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The Influence of Perceived Security and Perceived Enjoyment on Intention to Use with Attitude Towards Use as Intervening Variable on Mobile Payment Customer in Surabaya

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Abstract

This study aims to determine the effect of perceived security and perceived enjoyment as moderated variable on intention to use mobile payment, either directly or through mediation of attitude towards use. The method used in this study is quantitative by spreading the questionnaires to 211 respondents of mobile payment application users both online and offline in Surabaya. The selection of this research sample used a judgment sampling technique with criteria determined by the researcher. The data was analyzed with Structural Equation Modeling (SEM), SmartPLS tools. The questionnaire collected was 192 questionnaires. The results show that perceived security and perceived enjoyment have a significant directly influence on intention to use and indirectly through mediating attitudes to use mobile payment. In addition, it was found that perceived enjoyment variable moderated the relationship between perceived security and attitudes to use but did not moderate the relationship between perceived security and intention to use.

Keywords: Perceived security; perceived enjoyment; attitude toward use; intention to use; mobile payment.

1. Introduction

E-commerce in Indonesia is growing rapidly, Indonesian is among the five countries in the world with the highest number of mobile phones. The others are China, India, USA and Brazil (Ach, 2018). In fact, more than 100 million active smartphone Indonesian in 2018. Moreover, according to the survey conducted by Putera (2018), the Indonesian ecommerce revenues are expected to reach 9,1 billion USD in 2018 making it one of the most important means of conducting mobile financial transactions.

Fintech or financial technology offers modern technology in financial sector (Saksonova & Merlino, 2017). In financial industry, fintech is a non-financial business uses innovative technology to provide services, such as payment, remittance, and investment (Kim et al., 2016).

According to Dahlberg et al., (2008) mobile payments are payments for goods, services, and bills with a mobile device (such as a mobile phone or smartphone). Mobile payment methods are usually related to the particular benefits such as easy access to payment services anywhere, place and time independent payments, and the likelihood to avoid making cash payments and queues (Bezhovski, 2016).

On the other hand, the rise of mobile payment among businesses creates a risk. In the context of online services, security conceptualized has been found to be a critical concern among consumers (Lwin, et al., 2007). According to Bezhovski (2016) the factors that prevent the adoption of mobile payment methods include perceived security risks, premium pricing of the payment system, incompatibility with large payments, and the immaturity of the mobile payments market. Threats can be made either through network and data transaction attacks or through unauthorised access to the account by means of defective or false authentication, the success of mobile payment services is the intention to use the consumer (Yousafzai et al., 2003). According to Luna et al., (2016) intention is defined as the probability that an individual will use a technology.

In addition, the intention to use mobile payments can be influenced by perceived enjoyment. According to Heijden (2004) the definition of perceived enjoyment specifies the extent to which fun can be derived from using the system. Therefore, perceived enjoyment focuses on intrinsic motivation. The intention to use mobile payment services can also be influenced by attitudes towards the use of mobile payments. Attitude towards technology use refers to the degree to which a user likes or dislikes using technology (Teo & Zhou, 2014).

Nysveen et al. (2005) found that attitude toward use mediated relationship between perceived enjoyment and intention to use. Schierz et al.(2010) also found that attitude mediated relationship between

perceived security and intention to use mobile payment. Other studies related to consumer attitudes and intentions have been built based on the Theory of Planned Behavior (TPB) (Ajzen, 1991). In theory, there are three factors: attitude, subjective norm and perceived behavioral control that can predict individual intention

The relationship between perceived security and attitude toward has been shown in multiple studies applied to different contexts Schierz et al. (2010), Hartono et al. (2014), Amoroso & Watanabe (2012), Wang & Idertsog (2015), Vejačka & Štofa (2017). The higher perceived security may be related to positive attitude towards using (Schierz et al., 2010).

Perceived enjoyment variable moderated the relationship between perceived security and attitude toward. Cocosila et al. (2009) found that if users perceive a risk in the use of the information technology service, they would also tend to see less enjoyment in using this service. Therefore, the higher the enjoyment and usefulness users perceive the more likely they are to adopt it. Conversely, the more risk that is perceived, the less they adopt it. Dysvik & Kuvaas (2011) also found that intrinsic motivation moderates the relationship between perceived job autonomy and work performance.

Several studies such as those of Cabanillas et al. (2017), Cobanoglu et al. (2015), Luna et al., (2016), Peng et al. (2012) and Hartono et al. (2014) found that perceived security significantly affects intention to use.

Nicole et al. (2015) found that perceived enjoyment which had no direct effect on adoption intention but a significant effect on perceived ease of use, and perceived usefulness. Perceived enjoyment was found to be a significant predictor of perceived usefulness, perceived ease of use and perceived risk. Higher levels of perceived enjoyment may lead to a decrease in worry, in turn lowering perceived risk.

The relationship between attitude toward use and intention to use has been shown in multiple studies applied to different contexts Schierz et al. (2010), Nysveen et al. (2005), Akturan & Tezcan (2012), Luna et al. (2016) and Bauer et al. (2005), the higher attitude towards using may be related to higher intention to use.

Perceived enjoyment can also directly influence the intention to use a technology as proven by Heijden (2004), Kujala et al. (2017), Nysveen et al. (2005) dan Venkatesh et al. (2012)**.** In another study it was found that the perceived enjoyment can directly influence attitudes that have been proven by Nysveen et al. (2005), Heijden & Verhagen (2004), Huang (2017), Lee & Chang (2011)**.** Perceived enjoyment experienced by consumers has a positive influence on attitudes in using mobile services (Nysveen et al., 2005). Other research conducted by Heijden & Verhagen (2004) also shows the relationship between enjoyment and attitude to purchases at online stores.

Based on the above phenomenon, it is important to examine the relationship between perceived security, perceived enjoyment, moderated by perceived enjoyment on the intention to use, both directly and through mediation from the attitude toward use mobile payment. Surabaya is chosen as the case study to explore the consumer behavior to use mobile payment.

2. Literature review

Mobile payment can be defined as the type of payment transaction processing in electronic procedure, the payer employs mobile communication techniques in conjunction with mobile devices (Pousttchi, 2003). Mobile payment may replace traditional payment services such as cash, cheques, credit or debit cards (Meharia, 2012). Advantages of mobile payments compared with traditional payment include availability, time and place independence, queue avoidance, and possibilities for remote purchases (Mallat, 2007).

Many studies related to consumer behavior towards mobile payment services have been built based on the Technology Acceptance Model (TAM). In the TAM study conducted by Davis (1989) it was found that external variables affected perceived usefulness and perceived ease of use, both of these variables then influenced the behavioral intention to use as seen in figure 1.

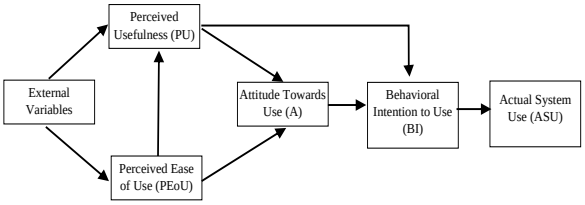

Figure 1. The Technology Acceptance Model
Source: Davis (1989)

2.1 Perceived Security

Internet transactions are subject to numerous information security threats, consumers' trust is fundamental in web transactions and is influenced by perceived information security (Tsiakis, 2012). According to Yousafzai et al. (2003) in the context of electronic banking threats can be made either through network and data transaction attacks or through unauthorized access to the account.

Ally & Toleman (2005) defined perceived security as probability which consumers believe that their payment information will not be viewed, manipulated or abused by unauthorized users during processing, transit, in a manner consistent with their expectations that the obligations of all parties concerned in the transaction will be fulfilled.

2.2 Perceived Enjoyment

Heijden (2004) defined perceived enjoyment specifies the extent to which fun can be derived from using the system as such. Therefore, perceived enjoyment focuses on intrinsic motivation. According to Praveena & Thomas (2014) perceived enjoyment is an intrinsic motivation that emphasizes the usage process and reflects the pleasure and enjoyment associated with the using a system. Perceived enjoyment plays an important role in user technology acceptance and has great implications, especially for hedonic systems (Sun & Zhang, 2006).

2.3 Attitude Toward Use

Davis et al. (1989) defines attitude toward using the system as the degree of evaluative affect that an individual associates with using the target system in his/her job. Akturan & Tezcan (2012) defined attitude as user's evaluation of the desirability to use the system.

Sritriratkul (2005) divides attitudes into three components, as follows:

1. Cognitive, cognitions are our beliefs, theories, expectancies, cause and effect beliefs, and perceptions relative to the focal object
2. Affective, the affective component refers to our feeling with respect to the focal object such as fear, liking, or anger.
3. Conative, conation is a tendency to respond in a certain manner toward an object or activity

2.4 Intention To Use

Intention is defined as the probability that an individual will use a technology (Luna et al., 2016). Trust in mobile payment services, directly and indirectly affects consumers' intentions to use mobile payment (Lu et al. , 2011). Intention to use is indicator to denote the factors that influence desired behavior (Teo & Zhou, 2014)

2.5 Research Hypotheses

Schierz et al. (2010) found that there is a positive relationship between perceived security of mobile payment services and the attitude towards using mobile payment services. This suggests that higher perceived security (low perceived risk) may be related to positive attitude towards using. Hartono et al. (2014) suggested that consumers who perceive that a website has a low level of security will also perceive a higher level of risk. The result is a negative attitude toward using this website and would be associated with a lower intention to use this website. Amoroso & Watanabe (2012) found that there is a positive relationship between perceived security and attitude toward using mobile Suica in Japan. Wang & Idertsog (2015) also found that security has positive relation to attitude toward using mobile payment service in Taiwan. Vejačka & Štofa (2017) found that security and trust have a significant effect on attitude toward using and behavioral intention to use electronic banking adaption in Slovakia.

H1: Perceived security significantly affects attitude toward use mobile payment

Cocosila et al. (2009) found that if users perceive a risk in the use of the information technology service, they would also tend to see less enjoyment in using this type of service. Therefore, the higher enjoyment and usefulness users perceive the more likely they adopt it. Jarvenpaa et al. (2000) also found that the lower the consumer's perceived risk associated with buying from an Internet store, the more favorable the consumer's attitudes towards shopping at that store. Lee & Murphy (2008) found that enjoyment moderated relationships between these cognitive determinants and loyalty. Service quality and value related more to loyalty when enjoyment was low, implying that youth who used mobile services for utilitarian purposes were mainly concerned with the services' quality and value. Switching costs related more to loyalty when enjoyment was high. Dysvik & Kuvaas (2011) also found that intrinsic motivation moderates the relationship between perceived job autonomy and work performance.

H2: Perceived enjoyment variable moderated the relationship between perceived security and attitude toward use

Cabanillas et al. (2017) found positive relationship between the perceived security and the intention to use, when the system is considered secure, the intent of the consumer will increase. Cobanoglu et al. (2015) found that perceived security have a positive effect on the intention to use proximity mobile payment in restaurants. In other words, consumers are more likely to adopt the new payment method if they believe mobile payment is secure and can provide significant added value. A major concern both for business and

consumers is payment security, consumer's perceived security of the NFC mobile payment system determines his/her intention to use it (Luna et al., 2016).

Besides perceived advantages, innovations usually also come with risks, Peng et al. (2012) found that perceived security (PS) has a positive effect on behavior intention to use tourism mobile payment in China. Hartono et al. (2014) also found positive relationships of perceived security with user attitude (ATT) and intention (INT). Consumers who perceive that a system has a low level of security will also perceive higher level of risk. The result is a negative attitude toward using this website. This negative attitude would be associated with a lower intention to use this website;

H3: Perceived security significantly affects intention to use mobile payment

Davis et al. (1992) modified original TAM by including the perceived enjoyment as intrinsic motivation, increasing enjoyment of using system helps to increase productive system accepted. Nicole et al. (2015) found that perceived enjoyment which had no direct effect on adoption intention but a significant effect on perceived ease of use, and perceived usefulness. Perceived enjoyment was found to be a significant predictor of perceived usefulness, perceived ease of use and perceived risk. Higher levels of perceived enjoyment in using a new technology may lead to a decrease in anxiety, worry or concern, in turn lowering perceived risk. Cocosila et al. (2009) found that intrinsic motivation will have a positive effect on behavioral intention to use a new information technology application, whereas perceived psychological risk has a negative influence. Therefore, if users perceive a risk in the use of the information technology, they would also tend to see less enjoyment in using this service. The higher enjoyment and usefulness users perceive the more likely they are adopt it.

H4: Perceived enjoyment variable moderated the relationship between perceived security and intention to use

Schierz et al. (2010) found that there is a positive relationship between the attitude towards using mobile payment services and the intention to use mobile payment services. This suggests that higher attitude towards using may be related to higher intention to use. Nysveen et al. (2005) found that attitude toward using a mobile service has a stronger effect on intention to use. Akturan & Tezcan (2012) also found that attitude towards using mobile banking positively affects the behavioral intention to use mobile banking. Perceived usefulness, perceived social risk, perceived performance risk and perceived benefit directly affect attitudes towards mobile banking, and that attitude is the major determinant of mobile banking adoption intention. Luna et al. (2016) found positive relationship between attitude towards the use with intention to use NFC technology payment. Bauer et al. (2005) found that the more positive the attitude toward mobile marketing the higher the behavioural intention to adopt mobile marketing;

H5: Attitude toward use significantly affects intention to use mobile payment

Based on the five hypotheses above, the research model developed can be seen in Figure 2.

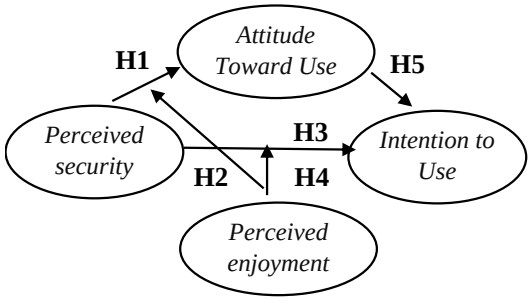

Figure 2. Research Conceptual Framework

3. Methods

3.1 Sampling

The purpose of this research is to examine and to verify the correlation or the influence among the research variables. This type of this research was a quantitative causal research. Users who are sampled in this research are mobile payment users domiciled in Surabaya the sampling technique used in this research is non-probability sampling, that is the purposive sampling of 192 respondents. The sample criteria to be respondents in this research are set by researchers, such as (1) respondent are mobile payment user; (2) respondent understand how to use mobile payment

3.2 Data Collection Methods and Processes

The data of this research were collected by distributing questionnaires online on google drive and offline by distributing questionnaires to customers according to respondents criteria in Surabaya. The determination of sample quantity was determined by the requirements specified by Sekaran (2013) which states that the number of samples is calculated more than thirty and less than five hundred and calculated with Lemeshow formula.

3.3 Measures

There were four variables in this study, Perceived Security (PS), Perceived Enjoyment (PE), Attitude Towards Use (ATU) and Intention to Use (ITU). The questionnaire used 5-point Likert scales, with response choices ranging from one (strongly disagree) to five (strongly agree). The definition of perceived security in this research is consumer perceptions of the level of security against threats in using mobile payments (ex. unauthorized data usage or data theft). This variable contains three indicators that were adapted from Schierz et al. (2010):

X1.1: I think using mobile payment secure from the risk of an unauthorized third party
X1.2: I think using mobile payment secure from the risk abuse of usage my personal information (ex.: names, birth date, address, phone number, etc)
X1.3: I think using mobile payment secure from the risk abuse of usage my billing information (ex.: credit card number, bank account data)

The definition of perceived enjoyment in this research is consumer's perception of the pleasure gained from using a mobile payment system. This variable contains three indicators that were adapted from Sun & Zhang (2006):

X2.1: I enjoy with easy of use mobile payment
X2.2: I enjoy with practicality of use mobile payment
X2.3: I enjoy with discount promo mobile payment (ex.: cashback or reward)

The definition of attitude towards use in this research is consumer attitudes toward the impact experienced when using a mobile payment service. This variable contains six indicators that were adapted Sritriratkul (2005):

a. Cognitive
   Consumer valuation of transactions through mobile payment
   Y1.1: I think using mobile payment save my time
   Y1.2: I think using mobile payment reduces costs for customers
b. Affective
   Consumer emotions towards payment through mobile payment
   Y1.3: I feel that mobile payment will be easy to use because it can be accessed anywhere
   Y1.4: I feel the transaction through mobile payment will give satisfaction according to my expectations
c. Conative
   Consumer behavior when transacting via mobile payment.
   Y1.5: I will study the mobile payment features to maximize existing services
   Y1.6: I will discuss with other users about using mobile payment

The definition of intention to use in this research is the desire or interest of consumers to use mobile payment in making payment transactions. This variable contains two indicators that were adapted Vejačka & Štofa (2017):

Y2.1: I am considering using mobile payment in the future
Y2.2: I consider making mobile payment the first choice as a payment media

3.4 Data Analysis

The data in this research were analyzed through by using Smart PLS. The technique used to know the effect of the independent variable on the dependent variable between data is Structural Equation model (SEM) using SmartPLS3.2.7. SEM is one of the multivariate techniques that will show how to represent a series of causal relationships in a path diagram.

4. Results

The study involved 211 Indonesian mobile payment customers in Surabaya. Five demographic variables, gender, age, profession, education and income, were measured in this survey. After data cleaning, the remaining 192 records comprised 87 males and 105 females. The result showed that the majority of respondent is female; on the age of 17 to 24 years old; the profession is student, the education background is senior high school and the income is on the range lower than IDR 3 million/month. The result of descriptive analysis on respondent profile revealed that the characteristic of the customers who have intention to use mobile payment is young, educated, and middle income.

We conducted validity and reliability test before the hypotheses testing. Validation measures using convergent validity and discriminant validity, on the other hand, reliability measurement using cronbach alpha, average variance extracted and composite reliability. We used software SmartPLS (Partial Least Square) 3.2.7 to test our model.

4.1 Evaluation of Discriminant Validity

The measurement of discriminant validity in this research used two criteria that were convergent validity criteria that can be seen in Table 1 and discriminant validity that can be seen in Table 2.

Table 1. Outer Loadings Assessment

	X1	X2	Y1	Y2
X1.1	0.774			
X1.2	0.785			
X1.3	0.823			
X2.1		0.822		
X2.2		0.78		
X2.3		0.798		
Y1.1			0.76	
Y1.2			0.736	
Y1.3			0.701	
Y1.4			0.724	
Y1.5			0.708	
Y1.6			0.735	
Y2.1				0.871
Y2.2				0.886

Based on Table 1, it can be seen that the value of outer loading of each indicator in all four research variables greater than 0.7. Thus, it can be concluded that this model possesses good convergent validity. The higher loading factor value indicates that the more important role indicator reflects the variable.

From Table 1, we also can concluded that high sense of perceived security is X1.3 (I think using mobile payment secure from the risk abuse of usage my billing information (ex.: credit card number, bank account data) an indicator that had the most important role that reflected perceived security variable.

X2.1 (I enjoy with easy of use mobile payment) is an indicator that had the most important role that reflected perceived enjoyment variable. Y1.1 (I think using mobile payment save my time) is an indicator that had the most important role that reflected attitude towards use variable, on the other hand, Y2.2 (I think using mobile payment save my time) is an indicator that had the most important role that reflected intention to use variable.

Table 2. Cross Loading Assessment

	X1	X2	Y1	Y2
X1.1	0.774	0.349	0.545	0.447
X1.2	0.785	0.347	0.541	0.46
X1.3	0.823	0.437	0.587	0.536
X2.1	0.446	0.822	0.587	0.434
X2.2	0.323	0.78	0.451	0.303
X2.3	0.363	0.798	0.47	0.434
Y1.1	0.423	0.427	0.76	0.423
Y1.2	0.564	0.516	0.736	0.464
Y1.3	0.451	0.473	0.701	0.411
Y1.4	0.501	0.454	0.724	0.492
Y1.5	0.524	0.442	0.708	0.465
Y1.6	0.582	0.452	0.735	0.453
Y2.1	0.488	0.466	0.541	0.871
Y2.2	0.577	0.405	0.553	0.886

Based on Table 2, it can be seen that each indicator that composes each variable in this study has fulfilled discriminant validity because it has a correlation of the latent variable with indicator bigger than another variable size, so latent variable can predict indicator better than another variable.

4.2 Evaluation of Reliability

Internal consistency reliability was calculated using cronbach alpha, average variance extracted and composite reliability. Below are the results of these tests:

Tabel 3. Reliability Measurement

Variabel	Cronbach Alpha	AVE	Composite Reliability
X1	0.708	0.631	0.837
X2	0.722	0.641	0.842
Y1	0.822	0.529	0.871
Y2	0.704	0.772	0.871

Based on Table 3, it can be seen that the value of Cronbach Alpha of each indicator in all four research variables greater than 0.6. Table 3 also shows that the resulting AVE value is greater than 0.5 and the resulting Composite Reliability value is greater than 0.7. Considering the acceptable threshold values for Cronbach alpha (0.6), AVE (0.5) and Composite Reliability (0.7), respectively, the values obtained suggest adequate internal consistency reliability.

4.3 Evaluation of Structural Model

After measuring each variable to determine the validity and reliability, further appraisal and testing of structural models hypotheses were conducted. Data were analyzed using SmartPLS 3.2.7 with bootstrapping method to test hypotheses. The results can be seen in Figures 3

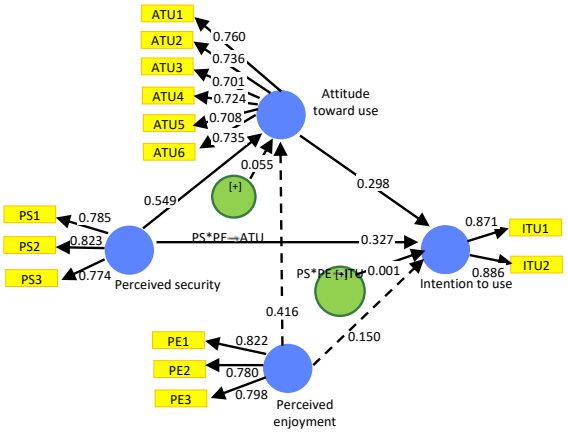

Figure 3. PLS Path Model

The value of R-square lies between 0 and 1, and a better model match if Rsquare value gets closer to 1. The value of R-square from the processed data using SmartPLS 3.2.7 can be seen in Table 4.

Tabel 4. RSquare Value

Variabel	R-Square
Perceived Security	-
Perceived Enjoyment	-
Attitude Towards Use	0.615
Intention To Use	0.458

The R-square value of the attitude towards use variable is 0.615, meaning that the percentage of the diversity of attitude towards use data that can be explained by the perceived security and the perceived enjoyment is 61,5%. In other words, it can be concluded that perceived security and perceived enjoyment can affect 61,5 %. attitude towards use from mobile payment consumers in Surabaya.

The value of R-Square in intention to use variable is 0.458, it means that the percentage of the diversity of intention to use data that can be explained by the perceived security, the perceived enjoyment and attitude towards use is 45,8%. In other words, it can be concluded that perceived security, the perceived enjoyment and attitude towards use can affect 45,8%. intention to use from mobile payment consumers in Surabaya.

4.4 Results of Hypotheses Testing

The research hypothesis is accepted if t value exceeds t table at the error rate of (α) 5%, which is 1.96.

Table 5. Hypotheses testing

	Hypotheses	Path Coefficient	T Statistics	P value
H1	PS→ATU	0.549	10.834	0.000
H2	PS*PE→ATU	0.055	2.086	0.037
H3	PS→ITU	0.327	4.069	0.000
H4	PS*PE→ITU	0.001	0.023	0.981
H5	ATU→ITU	0.298	3.663	0.000

Our result shows that perceived security has a positive and significant relationship with attitude toward use. This is evidenced by the value of t value exceeds 1.96 that is 10.834 and p value less than 0.05, that is 0.000, thus supporting our hypothesis H1.The results of this study support the previous theory of Schierz et al. (2010), Hartono et al. (2014), Amoroso & Watanabe (2012), Wang & Idertsog (2015), Vejačka & Štofa (2017) that proposed the higher perceived security may be related to positive attitude towards use.

Hypothesis H2 examined the impact of perceived enjoyment variable moderated the relationship between perceived security and attitude toward use on mobile payment customer in Surabaya was investigated. It was observed that perceived enjoyment had a significant impact on moderated the relationship between perceived security and attitude toward use mobile payment. This is evidenced by the value of t value exceeds 1.96 that is 2.086 and p value less than 0.05, that is 0.037. The results of this study support the previous theory of Cocosila et al. (2009) proposed that if users perceive a risk in the use of the information technology service, they would also tend to see less enjoyment in using this type of service. Therefore, the higher the enjoyment and usefulness users perceive in the service, the more likely they are to adopt it.

From table 5 shows that perceived security has a positive and significant relationship with intention to use. This is evidenced by the value of t value exceeds1.96 that is 4.069and p value less than 0.05, that is 0.000, thus supporting our hypothesis H3. The results of this study support the previous theory of Cabanillas et al. (2017), Cobanoglu et al. (2015), Luna et al., (2016), Peng et al. (2012) and Hartono et al. (2014) that the higher perceived security may be related to higher intention to use.

Hypothesis H4 examined the impact of perceived enjoyment variable moderated the relationship between perceived security and intention to use on mobile payment customer in Surabaya was investigated. It was observed that perceived enjoyment had a insignificant impact on moderated the relationship between perceived security and intention to use mobile payment. This is evidenced by the value of t value = 0.023 and p value more than 0.05, that is 0.981. The results of this study not support the previous theory of Nicole et al. (2015) that proposed perceived enjoyment was found to be a significant predictor of perceived usefulness, perceived ease of use and perceived risk. Higher levels of perceived enjoyment in using a new technology may lead to a decrease in anxiety, worry or concern, in turn lowering perceived risk. Our research shows that perceived enjoyment has direct effect on intention to use and attitude towards use. The higher perceived enjoyment may be related to higher intention to use.

Hypothesis H5 examined attitude toward use significantly affects intention to use mobile payment in Surabaya was investigated. Our result shows that attitude toward use has a positive and significant relationship with intention to use. This is evidenced by the value of t value exceeds 1.96 that is 3.663 and p value less than 0.05, that is 0.000, thus supporting our

hypothesis H5.The results of this study support the previous theory of Schierz et al. (2010), Nysveen et al. (2005), Akturan & Tezcan (2012), Luna et al. (2016) and Bauer et al. (2005), the higher attitude towards using may be related to higher intention to use.

5. Discussion

We find that perceived security has the greatest impact on the intention to use mobile payment. Based on these findings, the management of mobile payment needs to build system security as the foundation to stimulate the intention to use. Therefore the increase of mobile payment security will increase customer intention to use. The example is by adding encryption to passwords or adding authentication to mobile payments.

In addition since perceived enjoyment also affecting customer intention to use then it is necessary to sustain mobile payment enjoyment in running the business. Some important indicators that need to take into the system are easy to use mobile payment and discount promo mobile payment. Besides perceived enjoyment; the management of mobile payment needs to consider the technical aspect of the system that affects customer perceived enjoyment, for instance, the ease of use mobile payment transaction features, such as adding cash payments at mobile payment merchants and give cash back or reward for the mobile payment customer transaction.

6. Conclusion

From this research, it can be concluded that high perceived security in mobile payment transactions can influence intention to use either directly or through mediated attitude toward use in Surabaya. Perceived security plays vital role in creating intention to use mobile payment therefore it is necessary to identify the antecedents of customer perceived security in the context of mobile payment transaction. However, the sense of perceived security among mobile payment has not been strong so it needs to be maximized by increase system security so customer trust could be stronger and increase the impact on intention to use mobile payment.

We can also conclude that perceived enjoyment and attitude toward use have an important role in maintaining the intention to use mobile payment. Therefore the marketer has to assure that mobile payment transaction could achieve the high level of perceived enjoyment and attitude toward use in order to produce intention to use mobile payment.

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