

# How to Increase E-Repurchase of E-Pay Consumers in Purwokerto

MONICA ROSIANA<sup>1</sup>, DWITA APRILLIA FLORESTI<sup>2</sup>

<sup>1</sup>Management Department, Faculty of Economic and Business, Universitas Jenderal Soedirman, Indonesia

<sup>2</sup>Economics and Development Studies Department, Faculty of Economic and Business, Universitas Jenderal Soedirman, Indonesia

## Abstract

The purpose of this study is to explain the effect of perceived usefulness, perceived ease of use, perceived risk on e-repurchase using e-pay. Structural Equation Modeling (SEM) was used to test the empirical model. The number of samples in this study was 114 e-pay users in Purwokerto. The results indicate that perceived usefulness and perceived ease of use have a positive effect on e-repurchase. In addition, researchers can also prove that perceived risk has a negative effect on e-repurchase.

## Keywords

Perceived usefulness, perceived ease of use, perceived of risk, e-repurchase

## INTRODUCTION

Nowadays, the development of technology in Indonesia is very fast. One of them is the payment instrument which is now digitally based, so the public does not need to pocket banknotes because it has turned into digital or electronic money. Of course this situation has an impact on the financial services sector. Before the technology grew rapidly, people used banking services to conduct various activities.

The enforcement and application of this electronic money is valid after Bank Indonesia (BI) issued the regulation. The Bank Indonesia (BI) report on the growth of electronic money usage is recorded very significantly. As of February 2019, the use of electronic money grew by 77.6 percent. For the overall growth of non-cash payments grew by 17.1 percent.

Electronic money is divided into two, i.e., CIP-based electronic money usually in the form of applications, such as Go-Pay, OVO, and LinkAja. The advantages of electronic money or electronic based payment (e-Pay), among others, better prioritize speed, ease and efficiency when compared with cash payments and also the benefits gained by the public if using electronic-based payments is very large.

Although the payment of electronic-based (e-pay) has a positive benefit for the community, but the payment of electronic (e-pay) is still less desirable, it is because the knowledge of technology owned by the community is still lacking, the understanding of

the benefits and ease of electronic transactions are still less known by the public. Factors of perception of usability and ease of use in researched can affect e-repurchase use of e-pay, besides the perceived of risk factor also affects E-repurchase e-pay usage. Although technology currently provides benefits and convenience in transactions, there are still a handful of people who consider and reject electronic-based payment systems due to lack of security and uncertainty (Lee, 2009).

Even though the main target of Bank Indonesia in issuing electronic money is to minimize the use of cash among the people in everyday transactions. Current consumer of electronic money users generally dominated by middle to middle class people and the people who are technology literate. So that it is evenly distributed the use of electronic money in Indonesia is still lacking.

Program less cash society which is promoted by the government itself is part of the preparation of the Indonesian people in facing competition globally, especially the approved ASEAN Economic Community (AEC) since January 2016. Therefore, minimize the use of cash is one way that the value of the currency does not fall and remain stable.

The security and uncertainty perceived by the community is the risk of electronic-based payment systems (e-pay) perceived by a handful of people. The risk of security is a public concern for those who publish

electronic money in the form of cards issued by banks and in the form of applications, while the risk of uncertainty is that people still feel hesitant to between "yes" or "no" for electronic-based transactions. To solve the phenomenon what happens can be used theory Technology Acceptance Model (TAM) used as a basis of variety study of information technology systems that are can be used to answer phenomena that occur (Marangunic & Granić, 2015).

Davis (1989) explains that TAM is information systems theory that makes a model of how users want receive and use technology. This model proposes that when users offered to using a new system, a number of factors influence behavior them about how and when will use system, especially in terms of perceived usefulness and perceived ease of use.

The ease of use and attitude held by the community is a strong determinant of one's intention to conduct electronic-based transactions. (Han & Kim, 2017). The perceived of risk of online consumers influenced their belief in one of the e-commerce and the intention of purchasing society against the e-commerce (Haruna & Kassim, 2019). In addition to these risks, other risks are found, among others, financial, product, security, social/ psychological and time.

There are different results from previous studies. Researchers that say variable ease of use has positive effect on the re-purchase intent is Sidharta & Sidh (2014) Different result by Jain et al. (2014). They declared a usability variable that could affect the buying intention, Suresh & Shashikala (2011) in his research stating that perceived of risk has an effect on consumer re-buying intentions, but Fuad (2018) in his research stated that the risk perception variable has no influence on consumer re-buying intentions.

Based on this, this research will be done knowing the influence of perceived usefulness, perceived ease of use and perceive of risk to increase repurchase of e-pay consumers in Purwokerto.

## **LITERATURE REVIEW AND HYPOTHESES**

### **Electronic Payment (e-pay)**

Electronic payment is a payment model that makes it easy and offers convenience to users in conducting transactions payment. Users only need to make transactions using it

internet that is online, without having to meet or come all the way to meet the seller. Electronic payment is representative of all non-cash payments, which is also interpreted as an electronic payment transaction between buyers and sellers of business use savings accounts through the network internet or electronic network (Teoh et al., 2013). Electronic payment is used at this time for long distance transactions such as online shopping, along with the growing use of the internet and increasingly the number of e-commerce, electronic payment is a solution that is present for replace the old payment transaction tool. Which is included in Electronic payments are ATM, e-money, internet banking, credit cards, debit, mobile payment, mobile banking (Teoh et al., 2013).

Electronic money is money in electronics form that used in payment transactions on the internet through methods electronics, like using a smartphone. Electronic money is prepaid, which is the value of money from someone who is stored on a media electronic. Electronic money is also an electronic payment transaction tool that can do transactions with electronics also by using intermediaries i.e. internet, computer network, also digital store value system.

Electronic money consists of elements such as, electronic money issued with currency values money previously transferred from the customer or user to the issuer. Money is stored in a chip or electronic media a server. The money is used for payment between business people, not as the issuer of the electronic money. And electronic money from accounts which has been moved from the owner or customer and then managed by the issuer which is not a form of savings.

Benefits and advantages when using e-money compared to using cash value or non-cash payment instruments are: First, transactions only require a little time to do, easy and convenient inside. Its use compared to the old way of payment, namely money cash, making it easy to do small value transactions without having to prepare exact change and change from change. Or we can say that we get minimal error when we do payment transaction.

Second, with electronic money you don't need much time to make payment transactions. If you use cash money, it will require careful calculation so that the time needed is longer. Another case, if we use electronic money, we only enter numbers into

the system and do not have to counting the money. As well as recipients of money, it will be easier to calculate the number of transactions.

Third, the value of money can be refilled easily. It means we can fill anytime and anywhere. When we use cash, we have limitations because if our money runs out, we have to take it to the bank. And sometimes it takes a long time.

Forth, electronic payment generate more sales. This system allows consumers to pay for products and services online without having to meet with the seller. Therefore, you can reach more potential customers in various regions so that you can generate more sales. If we use cash money, we are not efficient and effective because we spend a lot of energy and time to meet our customers.

Fifth, transactions become more effective and efficient. This payment system is more effective and efficient than cash payments. Only by using a smartphone or internet banking application, consumers can pay for the items which they buy quickly and easily. In addition, consumers can pay for products purchased from e-commerce sites anytime and anywhere as long as the their device is connected to the internet connection.

Sixth, control expenses for customers. Users can check virtual accounts and see all expenses and transaction history. This can make it easier for users to control the amount of expenditure made each month. It will also help consumers to planning their purchases.

Seventh, e-payment makes our spending more saving than cash money. Using e-payment will certainly provide benefits that are not necessarily obtained when payment is made in cash. The biggest advantage is the number of discounts and promos which which is beneficial for its users. Indonesian people can enjoy discounts on cash back when making payments using e-payment services from online motorcycle taxi services such as GOJEK (GO-PAY) and Grab (OVO) and other e-payment services from 20% to 50% discounted prices.

Eighth, electronic payment is saver than cash payment. The use of cash money is very prone to theft, even more if cash payments are made in large quantities. As for e-payment transactions, users must enter a password and PIN that is only known by the account owner. Payments made electronically use a highly secure security mechanism so that

users, both merchants and consumers, trust the e-payment system.

Ninth, electronic payment is reducing circulation of counterfeit money. We can say that the less use of cash, the less the circulation of counterfeit money in Indonesia. The choice of non-cash transactions has indeed become an appeal of BI (Bank Indonesia) to the Indonesian people since a few years ago because the currency cannot be forged.

### **Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM) was adopted and developed from the Theory of Reasoned Action (TRA) model, a reasonable theory of action developed by Hill et al. (1977) with one premise that a person's reaction and perception of something, will determine the attitude and behavior of the person (Adhiputra, 2015).

Aulianita & Santoso (2013) stated that TAM is an improvement of the TRA (Theory of Reasoned Action) model, TAM adopted fixed components of the general TRA model and applied them as specific domains of computer technology and others for information technology. But what distinguishes both of them (TRA and TAM) is the placement of attitude factors from TRA, where TAM introduces two key variables, namely perceived ease of use and perceived usefulness, which have central relevance for predicting user acceptance of technology.

According to Adhiputra (2015), Technology Acceptance Model (TAM) developed by Davis (1989) explains the two main concepts that are trusted in user acceptance (ie, perceived ease of use), namely the level of someone's trust that use information technology will be easy and does not require a lot of effort and perceived usefulness (perceived usefulness), which is a person's level of trust that information system users increase performance in their work.

Technology users will have a positive perception of the technology provided. Negative perceptions will emerge as a result of the use of the technology so that the TAM model can be used as a basis for determining the efforts needed to encourage the willingness to use technology (Ahmad & Pambudi, 2014).

Jogiyanto (2007) in Ahmad & Pambudi (2014) explained the advantages possessed by the Technology Acceptance Model (TAM) are: First, Technology Acceptance Model

(TAM) is a behavior model that is useful to answer the question why many information technology systems which fails to be applied because the wearer has no interest (intention) to use it. Second, Technology Acceptance Model (TAM) is built with a very strong theory. Third, Technology Acceptance Model (TAM) has been tested by many studies and the results largely support and conclude that Technology Acceptance The Model (TAM) is a good model. Forth, The Technology Acceptance Model (TAM) is a parsimonius model, which is a simple but valid model.

There are several weaknesses of the TAM theory, such as: First, TAM does not accommodate or does not involve the role of the environment around someone's attitudes and behaviors. Second, there is a different person or individual who comes from one's personal nature, and value in that person. Third, TAM also does not consider the role of people's ability to realize their desires.

### **Perceived Usefulness and E-Repurchase**

The perceived benefits (perceived usefulness) in this study are the benefits obtained by consumers when making a purchase, meaning that consumers send the agreed simply amount of money via transfer. That will make it easier for consumers to save their time. Oly Ndubisi et al., (2011) states that when consumers believe that online shopping will improve their transaction performance, the perceived benefits will increase.

An individual is more likely to make further use when the use is considered useful. Thus it can be said that the perceived benefits can be obtained when a consumer find it easy to interact with the website, to find product information and pay online. They will consider that shopping online will be more useful.

Nowadays, technology must have the value of use that can be felt by the user to be acceptable in the community. This technology is expected to relieve the burden of human work. Users will prefer the technology that is easy to learn because to minimize their time and energy. Included in the use of e-pay, the purpose of community use is to facilitate transactions. When it feels so easy, it will be prompted to re-purchase. This statement is in line with Cho & Sagynov (2015); Triatma & Akmila (2012). For that, we can make hypotheses:

**H1: Perceived usefulness positive effect on e-repurchase.**

### **Perceived Ease of Use dan E- Repurchase**

According to Kwon & Wen (2010), perceived ease of use is where consumers feel that shopping at web-based stores will increase spending and the extent to which consumers feel the ease of interaction with the website and can receive product information he needs. When consumers feel the ease of interaction with e-commerce websites, to find product information and pay online, they will consider shopping more useful.

Ease of use is a very important variable for receiving information systems because it is the basis of using the system. A system that is difficult to use will be considered less useful by the user and may be abandoned by the user. The ease of use can be interpreted as a person's conviction that if he/she wears a product does not require a hard effort.

Although an indicator of someone with another is different about the ease or absence of use, but generally one must avoid using a system that is difficult to learn. When consumers feel that a product is easy to use, they will try to repeat the purchase. Because they hope that with the same product they will get the same convenience. This statement is supported by the research of Aren et al., (2013); Cho & Sagynov (2015). So, we can make formulated hypotheses:

**H2: Perceived ease of use affects positively to e-repurchase.**

### **Perceived of Risk dan E-Repurchase**

In making payments online, there must be various perceptions about the risks that will be accepted by consumers. This is because there is no direct meeting. This concern is what makes them feel hesitant to re-purchase. The higher the perception of consumers to the risks that will be received, will make it reluctant to make repurchase. Likewise, when their perception of the risk received is low, consumers will be more confident to re-purchase. This declaration is in line with the research results of Suresh & Shashikala (2011). It also supported by Tho et al. (2017), based on their research, it suggests that the mobile service providers in Vietnam need to prevent any cause that may lead to an increase selling because high risk perception makes customers switch to other products. So, we can make formulated hypotheses:

**H3: Perceived of risk affects negatively to e-repurchase.**

**Conceptual Framework**

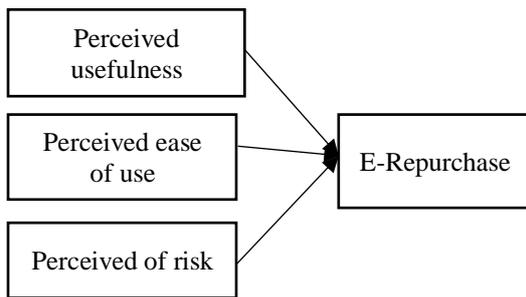


Figure 1. Conceptual Framework

**METHODS**

Hair et al. (2010) suggested that by using the Structural Equation Model (SEM), the appropriate sample size between 100-200 respondents. Furthermore, the minimum sample size is 5 observations for each estimated parameter (indicator). In this study a model with 19 parameters is used, so the minimum number of respondents for this study sample is  $19 \times 6 = 114$  respondents. Its population is all e-pay users in Purwokerto.

Data collection is done by spreading the online questionnaire. The sampling method is random sampling. This is because each sample has the same opportunity. Structural Equation Modeling (SEM) is used to test empirical models.

**RESULTS AND DISCUSSION**

**Characteristics of Respondents**

The number of respondents surveyed was 114 people used as a sample in this study. Research respondents are described by presenting their characteristics based on demographic variables, namely gender, age, and income or pocket money. The majority of respondents in this study were female with a percentage of 56.2 percent. Based on age, the majority in this study was 17-25 years old, amounting to 41 percent. Based on income or pocket money, the majority are respondents with income or pocket money of  $\leq 1,500,000$  per month of 69.8 percent.

**Validity and Reliability Test**

Validity Test is based on the factor t value and if the value is greater than the critical value of 1.96 then it is declared valid (Hooper et al., 2008). All indicators of each variable have a cut off  $> 1.96$  so that it can be stated that the whole indicator is valid. Reliability tests for

each latent variable were measured using Constructs Reliability (CR) and Average Variance Extracted (AVE). CR has a cut-off limit of 0.6 so that it can be declared reliable and AVE with values  $> 0.5$  (Ghozali, 2018). Based on the results of the validity and reliability test it can be concluded that all indicators can be used at the next stage of analysis.

**Model Conformance test**

The model conformance test results can be seen in the following table 1. Hair et al. (2010) stated that goodness of fit test can be accepted or the model is categorized “fit” if minimally 5 criteria are met. Based on these results, the model in the study is categorized as a very good model, because seven criteria were obtained in good category.

Table 1. Goodness of Fit Test

Index of Fit Model	Cut-off Value	Result of Analysis	Note
$\chi^2$ - Chi Square	$< \chi^2$ 77,93052 (p 0,05; df 59)	63,747	Good
Probability	$\geq 0,05$	0,313	Good
CMIN/DF	$\leq 2,00$	1,080	Good
RMSEA	$\leq 0,08$	0,029	Good
GFI	$\geq 0,90$	0,914	Good
AGFI	$\geq 0,90$	0,867	Marginal
TLI	$\geq 0,95$	0,983	Good
CFI	$\geq 0,95$	0,987	Good

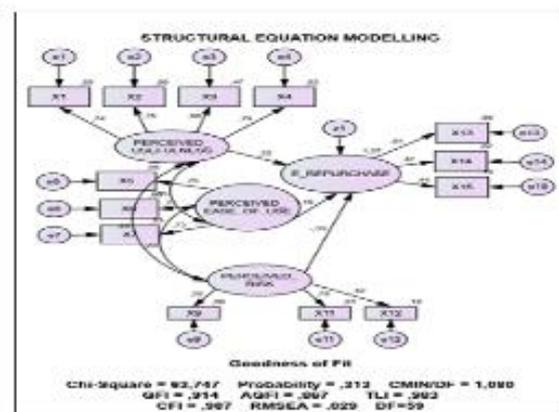


Figure 2. Full Model Hypothesis Test

Table 2. Result

Hypothesis	Value of C.R.	Value of C.R.	P	Result
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Perceived Usefulness → E-Repurchase	2.228	2.001	0.026	Accepted
Perceived Ease of Use → E-Repurchase	7.740	2.001	0.000	Accepted
Perceived Risk → E-Repurchase	-2.284	2.001	0.022	Accepted

**Hypothesis Discussion**

**Perceived Usefulness relationship with E-Repurchase**

**H1: Perceived Usefulness positively influential to E-Repurchase**

When a technology is easy to use, one tends to use the application again. Based on research results, e-pay can be categorized as user-friendly applications. They realize that with the existence of e-pay helps them to be able to transact anywhere and anytime. Electronic payment make it more flexible to make purchases when compared to using cash that is limited by time. Irmadhani & Nugroho (2014) states that usability is a person's belief that the technology he uses is able to improve their performance. This research is in line with the research results of Cho & Sagynov (2015); Kwon & Wen (2010); Triatma & Akmila, (2012).

**Relationship Perceived Ease of Use with E-Repurchase**

**H2: Perceived Ease of Use affects positively to E-Repurchase**

In this research, the perception of ease of use is evident in the speed when someone using e-pay transactions. For example: ease of access and search for the required e-pay services, clarity the instructions that contained in the application, consumers feel flexible when using the e-pay service. Ease of use will affect a person to use the service again or switch to another product. If they are confident with the E-pay application that it has done helps their effectiveness in transaction, they are more likely to wear it again. Respondents who were above 40 years also agreed with this statement because they were facilitated in conducting transactions. The research was in line with the results of Aren et al., (2013) ; Cho & Sagynov (2015).

**Relationship Perceived of Risk with E-Repurchase**

**H3: Perceived of Risk affects positively to E-Repurchase**

In making online payments, consumers are sure to have concerns about the risks that will be received. The high risk perception will have an effect on declining consumers desire to re-purchase. A low risk perception will make consumers confident about re-purchasing. In the context of this research, because the perception of consumers to the risk of e-pay is minimal, consumers are still encouraged to make repurchase. One of the efforts to improve security is the provision of strong passwords, and confirmation not only once but many times, for example by email and telephone number so that it can make risk perception decrease and increase repurchase. The research was in line with the research results of Suresh & Shashikala (2011).

**CONCLUSION**

This research shows that there are three factors that affect the re-purchase of e-pay usage. These factors are perceived usefulness, perceived ease of use, and perceive of risk. Perceived usefulness and Perceived ease of use give a positive influence on re-purchase of e-pay usage. While perceived of risk can decrease the intention of re-buying consumers of e-pay users in Purwokerto.

The limitations of this study are only focused on one area of Purwokerto. Therefore, the future research should not only be focused on one region but some areas. If viewed from the variable calculation results of benefits perception, the company should be able to provide attractive offers to consumers. Such discounted rates in hopes that they can increase their desire to re-buy. In addition, the company must also monitor and improve the quality of services in order to avoid interference when conducting e-pay transactions. And especially in this research, for the bank Indonesia as a regulation bank, should have begun to be regulated about electronic data capture tool. As well as for the government in Banyumas district, especially in Purwokerto, it is expected to continue to provide socialization of the use of cashless transactions among the people, in order to support the cashless movement.

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