THE INFLUENCE OF PERCEIVED EASE OF USE, PERCEIVED RISK AND CONSUMER TRUST TOWARDS MERCHANT INTENTION IN USING QRIS AS A DIGITAL PAYMENT METHOD

PENGARUH PERSEPSI KEMUDAHAN PENGGUNAAN, PERSEPSI RESIKO DAN KEPERCAYAAN KONSUMEN TERHADAP MINAT PEDAGANG DALAM MENGGUNAKAN QRIS SEBAGAI METODE PEMBAYARAN SECARA DIGITAL

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Abstract: The purpose of this research is to analyse the influence of Perceived Ease of Use, Perceived Risk and Consumer Trust towards Merchant Intention in using Quick Response Code Indonesian Standard (QRIS) simultaneously or partially. This research method uses questionnaire data collection techniques with the respondent data of 100 people. The result showed that Perceived Ease of Use has significant effect on Merchant Intention in using QRIS as a digital payment method, while Perceived Risk and Consumer Trust has no significant effect on Merchant Intention in using QRIS as a digital payment method. From these results, it is recommended for merchants who have not switched to non-cash transactions, it is hoped that they can use QRIS as a digital payment method, considering that QRIS has low risk, is easy to use and can save time quickly and efficiently. Also, it is recommended for further researchers to able to expand this research.

Keyword: perceived ease of use, perceived risk, consumer trust, merchant intention

INTRODUCTION

Research Background

With the advent of digital wallets, the adoption of QR Code payments has become a popular trend, especially in the business world. Various merchants have started to provide digital payment services. In this digital payment method such as in the use of e-wallet or mobile banking, there is a QR code feature. However, the use of this QR code was initially quite inconvenient and caused consumers to have their own problems to scan QR...
codes, because each different QR code has terms and conditions. Not only consumers but also for merchants because they need to provide multiple QR code services in proportion to the number of digital wallet apps that may be read by each app.

But now we have a QR code that is set up for various forms of digital payment transactions known as a QRIS (Quick Response Code Indonesian Standard). As the holder of the National Payment Gate (GPN) regulation, this makes Bank Indonesia need to have a system that can combine various instruments and payment channels nationally. To assist in the implementation of this integrated system, Bank Indonesia has established the QRIS (Quick Response Indonesia Standard) payment QR code standard for simplifying digital payment transactions in Indonesia. The Indonesian Payment Processes Association (ASPI) designed QRIS, a QR code which aims to safely streamline digital payment systems, improve government productivity and enhance digital financial inclusion. In doing business, QRIS offers a lot of benefits both for merchants and consumers.

Davis (1989) created the technology acceptance model in order to offer better means for measuring, predicting and explaining use of technology. In his theory, he found that perceived ease of use and perceived risk affect the usage intention of new technologies. This theory makes researchers interested in finding out whether these two things can affect the merchant interest in using QRIS as a digital payment method because QRIS is a part of financial technology. Another factor that is also a consideration in using a new technology is trust, trust is a willingness to be vulnerable to the actions of another person (Mayer, Davis, and Schoorman, 1995). It is based on the expectation that others will behave in a responsible manner (Pavlou, 2003) and will not take advantage of dependence on them (Gefen et al., 2003). Trust may be an important component in building economic relationships in an online environment such as conducting transactions through digital. This may be due to the higher threat of possible inappropriate behaviour such as security lapses where vital personal information could be stolen by hackers (Suh and Han, 2002). Security lapses can result in financial loss for users or technology adopters. Unless the individual trusts the technology, where this negative possibility will not occur, it is very likely that the technology will not be adopted.

Research Objectives

Based on the research background above, the objectives of this research as follows:
1. To analyse the influence of perceived ease of use towards merchant intention in using QRIS as a digital payment method.
2. To analyse the influence of perceived risk towards merchant intention in using QRIS as a digital payment method.
3. To analyse the influence of consumer trust towards merchant intention in using QRIS as a digital payment method.
4. To analyse the influence of perceived ease of use, perceived risk and consumer trust towards merchant intention in using QRIS as a digital payment method.

THEORITICAL FRAMEWORK

Marketing

According to Kotler and Keller (2012), marketing is an organizational function and a series of processes for creating, communicating, and providing value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.

Perceived Ease of Use

According to Davis (1989), he defines perceived ease of use as the extent to which users believe that using the system will be free from difficult efforts. This follows from the definition of the word ease: freedom from trouble and great effort.

Perceived Risk

Perceived risk is consumer beliefs about the potential uncertain negative outcome of online transactions and it is an important barrier for consumers who are considering making an online purchase (Kim et al., 2008). Perceived risk is a fundamental barrier for users considering using Fintech. Perceived risk is the user's perception of uncertainty and possible negative consequences associated with using fintech (Ryu, 2018).
Consumer Trust

Trust can be interpreted as a person’s willingness to take risks and become vulnerable to the behaviour of others in the belief that the other party will fulfil their expectations (Pavlou and Fygenson, 2006). According to Kim et al., (2010) to acquire and retain electronic payment users, it is very important to improve consumer’s perception of security and maintain consumer trust during electronic payment transactions. Trust is the main factor in the mobile payment system and so far, has been very influential in maintaining relationships with customers, because the mobile payment system has fewer direct interactions (Bourreu and Valleti, 2015).

Behavioural Intention to Use

Behavioural intention is the level of use of a computer technology on someone who can be predicted from the attitude and attention of the user of the technology. Behavioural intention also depends on the products and services used, if the products and services used can provide useful and benefits, the user will certainly show satisfying behaviour in using the products and services, and can make interest and intention of the users to always use the products and services. Behaviour is the specific act of someone on a particular object. Intention to use is the attitude of someone in using a particular product in the future (Khatimah and Halim, 2014).

Previous Research

Silaen, Manurung, and (2021) analyzed the effect of benefit perception, ease perception, security and risk perception of merchant interest in using Quick Response Indonesia Standard (QRIS) simultaneously or partially. The research variables consist of, X1 is benefit perception X2 is easy perception, X3 is security, X4 is risk perception and Y is merchant interest in using QRIS. Research data is Primary Data, obtained from the results of the distribution of questionnaires designed with the scale likert. The sample of the research was the merchant in pematangsiantar. Test Instruments using Test validity and reliability using SPSS. Technique Analysis, Multiple Regression, Classic Assumption Test, Hypothesis Test (Test F and Test t). The result showed that benefit perception has no significant effect on merchant interest using QRIS, the ease perception has no significant effect on merchant interest using QRIS, the security has significant effect on merchant interest using QRIS and the risk perception has significant effect on merchant interest using QRIS.

Krishna and Shanmugam (2017) investigated about the Influence of Demographic variables age and occupation on usage of e-payment system and the significance of the Demographic variables on the variables Perceived Benefits, Perceived Speed and Facilitating conditions. In this paper, a comprehensive survey on the factors of electronic payment was conducted after analysis of various research studies on e-payment systems. The most significant factor which are the causes of frequent usage of e-payment are tested using MANOVA. Multivariate Analysis of Variance is the extension of analysis of variance(ANOVA) to accommodate more than one dependent variable. The MANOVA results elucidated that there is statistical significance or impact on dependent variables Perceived Benefits, Perceived Speed and Facilitating conditions by the influence of demographic variables age, and occupation. The Levene's test the univariate tests (Levene’s test) for Perceived Benefits and Perceived Speed are significant (significant less than 0.05) whereas for facilitating conditions p>0.05 hence not significant. The tukey subsets based on demographic variable age showed that all the age group people have the same idea on the constructs Perceived Benefits, Perceived speed and facilitating conditions of e-payments. The tukey subsets based on the demographic variable occupation group, have the same idea on the constructs Perceived Benefits and Perceived speed where as in Facilitating conditions Business and Retired employee differ significantly with the other occupation groups Employee, student and homemake which are homogenous among themselves in their perception.

Ghrbeia (2020) investigated issues that affect customers when implementing digital payment and also proposing solutions to preserve and develop the quality of service for digital payment systems so as to inspire patronage repetition and loyalty and attract new customers. Descriptive analysis, independent t-test and Analysis of Variance were the methodologies used for analysis of collected data. The results attained depicts that there was “strong correlation” existing between the benefits and the ease of use of the Digital Payment System. An almost moderate correlation existed only between the trust and customers’ perception of the Digital Payment Systems alongside the true perception attained by customers while using the Digital Payment System and its basic case of use. There was a rather weak negative correlation between the average security and the benefits of the Digital Payment System. Another quite weak and negative correlations has to do with the age bracket of the customers and its effect on the general preference of the Digital Payment System. This study can help providers gain an insight of the views and preferences of their customers in order to improve the customer perception during the
Conceptual Framework

![Conceptual Framework Diagram]

Research Hypothesis

The hypothesis of this research are:

\(H_1\): Perceived ease of use has significant influence on merchant intention in using QRIS as a digital payment method.

\(H_2\): Perceived Risk has significant influence on merchant intention in using QRIS as a digital payment method.

\(H_3\): Consumer Trust has significant influence on merchant intention in using QRIS as a digital payment method.

\(H_4\): Perceived ease of use, perceived risk and consumer trust have significance influence on merchant intention in using QRIS as a digital payment method.

RESEARCH METHOD

Research Approach

This type of research is quantitative research that emphasizes theories or concepts through metric or numerical measurement of variables to examine the population or certain samples and perform data analysis procedures with statistical equipment and aims to test the established hypotheses (Indriantono and Supomo, 2002:10).

Population and Sample

According to Sekaran and Bougie (2009), population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate. This study’s population are merchants in North Sulawesi. Sugiyono (2015) stated the sample is part of the number and characteristics possessed by the population. The number of sample size was set at 100 respondents in order for this study to be more accurate.

Data Collection Method

To collect the research data, primary data and secondary data will be used in this research. For the primary data will be taken by the distribution of questionnaire and the secondary will be taken from Bank Indonesia regarding the data of QRIS in North Sulawesi.

Operational Definition of Research Variables

1. Perceived ease of use is defined as the extent to which a person believes that using a technology will be free from effort. (Indicators: easy to learn, ease to operate, effortless)
2. Perceived risk is user perceptions of the uncertainty and possible negative consequences of using fintech. (Indicators: uncertainty, consequences, unsecure)
3. Consumer trust is consumer belief and confidence in using fintech. (Indicators: reliable features, personal information safety, solves problems faced by consumers and fulfils all their needs)
4. Merchant Intention is the intention to use which refer to the attitude of someone in using a particular product in the future. (Indicators: utilization, intensity to use, expect to use QRIS continue in the future)
Data Analysis Method

Validity and Reliability Test

Validity is the degree of accuracy between the data that occurs in the object of research with data that can be reported by researchers. Reliability is an instrument which, if used several times to measure the same object, will produce the same data.

Multiple Linear Regression Analysis

According to Santoso (2012: 221), multiple regression analysis is used to predict the size of the dependent variable (dependent variable) using data from two or more independent variables (known as independent variables) of known magnitude. The equation of multiple linear regression is:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]

Description:

- \( Y \): Merchant Intention
- \( \alpha \): Constant
- \( X_1 \): Perceived Ease of Use
- \( X_2 \): Perceived Risk
- \( X_3 \): Consumer Trust
- \( \beta_1, \beta_2, \beta_3 \): Slope of each independent variable
- \( e \): Error term

RESULT AND DISCUSSION

Result

Validity Test and Reliability Test

Validity testing was carried out with the help of a computer using the IBM SPSS Version 26 program. Validity testing was performed on 100 respondents in this study. Making a decision based on \( r_{\text{count}} \) (Corrected Item-Total Correlation) > \( r_{\text{table}} \) of 0.1966. All questions for the variable the training method has a valid status, because the value of \( r_{\text{count}} \) (Corrected Item-Total Correlation) > \( r_{\text{table}} \) of 0.1966. Cronbach's alpha is a reliability coefficient that indicates how well the items measuring a concept are positively correlated to one another; the questionnaire is reliable if the value of Cronbach’s Alpha is greater than 0.6. All the items have the value greater than 0.6 it means that the questionnaire is reliable and can be distributed to respondents for use as a research instrument.

Classical Assumption Test

Normality Test

![Normal P-P Plot of Regression Standardized Residual](image)

Figure 2. Normality Test

*Source: Data Processed (2022)*

Figure 2 shows that the dots spread near the line and follow the diagonal line of Normal P-Plot. Therefore, it means the data in this research is normally distributed.
Heteroscedasticity Test

Figure 3 shows the result of heteroscedasticity test using scatterplot the dots in the scatterplot spread above and below 0 in Y axis and not form in a clear pattern. It means that there is no heteroscedasticity in this regression model and can be used to predict the influence between dependent variable and independent variable.

Multicollinearity Test

Table 1. Multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.938</td>
<td>1.066</td>
</tr>
<tr>
<td>X1</td>
<td>.969</td>
<td>1.032</td>
</tr>
<tr>
<td>X2</td>
<td>.967</td>
<td>1.034</td>
</tr>
</tbody>
</table>

Table 1 shows that the tolerance value of Perceived Ease of Use is 0.938, Perceived Risk is 0.969 and Consumer Trust is 0.967 it means the tolerance value of these independent variable is more than 0.100. The VIF of Perceived Ease of Use is 1.066, Perceived Risk is 1.032 and value of Consumer Trust is 1.034, the value of these variable is less than 10. It can be concluded that the result passed the test of tolerance and VIF. This research is free from multicollinearity.

Multiple Linear Regression Analysis

Table 2. Multiple Linear Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.835</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.331</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.060</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>.117</td>
</tr>
</tbody>
</table>

Table 2 shows through the regression equation as follows:

\[ Y = 2.835 + 0.331X1 + 0.060X2 + 0.117X3 + e \]

The explanation of the equation:

1. The constant value is 2.835 which states that if the variable Perceived Ease of Use (X1), Perceived Risk (X2), and Consumer Trust (X3) is equal to 0, then the Merchant Intention (Y) in using QRIS as a digital payment method is 2.835.
2. If the others are constant, an increase of one point in Perceived Ease of Use (X1) will result in an average increase of at least 0.331 in Merchant Intention (Y).
3. If the others are constant, an increase of one point in Perceived Risk (X2) will result in an average increase of at least 0.060 in Merchant Intention (Y).

4. If the others are constant, an increase of one point in Consumer Trust (X3) will result in an average increase of at least 0.117 in Merchant Intention (Y).

Table 3. Correlation Coefficient and Coefficient of Determination ($R^2$)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.644*</td>
<td>.415</td>
<td>.397</td>
<td>1.60470</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X3, X2, X1
b. Dependent Variable: Y
Source: Data Processed (2022)

Table 3 shows the correlation coefficient and coefficient of determination. If the coefficient correlation value close to 1, it means there is a strong relationship between independent variables and dependent variables. The R number 0.644, then the relationship between variables is strong. R square explains that 41.5% Merchant Intention (Y) influenced by Perceived Ease of Use (X1), Perceived Risk (X2) and Consumer Trust (X3). The rest of 58.5% influenced by the other variables.

Hypothesis Testing

T-table used for comparison is found at the level of significant of 0.05, which is at the confidence level of 95% ant the value if $t_{table} = 1.985$, which indicates that $t_{count} > t_{table}$.

1. From the table, it is known that $t_{count}$ is 8.206 and $t_{table}$ is 1.985, so $t_{count} > t_{table}$. While the significance value of X1 is 0.00, this value is below the alpha value of 0.05 or 0.00 < 0.05, this indicates that the Perceived Ease of Use variable (X1) has significant effect towards Merchant Intention (Y) partially, therefore H1 is accepted.

2. From the table, it is known that $t_{count}$ is 0.789 and $t_{table}$ is 1.985, so $t_{count} < t_{table}$. While the significance value of X2 is 0.432, it means that 0.432 > 0.05 (significance level has a greater value than Alpha) this indicates that the Perceived Risk variable (X2) has no effect on Merchant Intention (Y), therefore H2 is rejected.

3. From the table, it is known that $t_{count}$ is 0.916 and $t_{table}$ is 1.985, so $t_{count} < t_{table}$. While the significance value of X3 is 0.362, it means that 0.362 > 0.05 (significance level has a greater value than Alpha) this indicates that the Consumer Trust variable (X3) has no effect on Merchant Intention (Y), therefore H3 is rejected.

Table 4. T-Test Result

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.835</td>
<td>2.142</td>
</tr>
<tr>
<td>X1</td>
<td>.331</td>
<td>.040</td>
</tr>
<tr>
<td>X2</td>
<td>.060</td>
<td>.076</td>
</tr>
<tr>
<td>X3</td>
<td>.117</td>
<td>.128</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Merchant Intention (Y)
Source: Data Processed (2022)

F-Test

Based on the table 5 it is known that the significant value is 0.000 with F value is 22.703. The significant value for the effect of X1, X2, and X3 simultaneously on Y is 0.000 < 0.05 (the significance value is less than 0.05) and for $F_{count} 22.703 > F_{table} 2.70$ ($F_{count} is greater than $F_{table}$ ) so it can be concluded that Hypothesis 4 is accepted which means that Perceived Ease of Use, Perceived Risk and Consumer Trust simultaneously have effect on merchant intention in using QRIS as a digital payment method.
Table 5. F-Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>175.383</td>
<td>3</td>
<td>58.461</td>
<td>22.703</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>247.207</td>
<td>96</td>
<td>2.575</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>422.590</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X3, X2, X1

Source: Data Processed (2022)

Discussion

Perceived Ease of Use on Merchant Intention

Perceived Ease of Use has significant influence on Merchant Intention in using QRIS as a digital payment method. The implication is that a system or technology that is considered easy by an individual will further increase interest in using QRIS because QRIS is a national code that can be used by all types of digital payments. Besides that, using QRIS does not require more effort because it only need to scan the QR code and the transaction process can occur quickly, safely and comfortably. This result is in line with Keni (2020) that perceived ease of use play a significant and important role in affecting consumers’ intention to repurchase.

Perceived Risk on Merchant Intention

Perceived Risk has no significant influence on Merchant Intention in using QRIS as a digital payment method. This implies that merchants' interest in using QRIS as a digital payment method may indicate that higher or lower risk will affect the use of QRIS itself. The risk arises from user concerns about the negative impact that may occur while using QRIS. Some people in this world must have a curiosity to try something new. In this digital era, most people are not too concerned with the risks. The higher a person's level of curiosity, the higher the person's interest in trying it, as well as using QRIS, maybe for some people they want to try to experience first in using QRIS itself, then they will know whether there is a real risk that will occur or not. This result is in line with Faradynawati (2019) that there is a significant relationship between perceived risk and intention to use Fintech payments.

Consumer Trust on Merchant Intention

Consumer Trust has no significant influence on Merchant Intention in using QRIS as a digital payment method. Most respondents feel that consumer trust does not have a significant effect on their intention to use QRIS. Merchants feel that Consumer Trust is not the main factor in their interest in using the QRIS payment method because basically the merchants provide the QRIS payment method because it gives benefits for their business and if it turns out that it makes consumers feel helped by the QRIS payment method then, there will be more profit for merchants. This result is in line with Faradynawati (2019) that consumer trust and intention have positive impacts on a good evaluation of FinTech payment with objective opinions on the future of FinTech payment.

Perceived Ease of Use, Perceived Risk and Consumer Trust on Merchant Intention

One-way variance analysis (Anova) identified significant Perceived Ease of Use (X1), Perceived Risk (X2) and Consumer Trust (X3) together with Merchant Intention (Y) was significant. This shows that these independent variables have an influence on Merchant Intention in the multiple linear regression research model. Based on this, the statement in the hypothesis which says that Perceived Ease of Use, Perceived Risk and Consumer Trust have significant influence on Merchant Intention is accepted.

CONCLUSION AND RECOMMENDATION

Conclusion

After examining the findings and discussing the result, the conclusions based on this research can be formulated as follows:
1. Perceived Ease of Use is partially influenced Merchant Intention in using QRIS as a digital payment method. This shows that the easier a technology is to use, the higher the merchant intention to use it.

2. Perceived Risk is not partially influenced Merchant Intention in using QRIS as a digital payment method. This shows that most of merchant feel the risk of using QRIS is low, and they believe in the security system of QRIS that supervised by Bank Indonesia.

3. Consumer Trust is not partially influenced Merchant Intention in using QRIS as a digital payment method. This shows that most of merchant feel that consumer trust is not main factor that influenced them to use QRIS as a digital payment method.

4. Perceived Ease of Use, Perceived Risk and Consumer Trust have significant influence on Merchant Intention simultaneously. This shows that these three independent variables can simultaneously influence the interest of merchants to use QRIS as a digital payment method. While partially the Perceived Risk and Consumer Trust variables do not have a significant effect on Merchant Intention in using QRIS as a method.

**Recommendation**

1. It is important to Bank Indonesia as the financial regulator is to keep socialize QRIS to the public so that their awareness will increase. In addition, merchants may feel the benefits of using QRIS for their business so that the non-cash movement can be realized in the future.

2. For merchants who have not switched to non-cash transactions, it is hoped that they can use QRIS as a digital payment method, considering that QRIS has low risk, is easy to use and can save time quickly and efficiently.

3. For the future research, hopefully the results of this study can be reference if there will be the same theme or the same theme with different object.

**REFERENCES**


