The Effect of Perceived Cost, Trust, Usefulness and Customer Value Addition on Intention to Use of Go-Pay Mobile Payment Services in Small Merchants

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ARTICLE INFO	ABSTRACT
ISSN: 2723-1097	<i>This research is based on the phenomenon of the problem of the widespread use of payment methods based on financial technology (fintech), namely mobile payments which contribute to the circulation of electronic money reaching Rp.47.2 trillion in December 2018. However, there are mental barriers that increasingly hinder the intention to adopt this fintech-based service. One of the largest providers of mobile payment is Go-Pay who owned by Go-Jek. These barriers are in the form of costs, trustworthiness, usefulness, benefits, and experiences that will be obtained. The points of this review are to recognize the effect of Perceived cost, Perceived trust, Perceived usefulness, and Perceived customer value addition on Intention to Use Go-Pay Mobile Payment services on Small merchants. The samples used were 120 respondents of small merchants. Multiple linear regression analysis used in this study to identify the relationship between variables. These results indicate that the perceived cost, perceived trust, and perceived customer value addition have a significant positive effect on Intention to use, while perceived usefulness has a negative and insignificant effect on Intention to use. Hope through the research that has been done, hopefully to provide benefits for mobile payment providers in developing ways to attract small merchant partners for their mobile payment facilities.</i>
Keywords: <i>Intention to use, Go-Pay, Perceived cost, Perceived trust, Perceived customer value addition</i>	

Introduction

Since the financial technology (fintech) emerges, the current mobile payment method is growing, as seen from the Worldwide market share, which increased by 177% between 2019-2021. (Statista and MDI Ventures & Mandiri Sekuritas in Warta Ekonomi, 2019). Some of the most famous mobile payment providers in the world are Paypal, Google Wallet, and Alipay. In Indonesia, the most famous mobile payment providers are Go-Pay, OVO, and DANA. The cycle amount of electronic money in Indonesia reached IDR 167.21 million in December 2018 and increased by 85.78% from the previous year on an average growth of 45% over the past five years and a nominal value of IDR 47.2 trillion ([Bank Indonesia in CNBC, 2019](#)) with Go-Pay being the leading provider of the mobile payment market share with almost three quarters of the total use of electronic money ([Katadata, 2019](#)), that comes from the three largest types of transactions which are 28% retail transactions, 27% ordering online

transportation and 20% ordering online food ([Mix.co, 2019](#)). The government also take part by targeting 8 million MSMEs (Micro, Small & Medium Enterprises) whose already use the digital services by 2020, and soon towards cashless society through the non-cash transaction movement ([Kominfo, 2019](#)). Go-Jek as the largest provider of mobile payment in Indonesia has more than 200,000 business partners who accept payments through Go-Pay, including MSMEs partners ([Tribunnews, 2018](#)).

Many of numerous Go-Pay partners does not mean that fintech development has no barriers, one of them is the mental barrier to adopting fintech facilitated services, it means that the use of cash transactions felt to be more convenient for its ease and practice ([Pulse Lab Jakarta, 2018](#)). Furthermore, the problem from fee/commission charged to MSMEs, the insufficient aggregate from customer's demand, the inconsistency from technological and regulatory infrastructure, and the difficulties in normalizing MSMEs to pay full tax on sales also contribute to the obstruction of mobile payment-based fintech adoption ([World Bank, 2016](#)). Although it is inevitable, the fact that consumer behaviour switching to cashless payment systems will increase and exceed, or even replace cash transaction options ([Bezhovski, 2016](#)) due to the much easier, safe, efficient, and innovative payment ([Usman, 2017](#)).

To overcome this problem, the government, the entrepreneur and the community must take part in socializing the cashless society. The government develops systems and regulations as the legal law for electronic money, the entrepreneur promotes the use of electronic money by providing the tools and instruments, and the community itself start to change their cash transactions to non-cash transactions ([Tazkiyyaturrohman, 2018](#)).

Many research on mobile payments in consumer's context through Technology Acceptance Model (TAM) approaches has been composed, such as conducted by [Juhri and Dewi \(2017\)](#) entitled "Trust and Acceptance of T-CASH Mobile Money in Bandung with the Technology Acceptance Model (TAM) Approach", and by [Susanti \(2015\)](#) entitled "The Effect of Perceived Cost, Perceived Usefulness, Perceived Risk and Perceived Trust on Mobile Banking Awareness". The study of TAM mobile payment on merchants has been conducted overseas, as in a study by [Singh and Sinha \(2019\)](#) entitled "How Perceived trust mediates merchant's Intention to use a mobile wallet technology", but this research is sporadically done in Indonesia.

Based on previous discussion, the purpose of the research conducted is to obtain an impact of Perceived cost on Intention to use the Go-Pay mobile payments for small merchants; describe the effect of Perceived usability on Intention to use the Go-Pay mobile payments for small merchants; explain the effect of Perceived trust on the Intention to use the Go-Pay mobile payments for small merchants and describe the effect of Perceived Customer Value Addition on Intention to use the Go-Pay mobile payments for small merchants.

Literature Review

Intention to use

This theory is the development of The Reasoned Action Theory various parties' stated that in in the systems of management information field ([Benbasat & Barki 2007](#)), TAM actually when it was developed was intended to provide a prediction of the behaviour of individuals who took and took advantage of the latest information technology introduced by producers ([Davis 1989](#)).

The definition of Intention to use is the tendency of individual behaviour to continuously utilize technology. The level of utilization of a technology can be measured based on the user's attitude towards the technology such as motivation to continue using it and the intention to encourage other users ([Venkatesh et al., 2012](#)). Studies related to Intention to use the technology of mobile payment have been studied for a long time, for example in studies conducted by [Mallat and Tuunainen \(2008\)](#), [Cabanillas et al. \(2016\)](#); [Li \(2018\)](#); and [Cabanillas et al., \(2018\)](#). A number of literatures suggest identifying several factors that can have an impact on technology adoption. There are various conceptual frameworks and models, such as Technology Acceptance Model (TAM), Innovation Diffusion Theory (DOI), Planned Behaviour Theory (TRA), Integrated Admission and Use of Technology Theory (UTAUT2)) and social cognitive theory ([Dahlberg et al. al., 2008](#); [Ondrus et al., 2009](#); [Venkatesh et al., 2012](#)). The model of the conceptual consists of some factors for measuring behavioural outcomes in the mobile payments system. A number of published studies on payments services utilizing UTAUT and TAM were reviewed by [Dahlberg et al. \(2015\)](#).); From a number of studies, it was concluded that compatibility perception, with perceived ease of use as the dominating variable in giving effect, and then perceived trust and risk. Previous studies have emphasized the TAM, UTUAT2, and the adoption of other technology models urgency for merchants or customers to use technology of mobile payment. ([Hayashi, 2012c](#); [Singh, 2016](#); [Abhishek and Hemchand, 2016](#); [Singh and Srivastava, 2018](#)).

From the customer's point of view, there are several previous researchers who studied several aspects that affect the use of cellular payment technology, including Perceived ease of use, Perceived Customer Value Addition, social norms, trust, risk, innovation, habits, and others as a reference ([Dahlberg et al., \(2008\)](#); [Venkatesh et al., \(2012\)](#); [Madan and Yadav, \(2016\)](#); [Singh et al., \(2017\)](#)). Some of those paper confirmed that Perceived ease of use, Perceived Customer Value Addition, and social norms were aspects that have an impact on consumer acceptance and technology ([Barbuta et al., 2012](#); [Oliveira et al., 2016](#); [Cabanillas et al., 2018](#)). On the other hand, from the merchant's point of view, it concludes that Perceived cost, Perceived trust, and condition of facilities encourage the use of cellular payment technology ([Hu et al., 2008](#); [Cabanillas et al., 2016](#); [Możdżyński, 2018](#)). If observed, it can be seen that

previous research has paid attention to things that distinguish between perceptions and attitudes of consumers and merchants; The researcher explained that consumers have psychological and behavioral drives related to technology, for example comfort, personal innovation, habitual norms, beliefs, a number of risks, social perceptions, and other aspects. ([Abhishek and Hemchand, 2016](#); [Madan and Yadav, 2016](#)). Meanwhile, from the merchant side, they have more attention on the technical and functional aspects of a service that is based on technology ([Cabanillas et al., 2016](#), [Cabanillas et al., 2017](#); [Li, 2018](#))

Perceived cost

Cost reduction is the main merchants' motivation to approve to online payment systems. High costs are the main problem in merchants' approval of mobile payment technology ([Mallat and Tuunainen, 2008](#)) because merchants bear various costs when adopting the technology, and have a significant influence in using it. Also, there is an effect of Perceived costs and Perceived trust and experience on the merchant's behavioral significantly ([Możdżyński, 2018](#)). Otherwise, mobile wallet services are more preferred ([Arango and Taylor, 2008](#)) because they are more cost-effective than other services that use basic short-range communication like Near Field Communication (NFC) ([Cabanillas et al., 2016](#)). Several papers have reviewed and paid attention to several aspects, namely cost, risk, awareness, convenience, efficacy, which encourage merchant trust and intention to use a mobile wallet system ([Ondrus and Pigneur, 2009](#); [Hu et al., 2008](#); [Możdżyński, 2018](#)). However, only a few studies have raised UTAUT and TAM variables in the perspective of merchants in emerging markets ([Singh and Srivastava, 2018](#)).

Perceived trust

Quoted from [Reichheld and Scheffer, \(2000\)](#), perceived trust can be defined as an important factor in adopting technology and supporting merchants to develop customer relationships which are strong. It is an emotional condition that motivates someone (individual) to believe in others, that is according to behavior to satisfaction to others. A number of studies related to technology adoption confirm the trust urgency as an instrument to improve relationships with the customers, and for increasing trust and perception of security systems ([Cabanillas et al., 2018](#)). Merchants need to understand a variety of technological innovations, which may or may not be considered useful, but fluctuating trust in the system and ultimately has an impact on the impetus to utilize technology ([Morgan and Hunt, 1994](#); [Ehrenhard et al., 2017](#)). [Hayashi and Bradford \(2014\)](#) who have conducted research on mobile payments, and confirmed that the common of merchants believe that trust is a vital aspect in the use of mobile payments; A number of merchants feel sad and regret the emergence of problems related to security and privacy on the system. Merchants believe that these

problems can reduce the trust of mobile wallet service users, both merchants and consumers.

Perceived usefulness

In technology context, the definition of perceived usefulness is what users expect in using the system to improve job performance in relation to the organization ([Davis, \(1989\)](#)). In the system of online technology, the definition of usability is the use of technology that has benefits for users to produce certain tasks ([Madan and Yadav 2016](#); [Natarajan et al., 2017](#)). In this case, [Barbuta et al. \(2012\)](#) confirmed that Perceived Customer Value Addition, together with Perceived security and scalability, have an impact on merchant behavior in accepting the system of mobile wallet. [Kim et al. \(2010\)](#) provides an explanation that Perceived security and usefulness have an impact on the trust and intention of merchants to take advantage of the wallet system. On the other hand, for the research of [Schierz et al. \(2010\)](#) and [Ramos de Luna et al. \(2019\)](#) asserted that Perceived ease of use, Perceived usefulness, and Perceived behavior encourage a person's desire to use technology. In previous research, Perceived Customer Value Addition, and Perceived ease of use, were positioned as indicators used to assess (parameters) the behavioral intentions of the user variable (Youris and [Kauffman, 2008](#); [Koukova et al., 2008](#); [Singh and Srivastava, 2018](#))

Perceived customer value addition

It is the totality of benefits and experiences that can be felt or accepted by customers, according to the benefits of a product ([Hayashi 2009](#); [Lewis 2006](#)). The definition of adding customer value in the scope of online technology is the value obtained, that can be proportional to the things paid, according to the comparatively performance and usefulness of the technology ([Varki and Mark \(2001\)](#)).

Quoted from [Lepak et al. \(2007\)](#) “the relative amount of value that is subjectively achieved by the target users (or buyers) which are the focus of value creation”. The subjective value shows a willingness of individual to exchange a certain amount of money for the value received. Then, the value proposition of using the service and the value perceived by the target customer ([Ondrus et al., 2009](#)). For example, offering a method that provides greater convenience and security for payment for products or services using smartphone to customers. Through the adoption or development of mobile payment solutions, merchants are able to reduce transaction fees and costs ([Wong et al., 2015](#); [Mallat & Tuunainen, 2008](#)).

Research Hypothesis

[Hayashi and Bradford \(2014\)](#) in their research confirm that the perceived cost in terms of mobile payment adoption is the second dominant factor. Small retailers believe that the mobile payment system is able to minimize costs caused by the

existence of fraudulent modes and the occurrence of processes in each transaction. Previous studies also stated that the overall cost is the main factor that affect the merchant's adopted behaviour ([Chong et al., 2010](#); [Dwivedi et al., 2017](#)). Both studies state that the perceived cost of a technology encourages the intention of consumers or merchants to take advantage of mobile payment services. This is because cash payments do not include any costs, consumers have an expectation that the costs of mobile payment services will be low or even without costs at all ([Karnouskos and Fokus \(2004\)](#)). In this research, we define Perceived costs as a level which a small merchant can believe that the costs required when using the payment system will reduce his desire to use the Go-Pay payment system. We therefore argue that:

H1: Perceived costs have a significant and negative effect on the intention to use mobile payment Go Pay for small merchants

When utilizing mobile payments, transactions are transferred from consumers to retailers through a number of parties including the ecosystem: retailers, mobile manufacturers, network providers, software developers, and financial companies ([Amoroso and Magnier-Watanabe, 2012](#); [Grabner-Kräuter and Kaluscha, 2003](#); [Hoofnagle et al., 2012](#)). [Gefen et al. \(2003\)](#). Perceived trust is able to encourage a customer in their online shopping habits. A qualitative study examining the impact of attitudes on mobile payments, [Dahlberg et al. 2003](#) in his research explains that Perceived trust is a concern. Referring to [Shawn's \(2014\)](#) research, Perceived trust is able to encourage a person's intention to use technology. The research results are in line with the findings of [Duane et al. \(2012\)](#). In this research, we define Perceived trust representing a merchant's belief that their data is safe, and that consumer payments will be properly credited to the merchants. We therefore argue that:

H2: Perceived trust has a significant and positive effect on the intention to use mobile payment Go Pay for small merchants

[Davis et al. \(1989\)](#) provides a definition of Perceived usefulness as the subjective possibility of potential users who use an application system to have high performance in organizational scopes. According to the definition, [Davis et al \(1989\)](#) and [Adams, D.A \(1992\)](#) found that Perceived usefulness was the main determinant of behaviour and Intention to use. [Subramanian \(1994\)](#) restated two measures of trust (Perceived usefulness and Perceived ease of use using a number of new data for two different technologies, and detecting Perceived usefulness, and not Perceived ease of use, which encourage behavior in technology use with Structural Equation analysis Modeling (SEM) In this research, the researcher chose the operational definition of Perceived usefulness as the level of individual confidence of small traders that using the Go-Pay payment system will be able to improve the sales performance of their stores. We therefore argue that:

H3: Perceived usefulness has a significant and positive effect on the intention to use mobile payment Go Pay for small merchants.

The merchants prefer technology that customers find valuable and provide an overall satisfactory service. This improves the use of technology and merchants' acceptance of new technology services. In addition, a sense of comfort with the services provided, a smooth process and adequate information are a number of other important factors that affect on Perceived Customer Value Addition and the adaptation of new technologies that include payments or mobile wallets. (Gupta et al., 2017; Cabanillas et al., 2018; Xu and Du, 2018). In this research, we define Perceived Customer Value Addition as an added value for consumers which considered can increase sales transactions or services for the provided customers by merchants through the provision of the Go-Pay payment system. We therefore argue that:

H4: Perceived customer value addition has a significant and positive effect on the intention to use mobile payment Go Pay for small merchants.

Method

This research is a correlational study because the researcher intends to define the relationship between variables and problem statements (Fraenkel and Wallen, 2008; Sekaran, 2003). The method of collecting and analyzing quantitative data was conducted using a questionnaire with closed questions.

The data in this research is a primary data and a cross-sectional study with the small merchants as the research subject because some of them have used the Go-Pay payment system. The target population in this study are small merchants who use the gopay payment system. With an unknown target population. Simple random sampling is a sampling method used. A total of 120 people were taken as samples.

This research uses a number of data analyzes that include descriptive statistics, data quality tests, classical assumption tests and multiple regression analysis, and t-tests.

Validity Test

Table 1. Validity Test

Variable	Questions Number	r-Value
<i>Perceived costs (PC)</i>	Installation fee Mobile Payment Go-Pay is not Expensive	,645
	Go-Pay make deductions on payments from customers	,284
	No training cost needed to use Mobile Payment Go-Pay	,756
	Customer don't pay fees to use Mobile Payment Go-Pay	,619
<i>Perceived trust (PT)</i>	I trust Go-Pay are safe and has reliable features	,717
	I trust application and transaction on Go-Pay System	,782

Variable	Questions Number	r-Value
<i>Perceived usefulness (PU)</i>	I trust my financial information and my customer are safe	,718
	I trust my personal information and my customer are safe	,775
	Go-Pay Help me and my customers	,646
	Go-Pay ease to access and convenient to use	,726
	Go-Pay improves my performance	,724
<i>Perceived Customer Value Addition (PCVA)</i>	Go-Pay speeds up my customer's payment process	,740
	Go-Pay allows me to offer several benefits to customers	,654
	Go-Pay make a great experience for my customers	,643
	Go-Pay add value for me and my customers	,595
<i>Intention to use (ITU)</i>	Go-Pay helps me improve relationships with customers	,648
	I will increase the use of Go-Pay in the future	,703
	I use Go-Pay in the future	,741
	I will always Go-Pay	,763
	I have plan to use Go-Pay everyday	,758

Note: R table at $\alpha = 5\%$ with $N=120$ is 0.1779

Validity testing is done using SPSS. The Validity Test showed that all variable questions have r-count greater than r-table (0.1779) Thus, conclusions can be drawn that are declared valid from all the questions in the questionnaire.

Reliability Test

Table 2. Reliability Test

Variable	Cronbach's Alpha
<i>Perceived costs (PC)</i>	0,319
<i>Perceived trust (PT)</i>	0,738
<i>Perceived usefulness (PU)</i>	0,671
<i>Perceived Customer Value Addition (PCVA)</i>	0,507
<i>Intention to use (ITU)</i>	0,727

Note: r-table at $\alpha = 5\%$ with $N=120$ is 0.1779

To determine the data reliability tested with the SPSS program. Then results can be seen that the r-count of all variables > r-table (0.1779), the conclusion was that all variables passed the reliability test

Regression Analysis

Multiple linear regression analysis is a techniques that used in this study. In this study are Perceived costs (PC), Perceived trust (PT), Perceived usefulness (PU), & the Perceived Customer Value Addition (PCVA) are the independent variables, while the dependent variable is the Intention to use (ITU). Linear regression analysis has a formula:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + e$$

Information = Y: Intention to use (ITU), B_0 : Constants, X_1 : Perceived costs (PC), X_2 : Perceived trust (PT), X_3 : Perceived usefulness (PU), X_4 : Perceived Customer Value Addition (PCVA), B_1 : Variable Regression Coefficient Perceived costs (PC), B_2 : Variable Regression Coefficient Perceived trust (PT), B_3 : Variable Regression Coefficient Perceived usefulness (PU), B_4 : Variable Regression Coefficient Perceived Customer Value Addition (PCVA), e : Error Level.

T Test

The use of t test in order to detect the influence of one independent variable individually in explaining the dependent variable variation (Ghozali, (2012). Partial effect was tested by t-test. Criteria in determining the acceptance or rejection of the hypothesis, using the following criteria: If t-count > t-table and sig < 0.05, then H0 is rejected and H1 is accepted. If t-count < t-table, and sig > 0.05, then H0 is accepted and H1 is rejected.

Result and Discussion

Classical Assumption Test

Table 3. Classical Assumption Test

No.	Variable		Normality Sig	Multicollinearity		Heteroscedasticity Sig. (two tailed)
	Independent	Dependent		Tol.	VIF	
1	Perceived Cost (PC)	Intention To Use	0,200	0,965	1,037	0,055
2	Perceived Trust (PT)			0,912	1,097	0,339
3	Perceived Usefulness (PU)			0,954	1,048	0,097
4	Perceived customer value added (PCVA)			0,904	1,106	0,075

Normality testing is intended to ensure the dependent variable and the independent variable have a normal distribution that in the regression model. Kolmogorov Smirnov was chosen to test the normality of the data. The criteria if the value of sig. > 0.05, it is concluded that the distribution of the data is normal. Referring to data processing results, the value of sig. 0.200 > 0.05, which means that the data is distributed in normal way so that it passes the normality test. The Multicollinearity test was showed that all variables do not have multicollinearity based on the provisions of the Tolerance value is more than 0.10 and the VIF value more than 10. In accordance with the results of data processing, the significance value of all independent variables is greater than 0.05. Therefore, it is certain that the independent variable does not occur heteroscedasticity and fulfill the preresquities for the classical assumption test.

T test and Multiple Linear Regression Analysis

The t-test was run to detect whether each independent variable had a significant impact on dependent variable. The data processing results are:

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.004	.003		1.492	.138
PC	.392	.292	.116	1.994	.002
PT	.449	.170	.235	2.642	.009
PU	-.171	.212	-.070	-.807	.421
PCVA	.496	.168	.265	2.963	.004

Referring to the results of data processing, then a multiple linear regression equation model can be made, based on the beta value of Unstandardized Coefficients:

$$Y = 0,004 + 0,392X_1 + 0,449X_2 - 0,171X_3 + 0,496X_4 + e$$

A constant of 0.004, it means that if Perceived costs, Perceived trust, Perceived usefulness and Perceived customer value added do not exist or the value is 0, then the Intention to use the Go-Pay payment system on small merchants is 0.004

The regression coefficient of Perceived costs (PC) variable is 0.392, it means that if Perceived costs are increased by 1 unit, then the merchant's Intention to use the Go-Pay payment system will increase by 0.392 units. Between Perceived cost and Intention to use, there is a direct relationship, which means the coefficient is positive

The regression coefficient of the Perceived trust (PT) variable is 0.449, this means that if the Perceived trust increases by 1 unit, it will encourage an increase in the Intention to use Go-Pay payments system for small traders by 0.449 units. The value of the coefficient is positive, meaning that the direction of the relationship between the two variables is directly proportional

The regression coefficient value for the Perceived usefulness (PU) is negative, which is -0.171, means that if the Perceived usefulness increases by 1 unit, it will encourage a decrease in Intention to use the Go-Pay payments system for small traders by 0.171 units. The regression coefficient is negative, meaning that the relationship between the two variables is inversely proportional.

Furthermore, Perceived customer value added (PCVA) has the regression coefficient of 0.496 means that if Perceived usefulness increases by 1 unit, the Intention to use Go-Pay payments system for small traders will be pushed up by 0.496 units. The

coefficient is positive, meaning that the relationship between the both variables is directly proportional.

Discussion

The effect of Perceived costs on Intention to Use

Referring to the test data, the t value for PC was $1.994 > t \text{ table } (1.994 > 1.98063)$ and $\text{sig} < 0.05 (0.002 < 0.05)$. With this result, it can be stated that the PC variable is able to have an impact on ITU for small merchants. The conclusion of this analysis strengthens [Phonthanukitithaworn et. al \(2016\)](#) study, which concluded that the fees received have been identified as a major obstacle to efforts to absorb the next m-payment services. Certain Mobile payment cost, like transaction cost, new headset cost, subscription costs, then access of communication, all contributed to the increase in additional costs associated with the use of technology services. ([Luarn & Lin, 2005](#); [Cheong & Park, 2005](#); [Wu & Wang, 2005](#); [Tsu Wei et al., 2009](#); [Lu et al., 2011](#); [Keramati et al., 2012](#)). Based on the analysis of several studies, it was found that there was a real impact of PCs on the behavioral intentions of current users to take advantage of m-payment services. Moreover, it can be concluded that when small traders think about the cost of the mobile payment service such as installation fee, training cost and fee of using, it would impact their intention to use Go-Pay Mobile Payment service.

The effect of Perceived Trust on Intention to Use

From the results of the t-test, it is found that the t-value for PT is $2.642 > t\text{-table } (2.642 > 1.98063)$ and $\text{sig} > 0,05 (0,009 < 0,05)$. The PT variable in this study can be concluded to have an influence on ITU for Small merchants. The results of this study are supported by the statement of [Singh & Sinha. \(2020\)](#). [Shaw \(2014\)](#) stated that trust is estimated on the certainty an individual shows on the value and security of an innovation. This means that mobile wallets are preferred whenever they can be useful, reliable, and without fraud or error in their payment transactions. ([Hayashi and Bradford, 2014](#); [Cabanillas et al., 2018](#); [Verkijika, 2018](#)).

The effect of Perceived usefulness on Intention to Use

From the t-test, it was found that the t-value for PU is $-0.807 < t\text{-table } (-0.807 < 1.98063)$ and $\text{sig} < 0.05 (0,421 > 0,05)$. Thus, it can be concluded that small merchants from ITU are influenced by the PU variable in this study. These results also strengthen the results of previous studies conducted by [Sun & Zhang, \(2006\)](#); [Kusumo, \(2010\)](#); [Malhotra & Dash, \(2011\)](#); and [Gunawan, \(2014\)](#), where the perceived usefulness, in this case Go-pay mobile payment, is easily accessible, improves performance, and speeds up the payment process can increase intention to use, especially among small merchants. On the other hand, it can be said that the perceived usefulness of Go-Pay Mobile Payment can encourage Intention to use Go-pay Mobile payment technology.

The effect of Perceived customer value added on Intention to Use

From the t-test, it was found that the t-value for PCVA is $2.963 > t\text{-table}$ ($2.963 > 1.98063$) and $\text{sig} < 0.05$ ($0.004 < 0.05$). Thus, it can be concluded that small merchants from ITU are influenced by the PCVA variable in this study. This study is in line with that of Reichheld and Schefter (2000); they get the perceived customer value addition determines intention to use a technology ([Hayashi, 2009](#); [Hayashi, 2012a](#); [Hayashi 2012b](#)). The adoption and success of new technologies is considered by small merchants as the worth added services of an innovation. [Lundberg \(2016\)](#) stated as for what can be measured through low service fees, data control, reward points and cashback, and there is also operability and flexibility.

Conclusion

The conclusion of this research is to explain how the variables of Perceived cost, Perceived trust, Perceived usefulness, and Perceived Customer Value Addition influence the dependent variable of Intention to use the Go-Pay payment system.

Showed that Perceived trust has a positive and significant influence towards Intention to use the Go-Pay payment system are the result on this research. This confirms the analysis of [Shawn \(2014\)](#) and [Duane et al. \(2012\)](#) stated that trust influences the Intention to use.

Otherwise, the results this research showed had a positive and significant influence towards Intention to use the Go-Pay payment system from Perceived Customer Value Addition. This confirms the research conducted by [Gupta et al., \(2017\)](#), [Cabanillas et al., \(2018\)](#) and [Xu and Du, \(2018\)](#) that on the adoption of new technologies including payments or mobile wallets, service convenience, smooth processing, & information feasibility are some of the important factors that affect Perceived Customer Value Addition.

In this research, it can be investigated that the majority (68%) of small merchants who use the Go-Pay system are in the age range of 20-38 (Gen Y). When inspected from the system, most of them (70%) have used it for more than 3 months. Besides, another interesting thing revealed that most of the respondents use other payment systems besides Go-Pay (62%). The other payment systems used are OVO, I sell, Ottopay, Dana, Jakone, and Tunaikita.

This study has limitations, namely that is conducted only on small merchants using only the Go-Pay mobile payment, so the obtained perception is limited only to the Go-Pay payment system. Furthermore, there are many other mobile payment systems such as OVO, DANA, AKULAKU, OTTOPAY, JAKONE and TUNAIKITA. Further research is expected to expand the scope of this research.

References

- Abhishek, A., & Hemchand, S. (2016). Adoption of sensor based communication for Mobile Marketing in India. *Journal of Indian Business Research*, 8(1), 65–76. <https://doi.org/10.1108/jibr-08-2015-0091>
- Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS Quarterly*, 16(2), 227. <https://doi.org/10.2307/249577>
- Amoroso, D. L., & Magnier-Watanabe, R. (2012). Building a research model for mobile wallet consumer adoption: The case of Mobile Suica in Japan. *Journal of Theoretical and Applied Electronic Commerce Research*, 7(1), 13–14. <https://doi.org/10.4067/s0718-18762012000100008>
- Angelina, M. et.al. (2018). Menggali potensi teknologi finansial: Inklusi keuangan untuk usaha mikro di Indonesia. Retrieved from <https://pulselabjakarta.org/assets/uploadworks/2019-01-30-04-19-04.pdf>
- Arango, C., & Taylor, V. (2008). Merchant Acceptance, Costs, and Perceptions of Retail Payments: A Canadian Survey. Retrieved from <https://www.bankofcanada.ca/wp-content/uploads/2010/01/dp08-12.pdf>.
- Au, Y. A., & Kauffman, R. J. (2008). The economics of mobile payments: Understanding stakeholder issues for an emerging financial technology application. *Electronic Commerce Research and Applications*, 7(2), 141–164. <https://doi.org/10.1016/j.elerap.2006.12.004>
- Barbuta, I. et.al. (2012). Mobile payments guide 2012: Insights in the worldwide mobile financial service market. The Paypers BV, March, 2012. Retrieved from http://ibfsinc.com/uploads/Mobile_Payments_Market_Guide_2012.pdf
- Benbasat, I., & Barki, H. (2007). Quo Vadis Tam? *Journal of the Association for Information Systems*, 8(4), 211–218. <https://doi.org/10.17705/1jais.00126>
- Bezhovski, Z. (n.d.). The Future of the Mobile Payment as Electronic Payment System. Retrieved from <https://www.iiste.org/Journals/index.php/EJBM/article/view/29473>
- Cabanillas, F., Marinkovic, V., Ramos de Luna, I., & Kalinic, Z. (2018). Predicting the determinants of Mobile Payment Acceptance: A hybrid sem-neural network approach. *Technological Forecasting and Social Change*, 129, 117–130. <https://doi.org/10.1016/j.techfore.2017.12.015>
- Cabanillas, L. F., Leiva, F.M & Fernández, J.S., (2017). Examining Merchants' Refusal to Adopt Mobile Payment Systems in Spain. Published in Book in Smartphones from an Applied Research Perspective <https://10.5772/intechopen.70284>.
- Cabanillas, L. F., Slade, E., & Dwivedi, Y. (2016). Time for a different perspective: a preliminary investigation of barriers of merchants' adoption of mobile payments. In: *Proceedings of the 22nd Americas Conference on Information Systems*, San Diego.
- Cheong, J. H., & Park, M. C. (2005). Mobile internet acceptance in Korea. *Internet Research*, 15(2), 125–140. <https://doi.org/10.1108/10662240510590324>
- Chong, A. Y. L., Ooi, K. B., Lin, B., & Tan, B. I. (2010). Online banking adoption: An empirical analysis. *International Journal of Bank Marketing*, 28(4), 267–287. <https://doi.org/10.1108/02652321011054963>
- Content writer. (2018). GO-PAY PAY DAY Kasih Cashback 50%! Ini List Merchant-nya. Retrieved from <https://www.tribunnews.com/travel/2018/11/27/go-pay-pay-day-kasih-cashback-50-ini-list-merchant-nya>

- Content writer. (2019). Begini Tren Penggunaan Uang Elektronik konsumen Indonesia. MIX Marcomm. (2019, July 15). Retrieved from <https://mix.co.id/marcomm/news-trend/begini-tren-penggunaan-uang-elektronik-konsumen-indonesia/>.
- Content writer. (2019). Berapa transaksi Uang Elektronik di Indonesia? Databoks. (n.d.). Retrieved October 27, 2021, from <https://databoks.katadata.co.id/datapublish/2019/11/07/berapa-transaksi-uang-elektronik-di-indonesia>.
- Dahlberg, T., Mallat, N., Ondrus, J., Zmijewska, A., (2008). Past, present and future of mobile payments research: {A} literature review. *Electron. Commer. Res. Appl.* 7 (2), 165–181. <https://10.1016/j.elerap.2007.02.001>
- Dahlberg, Tomi & Guo, Jie & Ondrus, Jan. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*. 14. 265-284. <https://10.1016/j.elerap.2015.07.006>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1003. <https://doi.org/10.1287/mnsc.35.8.982>.
- De Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019). Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. *Technological Forecasting and Social Change*, 146, 931-944. <https://doi.org/10.1016/j.techfore.2018.09.018>
- Dina, S. (2017). Pemerintah Mau 8 Juta UMKM Pakai Layanan Pembayaran Digital pada 2020. Retrieved from https://kominfo.go.id/content/detail/12092/pemerintah-mau-8-juta-umkm-pakai-layanan-pembayaran-digital-pada-2020/0/sorotan_media
- Duane, A., O'Reilly, P., & Andreev, P. (2014). Realising M-Payments: Modelling consumers' willingness to M-pay using Smart Phones. *Behaviour and Information Technology*, 33(4), 318–334. <https://doi.org/10.1080/0144929X.2012.745608>
- Dwivedi, Y. K. et.al. (2017). An empirical validation of a unified model of electronic government adoption (UMEGA). *Government Information Quarterly*, 34(2), 211–230. <https://doi.org/10.1016/j.giq.2017.03.001>
- Ehrenhard, M., Wijnhoven, F., van den Broek, T., & Zinck Stagno, M. (2017). Unlocking how start-ups create business value with mobile applications: Development of an app-enabled Business Innovation Cycle. *Technological Forecasting and Social Change*, 115, 26–36. <https://doi.org/10.1016/j.techfore.2016.09.011>
- Fraenkel, J., Wallen, N., & Hyun, H. (2012). Correlational Research. In *How to design and evaluate research in Education* (pp. 331–357). McGraw-Hill.
- Franedy, R. (2019, February 11). Terungkap! Transaksi GoPay di 2018 Tembus Rp 87 T. Retrieved from <https://www.cnbcindonesia.com/tech/20190211103125-37-54742/terungkap-transaksi-gopay-di-2018-tembus-rp-87-t>
- Gefen, D., Karahanna, E., & Straub, D. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51. <https://doi.org/10.2307/30036519>
- Ghozali, I. (2012). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Yogyakarta: Universitas Diponegoro.
- Gunawan, A. (2014). APLIKASI technology acceptance model Pada Minat Nasabah untuk Menggunakan internet banking. *Nominal, Barometer Riset Akuntansi Dan Manajemen*, 3(2). <https://doi.org/10.21831/nominal.v3i2.2695>
- Gupta, S., Yun, H., Xu, H., & Kim, H.-W. (2017). An exploratory study on mobile banking adoption in Indian Metropolitan and urban areas: A scenario-based experiment.

- Information Technology for Development, 23(1), 127–152.
<https://doi.org/10.1080/02681102.2016.1233855>
- Hayashi, F., & Bradford, T. (2012). Mobile Payments: Merchants' Perspectives I. PAYMENT ENVIRONMENT AND MOBILE PAYMENT TECHNOLOGIES, 33–58. Retrieved from <https://www.kansascityfed.org/XdNVZ/publicat/econrev/pdf/14q2Hayashi-Bradford.pdf>
- Hoofnagle, C. J., Urban, J. M., & Li, S. (2012). Mobile payments: Consumer Benefits & New Privacy Concerns. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2045580>
- Hu, X., Li, W., & Hu, Q. (2008). Are mobile payment and banking the Killer Apps for Mobile Commerce? Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008). <https://doi.org/10.1109/hicss.2008.69>
- Juhri, K and Dewi, C.K. (2017). Kepercayaan dan penerimaan layanan mobile money T-cash di Bandung dengan pendekatan Technology Acceptance Model (TAM). Jurnal Pro Bisnis, 1(2), 10. Retrieved from <http://ejournal.amikompurwokerto.ac.id/index.php/probisnis/article/view/503>
- Kaluscha, E. A., & Grabner-Kräuter, S. (2003). Conference: Proceedings of the 8th European Conference on Pattern Languages of Programms (EuroPLoP '2003). In Patterns for Consumer Trust in Electronic Commerce. Irsee; dblp.
- Karnouskos, S. (2004). Mobile payment: A journey through existing procedures and standardization initiatives. *IEEE Communications Surveys & Tutorials*, 6(4), 44–66. <https://doi.org/10.1109/comst.2004.5342298>
- Keramati, A., Taeb, R., Larijani, A. M., & Mojir, navid. (2012). A combinative model of behavioural and technical factors affecting 'mobile'-payment services adoption: An empirical study. *The Service Industries Journal*, 32(9), 1489–1504. <https://doi.org/10.1080/02642069.2011.552716>
- Kim, C., Tao, W., Shin, N., & Kim, K.-S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*, 9(1), 84–95. <https://doi.org/10.1016/j.elelap.2009.04.014>
- Kominfo, P. (n.d.). Pemerintah Mau 8 Juta UMKM pakai Layanan pembayaran digital pada 2020. Website Resmi Kementerian Komunikasi dan Informatika RI. Retrieved from https://kominfo.go.id/content/detail/12092/pemerintah-mau-8-juta-umkm-pakai-layanan-pembayaran-digital-pada-2020/0/sorotan_media.
- Koukova, N., Kannan, P., & Ratchford, B. (2008). Product form bundling: Implications for marketing digital products. *Journal of Retailing*, 84(2), 181–194. <https://doi.org/10.1016/j.jretai.2008.04.001>
- Kusumo, H.C. 2010. Analisis penerimaan Mobile Banking (M-Banking) dengan kerumitan (Complexity) sebagai variabel eksternal dengan menggunakan Technology Acceptance Model (TAM). Skripsi. Fakultas Ekonomi. Universitas Sebelas Maret. Surakarta. <http://eprints.uns.ac.id/7838/1/170451611201112241.pdf>.
- Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value creation and value capture: A multilevel perspective. *Academy of Management Review*, 32(1), 180–194. <https://doi.org/10.5465/amr.2007.23464011>
- Lewis, M. (2006). Customer Acquisition Promotions and customer asset value. *Journal of Marketing Research*, 43(2), 195–203. <https://doi.org/10.1509/jmkr.43.2.195>

- Li, Y., 2018. The strategic decision on mobile payment: a study on Merchants's™ adoption. In: Proceedings of the Conference Adoption and Diffusion of Information Technology (SIGADIT), AMCIS 2018, USA.
- Lingga, H. (2019, February 21). Dahsyat! Bisnis Mobile Payment di Indonesia Dahsyat. Retrieved from <https://www.wartaekonomi.co.id/read216524/dahsyat-bisnis-mobile-payment-di-indonesia-dahsyat.html>
- Lu, Y., Yang, S., Chau, P. Y. K., & Cao, Y. (2011). Dynamics between the Trust Transfer Process and intention to use mobile payment services: A cross-environment perspective. *Information & Management*, 48(8), 393–403. <https://doi.org/10.1016/j.im.2011.09.006>
- Luarn, P., & Lin, H.-H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in Human Behavior*, 21(6), 873–891. <https://doi.org/10.1016/j.chb.2004.03.003>
- Lundberg, D. (2016). When do farmers adopt New Technology. LinkedIn. Retrieved from <https://www.linkedin.com/pulse/when-do-farmers-adopt-new-technology-dave-lundberg/>.
- Madan, K., & Yadav, R. (2016). Behavioural intention to adopt Mobile Wallet: A developing country perspective. *Journal of Indian Business Research*, 8(3), 227–244. <https://doi.org/10.1108/jibr-10-2015-0112>
- Malhotra, N. K., & Dash, S. (2011). *Marketing research: An applied orientation*. New Delhi: Pearson.
- Mallat, & Tuunainen. (2008). Exploring Merchant Adoption of Mobile Payment Systems: An Empirical Study. *E-Service Journal*, 6(2), 24. <https://doi.org/10.2979/esj.2008.6.2.24>
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of Relationship Marketing. *Journal of Marketing*, 58(3), 20. <https://doi.org/10.2307/1252308>
- Możdżyński, D. (2018). Acceptance of Payment Systems from the Perspective of Merchants. *Information Systems in Management*, 7, 16–34. <https://doi.org/10.22630/ISIM.2018.7.1.3>
- Natarajan, T., Balasubramanian, S. A., & Kasilingam, D. L. (2017). Understanding the intention to use mobile shopping applications and its influence on price sensitivity. *Journal of Retailing and Consumer Services*, 37, 8–22. <https://doi.org/10.1016/j.jretconser.2017.02.010>
- Oliveira, T. et.all. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404–414. <https://doi.org/10.1016/j.chb.2016.03.030>
- Ondrus, J., Lyytinen, K., & Pigneur, Y. (2009). Why mobile payments fail? towards a dynamic and multi-perspective explanation. 2009 42nd Hawaii International Conference on System Sciences. <https://doi.org/10.1109/hicss.2009.510>
- Phonthanakitithaworn, C., Sellitto, C., & Fong, M. W. (2016). A comparative study of current and potential users of mobile payment services. *SAGE Open*, 6(4), 215824401667539. <https://doi.org/10.1177/2158244016675397>
- Reichheld, F. & Scheffer, P.. (2000). E-Loyalty: Your Secret Weapon on the Web. *Harvard Business Review*. 78. Retrieved from <https://hbr.org/2000/07/e-loyalty-your-secret-weapon-on-the-web>
- Schierz, P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, 9(3), 209–216. <https://doi.org/10.1016/j.elerap.2009.07.005>

- Sekaran, U. (2003) *Research Methods for Business: A Skill-Building Approach*. 4th Edition, John Wiley & Sons, New York
- Setyowati, D. (2019, February 22). Dua riset sebut Go-Pay dominasi Pasar Pembayaran digital di Indonesia. Retrieved from <https://katadata.co.id/berita/2019/01/22/dua-riset-sebut-go-pay-dominasi-pasar-pembayaran-digital-di-indonesia>
- Shaw, N. (2014). The mediating influence of trust in the adoption of the mobile wallet. *Journal of Retailing and Consumer Services*, 21(4), 449–459. <https://doi.org/10.1016/j.jretconser.2014.03.008>
- Singh, N., & Sinha, N. (2020). How *perceived trust* mediates merchant's intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services*, 52, 101894. <https://doi.org/10.1016/j.jretconser.2019.101894>
- Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing*, 36(2), 357–378. <https://doi.org/10.1108/ijbm-12-2016-0186>
- Subramanian, G. H. (1994). A Replication of *Perceived usefulness* and *Perceived Ease of Use* Measurement. *Decision Sciences*, 25(5-6), 863-874. <http://doi.org10.1111/j.1540-5915.1994.tb01873.x>
- Sun, H., & Zhang, P. (2006). The role of moderating factors in user technology acceptance. *International Journal of Human Computer Studies*, 64(2), 53–78. <https://doi.org/10.1016/j.ijhcs.2005.04.013>
- Susanti, A. (2015, January 26). Pengaruh persepsi kegunaan, persepsi kemudahan, persepsi risiko dan persepsi kepercayaan terhadap minat menggunakan mobile banking. Retrieved from <http://digilib.uin-suka.ac.id/15945/>
- Tazkiyyaturrohman, Rifqy. (2018). c. Muslim Heritage. 3. 23. <https://10.21154/muslimheritage.v3i1.1240>
- Teima, G. et.al. (2016). Innovation in Electronic Payment Adoption: The case of small retailers. Worldbank.org. Retrieved October 27, 2021, from <http://documents1.worldbank.org/curated/en/765851467037506667/pdf/106633-WP-PUBLIC-Innovative-Solutions-Accelerate-Adoption-Electronic-Payments-Merchants-report-2016.pdf>
- Tsu Wei, T., Marthandan, G., Yee - Loong Chong, A., Ooi, K. B., & Arumugam, S. (2009). What drives Malaysian m - commerce adoption? an empirical analysis. *Industrial Management & Data Systems*, 109(3), 370 – 388. <https://doi.org/10.1108/02635570910939399>
- Usman, R. (2017). Karakteristik Uang Elektronik dalam Sistem Pembayaran. *Yuridika*. 32. 134. <https://10.20473/ydk.v32i1.4431>
- Varki, S., & Colgate, M. (2001). The role of Price Perceptions in an integrated model of behavioral intentions. *Journal of Service Research*, 3(3), 232–240. <https://doi.org/10.1177/109467050133004>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of Technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Verkijika, S. F. (2018). Factors influencing the adoption of mobile commerce applications in Cameroon. *Telematics and Informatics*, 35(6), 1665–1674. <https://doi.org/10.1016/j.tele.2018.04.012>
- Wong, C.-H., Tan, G. W.-H., Tan, B.-I., & Ooi, K.-B. (2015). Mobile Advertising: The changing landscape of the advertising industry. *Telematics and Informatics*, 32(4), 720–734. <https://doi.org/10.1016/j.tele.2015.03.003>

- Wu, J.-H., & Wang, S.-C. (2005). What drives mobile commerce? *Information & Management*, 42(5), 719–729. <https://doi.org/10.1016/j.im.2004.07.001>
- Wulandari, D. (2019, Juli 15). Begini tren penggunaan uang elektronik konsumen Indonesia. Retrieved from <https://mix.co.id/marcomm/news-trend/begini-tren-penggunaan-uang-elektronik-konsumen-indonesia/>
- Xu, F., & Du, J. T. (2018). Factors influencing users' satisfaction and loyalty to digital libraries in Chinese universities. *Computers in Human Behavior*, 83, 64–72. <https://doi.org/10.1016/j.chb.2018.01.029>