The Effect of Perception of Convenience, Perception of Benefits, And Perception of Security of Use on Interest in Using QRIS As A Payment Transaction

[1]Lovita Prili Noermansyah, [2]Abednego Priyatama
[1,2]*Fakultas Ekonomi Universitas Gunadarma*
Jl. Margonda Raya No. 100, Depok 16424, West Java
[1]*lovitaprilli22@gmail.com* [2]*abednego@staff.gunadarma.ac.id*

Abstract

The purpose of this study was to determine the effect of perceived ease of use, perceived usefulness, and perceived security of use on the interest in using QRIS as a payment transaction. The analysis method used is quantitative primary data, the test stages used are validity test, reliability test, normality test, multicollinearity test, heteroscedasticity test, multiple linear regression analysis, T test, F test, and coefficient of determination. The data used in this study used a questionnaire instrument, and valid data that was successfully collected were 100 respondents. The sampling method in this study was non-probability sampling with a purposive sampling technique. The testing tool used was SPSS. The results of the study showed that partially the perceived ease of use and perceived usefulness variables had a significant effect on the interest in using QRIS, while partially the perceived security variable did not have a significant effect on the interest in using QRIS. Simultaneously, the perceived ease of use, perceived usefulness, and perceived security variables together had an influence on the level of interest in using QRIS as a payment transaction.

Keywords : *perception of convenience, perception of benefits, perception of security of use, interest in using, QRIS.*
JEL Codes : G20, D91, M31, O33

INTRODUCTION

The rapid development of digital technology is currently demanding that people be able to use and utilize it to simplify various daily activities. In the economic sector, Indonesian commerce is increasingly accustomed to using the internet for buying and selling transactions and online communication between buyers and sellers. Indonesians are also starting to use payment systems that utilize electronic money, eliminating the need for cash. Current technological advances provide ease and convenience in various aspects of people's lives.

Technological developments in the business world have resulted in various innovations that support digital payment transactions. The high demand for speed and convenience in meeting people's needs has driven the creation of innovations in the financial sector known as Fintech (Financial Technology). Fintech is a technological innovation that simplifies the use of financial services through applications. One fintech technology widely used by the Indonesian public is QRIS (Quick Response Code Indonesia Standard). QRIS is a QR code standard introduced by Bank Indonesia for all fintech companies. The purpose of QRIS is to simplify digital transactions for the public, as all non-cash payments or merchant transactions are monitored through a single, integrated system. With the advent of QRIS, all transactions using QR codes require only a single QR code, which is integrated with various payment applications, both for receiving and making transactions.

Public perceptions of the convenience, benefits, and security of QRIS are key considerations and assessments when using it. Perceived convenience is a crucial factor in achieving user satisfaction. When deciding to use digital payments, it's important to consider the benefits offered in daily activities. Perceived security also refers to consumers' confidence that their personal information is protected and cannot be accessed by anyone other than themselves.

Students at Gunadarma University Karawaci are increasingly adopting digital payment methods through QRIS for various transactions, from purchasing food and books to purchasing other daily necessities. The

ease and speed of payment processing offered by QRIS make it a practical solution in the digital age, especially for dynamic students who are always seeking efficiency. Digital transformation on campus also encourages them to be more open to financial technology innovations, making cashless transactions increasingly a trend that supports modern lifestyles. The purpose of this study is to determine the influence of perceived ease, perceived usefulness, and perceived security on interest in using QRIS as a payment transaction, both partially and simultaneously.

LITERATURE REVIEW

Digital Payments

Digital payments generally don't use physical cash as a means of payment, but rather are made through bank transfers or through the bank's internal network. Cashless payments can also be made using payment cards, such as ATMs, debit cards, or credit cards, according to Tarantang (2019). Digital payment systems are a new form of value exchange, similar to other payment methods, and can be used by customers. However, their use depends on the development of smartphone features and the user's financial authorization, according to Sutrisna (2022).

Financial Technology (FinTech)

Financial Technology (Fintech) is an innovation that simplifies the use of financial applications. According to Bank Indonesia, fintech combines financial services with technology, transforming conventional business models into digital ones, enabling payments that were previously made in person to now be made instantly via smartphone. Financial transactions through fintech include a variety of services, such as payments, investments, loans, transfers, financial planning, and financial product comparisons.

Quick Response Code Indonesian Standards (QRIS)

According to Bank Indonesia (2020), Quick Response Code Indonesian Standards (QRIS) is a unification of various QR codes from various Payment System Service Providers using QR codes. The use of QRIS is regulated in the Regulation of the Member of the Board of Governors Number 21/18/PADG/2019 concerning the implementation of national standards for quick response codes for payments. QRIS was officially introduced by Bank Indonesia on January 1, 2020.

The characteristics of QRIS promoted by Bank Indonesia are:

a. Universal, meaning QRIS is inclusive, accessible to all social strata, and can be used for payment transactions both domestically and internationally;
b. Easy, meaning QRIS is designed to make it easier for people to conduct secure transactions via their mobile phones;
c. Profitable, meaning transactions using QRIS provide benefits for buyers and sellers, because transactions are more efficient through a single QR code that is compatible with various payment applications on mobile phones;
d. Direct, meaning transactions using QRIS take place instantly or in real time due to its fast process, thus supporting a smooth payment system.

Perception of Convenience

Convenience in this perception means easy for using. Ease of use is defined as the extent to which a person believes that using a technology requires minimal effort. Davis et al. (2019) defines perceived ease of use as the belief in ease of use, namely the user's confidence that the technology or system can be used easily and without obstacles. Furthermore, the level of use and interaction between the user and the system also reflects ease of use. According to Ernawati and Noersanti (2020), there are several indicators that can measure ease of use, namely:

1. Easy to learn
2. Controllability
3. Flexibility
4. Easy to use
5. Clear and understandable

Perception of Benefits

According to Kotler and Armstrong (2018), perception is the process by which a person selects, organizes, and interprets information to create a meaningful understanding of the world. A person is more likely to use technology if they perceive it to be beneficial. Conversely, if someone perceives the technology to be unbeneficial, they are unlikely to use it. According to Davis (2017), in research by Ernawati and Noersanti (2020), perceived usefulness is measured using several indicators, as follows:

1. Simplifying payment transactions
2. Accelerating payment transactions
3. Provide additional benefits when completing transactions
4. Provide a sense of security when making payments

Perception of Security of Use

Perceived security refers to consumers' belief that their personal information is protected and cannot be accessed by anyone other than themselves. This is due to data storage systems that ensure information remains secure and cannot be manipulated. Thus, consumers feel more confident in using technology that has guaranteed security (Aprilia, 2018). According to Kolifah, Nur, & Ita (2023), based on the definitions of security, it can be concluded that security perception indicators include four elements:

1. Integrity.
2. Confidentiality.
3. Authentication.
4. Availability.

Interest In Using QRIS

According to the Big Indonesian Dictionary (KBBI), interest in use comes from the word "interest," meaning a strong desire or inclination toward something, and "use," meaning to use or utilize something. Thus, interest in use can be defined as a strong desire to use or utilize something. According to Davis et al. (2000), there are several indicators of interest in use, namely:

1. Will transact
2. Will recommend
3. Will continue to use

RESEARCH METHOD

Research Subjects

This study was conducted with students at Gunadarma University Karawaci who use QRIS digital payments as subjects. The study aimed to determine the influence of Perceived Convenience (X1), Perceived Benefit (X2), and Perceived Security (X3) on Intention to Use (Y) as the research variable. The research location was limited to the Gunadarma University region Karawaci.

Data Types and Sources

This research uses a quantitative approach. Quantitative data was collected through a questionnaire administered to students at Gunadarma University, Karawaci. This research can be measured or calculated directly using a questionnaire with statistical calculations aimed at testing the hypotheses derived from the questionnaire as a research tool. The population used in this study was Gunadarma University Karawaci students who use QRIS digital payments.

Data Sample

The sampling method used in this study was purposive sampling. Purposive sampling is a sampling technique that uses specific criteria that align with the research objectives. The purposive sampling criteria used in this study were:

a. Respondents had made a payment using QRIS at least once.
b. Respondents were students at Gunadarma University, Karawaci.

Therefore, the sample used in this study must be representative of the population of QRIS users as a digital payment tool among Gunadarma University, Karawaci students. Because the population size is not precisely known and is assumed to be infinite, the researcher used the Rao Purba formula to calculate the sample size.

Research Variables

In this study, there are two types of variables: the independent variable (IV) and the dependent variable (DV).

a. Independent Variable
   In this study, the independent variables used include perceived ease of use (X1), perceived usefulness (X2), and perceived security (X3).
b. Dependent Variable
   In this study, the dependent variable used is intention to use (Y).

Data Collection Method

In this study, the data collection methods used included a library search and a field study.

1. Library Search
   The data collection method applied in this study was a library study, in which the researcher sought and studied scientific sources found in books and journals, particularly those related to the research topic.
2. Field Study
   The researcher distributed an online questionnaire to QRIS digital payment users among students at Gunadarma University, Karawaci. This questionnaire contained statements related to the research variables: perceived ease of use, perceived usefulness, perceived security, and interest in using QRIS. Data collection was based on respondents' answers or responses to the questions posed, which are expected to provide information to answer the research questions related to factors influencing interest in using QRIS.

The data in this study will be collected through a list of statements that will be assessed by respondents using a Likert scale. A Likert scale is a method for measuring a person's level of understanding or perception of an indicator or variable. Answers to each question will be scored from strongly agree to strongly disagree.

Data Analysis Method

The analysis method in this study uses quantitative primary data, the test stages used are validity test, reliability test, normality test, multicollinearity test, heteroscedasticity test, multiple linear regression analysis, T test, F test, and coefficient of determination. The data used in this study uses a questionnaire instrument, and valid data that was successfully collected was 100 respondents. The sampling method in this study was non-probability sampling with a purposive sampling technique. The testing tool used was SPSS.

RESULTS AND DISCUSSION

Validity Test

The validity test results show that the Corrected Item-Total Correlation (r-calculation) value of the statements given to 100 respondents was greater than 0.1946 (r-table), indicating that all statements in the study were valid.

Reliability Test

The reliability test results for all Cronbach's Alpha values for each variable were greater than 0.60. Therefore, it can be concluded that the statements are reliable or trustworthy.

Normality Test

The results of the normality test using the Normal Probability Plot graph analysis show that the data (points) are distributed around the diagonal line and follow the direction of the diagonal line. Therefore, it can be concluded that the regression model used in this study meets the assumptions.

Multicollinearity Test

The results of the multicollinearity test indicate that each variable has a tolerance value > 0.10 and a VIF value < 10.00. Thus, it can be concluded that there are no symptoms of multicollinearity, so the regression model is suitable for use.

Heteroscedasticity Test

The results of the heteroscedasticity test show that in the scatterplot graph the data (dots) are spread randomly above and below the number 0 on the Y axis. Therefore, it can be concluded that the regression model in this study does not show symptoms of heteroscedasticity, so the regression model in this study is suitable for use.

Linear Regression Analysis

The results of the multiple linear regression analysis using SPSS yielded the following regression equation:

Y = 1,860 + 0.276X1 + 0.189X2 + 0.131X3 + E

From these results, it can be concluded that:

1. The constant (a) value of 1,860 is positive.
2. The regression coefficient for the Perceived Ease variable is 0.276, which is positive.
3. The regression coefficient for the Perceived Benefit variable is 0.189, which is positive.
4. The regression coefficient for the Perceived Security variable is 0.131, which is positive.

T-Test

Based on the T-test results, the variables Perceived Ease and Perceived Benefits have a calculated t value > t table and a sig value < 0.05. Meanwhile, the variable Perceived Security has a calculated t value < t table and a sig value > 0.05. Therefore, it can be concluded that Perceived Ease and Perceived Benefits partially have a significant effect on Interest in Using QRIS. Meanwhile, Perceived Security partially does not have a significant effect on Interest in Using QRIS.

F-Test

Based on the results of the F test, the variables Perceived Ease, Perceived Benefit, and Perceived Security simultaneously have a significant effect on the variable Interest in Using because they have a calculated f value > f table.

Coefficient of Determination

The Adjusted R Square coefficient of determination is 0.453 (45.3%). This means that using the regression model obtained in the variables Perceived Ease, Perceived Benefit, and Perceived Security has an influence on the variable Intention to Use of 45.3%. While the remaining 54.7% is the contribution of other variables not explained in this study.

Discussion

Based on the results of the test conducted to determine whether the independent variables significantly influence the dependent variable using the t-test (Partial) using SPSS software, the following calculation results were obtained for analysis in this study:

1. Perceived Ease of Use (X1)
   The calculated t-value for the Perceived Ease of Use variable is 4.402, which is greater than the t-table value of 1.984, and the significance value for the Perceived Ease of Use variable is 0.001 < 0.05. Therefore, it can be concluded that, partially, Perceived Ease of Use has a significant effect on Intention to Use.
2. Perceived Benefit
   The calculated t-value for the Perceived Benefit variable is greater than the t-table value of 1.984, and the significance value for the Perceived Benefit variable is 0.048 < 0.05. Therefore, it can be concluded that, partially, Perceived Ease of Use has a significant effect on Intention to Use.
3. Perceived Security
   The calculated t-value for the Perceived Security variable is smaller than the t-table value of 1.984, and the significance value for the Perceived Security variable is 0.66 > 0.05. Therefore, it can be concluded that partially, Perceived Security does not have a significant effect on Intention to Use.

Although the descriptive results indicate that respondents have a high level of agreement with the Perceived Security variable in using QRIS, the test results indicate that this variable does not have a

significant effect on Intention to Use QRIS. This can be explained from a behavioral economics perspective, where although security is considered important, this factor may not be a primary determinant in the decision to use QRIS. If users already perceive QRIS to have an adequate level of security, this factor is no longer a key differentiator in their decision to use it. Thus, although respondents strongly agree with the security aspect, other factors such as ease of use and benefits have a greater influence on interest in using QRIS.

Based on the results of the test conducted to determine whether the independent variables significantly influence the dependent variable using the f-test (simultaneous) method using SPSS software, the calculation results obtained can be analyzed in this study. It can be seen that the calculated f is 28.323 > f table (2.47) with a significance level of 0.001 < 0.05. Therefore, it can be concluded that the variables Perceived Ease of Use (X1), Perceived Benefit (X2), and Perceived Security (X3) simultaneously have a significant effect on the variable Intention to Use.

CONCLUSION AND SUGGESTION

Conclusions

Based on the research results and discussion regarding the influence of perceived ease of use, perceived usefulness, and perceived security of use on the intention to use QRIS for payment transactions among Gunadarma Karawaci students, analyzed by researchers using validity tests, reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, multiple linear regression tests, partial t-tests, simultaneous f-tests, and the coefficient of determination (R2) test, the following conclusions can be drawn:

1. Perceived ease of use has a partial significant effect on intention to use QRIS. This means that the higher the perceived ease of use of QRIS, the higher the level of intention to use.
2. Perceived usefulness has a partial significant effect on intention to use QRIS. This means that the higher the perceived usefulness of QRIS, the higher the level of intention to use.
3. Perceived security has no partial significant effect on intention to use QRIS. This indicates that perceived security does not significantly impact user interest in using QRIS.
4. Perceived Ease, Perceived Benefit, and Perceived Security simultaneously have a significant influence on Interest in Using QRIS. It is evident that these three factors collectively influence the level of interest in using QRIS.

Suggestions

Based on the conclusions outlined above, the following recommendations can be provided to complement the findings of this study. These recommendations are as follows:

1. For further researchers:
   For future researchers interested in conducting research on a similar topic, it is recommended to expand the variables studied by considering factors other than Perceived Ease of Use, Perceived Benefit, and Perceived Security that may influence Intention to Use QRIS. Furthermore, further research can be conducted with a larger sample size to obtain more representative results.
2. For Companies:
   Based on the research results, Perceived Ease of Use and Perceived Benefit have a positive and significant influence on Intention to Use QRIS. Therefore, the recommendation is that QRIS managers continue to improve the ease of access and use of the QRIS system and strengthen communication regarding the benefits users can obtain from transactions using QRIS. Although Perceived Security did not have a significant influence in this study, it is important for service providers to maintain and improve security aspects to create a sense of security and comfort for users, as this can impact long-term trust in QRIS use.

REFERENCES

Abrilia, Nurya Dina. (2020). "Pengaruh Persepsi Kemudahan Dan Fitur Layanan Terhadap Minat Menggunakan E-Wallet Pada Aplikasi Dana Di Surabaya." *Jurnal Pendidikan Tata Niaga (JPTN)* 8.3 (2020): 1006-1012.

Arikunto, S. (2019). Prosedur Penelitian: Sampel Penelitian. Jakarta: Rineka cipta.

Atriani, Atriani, Lalu Adi Permadi, and Baiq Handayani Rinuastuti. (2020) "Pengaruh Persepsi Manfaat

dan Kemudahan Penggunaan Terhadap Minat Menggunakan Dompet Digital OVO." *Jurnal Sosial Ekonomi Dan Humaniora* 6.1: 54-61.

Bank Indonesia. (2018). Peraturan Bank Indonesia Nomor 20/06/PBI/2018 Tentang Uang Elektronik (Electronic Money).

Bank Indonesia. (2020). "Quick Response Code Indonesian Standard (QRIS)", situs resmi Bank Indonesia. https://www.bi.go.id/QRIS/Contents/Default.aspx (03 oktober 2020).

Basuki. (2015). Pengaruh Knowledge Management Terhadap Kinerja Organisasi Al Ulum: Jurnal Ilmu Sosial Dan Humaniora 1 (1)

Davis, Fred D. (1989). "Perceived Usefulness, Perceived Ease of Use, And User Acceptance of Information Technology". MIS Quarterly. Vol. 13, No. 3, pp. 319-340

Davis, F. D., Bagozzi, R. P., Warshaw, P. R.. (2019). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. Management Science, 35(8), 982-1003. https://doi.org/10.1287/mnsc.35.8.982

Ernawati, N., & Noersanti, L. (2020). Pengaruh Persepsi Manfaat, Kemudahan Penggunaan dan Kepercayaan Terhadap Minat Penggunaan Pada Aplikasi OVO. Jurnal Ecodemica, 4, 200–210.

F. Kurniasari and N. Adyni. (2021). "Pengaruh Literasi dan Efikasi Diri terhadap Inklusi Keuangan pada Penggunaan Layanan Pembayaran Digital Shopee Pay di Jabodetabek," DeReMa (Development Res. Manag. J. Manaj., vol. 16, no. 1, pp. 128–140.

Ghozali, Latan. (2015). Evaluasi Model Pengukuran dan Struktural dengan Partial Least Square (PLS). Semarang: Universitas Diponegoro.

Ghozali. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 Edisi 9. Cetakan 9. Badan Penerbit Universitas Diponegoro. Semarang

J. Ismanto. (2020). Manajemen Pemasaran, Tangerang Selatan: UNPAM PRES, 2020.

Jogiyanto, H., & Willy, A. (2009). Konsep dan aplikasi PLS (partial least square) : Untuk penelitian empiris (1st ed.). BPFE.

Jogiyanto. (2007). Sistem Informasi Keperilakuan. Yogyakarta: Andi.

J. Tarantang, A. Awwaliyah, M. Astuti, and M. Munawaroh. (2019). "Perkembangan Sistem Pembayaran Digital Pada Era Revolusi Industri 4.0 Di Indonesia," J. Al Qardh, vol. 4, no. 1, pp. 60–75, doi: 10.23971/jaq.v4i1.1442.

Kartika, A. (2018). Pengaruh Persepsi Kegunaan, Persepsi Kemudahan, dan Persepsi Keamanan Terhadap Minat Penggunaan E-Money (Studi Pada Pengguna Go-Pay di Kota Malang) (Doctoral dissertation, Universitas Brawijaya).

Koler, P., & Armstrong, G. (2018). Principles of Marketing.

Nizar, Arif Maulana, and Abdul Yusuf. (2022). "Pengaruh Persepsi Kemudahan Penggunaan dan Kepercayaan Terhadap Minat Menggunakan Aplikasi Dompet Digital LinkAja." *J-MAS (Jurnal Manajemen dan Sains)* 7.2: 928-933.

R. A. Suwarjo. (2019). "Aplikasi Sistem Pembayaran Administrasi Kuliah Di Universitas Islam," Progr. Stud. Tek. Inform. Univ. Islam Majapahit. [Online]. Available: repository.unim.ac.id/269/2/Jurnal Rahmad Anton Sujarwo 5.13.04.11.0.135.pdf

Rodiah, Siti Rodiah, and Inaya Sari Melati. (2020). "Pengaruh Kemudahan Penggunaan, Kemanfaatan, Risiko, dan Kepercayaan terhadap Minat Menggunakan E wallet pada Generasi Milenial Kota Semarang." *Journal of Economic Education and Entrepreneurship* 1.2 (2020): 66-80.

Sudaryono. (2016). Manajemen Pemasaran Teori Dan Implementasi. Yogyakarta: ANDI

Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: CV Alfabeta.

Sugiyono. (2019). Populasi Penelitian, Metode Pengambilan Data. Bandung: Alfabeta.

S. Sutrisna (2022). "Prosiding : Ekonomi dan Bisnis Pengaruh Suasana Toko, Kesadaran Merek Dan Pembayaran Digital Terhadap Keputusan Pembelian (Studi Pada PT . Cara Loe Buat Kopi "Kopi Clbk")," Pros. Ekon. dan Bisnis, vol. 1, no. 2.