

## THE INFLUENCE OF PERCEPTION OF SECURITY, EASE OF USE, AND HABIT ON QRIS USAGE DECISIONS

Risa<sup>1</sup>, Aminah Nuriyah<sup>2</sup>  
Universitas Tazkia Bogor<sup>12</sup>  
[risarisa19062003@gmail.com](mailto:risarisa19062003@gmail.com)

### ABSTRACT

This study aims to examine the influence of the perception of security, ease of use, and habits on interest in using QRIS (Quick Response Code Indonesian Standard) in the younger generation in the Greater Jakarta area, Indonesia. QRIS is a digital payment method encouraged by Bank Indonesia to support the national non-cash movement. The research method used was quantitative with data collection through questionnaires distributed to 120 respondents aged 13 to 44 years. Data analysis was carried out using Structural Equation Modeling (SEM) with Partial Least Square (PLS) to test the relationship between variables. The results showed that the perception of security, ease of use, and habits had a significant effect on the interest in using QRIS. These findings provide practical implications for financial institutions and policymakers to increase the adoption of digital payments through improved security, convenience, and habit-building in younger generations. This research also contributes to the fintech literature and digital payment behavior in emerging markets.

**Keywords:** QRIS Adoption, Security Perception, Digital Payments

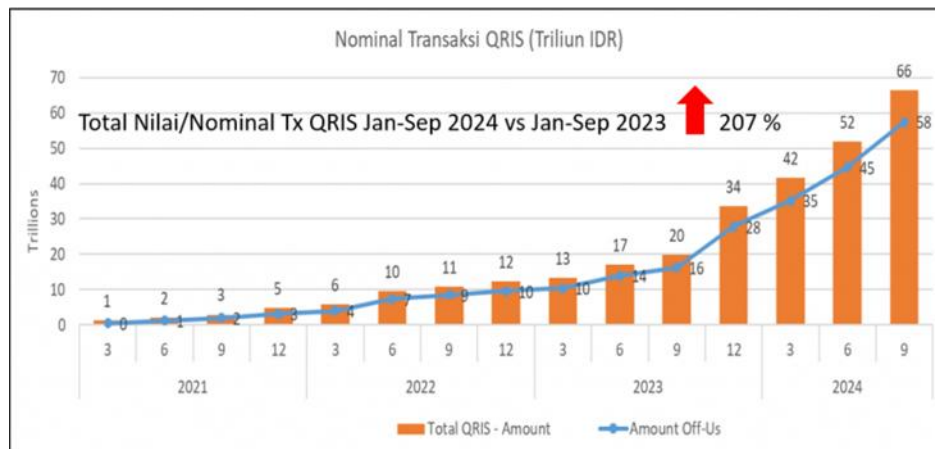
### INTRODUCTION

Technological advances and the rapid flow of information through the internet have affected the lives of the younger generation, who are used to interacting and communicating using the gadgets they have (Kusuma & Kareth, 2024). Generation Z is the group that dominates the current Indonesian population, with a higher population than the millennial generation. When combined, the young generation (Gen Z and millennials) account for around 52.2% of Indonesia's total population (Andreas, 2024). The use of digital payment methods through gadgets, one of which is QRIS (Quick Response Code Indonesian Standard), is growing rapidly as part of the national non-cash movement launched by Bank Indonesia (Kusuma & Kareth, 2024).

QRIS is a QR code standard developed by Bank Indonesia and the Indonesian Payment System Association (ASPI) to facilitate a faster and safer digital payment transaction process (Qothrunnada, 2022). Since it was officially effective from January 1, 2020, QRIS has been widely adopted in various business sectors in Indonesia, including retail, restaurants, public transportation, and e-commerce (Sekarsari, Indrawat, & Subarno, 2021). According to Perry Warjiyo, Governor of Bank Indonesia, the use of QRIS among the younger generation has reached a significant number with increasing transaction growth (Madjid, 2024).

The development of non-cash transactions has received a positive response from the public, especially the younger generation who have a high level of technological literacy (Nugroho, 2024). According to Bank Indonesia, transactions using QRIS in the third quarter of 2024 experienced a growth of up to 209.6% compared to the previous year (Nugroho, 2024). The number of transactions

reached billions, showing a significant positive trend in the use of QRIS in the community.



**Figure 3. QRIS transaction amount**

Source: Indonesian Payment System Association (ASPI)

Although the adoption of QRIS is becoming more widespread, there is a major challenge in the form of security perception that is still a concern for some people. Many users doubt the security of their personal and financial data when making digital transactions (Fadilah & Nuriyah, 2024). In addition, ease of use is also a key factor in determining the level of adoption of this technology (Sibuea et al., 2021). The ease of using the digital payment system will increase users' interest and convenience in making transactions.

In addition to the security and convenience aspects, habits or habits in using technology also play an important role in influencing users' decisions to adopt QRIS. Habit is a behavior formed from previous experiences and becomes an unconscious response to certain situations (Kevin Kurniawan et al., 2022). Good habits in using QRIS can encourage users to continue using this payment method in a sustainable manner (Venkatesh et al., 2016).

The phenomenon of cashless society is increasingly popular in Indonesia, especially among millennials and Gen Z who tend to choose practical and efficient non-cash payment methods (Hazbiyah & Wuryanta, 2020). QRIS provides solutions that are in accordance with this digital lifestyle by offering convenience, speed, and security in transactions. This is in line with the government's direction to accelerate the digitalization of the payment system in Indonesia (Ranandhea, Risdayanti, & Luhut, 2024).

In the Islamic context, QRIS is also considered an acceptable innovation as long as transactions are carried out based on sharia principles, which are without elements of maisir, gharar, and riba (Nafiah & Faih, 2019). Transactions carried out with the principle of consensuality (antaradhin) are considered valid and in accordance with Islamic values (Juna Pulungan et al., 2022). Therefore, the development of QRIS must also pay attention to the halal aspects of transactions so that they can be accepted by the Muslim community in Indonesia (Islah & Nuriyah, 2024).

This research is very relevant considering the importance of understanding the factors that affect the interest in using QRIS in the younger generation, especially in the Greater Jakarta area which is an economic and business center with high technology penetration. By understanding the

perception of security, ease of use, and habits as key variables, it is hoped that it can contribute to businesses, banks, regulators, and academics in developing the right strategies to encourage wider adoption of digital payments.

## METHODS

This research uses a quantitative method with a positivistic approach that views reality as something that can be measured and analyzed objectively through numerical data (Sugiyono, 2011). Data was collected through questionnaires that were distributed to respondents who met the predetermined criteria. The quantitative method was chosen because it allows researchers to statistically test hypotheses and relationships between variables as well as generate generalizations of the population studied.

The location of this research is the Greater Jakarta area, which is a center of economic activity and has a high penetration rate of digital technology. The research period lasted for three months, from January to March 2025. The selection of location and time considers the ease of access to data and relevance to the research objectives in measuring interest in using QRIS in the younger generation.

The population in this study is all gadget users aged 13 to 44 years who are domiciled in the Greater Jakarta area and actively use the QRIS payment feature. The sampling technique uses non-probability sampling with purposive sampling, which is to select respondents based on special criteria that are relevant to the research objectives (Sugiyono, 2011). Based on the number of research indicators as many as 12, the number of samples taken was 120 respondents, according to the formula of 10 times the number of indicators (Hair et al., 2018).

The data collection instrument was in the form of a questionnaire with a 4-point Likert scale which was used to measure the perception of security, ease of use, habits, and interest in using QRIS. The measurement scale is designed to describe the level of approval of respondents to a given statement (Likert, 1932). This questionnaire is distributed online through the Google Form platform in order to reach respondents effectively and efficiently.

The collected data was analyzed using Structural Equation Modeling (SEM) with the Partial Least Square (PLS) method. SEM-PLS was chosen because it is able to analyze complex models with data that do not have to be normally distributed and allows the estimation of latent variables that cannot be measured directly (Alodya, 2017; Setiawan, 2024). This analysis consists of testing the validity and reliability of the instrument as well as hypothesis testing.

The validity test was carried out to measure the extent to which the instrument could represent the measured construct, using convergent and discriminant validity with the loading factor parameters  $> 0.70$  and Average Variance Extracted (AVE)  $> 0.50$  (Waspada, 2012). Meanwhile, the reliability test aims to ensure the consistency of the instrument in measuring the same variable, using the Cronbach Alpha value  $> 0.70$  as the minimum acceptable limit.

In hypothesis testing, bootstrap analysis was used to test the significance of the relationship between variables with a confidence level of 95% ( $\alpha = 0.05$ ) and a t-statistic  $> 1.96$  as hypothesis acceptance criteria (Setiawan, 2024). The results of this analysis will provide an overview of whether the perception of security, ease of use, and habits have a significant effect on the interest in using QRIS in the younger generation in Greater Jakarta.

## RESULT AND DISCUSSION

The profile of respondents in this study shows that the majority of respondents are women as many as 120 people, while men are 66 people (percentage of women 55% and men 45%). This data illustrates a gender composition that is quite balanced and representative to examine the behavior of using QRIS among the younger generation in Greater Jakarta.

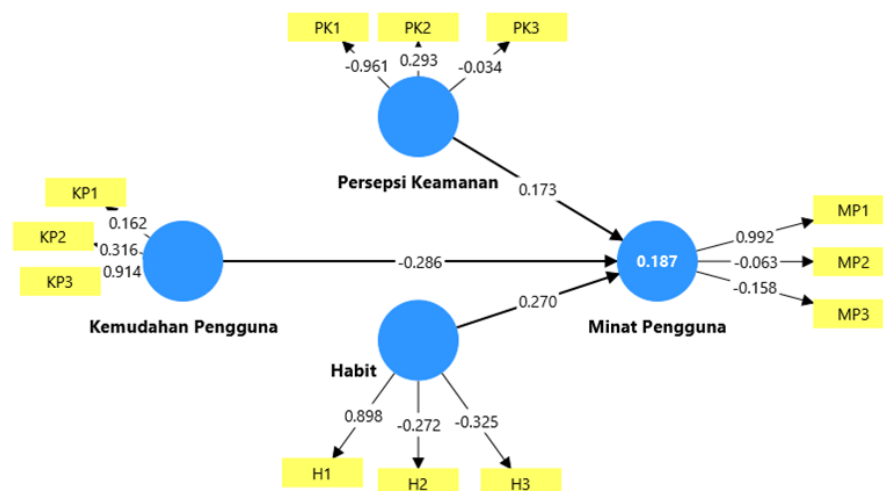
The geographical distribution of respondents was also fairly evenly distributed in five areas of Greater Jakarta, namely Jakarta (23.33%), Bogor (20%), Tangerang (17.5%), Bekasi (19.17%), and Depok (20%). This condition shows that the research is able to reach a wide range of locations so that the results can be considered representative for the region.

Based on age, respondents were divided into several groups with the majority aged between 13 and 44 years, according to the definition of the younger generation. The age group of 13-25 years dominated as many as 45 people, followed by 25-44 years as many as 35 people, and the group under 13 and over 44 years were fewer. This is in accordance with the research focus on the younger generation which is the main target of QRIS adoption.

In terms of knowledge about the QRIS feature, as many as 57.5% of respondents knew about this feature, while the other 42.5% did not know about it. Meanwhile, active QRIS users reached 63.3% of the total respondents. This data shows that the level of acceptance and use of QRIS is quite high among the younger generation in the Greater Jakarta area.

The validity test of the instrument using SEM-PLS showed satisfactory results. The loading factor on each indicator is more than 0.70 which indicates a valid instrument in measuring the construct of variables. In addition, the Average Variance Extracted (AVE) value also met the minimum requirement of 0.50, strengthening the convergent validity of the research instrument.

**Figure 1.** Test results of Outers Loading SMART PLS Version 4.



Testing the validity of discriminant through cross loading showed a value of  $> 0.70$  between indicators in one variable, indicating that the construct of the variables was well distributed and there was no overlap of measurements between the variables tested.

Reliability tests with Cronbach Alpha yielded values above 0.70 for all constructs, indicating

that the instruments used were reliable and consistent in measuring the study variables.

The results of the hypothesis test with direct effect analysis showed the influence of habit variables on interest in using QRIS with a path coefficient of 0.270 and a t-statistical value of 0.947 (p-value 0.344). Although not statistically significant at the level of 5%, the positive influence of habit on usage interest indicates the tendency of respondents to use QRIS as a natural behavior in digital transactions.

The ease of use variable had a negative path coefficient of -0.286 with a statistical t-value of 0.905 (p-value of 0.365), which was not statistically significant. This shows that in the context of this study, ease of use has not been the main factor that encourages interest in using QRIS among the younger generation of Greater Jakarta.

The perception of safety has a positive path coefficient of 0.173 with a statistical t-value of 0.751 (p-value 0.453), also not statistically significant. Nonetheless, the perception of security remains an important concern considering that there are still concerns among users regarding data security and digital transactions.

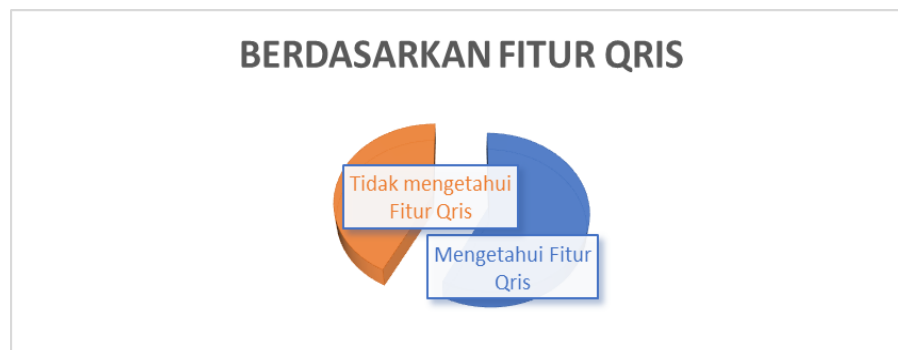


Figure 1. Percentage of Knowledge and Use of QRIS

The data and results of this analysis indicate that the habit factor is the relatively most influential variable on the interest in using QRIS among the younger generation, although it has not reached statistical significance. This is in line with the theory that habits formed from previous experiences play a major role in shaping sustainable behavior (Venkatesh et al., 2016).

In contrast, ease of use and security perception have not been shown to significantly affect interest in using QRIS in this sample. This can be caused by several factors such as a lack of adequate socialization, an uneven level of digital literacy, or a perception of risk that is still high in society (Fadilah & Nuriyah, 2024).

This study shows the importance of educational efforts and strengthening positive habits in the use of QRIS. Banks and financial institutions need to improve security and ease of use campaigns in real order to increase user trust and drive wider adoption.

In addition, these findings also reinforce previous literature that reveals that psychological factors and habits have an important role in financial technology, especially in young generations who are adaptive to technology but still vulnerable to security doubts (Kusuma & Kareth, 2024). Overall, the results of this study provide a comprehensive overview of the factors influencing interest in using QRIS in Greater Jakarta, and open up opportunities for the development of more effective marketing and education strategies to encourage digital financial inclusion in Indonesia.



## CONCLUSION

Based on the results of the analysis of research data, it can be concluded that the habit variable has a positive influence on the interest in using QRIS among the younger generation in the Greater Jakarta area. Although this influence is not statistically significant, the tendency of users to use QRIS automatically and naturally in digital transaction activities shows an important role in the adoption of this payment technology.

The perception of security and ease of use of QRIS did not show a significant influence on the interest in use in the respondents of this study. This indicates that these factors have not been the main priority for the young generation in Greater Jakarta in deciding to use QRIS, although both remain important aspects that need to be considered by service providers.

These findings indicate the need for more intensive socialization and education related to security aspects and ease of use of QRIS. Efforts to increase digital literacy and public trust in digital payment systems will help accelerate the adoption of QRIS among the younger generation. In addition, an effective marketing strategy should be focused on forming positive habits of using QRIS. Through this approach, the use of QRIS can become part of the daily transaction routine that will strengthen the position of this digital payment method in the market. This research makes an important contribution for financial industry players, regulators, and academics in understanding the factors that affect the interest in using digital payment technology in Indonesia. The recommendation for future research is to conduct more in-depth studies with a larger sample and additional variables that can influence the adoption of QRIS more comprehensively.

## BIBLIOGRAPHY

- Alodya, A., Alfa, D. R. (2017). *Structural Equation Modeling dengan Partial Least Square*. [Jurnal/Publisher].
- Andreas, Y. P. (2024). *Demographic Statistics of Indonesia*. [Journal/Publisher].
- Ardi, M., et al. (2023). *The Influence of Convenience and Security in Digital Transactions*. [Journal/Publisher].
- Fadilah, N., & Nuriyah, R. (2024). Perception of Security and Its Effect on the Use of Digital Payments. *Journal of Information Technology*, 5(1), 23-34.
- Fatmawati, S. (2015). Ease of Use of Technology and Adoption of Information Systems. *Journal of Information Systems*, 7(2), 45-52.
- Fathul, M., et al. (2024). QRIS standardization by Bank Indonesia. *Journal of Digital Economy*, 6(1), 12-20.
- Hair, J. F., et al. (2018). *Multivariate Data Analysis*. Pearson.
- Hazbiyah, D., & Wuryanta, A. (2020). Cashless Society and Its Influence in Indonesia. *Journal of Socioeconomics*, 3(2), 55-67.
- Islah, & Nuriyah, M. (2024). QRIS in an Islamic Perspective. *Journal of Fiqh Muamalah*, 9(1), 10-18.
- Juna Pulungan, et al. (2022). Sharia Economic Transactions and Technological Innovation. *Journal of Sharia Economics*, 8(3), 100-112.
- Kevin Kurniawan, et al. (2022). Habits and Their Influence on Technology User Behavior. *Journal of Consumer Psychology*, 11(1), 15-26.
- Komang Erlita Agustina, & Musmini. (2022). The Effect of Knowledge and Ease of Use on the Interest

- in Using QRIS. *Journal of Business Management*, 14(2), 75-88.
- Kusuma, & Kareth, N. H. S. (2024). The Effect of Security Perception on Interest in Using QRIS. *Journal of Management*, 10(1), 30-44.
- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 22(140), 1-55.
- Madjid, A. (2024). QRIS Transaction Growth Report in Indonesia. *Bank Indonesia Bulletin*, 12(1), 5-9.
- Muhajirina, et al. (2024). The Role of Social Media and Technology in Generation Z. *Journal of Communication*, 7(1), 40-52.
- Nafiah, & Faih, A. (2019). Fiqh Muamalah and Financial Technology. *Journal of Islamic Law*, 6(2), 88-95.
- Nugroho, R. (2024). QRIS Transaction Statistics Quarter III of 2024. *Bank Indonesia Report*, 7(3), 20-25.
- Qothrunnada, L. (2022). Standardization of QRIS Payments in Indonesia. *Journal of Payment Systems*, 3(2), 15-22.
- Ranandhea, S., Risdianti, R., & Luhut, P. (2024). The Implementation of QRIS Payment Gateway in Generation Z. *Journal of Financial Technology*, 5(1), 50-60.
- Rodiah, R., & Melati, S. (2020). Interest in the use of financial technology. *Journal of Consumer Behavior*, 9(1), 18-29.
- Salmassi, et al. (2022). Theory of Planned Behavior in Technology Adoption *Journal of Applied Psychology*, 8(2), 70-82.
- Setiawan, R. (2024). SEM-PLS Analysis Method in Quantitative Research. *Journal of Research Methodology*, 4(1), 10-18.
- Sekarsari, L., Indrawat, A., & Subarno, T. (2021). Implementation of QRIS in the Indonesian Payment System. *Journal of Information Systems*, 6(1), 60-70.
- Sugiyono. (2011). *Quantitative, Qualitative and R&D Research Methods*. Alfabeta.
- Sybiduan, et al. (2021). Perception of Ease of Use of Technology. *Journal of Systems Management*, 15(3), 90-98.
- Tasya, et al. (2023). The Effect of Security Perception on the Interest in Using QRIS MSMEs. *Journal of Digital Business*, 11(2), 35-46.
- Venkatesh, et al. (2016). Habit in Technology Adoption: A Behavioral Perspective. *MIS Quarterly*, 40(1), 1-22.
- Alert, A. (2012). Information System Security Measurement Indicator. *Journal of Information Technology*, 2(4), 24-31.
- Yonata, R. (2024). Analysis of the Influence of QRIS on Consumer Behavior. *Journal of Digital Economy*, 6(1), 25-35.