

Intention in Using Digital Payment Among High School Students in Jakarta

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Abstract

The purpose of this study is to identify the intentions in using a digital payment system among high school students in Jakarta. As a data collection tool for this study we used questionnaires, as many as 100 high school students that we surveyed about the use of digital payment systems. We used regression analysis and descriptive statistics to analyze the data. This study was developed based on a model of attitudes toward behavior, perceptions of behavioral control, subjective norms, and intentions. In conducting this research, data obtained from 100 respondents who used electronic transactions using digital payments. Meanwhile, the collected data was analyzed using Theory of Planned Behavior (TPB). From the analysis, it is known that all of these factors have a significant effect on the value of using digital payments. The sequence is based on the largest to the smallest significant level is Intention (0.846), perceived behavioral control (0.792), attitudes toward behavior (0.692), and subjective norms (0.666).

Keywords: Digital Payment System, Technology, Intention, Perceived Behavioral Control, Subjective Norm, The Theory of Planned Behavior, TPB, High School Student, Jakarta

1. INTRODUCTION

Lately, the internet has become the fast developing communication network in the digital era, which includes Indonesia. Society cannot be easily separated from the attachment of the internet in their daily lives. Therefore, today's society is touted as the society of modern digital era. This technological progress is done to make various activities easier for all individuals in the community. From being a means of communication with relatives or old friends who are far away, for looking for various data and for transportation, to being a means of payment, the internet has become a great ease for activities that were difficult to do in the old days.. In this study, the researchers wanted to conduct a study on the factors the influences the intention of using digital payments among high school students in Jakarta. Digital payments are meant for payments

made using technology and without the use of physical cash. In this case, digital payments are used as a substitute for money in the transactions of both receiving money or making payments. The use of digital payments depends on security and trust, and the use of digital payments depends on both. Indonesia is one of the countries where the majority of the population are internet users, and its users continue to increase along with their economic stability. Some non-banking institutions and start-up companies offer digital payment services. Among the variety of digital payment facilities, one of which is through a mobile phone or smartphone. Smartphones are an efficient tool for making digital payments, which are now much cheaper than the past.

Previous researchers stated that all payment systems for personal or commercial activities that use smartphones to complete transactions can be referred to as digital payments (Liébana-Cabanillas, 2012). Using technological advancements, companies began to expand their business through electronic commerce. The rapid trade expansion is the factors that produce payment services that continue to grow and lead the fast growth of the payment system. As a consequence, consumers have the opportunity to be able to use new payment systems that are diverse and more complex.

Start-up companies also began to take advantage of these business opportunities to create magnets so that their business is always in demand by everyone. They began to develop digital payment systems as it demands for progress in the era.

Start-up companies began to be used to create magnets so that their business was always in demand by everyone. They began to develop digital systems as advances in the era. In Indonesia, digital payment system providers with smartphones have started to grow, for example Go-Pay, Grab-Pay which is now OVO, T-Cash. Although this payment system is used as an efficient digital payment system, most still use the old system of using credit or debit cards, or even using cash. Because they are familiar with the system before, but will create business opportunities for new service providers or payment services in the future.

According to previous research, there are several factors that influence the intention as to why people use the online payment system, such as the existence of trust (Mcknight & Choudhury, 2006) and certain apparent risks. (Cunningham, Gerlach, Harper, & Young, 2005) (Lu, Hsu, & Hsu, 2005). Therefore, entrepreneurs and business owners see this as a business opportunity and realize that increasing the number of digital payments also reduces the use of paper money. Having felt the utility of online payment forms and perceived convenience has a positive correlation with behavioral intention to accept the use of electronic payments (R. George, 2007) and perceptions of good quality systems and services also have a direct impact on users to make payments online, and do repurchase on the internet (He & Mykytyn, 2007). A large company tends to be trusted to have credibility from small companies so that it is easy to attract consumer intentions in using digital payment. Thus, researchers are interested in knowing and studying the factors that influence the intentions of high school students in Jakarta in using digital payments. The results of this study are expected to be useful for business people who are developing and creating digital payment systems, and to create trust for consumers in using digital payments.

2. LITERATURE REVIEW

This portion summarizes the literature review that was used in the study, particularly those relating to Digital Payments and Theory of Planned.

1. Digital Payment System

Generally, digital payments are defined as payments that are processed and received (Liébana Cabanillas, 2012). This is a worldwide phenomenon that nowadays enables us as people to make transaction online anytime and anywhere (Humphrey, Pulley, & Vesala, 1996), thereby strengthening domestic and global trade (Weir, Anderson, & Jack, 2006). Because of rapid technology developments, it has become popular mostly because of its convenience and flexibility (He, Duan, Fu, & Li, 2006). Digital payments, which are certain forms of electronic payments, use communication technology by allowing mobile users to make payments using mobile devices that are linked to the Internet (Lee, 2009). This makes online transactions easier and more flexible for consumers. In previous studies, indepen-

dence of location and time are the key attributes that influence use of mobile technology and services (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008). Wireless technology and communication are taken advantage by digital payment system since it permits payments to be made through the use of SMS messages, Cellular Web, direct billing to customers and to credit card via cellphone, transmission of PIN numbers, and Wireless Application Protocol (WAP) online bills. (Carlsson, Walden, & Bouwman, 2006). Because of its usefulness and convenience, mobile users has increasingly supported the use of payment methods (Kim, Mirusmonov, & Lee, 2010).

Transactions on e-commerce sites use general digital payments today. There is no great difference between the process of using digital payments and traditional payments. Digital payments are like physical walls, but it increases security and efficiency in assisting payment transactions. Currently, many companies have developed and provided the use of digital payments in Indonesia. Such digital payments includes Ovo, T-cash, Go-pay and more. The basic idea of digital payment systems is creation of payments through cellphone or smartphone by means of the internet through the use of distinctive tokens or Quick Response Code (QR code) scans that represent money from customers to traders. Consumers will then deposit money in their own digital wallet for the use of any payments in the near future.

2. Theory of Planned Behavior (TPB)

Theory of Reasoned Action (TRA), which was developed by Ajzen and Fishbein (Ajzen & Fishbein, 1980), especially those relating to Digital Payments, and The Theory of Planned Behavior (TPB) by Ajzen (Ajzen, The Theory of Planned Behavior, 1991) are two of the classical theories that explained the human behaviors connected to the adoption of new technologies by human beings. Both are usually used as the main theoretical framework for understanding and explaining the adoption and behavior in using different information system by individuals. TPB expresses that humans behave voluntarily primarily because of their intention to be involve in such behavior.

Noor Raihan Ab Hamid, and Aw Yoke Cheng

(Monsuwé, Dellaert, & Ruyter, 2004)] state that perceived risk is an assessment of certain predictions or the lack of information about the range of possible outcomes and its inability to achieve results. (Mansour Samadi & Ali Yaghoob-Nejadi, 2009 2(2)) While Vlek, C., and Stallen. Nosor Raihan Ab Hamid, and EawHooi Cheng (Monsuwé, Dellaert, & Ruyter, 2004) describes risks as a condition of uncertainty regarding something or a lack of information about the possible flow of end products and the state in which the final results cannot be controlled. In their study, they focused on risks such as performance risk, psychological risks, financial risks, physical risks, and time-constraint risk. With regards to electronic payments, consumers are well aware that providing their credit card information is quite risky and dangerous as security is mainly the issue in giving out such information.

Özeretal.,(Oginni, Gambo, Abba, & Onuh, 2013) Menurut TAM (Technology Acceptance Model) explains the perceptions on the ease of use and the effects of behavioral use developed by the handlers on information systems. This behavior links individual intentions and leads to its adoption of technology.

3. Intentions in Using Digital Payment System

A previous study has determined that the predictors of an individual's behavioral intentions are their attitudes and beliefs. (Au & Krauffman, 2008). Intentions are one of the things that is usually used to understand as to how an individual's attitude can affect their actual behaviors, (Huang, Lee, & Ho, 2004) and unfavorable behaviors and intention can be caused by negative attitudes. (Stevenson, Bruner, & Kumar, 2000). Previous research has also provided empirical evidence wherein when mobile users hold positive benefits from mobile technology, they would have good intentions of towards it. (Au & Krauffman, 2008). This confirms that preliminary understanding on a certain consumer's behavior provides better forecasts than simple analysis from past sales trends (Amstrong, Morwitz, & Kumar, 2000). Therefore, it is very important to understand what causes mobile cellular users to

be eager in using the digital payment system.

4. Ethnic and Culture

Ethnicity encompasses general cultural heritage which is the sense of ownership inherited from one generation to another (Renzetti & Curran, 1998). Culture, on the other hand, expresses patterns of human thought and relations (Legohérel, Daucé, Hsu, & Ranchhold, 2009). It can be defined as the belief or norm of certain groups that has made an effect on individual's behavior. Since ethnicity is the prevailing manifestation of culture (Usunier, 2000), it is proving that individual attitudes, intentions and beliefs may depend on their ethnicity (Legohérel, Daucé, Hsu, & Ranchhold, 2009). Therefore, the importance of cultural values can be seen in the way of life of each certain ethnic group, in which it becomes the guiding principles for their way of living. (Schwartz, 1999). This offers a foundation for understanding in what way ethnicity may influences cellular users' responses to the system of digital payment.

5. Underlying theory

Theory of planned behavior (TPB) is the extension of the Theory of Reasoned Action (TRA) in which it explains the behavior of consumers. (Ajzen, The Theory of Planned Behavior, 1991). TPB presupposes three determinants of conceptually independent intentions. These are perceived behavioral control, attitudes, and subjective norms. These three determinants are then predicted by three different beliefs which includes control, behavioral, and normative beliefs. In this study, they function as antecedent variables. TPB was used as the fundamental theory because the variables were binding and relevant in the understanding of human behavior (Shankar & Balasubramanian, 2009).

3. METHODS

This research is a quantitative study in which it used questionnaires as the primary tool in the collection of data. The population for this research comprised of students who have used digital payments. From the population, we took a random samples of 100 senior high school students.

We used a simple questionnaire to measure variables in the conceptual framework and use a Likert scale of 4 points: 1 = very bad, 2 = bad, 3 = good, 4 = very

good. To test the hypothesis, we use linear regression to analyze the factors that influence the customer's intention to use a digital payment system. The result of the analysis are made in the form of linear equations, and are examined from each of the independent variables that influence the customer's intention to use the digital payment system.

Table I, The confidence of the questionnaires

THE CONFIDENCE OF THE QUESTIONNAIRES WITH CRONBACH'S ALPHA		
Variables	Questions	Cronbach's Alpha
Attitude Toward The Behavior	4	0.692
Perceived Behavioral Control	4	0.792
Subjective Norm	4	0.666
Intention	4	0.846

4. RESULT

The analysis from the 100 samples are as follows:

A. Respondent's Personal Data

Demographic data of respondents are male and female, aged range 16 years to 18 years in Santo Yoseph High School (private school).

B. Variable Analysis

Table 2 summarizes the opinions about various factors that influence respondents' intentions in using digital payment services.

Table II, Mean and standard deviation

MEAN AND STANDARD DEVIATION OF THE STUDIED VARIABLES		
Variables	Mean	Std
Attitude Toward The Behavior	2.90	0.680
Perceived Behavioral Control	2.23	0.687
Subjective Norm	3.01	0.661
Intention	2.54	0.783

It can be observed from table 2 that the respondents' subjective norm, with an average of 3.01, is the highest factor that influences their intention in using digital payments. This is followed by attitudes toward behavior and perceived behavioral control. The analysis of each factor proves that most respondents strongly agree on each factor.

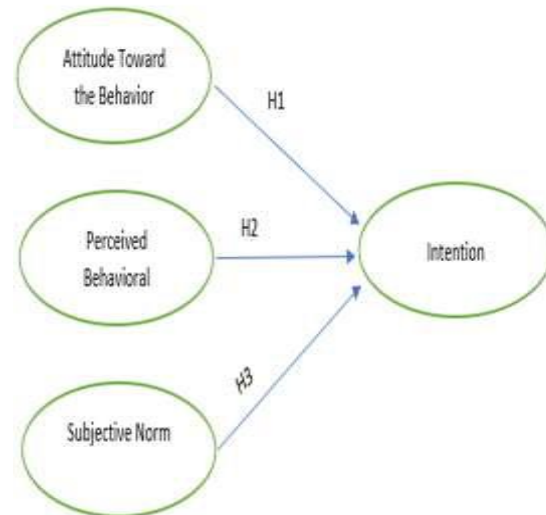
C. Test of Hypotheses

According to the research conceptual framework, there are three factors that influence the intention for using digital payment services. The following are the assumptions that must be tested:

H1: Attitudes toward behavior affect the intention to use digital payment services.

H2: The Perceived behavioral control affects the intention to use digital payment services.

H3: Subjective norms affect the intention to use digital payment services.



Multiple regression coefficients using multiple regression analysis are shown in Table III.

Table III, Statistical multiple regression

STATISTICAL MULTIPLE REGRESSION ANALYSIS						
Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)		1.143		-4.003	.000
	Perceived Behavioral Control	.428	.006	.327	4.948	.000
	Subjective Norm	.315	.003	.265	3.794	.000
	Attitude Toward The Behavior	.582	.002	.445	6.319	.000

R = 0.817 R Square = 0.651

The results of the study show that there are three key factors that have a significant value of less than 0.01. It can be concluded that the factors influencing intention to use electronic payment services included perceived behavioral control ($\beta = 0.327$), subjective norms ($\beta = 0.265$) and attitudes toward behavior ($\beta = 0.445$) at the 0.01 significance level. The multiple correlation coefficient (R^2) of 0.651 means that the influence of the independent variable can explain the intended use variation of digital payment services by 65.1%, while the remaining 34.9% is due to other variables.

5. DISCUSSION

The purpose of our study was to analyze the intention for using digital payments from the point of view of behavior and to determine its constitutive factors. The factors that influence intention for using digital payment in which the research used as variables are: attitude, followed by perceived behavior, and subjective norms. In this study, attitude is the most prominent

factor in determining intention in using digital payment. Furthermore, attitudinal factors are also important determinants of this research. This reveals its significant, positive and direct effect on the intentions for using digital payments. The technology acceptance factor also determines the tendency of consumers to use new technology in the payment system. In addition, in the implementation of digital payment systems, perceived behavior is also an important factor for the adoption of digital payment systems, which have subjective norms as the second most important variable. This implies that users of future digital payment systems will maintain a higher consideration of opinions that really matter to them.

The scope of our study is limited to 100 respondents of private high school students in Jakarta. We try our best to get more and valid data in this study.

6. CONCLUSION

The results of the study on the factors that influence the intention for using digital payment services as are follows:

1. Subjective norms is the strongest factor that influence the intention of consumers for using digital payment services. Companies must market such digital services to the community by utilizing various media such as TV or online media. This will make customers be aware of the advantages of utilizing digital payment benefits in electronic business transactions that will encourage other consumers to pay through digital payment.
2. Factors acceptance of technology regarding attitudes toward behavior and perceived behavioral control that easy-to-use digital payment services also influences the intention of consumers to use payment services in electronic business transactions. Companies must publicize the steps and how to use of digital payment clearly through every possible media channels in order for customers to try and know how to use digital payment.

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