The Influence of Perceived of Usefulness, Trust and Risk on Interest in Using Electronic Money Services in Communities in Malang City

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ABSTRACT

The transaction process using e-money in the community in Malang City is very influential. To determine the effect of perceived usefulness, perceived trust, and perceived risk on satisfaction in the use of electronic money is the purpose of this study. The population of this study were 846,126 people in Malang City. Purposive sampling is the method used to determine the number of samples. From 846,126 people in Malang City samples, 400 people were obtained. The autocorrelation test, heteroscedasticity test, multicollinearity, and normality test are classical assumption tests conducted in this study. After testing, the conclusions that can be drawn are perceived usefulness, perceived trust, and perceived risk partially have a positive and significant influence on satisfaction in using e-money. Meanwhile, simultaneously are able to influence interest in using electronic money services by 63%.

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INTRODUCTION

Since the 1990 until now there has been a public tendency to use electronic money, such as internet banking, debit cards, and automatic teller machine (ATM) cards. The evolution of money doesn't stop here. Electronic money also appears in the form of smart cards, namely the use of chips on a card. The use of smart cards is very practical, namely by "filling" the chips with the desired amount of money, and then using them to make transactions (Usman R., 2017).

Electronic money (electronic money) is defined as a means of payment issued on the basis of the value of money deposited in advance to the issuer and the value of money is stored electronically in a medium such as a server or chip. The use of electronic money as a means of payment can provide benefits, including providing convenience and speed in making payment transactions without the need to carry cash, no longer accepting change in the form of goods (such as candy) as a result of merchants not having small value change, this is very useful for mass transactions with small value but high frequency, such as: transportation, parking, tolls, fast food, and others (Pramudana & Santika, 2018).

In the current pandemic era, the trend of the people of East Java in non-cash payment transactions using electronic money has increased. The increase in transactions in 2021 reached 84.6% compared to 2020. The amount of electronic money also increased 66.4% in the same period. This achievement in 2021 has increased compared to 2020. Meanwhile, the total value of electronic money transactions in 2020 or since the beginning of the pandemic was still recorded at IDR 21.39 trillion. These transactions were obtained from a total of 69,241,575 units of electronic money cards. Meanwhile, Malang City ranks third in East Java in the value of electronic money transactions, namely Rp. 2.57 trillion (Meilisa, 2019).

The use of payment instruments is influenced by the background of the people who use these payment instruments. People who live in rural areas and small towns tend to prefer transactions using cash. Meanwhile, people who live in big cities tend to prefer transactions using non-cash payment instruments. In Indonesia, especially the province of East Java, the city of Malang is the second largest city after the city of Surabaya. Even though the city of Malang is one of the big cities in Indonesia, the implementation of the use of non-cash payment instruments in the city of Malang is still relatively low. This is indicated by the relatively minimal use of electronic money, even though a number of banks have issued electronic money products (Hardiyanto, 2018).

This research was conducted in the city of Malang, because the city of Malang is one of the cities that has the potential to develop the use of electronic money. According to Sheila, Lestary, & Kholis (2021) in her research, electronic money is an alternative means of non-cash payment, especially for micro-to-retail payments, which offers many conveniences in transactions. The use of electronic money offers various advantages compared to other means of payment. With various conveniences and conveniences offered for transactions, people in general still prefer to use manual or cash means of payment. Based on
data from the Malang Representative Office of Bank Indonesia (KPBI), the use of currency has slightly decreased. However, literacy still needs to be improved (Asyari, 2018).

Based on the background that the writer has described, the writer is interested in conducting research with the title "The Influence of Perceptions of Usefulness, Trust and Risk on Interest in Using Electronic Money Services in Communities in Malang City".

LITERATURE REVIEW

Perceived Usefulness

Perceived usefulness (perceived benefit) is defined as the level of one's trust in using a system (electronic money) so that it will improve the performance of the activities carried out. Perceived usefulness is a belief about the decision-making process. If someone feels confident that the system is useful then he will use it. Conversely, if someone believes that the information system is less useful then he will not use it (Salsabilla, 2022). There are several indicators that influence the perception of usefulness according to (Riadi, 2022), among others:

1. Electronic money can shorten the time used in the process of completing a work activity.
2. Using electronic money, consumers can easily carry out the shopping process.
3. Using electronic money can speed up the time for consumers to make transactions.

Perceived Trust

Trusts in the electronic payment system is defined as an individual's judgment after obtaining, processing, and synthesizing information and generating various judgments and assumptions (Kurniawan, Yulianti, & Putri, 2022). Several indicators are used to measure risk perception according to Julianto (2020) as follows:

1. Honesty in managing electronic money applications
2. Competence (e-money applications can be competitive and reliable)
3. Information about electronic money provided can be trusted.

Perceived Risk

Perceived risk is a determining factor for someone to adopt a technology if they accept the nature of how much risk consumers will be able to feel in order to make a decision to carry out a purchasing process (Anjelina, 2018). According to Hapsari, Hidayah, & Pramesti (2022) there are 4 indicators of risk perception, namely:

1. Physical risk relating to the physical security of electronic money.
2. Performance risk associated with the performance risk of electronic money.
3. Psychological risk is related to the possibility of incompatibility between electronic money and consumer personality.
4. **Financial risk**

Associated with financial risk after making purchases using electronic money.

**Interest**

According to (Kotler & Keller, 2006) that interest is something that arises after receiving stimulation from the product he sees, then interest arises to try the product and finally arises the desire to buy and be able to have the product. Interest indicators according to Walgito, (2015) consist of three indicators, the three indicators are:

1. Interest in the object of interest
   
   Interest in the object of interest, that is, potential consumers or consumers have attention that is always focused and focused on electronic money.

2. Feeling happy
   
   Feelings of pleasure, namely prospective consumers or consumers who are interested in using electronic money seem to have feelings of pleasure in using electronic money in transactions.

3. Tendency to use
   
   The tendency to use, namely whether or not potential consumers or consumers wish to use electronic money in their daily transactions. Consumers who have a high interest in using it will be seen from their high frequency of using electronic money.

**Electronic Money**

Electronic money is an electronic payment instrument that is obtained by depositing money in advance to the issuer either directly, or by debiting an account at a bank, then the value of that money is entered into the value of money in electronic media and is expressed in units of rupiah. The money is used to carry out payment transactions by directly reducing the value of money on the electronic media (Yogananda, 2017).

Bank Indonesia Regulation No. 11/12/PBI/2009 regulates Electronic Money as one of several methods used in regulating a cashless society. The purpose of using electronic money (e-money) is to make it easier for users to make various transactions. In Indonesia the development of electronic money is not only in the form of cards but also in other forms that are stored in smartphones. Electronic money issuers have now developed, not only banks but also Non-Bank Institutions (LSB), such as financial companies, telecommunications companies, or public transportation companies (Usman R., 2017).

According to Bank Indonesia (2009) electronic money must meet the following elements, namely issued based on the value of money deposited in advance by the holder to the issuer, the value of money is stored electronically on media such as servers or chips, used as a means of payment for traders who are not is the issuer of said electronic money, and the value of electronic money deposited by the holder and managed by the issuer is not included in deposits based on the Banking Law. Currently, telecommunications and banking companies are competing to issue e-money services and products. Almost all
major banks in Indonesia currently have e-money services, such as Mandiri e-money, BRI Brizzi, BNI Tapcash, BCA Flazz, and there is T-cash which is a Telkomsel product. There are also many startup companies or technology startups that are eyeing this business (Asyari, 2018).

H1 : Perceived Usefulness has a positive effect on the interest in using electronic money services in the community in Malang City.

According to Jogiyanto (2007) perceived usefulness is an individual's belief in the use of technology that will facilitate his activities. The technology used is clear and easy to use. It is consistent with Anjelina (2018), Candrawati, Widiastuti, & Muwidha (2022), Hermawan & Paramita (2020), it shows that perceived usefulness has a significant influence on the use of e-money. Based on the statement above, the research hypothesis is organized as follows.

H2 : Perception of trust has a positive effect on the interest in using electronic money services in the community in Malang City.

Trust is the willingness to rely on others to do something. Trust is important in the use of electronic money as a transaction tool. This concept of trust means the reliability of electronic money service providers in guaranteeing the security and confidentiality of the instruments used by consumers to make consumers trust them(Kotler & Keller, 2006). It is consistent with Kurniawan, Yulianti, & Putri (2022), Adiyanti (2015), Rodiah & Melati (2020) shows that perceptions of trust have a positive effect on interest in using e-money. Based on the statement above, the research hypothesis is organized as follows.

H3 : Perceived risk has a negative effect on the interest in using electronic money services among people in Malang City.

Issuers of electronic money need to pay attention to this security risk factor in order to minimize public perception of transaction risks that can occur due to transactions carried out electronically with the aim that electronic money users avoid various worries when transacting using electronic money (Priambodo & Prabawani, 2018). It is consistent with Rodiah & Melati (2020), Sati & Ramaditya (2020), Candrawati, Widiastuti, & Muwidha (2022) shows that perceived risk has a negative effect on the intention to use e-money. Based on the statement above, the research hypothesis is organized as follows.

H4 : Usefulness, Trust and Risk Perceived Variables have an effect simultaneously on the interest in using electronic money services in the Community in Malang City.

Performance comparison or results obtained with expectation The desired is to customer satisfaction. It is consistent with Anjelina (2018), Rodiah & Melati (2020), Adiyanti (2015) shows that perceived usefulness and trust have
a positive effect on the intention to use e-money while perceived risk has a negative effect on the intention to use e-money. Based on the statement above, the research hypothesis is organized as follows.

![Conceptual Framework](image)

**Figure 1. Conceptual Framework**

**METHODOLOGY**

Purposive sampling is the method used to determine the number of samples. From 846,126 people in Malang City samples, 400 people were obtained. The autocorrelation test, heteroscedasticity test, multicollinearity, and normality test are classical assumption tests conducted in this study.

**RESEARCH RESULT**

**Validity and Reliability Test**

**Validity Test**

The validity test was carried out with the aim of testing the validity of each question item on the designed questionnaire. A question item is said to be valid if the correlation value (R count) of the question item > R table (0.096). Table 1 presents the results of the validity test for each question item from the questionnaire.

<table>
<thead>
<tr>
<th>P</th>
<th>R Count</th>
<th>R Table</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1.1</td>
<td>0.757</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>Y1.2</td>
<td>0.678</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>Y1.3</td>
<td>0.674</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>Y1.4</td>
<td>0.667</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>Y1.5</td>
<td>0.685</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.1</td>
<td>0.769</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.2</td>
<td>0.687</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.3</td>
<td>0.983</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.4</td>
<td>0.672</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.5</td>
<td>0.794</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.6</td>
<td>0.794</td>
<td>0.096</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.7</td>
<td>0.781</td>
<td>0.096</td>
<td>Valid</td>
</tr>
</tbody>
</table>
A question is said to be valid if the value of R count > 0.096 (R table). It is known that all values of R count > 0.096 (R table). So it was concluded that all of the questionnaires were valid.

**Reliability Test**

The reliability test must be carried out only on questions that already have or fulfill the validity test, so if it does not meet the validity test requirements, it does not need to be continued for the reliability test. The following are the results of the reliability test on valid question items.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>0.795</td>
<td>Reliable</td>
</tr>
<tr>
<td>X1</td>
<td>0.669</td>
<td>Reliable</td>
</tr>
<tr>
<td>X2</td>
<td>0.845</td>
<td>Reliable</td>
</tr>
<tr>
<td>X3</td>
<td>0.811</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

If the Cronbach's Alpha value is greater than 0.6, then the research questionnaire is reliable. It is known that the questionnaire is reliable, because all Cronbach's Alpha values are greater than 0.6.

**Classical Assumption Test**

**Normality Test**

The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. Test and assume that the residual values follow a normal distribution. In this study, the normality test for residuals used the Kolmogorov-Smirnov test. The level of significance used . The basis for making a decision is to look at the probability number, with the following provisions.tFα=0.05p

If the probability value is 0.05, then the normality assumption is met. p≥

If the probability < 0.05, then the normality assumption is not met.
Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>ABS_RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>422</td>
<td></td>
</tr>
</tbody>
</table>

Normal Parameters, Means 1.2316
std. Deviation 1.06283

Most Extreme Differences

<table>
<thead>
<tr>
<th></th>
<th>absolute</th>
<th>.124</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>.112</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>-.124</td>
</tr>
</tbody>
</table>

Test Statistics

| asymp. Sig. (2-tailed) | .870c |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Note that based on Table 3, the probability or Exact value is known. Sig. (2-tailed) of 0.87. Because the probability value, which is 0.87, is greater than the significance level, which is 0.05. This means the data is normally distributed.

Figure 1. Normal Probability Plot Normality Test

Figure 2. Histogram Normality Test
Figure 2 is a normality test using the normal probability plot approach, while Figure 3 is a normality test using a histogram approach. It is known in Figure 2, the points spread around the diagonal line, while in Figure 3, it can be seen that the curve is in the form of a normal curve, so the data is normally distributed.

**Multicollinearity Test**

To check whether multicollinearity occurs or not, it can be seen from the value of the variance inflation factor (VIF). A VIF value of more than 10 indicates an independent variable where multicollinearity occurs.

Table 4. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1</td>
<td>.653</td>
<td>1,533</td>
</tr>
<tr>
<td>X2</td>
<td>.612</td>
<td>1634</td>
</tr>
<tr>
<td>X3</td>
<td>.810</td>
<td>1235</td>
</tr>
</tbody>
</table>

Note that based on Table 4, it is known that the VIF value of $X_1$ is 1.533, the VIF value of $X_2$ is 1.634 and the VIF value of $X_3$ is 1.235. Because all VIF values are <10, it can be concluded that there is no multicollinearity problem between the variables perceived usefulness ($X_1$), perceived trust ($X_2$) and perceived risk ($X_3$).

**Heteroscedasticity Test**

The Glejser statistical test was chosen because it can guarantee the accuracy of the results compared to the graph-plot test which can cause bias. The Glejser test is carried out by regressing the independent variables on their residual absolute value on the dependent variable (Ghozali, 2013). The criteria used to state whether there is heteroscedasticity or not among the observed data can be explained by using a significance coefficient. The significance coefficient has to be compared with a predetermined level of significance (5%). If the significance coefficient is greater than the specified level of significance, it can be concluded that there is no heteroscedasticity (homoscedasticity). If the significance coefficient is less than the specified level of significance, it can be concluded that heteroscedasticity occurs.
Table 5. Heteroscedasticity Test with the Glejser Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>std. Error</td>
<td>Betas</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.773</td>
<td>.238</td>
<td>3.242</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>-.006</td>
<td>.019</td>
<td>-.033</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.005</td>
<td>.026</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>-.021</td>
<td>.019</td>
<td>-.132</td>
</tr>
</tbody>
</table>

a. Dependent Variable: abs_res

Based on Table 5, it is known that all Sig. The Glejser of each independent variable is above 0.05, it is concluded that there is no heteroscedasticity.

**Hypothesis Testing**

**Simultaneous Significance Test (F Test)**

The F test aims to examine the effect of the independent variables jointly or simultaneously on the dependent variable Y.

Table 6. Simultaneous Effect Test with Test F

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MeanSquare</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1900,694</td>
<td>3</td>
<td>633,565</td>
<td>237,366</td>
</tr>
<tr>
<td></td>
<td>residual</td>
<td>1115,704</td>
<td>418</td>
<td>2,669</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3016398</td>
<td>421</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: TOTALLY1
b. Predictors: (Constant), TOTALX3, TOTALX1, TOTALX2

Based on Table 6, it can be seen that the F value is 237,366 with a significance level of 0.000. because the probability (0.000) is below 0.05, it can be said that the regression model can be used to predict interest in using electronic money services or it can be said that perceived usefulness, perceived trust and perceived risk together influence intentions to use electronic money services.

**Partial Significance Test (t test)**

The t statistical test is used to determine the significance level of the effect of each independent variable on the dependent variable. Table 7 presents the value of the regression coefficient, as well as the statistical value of t for partial effect testing.
Table 7. Test of Significance of Partial Effect (Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1907</td>
<td>.561</td>
<td>3,399</td>
<td>001</td>
</tr>
<tr>
<td></td>
<td>TOTALX 1</td>
<td>.387</td>
<td>.023</td>
<td>16,842</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>TOTALX 2</td>
<td>.200</td>
<td>.039</td>
<td>5.125</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>TOTALX 3</td>
<td>.100</td>
<td>.034</td>
<td>2,969</td>
<td>003</td>
</tr>
</tbody>
</table>

a. Dependent Variable: TOTALLY1

Based on the results of the t test in Table 7, the results are:

\[ Y = 1.907 + 0.387X_1 + 0.200X_2 + 0.100X_3 + e \]

- It is known that the value of the regression coefficient of the variable X1 is 0.387, which is positive. This means that X1 has a positive effect on Y. It is known that the t statistic or t count of X1 is 16,842 and the value of Sig. is 0.000, i.e. < a significance level of 0.05, then X1 has a significant effect on Y. So it is concluded that X1 has a positive and significant effect on Y.
- It is known that the value of the regression coefficient of the variable X2 is 0.200, which is positive. This means that X2 has a positive effect on Y. It is known that the t statistic or t count of X2 is 5.125 and the value of Sig. is 0.000, i.e. < a significance level of 0.05, then X2 has a significant effect on Y. So it is concluded that X2 has a positive and significant effect on Y.
- It is known that the regression coefficient value of variable X3 is 0.100, which is positive. This means that X3 has a positive effect on Y. It is known that the t statistic or t count of X3 is 2,969 and the value of Sig. is 0.000, i.e. < a significance level of 0.05, then X3 has a significant effect on Y. So it is concluded that X3 has a positive and significant effect on Y.

Analysis of the Coefficient of Determination

The coefficient of determination is a value (proportion value) that measures the ability of the independent variables used in the regression equation to explain the variation of the dependent variable. \( R^2 \)
Based on Table 8, it is known that the coefficient of determination (R-Square) is 0.630. This value can be interpreted that the variables X1, X2 and X3 are able to influence Y by 63%, the remaining 100% - 63% = 37% is explained by other variables or factors.

**CONCLUSIONS AND RECOMMENDATIONS**

Based on the questionnaire, 400 respondents who met the sample criteria were consumers who live in Malang City and consumers who have owned and used electronic money. Based on the profiles of respondents who obtained data, the majority of respondents were female, graduated from high school, and had used electronic money for 2-4 years. The findings from this study are perceived usefulness and perceived trust have a positive effect on the intention to use electronic money. Perceived risk has a negative effect on interest in using electronic money. Perceptions of usefulness, trust and risk simultaneously influence the intention to use electronic money services (Y) by 63%.

Future research that is relevant to this research is expected to be able to investigate further by using other variables that affect customer satisfaction and repurchase intentions. In order to achieve a more accurate and representative sample, it could determine the size of the study population, and it might be able to accommodate the research in a better way by collecting data through interview surveys to get more comprehensive and authentic results. Additionally, broadening the scope of research to a wider range of subjects is encouraged.

**ADVANCED RESEARCH**

There are limitations in conducting this research, including the use of limited variables, such as customer satisfaction, trust and risk. Based on the R-square value shows that of 0.630. This value can be interpreted that the variables X1, X2 and X3 are able to influence Y by 63%, the remaining 100% - 63% = 37% is explained by other variables or factors. In addition, the data collection method uses online surveys and questionnaires can cause respondents to need clarification about the meaning of the questionnaire.

**ACKNOWLEDGMENT**

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