity in worksheet interesting	97%	3%
7	The learning environment previously was fun	5%	95%
8	Teaching environment without sets of modules easy to understand	0%	100%

3.4 Validity and Reliability

Since reliability and validity are entrenched in positivism context then they should be refined for their use in a reasonable approach. Based on Nahid Golafshani, (2003) Reliability and validity are conceptualized as trustworthiness, rigor and quality in qualitative paradigm. Such reliability and validity as worn in quantitative research are contingent upon springboard to scrutinize what these two terms mean in the qualitative research description, triangulation as used in quantitative research to proof the reliability and validity can also highlight some ways to test or expand the validity and reliability of a qualitative study. Consequently, reliability, validity and triangulation, if they are admissible research concepts, especially from a qualitative point of view, have to be redefined in order to emulate the numerous ways of endowing veracity.

3.5 General Research Questions

Several research questions in general are given to both group of sampling. Different types of question are constructed by researcher. These questions are conducting by using verbal interview method. Researcher want to analyse the reaction for both group of sampling. The verbal interview session has been done before doing the pre-test post-test to get engage with some information that can help researcher built up the sets of modules.

Question for the lecturer is more to the teaching method and point of view based on their experience during lesson in class. Meantime, question for the five slow learners is related to their desired and perspective of this programme. Researcher are prepared the question for lecturer to answer the question by expressed the sharing of situation in class and the slow learners just need to give yes or no answer only. The table below shows the question asking by researcher to the lecturer and five slow learners.

Table 2: General Question for Lecturers

No.	Responses of Lecturers
1	What are the difficulties you face as a lecturer to handle the slow learners in class?
2	Normally, how you attract slow learners to get involves in lesson.
3	Are you enjoy teaching slow learners?
4	How you overcome the situation if the slow learners starting to get bored with the lesson?
5	Do you need any reference or teaching aids to help you conducting slow learners?
6	Can you share your teaching process and lesson flow in class?
7	What source you used to get any materials as a reference to handle slow learners?
8	What is your suggestion to improvise the teaching method for slow learners?

Table 3: General Question for Learners

No.	Responses of Slow Learners
1	Do you like sewing?
2	Do you know how to sew?
3	Are you enjoying learning session in class?
4	Do you like to watch video?
5	Are happy being in this programme?
6	Are you interested to sew a basic skirt?



3.6 Collection of Information

There are many ways to converge information in research. The method that is selected by the researcher depends on the research question that is being asked. Examples of information collection methods include surveys, interviews, tests, physiological assessments, observations, existing record reviews and biological samples.

As for this research, researcher is using semi-structured interview, observation and document analysis. Researcher construct the question for interview session based on needed for the slow learners and the lecturer. Researcher need to do an observation to measure based on the environment and situation in class. Researcher demand to do the document analysis as an evidence and prove to further strengthen the data collection.

3.7 Transformation of Data

Data transformation is one of the processes from the findings of raw information to a solid collection of data. Researcher were transforming the information and source from the semi structured interview with the lecturer and five slow learners into pie chart and table. It is because to exposition the data clearly and easier to understand. Researcher also transforming the record audio during interview session into the table above by simplifying with wording.

3.8 Interpretation of Data

Data interpretation is the process of investigating data through a number of pre -determined steps and will help some meaning to the data and be conferred at more relevant conclusions. This involves contagious the results of data analysis, make a conclusion about the relationships of studied, and using them to draw conclusions.

4. Results and Discussion

This research appraised the efficiency of the interactive module which stands for photobook and several worksheets sets as a teaching aid. It is an alternative to improve the understanding and to enhance the learning interest of the slow learners. They will have a new spirit in learning session with the new teaching environment by using something new and totally different. Indirectly, it will improve their motivation by using the new module and teaching aid which helps them to improve their understanding and they will be more focused on the lesson. As mentioned by Kim, Park and Coleman, (2017), “The portability and social acceptability will create an enjoyment and giving satisfaction to the slow learners in their learning environment by using the tablet, technology and applications”.

In addition, slow learners certainly need new module to guide them, help them and to make them delighted in the learning process. They need something to exhilarate their mind, boost their energy and increase their motivation to make them not to lose focus and always on track in order in making something especially related to skills which need a pleasing emotion in order to make sure the project is accomplished on time.



Besides that, these modules and teaching aids also can provide an exposure for the slow learners to explore about the use of video as a medium to help them understand and follow the learning over and over again without changing the method and presence of its delivery. This module leads to asynchronous and synchronous activity.

This study is led to build up a module and construct the teaching aids which it included the interactive video to compose slow learners to be interested in the making of basic skirt. They just need to scan the QR code prepared on a card like and their identity card and it will directly link them to the videos. The video will be shown in steps by steps on the process of making skirt starting from take the measurement until the end of the process. Slow learners just need to click the video by following the steps given. Other than that, in the teaching aid, tools are prepared for them such as fabric and material used for making a basic skirt. Then, learners will know what kind of fabric they will need to use to make a basic skirt. The patterns were provided as for their reference. It helps to ease them in making a new skirt on the later part. The activity book will have 10 different activities which will be given as worksheets will be prepared for the slow learners. It has colouring activities, doodling, find and match the material and cut and paste activities.

5. Conclusion

In conclusion, based on the discussion above, the use of interactive module such as video and novel types of learning tools may assist in reinforcing the slow learners learning and install the interest in slow learners of creative sewing program at Raub Community College, Pahang. Additionally, it will also strengthen their understanding towards the process of sewing a basic skirt and aids to improve their sewing techniques.

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LEXICAL INFERENCE STRATEGIES OF VIETNAMESE EFL STUDENTS

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Abstract: *This study examines the lexical inferencing strategies Vietnamese EFL students at high-proficiency (HP) and low-proficiency (LP) levels use when they attempt to guess the meaning of unknown words while reading an English text. The study also intends to find out if there is a difference between HP learners and LP learners in terms of the number of successful guesses that are made. A reading proficiency test was given to participants to classify them into two groups of HP and LP. Data consist of think-aloud protocols of 20 second-year English-majored students of Mekong University in Vinh Long City, Vietnam, who attempted to infer the meaning of unknown words in a written text. Results reveal that students used a variety of strategies for guessing unknown words, but not all students used all strategies for their lexical inferencing. The findings also indicate that both HP and LP learners made a small number of successful guesses in attempting to infer the meanings of the unknown words, and that HP learners made more correct lexical inferencing than their LP counterparts, but the difference is not considerable. This study can inspire teachers, textbook writers, and students to attend more to different strategies and lexical inference.*

Keywords: strategies, lexical inferencing, reading proficiency, unknown words, think-aloud.

1. Introduction

Reading is a process which contributes to success in learning a foreign language and good language learners are considered to be good readers (Bialystok, 1983). According to Paribakht and Wesche (1999), a good reader can guess the meanings of some unfamiliar words in a text, and there is a strong relationship between vocabulary knowledge and reading comprehension. Reading ability of second/ foreign language learners have been widely investigated and it has been found that they understand more and make more guesses if they participate actively in the reading process by applying strategies.

Vocabulary is one of the most difficult aspects of reading for second or foreign language learners. While reading, language learners may encounter unfamiliar words in context. Although a few unknown words may not block their general understanding of the text, their reading comprehension may be impaired when they are not acquainted with numerous or the most crucial ones in the text (Soria, 2001). Therefore, vocabulary knowledge is often viewed as a critical tool for second language learners because a limited vocabulary impedes successful communication (Alqahtani, 2015). A review of the literature confirms the primacy of vocabulary knowledge for successful second language reading, and the lack of that knowledge is the main and the largest obstacle for L2 readers to overcome (Alqahtani, 2015).



As evident from the definition, to generate inference, one has to rely on certain strategies. However, making use of lexical inferencing strategies for unknown words is still being neglected among teachers and students in Vietnam. Clearly, the role of lexical inferencing has not accurately been aware by EFL students, and the strategy of inferring word meaning from context seems to be ineffectively used by the students. In reality, no one really knows to what extent students use context in guessing the meaning of new words, so it will be useful to have a good understanding of what EFL readers actually do when they encounter new words in reading and do try to infer the meaning without dictionary support.

On the basis of the realistic problems in English reading classes at Mekong University and the theoretical and practical background of lexical inferencing, the study was conducted to investigate Vietnamese EFL students' use of strategies as they tried to make lexical inferencing in reading comprehension and to examine whether there is a difference between HP learners and LP learners in terms of the number of successful guesses that are made.

2. Literature Review

Over the past decades, researchers have spent considerable amount of time theorizing and exploring what successful language learners do and what strategies they employ in the process of acquiring a second language (Hu & Nassaji, 2014). Recently, there has been an increased research interest in the inferencing strategies of L2 learners and factors affecting the use and success of them (Nassaji, 2003, 2004; Nassaji & Hu, 2012; Paribakht & Wesche, 1999; Wesche & Paribakht, 2010). Research also indicated that lexical inferencing was widely used by L2 learners when dealing with unknown words in their reading (Paribakht & Wesche, 1999).

In studies conducted on lexical inferencing, there is another factor for learners' vocabulary learning success and that is learners' knowledge of using strategies in the most effective way (Nassaji, 2004; Wesche & Paribakht, 2010). It is believed that quantity of strategies alone is not enough to judge why good language learners succeed but there might be other characteristics which should be included such as being able to use them in right place (Hu & Nassaji, 2014). It is possible to shed more light on this area through using think-aloud protocols. Think-aloud protocols provide rich information about how learners solve problems, what difficulties they come across and also give some information about the contexts where they use to investigate lexical inferencing and the role it plays in reading comprehension success.

Having carried out a study with university-level French as second language (FSL) learners, Morrison (Morrison, 1996) examined the lexical inferencing procedures of the FSL learners. This examination supported Haastrup's (1991) observations and found that context was by far the most frequently used knowledge source by her participants, almost twice as frequent as the use of intralingual cues and more than twice as frequent as the use of interlingual cues.



Lee and Wolf (Lee & Wolf, 1997) investigated native speakers versus non-native speakers' behaviours in dealing with unknown words to address the question of whether L2 learners infer in a similar way and if native speakers pay attention to part of speech as non-native speakers do. Results of their study showed that beginner non-native students could only infer an average of two out of fifteen words. Native speakers did not achieve a perfect success rate either. Advanced L2 learners did not differ significantly from native speakers while beginner and intermediate students were significantly less successful.

Nassaji (Nassaji, 2003) used introspective and retrospective think-aloud protocols to examine the use of strategies and knowledge sources in L2 lexical inferencing and their relationship with inferential success with 21 intermediate ESL learners. With such a concern, Nassaji (Nassaji, 2004) examined the relationship between ESL students' depth of vocabulary knowledge, their lexical inference strategy use, and their success in generating lexical inference. In their mixed design, Hu and Nassaji (Hu & Nassaji, 2014) conducted a think-aloud protocol with 11 Chinese ESL learners to explore L2 learners' inferential strategies and the relationship with their success. Based on both qualitative and quantitative analysis, they concluded that there are a number of differences between successful and less successful inferencers. These differences were related to not only the degree to which the participants used certain strategies but also when and how to use them successfully.

A research by Riazi and Babaei (Riazi & Babaei, 2008) was conducted in which 15 Iranian EFL female students of three different levels of proficiency were asked to think aloud as they read a text, specifying the knowledge sources they used to guess the meaning of unknown words. Results revealed that though elementary students made the highest number of lexical inferences, the highest correct lexical inferencing belonged to advanced students. Overall lexical inference did not show any relationship with the students' reading performance.

In summary, previous research on L2 lexical inferencing revealed important insights about how learners behave while trying to infer the word meaning from context and the factors that might affect their use of strategies (Hu & Nassaji, 2014). However, there is inadequate evidence with regard to the difference between HP learners and LP learners in terms of the number of successful guesses that are made. Therefore, it is necessary to conduct more research in this area to compare these two groups. To fill in the existing gap, this study aimed to find out what strategies are used by Vietnamese EFL students in making lexical inferencing using think-aloud protocols, and to find out if there is a difference between HP learners and LP learners in terms of the number of successful guesses that are made.

3. Method

3.1 Participants

The participants of this study were chosen from among 20 second-year English-majored students at Mekong University in the Mekong Delta in Vietnam. These students were divided into 2 different groups of 10 HP and 10 LP students based on their Reading Proficiency Test scores from the beginning of the academic year. The English majors of Mekong University were generally supposed to be of rather low proficiency level. All the participants (4 males and 16 females) were in their second-year, taking ESP, aged from 19 to 21. They were from different backgrounds, so the level varies from student to student.



3.2 Research Instruments

3.2.1 Reading Proficiency Test

A reading test was designed to check students' reading comprehension performance. The test consists of four reading passages with 24 multiple-choice items from two parts used for the placement test in the textbook *Interactions 2 (Instructor's Manual- 3rd edition)*. The test was administered during a class period. Before learners took the test, they were notified of the general purpose of the study and were informed that their performance on the test would not affect their course outcome. The time allocated to the test was 30 minutes. The text was selected with the assumption that it was standardized and suitable with students' reading ability.

3.2.2 Inferencing Task

To know students' ability of lexical inferencing, an English text was presented to participants who were asked to read the text for comprehension and try to infer the meaning of the words they did not know and think aloud in L1 or L2 as they liked (and in fact, all the readers chose to think aloud in Vietnamese, their L1) as they attempted to infer the meaning of the unknown words.

The text selected for use in this study was the one developed by Haastrup (1991) in a study on lexical inferencing with Danish learners of English. The text "Health in the rich world and in the poor" contained 374 words, with 10 target words highlighted with its Flesch Readability Index calculated. The target words were all content words consisting of five nouns, three verbs, and two adjectives.

In order to make sure that the target words were unknown by the participants, the pilot study was conducted with 34 second-year students from English 07 at Can Tho In-Service University, assumed to have similar reading proficiency to the participants in the main study with respect to language proficiency and level of reading comprehension. Those words that were known by these learners were replaced with other target words.

3.2.3 A Think-Aloud Protocol

A think-aloud protocol in L1 or L2 was used to discover students' knowledge sources used in inferencing word meaning, as used by several other researchers. Although a think-aloud protocol only captures a fraction of the subject's thoughts (and moreover the thoughts expressed are further cognitatively reprocessed), it is not retrospective and thus can capture enough information from short-term memory to trace the use of strategies by the L2 readers and provide tentative answers to the research questions. In this procedure, students were asked to verbalize the content of their thoughts while attempting to infer the meaning of an unknown word from context.



3.3 Data Collection Procedure

The procedures of the research consist of 4 stages. At stage 1, second-year English-majored students from two classes at MKU were chosen to take a reading comprehension test. After that, students were introduced to the think-aloud method with practical exercises so that they became familiar with it. At the same time, the text was given for students of two experimental groups to infer the unknown words using the think-aloud method in the form of a questionnaire. This questionnaire was distributed to students from English 07 class at Can Tho In-Service University, who did not take part in the study to test the difficulty of 10 words in the text, in which students would tell which words they knew or did not know. The final stage is the real data collection stage for the research. Each student was given a text to deal with in about 15 minutes. As students encountered each underlined word in the text, they were encouraged to try to infer the meaning of the unknown word from the context and say what they had in mind. At that time, all think-aloud protocols were recorded as a basis for data analysis.

3.4 Data Analysis

With a descriptive orientation, a qualitative approach was used to describe what strategies students used in inferencing the meanings of unknown words when reading an English text. Some quantitative data on the reading proficiency level of the participants and think-aloud data were collected as well using the Statistical Package for the Social Sciences (SPSS) to process data.

The data were collected, classified and categorised for all broad areas of the research. To determine the degree to which learners were successful at inferencing, the researcher and an experienced teacher independently rated their responses to each of the unknown words using a 3-point scale (2 = successful, 1 = partially successful, 0 = unsuccessful). Successful inferencing was defined as responses that were semantically, syntactically, and contextually appropriate. A successful response could be a word representing an accurate semantic meaning of the target word (e.g., a synonym) or an appropriate definition of the word. Because it was possible to arrive at a completely accurate semantic meaning of a word and yet associate the word with a wrong syntactic category, for rating purposes, we classified responses that were semantically appropriate but syntactically deviant, or vice versa, as partially successful. In order not to underestimate learners' success, if the meaning or the definition they provided made sense in the context but when judged out of context was not the meaning of the word, we still considered the response partially successful. In cases where the response did not meet any of the above conditions, we considered it unsuccessful.

All think-aloud protocols were recoded; transcribed to enable further analysis, and subsequent analysis was based on these written transcripts. To determine the different types of strategies learners used, all the think-aloud protocols were initially transcribed verbatim before being carefully examined and coded twice, once by the researcher and then by a colleague. For coding categories, we consulted the literature on vocabulary learning and lexical inferencing strategies in some related studies, and the coding scheme adapted from (Nassaji, 2003) was the principal analysis tool employed in addressing the strategies used. Coding involved reading and rereading the protocols and identifying in an inductive manner the kind of inferencing strategies used. In addition to the audio taping, written field notes were also used to record the details of students' lexical inferencing.

4. Results and Discussion

4.1 Strategies Used in Inferencing

According to Nassaji (2003), strategies were defined as conscious cognitive or metacognitive activities that the learner used to gain control over or understand the problem without any explicit appeal to any knowledge sources as assistance. In his study, there were a total of 6 categories of strategies students used to make lexical inferences, and he clearly defined them in his research: repeating, verifying, analyzing, monitoring, self-inquiry, and analogy.

Table 1 presents the categories of strategies identified, along with definitions.

Table 1: Definitions of Strategies Students Used to Make Lexical Inferences

Strategies	Definition
Repeating	Repeating any portion of the text, including the word, the phrase, or the sentence in which the word has occurred.
Verifying	Examining the appropriateness of the inferred meaning by checking it against the wider context.
Self-inquiry	Asking oneself questions about the text, words, or the meaning already inferred.
Analysing	Attempting to figure out the meaning of the word by analysing it into various parts or components.
Monitoring	Showing a conscious awareness of the problem or the ease or difficulty of the task.
Analogy	Attempting to figure out the meaning of the word based on its sound or form similarity with other words.

The reliability of the coding was established by calculating an inter-coder agreement on a sample of 20% of the data, selected from every fifth participant, and coded by the researcher and a second coder, a colleague of the researcher. The inter-coder agreement for that 20% of the data was 90%. Table 2 describes the categories of strategies, along with examples from the transcripts.

Table 2: Transcript Examples of Strategies Students Used

Strategies	Examples
Repeating	"waver" is a noun, "waver"... "waver"... "our beliefs waver..." Maybe ... waver is wave or contagiousness of disease... epidemic diseases.
Verifying	"Now... waver"... "belief waver"... "After we came back... country" ... "But when we ourselves become ill, our beliefs"... we will be... can be taken care... waver... waver... take care... take care... "waver"... take care.
Self-inquiry	"Other diseases are due to hazards in the natural conditions in which we live." ... "hazards"... "Other diseases are due to hazards in the natural conditions in which we live." ... umm... "hazards"... "hazards"... Can "hazards" be an area?... "in the natural conditions... live."
Analysing	"In the rich world many diseases are caused by affluence"... I think... affluence... flu... flu... flu... flu... cold... no. "In... affluence"... affluence... flu is cold... affluence... affluence... can use a prefix... fluence... fluence... fluence... diseases of rich people can relate to heart... heart disease... I think it is the same... similar to heart disease.
Monitoring	"In the rich world many diseases are caused by... affluence"... by... "affluence"... in general... it means... the mental condition... (smile)... it is very difficult... (smile)... I'm not sure.
Analogy	"When assessing modern medicine"... I think... "assessing" means... "We often... infections"... "assessing" means... access... (smile)... because I see it in the curriculum of Information Technology.

The frequencies and percentages of strategies students used in inferring the meanings of unknown words are presented in Table 3.

Table 3: Students' Use of Strategies

Strategies	<i>n</i>	%
Word repeating	42	34.7
Section repeating	10	8.3
Analogy	9	7.4
Verifying	15	12.4
Monitoring	24	19.8
Self-inquiry	17	14.1
Analysing	4	3.3
Total	121	100

Of all the strategies, students used repeating (including word repeating and section repeating) most frequently, accounting for nearly half (43%) of the strategies used. Of the two types of repeating, students used word repeating much more frequently than section repeating (34.7% vs. 8.3%). Other strategies students used less frequently were monitoring (19.8%), self-inquiry (14.1%). Students used analogy much less frequently (7.4%) and analysing (3.3%) the least (see Table 3).

The findings also showed that not all students used all strategies. Actually, whereas 85% (17 learners) used word repeating, only 30% (6 learners) used section repeating, 35% (7 learners) used analogy, 45% (9 learners) used verifying, 60% (12 learners) used monitoring, 35% (7 learners) used self-inquiry, and 15% (3 learners) used analysis.

Figure 1 shows the frequency of strategies students used.

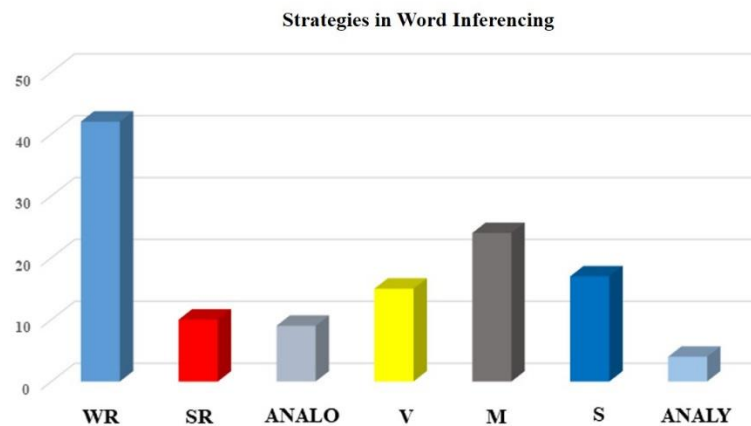


Figure 1: Frequency of Strategies Students Used

The strategies that learners used including repeating, verifying, monitoring, self-inquiry, analysing, and anology. Results showed that learners used repeating as the major strategy. The fact that they used this strategy very often is not surprising because repeating can aid both comprehension and reflection on the content. This finding is similar to the one in Nassaji (2003)'s research. He found that students used repeating (including word repeating and section repeating) most frequently, accounting for about two thirds (63.7%) of the strategies used, whereas analysing (5.5%) was found least frequently.

Among strategies, however, analysing and monitoring were related more to successful inferencing than other strategies. This finding seems to provide evidence for the important role of these metacognitive strategies in lexical inferencing. However, analysis showed that although some of the strategies were more related to successful inferencing than others, the overall contribution of these strategies was partial and limited. This suggests that success in inferencing may not depend just on the use of certain strategies but also on how effectively the use of strategies is combined and coordinated with the use of other sources of information in and outside the text. This finding is consistent with the previous studies (Nassaji, 2004; Wesche & Paribakht, 2010), showing that there is another factor for learners' vocabulary learning success and that is learners' knowledge of using strategies in the most effective way, and that quantity of strategies alone is not enough to judge why good language learners succeed but there might be other characteristics which should be included such as being able to use them in right place (Hu & Nassaji, 2014).

In the present study, for example, analogy can also be a helpful strategy and can sometimes be used as a means of retrieving the meaning of a word through associating it with other neighboring words. However, it may fail if there are pseudo-similar words in the text and if students fail to distinguish the word from those that are deceptively similar (Bensoussan & Laufer, 1984). In such cases, analogy may lead to process whereby the student takes a word for another similar-looking word.

4.2 Successful Guessing and Different Proficiency Levels

The data collected showed that there was a small number of successful inferencing both HP & LP learners made. They wrongly inferred the meanings of the new words from context most of the time.

As shown in Table 4, the HP group made the higher successful attempts with 8 correct guesses out of a total of 100 attempts (8%), whereas the LP group made only 3 correct guesses (3%). The result demonstrated a slight difference in making successful guesses between the two groups, and that HP students were more successful in making correct lexical inferences. The finding that HP students were more successful in making correct lexical inferences is in line with the findings of the study conducted by Lee and Wolf (1997). Based on the findings of Lee and Wolf (1997) who recruited both native speakers and elementary, intermediate and advanced non-native ones, beginning level students could only infer an average of two out of fifteen words. Advanced L2 learners did not differ significantly from native speakers while beginner and intermediate students were significantly less successful. Such a result can be justified in the light of Riazi and Babaei (2008)'s findings which indicated that advanced (more proficient) students were more successful in making correct lexical inferences. They found that though elementary students made the highest number of lexical inferences, the highest correct lexical inferencing belonged to advanced students, and that overall lexical inference did not show any relationship with the students' reading performance.

Table 4: Number and Percentage of Successful/ Partially Successful/ Unsuccessful Inferences for HP & LP Learners

Inferences	HP group		LP group	
	N	%	n	%
Successful	8	8	3	3
Partially Successful	13	13	11	11
Unsuccessful	79	79	86	86

To have the reliability of the result, SPSS (Statistics package for the Social Sciences) was used for data analysis. First, students' successful inferencing between two groups was analysed with *Descriptive Statistics Test*. Then the mean difference in students' successful inferencing between two groups was analysed using *Independent Samples T-Test*. The test was performed at the level of .05. Table 5 displays the result of these tests.

Table 5: Students' Successful Inferencing Between Two Groups

Groups	N	Min.	Max.	Mean (M)	MD	SD
HP	10	.00	.08	.29	.12	.26
LP	10	.00	.30	.17		.11

MD mean difference, SD standard deviation

Descriptive Statistics of Students' Successful Inferencing Between Two Groups

As shown in Table 5, the total mean score of students' successful inferencing in HP group was 0.29 ($M = 0.29$) and that of LP group was 0.17 ($M = 0.17$). The two means are too low, indicating that students' successful inferencing in two groups was not satisfactory. This finding is in line with the finding of the study conducted by Nassaji (2003) revealing that overall, the rate of success was low even when learners used the knowledge sources they had at their disposal. However, it is in

contrast with the one resulted from Morrison (1996)'s research, in which there was a clear and significant difference between the HP and LP groups with regard to the number of knowledge sources activated and the possible combinations.

Comparison of Students' Successful Inferencing Between Two Groups

Table 6: Difference in Inferential Success Between Two Groups

Group	T	Df	Sig. (2-tailed)	Mean Difference
HP-LP	1.332	12.441	.207	.1200

Table 6 shows the mean difference in students' successful inferencing between two groups ($MD = .12$, $t = 1.33$, $df = 12.44$, $p = .20$), indicating that students' successful inferencing between the HP & LP groups was not significant. This result matched the initial assumption that HP learners would be able to make a larger number of successful guesses than LP learners (see Table 4). However, the difference is not considerable. This finding is in line with the findings of the study conducted by Nassaji (Nassaji, 2004), showing that the lexical inference is significantly influenced by the richness of the learner's pre-existing semantic system. Obviously, this system develops cumulatively; therefore, such richness is brought about gradually as the learners' proficiency improves.

4.3 Correlation Between Strategies and Students' Inferential Success

Table 7: Types of Strategies and Inferential Success

Strategies	Inferential success							
	Successful		Partially successful		Unsuccessful		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Word repeating	4	9,5	4	9,5	34	81,0	42	100
Section repeating	0	0,0	1	10,0	9	90,0	10	100
Verifying	0	0,0	2	13,3	13	86,7	15	100
Analogy	0	0,0	1	11,1	8	88,9	9	100
Self-inquiry	0	0,0	2	11,8	15	88,2	17	100
Analysing	2	50,0	1	25,0	1	25,0	4	100
Monitoring	1	4,2	0	0,0	23	95,8	24	100
Total	7	9,1	11	11,5	103	79,4	121	100

Table 7 displays the percentages of successful inferences for the different types of strategies used. Among strategies, analysing was associated with the highest inferential success (50%), followed by word repeating (9.5%), and monitoring (4.2%). Section repeating, verifying, analogy, self-inquiry had no proportion of success (0%).

Pearson's Correlation Test was also conducted to consider the correlation between types of strategies and inferential success. The statistic test was performed at the level of .01.

Table 8 presents the result of the *Pearson's Correlation Test*.

Table 8: Correlation Between Types of Strategies and Students' Inferential Success

Correlation	N	R	Sig. (2-tailed)
Types of strategies-Inferential success	20	.196	.409

** *Correlation is significant at the 0.01 level (2-tailed).*

Statistical comparison of the mean scores of success and the mean frequency of these types of strategies revealed no statistically significant differences in the contribution of different strategies ($N = 20$, $r = .196$, $p = .409$). These findings indicate that success in inferencing did not depend significantly on what kind of strategy learners used. Further analysis of the data showed, however, that none of the strategies, even the most successful one, was 100% successful alone. This suggests that successful inferencing may be the result not of using one strategy over and above other strategies but of the extent to which various kinds of strategies converge and link.

Another point concerns the relationship of the success with the number versus the kind of strategies used. Out of the total number of strategies used ($n = 121$), about 85% (103) were associated with unsuccessful inferencing. However, out of the total number of strategies associated with unsuccessful inferencing (103), about one third (34) were word repeating, with fewer instances of the other more elaborative strategies. In the case of successful inferences, on the other hand, relatively more instances of analysing (2), and monitoring (1) can be seen. These findings suggest that success in inferencing may not be related as much to the quantity as to the quality of the strategies used. This result is different from that of Nassaji (2003)'s study. He found a statistically significant differences in the contribution of different strategies, and his findings indicate that success in inferencing depended significantly on what kind of strategies learners used. Nevertheless, this study also supports the conclusion in Nassaji (2003)'s research, which revealed that success was related more to the quality rather than the quantity of the strategies used. Actually, in this study, many times students used word repeating as their strategy for inferring the meanings of unknown words, but most of the time they were not successful.

5. Conclusion and Recommendation

The research showed that the strategies used by second-year English-majored students to infer the meanings of unknown words are varied, and quite flexible depending on the needs of the context. However, overall observations can be made. Among the strategies, word repeating had the highest frequency of strategies used. The data collected showed that not all the students used all the strategies, and that there was variation among students in terms of types of strategies used.

A correlation between types of strategies and students' inferential success was investigated. There was a negative correlation between the two variables. That means students' use of strategies was not associated with better guessing.



With respect to the results about inferential success, the present study showed a difference in successful guesses between HP and LP learners. In general, the number of successful guesses was small for both HP and LP groups. However, if compared between the two groups, HP group had higher inferential success although the statistical comparison conducted showed a rather little difference.

The results of this research offered some insight into the process of inferencing vocabulary meaning during reading and guidance for teaching vocabulary through reading. There are some implications for EFL teachers. When assigning reading materials to students, teachers should avoid both providing the learners with the meaning of all new words and encouraging dictionary use all the time, though the importance of dictionary use cannot be denied. Instead, teachers should familiarise students with strategies in lexical inferencing and have them practice doing so in the classroom. However, students should not be pushed to rely too much on context to learn the meanings of new words. Teachers should devote part of the class time to identifying, defining, and explaining the new words to the students.

This research is of very important significance. It enables teachers to discover students' processing skills as they perform an assigned task, and to evaluate pedagogical values of the think-aloud method as a research method about students' language perception process. Furthermore, if the strategies used in lexical inferencing contribute to inferential success, this will be an important implication in vocabulary teaching.

Based on the results and the discussions of this study, directions for further research could be suggested. Further research should re-test whether HP learners make more correct guesses than LP learners because from independent samples t-test, students' successful inferencing between the HP and LP groups was not significant. Therefore, a research to re-test this result should be conducted with a larger population.

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REASONS FOR ACCOUNTING DISCLOSURE IN MALAYSIAN LOCAL AUTHORITIES

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Abstract: This paper attempts to explore the reasons for financial disclosure in selected Malaysian local authorities. Employing semi-structured interviews, data were collected from 33 members in five case study organisations and interpreted from the perspective of institutional isomorphism concept. The analysis of data suggests that coercive isomorphism from the federal and state government is perceived to be the influential institutional factor placing intense pressures on Malaysian Local Authorities (MLAs) to disclose financial disclosure. The study contributes to a greater understanding of disclosure practices especially for emerging economies like Malaysia. This study offers guidance to the regulators and legislators by outlining significant organizational and institutional influences on disclosure decision as they may wish to take cognisance of these factors in developing external rules and regulations concerning financial disclosure in MLAs.

Keywords: Malaysia, Financial disclosure, Isomorphism, Case-study, Local authorities.

1. Introduction

This study investigates the reasons for financial disclosure among Malaysian local authorities (MLAs). Financial disclosure refers to “any deliberate release of financial information, whether numerical or qualitative, required or voluntary, or via formal or informal channels” (Gibbins et al., 1990, p. 122). There has been growing interest, especially in the accounting profession and in part of the academe, regarding the need for disclosure of financial information by the public sector. Within the public sector, the search for the appropriate financial disclosure model has given rise to some questions, among others with regards to the incentives for making disclosure, the parties which utilise the financial information, the scope of information required and why. Many incentives have been identified for the accounting choice. However, the findings on the incentives for disclosure are difficult to compare given that the methods of accounting disclosure adopted in previous studies differed from each other. Further, the research outcome on public sector financial disclosure did not make clear who makes particular disclosure decisions, what are the range of issues considered when making these decisions, the influence of various actors in disclosure practices, as well as the reasons for disclosing financial information (Gibbins et al, 1990; 1992). Previous research mostly focused on the influence of socio-economic, political, and economic incentives (Perez, Bolivar and Hernandez, 2008; Felix, 2014; Cuny, 2016; Beck, 2018) and institutions (e.g., Carpenter and Feroz, 2001) on disclosure, but did not go a step further to analyse how these factors influence the day to day decision-making on disclosure. Furthermore, most studies on disclosure have tended to focus on the private sector (Laswad, Fisher & Oyelere, 2005) in developed countries. The few studies which focused on local government in the developing countries of South East Asia did not examine this important issue (Arifin, Tower and Poeter, 2012; Tayib, Coombs & Ameen., 1999; Tooley, Hooks and Basnan, 2010b). This study was undertaken



within the context of Malaysia, a rapidly emerging economy, and specifically on local authorities. Focus on public sector financial disclosure in Malaysia is thus timely because this sector has been criticised as inefficient, unaccountable and corrupt (Siddiquee, 2010; Tooley et al., 2010a, b; The Star, 2020). But at the same time, the country has embraced new public management (NPM) reforms (Hood, 1995) which implies adoption of private sector-like practices in the public sector (Abdul Khalid, 2008).

The case study research method (Yin, 2009) employed in this paper provides important insights into the complex and multi-dimensional phenomenon of disclosure. This approach is deemed to be appropriate considering the dearth of disclosure studies employing it. The study should be of interest to policy makers who wish to enhance accountability to their citizens. The paper is structured into seven sections as follows. The following section describes the disclosure context of MLAs, Section 3 discusses the literature review, Section 4 outlines the theoretical framework and Section 5 describes the methods. Section 6 describes the findings with Section 7 concludes the paper.

2. Disclosure Context of Malaysian Local Authorities

This research study was conducted with its subjects being five local government bodies in Malaysia. They comprised one city councils, three municipal councils, and one district councils. The city councils and municipal councils have great growth potential due to their well-developed financial systems and fast-growing information technology sectors (Setapa, 2003). The Malaysian local government represents the third tier of government and is the “*government closest to the people*” (Phang, 2008). Local government provides urban services using financial assistance or grants from the state and federal governments (Kuppusamy, 2008). MLAs are also subjected to the authority of a host of other entities, namely regulators, policy-makers, and other regulatory bodies at both state and federal levels of government (Othman, Taylor, Sulaiman & Jusoff, 2008). State and federal governments are particularly interested in the performance of MLAs because the inefficiencies and poor performance of MLAs may reflect on them and in turn negatively affect their popularity amongst the people (Tooley et al., 2010b).

The government provides a number of avenues for members of the public to obtain information as well as to furnish input pertaining to the quality of services delivered by the MLAs. Section 23 of the Local Government Act 1976 (—Act 171) provides that the proceedings of local authorities must be made open to the public and media representatives. Section 27 of the same Act permits taxpayers to have access to and to scrutinise the MLAs’ minutes of meeting. Meanwhile, by virtue of Section 60(4) of Act 171, audited financial accounts of MLAs are required to be published in the Government Gazette, whilst Section 142 stipulates that “*citizens who are dissatisfied with the authorities’ performance have a right to make objections in writing and are allowed an opportunity of being heard at the consequent enquiry*”.



With respect to the financial reporting in MLAs, there are no specific financial reporting requirements, either statutory or non-statutory, currently imposed on Malaysian Local Authorities in preparing their annual financial accounts (Coombs & Tayib, 1999; Tooley et al., 2010b)¹. Although Sections 53 and 54 of the Local Government Act 1976 make it mandatory for MLAs to maintain proper accounts and to do up their annual financial reports, it does not dictate the required form and content of the report. Instead, the respective state authorities are left to determine the form and content of their own financial reporting. Thus, the financial disclosure practises of MLAs have essentially been voluntary in nature, rather than compelled by the legal force of statute. (Coombs & Tayib, 1999). Without a set of accounting standards to follow, local authorities have the flexibility and freedom to decide on the treatment of accounting items as well as on how they are presented and disclosed in the financial reports. This discretion has been characterised by the marked differences in terms of the substance and layout of the financial accounts prepared annually by the many local authorities in Malaysia (Tayib et al., 1999). Tayib et al. (1999) recommended that specific financial disclosure requirements or standards be tailored to the appropriate public sector body. In particular, MLAs should meet the needs and interests of stakeholders. Although this suggestion was put forward more than a decade ago, so far no announcement pertaining to this issue has been made by the state authorities (Tooley et al., 2010b).

In the absence of specific statutory guidance in Malaysia, a number of local authorities have, in drawing up their financial reports and accounts, relied on the Federal Treasury Circular (FTC) No. 15, 1994 (superseded by FTC No. 4, 2007) – Guidance for Preparing and Presenting Annual Reports and Financial Statements for Federal Statutory Bodies (Coombs & Tayib, 1999). Furthermore, Tayib et al. (1999) revealed that typically, the MLAs would draw up some but not all of the financial statements required in the FTC. According to Coombs and Tayib (1999), there are two major factors which hindered the development of local authority financial reporting in Malaysia. These two factors are weak financial disclosure regulations (amplified by the lack of qualified accountants employed in the MLAs) and the lack of involvement of relevant professional bodies. Despite their backgrounds as public sector accountants, the members of the Malaysian Institute of Public Sector Accounting (IPSAM) have not shown the initiative to develop accounting and reporting standards (Coombs & Tayib, 1999). It is therefore not surprising that the annual financial accounts of Malaysian local authorities have differed widely in both content and format (Tayib et al., 1999). This has motivated us to investigate the disclosure practices among the MLAs at a closer level.

¹ Unlike the practises in well-developed countries (for example, in UK, CIPFA has developed and implemented The Codes of Practice on Local Authorities Accounting in United Kingdom: A statement of Recommended Practice - guidance notes for practitioners; in Australia, AAS 27 Financial Reporting by Local Government (1991) which specific rules and regulations to govern the published accounts of local authorities)

The reasons why Malaysia is selected as the country of the study are interesting. Firstly, some taxpayers and the state governments have recently begun to make known their disappointment with the unsatisfactory level of service delivered by their local authorities and are consequently demanding more accountability. Furthermore, a range of stakeholders have started to question the transparency and integrity of local public servants in delivering services (The Star, January 15, 2020; Siddiquee, 2010). The choice of MLAs is also notable for a number of other reasons. As revealed by Tayib et al. (1999), easy access to annual financial accounts is limited to councillors, auditors, the State Authority, and the Ministry of Housing and Local Government (MHLG). Secondly, members of the public are unaware of the existence of financial information (Tayib et al., 1999). Thirdly, there are no specific legal provisions compelling MLAs to prepare annual financial accounts (Coombs & Tayib, 1999; Tooley et al., 2010b). The absence of accounting standards and regulations has given local authorities much leeway to decide on the treatment of accounting items and how the financial reports are to be prepared and presented (Coombs & Tayib, 1999).

3. Literature Review

Public sector financial disclosure studies can be categorised into two broad themes. The first consists of those which have been concerned to identify the use and users of government financial reports (e.g., Steccolini, 2004; Tooley et al., 2010b). The second consists of those which have sought to identify the contextual factors that inform financial disclosure decisions (e.g., Laswad et al., 2005; Serrano-Cenca et al., 2016, Garcia and Garcia-Garcia, 2010; Styles and Tennyson, 2007).

The first type of studies has failed to reach a consensus as to the information needs of the users of financial statements (Steccolini, 2004). Tayib et al. (1999), for example, found that though taxpayers in Malaysia wanted information on the income and expenditure of their municipalities, the information provided by MLAs could not meet their needs. Some studies have found that though most local governments in many countries disclose financial information, citizens have difficulty in accessing it and even then, the number of citizens using it is likely to be small (Brusca and Montesinos, 2006; Marcuccio and Steccolini, 2009). This situation has been attributed to lack of awareness of availability of financial disclosure practices disclosures (Tayib et al., 1999) and their complexity (Stanley et al., 2008) with Brusca and Montesinos (2006) calling for a “popular” form of financial reporting to enhance citizen use.

The second type of studies have focussed on understanding the contextual factors that explain financial disclosure. A number of these studies have been concerned with the relationship between size and financial disclosure. For example, Serrano-Cenca et al. (2016), Garcia and Garcia-Garcia (2010) and Styles and Tennyson (2007) found a significant and positive relationship between size, and voluntary online disclosure of financial data. Styles and Tennyson (2007) also found that size of the municipality was significantly related with the accessibility of financial information to residents. These findings were in line with earlier research findings by Allen and Sanders (1994). The above studies do not, however, delve into how user needs are implicated in the disclosure processes within the municipalities.

Contextual factor studies have also sought to understand the influence of leverage on financial disclosure. Laswad et al. (2005) and Perez et al. (2008) found a significant relationship between the cost of debt and online financial disclosure among New Zealand and Spanish local authorities, respectively. Robbins and Austin (1986) found a significant relationship between leverage and indexes of quality of financial disclosure, while Styles and Tennyson (2007) found the level of debt to be related to accessibility of financial information to residents of municipalities in the USA.

The wealth of the local authority, be it that of the authority or the citizens, has also concerned researchers with suggestions that wealthier local authorities will experience higher levels of financial disclosure. Laswad et al. (2005) found that the wealth of the local authority is associated with disclosure practices in local authorities in New Zealand. Styles and Tennyson (2007) found a significant relationship between financial position and accessibility of financial information to residents.

Further contextual studies have been concerned to test the hypothesis that the type or form of the local authority has an influence on financial disclosure. Laswad et al. (2005) found that the type of local authority was associated with disclosure practices in local authorities in New Zealand. Robbins and Austin (1986) found that irrespective of the index used, city council form was significantly associated with indexes of disclosure quality.

The influence of politics, specifically political will and political competition on financial disclosure, has also not escaped the attention of researchers. Serrano-Cenca et al. (2016) found that political will affects e-disclosure among Spanish local governments. Garcia and Garcia-Garcia (2010) and Gandia and Archidona (2008) found a significant relation between political competition and voluntary disclosure of budgetary and other financial information.

Researchers have also sought to study the influence of the press on financial disclosure among local authorities. Laswad et al. (2005) found that visibility to the press is associated with disclosure practices in local authorities in New Zealand. Perez et al. (2008) found a significant relation between internet and public media visibility on voluntary disclosure of budgetary and financial information. These findings are also consistent with those of Garcia and Garcia-Garcia (2010).

Context studies have also been concerned to identify the specific characteristics of residents of municipalities and how these affects financial disclosure. These characteristics include income per capita, level of education and internet access. Both Serrano-Cenca et al. (2016) and Styles and Tennyson (2007) found that citizens' income level affects e-disclosure among Spanish and US local governments, respectively. Styles and Tennyson (2007) also found a positive and significant relationship between higher income per capita and both financial disclosure and accessibility of financial information to residents. Perez et al. (2008) demonstrated a significant relationship between internet access and transparency of financial information provided over the web. Gandia and Archidona (2008) revealed a significant relationship between internet access and education level of the inhabitants, with voluntary disclosure of budgetary information.



The other contextual factors which have been studied and found to be significantly related to financial disclosure in local authorities include revenue transfers (Robbins and Austin, 1986), external validation (Styles and Tennyson, 2007) and capital investment (Garcia and Garcia-Garcia, 2010). In addition, Allen and Sanders (1994) showed that government size, and reporting requirements externally imposed by a higher level of government influenced the quality of disclosure as measured by a disclosure index. Allen and Sanders (1994) also found two internal factors, namely, professional involvement of CFOs, and participation in the Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting (COA) programme, to influence this index. A regression analysis of the composite of these factors, however, found that it is only professional interest on the part of the CFO and participation in the COA programme which had a significant effect on disclosure. Though Allen and Sanders (1994) opined that “these factors provide an administrative context within which financial disclosure decisions are made” (p. 181), there is a need to illuminate how these decisions are made in practice.

In the context of Malaysia, Ghani and Said (2010) revealed that performance and social obligation influence digital financial disclosure practices among MLAs. The study also found that disclosure was hampered by lack of expertise, technology and enforcement. The study focussed on the digital mode of disclosure, while our study focusses on the gamut of mechanisms through which disclosure is undertaken. This brief and certainly limited review reveals that studies on public sector financial disclosure employ a proxy – the annual report or website – and to a lesser extent, questionnaire responses, to make inferences regarding decisions over financial disclosure.

4. Institutional Isomorphism Mechanism on Accounting Rule Choice

The institutional theory has been used to provide a more flexible approach in interpreting the findings of this study. Given that this study is based on the local government setting, which is subject to many institutional influences, it is beneficial to adopt the institutional theory to rationalise the financial disclosure practices in MLAs. Generally, the central notion behind the institutional theory is that an organisation would have to accept and follow the convention of socially acceptable behaviours in order to survive and gain legitimacy (Meyer and Rowan, 1977; Dimaggio and Powell, 1983; Scott 2008; Brignall and Modell, 2000). Institutional theory assumes that formal organisation structure, policies, and procedures are shaped by the social environments and “...serve to demonstrate conformity with institutionalised rules, thereby legitimising it, to assist in gaining society’s continued support” (Covaleski and Dirsmith, 1988, p.563). In respect of the public sector, Carpenter and Feroz (2001) stated that “...institutional theory suggests that an organisation’s tendency toward conformity with predominant norms, traditions and social influences in their internal and external environments will lead to homogeneity among organisations in their structures and practices, and that successful governments are those that gain support and legitimacy by conforming to social pressures...” (p.569).



Dimaggio and Powell (1983) identified three mechanisms that pressure organisations towards institutional isomorphism namely coercive, mimetic, and normative respectively. However, as noted by Dimaggio and Powell (1983) and Carpenter and Feroz (2001), it is sometimes difficult and not always possible to differentiate the three mechanisms of institutional pressures from one another. The three mechanisms of institutional force may be operating concurrently, making it difficult to ascertain which of them is playing a dominant role in influencing the institutionalisation of a norm or practice. Despite the difficulties in differentiating these three institutional isomorphisms, the general idea behind institutional isomorphism is to promote and encourage homogenisation of an organisation and to strive for its legitimacy. Although these three mechanisms may function in different ways, it is imperative to understand each of them individually in order to fully appreciate the influence each of them has on the process of decision-making.

Several past studies were conducted to investigate the influence of institutional isomorphism mechanism on accounting rule choice. Pilcher (2011) studied the effects of local governments adherence to IFRS in Australia within the New Public Management (NPM) and institutional theory framework and found the existence of coercive isomorphism with regards to local government 's compliance with IFRS, and that the councils are succumbing to the coercive pressure exerted by the legislative bodies. Carpenter and Feroz (2001) used the institutional isomorphism mechanisms to identify factors that potentially influenced four state governments in the United States ("the U.S.") to either accept or reject the application of generally accepted accounting principles (GAAP) for external financial reporting. Their study identified three factors which potentially caused the initial resistance to use GAAP for financial external reporting. These factors were: (1) the passive role of accounting bureaucrats within the professional groups that call for the adoption of GAAP (normative); (2) issues related to organisational printing (mimetic), and finally, (3) powerful interest (coercive). However, regardless of the different strategies adopted by each state to resist the adoption of GAAP, this study claimed that all these strategies were unsuccessful due to the force of the institutional pressures coming from the professional accounting and governmental institutional fields.

Baker and Rennie (2006) used the concept of isomorphism to examine the elements which could potentially influence the federal government 's decision to implement full accrual accounting in Canada. The findings of their study indicated that the said decision could be due to coercive and normative pressures exerted by the Office of the Auditor General of Canada and supported by the normative influence of the Canadian Institute of Chartered Accountants' Public Sector Accounting Board. This study also highlights similar findings by Carpenter and Feroz (2001) with regards to how government regulatory agencies and professional accounting bodies play a part in government organisations' accounting practices.



Ryan and Purchell (2004) applied institutional theory to understand the factors that motivated the local government to prepare their annual reports in such a way which discloses corporate governance information in Australia. This study found that both coercive and mimetic pressures were present, influencing the local government's decision on the manner and scope of their corporate governance disclosure. Most recently, Nukpezah and Abutabenjeh (2018) examine how coercive, mimetic and normative pressures from the state, other local governments and government agencies affect cash management practices among counties in Mississippi. They found that institutional isomorphism drives cash management practices in the counties by influencing how they follow state and agency mandates. Moreover, while urban counties have superior socio-economic indicators compared to their rural counterparts, no differences exist regarding standardized financial indicators, which suggest that local governments in the state may be imitating the practices of one another.

5. Research Methods

The data were collected from five MLAs case study organisations using 33 interviews. The case studies consisted of one city council, two municipal councils and two district councils. The five field sites were selected purposefully in order to obtain a mix of local governments of different characteristics in terms of size and organisational form. This mix of local authorities with different sizes were chosen because prior literature (e.g., Allen and Sanders, 1994) posits that size influences disclosure practices. The study employed the explanatory case study method. This approach enabled the researchers to understand the subjects' own description of social reality and the meanings that inform their actions (see Yin, 2009). Scapens (2004) argued that the explanatory case study is normally used when the researcher is attempting to explain observed accounting practices. The interview questions were semi-structured and designed to allow the participants to interpret and describe the phenomena in their own way (Holland and Stoner, 1996). The interviewees worked at different levels, held different positions and were from a variety of backgrounds, but more fundamentally were chosen through a snowballing technique. Views of people with different work backgrounds and experiences enabled the researchers to obtain broader and diverging perspectives on the same topic or issue. The interview data were supplemented with internal documents and published sources, including annual reports, monthly management reports, legislative documents, financial reports, newspaper reports and MLAs' website reports. The audio interviews, interview transcripts, field notes and other documents were then coded using NVivo software. The interview data were read several times to gain familiarity with the information. The data were open coded and then systematically analysed and coded. The concept of isomorphism was examined under the institutional theory lens and used to explain the influences on the disclosure practices in MLAs. The interpretation was, however, open enough to enable a new and deeper understanding of the events observed during the research. The study remained open to possible alternative explanations of issues uncovered and thus hoped to advance theory (Dyer & Wilkins, 1991).

6. Research Findings

The interview evidence revealed that the most frequently cited reason for disclosure is to comply with the legal requirements as laid down in the Local Government Act 1976 (Act 171). The MLAs are particularly sensitive to the coercive influence that comes from statutory requirements. In Malaysia, there are three main pieces of legislation passed and enforced to control and regulate the operations of MLAs in Peninsular Malaysia, namely the Local Government Act 1976 (Act 171), the Street, Drainage and Building Act 1974 (Act 133), and the Town and Country Planning Act 1976 (Act 172). Evidence from the interviews showed that out of the three, Act 171 is the most significant piece of legislation in terms of accounting requirements as it sets out the general financial provisions of MLAs as well as imposes the requirement for MLAs to maintain proper accounting records:

“... We are obliged under Section 53 of Local Government Act 1976 to prepare the annual financial statements. It’s a must. It is important for us to follow whatever required by this regulation. In addition, the Act requires the financial statements to be inspected by any councillor at any particular time or period. The Act also requires the financial statements to be audited by the AG or other auditor appointed by the state authority based on the AG’s recommendation...” (Treasury Director of Beta).

In addition, Section 55 (5) imposes the requirement for the MLAs to forward their respective budgets to the state authority for approval:

“.... We in local council are operating under several Acts. Therefore, it is important for us to follow all these legislations and regulations... We forward our budget to the state authority for approval as required by Act 171 under Section 55 (5) ...According to the Act, we can only spend the money after our budget is approved by the state authority...” (Finance Director of Alpha).

Therefore, conformity with the social norms as prescribed in the regulations can be interpreted as coercive pressure on the disclosure practices in MLAs.

Coercive pressure can also be seen to come from the state authorities. Under List II of the Ninth Schedule of the Federal Constitution, local government has been categorised as a state matter, except for those in the Federal Territories of Kuala Lumpur, Putrajaya, and Labuan. Hence, the state government by virtue of its powers could exert their influence and enforce the implementation of policies in MLAs which fall under its jurisdiction. In this respect, the MLAs can be subjected to close scrutiny by the state government. Further, the daily financial transactions carried out by local authorities who provide local services should be regulated by the state authority in which they operate. It was highlighted by the interviewees that they are required by Act 171 to disclose their financial information to the state authority on a monthly basis. In addition, the state government is responsible to appoint auditor based on recommendation of the Auditor General to audit the financial statements of MLAs.

This can be linked to the second most mentioned reason for financial disclosure which is for auditing purposes. Section 60 (1) of the Local Government Act 1976 states: “The Auditor General or other auditor appointed by the State Authority on the recommendation of the Auditor General shall, throughout the financial year, inspect and examine the accounts of the local authority, and the local authority shall, by the Treasurer or other officer authorized by the local authority, produce and lay before the auditor all books and accounts of the local authority together with all vouchers, papers, contracts and documents relating thereto”. With this in mind the Treasury Director of Gamma commented that the council’s financial accounts are audited by the private auditor on behalf of AG as required by Act 171. She added that it is a normal practice for the AG to send a team to the councils having problems with their financial statements and conduct further auditing and suggest recommendations for improvement:

“...As required by Act 171, we are audited by the private auditor appointed by the state authority on behalf of AG. The private auditor sends reports to AG once audit completed. Therefore, we disclose financial information to the Auditor General (AG) for the auditing purposes. Besides, the AG also interested to know the performance and the financial management of the local council. If they found out something wrong, they will come and make a query. This is true for the councils which received qualified or adverse report. The AG normally sends a team to investigate the financial statements of council which seems to be problematic. They will perform another audit and, in the end, they give recommendations for the improvement ...” (Treasury Director of Gamma).

The third most mentioned reason for financial disclosure is that of monitoring and decision-making. Evidence gathered from the interviews suggest that the disclosures made in the monthly reports are used for decision-making and also to determine which councils are financially sustainable and which ones are not. The purpose of making financial disclosure to the state authority is to keep the state authority informed as to the financial position of the MLAs. With this pertinent information, the state authority will be able to identify which council(s) is/are in good financial position and which ones are struggling to keep afloat. The state authority may then take the necessary steps to help those councils which are facing financial difficulties:

“...The purpose of the disclosure is to keep the state authority informed of our financial performance and position. Once we disclose financial information to them, they will do the analysis and comparison. The purpose of the analysis is to know the financial position and performance of local councils. So, once they know our financial position and performance, it makes it easy for them to monitor us. They will be able to know which local councils perform better and which local councils need help. They will be able to know which local councils perform better in the collection and which local councils are struggling with it.” (Treasury Director of Omega).

Thus, as revealed by the interviewees, the disclosures made by the MLAs are linked to the possible receipt of financial assistance, the fourth most mentioned reason for disclosure. Given the persistent deficit in some of the local councils in Malaysia, the interviewees stated that grants and contributions given by both the state and federal governments seem to be inevitable sources of funding. However, unlike federal to state grants which are constitutionally determined, both federal to local government and state to local government grants are not and the flow is not guaranteed and largely depends on discretion. For instance, the Treasury Director of Gamma explained that the council discloses the financial information to the federal and state governments so that they are able to know the financial position and financial performance of each council. This information is used to determine which councils need financial help:

“... We received grant from both Federal and State Governments. In order to give us the grant, there are certain requirements. The Federal requirements may be different from State requirements. We normally apply for both grants from Federal and State Governments. Therefore, we disclose the financial information to them (Federal and State) so that they are able to know our financial position and performance. The financial information helps them to make decision on how much the grant should be given to each council or on the decision whether or not council should be given a grant...” (Treasury Director of Gamma).

Similarly, the Finance Director of Alpha explained that the council discloses the financial information to the state authority so that it knows about the financial position and performance of the council and how much assistance is needed:

“... State government is like our parents. Disclosure of financial information to the state authority means we want them to know our financial position and performance and we want them to know which councils are having financial difficulties. If we are having financial difficulties, we normally request a grant or other form of financial assistances from the State Government. If we want to request the grant, for example, development grant, they will consider our financial position and performance. If the financial position of the council is strong, normally no grant will be granted. If we have the financial difficulties, normally State Government will help us. That is why disclosure of the financial information to state authority is crucial ...” (Finance Director of Alpha).

Thus, this form of financial dependency can be considered as a formal coercive pressure. This finding is in line with the contention put forth by DiMaggio and Powell (1983) and Carpenter and Feroz (2001) that it is more probable for coercive isomorphism to surface when there is lack of financial independence.

7. Conclusion

In this study, the concept of isomorphism was examined in the context of the institutional theory which is used to explain the reasons accounting disclosure in MLAs. The findings indicate that there is existence of coercive isomorphism in the reasons for MLAs' accounting disclosure. The isomorphism comes from coercive rules (regulations and legislations, and the pressure from federal and state authority). In relation to coercive isomorphism, the findings suggest that the MLAs are particularly susceptible to the coercive influence that comes from regulations and legislations. Among the various legislations passed to regulate MLAs, the Local Government Act 1976 (Act 171) is the most important piece of legislation for accounting purposes as it contains prescriptions pertaining to MLAs' duties on making financial disclosures and keeping proper accounting records. In addition, MLAs have been included under List II of the Ninth Schedule of the Federal Constitution as a state matter, except for those under the Federal Territories of Kuala Lumpur, Putrajaya and Labuan. Hence, the state has the jurisdiction to oversee the implementation of policies in MLAs which fall under its purview. Being one of the government units, MLAs serve as one form of institutionalised environment in which their survival is dependent on both federal and state governments' assistance. Therefore, MLAs need to abide by the laws enforced by the government. Adherence to the government aspiration is seen as a means of protecting the organisational legitimacy as an effort to continually gain financial support from the government. MLAs in Malaysia primarily receive financial support from the government. Therefore, to continually obtain the financial support, their activities must be harmonious with the aspiration of the government. This type of financial dependency is viewed as a formal coercive pressure. The weakness of this study is that being a case study, the results cannot be generalised to local authorities in different contexts. This notwithstanding, the study demonstrates that case study-based research can contribute useful insights into the complex and multi-dimensional phenomenon of financial disclosure. This study enhances our understanding of the disclosure management and practices in MLAs. The findings of this study have contributed to the existing literature by providing greater understanding of the financial disclosure processes in the public sector. Specifically, the Malaysian context reveals there is an existence of coercive, normative and mimetic isomorphism in MLAs disclosure practice. The isomorphism comes from regulations and legislations and the pressure from state authority.

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STUDY OF NEUROMARKETING IN CONSUMER BEHAVIOR DUE TO PRODUCT LOGOS COLOR CHANGES EFFECT

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Abstract: *Consumer behavior can be detected by conducting surveys, but this method lacks depth of analysis to measure consumer behavior. By utilizing technological and scientific advances through the study of neuroscience, especially in neuromarketing. Neuromarketing has been widely used to measure consumer behavior through several stimuli, one with logo colors. Neuromarketing to the human brain's response is done using electroencephalography (EEG) signal analysis. Data collection was carried out on six subjects of Telkom University students aged 19-24 years. Subjects were given a stimulus of five original logo colors and five logo colors that had been recolored with the number of questions three sessions. Pre-processing uses a butterworth horde 4 bandpass filter with a theta-band frequency band in the frequency range of 4-8 Hz. Processing data on color changes using questionnaires and EEG signal data is processed on spatial domains and spectral domains to view active areas of short-term memory. The result obtained is that the effect of the change in logo color on consumer memory and the active location of short-term memory on the color of the logo.*

Keywords: Branding, consumer behavior, neuromarketing, EEG, logo colors.

1. Introduction

Marketing or marketing is the identification activity of a company or institution that aims to provide services or goods by the times (Phil Kotler & Goldgehn, 1981). To survive the marketing competition, companies need to do good branding and positioning of products and choose the appropriate targets (Philip Kotler & Armstrong, 2017). By utilizing technological and scientific advances through the study of neuroscience in Neuromarketing, it is expected to create marketing strategies that are appropriate and able to meet the needs and desires of consumers, after several researchers on consumer behavior conducted by quantitative and qualitative methods such as surveys. But the survey has some shortcomings in branding. The depth of analysis of data is less relevant to know the consumer behavior, so many researchers switch to using neuromarketing with EEG analysis. Today, a marketing process relies heavily on technological advances by making marketing digital marketing.(Parchure et al., 2020). With digital marketing, changes in consumer behavior will be more blessed.(Parchure et al., 2020). Use of neuromarketing technology will display consumer responses previously unknown to previous ways of marketing (Nadanyiova, 2017). Neuromarketing tidak seluruhnya menggantikan metode pemasaran tradisional tetapi neuromarketing digunakan untuk mendapatkan pengalaman dan wawasan pemasaran secara lengkap (Mansor & Isa, 2020). Neuromarketing strategies are used to understand consumer behavior toward a product. The level of consumer interest in a product can be seen from the biological data recorded when looking at the logo or jingle of a product (Ceylan, Burak, 2020).



Neural technology used in marketing is used to identify a true response from a consumer (Cheredniakova et al., 2021). In this case neuromarketing plays an important role. Advances in neuroscience inform how a human being works in the process of marketing a product (Mansor & Isa, 2020). (Parchure et al., 2020). Some companies have widely used marketing strategies using Neuromarketing.

Color is the most striking thing about a product and includes important criteria for developing product marketing. In product marketing, color becomes the main cast because it can affect consumer behavior when looking at a product. Color becomes an important criterion because the color is effortless to remember and can define emotions that will affect the response of the observer's brain. According to several studies, it has been explained that the human brain's response to color occurs in the occipital part of the lobe further processed in the left inferior temporal, left frontal posterior, and left parietal cortical (Andersen et al., 2019). Using color stimulus as Neuromarketing is essential to know the brain's response when predicting a color by classifying four colors (Red; Yellow; Green; Blue) of the signal generated by the EEG (Rakshit & Lahiri, 2017).

The use of physiological signals to observe color is one way to be used in addition to the subject's verbal feedback. With physiological signals, observers will better understand and emerge new ideas (Rakshit & Lahiri, 2017). Product marketing actors must also understand color psychology. The effect of color on humans is also different for each person. Many factors that affect a person's perspective on color include age, time, and gender. Some companies do product marketing by creating logos with various colors. The use of the right colors by the company's characteristics makes consumers more confident and interested in the products offered. Different colors between companies help consumers to remember the brand better. The color used in one company must be in the same color range because it will be the hallmark of a company. Many consumers are looking for products from brands they like and well-known brands.

Although the influence of color in a product is enormous, the effectiveness of its use is different for each person. Some people have their own emotions and pleasures. Many companies use red for their brand because red tends to describe spirit and happiness and other colors also have different characteristics. The choice of color is based on communication between the company and consumers. If there is a change in the logo or its elements, it will increase the risk. So if a company will change the logo, elements must be regulated as well as possible not to harm the other party. It would help if did the latest branding of logo elements to consumers to maintain trust. Small changes to the logo element will cause curiosity, while a big change in the logo will result in resistance.

Neuromarketing research aims to obtain information related to consumers. The essence of the study is knowing the emotional and memory responses of consumers (Glova & Mudryk, 2020). By researching brain waves. Application of Electroencephalography (EEG) to Neuromarketing for the retrieval of information from consumers. EEG will display spectral activity in the frontal, parental and occipital areas that will adjust according to consumer data retrieval needs (Golnar-Nik et al., 2019). Research that discusses the classification of EEG signals is beneficial as a device to identify attraction to an object (Pratama et al., 2016).

In addition to EEG, can also do neuromarketing research techniques by using fMRI and eye-tracking. fMRI or Function Magnetic Resonance Imaging is used by identifying specific areas of the brain, such as areas that regulate levels of satisfaction, memory, and other active emotions at any given time. fMRI uses a magnetic resonance scanner. Eye-tracking is a technique used to identify how long the eye is focused on an object being observed. The eye-tracking method also measures the movement of the eyes, and it is done to create a real-time scenario with a constituency (Devaru, 2018). That way, eye-tracking displays internal brain activity. In addition to doing eye tracking directly, eye tracking can also be done online (Devaru, 2018). The disadvantage of using eye-tracking techniques is that when respondents observe an object for a long duration of time, it is likely that the respondent will have difficulty understanding the object, or the respondent will be more interested in the observed object (Kisti Nur Aliyah, 2020).

2. Literature Review

2.1 Neuromarketing

Neuromarketing is a branch of neuroscience research. Neuroscience is a study that addresses marketing issues with methods and insights from brain research. Neuromarketing is considered better and effective by researchers for several reasons, namely, being able to predict consumer behavior without using questionnaires and interview methods accurately and can reduce company costs for advertising products to be incurred (Oon et al., 2018). Konsep dari neuromarketing ini memberikan pengetahuan terbaru dan metode yang kuat dalam sebuah riset suatu pemasaran, terutama pada analisis terhadap consumer behavior. Konsep utama dalam neuromarketing yaitu terkait dengan aktivitas otak manusia, neuromarketing memahami pikiran bawah sadar dari manusia yang menjelaskan tentang motivasi dan harapan. Neuromarketing juga dapat memprediksi perilaku konsumen dalam kehidupan. Aspects that are considered in neuromarketing techniques are qualitative and quantitative. Qualitative covers problems such as media and content to customers, while quantitative includes the timing of consumers' advertisements (Devaru, 2018).

Neuromarketing approaches are divided into auditory, visual, and tactile auditory influences on consumer behavior in a product's decision-making (Kurniawan et al., 2017). Neuromarketing is a combination of marketing and neuroscience. Neuroscience is used to improve predictions of consumer behavior. When making a decision, consumer behavior is based on consumer emotions in a short time (K N Aliyah, 2019). Neuroscience is used to gather a wide variety of information about brain function and structure. The science branch of neuroscience is cognitive neuroscience, which is used to learn the mechanisms of brain function from various processes such as emotions, actions, and others. Neuroscience uses electroencephalography (EEG) and Functional Magnetic Resonance Imaging (fMRI) methods. Neuroscience is still considered new because some studies focus on methods of human behavior. Non-invasive neuroscientific techniques are used to measure activity in the brain. The difference between electroencephalography (EEG) and Functional Magnetic Resonance Imaging (fMRI) is that the spatial resolution at fMRI is higher than at EEG. But EEG has better temporal resolution than fMRI (Ng, 2018).

The four neural circuits studied in neuroscience primarily relate to consumer decisions: attention, memory, emotion, and reward. In the attention-focused part when our brain is given a lot of information. The amount of information that enters the brain is sometimes not commensurate with each person's brain capacity. Therefore, the brain has to work more extra to filter out which information is a priority. Attention is divided into two: bottom-up attention and top-down attention. Bottom-up attention is attention that focuses on the surrounding environment. A top-down is self-focused attention. The part of the brain that plays an important role in the bottom-up and top-down attention process is the prefrontal cortex. Neuromarketing can detect a variety of subjects. There is a taxonomy that has a side about classifications that can be detected neuromarketing, namely attention, product assessment, product preferences, memory, and brain extension. (Nilashi et al., 2020). Attention focuses on showing stimuli that attract emotional attention. Product assessment focuses on the neurological correlation of marketing (Nilashi et al., 2020). Product preferences focus on the brand differences of a product (Nilashi et al., 2020). Memory focuses on factors that influence marketing internal factors and external factors. (Nilashi et al., 2020). Brain extension focuses on indicators of a nerve of a brand (Nilashi et al., 2020).

This study analyzed differences in brainwave response to a famous brand logo in Indonesia by featuring two logos with different colors. How to know the response of consumers to the logo of a brand is to conduct an interview. It uses electroencephalography (EEG) to display brain signals that respond to the object provided. There will be different signals when the brain sees the color of the original logo or the logo with the color that has been modified. Data is obtained in the form of how strong the brain's memory is on an object. The implementation of neuromarketing is widely used to analyze color, jingle, an image of a person's behavior. Methods that can be used to conduct the study of the analysis include conducting interviews to conduct analysis using electroencephalography (EEG).

2.2 Electroencephalography (EEG)

Electroencephalography (EEG) is a tool used in neuromarketing research. The way EEG works is by getting brain signals from analyzing electrical activity from brain waves. Signal measurement using EEG is an easy-to-use way to detect changes in brain activity in the absence of time delays, it can quickly weaken the subconscious response in humans (Khurana et al., 2021). EEG is one of the techniques that record electrical activity in the brain, by placing electrodes on the surface of the scalp (Marquez Lobato & alanis Garza, 2017). The electrodes used have a number of channels as much as 10-20. It provides information about the polarity of ions, temperature, and electronic impulses generated by the brain (Fugate, 2008). Activity in the brain consists of two types, namely rhythm and activity. Rhythm or rhythm is repetitive neural activity. Certain activities are a type of activity in the brain that reacts at a given time recognizable by position, frequency and amplitude.

The various types of brain waves are Alpha, Delta, Theta, Beta and Gama. The difference between each wave is that Alpha has a frequency range between 8 Hz-13Hz, Beta has a frequency range between 13Hz-30Hz, Delta has a frequency range of 1Hz-5Hz and Theta has a frequency range between 4Hz-8Hz (Jain et al., 2018). Alpha waves can be detected in the occipital region of the brain of a awake person, beta waves can be detected in the parietal and frontal lobes, theta waves can be detected in children and adults who do not perform strenuous or asleep activities, delta waves can be detected in infants and adults while asleep (Songsamoe et al., 2019). From the wave that can be analyzed into data in the form of emotions, behavior and brain function (Songsamoe et al., 2019).

Electroencephalography (EEG) is the most commonly used method because it measures brain waves with high temporal resolution. EEG can measure brain waves in real time. Data obtained from these measurements will be analyzed according to emotions, feelings and brain function (Andersen et al., 2019). That way it can be concluded that brain activity recorded using EEG is very important and helps in sensory research of consumers (Shaw & Bagozzi, 2018). EEG is widely used for research due to its easy use, low cost and higher resolution (Oon et al., 2018). Now EEG signals can display color stimulation signals and spectral power (Rakshit & Lahiri, 2017). But the EEG signal is stochastic where the results are not certain (Rakshit & Lahiri, 2017).

2.3 Spatial Selection

Spatial selection is one of the channel selection methods by normalizing data from EEG signals and calculating the energy of Electroencephalography signals. Spatial selection will provide a matrix that defines the essential structure of the Electroencephalography (Fauzi et al., 2020). Spatial filters will find the right time pattern for each signal session (Fauzi et al., 2020). Spatial selection generally consists of two processes, namely, energy extraction and energy selection (Fauzi, 2019). The energy extraction process has two methods, namely, L2-norm and leverage score (Fauzi, 2019). This study uses the L2-norm method with equations (1)

$$P_j = \frac{\sum_{i=1}^m A(i,j)^2}{\sum_{i=1}^m \sum_{j=1}^n A(i,j)^2} \quad (1)$$

P_j variable A is the matrix of data, j is the column, and i is the row. Variables n and m are the order of columns and rows (Fauzi, 2019). Calculations of these equations are used in research trials. After the L2-norm method, the next step is to choose energy judging from the best results obtained (Fauzi et al., 2019).

3. Method

The data was taken on six subjects consisting of three men and three women. The research subjects are Telkom University students and students who have an age range of 19-24 years. The selection of stimulus objects is based on the top brand award survey results, and selected stimulus objects are Shopee, Bli-bli, Tokopedia, Zalora, and JD ID. The selection of these five brands is due to the dominance of the colors owned and the ease of visualizing brand colors displayed on the subject. The data collection used six subjects with three men and three women, with data, were taken using Electroencephalography (EEG) Contec KT-88 16 channels.

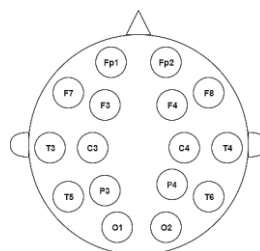


Figure 1: Contec KT-88-1016 Digital 16 Channel EEG Machine and Mapping System

When data collection is done, the subject observes several logos that have been provided in the form of the original logo and the logo that has been modified. The subject is provided with a chair that has armrests. It is provided so that the subject can be in a relaxed state. The subject is provided with a monitor in front to display the question screen. Researchers adjusted the distance of the chair with the monitor to adjust the visibility of each subject so that the screen display is visible.

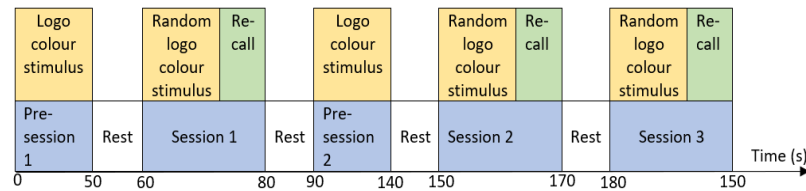


Figure 2: Timing Diagram

The data was taken on six subjects consisting of three men and three women. The research subjects are Telkom University students and students who have an age range of 19-24 years.

3.1 Pre-session

Pre-session is an opening activity that then contains data retrieval rules and steps to retrieve data. In the pre-session stage, respondents in the study were asked to observe a product or object provided. Pre-session consists of pre-session one and pre-session 2. In pre-session, one subject will show the logos of five brands with the original color of each brand's logo. In pre-session 2, subjects will be displayed logos from five brands with colors that have been changed into one of the secondary colors and primary colors. The brand logo is displayed with a duration of 10 seconds for each logo. The pre-session is held for 40 seconds and then given a rest.

3.2 Rest

At the resting stage, respondents in the study were provided for a few seconds. With the aim to neutralize the brain response so that when continuing to the next stage, the brain response is fresh and provides maximum results. Rest is held for 10 seconds then goes into the session stage.

3.3 Session

In the hold session, respondents will choose the product that they think the color of the product logo is correct. The session consists of session 1, session 2, and session 3. In session 1, the subject will be displayed the logo of one brand with the original color at random for 10 seconds, then displayed a blank slide for the subject to recall the previous object. Here are some brand logos with original colors and colors that have been modified. The left logo is a logo that has been modified in color, while the right logo is the color of the original logo. The session is held for 20 seconds.



Figure 3: Logo Brand

3.4 Data Processing

In the data processing, we will obtain resistance from the dataset from the EEG signal. The data generated from the EEG then goes into pre-processing of the data, cutting the data for 10 seconds according to the stimulus given. After pre-processing, data from the EEG is processed with a sampling frequency of 100 Hz using spatial selection, where the channel will be selected and sorted by the most significant energy. Will choose the results of the spatial selection four channels with the largest energy. The four channels selected are called the active channel. Furthermore, all the active channels that have been obtained will be sorted by selected channels that appear. The dominant channel selected is called the common active channel.

4. Results and Discussion

This study obtained some experimental results and analysis of EEG signals with logo color stimulus to obtain short-term memory signal profiles. This research provides certain brand logos with different colors. There is a logo with the original color and a logo with a modified color. The study intends to find out if customers can still recognize the original brand logo when given some original and modified logos to observe. That way, we can know some of the influence of product logo colors on a person's memory.

4.1 Marketing Analysis

The experiment results obtained from the subjects' answers when filling out a data retrieval questionnaire were seen in Table.1. The results of a post-data questionnaire on top brands showed that the subjects remembered the color of the original logo given. When the logo color was changed, some subjects had difficulty remembering the color of the logo. And the results of the post-data collection questionnaire on non-top brands showed that the subjects remembered the original logo color, and the subject remembered the color of the logo that had been changed. Subjects remember logo colors that have been changed because both colors of the brand's non-top logo are changed to primary colors, based on primary color theory, which is easier to remember than secondary colors. From the data obtained from 6 subjects and 18 sessions, 14 sessions, including answering questions correctly, and four other sessions were answering questions incorrectly. In the study, probability values were obtained from each brand. Bli-Bli has the highest probability value of 27.78%, Shopee has the probability value of 22,22%, JD ID has the probability value of 22,22%, and Zalora has the lowest probability value of 11.11%. Brands that have a high probability then the brand is increasingly stronger remembered by customers. While brands that have low probability value tend to be difficult to remember by customers.

Table 3: Experimental Questionnaire Answers

Subject	Session	Stimulus Color	Answer	Result	Probability brand
	1	Bli-bli	Bli-bli	True	27,78 %
1	2	Bli-bli	Bli-bli	True	27,78 %
	3	Shopee	Shopee	True	22,22%
	1	JD ID	JD ID	True	22,22%
2	2	JD ID	JD ID	True	22,22%
	3	Tokopedia	Tokopedia	True	16,67%
	1	Tokopedia	Tokopedia	True	16,67%
3	2	Shopee	JD ID	False	22,22%
	3	Zalora	Zalora	True	11,11%
	1	Shopee	Shopee	True	22,22%
4	2	Bli-bli	Bli-bli	True	27,78 %
	3	JD ID	JD ID	True	22,22%
	1	Bli-bli	Bli-bli	True	27,78 %
5	2	Shopee	Bli-bli	False	22,22%
	3	Zalora	Zalora	True	11,11%
	1	JD ID	JD ID	True	22,22%
6	2	Tokopedia	Bli-bli	False	16,67%
	3	Bli-bli	Tokopedia	False	27,78 %

The questionnaire results after taking data on top brands showed that the subjects remembered the color of the original logo given. When changed the logo color, some subjects had difficulty remembering the color of the logo. And the results of the post-data collection questionnaire on non-top brands showed that the subjects remembered the original logo color, and the subject remembered the color of the logo that had changed. Subjects remember logo colors that have been changed because both colors of the brand's non-top logo are changed to primary colors, based on primary color theory, which is easier to remember than secondary colors.

4.2 Common Channel Analysis

The measurements used Electroencephalography (EEG) with 16 canals viewed canals that had the highest energy of any subject selected the 2 largest most active.

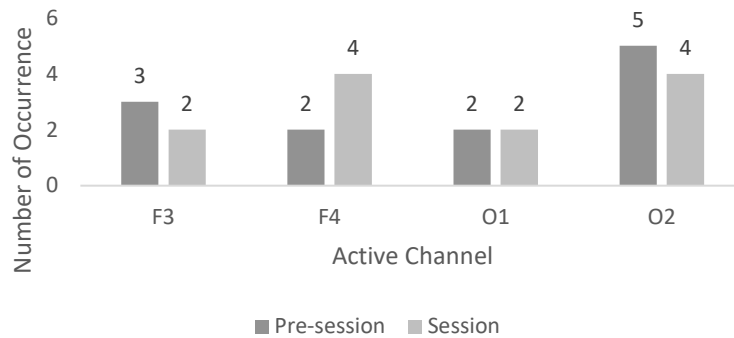


Figure 4: Common Active Channel

Based on the results of the common active channel obtained common active channel for pre-session is the O2 channel, and for a common active channel, a session is channel F4 and channel O2. In the pre-session, the dominant active channel is the O2 channel that is viewing, and in the active channel session section, the dominant is the F4 channel that is remembering, and the O2 channel is viewing (Arya & Singh, 2015), (Ono et al., 2015).

4.3 Active Area

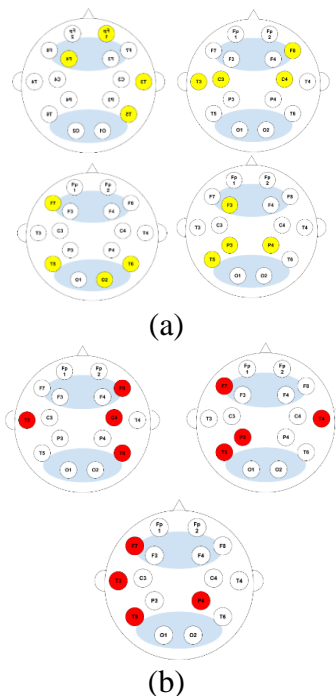


Figure 5: Channel Mapping Active Area (a) Correct Answer (b) False Answer

The yellow color indicates an active channel that works when the subject answers correctly. The gray color indicates the reference channel area, with the top being the area for memory and the bottom being for visuals. The red color indicates an active channel that works when the subject answers incorrectly. An active area that worked with the subject's correct answer indicated that the frontal or memory areas tended to be active. In contrast, the subject indicated that the active frontal and occipital areas tended to be less active with the false answer. The more a person remembers, the more nerves work on the front or front area of the memory. When the subject answers correctly, it means that he remembers, then the memory works with the active front memory area marked with a yellow canal. While when the subject answers incorrectly, then the active channel is not in the memory area.

5. Conclusion

The result from the analysis is that the original logo color is more remembered than the logo color that has been modified. This is because the original logo color already has a characteristic that is attached to the consumer's memory. Furthermore, when giving a color stimulus to the logo, short-time memory will be in the frontal and occipital when in the active area. The frontal area is the area that confirms the presence of recall activity, while the occipital area is the area that confirms the presence of viewing activity. Based on the analysis, active channels are O2 channels for pre-sessions and F4 channels for sessions. When consumers are given the original logo color of the frontal and occipital areas will tend to be more active than when consumers are given a logo color that has been modified so that consumers have difficulty recognizing the frontal and occipital areas are less active.

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THE URGENCE OF ARRANGING A PERMANENT COALITION OF POLITICAL PARTIES FOR THE ESTABLISHMENT OF EFFECTIVE GOVERNMENT IN INDONESIA

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Abstract: *To carry out his duties as head of government effectively, the President needs the political support of a majority in parliament. However, the implementation of a multi-party presidential system that applies in Indonesia makes it difficult for the President to gain political support. The various problems above arise because the practices of coalitions of political parties and the government that have been going on are built on the basis of interests and pragmatism. The purpose of this paper is to examine the importance of a permanent coalition of political parties to create an effective government. The research method used is a normative legal research method which is an effort to find and analyze secondary data using library research. The data that has been collected from the literature research will then be analyzed qualitatively to answer research problems. The results of this study indicate that the combination of a limited-fit coalition model and an ideological coalition can be the basis for building a permanent coalition that is proportional, solid, oriented party visions and missions and not based solely on pragmatic interests. Therefore, the Government and the parliament are expected to have the political will to incorporate the idea of a permanent coalition into the national legislation program and then follow up with the formation of related laws.*

Keywords: Permanent Coalition, Political Party, Government.

1. Introduction

In this study, the coalition of political parties is not interpreted as a requirement for political parties to be able to nominate a candidate for residency/vice president, but the coalition here is interpreted as a way to realize an effective government. The coalition in this meaning has the point of view that the relationship between the legislature and the executive has a very decisive relationship in realizing effective government (Shugart, 2016).

At the practical level, one of the factors that determine the effectiveness of government is the implementation of a multi-party system which causes difficulties for the President to gain the support of a political majority in parliament. To carry out his constitutional obligations as head of government easily and smoothly, the President needs the support of a majority in parliament. Without absolute support, the President is very likely to be less 'decisive' in an effort to move the course of government and day-to-day development (Asshiddiqie, 2018).



The importance of the element of a coalition between the government and parliament in order to create an effective government is inversely proportional to the existing reality, if one looks carefully at all historical series regarding coalitions of political parties in Indonesia, it can be concluded that the coalition built in Indonesia is an interest-based coalition, not ideological (Hanan, 2014). Coalition is just a way of fulfilling the "threshold". Political parties only think about how the conditions for "combined political parties" are met when carrying out pairs of candidates. This is actually the problem. The coalition system in Indonesia actually creates a paradox (Ramadlon, 2016).

This condition can be seen from the rivalry between Red and White Coalition (RWC) and Great Indonesia Coalition (GIC) in the 2014 election. The RWC, which was originally projected to become a permanent coalition, finally foundered after three of its member parties, namely PPP party, Golkar party and PAN party, declared their departure from the coalition membership. this party stated that it had joined the government and joined GIC (Slater, 2018). Although the RWCC split made the government stronger, in the future there is no guarantee that the coalition supporting the government will last forever.

What happened in the 2014 election was repeated again in the 2019 election. The parties that are members of Prosperous Fair Coalition (PFC) that support the presidential candidate pair Prabowo-Sandi also broke up and immediately moved closer to the coalition that won the election. Even Prabowo and his Gerindra party have now joined the Indonesian Work Coalition (IWC), which incidentally is a coalition supporting the Jokowi-Amin government. Practically at this time, only PKS party has firmly stated that it is an opposition party, the rest are parties supporting the government (Kompas.com, 2019).

The various problems above arise because the practices of coalitions of political parties that have been happening so far are built on the basis of interests and pragmatism, where political parties are free to turn into opposition parties or supporters of the government depending on the benefits that the party will receive (Mietzner, 2013). In addition, so far there are no clear and firm rules regarding the procedures for coalitions between political parties and the government, especially after the election of the president and vice president (Hanan, 2012). Thus, the birth of legal norms regarding coalition procedures that are able to limit pragmatism practices within political parties is highly expected in order to realize an effective government. In this study, an in-depth and philosophical study of the urgency of a permanent coalition needs to be carried out considering that the formation of legal norms to regulate the "permanent coalition" of political parties is considered relevant to realizing an effective government.

2. Literature Review

2.1 Coalition of Political Parties in Indonesia

In political dynamics, a coalition is a combination of two or more parties with the aim of forming a government together. The presidential government system and the multi-party system in Indonesia have political implications for the configuration and pattern of coalitions in the executive and legislative institutions. The number of political parties participating in the general election is quite large, resulting in a large number of parties. Changes in political power that occur have an impact on changes in political power in the executive and legislative institutions in the Indonesian presidential government system (Ambardi, 2008).

According to Horowitz (2013), since the first general election held in 1999 until the last election in 2019, the configuration and map of political party coalitions in the presidential system in Indonesia was built on the foundation of pragmatism interests in power politics, not coalitions based on ideological closeness or similarities. platforms. The coalition map will always change. The intensity of the coalition that occurs will run instantaneously and quickly. The pattern of coalitions built by political parties is very fluid, fragile and pragmatic.

The fragility of coalition ties causes the government coalition partner parties to tend to use pragmatic politics in responding to government policies. On the one hand, he joined the cabinet, but on the other hand it seemed to act as an opposition party in parliament. The main factor of the ineffectiveness of the coalition built in the presidential system in Indonesia is the weak bond of the coalition formed. The coalition supporting the government that has been built so far is not a permanent coalition, but a very fragile pragmatic coalition.

2.2 Effective Government

In the context of Indonesia, especially after the amendment to the 1945 Constitution, the government will face a trident of challenges; First, the constitutional powers of the president are increasingly limited and the parliament is getting stronger, second, the support of political parties is difficult to achieve a majority and third, the control of civil society is getting higher. Related to the topic of this paper, what is in the spotlight is the political support factor in realizing an effective government. What is meant by the political support factor here is more specifically the support of political parties (Indrayana, 2011).

To carry out his constitutional obligations as head of government easily and smoothly, the President needs the support of a majority in parliament. Without absolute support, the President is very likely to be less 'decisive' in an effort to move the government and day-to-day development. (Asshiddiqie, 2015). However, the implementation of a multi-party system in a presidential system such as in Indonesia causes difficulties for the President to gain the support of a political majority in parliament. In such a condition that the support of political parties does not penetrate the majority in parliament, then a coalition with other political parties is a necessity (Mietzner, 2016).



Therefore, coalitions are no longer only a characteristic of a parliamentary system of government, coalitions are also mandatory in a presidential system, especially one that is based on a multi-party system that is not as simple as in Indonesia. Because, in such a party system, it will be very difficult for a party to be able to control the majority of the parliamentary votes. In fact, the effectiveness of the government will certainly be greatly influenced by political support from the parliament. So, building a solid coalition is one of the president's strategies to keep governing effectively.

2.3 Problem Statement

The implementation of a multi-party system coupled with a pragmatic coalition of political parties makes it difficult to realize an effective government in Indonesia. Therefore, this paper seeks to examine a coalition model that is able to provide stable political support for the government so that it can carry out its duties and functions effectively.

3. Method

This article uses a normative legal research method. In normative legal research, there are several approaches used to obtain information from various aspects, namely the statute approach, case approach, historical approach, comparative approach, and conceptual approach (Marzuki, 2014). While this article uses a statute approach and a conceptual approach. This research was conducted using secondary data consisting of primary legal materials, secondary legal materials and tertiary legal materials. The legal materials are in the form of various statutory regulations and literatures. The data collection in this research is done by document study. The data obtained from this study were then analyzed qualitatively.

4. Results and Discussion

4.1 The Role of Political Parties in Realizing an Effective Government in Indonesia

Katz & Mair, (1995) argues that political parties have a very important position and role in every democratic system. The party plays a very strategic liaison role between government processes and citizens. In fact, many argue that it is political parties that actually determine democracy. Therefore, political parties are very important pillars to strengthen the degree of institutionalization in a democratic political system. Meanwhile, Article 1 point 1 of Law Number 2 of 2008 concerning Political Parties states that political parties are organizations that are national in nature and are formed by a group of Indonesian citizens voluntarily on the basis of common will and ideals to fight for and defend the political interests of their members, society, nation and state, and maintain the integrity of the Unitary State of the Republic of Indonesia based on Pancasila and the 1945 Constitution of the Republic of Indonesia.



In the context of Indonesia, political parties have a very important role as election participants that function as political vehicles for candidates who run for elections both in the presidential election and regional head elections. The position of political parties as election participants has major implications in realizing an effective government. This is due to the concept of a coalition between political parties that aims to win the candidate promoted by the coalition. In the presidential election (Slater & Simmons, 2014), for example, the presidential/vice presidential candidate pair can only be carried by a political party or a coalition of political parties participating in the general election as stipulated in article 6A paragraph (2) of the 1945 Constitution.

Even in Law Number 7 of 2017 concerning the General Election gives meaning to "coalition" only as a method used by political parties (political parties) or a combination of political parties to be able to nominate pairs of President/Vice President candidates in the General Election. However, the purpose of the coalition of political parties is not only to stop at the election, there is a further agenda from this coalition of political parties. The next agenda of the coalition winning party is the bargaining position regarding the distribution of power, for example, such as the division of ministerial positions or other strategic positions in the government. Meanwhile, coalition parties that lose the election will usually transform into a government opposition party in parliament. After the completion of the general election, the relationship between coalition parties and opposition parties in the legislative and executive institutions has a very decisive relationship in realizing an effective government.

To carry out his constitutional obligations as head of government easily and smoothly, the President as head of government needs the support of a majority in parliament. Without absolute support, the President is very likely to be less "decisive" in an effort to move the government and daily development. In the 1945 Constitution, there is a lot of involvement of the parliament in every government agenda, for example, the formation of a law must be mutually agreed upon between the President and the parliament, in carrying out its supervisory function over the government, the parliament has the right of interpellation, the right of inquiry, and the right to submit an opinion, many government policies which must be approved by the parliament such as making international agreements, granting amnesty and abolition, declaring war etc.

The main implication that will occur from the implementation of a presidential system with a multi-party system is the low level of party institutionalization and political power in parliament tends to be changed by various interests and a fairly high plurality of parties. In addition, party power tends to be evenly distributed and it is difficult to obtain majority power in parliament. However, this majority vote is difficult for the President's party to obtain in a multi-party situation, except relying on a coalition of political parties in the parliament and cabinet in order to gain a majority to ensure government stability (Yuda, 2010).



Given the large influence of parliament on the running of the government, if the parliament is controlled by an opposition party, the president will find it difficult to carry out his government. At this point, according to Indrayana (2011), the post-reform president will face two formidable challenges; first, the constitutional authority of the president is increasingly limited and the parliament is getting stronger, second, the support of political parties (political support) which is difficult to achieve a majority. The first challenge will be overcome by itself if the second challenge is successfully passed by the President, namely getting strong support from political parties that have large seats in parliament.

Thus, a political party is not just an association of ordinary people, but a political party is an organization that greatly influences the running of the wheels of a government. This happens because of the nature of political parties themselves as organized organizations with the aim of seizing or maintaining control of the government. If a President wants to have a stable government, then he must really look for the right formulation in establishing political relations with the political parties in power in parliament.

4.2 Permanent Coalition Arrangements in Indonesia

In terms of building the power of the President in Parliament, such a complicated multi-party system will be very difficult for the President to control the majority of the parliamentary votes. Whereas the effectiveness of the government will definitely be greatly influenced by political support from the parliament (Duignan, 2010). So, building a solid coalition is one of the president's strategies to keep governing effectively. In order to build such a solid coalition, one of the things to do is to share power (power sharing) among coalition members, one of which is by forming a government cabinet that reflects the strength of the coalition.

Although there is an opinion that what the president should form is a zaken cabinet, namely a cabinet without political party representation, all ministers only come from professional backgrounds. Because the president, who is directly elected by the people, does not need to get the support of political parties, it is the people who choose him, according to this line of thought. This line of opinion once again sounds heroic, but it is not a solution. A president who does not have majority political support must form a coalition with a political party. In any country, the coalition is realized by sitting together in government at the ministry level, or other government positions that the coalition may collaborate with (Cheibub, 2007).

So, in a multi-party government system, it is natural that there are ministers who are representatives of political parties in a coalition. Of course, with the basic condition, every minister who sits in his position is a person with moral integrity and has an undoubted intellectual capacity, no matter whether he comes from a political party or a non-political party. It would be unfair, if a coalition is formed, but the cooperation is not realized in the form of a cabinet that reflects the political parties in the coalition.



To form a smoother cabinet, the President must consider the representatives of the parties that support him in the general election contest, gender representatives, ethnic representatives, regional representatives, all of which are common habits and standards carried out by presidents in any part of the world. However, building a solid coalition, even by taking into account the mix of politics, gender, regional representation and others, is still not without challenges. Differences in vision and political interests often make it difficult to solidify coalitions (Maor, 1997).

There is no guarantee that the parties that are members of the coalition that have representatives in the legislature will always support government programs. and vice versa, the parties that previously joined the opposition are not always in the opposition, there are moments when the opposition parties cross over to the government party just for the sake of pragmatism.

This condition can be seen from the rivalry between the Red and White Coalition (RWC) and the Great Indonesia Coalition (GIC) in the 2014 election. The RWC, which was originally projected to become a permanent coalition, finally foundered after three of its member parties, namely PPP party, Golkar party and PAN Party, declared out of coalition membership. this party stated that it had joined the government and joined GIC. Although the RWC split made the government stronger, in the future there is no guarantee that the coalition supporting the government will last forever (Muhtadi, 2015).

What happened in the 2014 election was repeated again in the 2019 election. The parties that are members of Prosperous Fair Coalition (PFC) that support the presidential candidate pair Prabowo-Sandi also broke up and immediately moved closer to the coalition that won the election. Even Prabowo and his Gerindra party have now joined the Indonesian Work Coalition (IWC), which incidentally is a coalition supporting the Jokowi-Amin government. Practically at this time, only PKS party has firmly stated that it is an opposition party, the rest are parties supporting the government.

If this is the case, what will happen is only endless political chaos, because political parties can turn into coalitions or oppositions at any time, depending on the interests of the political parties. If so, three things will happen. *First*, at certain times the government can become very weak, due to the lack of political support from the parliament, as a result the government will find it difficult to succeed in the programs that have been designed. *Second*, at other times the government becomes very strong because of the large political support from the parliament, thus causing the potential for Corruption, Collusion and Nepotism (KKN) to be strengthened, due to the small number of opposition parties that act as supervisors in parliament. *Third*, in the process of positioning itself as either a coalition party or an opposition party, there is the potential for pragmatic political contracts between political parties and the government, for example, such as the distribution of ministerial quotas, projects for procurement of goods and services, etc. the interests of the people, but what happens is that the government is busier fulfilling the interests of political parties. If this is the case, then the government is no longer effective.



The existence of strict rules regarding permanent coalitions is expected to be able to eliminate the tradition of pragmatism in coalitions from the parties. Equally important, this permanent coalition is projected to create an effective government climate, because: *First*, the permanent coalition will provide stable political support for the government, where since the cabinet was formed there has been certainty which parties are ready to support the president's agenda. until the end of his reign. *Second*, the permanent coalition will also create a system of regular checks and balances for the government, considering that this system will also form a permanent opposition party.

Thus, the presence of a permanent coalition arrangement is expected to be able to realize an effective government. Although of course it will require various adjustments in the future, for example how to determine whether a party joins a coalition or government opposition, how long the permanent coalition will be, and in terms of how the party can leave the coalition. Therefore, the formation of rules regarding permanent coalitions must be seriously considered, both formally and materially. Therefore, before determining how the arrangement is formulated, it is very important to provide a theoretical argument base about the permanent coalition, so that when the permanent coalition is actually regulated in the law, the regulation already has a theoretical argument base.

Coalition can at least be divided on the basis of its solidity and on the basis of its size. In the book *The Coalitional Presidency* (1989) it is explained that there are three types of coalitions measured by their solidity; *First*, the ideological coalition (ideological consensus), this coalition is the most solid because the unity of the parties is due to the similarity of ideology, the same vision and mission. *Second*, a strategic coalition (conglomerate coalition), which is a coalition whose solidity quality is only moderate, because the unity of the parties is solely based on the similarity of the presidential candidate, they are championing. *Third*, the pragmatic coalition (exclusive coalition), this coalition is the weakest in solidity, because coalition ties are only based on the similarity of the issues they stretch (Seligman & Covington, 1989).

For coalitions based on size, there are three types of coalitions, namely: undersized coalition, oversized coalition and limited-fit coalition. Too big and too small is measured by the control of the coalition to the seats in parliament. The undersized coalition, its control is far from half the parliamentary seats, and is therefore useless, and will not succeed in supporting the running of the government. Such coalitions should not occur in reality, and only exist at the theoretical level, solely to help categorize, and facilitate analysis.

An oversized coalition is one that is too fat, and therefore potentially ineffective. If it is calculated from the control of seats, the grand coalition is actually more than an absolute majority. Such a coalition is also problematic. If the coalition is solid, it will negate the control function of the parliament. Meanwhile, if it is not solid, because the various interests are too diverse, it is also useless. Although, the problem of a coalition that is not solid, of course, is not just a problem of a large coalition. All kinds of coalitions are bound to have problems with their effectiveness if they are not solid (Mietzner, 2016).



The relatively ideal is a limited-fit coalition. Like body size, he is neither too thin nor too fat. If it is measured as a measure of the number of seats in parliament, then the number is between a simple majority and an absolute majority. For example, if there are 500 seats in the parliament, the coalition fit is limited to between 300 and 325 parliament seats.

The type of coalition based on the number of seats in parliament will be more complete if it is combined with the type of coalition based on the solidity and reason for the coalition party joining. The most solid coalition is the ideological coalition (consensus coalition). That is a coalition that joins for ideological reasons, because of the common platform and vision and mission of the struggle. The coalition in the middle of its solidity level is a strategic coalition (conglomerate coalition). Namely a combination of cooperation between political parties for the purpose of winning the election strategy. For example, a strategic coalition to win the presidential election, by carrying out the same presidential candidate. Therefore, when the general election is over, such coalitions are prone to break up, because there is no longer a political agenda and strategy that binds them.

The coalition with the most fragile level of solidity is the pragmatic coalition (exclusive coalition). This coalition was only formed for purely pragmatic political reasons. There are no strategic or ideological ties. So, the ties are only political issues and interests. On the same political issues and interests, the coalition will unite. However, on different issues and interests, the coalition will divorce. Then pragmatic coalitions will live and die, depending on the issues and political interests they face. Based on the type of limited coalition above, the most ideal is a combination of a limited-fit coalition that is also an ideological coalition. In terms of mastery of the seats, the size is ideal, the control room is still open, and in terms of solidity, cohesiveness is certainly very necessary to support the government's work program.

In order to form the concept of a permanent coalition with a strong theoretical foundation, the combination of the limited-fit coalition model and the ideological coalition can be the basis for building a permanent coalition that is proportional, solid, oriented to the party's vision and mission and not practical political pragmatism. Academically, the permanent coalition already has an argumentative theoretical basis, but the concept of a permanent coalition is not enough to just stop at the level of studies and concepts. As one of the efforts to realize an effective government, both the Government and the parliament are expected to have the political will to incorporate the idea of a permanent coalition into the national legislation program and then follow up with the formation of related laws. With a strong legal basis, it is hoped that a permanent coalition can bind parties in Indonesia to comply.



5. Conclusion

To carry out his duties as head of government properly, the president needs strong support from parliament. In the Indonesian Constitution (UUD 1945) there is a lot of involvement of Parliament in every government program. Coalitioning with political parties in parliament is a step that must be taken by a President if he wants his government to run effectively, but unfortunately the coalition tradition that has been running in Indonesia so far has relied on instant coalitions based on the interests of momentary pragmatism. The results of this study argue that the idea of a permanent coalition is an alternative solution to overcome the tradition of pragmatism in coalitions. There are two models that can be used to form a permanent coalition that is proportional, solid, oriented to the party's vision and mission. First, coalitions based on their solidity, namely ideological-based coalitions that unite parties because of their ideological similarities. Second, a coalition based on its size, namely a limited-fit coalition where this coalition will provide strong support to the government without having to eliminate the existence of the opposition that plays a system of checks and balances.

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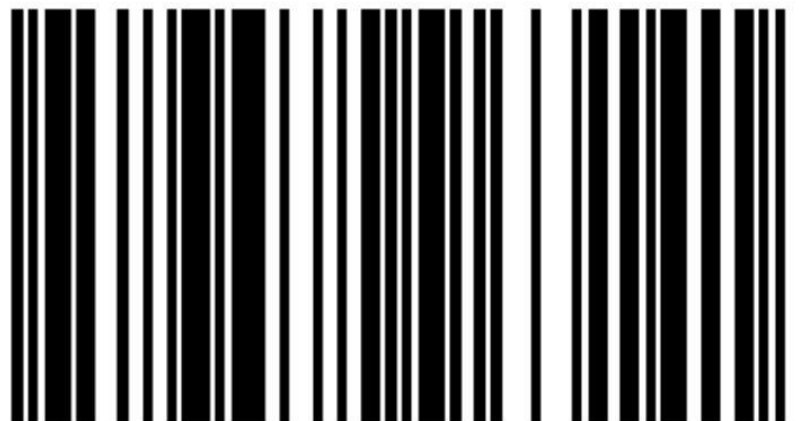
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