ANALYSIS OF YOUNG ADULT'S INTENTION TO USE INDONESIAN PREPAID ELECTRONIC MONEY

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ABSTRACT

Electronic money is one of the non-cash payment instruments that has grown rapidly in the last decade and is considered to be boosting the economy in Indonesia. There are 37 products of electronic money that have been registered under Bank Indonesia. The main focus of this research is to analyze young adult's intention to use electronic money. This study examines three main factors that influence the intention to use electronic money namely attitude, subjective norms, and perceived behavioral control. The results indicate that attitudes, subjective norms, and perceived behavioral control have significant influence on the intention to use electronic money. In addition, the variable with most significant influence is perceived behavioral control, while subjective norms are the lowest. Therefore, to increase the use of electronic money and promote a cashless society, the most suitable step for the government and companies is to increase the ease of access to electronic money. The easier and more practical the use of electronic money, the more people will use it and even reach users from elderly and underage age groups.

Keyword: electronic money, theory of planned behaviour, intention to use e-money

RESEARCH BACKGROUND

The development of technology and information are having a significant impact on almost every existing field. Especially when it comes to a payment system, many retail payments nowadays implement the latest payment instrument, which is electronic money to its transaction method. Electronic money, shortened “e-money” and sometimes called e-wallet, was first created in 1990 by the company "DigiCash" founded by encryption expert David Chaum. Based on several advantages of electronic money, it provides convenience and speed in transactions and does not accept refunds in kind. Additionally, it is universally applicable for bulk transactions with small value but high frequency. Electronic money can be used in various places such as minimarkets, supermarkets, toll roads, electricity bills, public transportation, and so on.

The benefits and purposes of electronic money are explained in Bank Indonesia Journal by Hidayati (2006) which state that the use of electronic money as an alternative means of non-cash payment in several countries shows a considerable potential to reduce the growth rate of cash use, particularly for micro to retail payments. Based on Hidayati's article, Bank Indonesia in 2006 organized a program to increase the use of non-cash instrument through the development of card-based payment. The concept of this program was generated in the framework of the initiative less cash community to encourage the creation of safe, efficient, and reliable payment system for the society to build a better national economy.

There are two theories explain that the economy is influenced by technological factors. In this study electronic money is a big part of the technological factor. First theory is made by A.Smith (1776) the first inventor to discuss economic growth systematically. Smith stated that technological progress one of the factors that will produce a level of efficiency that is able to bring the economy into full employment, and economic growth will lead to a stationary position (stationary state). The second theory was put forward by Solow and Swan in 1956 which stated that the growth rate came from three sources, namely capital accumulation, increased labor supply, and technological improvements.

According to Lenhart, et al (2010) the most electronic money users are young adults. It is known that, due to the low education about technology development and limited financial literacy in Indonesia, people of the adult and elderly age range mostly don’t have enough knowledge of technology let alone have an intention to use electronic money. From the minor age range, the users are also limited.

Additionally, there are few people under the young adult age range who have no intention to use electronic money as they do not have capabilities to it. It can be seen that electronic money in Indonesia has not been widely used if compared to the existing population and also in other developed countries. The age range that best fits using electronic money is between the young adult age range. If compared to minors, young adults can quickly adapt with electronic money usage. If compared to the elderly, young adults have acquired more financial literacy and technology knowledge. Thus, the object of this research are people under the young adult age range.

Analysing the intention of using electronic money based on the consumer's perspective will be more suitable with the theory of planned behaviour if we refer to one of Conner's (2020) research. Based on source of the theory, which is the research conducted by Ajzen (1991), the purpose of the theory of planned behaviour and the results from the theory is suitable to analyse consumer's perceptions which influence their intention to use a product. The reason they are important is that at one level, their analysis increases our understanding of many different behaviors.

Furthermore, based on a study conducted by Ajzen (2002), the intention to use a product is determined from three main categories based on Theory Planned Behaviour. Furthermore from Ajzen (1991), Theoretically there is a relationship between attitude, subjective norm, and perceived behavioral control with one's behavioral intention. These three factors seem to be the driving force for an individual to do a particular behaviour which is using electronic money in this study.

In accordance with the gap with the previous studies, the person's intention to use electronic money as the alternative payment instrument to cash for transaction purposes is the main topic. This research specifically discusses the prepaid electronic money. Furthermore, a dataset about consumers' perspectives about their intention of using electronic money, whether they have used it or not, is collected. The focus is on attitude, subjective norms, and perceived behaviour control, which influence their intention to use electronic money. Theory of Planned Behaviour is used in this research with the main goal to provide an understanding of the factors that lead to a behavioural intention, which is the intention to use electronic money. The target is to investigate which factors that have significant influence on people intention to use electronic money, and the main purpose of this research is to boost the use of electronic money to promote the advancement of the economy.

RESEARCH METHODS

This is quantitative research where the variables are measured with numbers and analyzed with statistical procedures. There is a cause and effect relationship between the data and variables in this research. The quantitative data for this research is gathered through a survey aimed at a sample of the population which briefly described in the data collection method section. This research aims to find out the factors that encourage the use of e-money payment instrument and the contributions of each factor. Descriptive research is used to express the nature of people choosing the payment instrument for the transaction. The descriptive method is an analytical method for analysing research results but is not used to make broad conclusions according to Sugiyono (2017). This research is influenced by the Liébana-Cabanillas *et al.* study in 2018 which investigated the determinant of mobile payment acceptance.

Variables in this study came from the conceptual framework was adapted from Liébana-Cabanillas *et al.* in 2018. They conducted a study of mobile payment technology and the determinants of using NFC mobile payment. The study started on February 6, 2017 and focused on three main characteristics of e-money: perceived ease of use, perceived usefulness, and perceived security as the determinant of using NFC mobile payment. On the other hand, this research has different characteristics that are more fit with the situation in Indonesia. The interrelations between attitude, subjective norm, perceived behaviour control to the intention of using e-money and continue with the customer behaviour are analysed using the theory of planned behaviour. The independent variables are attitudes or behavioural beliefs, subjective norms, and perceived behavioural control. If the independent variable change, it will affect the dependent variable to change along with it. In this study, the dependent variable is not only directly influenced by the behavioural intention but also perceived behaviour control. However, what is clearer is the dependent variable is indirectly influenced by attitude, subjective norm, and perceived behaviour control.

Primary data consists of respondents' characteristics (age, gender, education, occupation, and monthly allowance) that are gathered through a questionnaire for background factors data. Afterwards, the questionnaire would have asked about the respondent's behavioural beliefs with attitudes, normative beliefs with subjective norms, and control beliefs behavioural control. Data collection was done through an online questionnaire. Respondents were asked to directly fill out the questionnaire distributed by the writer to get data about the respondent before using electronic money. This study chose the questionnaire because it is sufficient to obtain more reliable answers than interviews

because respondents can freely examine and answer questions without any intervention from the writer. The variable measurement method will determine the value of the results in this study. The variable measurement method is used to test each variable that has been determined in this study, such as attitude, subjective norms, and perceived behavioural control.

This study processed the data result with descriptive analysis first. According to Ayush Singh Rawat in his article in 2021, descriptive analysis is a type of data analysis that helps describe, show or summarize data points in a constructive way so that the patterns that may appear meet each data condition. It is one of the most important steps for performing statistical data analysis.

Furthermore, the data result analysed with Partial Least Squares (PLS) regression methods. These methods are gaining importance in many areas of chemistry; analytical, physical, clinical chemistry and industrial process control can benefit from using this method. However, PLS is a strong analytical method because it can be used on any type of scale data (nominal, ordinal, interval, and ratio) as well as more flexible assumption requirements according to Yamin, Sofwan, and Kurnaian, (2011). PLS, accordance to Kusumawardani (2011), has several advantages, namely, being able to run with complex models, being able to manage multicollinearity, the results remain solid even though there are abnormal and missing data, can be run on small samples, and can be used on data with different scale types.

This study uses SmartPLS as tool to analyse the data collected. This kind of study where discussing more about technology is suitable to use SEM as part of the analysis. However, there are many previous study has already analyse the theory of planned behaviour and it is already proofed that the research model in this study is good and fit. Hence, using SEM as part of the analysis is not necessary anymore. In the analysis process, PLS uses two evaluations, namely the measurement model (outer model) and structural model (inner model).

Finally, the data result analysed through hypothesis testing which can be done by a few methods. The first method according to Hair, Ringle and Sarstedt (2011), is that hypothesis testing can be done by looking at the level of significance between latent variables. Hypothesis testing is usually done by comparing the t-value with the existing t-statistic value, the t-value for the two-tailed test is 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.58. Further research by Leguina (2015) explains that the hypothesis can also be made by looking

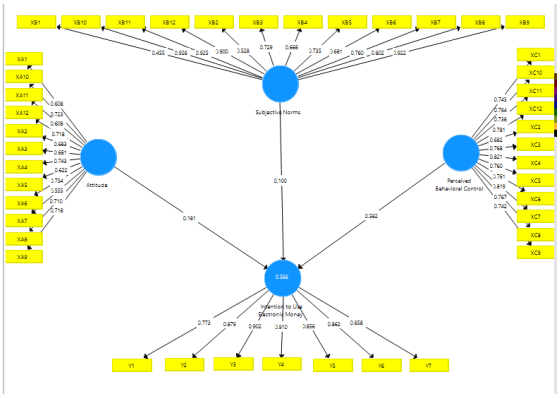
at the results of the p-value must be smaller than a significance value of 5% or 0.05 to say that a variable has a significant relationship.

RESULT

This research was conducted in Jakarta. The writer made a set of questionnaires in the Google Form. Afterwards, the writer distributed the link of the questionnaire to the writer's friends and other relations. However, the location of the respondents randomly spread in and outside Malang. The research time was conducted 20 days from 7th to 27th of October 2021.

From the descriptive analysis, the data shows that most of the respondent are at the age of early twenties and mostly student who is not working at the moment. The gender is divided evenly as well as the respondent's source of income are evenly separated self-finance and supported financed. Most of the respondent are educated and all of them have some knowledge about electronic money. However, almost all of the respondent are unmarried.

Furthermore, for the data result using PLS analysis the variables relationship comes to this model structure in the outer model:



However, from the structure above there are some indicators of the variables that are not valid and making the not reliable as the indicators could not represent the variables. Thus, the invalid and bad outer loadings/indicators are taken out so making the indicators valid and reliable enough to represents the variables.

The next step of PLS analysis is Inner model which analysing how strong are each independent variable are influencing the dependent variable. The result is all of the independent variables are strongly affecting the dependent variable. R square of the independent variable is 0.57. The results of the study can be interpreted as the dependent variable, namely intention to use electronic money, with 57% influenced by the independent variables, namely Attitude, Subjective Norms, and Perceived Behavioural Control. Since the value of R square is greater than 0.50, the

independent variables have a moderate significant influence to the independent variables. Besides, the remaining 43% of the determination of the dependent variable is influenced by other variables that are not suspected as independent variables in this study. The analysis also shows that each of the independent variables has a positive relationship with the dependent variable as all of the path coefficient value is greater than 0.

Every independent variable selected in this study have a positive effect and also significantly affected the dependent variable. The data result can be seen that each of the independent variable contribute to the dependent variable. From the t-statistics listed in, perceived behaviour control (X3) is the biggest contributor of influence to the intention to use electronic money (Y). Attitude (X1) and Subjective Norms (X2) respectively to the lowest impact the dependent variable.

DISCUSSION

Based on the indicators of the variable, a person's capability to do something are the biggest determining factors. Young adults' intention to use electronic money is greatly influenced by the amount of time, money, energy, and knowledge. According to Liébana-Cabanillas et al. (2018) the higher one's ability and capability for a behaviour, the higher one's intention to do it. As well as knowledge, it can affect a person's intention to implicate a behaviour, which uses electronic money.

The results of this study are supported by research by Viswanath, Venkatesh, et al (2015) which states that supporting conditions can control individual behaviour in the context of technology. The existence of supporting facilities for individuals directly such as applications or mobile devices will have an impact on individual behaviour directly also on the technology used.

The results of this study are in accordance with research shown by Mayer, et al (1995) that trust is not a risk-taking but an awareness or desire to take risks. From the results of this hypothesis test, it is clear that consumers in Indonesia have the awareness to take risks when using e-money. As the conclusion of research by Melorose, et al (2015) which states that trust is the key to reducing consumer worry about using technology, this research proves that many consumers are no longer worried when using e-money.

The result of this study also in accordance with the previous theories created by first by A.Smith (1776) that states technology improvement can create efficiency and boost the economy growth. The respondent is the proof that using electronic money would create efficiency

and other good things which will advance the economy. Second theory made by Solow and Swan in (1956) that put elements of technology progress into their model production function. With the belief felt by respondents in using electronic money where many positive things that will be obtained from using electronic money. This belief is proofed in the result of this study increase the young adult's intention to use electronic money. the continuation is an improvement in economic conditions in Indonesia to be better than before

CONCLUSION

This research was conducted to understand the young adult's intention of using Indonesian prepaid electronic money. To be able to collect data for this research, the author distributed an online questionnaire media via Google Forms. From the result of this study, the writer can conclude that all hypotheses are accepted because they have t-statistic value above 1.96 and p-value greater than the critical value (0.05). In addition, the data quality and research model in this research are also proven to have good quality.

Perceived behaviour control is the most significant factor that determines the young adult's intention to use electronic money. The reason is due to a person's capability in performing a behaviour, their intention is very affected. knowledge about electronic money is also part of the perceived behaviour control which greatly affects the intention to use electronic money. knowing the risks that arise from using cash also makes perceived behaviour control very influential to intention to use electronic money.

Besides, Subjective norm ranks last in influencing the dependent variable although attitude also gets a score that is not much different. It is believed because, in Indonesia, the intention to do some behaviours is according to the subject's personal conditions/capability rather than the environmental factors and benefits. In other words, intentions tend to come from within oneself.

RECOMMENDATION

Based on the conclusion result above, there are some suggestions that may give benefits to electronic money users and other related parties including future electronic money researchers. Those recommendations are:

- Perceived behaviour control influenced the intention to use electronic money the most so in order to boost the use of electronic money the convenience and supporting factors of using electronic money should be introduced more to the general public.

- Based on research, the encouragement of others to create a cashless society is still not massive and needs to be improved again. Electronic money users is advisable to spread their knowledge widely regarding the use of electronic money and its usefulness.
- Many elderly people in Indonesia are not capable enough to use the newest technology. So, the writer gives recommendation to make prepaid electronic money more flexible and accesible to attract more people from different segments.
- Future researchers can modify or add more research methods other than questionnaires in order to obtain more objective results and also can ask for opinions and suggestions from respondents regarding the use of electronic money in Indonesia for a wider scope of research.

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