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Unveiling The Path To Qris Adoption: The Roles Of Perceived Ease Of Use And Risk Through Attitude Toward Using

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ABSTRACT

This study aims to analyze the influence of perceived ease of use and perceived risk on attitude toward using and intention to use QRIS (Quick Response Code Indonesian Standard) in Jabodetabek. A quantitative research was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). Data were collected from 201 QRIS users and analyzed using SmartPLS 3. The findings indicate that higher perceived ease of use increases both users' attitude and intention to use QRIS. Conversely, higher users' perceived risk reduces both their attitude toward using the system and their intention to adopt it. Moreover, it also found that users' attitude toward using QRIS mediates the relationship between perceived variables and behavioral intention. These findings highlight the importance of educational and communication strategies to enhance positive users' attitudes and to reduce perceived risk in order to increase QRIS adoption.

INTRODUCTION

The rapid advancement of information and communication technology over the past decades has significantly impacted not only large-scale industries but also daily life and individual behavior. One of the most visible transformations is the shift in how people conduct financial transactions. Traditionally, payments were made using cash, checks, or physical cards, which often created inefficiencies between payers and receivers. As digitalization continues to evolve, particularly in the financial sector, new payment solutions have emerged that aim not only to simplify and accelerate transactions but also to enhance security, transparency, and operational efficiency for all parties involved.

In Indonesia, a key innovation reflecting this progress is the implementation of the Quick Response Code Indonesian Standard (QRIS), introduced by Bank Indonesia in 2019. QRIS serves as a unified national standard for QR code-based payments, enabling interoperability across various platforms. By integrating QRIS into payment systems, users can now make transactions with a single QR code regardless of the application used. This system enhances convenience,

security, and efficiency in conducting digital payments and plays a strategic role in unifying Indonesia's fragmented payment ecosystem.

According to the Indonesian Payment System Association (ASPI), QRIS user adoption has surged by over 194% in just three years (2022–2024). This sharp increase reflects growing public enthusiasm for digital payment methods. Not only has the number of users risen significantly, but the number of merchants adopting QRIS has also doubled over the same period. These figures highlight the increasing awareness among business actors both large and small of the benefits QRIS offers in supporting their operations.

Despite this encouraging growth, the adoption rate of QRIS still falls short of its potential when compared to the digital readiness of the population. A 2024 report by Sindonews shows that out of 275.5 million Indonesians, 187.7 million already use smartphones. This high smartphone penetration opens up vast opportunities for digital services such as QRIS. However, the current adoption levels suggest that this potential is not yet fully realized, particularly among users who have access to technology but remain reluctant to utilize digital financial solutions. This gap underscores the need for more effective strategies to promote QRIS adoption and to contribute to broader financial inclusion.

Understanding what drives individuals to use QRIS is therefore crucial. Several studies have emphasized the importance of perceived ease of use and perceived risk as key psychological factors that influence user attitude and behavior in technology adoption. Attitude itself functions as a mediating variable that connects initial perception with final decision-making. In this context, identifying how ease and risk perceptions shape user attitude and how that attitude impacts intention is vital for optimizing the adoption of QRIS.

The urgency of this study lies in its objective to identify the drivers and barriers affecting QRIS usage. The findings are expected to inform strategies that increase QRIS adoption in the broader community. Specifically, this study investigates the influence of perceived ease of use and perceived risk on the intention to use, with attitude toward using QRIS as a mediating variable. Although prior research has addressed these constructs in the context of various technologies, few have focused explicitly on QRIS adoption in Indonesia using this mediating framework.

Building on previous findings (Davis, 1989) and *(Venkatesh & Davis, 2000)*, this study positions perceived ease of use and perceived risk as key cognitive factors, and attitude as the affective mechanism that channels their influence on behavioral intention. By targeting QRIS users in Greater Jakarta, this research seeks to fill a gap in local empirical studies and contribute to the growing body of knowledge on digital payment adoption in emerging markets.

LITERATURE REVIEW

This study builds upon several theoretical frameworks to explain the adoption of QRIS, including the Technology Acceptance Model (TAM), Technology Acceptance Model 2 (TAM2), Theory of Reasoned Action (TRA), and Theory of Planned Behavior (TPB), as well as the constructs of perceived ease of use, perceived risk, attitude toward using, and intention to use.

The Technology Acceptance Model (TAM), introduced by (Davis, 1986), is one of the most influential models in explaining user acceptance of technology. It identifies two main constructs: perceived usefulness, defined as the extent to which a person believes that using a system enhances performance, and perceived ease of use, referring to the belief that using the system will be free of effort. These constructs influence users' attitudes toward using technology, which subsequently affect their behavioral intention to use it.

Building on TAM, (Venkatesh & Davis, 2000) developed Technology Acceptance Model 2 (TAM2), which incorporates additional explanatory variables from social and cognitive psychology, such as subjective norm, image, job relevance, output quality, and result demonstrability. TAM2 recognizes that perceptions of usefulness are shaped by both direct

experience and external influences, making it more comprehensive, especially when social influence and task relevance are significant.

The Theory of Reasoned Action (TRA), formulated by (Fishbein & Ajzen, 1975), emphasizes that behavioral intention is the primary predictor of actual behavior. It proposes that intention is shaped by two factors: attitude toward the behavior and subjective norm. While TRA assumes full volitional control over behavior, (Ajzen, 1991) extended it into the Theory of Planned Behavior (TPB) by introducing perceived behavioral control—reflecting an individual's perception of their capability to perform the behavior considering internal and external constraints. TPB thus accounts for contexts where certain barriers or limitations may influence behavioral execution, including the adoption of digital payment technologies.

In the context of TAM and TPB, perceived ease of use plays a critical role. As defined by (Davis, 1989), it refers to the degree to which a person believes that using a system will be free from effort. Prior research (Venkatesh & Davis, 2000) confirms that ease of use influences both attitudes toward using and perceived usefulness, even before actual system use, thereby increasing adoption likelihood. Conversely, perceived risk, as introduced by (Bauer, 1960) and refined by (Cunningham, 1967), captures the degree of uncertainty and potential negative consequences—whether financial, performance-related, social, psychological, or time-based—that may hinder adoption (Featherman & Pavlou, 2003). High perceived risk can undermine user confidence and reduce both positive attitudes and intentions toward technology use.

Attitude toward using, defined by (Ajzen & Fishbein, 1980) as the overall evaluation of performing a specific behavior, serves as a central mediating variable linking cognitive perceptions to behavioral intentions. A favorable attitude increases the likelihood of adoption, while an unfavorable one diminishes it. This study measures attitude through four indicators: perceived benefits, positive feelings, negative feelings, and perceived personal benefit.

Finally, this research focuses on the Quick Response Code Indonesian Standard (QRIS), introduced by Bank Indonesia in 2019 as a unified national standard for QR-based payments. By consolidating multiple QR code formats from various Payment Service Providers into a single interoperable system, QRIS enables users to conduct transactions conveniently, securely, and across multiple platforms. Its adoption plays a vital role in enhancing Indonesia's digital payment infrastructure and promoting financial inclusion.

METHODS

This study employed a quantitative approach using a survey method to collect data from QRIS users in the Greater Jakarta area. A purposive sampling technique was used, resulting in 201 valid responses. Data were collected using a 4-point Likert scale questionnaire and analyzed using Structural Equation Modeling (SEM) with SmartPLS 3.0 to test the proposed model.

RESULTS

This section presents the results of the data analysis, including validity and reliability testing, model fit assessment, and hypothesis testing, to evaluate the proposed research model.

Convergent Validity

Convergent validity assesses the extent to which indicators of a construct are correlated and measure the same underlying concept. This validation ensures that the indicators represent the intended latent variable. According to (Ghozali, 2006), convergent validity can be evaluated using the outer loading values, where a value above 0.60 indicates that the indicator is considered valid.

Tabel 1. Outer Loading

Variable	Indicator	Outer Loading
Perceived Ease of Use	PU01	0.815
	PU02	0.923
	PU03	0.901
	PU04	0.915
Perceived Risk	PR01	0.720
	PR02	0.669
	PR03	0.755
	PR04	0.770
	PR05	0.726
Attitude Toward Using	AU01	0.864
	AU02	0.871
	AU03	0.689
	AU04	0.812
Intention to Use	IU01	0.824
	IU02	0.837
	IU03	0.884
	IU04	0.933
	IU05	0.898

Average Variance Extracted (AVE)

Average Variance Extracted (AVE) reflects the proportion of variance captured by a construct in relation to the variance due to measurement error. A higher AVE indicates that the construct explains more variance of its indicators, thereby demonstrating sufficient convergent validity. (Hair et al., 2019) suggest that AVE values above 0.50 are acceptable for confirming good convergent validity.

Table 2. AVE

Variable	Average Variance Extracted (AVE)
Perceived Ease of Use	0.791
Perceived Risk	0.532
Attitude Toward Using	0.660
Intention to Use	0.767

Cronbach Alpha dan Composite Reliability

Cronbach's Alpha measures internal consistency, indicating how closely related the items are within a construct. Values range from 0 to 1, with values above 0.70 considered acceptable for reliability. In addition, Composite Reliability is used to assess internal consistency with a more comprehensive approach that considers the loading of each indicator. Composite reliability values above 0.70 indicate sufficient reliability, and values between 0.80 and 0.90 reflect high internal consistency (Hair et al., 2017).

Tabel 3. Cronbach Alpha dan Composite Reliability

Variabel	Cronbach's Alpha	Composite Reliability
Perceived Ease of Use	0.911	0.938
Perceived Risk	0.780	0.850
Attitude Toward Using	0.827	0.885
Intention to Use	0.924	0.943

R-squared (R^2)

R-squared (R^2) indicates the proportion of variance in the endogenous construct explained by its exogenous variables in the model. In PLS-SEM, R^2 values are used to assess the model's predictive accuracy. According to (Chin, 1998), an R^2 of 0.19 is considered weak, 0.33 is moderate, and 0.67 or higher is substantial.

Tabel 4. R-squared

Variabel	R Square
Attitude Toward Using	0.485
Intention to Use	0.678

Based on the table above, the R^2 value of Attitude Toward Using is 0.485, indicating that 48.5% of the variance in this variable is explained by Perceived Ease of Use and Perceived Risk, while the remaining 51.5% is influenced by other factors outside the model.

Meanwhile, the R^2 value of Intention to Use is 0.678, meaning that 67.8% of its variance is explained by Perceived Ease of Use, Perceived Risk, and Attitude Toward Using, with the remaining 32.2% being influenced by other variables not examined in this study. This demonstrates that the structural model has strong explanatory power for predicting behavioral intention toward QRIS usage.

Hypothesis Testing

In the context of SEM-PLS (Structural Equation Modeling - Partial Least Squares), the path coefficient refers to the magnitude and direction of the relationship between latent variables within a structural model. These coefficients are calculated using the Partial Least Squares algorithm and interpreted similarly to regression coefficients in linear analysis. The path coefficient also indicates the strength of the direct influence one latent construct has on another (Chin, 1998).

The statistical significance of these path coefficients is commonly evaluated using the p-value. A significance threshold of 0.05 is widely accepted across studies to determine whether the relationship between constructs is statistically significant (Hair et al., 2017). If the p-value is less than 0.05, the relationship is considered statistically significant, indicating that the observed effect is unlikely due to random chance.

However, some studies adopt stricter thresholds for higher confidence levels, such as 1% ($p < 0.01$) or 0.1% ($p < 0.001$), to assess stronger levels of significance (Cohen, 1988). These thresholds help to reduce Type I error and ensure the robustness of the findings.

Hypothesis testing in this study is conducted by examining the significance (p-value) and path coefficient (β) of each hypothesized relationship. A significant p-value alongside a meaningful coefficient supports the proposed hypothesis and validates the theoretical relationships within the model.

Tabel 5. Path Coefficient

Hypothesis	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Perceived Ease of Use -> Intention to Use	0.233	4.433	0.000
Perceived Risk -> Intention to Use	-0.097	2.178	0.030
Perceived Ease of Use -> Attitude Toward Using	0.513	9.023	0.000
Perceived Risk -> Attitude Toward Using	-0.337	6.125	0.000
Attitude Toward Using -> Intention to Use	0.606	9.574	0.000

Perceived Ease of Use -> Attitude Toward Using -> Intention to Use	0.311	6.958	0.000
Perceived Risk -> Attitude Toward Using -> Intention to Use	-0.204	5.125	0.000

DISCUSSION

This section discusses the research findings in relation to the proposed hypotheses and compares them with previous studies, highlighting theoretical and practical implications.

The Effect of Perceived Ease of Use on Intention to Use QRIS

The results indicate that perceived ease of use has a positive and significant effect on the intention to use QRIS. This finding supports H1, which states that perceived ease of use positively influences intention to use QRIS. The result aligns with the Technology Acceptance Model (TAM) developed by (Davis, 1989), which suggests that users' perceptions of the ease of using a technology increase their tendency to adopt it.

The path coefficient of 0.233 (p-value = 0.000) shows that the more effortless users perceive QRIS to be, the stronger their intention to continue using it. This result is consistent with the findings of (Ramayanti et al., 2025) and (Prasetyo et al., 2025), who emphasized that perceived ease of use is a critical predictor in the adoption of digital payment services. Similarly, (Paleni et al., 2025) found that perceived ease of use significantly influence the intention to use QRIS among university students.

The Effect of Perceived Risk on Intention to Use QRIS

The analysis also shows that perceived risk has a negative and significant effect on intention to use QRIS, supporting H2, which posits a negative relationship between perceived risk and usage intention. The coefficient of -0.097 (p-value = 0.030) indicates that higher levels of perceived risks whether in terms of security, privacy, or legal concerns correlate with lower intention to use QRIS.

This result is in line with (Zhao & Khaliq, 2024) and (Appiah & Agblewornu, 2025), who found that risk perception serves as a major barrier to fintech adoption, particularly in developing countries.

The Effect of Perceived Ease of Use on Attitude Toward Using

The findings reveal that perceived ease of use positively and significantly influences attitude toward using (β = 0.513, p = 0.000), thereby supporting H3. This implies that ease of access, comprehension, and operation contribute to forming a positive user attitude toward QRIS.

This result strengthens the findings of (Venkatesh & Davis, 2000) and (Prasetyo et al., 2025), who argued that perceived ease of use directly shapes both the affective and cognitive evaluation of users toward technology.

The Effect of Perceived Risk on Attitude Toward Using

Perceived risk also has a negative and significant effect on attitude toward using (β = -0.337, p = 0.000), confirming H4. This suggests that users' concerns regarding system security, data privacy, or service disruptions negatively influence their overall attitude toward using QRIS.

This result supports the technology adoption model proposed by (Appiah & Agblewornu, 2025) and (Julia et al., 2024), which emphasized that perceived risk is a negative determinant of attitude, particularly in digital platform contexts.

The Effect of Attitude Toward Using on Intention to Use QRIS

The analysis shows that attitude toward using has a positive and significant effect on intention to use (β = 0.606, p = 0.000), thus supporting H5. A positive attitude formed through user experiences such as satisfaction, enjoyment, and perceived benefit is a key driver of behavioral intention.

This finding is consistent with the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and (Shahzad et al., 2022), which stated that attitude is a primary determinant of behavioral intention in the context of technology adoption.

The Effect of Perceived Ease of Use on Intention to Use QRIS through Attitude Toward Using

Bootstrapping results indicate that attitude toward using significantly mediates the effect of perceived ease of use on intention to use QRIS (β = 0.311, p = 0.000), supporting H6. This means that the perception of ease not only influences intention directly but also indirectly by shaping a positive attitude.

This finding is aligned with (Emon & Khan, 2025), who emphasized that attitude toward using serves as a psychological bridge that strengthens the influence of perceived ease in shaping usage intention.

The Effect of Perceived Risk on Intention to Use QRIS through Attitude Toward Using

Finally, the results also reveal that attitude toward using significantly mediates the negative effect of perceived risk on intention to use (β = -0.204, p = 0.000), supporting H7. This suggests that risk perception weakens users' positive attitudes, which in turn reduces their intention to use QRIS.

This finding is consistent with (Julia et al., 2024) and (Appiah & Agblewornu, 2025), who emphasized the critical role of attitude as a mediating factor between risk perception and adoption behavior in digital services. Similarly, research by (Indah et al., 2024) found that perceived risk negatively affects attitude, which in turn impacts the intention to adopt.

CONCLUSION

Based on the findings of this study on QRIS users in the Greater Jakarta area, several conclusions can be drawn. First, the perceived ease of use significantly increases users' intention to adopt QRIS for daily transactions, indicating that usability plays a key role in the adoption of digital payment technologies. Second, a higher level of perceived risk—particularly concerns regarding security and data privacy—leads to a lower intention to use QRIS, emphasizing the importance of trust and perceived safety in digital systems.

Third, ease of use positively shapes users' attitudes toward using QRIS, suggesting that a smooth and enjoyable experience fosters more favorable evaluations of the system. Conversely, higher perceived risk contributes to negative user attitudes, thereby reducing support for the technology. Fourth, user attitude significantly influences intention, with a positive attitude encouraging continued use of QRIS. This highlights the mediating role of attitude in translating cognitive perceptions into behavioral intentions.

Fifth, the study also confirms that ease of use indirectly affects intention through the development of a positive attitude. Users who perceive the system as easy to use are more likely to develop supportive attitudes, which in turn enhance their intention to continue using the service. Finally, perceived risk weakens user attitudes and subsequently lowers their intention to adopt QRIS, indicating a dual negative impact on both psychological and behavioral outcomes.

These findings underscore the importance of improving user-friendly design and minimizing perceived risks to increase adoption rates. Building trust and simplifying digital

payment experiences are essential for promoting sustained use of QRIS among the broader population.

LIMITATION

This study has several limitations that should be considered for future research. The coverage of respondents was limited, as most participants were active QRIS users residing in urban areas, particularly the Greater Jakarta region. Consequently, the findings may not fully represent the experiences or perspectives of users from more remote regions, such as the frontier, outermost, and disadvantaged areas (3T).

Data were collected exclusively through online questionnaires, which tends to attract participants who are accustomed to using technology and have internet access. As a result, groups who are less familiar with technology or who rarely use digital services may be underrepresented in the sample.

The scope of this research was relatively narrow, focusing only on four main constructs: perceived ease of use, perceived risk, attitude toward using, and intention to use QRIS. In practice, many other factors could influence an individual's decision to adopt digital payment services, such as nationalism, trust in the service provider, peer influence, or perceived benefits.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behavior. Englewood Cliffs, NJ: Prentice Hall.

Appiah, T., & Agblewornu, V. V. (2025). The interplay of perceived benefit, perceived risk, and trust in Fintech adoption: Insights from Sub-Saharan Africa. Heliyon, 11(2). https://doi.org/10.1016/j.heliyon.2025.e41992

Bauer, R. A. (1960). Consumer Behavior as Risk-Taking. In R. S. Hancock (Ed.), Dynamic Marketing for a Changing World (pp. 389–398). American Marketing Association.

Chin, W. W. (1998). The Partial Least Squares Approach for Structural Equation Modeling. In G. A. Marcoulides (Ed.), Modern Methods for Business Research (pp. 295–336). Lawrence Erlbaum Associates.

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Lawrence Erlbaum Associates.

Cunningham, S. M. (1967). The Major Dimensions of Perceived Risk. In D. F. Cox (Ed.), Risk Taking and Information Handling in Consumer Behavior (pp. 82–108). Harvard University Press.

Davis, F. D. (1986). A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results [Massachusetts Institute of Technology (MIT), Sloan School of Management]. https://dspace.mit.edu/handle/1721.1/15192

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008

Emon, M. M. H., & Khan, T. (2025). The mediating role of attitude towards the technology in shaping artificial intelligence usage among professionals. Telematics and Informatics Reports, 17. https://doi.org/10.1016/j.teler.2025.100188

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. International Journal of Human Computer Studies, 59(4), 451–474. https://doi.org/10.1016/S1071-5819(03)00111-3

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Addison-Wesley.

Ghozali, I. (2006). Structural Equation Modeling: Metode Alternatif dengan Partial Least Squares (PLS). Badan Penerbit Universitas Diponegoro.

Hair, J. F. ., Hult, G. T. M. ., Ringle, C. M. ., & Sarstedt, Marko. (2017). A primer on partial least squares structural equation modeling (PLS-SEM). Sage.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. In European Business Review (Vol. 31, Issue 1, pp. 2–24). Emerald Group Publishing Ltd. https://doi.org/10.1108/EBR-11-2018-0203

Indah, A., Shaliha, P., & Gunanto Marsasi, E. (2024). The Influence of Attitude and Perceived Risk to Optimize Intention to Adopt Based on Theory of Planned Behavior in Generation Z. Ekombis Review: Jurnal Ilmiah Ekonomi Dan Bisnis, 12(2), 1679–1694. https://doi.org/10.37676/ekombis.v12i2

Julia, L., Linggam, P. S., Hibatullah, R., & Justianto, J. S. (2024). The Impact of Perceived Risk and Technology Acceptance Model on Gen Z's Adoption of Digital Banking. WSEAS Transactions on Computer Research, 12, 1–18. https://doi.org/10.37394/232018.2024.12.1

Paleni, H., Suyadi, S., Indah, P, T. (2025). Ekombis Review-Jurnal Ilmiah Ekonomi dan Bisnis Increasing University Students Intentional Use Of QRIS E-Payment. Ekombis Review: Jurnal Ilmiah Ekonomi Dan Bisnis, 13(3), 1975–1984. https://doi.org/10.37676/ekombis.v13i3

Prasetyo, Y. T., Susanto, K. C., Chuang, K. H., Yin, R. T., Chen, J. W., Zhang, Y. X., Benito, O. P., Belmonte, Z. J. A., Cahigas, M. M. L., Nadlifatin, R., & Gumasing, M. J. J. (2025). Factors influencing the perceived usability of line pay: An extended technology acceptance model approach. Acta Psychologica, 255. https://doi.org/10.1016/j.actpsy.2025.104924

Ramayanti, R., Azhar, Z., & Nik Azman, N. H. (2025). Factors influencing intentions to use QRIS: A two-staged PLS-SEM and ANN approach. Telematics and Informatics Reports, 17. https://doi.org/10.1016/j.teler.2024.100185

Shahzad, A., Zahrullail, N., Akbar, A., Mohelska, H., & Hussain, A. (2022). COVID-19's Impact on Fintech Adoption: Behavioral Intention to Use the Financial Portal. Journal of Risk and Financial Management, 15(10). https://doi.org/10.3390/jrfm15100428

Venkatesh, V., & Davis, F. D. (2000). Theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. Management Science, 46(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

Zhao, H., & Khaliq, N. (2024). In quest of perceived risk determinants affecting intention to use fintech: Moderating effects of situational factors. Technological Forecasting and Social Change, 207. https://doi.org/10.1016/j.techfore.2024.123599