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MODERATING ROLE OF MOBILE PAYMENT TECHNOLOGY THAT INFLUENCE INTENTION TO USE OF MOBILE PAYMENT IN INDONESIA

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Abstrak

Penelitian ini bertujuan untuk menyelidiki peran moderasi teknologi pembayaran seluler dalam mempengaruhi niat penggunaan pembayaran seluler di Indonesia. Mengingat adopsi teknologi pembayaran seluler yang semakin meningkat di Indonesia, penelitian ini bertujuan untuk memahami bagaimana faktor-faktor tertentu dapat mempengaruhi niat individu untuk menggunakan pembayaran seluler, dengan teknologi pembayaran seluler sebagai variabel moderator. Metode penelitian ini menggunakan pendekatan kuantitatif dengan menggunakan survei online. Sampel penelitian terdiri dari individu pengguna pembayaran seluler di Indonesia. Instrumen survei yang digunakan mencakup skala pengukuran untuk mengukur variabel niat penggunaan pembayaran seluler, faktor-faktor yang mempengaruhi niat, dan teknologi pembayaran seluler sebagai variabel moderator. Hasil analisis data menunjukkan bahwa teknologi pembayaran seluler memiliki peran moderasi yang signifikan dalam mempengaruhi hubungan antara faktor-faktor yang mempengaruhi niat penggunaan pembayaran seluler di Indonesia. Hasil ini memberikan pemahaman yang lebih baik tentang bagaimana penggunaan teknologi pembayaran seluler dapat memperkuat atau melemahkan pengaruh faktor-faktor lain terhadap niat penggunaan pembayaran seluler. Penelitian ini memiliki implikasi penting bagi industri pembayaran seluler di Indonesia. Hasil penelitian ini dapat membantu perusahaan dan penyedia layanan pembayaran seluler untuk memahami faktor-faktor yang mempengaruhi niat penggunaan dan mengoptimalkan penggunaan teknologi pembayaran seluler untuk meningkatkan adopsi dan kepuasan pengguna.

Kata Kunci: *Mobile payment technology, Intention to use,* Indonesia.

Abstract

The research aims to investigate the moderating role of mobile payment technology in influencing the intention to use mobile payment in Indonesia. Given the increasing adoption of mobile payment technology in Indonesia, this study seeks to

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understand how specific factors can influence individuals' intention to use mobile payment, with mobile payment technology as the moderating variable. The research methodology employs a quantitative approach using an online survey. The research sample consists of mobile payment users in Indonesia. The survey instrument includes measurement scales to assess the variables of intention to use mobile payment, factors influencing intention, and mobile payment technology as the moderating variable. The data analysis results indicate that mobile payment technology has a significant moderating role in influencing the relationship between factors affecting the intention to use mobile payment in Indonesia. These findings provide a better understanding of how the use of mobile payment technology can strengthen or weaken the influence of other factors on the intention to use mobile payment. This research has important implications for the mobile payment industry in Indonesia. The findings can assist companies and mobile payment service providers in understanding the factors influencing intention to use and optimizing the use of mobile payment technology to enhance user adoption and satisfaction.

Keywords: *Mobile payment technology, Intention to use, Indonesia.*

Introduction

The new way of living during Covid 19 pandemic provides opportunity for the increase of mobile payment services around the world, including Indonesia. This is supported by the existence of various mobile payment service in Indonesia even before the pandemic. Based on research that was done by PWC in 2019 to 21.480 respondent across several countries, it was revealed that 47% of respondent in Indonesia has used mobile payment in 2019 and make Indonesia as the fourth highest country that used mobile payment (PricewaterhouseCoopers, 2019). This trend to use mobile payment in Indonesia will keep increasing as the government has supported to use electronic money with the program of Gerakan Nasional Non Tunai in 2014 which the purpose is to make the financial transaction easier and at the same time can reduce the cost for money management. The development of mobile payment industry in Indonesia started with TCash in 2007 and now it has grown rapidly.

Understanding the strength and weakness of the different mobile payment technology along with the consumer behaviour intention to use the technology will be valuable for the industry to improves further development and enhance the effectiveness of the services that the technology provides. The study even more relevant to be conducted nowadays because many consumers are forced to shift their payment method from cash to non-cash payment due to the Covid 19 pandemic. There has been many research available that study the intention to use mobile payment. However, there are still few studies which conducted during the Covid 19 pandemic in Indonesia, especially which using mobile payment technology as moderating variable.

Mobile payment can be defined as any type of individual or business activity involving an electronic device with connection to a mobile network enabling successful completion of an economic transaction (de Luna et al., 2019). Several research have been conducted to study behavioural intention to use mobile payment technology. Li et al, (2019) conduct study of individual intention to use Alipay in China. It resulted that

intention to use is primarily affected by perceived usefulness, perceived ease of use and risk perception. The result also similar with study conducted by Kalinic et al., (2019) using multi-analytical approach to P2P (peer to peer) as one of the mobile payment technology which shown that perceived usefulness is the strongest antecedents of intention to use and subjective norms is one of the variables that most influences the intention to adopt technology. Contradicting with previous study from Li et al., (2019), de Luna et al., (2019), and Liébana-Cabanillas et al., (2020), research conducted by Al-Saedi et al., (2020) concluded that perceived risk has an insignificance negative influence on the behavioural intention to use mobile payment. A contradicting result also shown in the study from de Luna et al., (2019) which indicated that relationship between ease of use and attitude for specific mobile payment technology of NFC and QR systems are not significant.

Furthermore, the study conducted by de Luna et al., (2019) using three specific types of technology (SMS,QR Code and NFC) demonstrated that the model of mobile payment behaviour simply cannot be implemented in a global way and the proposed relationship in the model are indicated with different intensity depending the system payment under study. In the context of current Covid-19 Pandemic, a study conducted by Yan et al., (2021) suggested that the use of QR code in mobile payment in the retailing industry may decrease due to the force of physical interactions restriction among people. Even though there are various technology for mobile payment, most of the research only focus to one mobile payment technology to study the factor of mobile payment adoption. There is lack of study conducted in Indonesia which using more than one mobile payment system technology simultaneously into one proposed framework to study the user's intention to use.

As per contextual of pandemic Covid 19, Indonesia government through Bank of Indonesia (BI) has declared strategic step, which one of it is to encourage society to switch from using cash to non-cash payment system (*Ini Sederet Kebijakan BI Mendorong Transaksi Digital Di Tengah Pandemi Corona*, 2020). This disrupted pandemic situation occurred currently is clearly different with the condition from the previous study to seek intention to use of mobile payment was conducted using framework such as TAM or UTAUT. Heuvel (2020) stated that "the extremely disrupting impact of Covid-19 pandemic causes theories and models that used to be helpful in studying and explaining technological acceptance and technology use to suddenly become obsolete (at least partially)". Hence, we consider the urge and propose the novelty to conduct this study by using mobile payment technology as moderating variable for user's intention to work and to identify whether the variables from TAM are still relevant with the Covid 19 pandemic situation in Indonesia market.

This study seeks to make several contributions to the literature. First, from a theoretical perspective, the study is significant in adopting TAM within the context of disruptive situation of Covid-19 pandemic which may cause a change in the technological acceptance. Furthermore, mobile payment technology as a moderating variable is under-researched and this study will provide breakthrough result in the context of mobile

payment. Secondly, from a practical perspective, the result from this study will provide insight to the mobile payment services companies to focus on factors that affect user's intention to use especially during the pandemic and provide direction when the company set direction on establishing type of mobile payment technology for Indonesia market. This insight, in turn, will help the mobile payment service companies to develop R&D and marketing strategies.

In this study, empirical research will be conducted using original TAM framework and add two mobile payment technology which are mobile wallet and mobile banking that will act as moderating variable to intention to use. Thus, we structured our research question and objective as follow:

The purpose of this research is to: (a) Analyze the relationship between perceived ease of use and attitude, (b) Analyze. the relationship between perceived ease of use and perceived usefulness, (c) Analyze the relationship between perceived usefulness and attitude, (d) Analyze the relationship between perceived usefulness and intention to use, (e) Analyze the relationship of attitude as mediating variable to intention to use, (f) Anayze the relationship of mobile payment technology as moderating variable between attitude and intention to use.

Literature Review

A. Perceived Ease of Use

From the original TAM, Davis identified two distinct of beliefs, perceived usefulness and perceived ease of use, which based on his research it is sufficient to predict the attitude of as user toward a system. Based on study from King & He (2006), which conducted a statistical meta-analysis of TAM as applied in various fields, showed that TAM to be a valid and robust model that has been widely used, thus implying its potential for wider applicability.

According to Davis, perceived ease of use defined as the degree to which the person believes that using the particular system would be free of effort (Marangunic & Granic, 2014). In the context of mobile payment services, perceive ease of use is the extent to which using mobile payment technology to be relatively free of physical, emotional, or psychological efforts for the user (Phonthanukitithaworn, Selitto, & W.L Fong, 2016). This can be considered as a major concern for user when using mobile payment services due to the numerous stages associated with the payment process, which may be challenging especially to the new adopter.

The effect of perceived ease of use of a product have been demonstrated in some studies, which shown the relationship between perceived ease of use, attitude, and intention to use. Study from Liebana-Cabanillas et.al. (2020) resulted that the two key factors of TAM, perceived ease of use & perceived usefulness, have significant influences on the intention to use mobile payment services, whereby the effect of perceived of use have significant influences compare to the previous study in developing country (Liebana-Cabanillas, Japutra, Molinillo, Singh, & Sinha, 2020). Perceived ease of use has been identified as having a direct effect on the behavioral

intention or as having an indirect impact by mediating perceived usefulness of mobile payment services (Peng, et al., 2012), In the different study, Venkatesh et al. (2012) suggested a positive influence of perceived ease of use and perceived usefulness. The rationale is that user who believes that a technology is easy to use will think that it is also useful and leads to the adoption of mobile payment technology.

Accordingly, we propose the following research hypothesis :

H1 : Perceived ease of use has positive impact on attitude

H2 : Perceived ease of use has positive impact on perceived usefulness

B. Perceived Usefulness

Other variable from TAM is perceived usefulness, which defines as the degree to which the person believes that using the particular system would enhance his/ her job performance (Marangunic & Granic, 2014). In the context of mobile payment service adoption, perceived usefulness refers to the extent that people believe that a service will help them conduct payment transactions (Phonthanukitithaworn, Selitto, & W.L Fong, 2016). If the user believe that one mobile payment system will help them make payments easier and quicker, they will believe that it brings benefit and at the end will be more motivated to use it. Studies from Hsu & Chiu (2003) and Kim & Shin (2015) have demonstrated that perceived usefulness has a direct relationship with attitude.

In the field of mobile payment system, there were several research conducted which demonstrated the role of perceived usefulness that is determined by external variable and become a mediating variable that can influence attitude. Study by Chauhan (2015) on the acceptance of mobile money for poor citizens in India resulted that the perceived usefulness of m-money was found significantly impacting attitude to use it. The implication of this study is that if poor people are made aware of the usefulness of m-money, it will provide a "push" factor to use it as "significance precedes momentum" (Chauhan, 2015). On the study conducted by de Luna, et al. (2018) which compare variables for adoption of 3 mobile payment services, revealed that perceived usefulness show greater relevance with the NFC payment system due to the impact of attitude and intention. In different study related to mobile payment, it has been concluded that the higher level of usefulness a user perceives when he/she decided to use specific mobile payment system, the greater the intention to use it (Liebana-Cabanillas, Japutra, Molinillo, Singh, & Sinha, 2020).

Based on the preceding findings, we propose the following hypothesis :

H3 : Perceived usefulness has positive impact on attitude

H4 : Perceived usefulness has positive impact on intention to use

C. Attitude

According to Azjen, attitude toward behavior is a positive or negative evaluation of performing that behavior (Marangunic & Granic, 2014). In the original TAM, Davis hypothesized that the attitude of a user toward a system will be a major determinant of whether the user will accept the system or not. Thus, in turn, will be considered to be influenced by two major beliefs, perceived usefulness & perceived

ease of use (Marangunic & Granic, 2014). The study by Yang & Yoo (2003) suggested that attitude may have important effects on system use, and therefore need to be reconsidered in the TAM model.

Attitude is important when studying consumer behavior because most of its models view attitudes as a key variable that could influence the consumer behavior (Verma & Sinha, 2017). In the context of this study, it is expected that attitude facilitate transactions and favor the intention to use mobile payment system. It is an essential determinant factor related to the question of intention to use a new payment system, as it express a significant effect on the intention to use for 3 mobile payment services (de Luna, Liebana-Cabanillas, & Sanchez-Fernandez, 2018).

Attitude is positively influenced by perceived usefulness and perceived ease of use and it can be strengthened by advocating the benefit of those 2 variables (Lin, 2011). Based on the study from Chauhan (2015), once the users have attitude towards using m-money, the behavior intention to use will follow as per the result of the study. Similar with the previous study, research from Verma & Sinha (2017) indicated that perceived ease of use does not directly impact intention to use but it is mediated by attitude. Furthermore, the study also suggests that if the attitude is favorable then the perceived ease of use will be higher. Thus, we propose the following hypothesis:

H5 : Attitude mediates the relationship between perceived ease of use and perceived usefulness to intention to use

D. Intention to Use

Intention is the indicator of an individual's readiness to perform a given behavior (Fishben & Ajzen, 1975). In the theoretical model, Fishbein and Ajzen referred the intention that a person has prior to actual behavior as the behavioral intention of that person and defined it as a measure of one's intention to perform behavior (Chuttur, 2009). Past research has established that beliefs and attitudes are predictors of behavioral intention (Wang, Sun, Lei, & Toncar, 2009). Intention is often used to understand how attitude can have an effect on actual behavior (Huang, Lee, & Ho, 2004), and how negative attitude would lead to unfavorable intention and behavior (Stevenson, Bruner, & Kumar, 2000). Past studies have also provided empirical evidence about favorable intention of mobile users towards mobile technology when they hold positive beliefs about it (Au & Kauffman, 2008; Mallat, 2007; Ondrus & Pigneur, 2006).

According to Davis, the magnitude of users perceives the usefulness of a system provides the prediction for their intention to use the information technology and it is regarding how a person thinks mobile payment services would benefit and improve their lifestyle. In the context of our research, we consider that the perceived ease of use and perceived usefulness of the payment system will influence the intention to use through user's attitude toward the payment system.

E. Mobile payment technology

There are several different mobile payment technology that are now available and some of it are more used than another. Based on study from iPrice (2020),

applications such as GoPay, Ovo, Dana, & LinkAja which categorized as mobile wallet become the top four mobile payment provider. While some mobile banking such as CIMB, JakOne also listed in one of the top 10.

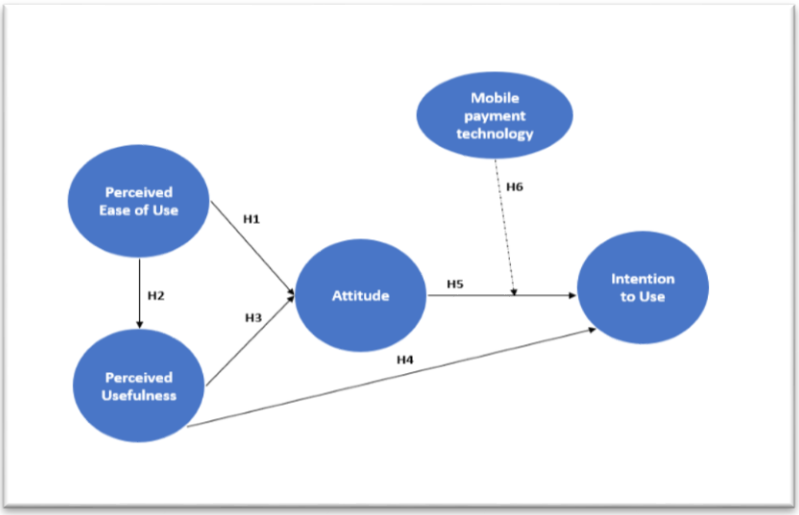
Only very few studies that use specific mobile payment technology as the research variable. One of this few is study from Liebana-Cabanillas et.al. (2017) that focuses on the two largest current mobile systems of payment, which are SMS that is remote and Near Field Communication (NFC) that required close proximity. The major variable regarding the intention to use both payment system is attitude, however the degrees of important factor for mobile payment adoption might be differ from one to another. Other similar research conducted by de Luna et.al (2018) comparing 3 mobile payment technology of SMS, NFC, & QR. It resulted a significant difference in the relationship between certain variables of the structural models, which confirm the hypothesis that the user behaviour towards the proposed payment system differ from one to another.

The novelty of our research lies in the formulation of mobile payment technology that moderates the relationship between attitude to intention to use. Therefore, we put forward the following research hypothesis:

H6: Mobile payment technology moderates the relationship between attitude and intention to use

Below is the framework model for the 6 hypothesis.

Figure 1
Framework model of the study



Research Methode

A. Research Design

In order to evaluate the factor that influence the adoption of mobile payment, we will use the research strategies of survey to obtain the information from respondent. This is a popular strategy that used in research, and the reason the

researcher used this is due to its capability to collect data on many types of research question. A self-administered questionnaire will be developed to measure the variables exist in this study. The survey will contain similar and only differs as the proposed payment system. We believe that using this method will achieve the purpose of our study as it provides the most cost & time efficient method for the researcher due to its ability to reach many respondents in one time frame of data collection.

B. Sampling Method & Sample Size

Our relevant targeted population are those who ever use at least one mobile payment technology, either mobile wallet, or mobile banking, at least once in the past one month. This is to ensure that the sample taken has direct experience in using mobile payment and resulted in a more valid & reliable data. The parameter that the study would like to investigate is based on the hypothesis that we have defined using 5 variables; perceive ease of use, perceived usefulness, attitude, intention to use, and mobile payment technology.

The study will not use a specific sampling frame, as representativeness is not critical for the study. Due to the time frame that explain earlier, the study wants to obtain a quick, convenient, and less expensive data, therefore we will use convenience sampling. In order to establish the representativeness of the sample, we will use the approach from Krejcie & Morgan which simplified the sample size decision by referring to a table that under certain circumstances ensures a good decision model (Bougie & Sekaran, 2020). Therefore, we will use the reference sample of 384 as listed in Krejcie & Morgan table for population of 1 million. This is aligned with one of the rules of thumb from Roscoe which mentioned that the sample size of 30 and less than 500 are appropriate for most research (Bougie & Sekaran, 2020).

C. Method of Data Collection & Proposed Data Analysis

In order to study the proposed framework, self-administered questionnaires were made and filled out by the respondents. The questionnaires conducted in Bahasa Indonesia in the form of electronic questionnaire using Google form. We would like to take the advantage of the electronic questionnaire for practical purposes such as, convenience of the respondents to answer the question and easy to administer (Bougie & Sekaran, 2020). This will be relevant to the current pandemic condition where there is a limitation for mobility, and people makes the most use of the ability of the internet to do their daily activities. Prior to the actual data gathering, the questionnaires was subjected to a pilot test with 30 respondents, to ensure its reliability and validity.

The questionnaire will use a 5-point Likert scale ranging from strongly disagree to strongly agree. The survey instruments comprised as 17 items.

Table 1
Questionnaire's Item

Construct	Operational Definition	Items Questionnaire	Indikator	Sources
Perceived ease of use	The degree to which the person believes that using the particular system would be free of effort	Mudah untuk menjadi terampil dalam menggunakan aplikasi mobile payment	X11	de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019)
		Interaksi menggunakan aplikasi mobile payment adalah jelas	X12	
		Interaksi menggunakan aplikasi mobile payment mudah dipahami	X13	
		Mudah untuk mengikuti semua langkah dalam aplikasi mobile payment	X14	
		Mudah untuk berinteraksi dengan aplikasi mobile payment	X15	
Perceived usefulness	The degree to which the person believes that the particular system would enhance his/her job performance	Mobile payment adalah cara pembayaran yang bermanfaat	X21	de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019)
		Penggunaan mobile payment memudahkan proses pembayaran	X22	
		Mobile payment yang saya gunakan mempercepat penggunaan aplikasi mobile saya	X23	
		Saya yakin mobile payment system yang saya gunakan membantu keputusan saya untuk berbelanja	X24	
Attitude	A positive or negative evaluation of performing that behaviour	Penggunaan mobile payment adalah ide yang bagus	X31	de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019)
		Penggunaan mobile payment membuat saya nyaman	X32	
		Penggunaan mobile payment bermanfaat untuk saya	X33	
		Penggunaan mobile payment cukup menarik untuk saya	X34	
Intention to use	Intention that a person has prior to actual behaviour as the behavioural intention of that person, and defined it as a measure of	Jika terdapat kesempatan, saya akan selalu menggunakan mobile payment	Y1	de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019)
		Saya kemungkinan besar akan selalu menggunakan mobile payment dalam waktu dekat	Y2	
		Saya terbuka untuk menggunakan mobile payment dalam waktu dekat	Y3	

one's intention to perform behaviour	Saya berniat menggunakan mobile payment ketika ada kesempatan	Y4

Two approaches of data analysis, descriptive and quantitative, will be used in this study. Descriptive analysis can offer a further explanation with respondent demographics and characteristics, which will give us more understanding of the user's intention to use. For quantitative analysis, we use PLS-SEM to test the validity and reliability of the data. Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure while reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring (Bougie & Sekaran, 2020). In order to test the structural model, this study will use the same PLS-SEM using the software SMART-PLS to test and confirm our assumption. PLS-SEM give us more flexible and suitable for research with new object and a small number of respondents (Hair et al, 2016).

Result & Discussions

A. Descriptive Statistics

In order to study the proposed framework, self-administered questionnaires were made and filled out by the respondents. The questionnaires conducted in Bahasa Indonesia in the form of electronic questionnaire using Google form. It was distributed to the respondents between the period from 18 – 22 October 2021 when the infection rate of Covid 19 in Indonesia is still high with over than 4 million cases, and the condition at that time was still considered as pandemic (Annisa, 2021). A total of 464 questionnaire is collected, and after we screening the outlier, the 455 questionnaires were available for further studies.

From the questionnaires collected; we obtained the result of respondent statistics as follow:

Table 2
Descriptive statistics

		Total	Percentage (%)
Gender	Male	215	47.25
	Female	240	52.75
Age	< 41 year	368	80.88
	> 41 year	87	19.12
Mobile Payment Technology most frequently used	Mobile Wallet	260	57.14
	Mobile Banking	195	42.86

From the data above, we can see that the gender proportion of is almost balance (47.25 % male user and 52.75% female user). In the other hand, we can see that user's age proportion is not balance (80.88% users are less than 41 years old while the remaining more than 41 years old are only 19.12%). The distribution of mobile

payment technology that mostly used by respondent is slightly balance (57.14% of mobile wallet user vs 42.86% of mobile banking user).

B. Measurement model analysis

In order to decrease the variability in the data, outliers need to be detected and removed by referring to the value of Mahalanobis distance. The value is compared to chi-square at a significance level of 0.001. This resulted to a reduction of data sampling from 464 to 455.

Prior to conduct further analysis, we did normality, linearity, multi Colliniearity and Heteroscedasticity test. Normality test is performed to test whether in a regression model, an independent variable and a dependent variable or both have normal or abnormal distributions (Ghozali, 2021). Linearity test is used to see if the specifications of the model used are correct or not (Ghozali, 2021). Heteroscedasticity is conducted to test whether in regression models there is a variance inequality from the residual value of one observation to another (Ghozali, 2021). Multicollinearity test aims to test whether the regression model found the corellation between independent variables (Ghozali, 2021). After conducting the analysis, we conclude that the data meet the requirement of normality, linearity, multi Collinierity and Heteroscedasticity test as shown in the appendix.

From the final 455 data sampling, validity and reliability tests were conducted using Smart PLS software. The purpose of this is to ensure that the measurement item measure the right concept and has stability and consistency of measurement. Loading factor is used as parameter to examine the validity test, while average variance extracted (AVE) value and composite reliability were used for reliability test. In addition, discriminant validity was also evaluated using AVE analysis.

The factor loading value for validity test must be greater than 0.5, while the AVE limit should be greater than 0.5 with the composite reliability value limit is 0.7 (Hair et al, 2016). Reliability was also often assessed by Cronbach alpha. When the values of Cronbach Alpha were larger than 0.70, it can be acknowledged that the reliability of the construct were acceptable (Hair et al, 2016). The validity and reliability tests conducted during the primary research are summarized in Table 2.

Table 3
Validity and reliability test result

Variable	Item	Factor Loading	AVE	Composite Realibility	Cronbach Alpha
PEOU	X11	0.936	0.907	0.980	0.974
	X12	0.956			
	X13	0.964			
	X14	0.967			
	X15	0.937			
PU	X21	0.912	0.799	0.941	0.915
	X22	0.898			
	X23	0.925			
	X24	0.837			
ATT	X31	0.894	0.807	0.893	0.760
	X34	0.902			
ITU	Y1	0.841	0.738	0.919	0.882
	Y2	0.875			
	Y3	0.856			
	Y4	0.864			

Based on the table above, the factor loading for the questionnaire items are all already greater than 0.7. Therefore, we could conclude that questionnaire item has passed the validity test. For AVE measurements, all variables are greater than 0.5. The test results on composite validity for each variable are greater than 0.7. This shows that all variables meet the reliability test limit. We can also observe from the table 2 that all the variables provide Cronbach alpha more than 0.7 which means that all of the variables are reliable.

The result of discriminant validity result was provided in table 3 below. it can be observed that the correlation value for each AVE construct variable to itself is greater than the correlation between the construct variable to others, so that all variables can be determined as valid.

Table 4
Discriminant validity

	ATT	ITU	PEOU	PU
PU	0.828	0.770	0.891	0.894
PEOU	0.773	0.680	0.952	
ITU	0.769	0.859		
ATT	0.898			

C. Structural model analysis

The second step in analysis is using multiple regression as statistical analysis to test the six hypotheses. It was done using PLS SEM by assessing the structural method. Initially, a bootstrap resampling technique with 5000 iterations was performed. It is a resampling technique used to estimate statistics on a population by sampling a dataset with replacement. Bootstrap is an appropriate way to control and check the stability of the results. The result of this techniques will provide analysis on hypotheses and construct's relationship based on examination of standardized paths. The result of the structural model analysis is displayed in figure 1 while the summary provided in table 4.

Figure 2
Structural model

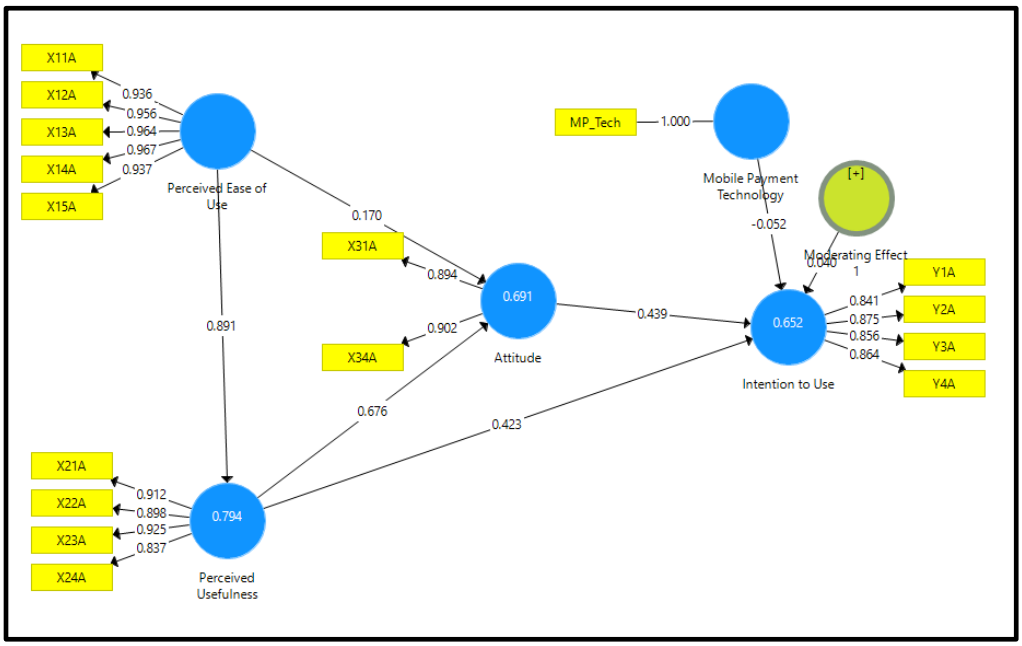


Table 5
Hypothesis result

Hypothesis	Path	Path coefficient	p-value	Conclusion
H1	PEOU--> ATT	0.170	0.006	Accepted
H2	PEOU --> PU	0.891	0.000	Accepted
H3	PU --> ATT	0.676	0.000	Accepted
H4	PU --> ITU	0.423	0.000	Accepted
H5	PEOU --> ATT --> ITU	0.075	0.010	Accepted

Table 4 contains the results of the hypothesis test. Since this study used a 95 percent confidence level, the t-value > 1.96 and p-value 0.05 are used to determine whether a hypothesis is significant or accepted in this study. If the t-value is less than 1.96 and the p-value is greater than 0.05, the hypothesis is rejected. As for H6 we run the Multi Group Analysis for each Mobile Payment Technology, with the result as follow:

Table 6
MGA result of Mobile Payment Technology as Moderating Variable

Description	Mobile Payment Technology	
	Mobile Wallet	Mobile Banking
Path Coefficient	0.737	0.770
Standard Error	0.039	0.029

Using the formula from Chin (2000), we obtain the t-stat -0.679. Since this value is lower than -1.96 (for alpha 5%) we can conclude that Mobile Payment Technology did not moderate the relationship between attitude and intention to use.

In addition to the structural model, the research model explains 68.9% effect for attitude caused by perceived ease of use and perceived usefulness, 64.9% of effect in intention to use caused by attitude and perceived usefulness, and 79.4% of effect in perceived usefulness caused by perceived ease of use. This is indicated by the adjusted R square score as stated in figure 5.

Table 7
R square score

	R Square	R Square Adjusted
Attitude	0.691	0.689
Intention to Use	0.652	0.649
Perceived Usefulness	0.794	0.794

From the hypothesis test, it is concluded that perceived ease of use has a positive and significant impact toward attitude. The result is consistent with the study mentioned that the original TAM is a robust model for the study of mobile payment system (Davis, 1989; de Luna et al., 2019; Li et al., 2019). Perceived ease of use has a positive and significant impact toward perceived usefulness. This strengthen the previous study (Davis, 1989; Li et al., 2019; Liébana-Cabanillas et al., 2020; Wijaya et al., 2020). It is most likely that the easiness to navigate the mobile payment application, whether it is mobile wallet or mobile banking, will lead to a perception from user that the system is useful.

Perceived usefulness has a positive and significant impact toward attitude, this strengthen the previous study (Chauhan, 2015; de Luna et al., 2019; Li et al., 2019). This indicate that if people are made aware of the usefulness of mobile payment, it will provide a "push" factor to use it. Perceived usefulness has positive and significant impact toward intention to use. This consistent with previous study (de Luna et al., 2019; Kalinic et al., 2019; Li et al., 2019; Liébana-Cabanillas et al., 2020; Wijaya et al., 2020). Once user identify perceived usefulness of a payment system, it will lead to become a critical factor for determining the successful adoption of a certain technology or in this case mobile payment system. This research also concluded that attitude mediates the relationship between perceived ease of use and intention to use which align with the study from Chauhan (2015). Once the users have attitude towards using mobile payment, the behavior intention to use will follow.

One hypothesis that brings novelty to this study, reveals that mobile payment technology did not moderate the relationship between attitude and intention to use. It is likely that it is due to the similarity of user interface from both mobile payment technology of mobile wallet and mobile banking. From the user perspective, there is no significant difference of attitude that can lead to intention use from user who use mobile wallet and mobile banking technology.

Conclusion

The main purpose of this study to understand the contributing variables of the user's intention to use of mobile payment in Indonesia using the original TAM framework and put a novelty to use mobile payment technology as moderating variable. Thus, the variables that we use as construct include perceived ease of use, attitude, perceived usefulness, and mobile payment technology which refer to mobile wallet and mobile banking.

Based on the results of research from 455 respondents, it is known that perceived ease of use affects attitude and perceived usefulness significantly, as well as perceived usefulness and attitude together have a significant effect to intention to use with the attitude as mediating variable. This indicates that the ease of using mobile payment technology will create an attitude and a high sense of usefulness by users, which in turn will encourage the intention to use mobile payments technology for paying their daily needs.

The present study has implication that the original TAM framework is still relevant to be used when investigating the intention to use of mobile payment. Even though the study conducted in a disruption condition of Covid 19 pandemic, the result of the study yet still confirming the previous study using original TAM framework. This will bring a practical implication for the company engaged in mobile payments that strive to expand the use of mobile payments. They might want to consider variables mentioned in this study to improve the service strategies and business model for current and future markets.

A large sample of millennial generation which indicated as those who are in below 41 when the study conducted become one of the limitations of this study. The distribution of the questionnaire was limited to one particular user setting, at one time, and was therefore limited for broad generalization. Further research may consider finding a more various group of age which may affect the result.

Mobile payment technology that used in this study only refer to mobile payment and mobile banking which even though are the most used technology in Indonesia, may have similar characteristics in terms of the user interface which may not affect user's intention to use. This may become one of the rationales of the finding for mobile payment technology that did not moderate the relationship between attitude and intention to use. Further study could consider technology that is more distinctive from one to another such as mobile wallet and NFC or QR code.

The fact that 64.9% of the variance of intention to use was explained by the independent variables considered in this study still leaves 35.1% unexplained. We can also say that there are other additional variables that have not been considered in this study. Further research might be necessary to use variables outside original TAM framework to explain the intention to use of mobile payment technology in Indonesia.

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