

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students



Gusti Ayu Dyah Candra Dewi¹, A.A. Ketut Jayawarsa², I Gusti Ayu Athina Wulandari³

^{1,2,3} Faculty of Economics and Business, Warmadewa University, Denpasar, Bali - Indonesia

ABSTRACT: QRIS is a standardization of Quick Response Code as a technology for payment methods set by Bank Indonesia since January 2020. This standard was formed to provide an easier and more efficient non-cash payment method. This study aims to analyze the influence of the use of trust, benefits and risks on the use of QRIS on students of the Faculty of Economics and Business, Warmadewa University. The sample of this study amounted to 98 respondents who were taken based on simple random sampling technique and the data collection instrument used was a questionnaire. The results of this study indicate that the use of trust has a negative and insignificant effect on the use of QRIS, the benefits have a positive and significant effect on the use of QRIS, and the risk has a negative and insignificant effect on the use of QRIS. Taken together, the effect of trust, benefits and risks have a positive and significant impact on the use of QRIS at the Faculty of Economics and Business, University of Warmadewa.

KEYWORDS: QRIS, User Trust, Benefits, Risks, non-cash payment methods.

PRELIMINARY

The rapid development of science and technology has an impact on economic activities, especially in the financial and banking sectors. A safe and smooth payment system is not only needed to facilitate efficient, safe, and fast transfers of funds, it is also indispensable in the world of capital markets which demands accuracy and security in the completion of each transaction (Ureche & Plamondon, 2000). The payment system cannot be separated from the development of money starting from cash payments to non-cash payments (Susanto, 2017). Bank Indonesia as the monetary authority has the right and authority in the development of the payment system in Indonesia (Damayanti, 2019). The role of Bank Indonesia in the payment system is to regulate and maintain a stable financial system mechanism, both cash and non-cash. In the cash payment system, Bank Indonesia is responsible for the disbursement and circulation of cash to the public (Jayawarsa et al., 2021). However, over time the use of cash payment transaction values creates many problems and weaknesses. So we need a payment system innovation that is able to answer problems and fix the weaknesses of the cash payment system. Therefore, non-cash payments were created as a form of further innovation in a more efficient financial system (Ebel & Yilmaz, 2002; Jayawarsa et al., 2021; Siti-Nabiha et al., 2018).

There have been many studies that have taken the topic of the use of e-payments before. Research conducted by Singgih (2016), Effects of Perceived Benefits, Perceptions of Ease of Use, and Perceived Risks on Interest in Using Electronic Money Services (Case Study on Communities in Semarang City). This study uses the dependent variable interest in using e-payment and the independent variables are perceived benefits, perceived convenience, and perceived risk. The results of his research show that perceived benefits and perceived convenience have a significant effect on interest in using e-payment. However, the perception of risk does not have a significant effect on the interest in using e-payments. Research conducted by Wibowo (2016) discusses the effect of perceived benefits, perceived convenience, service features, and Trust in Interest in Using E-Money Cards (Study on Commuterline Service Users in Jakarta). This study uses the dependent variable of interest in using e-money cards and the independent variables are perceived benefits, perceived convenience, service features, and trust (Tran, 2019). The results of his research show that the benefits have a positive and significant effect on the interest in using e-payment (Ureche & Plamondon, 2000).

Based on the phenomena that occurred and there are still differences in the results of previous studies, the researchers conducted another study on the effect of trust, benefits and risks on interest in using electronic payments with QRIS (Fenu & Pau, 2015). The difference between this study and previous researchers is that the researcher adds a variable of trust usage. Therefore, the researcher chose the title "The Influence of Trust Use, Benefits and Risks on the Use of QRIS (Case Study on Students of the Faculty of Economics and Business, Warmadewa University)".

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

LITERATURE REVIEW

Quick Response Code Indonesian Standard or commonly abbreviated as QRIS is the unification of various kinds of QR from various Payment System Service Providers (PJSP) using a QR Code. Qris is beneficial for both buyers and merchant regulators, because all non-cash payments can be monitored from one door. QRIS is a useful breakthrough that is not only profitable for businesses or merchants, but also for consumers who make payments (Fenu & Pau, 2015; Ureche & Plamondon, 2000).

Ba and Pavlou (in Farizi, 2016) define trust as an assessment of relationships with other people who carry out certain transactions in accordance with expectations in an environment full of uncertainty. In addition, user trust can also be achieved, maintained and increased by showing consistency in several ways. For example, by continuing to provide transparent services, both in terms of prices and services (Connolly & McGing, 2007). Sorry if something causes harm to users, resolve the issue immediately and don't forget to ask for feedback in the form of criticism and suggestions to increase user engagement with the business. Staying consistent in providing excellent service to customers can also be another thing that affects user trust. At its core integrity and credibility with a focus on the quality of business and services provided. Then the focus is continued on the user (Sara & Saputra, 2021).

Perceived usefulness according to Bailey A, (2017) is defined as benefit which refers to the extent to which consumers believe that obtaining benefits (eg convenience or simplification of payments) for mobile payments will be the same as other forms of payment. QR Code standardization with QRIS provides many benefits, both for merchants such as MSMEs and consumers. QRIS transactions use sources of funds in the form of deposits and/or payment instruments in the form of debit cards, credit cards, and/or electronic money using server-based storage media. The use of sources of funds and/or payment instruments shall be applied based on a proposal from the Standards Institution approved by Bank Indonesia. Furthermore, the nominal QRIS transaction is limited to a maximum of IDR 10 million per transaction. The issuer can set a daily and/or monthly cumulative nominal limit for QRIS transactions made by each QRIS user, which is determined based on the issuer's risk management. According to Featherman, M. and Pavlou, P. (2016), risk perception is a perception of uncertainty and unwanted consequences of using a product or service. Perception of risk greatly affects the level of trust (Predana et al., 2020).

METHOD

This research was conducted at the Faculty of Economics and Business, University of Warmadewa which is located at Jalan Terompong No. 24, Sumerta Kelod, East Denpasar. The total population, namely students of the Faculty of Economics and Business, Warmadewa University, for the 2019/2020 academic year, is 5,394 people. This number is the population in this study. So, for the sample of students in this study, there were 98 students. This study uses quantitative data. The data analysis technique used in this research is to use multiple linear regression, in the calculations using software with SPSS version 22 for Window program.

RESULTS AND DISCUSSION

Based on the results of the Kolmogorov Smirnov (KS) test, it shows that the significance value of 0.164 is greater than the 0.05 significance level, so it can be stated that the data is normally distributed.

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		98
Normal Parameters, b	mean	,0000000
	Std. Deviation	2.38353715
Most Extreme Differences	Absolute	,113
	Positive	,113
	negative	-,087
Kolmogorov-Smirnov Z		1.118
asymp. Sig. (2-tailed)		,164

Based on the results of SPSS output, it is known that the tolerance value of all independent variables is greater than 0.10 and the VIF value of all independent variables is less than 10.00. Based on the results above, it can be concluded that there is no multicollinearity.

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

Table 2. Multicollinearity Test Results

No	Variable	Tolerance	VIF
1	Usage Trust	0.641	1,560
2	Benefit	0.486	2.056
3	Risk	0.416	2,403

Based on the graph above, it can be seen that the points spread at a value of 0 on the horizontal axis and at a value of 0 on the vertical axis and spread randomly and do not form a certain pattern. From the results above, it can be concluded that the regression model does not have heteroscedasticity symptoms.

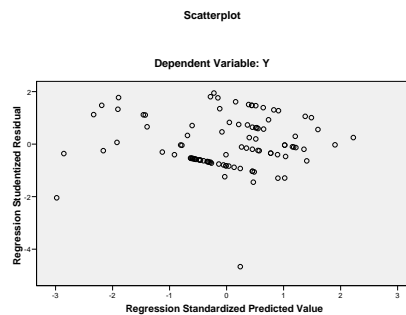


Figure 1. Heteroscedasticity Test Results

Based on the table above, it is known that the results of multiple regression analysis obtained are the coefficient for the use of trust variable is 0.030, the benefit variable is 0.576 and the risk variable is -0.354 in column B there is a constant value of 19.137 so that the regression equation can be explained as follows:

$$Y = 19.137 + 0.030 X_1 + 0.576 X_2 - 0.354 X_3$$

Table 3. Results of Multiple Linear Regression Analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19,137	2,290		8,358	,000
	Usage Trust	0.030	,074	0.047	,405	,686
	Benefit	,576	,132	,588	4,381	,000
	Risk	-,354	,112	-,459	-3,162	,002

a. Dependent Variable: Use of QRIS

Based on the above equation, the interpretation is as follows:

- The constant value of 19.137 is assumed to mean that without adding the use of trust, benefits, and risks variables, the value of using QRIS will be 19.137.
- The value of the regression coefficient of trust usage (X1) is positive 0.030, which means that X1 (trust of use) has a positive relationship with the decision to use QRIS. This shows that the higher the usage trust generated, the students will assume that transactions with the use of QRIS will increase.
- The regression coefficient value of Benefits (X2) is positive 0.576, which means that if Benefits (X2) provide many benefits, FEB Unwar students will increase student interest in transacting using QRIS.
- The risk coefficient value (X3) is negative -0.354, which means if the risk (X3) has the opposite relationship with the decision to use QRIS. This shows that the higher the risk, the students will assume the use of QRIS is very risky.

The F test is used to test how much influence the independent variable simultaneously has on the dependent variable significantly with a significance level of 0.05

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

Table 4. Results of F Statistical Test (F-test)

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117,827	3	39,276	6,699	,000a
	Residual	551,081	94	5,863		
	Total	668,908	97			
a. Dependent Variable: Use of QRIS						
b. Predictors: (Constant), Risk, Benefit, Trust Usage						

a. Testing Terms

Using 95% confidence level or 5% error rate ($\alpha = 0.05$) and the degree of freedom of the numerator $k=3$ and the degree of denominator: $nk-1$ then the values obtained are $df_1 = 3$ and $df_2 = 94$. So, in F table $0.05 (3 ; 94) = 2.70$.

b. Testing Criteria

- 1) If $F\text{-count} > 2.70$ then H_0 is rejected, meaning that there is a significant effect.
- 2) If the $F\text{-count} < 2.70$ then H_0 is accepted, it means that there is an insignificant effect

c. Ho Acceptance and Rejection

The results of data processing in Appendix 7 using the SPSS program obtained an F-count value of 6.699 with a significance of 0.000, in this study obtained $df_1 = 3$, and $df_2 = 94$, then the table F value is $F_{0.05 (3 ; 94)} = 2,70$. Based on the table, it can be explained partially the effect of each independent variable on the dependent variable:

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19,137	2,290		8,358	,000
	Usage	0.030	,074	0.047	,405	,686
	Trust	,576	,132	,588	4,381	,000
	Benefit	,354	,112	,459	3,162	,002
	Risk					
a. Dependent Variable: Use of QRIS						

To test H_0 is accepted or rejected, the following steps are used:

1) Determining the formulation of the hypothesis

$H_0 : b_1 = 0$, it means that usage trust has no positive effect and significant effect on the use of QRIS at the Faculty of Economics and Business, University of Warmadewa.

$H_0 : b_1 > 0$, it means The use of trust has a positive and significant effect on the use of QRIS at the Faculty of Economics and Business, Warmadewa University.

2) Testing Terms

Using a 5% confidence degree or 5% error rate ($\alpha 0.05$, and degrees of freedom: $nk-1$, the two-sided test on the left and right sides obtained the t-table value $(0.05 ; 94) = 1.661$

3) Testing Criteria

- a. If $t\text{-count} < 1.661$ then H_0 is accepted, meaning that the effect is not significant.
- b. If $t\text{-count} > 1.661$ then H_0 is rejected, which means that the effect is significant.

4) Comparing t count with t table. The value of t count $< t$ table ($0.405 < 1.661$) then H_0 is accepted and H_2 is rejected.

5) Conclusion

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

Based on the results of the analysis obtained a significance value of 0.686 with a regression coefficient value of 0.030 and a t value $< t$ table ($0.405 < 1.661$). on the use of QRIS at the Faculty of Economics and Business, Warmadewa University. To test H_0 is accepted or rejected, the following steps are used:

1) Determining the Hypothesis formula

$H_0 : b_2 = 0$, meaning that the benefits do not have a positive and significant effect on The use of QRIS at the Faculty of Economics and Business, University of Warmadewa.

$H_0 : b_2 > 0$, meaning that the benefits have a positive and significant effect on The use of QRIS at the Faculty of Economics and Business, University of Warmadewa.

2) Testing Terms. Using a 95% confidence degree or 5% error rate ($\alpha 0.05$, and degrees of freedom: $nk-1$, the two-sided test on the left and right sides obtained the t-table value ($0.05 ; 94$) = 1.661

3) Testing Criteria

a) If t-count < 1.661 then H_0 is accepted, meaning that the effect is not significant.

b) If t-count > 1.661 then H_0 is rejected, which means that the effect is significant.

4) Comparing t count with t table

5) Conclusion

Based on the results of the analysis obtained a significance value of 0.000 with a regression coefficient value of 0.576 and a t count $> t$ table ($4.381 > 1.661$), Based on the acceptance area of H_3 and a significance value of 0.000 less than 0.05 so that the conclusion is Benefit has a positive and significant effect on the use of QRIS at the Faculty of Economics and Business, Warmadewa University. Based on the results of data analysis, it shows that the use of trust, benefits and risks have a joint effect on the use of QRIS, this is obtained from a significance value of 0.000. Significance value $0.000 < 0.05$ and calculated F value $> F$ table ($6.699 > 2.70$) indicates that H_0 is rejected and H_1 is accepted. These results mean that the use of trust, benefits and risks simultaneously have a positive and significant effect on the use of QRIS on students of the Faculty of Economics and Business, Warmadewa University. The results of this study are consistent with the results of research conducted by Devy (2016) who found that there was a significant effect of perceived benefits, perceived ease of use and experience on mobile banking usage behavior (Ishengoma, 2011; Rahman & Anwar, 2014).

Based on the results of data analysis, it shows that the effect of trust usage on the use of QRIS is a positive and insignificant effect, this is obtained from a significance value of 0.686 with a regression coefficient value of 0.030. The significance value is $0.686 > 0.05$ and the t value $< t$ table ($0.405 < 1.661$) so the hypothesis H_0 is accepted and H_2 is rejected, the conclusion is that the use of trust has a positive and insignificant effect on the use of QRIS at the Faculty of Economics and Business, Warmadewa University. The results of this study are in accordance with research conducted by Wahyu et al (2019), Budi (2019), and Oktaviana (2020) that the trust variable has no significant effect on interest in using e-payments.

Based on the results of data analysis shows that the effect of Benefit on the use of QRIS is a positive influence, this is obtained from a significance value of 0.000 with a regression coefficient of 0.576 positive. The significance value is $0.000 < 0.05$ and the t value $> t$ table ($4.381 > 1.661$), so H_0 is rejected and H_3 is accepted. These results mean that the benefits have a positive and significant effect on the use of QRIS at the Faculty of Economics and Business, University of Warmadewa. Research conducted by Rosmauli, et al (2016) and Noviandri (2017) which said that the perception of benefits had a positive and significant effect on interest in use, but it was different from the research conducted (Fenu & Pau, 2015).

Based on the results of data analysis shows that the effect of risk has a negative and significant effect on the use of QRIS, this is obtained from a significance value of 0.002 with a negative regression coefficient of -0.354. The significance value is $0.002 < 0.05$ and the t count $< t$ table ($-3.162 < 1.661$), so H_0 is rejected and H_4 is accepted. These results mean that risk has a negative and significant effect on the use of QRIS at the Faculty of Economics and Business, University of Warmadewa. The results of the research that have been carried out show that the risk variable has a negative and significant effect on the interest in using QRIS. This means that there are still risks that are felt by students of the Faculty of Economics and Business, Warmadewa University in using QRIS (Jayawarsa et al., 2021; Predana et al., 2020).

CONCLUSION

Based on the results of data analysis and discussion, the conclusions obtained from the research are as follows: The use of trust, benefits and risks together affect the use of QRIS services at the Faculty of Economics and Business, University of Warmadewa. This is obtained from a significance value of 0.000. Significance value $0.000 < 0.05$ and calculated F value $> F$ table ($6.699 > 2.70$) indicates that H_0 is rejected and H_1 is accepted. This shows that the increase or decrease in the use of trust, benefits and risks will affect the increase and decrease in the use of QRIS services for students of the Faculty of Economics and Business, Warmadewa University. The use of trust has a positive and insignificant effect on the level of use of QRIS in the Faculty of

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

Economics and Business, Warmadewa University. This is obtained from a significance value of 0.686 with a regression coefficient of 0.030 which is positive. The significance value is $0.686 > 0.05$ and the t count $< t$ table ($0.405 < 1.661$) so the hypothesis H_0 is accepted and H_2 is rejected. This shows that if there is no trust from students, no one will be interested in using QRIS. The increasing student confidence in QRIS, it will be followed by increased interest in using the QRIS.

Benefits have a positive and significant effect on the level of QRIS use at the Faculty of Economics and Business, Warmadewa University. This is obtained from a significance value of 0.000 with a positive regression coefficient value of 0.576. The significance value is $0.000 < 0.05$ and the t value $> t$ table ($4.381 > 1.661$), so H_0 is rejected and H_3 is accepted. This shows that the better the benefits offered by QRIS to students at the Faculty of Economics and Business, University of Warmadewa, the more the use of QRIS services at the Faculty of Economics and Business, University of Warmadewa will increase. Risk has a negative and significant effect on the level of QRIS use at the Faculty of Economics and Business, Warmadewa University. This is obtained from a significance value of 0.002 with a regression coefficient of -0.354 which is negative. The significance value is $0.002 < 0.05$ and the t count $< t$ table ($-3.162 < 1.661$), so H_0 is rejected and H_4 is accepted. This shows that the higher the level of risk that students get when using QRIS, the lower the level of QRIS use among students of the Faculty of Economics and Business, University of Warmadewa.

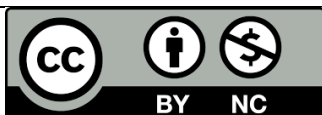
REFERENCES

- 1) Bailey, A. et al. (2017). Mobile Payment Adoption By US Consumers: An Extended TAM. *International Journal of Retail and Distribution Management*, 45 (6).
- 2) Budi, A. (2019). Consumer Trust and Loyalty. *Journal of Economics Focus* 9(1). 96-108.
- 3) Connolly, P., & McGing, G. (2007). High performance work practices and competitive advantage in the Irish hospitality sector. *International Journal of Contemporary Hospitality Management*, 19(3), 201–210.
<https://doi.org/10.1108/09596110710739903>
- 4) Damayanti, N. N. S. R. (2019). The Effect of Work Engagement and Self-Efficacy on Job Burnout of Credit Analyst. *International Journal of Applied Business and International Management*, 4(3), 113–120.
<https://doi.org/10.32535/ijabim.v4i3.689>
- 5) Devy. (2016). Perception of Benefits, Perception of Ease of Use and Experience of Mobile Banking Usage Behavior. *E-Journal of Unud Management*, Vol. 5, No. 4, 2016: 2606-2636
- 6) Ebel, R. D., & Yilmaz, S. (2002). *Concept of Fiscal Decentralization and World Wide Overview*.
- 7) Farizi, Hadyan., & Syaefullah. (2016). The Influence of Perceived Usefulness, Perception of Ease, Perceived Risk and Trust on Interest in Using Internet Banking. *Thesis of Accounting Department, Faculty of Economics and Business, Universitas Brawijaya*.
- 8) Featherman, M. and Pavlou, P. (2016). Predicting E-Services Adoption: A Perceived Risk Facets Perspective. *International Journal of Human Computer Studies*.
- 9) Fenu, G., & Pau, P. L. (2015). An analysis of features and tendencies in mobile banking apps. *Procedia Computer Science*, 56(1), 26–33. <https://doi.org/10.1016/j.procs.2015.07.177>
- 10) Ishengoma, A. R. (2011). Analysis of Mobile Banking for Financial Inclusion in Tanzania : Case of Kibaha District Council. *Int. J. Manag. Sci. Terchnology*, 1(4), 75–79.
- 11) Jayawarsa, A. K., Wulandari, I. G. A. A., Saputra, K. A. K., & Saputri, N. M. M. D. (2021). Public financial deposits in state owned banks: from an inflation perspective and bank indonesia interest rates. *International Journal of Business, Economics and Law*, 24(1), 105–112.
- 12) Noviandri. (2017). Perceived Benefits, Perceived Ease, Subjective Norms, Quality of Information and Interest in Use (Study on E-Commerce Users). 31 (5). 1317-1330.
- 13) Octaviana. (2020). Differences in Consumer Loyalty in TCash E-Payment Based on Perceived Benefits, Ease of Use and Customer Trust. *Thesis of Darma Persada University*.
- 14) Pavlou, PA (2016). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with The Technology Acceptance Model. 7 (03), 69-103.
- 15) Pratiwi et al. (2017). Analysis of Factors Affecting Customer Interest in Using Internet Banking BCA Palembang. 43(1).
- 16) Predana, P. G. W., Jayawarsa, A. A. K., Purnami, A. A. S., Larasdiputra, G. D., & Saputra, K. A. K. (2020). Effect Of Easy In The Use, Trust And Benefits Of The Use Of Mobile Banking Services. *International Journal of Environmental, Sustainability, and Social Sciences*, 1(2), 41–45.
- 17) Princess. NA (2020). Implementation of the Use of Quick Response Codes (QR Codes for Payment Systems Based on the Regulation of Members of the Board of Governors Number 21/ 18 /PADG/2019 concerning the Implementation of the

The Effect of Trust Use, Benefits and Risks on the Use of QRIS in Students

National Standard Quick Response Code for Payments in the City of Semarang. Semarang: *Thesis* of the Faculty of Law, State University of Semarang.

- 18) Rahman, R. A., & Anwar, I. S. K. (2014). Effectiveness of Fraud Prevention and Detection Techniques in Malaysian Islamic Banks. *Procedia - Social and Behavioral Sciences*, 145, 97–102. <https://doi.org/10.1016/j.sbspro.2014.06.015>
- 19) Rosmauli, et al. (2016). The Influence of Perceived Benefits, Perceived Ease and Perceived Trust on Interest in Using E-Money Card. Jakarta State University *Thesis*.
- 20) Sara, I. M., & Saputra, K. A. K. (2021). Socialization of the implementation of good village governance and sustainability village credit institutions: Community service in Pejeng Village, Tampaksiring district, Gianyar Regency, Bali. *International Journal of Business, Economics and Law*, 24(4), 58–65. <https://www.ijbel.com/wp-content/uploads/2021/06/IJBEL24-726.pdf>
- 21) Siti-Nabiha, A. K., Azhar, Z., & Ali-Mokhtar, M. A. (2018). Management control for microfinance: An examination of the belief system of a Malaysian microfinance provider. *Asian Academy of Management Journal of Accounting and Finance*, 14(1), 185–208. <https://doi.org/10.21315/aamjaf2018.14.1.8>
- 22) Susanto, R. J. (2017). Analysis of Internet Banking Applications and Mobile Banking on the Level of Banking Service Quality. *International Journal of Business, Economics and Law*, 12(3), 32–39. <https://www.ijbel.com/wp-content/uploads/2017/05/ECON-15.pdf>
- 23) Tran, Q. T. (2019). Corruption, agency costs and dividend policy: International evidence. *Quarterly Review of Economics and Finance*. <https://doi.org/10.1016/j.qref.2019.09.010>
- 24) Ureche, O., & Plamondon, R. (2000). Digital payment systems for Internet commerce: The state of the art. *World Wide Web*, 3(1), 1–11. <https://doi.org/10.1023/A:1019217210183>
- 25) Wahyu et al. (2019). Factors Affecting Consumer Perception of E-Payment (Case Study of Credit and Debit Card Users in Bandung City). *Indonesian Journal of Management*. 19(1).
- 26) Wibowo, SF, Rosmauli, D., & Suhud, U. (2016). The Influence of Perceived Benefits, Perceived Ease, Service Features, and Trust on Interest in Using E-money Cards ,6(1) , 440-456.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.