# QRIS ON THE RISE: THE ROLE OF PERCEIVED USEFULNESS, SECURITY, AND SOCIAL FACTORS ON INTENTION TO USE QRIS AS TRANSACTION PAYMENT INSTRUMENT IN GENBI SULUT

*QRIS DALAM PENINGKATAN: PERAN KEGUNAAN, KEAMANAN, DAN FAKTOR SOSIAL YANG DIRASAKAN TERHADAP NIAT MENGGUNAKAN QRIS SEBAGAI INSTRUMEN PEMBAYARAN TRANSAKSI PADA GENBI SULAWESI UTARA*

By:
**Steve C. Monintja**[1]
**Joy E. Tulung**[2]
**Merinda H. C. Pandowo**[3]

[123]International Business Administration, Management Department
Faculty of Economic and Business
Sam Ratulangi University, Manado

Email:
[1]stevemonintja062@student.unsrat.ac.id
[2]joy.tulung@unsrat.ac.id
[3]merindapandowo@unsrat.ac.id

**Abstract**: The rapid growth of digital payment systems has transformed financial transactions globally, with the Quick Response Code Indonesian Standard (QRIS) serving as a key initiative by Bank Indonesia to unify payment methods across providers. This study analyzes the role of perceived usefulness, security, and social factors on the intention to use QRIS among 148 GenBI Sulut members. Using a quantitative approach, the data were collected via a structured questionnaire and analyzed through multiple linear regression with Statistical Package for the Social Sciences (SPSS) version 26, following validity, reliability, and classical assumption tests. Results show that perceived usefulness significantly increases intention to use, while security and social factors have no significant partial effects; however, all three variables jointly have a significant influence, explaining 65.5% of variance. The findings suggest that QRIS adoption strategies should focus on enhancing perceived usefulness, ensuring security, and delivering positive user experiences.

**Keywords:** QRIS, Perceived Usefulness, Security, Social Factors, Intention to Use

*Abstrak: Pertumbuhan pesat sistem pembayaran digital telah mengubah transaksi keuangan secara global, dengan Quick Response Code Indonesian Standard (QRIS) yang diinisiasi oleh Bank Indonesia sebagai upaya utama untuk menyatukan metode pembayaran lintas penyedia. Penelitian ini menganalisis peran persepsi kemanfaatan, keamanan, dan faktor sosial terhadap minat menggunakan QRIS pada 148 anggota GenBI Sulut. Dengan menggunakan pendekatan kuantitatif, data dikumpulkan melalui kuesioner terstruktur dan dianalisis menggunakan regresi linier berganda dengan Statistical Package for the Social Sciences (SPSS) versi 26, setelah melalui uji validitas, reliabilitas, dan asumsi klasik. Hasil penelitian menunjukkan bahwa persepsi kemanfaatan secara signifikan meningkatkan minat menggunakan, sementara keamanan dan faktor sosial tidak berpengaruh signifikan secara parsial; namun secara simultan ketiga variabel tersebut memiliki pengaruh signifikan dengan kontribusi sebesar 65,5% terhadap variasi minat menggunakan. Temuan ini menyarankan bahwa strategi peningkatan adopsi QRIS perlu difokuskan pada peningkatan persepsi kemanfaatan, menjaga keamanan, dan memberikan pengalaman pengguna yang positif.*

***Kata Kunci**: QRIS, Persepsi Kemanfaatan, Keamanan, Faktor Sosial, Minat Menggunakan*

## INTRODUCTION

### Research Background

The global financial landscape is undergoing a profound and rapid transformation, largely driven by advancements in digital technology and the burgeoning financial technology (Fintech) sector. This shift marks a significant departure from traditional cash-based transactions towards innovative digital payment solutions, reshaping consumer behavior and business operations worldwide (Gomber et al., 2018). The convenience, speed, and efficiency offered by digital payments, such as mobile wallets, online transfers, and QR code-based systems,

have become increasingly appealing to modern consumers, particularly the younger, digitally-native generations (Dwivedi et al., 2021). This global phenomenon is not merely a technological upgrade but a fundamental societal shift towards a cashless and more interconnected digital economy.

Recognizing the immense potential of digital payments to foster financial inclusion, enhance economic efficiency, and support the growth of Micro, Small, and Medium-sized Enterprises (MSMEs), Bank Indonesia (BI) has actively championed initiatives to accelerate the adoption of digital transaction instruments (Bank Indonesia, 2019). A cornerstone of this national strategy is the Quick Response Code Indonesian Standard (QRIS), launched on August 17, 2019. QRIS was introduced to standardize QR code payments across all payment service providers in Indonesia, ensuring interoperability and ease of use for both consumers and merchants. This standardization eliminates the need for merchants to display multiple QR codes, simplifying transactions and accelerating the shift away from cash (Yadav & Singh, 2024). The widespread adoption of QRIS is thus critical for achieving Bank Indonesia's vision of a robust, efficient, and inclusive national payment system.

However, the successful implementation and widespread adoption of any new technology, including digital payment systems like QRIS, is not solely dependent on its technological infrastructure or regulatory backing. Ultimately, its success hinges on the willingness and intention of individual users to integrate it into their daily financial activities (Venkatesh et al., 2003). Despite Bank Indonesia's efforts and the clear benefits offered by QRIS, understanding the specific factors that drive or hinder consumer adoption remains a crucial area of inquiry. While the system's availability is a prerequisite, user perceptions of its value, trustworthiness, and social acceptance significantly determine their behavioral intention to use it.

To comprehensively understand consumer adoption of QRIS, this study focuses on three critical factors: Perceived Usefulness, Security, and Social Factors. Perceived usefulness is paramount as consumers adopt digital solutions only if they offer tangible benefits such as speed, efficiency, and convenience over traditional methods (Dwivedi et al., 2021; Chang et al., 2021). Given the sensitive nature of financial transactions, the perception of Security is equally vital; users must feel confident that their personal and financial data are protected from fraud and unauthorized access, fostering trust in the system (Kim et al., 2010; Liébana-Cabanillas et al., 2015). Furthermore, Social Factors play a substantial role, where opinions, recommendations, and observed behaviors of family, friends, and social networks can strongly influence individual decisions regarding technology adoption (Venkatesh et al., 2003).

This study specifically focuses on the intention to use QRIS among GenBI Sulut (Generasi Baru Indonesia Sulawesi Utara) members that spread across 6 colleges in North Sulawesi namely, Universitas Sam Ratulangi, Universitas Negeri Manado, Universitas Katolik De La Salle Manado, Universitas Klabat, Institut Agama Islam Negeri Manado, and Politeknik Negeri Manado. This demographic represents a critical segment of young, digitally-savvy individuals who are often early adopters of technology and actively involved in Bank Indonesia's community development and engagement programs. Their inherent digital literacy, coupled with their role as potential opinion leaders and advocates for BI initiatives, makes them a highly relevant population for understanding the dynamics of QRIS adoption.

**Research Objectives**

The objectives in conducting this research are:

1. To examine the influence of perceived usefulness towards the intention to use QRIS across students who are members of Generasi Baru Indonesia Sulawesi Utara (GenBI Sulut)
2. To examine the influence of security towards intention to use QRIS across students who are members of Generasi Baru Indonesia Sulawesi Utara (GenBI Sulut).
3. To examine the influence of social factors towards intention to use QRIS across students who are members of Generasi Baru Indonesia Sulawesi Utara (GenBI Sulut)
4. To examine whether perceived usefulness, security, and social factors collectively influence the intention to use QRIS across students who are members of Generasi Baru Indonesia Sulawesi Utara (GenBI Sulut).

## LITERATURE REVIEW

**Financial Management**

Financial management refers to the strategic oversight and control of an organization’s financial activities, including revenue generation, cost management, accounting, taxation, and risk mitigation (Sampson, 2023). Beyond ensuring operational stability, it encompasses strategic planning, investment decisions, and regulatory compliance

to achieve organizational goals effectively. Its core functions accounting, procurement, treasury, taxation, and financial planning collectively ensure that financial resources are efficiently allocated and sustained for growth and stability.

**Payment System**

A payment system serves as the infrastructure enabling the secure and efficient transfer of monetary value between parties (Bátiz-Lazo & Maixe-Gómez, 2021). Over time, payment systems have evolved from physical cash transactions to electronic and digital mechanisms, driven by the demand for speed, transparency, and security (Arner et al., 2016). Modern payment systems not only facilitate commerce but also underpin financial inclusion and national economic stability. The ongoing digital transformation of payment infrastructures thus represents a crucial foundation for economic modernization.

**Digital Payment**

Digital payments mark a major paradigm shift in financial transactions, enabling cashless exchanges through internet-enabled devices such as mobile phones and e-wallets. They offer convenience, accessibility, and efficiency while reducing operational costs and expanding financial inclusion (Dwivedi et al., 2021. However, adoption depends on users' perceptions of trust, security, and usability (Chang et al., 2021). Consequently, the success of digital payment initiatives such as QRIS relies not only on technology but also on users' behavioral acceptance and confidence in the system.

**Financial Technology (Fintech)**

Fintech combines finance and technology to transform the design and delivery of financial services, emphasizing accessibility, efficiency, and user-centered innovation (Gomber et al., 2018). It integrates emerging technologies such as AI, blockchain, and mobile computing to enhance service quality and reduce costs. In the payment sector, fintech has driven the creation of digital wallets and standardized QR-based payment systems. Drawing from innovation diffusion theory (Lee & Shin, 2020), fintech adoption depends on perceived advantages, compatibility, and ease of use, which are also central to understanding QRIS adoption dynamics.

**Previous Research**

Hanafi & Toolib (2021) assessed the adoption of digital payment among younger and older adults. Data was collected through an online questionnaire and successfully gathered 518 responses from two groups which is younger and older adults. The result revealed that for both groups, all three hypotheses propose have a significant effect on intention to use digital payment.

Phuong et al. (2024) aimed to identify the factors influencing the intention to continue using online payment applications among small and medium enterprises (SMEs) in Vietnam. Data were collected through a Google Forms survey targeting 388 businesses familiar with online payment technologies such as Banking, Momo, Zalo Pay, AirPay, and ViettelPay. The analysis reveals six key factors affecting the intention to continue using online payment applications: privacy security, social influence, perceived risk, perceived usefulness, information technology knowledge, and trust.

Chang et al. (2021) studies the motivation of customers to choose the QR code as a payment tool by developing an integrated model based on UTAUT 424 valid responses were collected from diversified socio-economic backgrounds to validate the proposed framework. Compared with the original UTAUT model, the new one integrates 'perceived security', 'perceived benefits' and excludes 'social influence' to provide more comprehensive and consistent guidance. Our study concluded that customers' intention to use QR code as the payment tool is jointly contributed by their attitude, perceived usefulness, and subjective norms toward using QR code as the payment method. The formation of customers' attitudes towards using QR code is affected by their perceived usefulness, perceived benefits, and subjective norms.

**Research Hypothesis**

$H_1$: Perceived Usefulness (X1) influences the intention to use (Y) QRIS across students who are members of GenBI Sulut

$H_2$: Security (X2) influences the intention to use (Y) QRIS across students who are members of GenBI Sulut

$H_3$: Social Factors (X3) influences the intention to use (Y) QRIS across students who are members of GenBI Sulut

$H_4$: Perceived Usefulness, Security, and Social Factors (X1, X2, and X3) collectively influence the intention to use (Y) QRIS across students who are members of Generasi Baru Indonesia Sulawesi Utara

**Conceptual Framework**

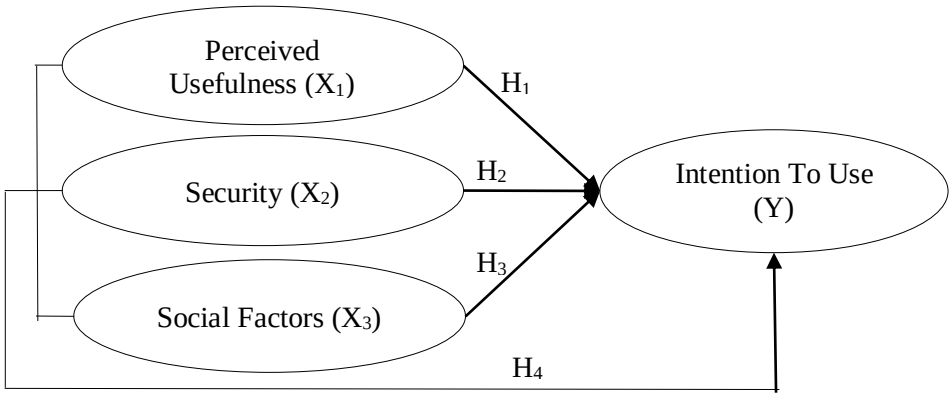


**Figure 1. Conceptual Framework**
*Source: Literature Review*

## RESEARCH METHOD

**Research Approach**

This study adopted a quantitative approach to achieve its objective. Quantitative research focuses on measuring the extent or amount of a phenomenon. It involves a structured experimental analysis of observable data using statistical, mathematical, or computational methods, typically presented in numerical forms such as percentages and statistical figures (Sugiyono, 2013).

**Population, Sample, and Sampling Technique**

The population of this study comprises active members of Generasi Baru Indonesia (GenBI) Sulut from six universities in North Sulawesi: Universitas Sam Ratulangi, Universitas Negeri Manado, Universitas Katolik De La Salle Manado, Universitas Klabat, Institut Agama Islam Negeri Manado, and Politeknik Negeri Manado. GenBI members were selected because they are young, digitally literate individuals who serve as Bank Indonesia's ambassadors for financial literacy and digital payment awareness, making them relevant subjects for studying QRIS adoption. From a total of 325 members, a sample of 126 respondents was determined using Slovin's formula with a 7% margin of error. Using a quota sampling technique, respondents were proportionally distributed 29 from Universitas Sam Ratulangi and around 20 from each of the other five universities to ensure balanced representation across all Universities.

**Type of Data and Data Source**

This study employs quantitative data analyzed using a descriptive quantitative approach, where numerical findings are interpreted into descriptive explanations. The data were obtained from primary sources, collected directly from respondents through a structured questionnaire without intermediaries (Roopa & Rani, 2012). The questionnaires were distributed to GenBI Sulut members across six universities in North Sulawesi using Google Forms, shared via email, messaging apps, and social media platforms to ensure accessibility and wide participation.

**Data Collection Method**

Data in this study were collected through a structured questionnaire adapted from previous research. The instrument consisted of four sections covering Perceived Usefulness, Security, Social Factors, and Intention to Use QRIS. All items were measured using a 7-point Likert Scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree), allowing respondents to express their level of agreement. The questionnaire was fully closed-ended to ensure clarity and facilitate quantitative analysis (Sugiyono, 2013; Roopa & Rani, 2012).

**Operational Definition and Indicators of Research Variable**

**Table 1. Operational Definition and Indicators of Research Variable**

| Variable | Definition | Indicators |
|---|---|---|
| Perceived Usefulness ($X_1$) | The degree to which a person believes that using QRIS will enhance their efficiency, effectiveness, and | 1. Efficiency<br>2. Effectiveness |

| | | |
|---|---|---|
| | productivity in conducting financial transactions conviniently. It reflects the user's perception of the benefits gained from adopting QRIS. | 3. Productivity<br>4. Convenience |
| Security ($X_2$) | The extent to which users perceive that using QRIS for transactions is safe, reliable, and protects their personal and financial information from unauthorized access, fraud, or misuse. It encompasses trust in the system's ability to maintain and integrity. | 1. Data Protection<br>2. Financial Transaction Security<br>3. Reliability |
| Social Factors ($X_3$) | The degree to which an individual perceives that important others (e.g., family, friends, peers, influential person, or groups like GenBI Sulut community members) believe they should use QRIS. It reflects the influence of social norms and peer recommendations on behavior. | 1. Peer Influence<br>2. Social Norms<br>3. Opinion Leaders |
| Intention to Use (Y) | The strength of an individual's conscious plan or desire to use QRIS for their financial transactions in the near future and recommend it to others. It reflects the likelihood that a user will adopt and continue to use the QRIS system. | 1. Frequency of Use<br>2. Willingness to Use<br>3. Future Use<br>4. Recommendation |

*(Source: Data Processed, 2025)*

**Testing of Research Instrument**

**Validity and Reliability Tests**

The research instruments were tested for both validity and reliability to ensure accuracy and consistency. The validity test was conducted using the Pearson Product-Moment correlation method (Chee, 2015) to confirm that each questionnaire item accurately measured its intended variable (Karnia, 2024).

The reliability test employed the Cronbach's Alpha coefficient, where values above 0.6 indicate acceptable internal consistency and reliability of the instrument, ensuring that responses remain stable and dependable across measurements.

**Data Analysis Method**

**Test of Classical Assumptions**

**Normality Test**

A normality test is also conducted to ensure that the residuals are normally distributed, where data are considered normal if the Asymp. Sig (2-tailed) value is ≥ 0.05 (Mishra et al., 2019).

**Multicollinearity Test**

The multicollinearity test is conducted to identify whether correlations exist among independent variables in the regression model. According to Shrestha (2020), multicollinearity can be detected by examining the tolerance and Variance Inflation Factor (VIF) values. The model is considered free from multicollinearity if the tolerance value > 0.1 and the VIF < 10; otherwise, if the tolerance is < 0.1 and the VIF exceeds 10, multicollinearity is present.

**Heterodasticity Test**

The heteroscedasticity test aims to determine whether the residuals in a regression model have constant variance across observations. According to Astivia & Zumbo (2019), when the variance of residuals remains equal, the data are said to exhibit homoscedasticity; however, if the variance differs between observations, heteroscedasticity is present, which can affect the accuracy of regression estimates.

**Multiple Linear Regression Analysis**

Multiple linear regression is used to analyze the relationship between two or more independent variables and a dependent variable. This method helps determine both the direction and magnitude of influence that the independent variables exert on the dependent variable (Shrestha, 2020). In this study, multiple regression is applied to examine how Perceived Usefulness, Security, and Social Factors affect the Intention to Use QRIS among members of Generasi Baru Indonesia Sulawesi Utara (GenBI Sulut).

**Coefficient of Correlation (R) and Coefficient of Determination ($R^2$)**

The correlation coefficient (R) measures the strength and direction of the relationship between independent and dependent variables, with values ranging from –1 (perfect negative correlation) to +1 (perfect positive correlation) (Schobber, 2018).

The coefficient of determination ($R^2$) indicates the extent to which these independent variables explain variations in the dependent variable. A higher $R^2$ value signifies that the model accounts for a greater proportion of the variance in intention to use QRIS, while a lower value suggests that other external factors may have a stronger influence (Cheng et al., 2014).

**Hypothesis Testing**

**T-Test**

The hypothesis testing in this study employs both the t-test and F-test to evaluate the influence of the independent variables Perceived Usefulness ($X_1$), Security ($X_2$), and Social Factors ($X_3$) on the dependent variable, Intention to Use QRIS (Y). The t-test examines the partial effect of each independent variable, where a Sig. value < 0.05 indicates a significant individual influence (Mishra et al., 2019).

**F-Test**

The F-test assesses the combined effect of all independent variables on the dependent variable, where the model is considered significant if the calculated F-value exceeds the F-table value at a significance level of 0.05. These tests collectively determine whether each variable and the model as a whole significantly affect users' intention to adopt QRIS.

## RESULT AND DISCUSSION

**Result**

**Validity and Reliability Test**

**Table 2. Validity Test Results**

| Variable | Indicator | Validity | | | Result |
|---|---|---|---|---|---|
| | | R-Count | R-Table | Sig | |
| Security ($X_2$) | X1.1.1 | .790** | 0,159 | 0,000 | Valid |
| | X1.1.2 | .800** | 0,159 | 0,000 | Valid |
| | X1.2.1 | .744** | 0,159 | 0,000 | Valid |
| | X1.2.2 | .805** | 0,159 | 0,000 | Valid |
| | X1.3.1 | .630** | 0,159 | 0,000 | Valid |
| | X1.3.2 | .777** | 0,159 | 0,000 | Valid |
| | X1.4.1 | .807** | 0,159 | 0,000 | Valid |
| | X1.4.2 | .781** | 0,159 | 0,000 | Valid |
| | X2.1.1 | .736** | 0,159 | 0,000 | Valid |
| | X2.1.2 | .756** | 0,159 | 0,000 | Valid |
| | X2.2.1 | .714** | 0,159 | 0,000 | Valid |
| | X2.2.2 | .787** | 0,159 | 0,000 | Valid |
| | X2.3.1 | .697** | 0,159 | 0,000 | Valid |
| | X2.3.2 | .818** | 0,159 | 0,000 | Valid |
| Social Factors ($X_3$) | X3.1.1 | .643** | 0,159 | 0,000 | Valid |
| | X3.1.2 | .683** | 0,159 | 0,000 | Valid |
| | X3.2.1 | .780** | 0,159 | 0,000 | Valid |
| | X3.2.2 | .746** | 0,159 | 0,000 | Valid |
| | X3.3.1 | .589** | 0,159 | 0,000 | Valid |
| | X3.3.2 | .501** | 0,159 | 0,000 | Valid |
| Intention to Use (Y) | Y.1.1 | .816** | 0,159 | 0,000 | Valid |
| | Y.1.2 | .819** | 0,159 | 0,000 | Valid |
| | Y.2.1 | .695** | 0,159 | 0,000 | Valid |
| | Y.2.2 | .652** | 0,159 | 0,000 | Valid |
| | Y.3.1 | .790** | 0,159 | 0,000 | Valid |

| | | | | | |
|---|---|---|---|---|---|
| | Y.3.2 | .780** | 0,159 | 0,000 | Valid |
| | Y.4.1 | .834** | 0,159 | 0,000 | Valid |
| | Y.4.2 | .802** | 0,159 | 0,000 | Valid |

*(Source: Data Processed by SPSS, 2025)*

Based on the table 2, it shows that all indicator statement items from the Perceived Usefulness ($X_1$), Security ($X_2$), and Social Factors ($X_3$), and Intention to Use QRIS (Y) variable have a pearson correlation value greater than r table (0,159). The entire statement of the research variable was valid.

**Reliability Test**

**Table 3. Reliability Test**

| Variable | Cronbach's Alpha | N of Items | Results |
|---|---|---|---|
| Perceived Usefulness (X1) | 0,932 | 8 | Reliable |
| Security (X2) | 0,934 | 6 | Reliable |
| Social Factors (X3) | 0,877 | 6 | Reliable |
| Intention to Use (Y) | 0,946 | 8 | Reliable |

*(Source: Data processed by SPSS, 2025)*

Based the table 3, it shows that all variable Perceived Usefulness ($X_1$), Security ($X_2$), and Social Factors ($X_3$), and Intention to Use QRIS (Y) have Cronbach Alpha value is greater than 0,6. It means that the measuring instrument is reliable.

**Normality Test**

**Table 4. Normality Test**

| | | Unstandardized Residual |
|---|---|---|
| N | | 148 |
| Normal Parameters[a,b] | Mean | .0000000 |
| | Std. Deviation | 4.82042704 |
| Most Extreme Differences | Absolute | .090 |
| | Positive | .055 |
| | Negative | -.090 |
| Test Statistic | | .090 |
| Asymp. Sig. (2-tailed)[c] | | .050[c] |

*(Source: Data processed by SPSS, 2025)*

Table 4 shows that the significant value of the test is 0,50 which it lies on the decision threshold of value 0,05. It indicates that the data is normally distributed and can be used in this research.

**Multicollinearity Test Result**

**Table 5. Multicollinearity Test Result**

| Model | Collinearity Statistics | | Status |
|---|---|---|---|
| | Tolerance | VIF | |
| Perceived Usefulness (X1) | 0.376 | 2.657 | No Multicollinearity |
| Security (X2) | 0.379 | 2.641 | No Multicollinearity |
| Social Factors (X3) | 0.544 | 1.838 | No Multicollinearity |

*(Source: Data processed by SPSS, 2025)*

Based on the results shown in Table 5, the tolerance values for all three independent variables are greater than 0.10. Similarly, the Variance Inflation Factor (VIF) values for all variables are below 10. Since all variables meet these criteria, it can be concluded that no multicollinearity is present among the independent variables in this regression model.

**Heteroscedasticity Test**

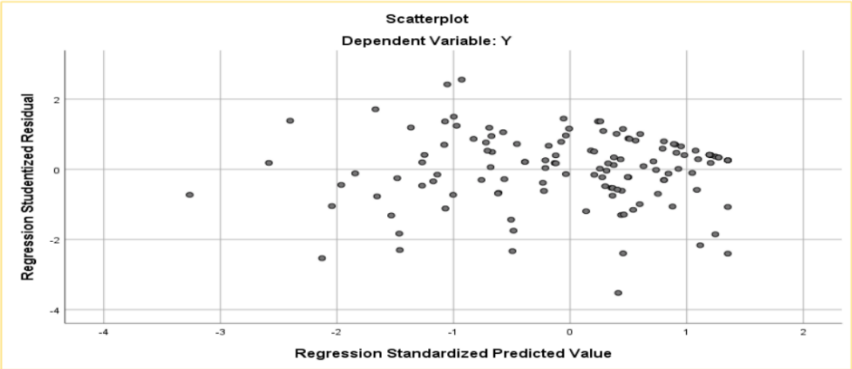


**Figure 2. Scatterplot**
*(Source: Data processed by SPSS, 2025)*

The scatterplot shown in figure 2 indicate that there is no clear or specific pattern such as a funnel shape, wave-like formation, or systematic clustering. It concludes there is no indication of heteroscedasticity in the regression model, as a result, the estimation of regression coefficients is reliable, and the hypothesis testing results for each independent variable remain valid.

**Multiple Linear Regression Analysis**

**Table 6. Multiple Regression Analysis**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -152 | 2.944 | | -.052 | .959 |
| | Perceived Usefulness ($X_1$) | .747 | .094 | .637 | 7.975 | .000 |
| | Security ($X_2$) | .169 | .112 | .121 | 1.516 | .132 |
| | Social Factors ($X_3$) | .137 | .083 | .110 | 1.653 | .101 |

*(Source: Data processed by SPSS, 2025)*

Based on table 6, the multiple linear regression analysis can be described as follows:

1. The constant value (-0.152) indicates that if all independent variables Perceived Usefulness ($X_1$), Security ($X_2$), and Social Factors ($X_3$) are equal to zero, the predicted value of Intention to Use QRIS would be -0.152. While this situation is not realistic, it serves as the baseline or intercept of the regression equation.
2. The coefficient of Perceived Usefulness (0.747) shows that for every one-unit increase in Perceived Usefulness, assuming other variables remain constant, the Intention to Use QRIS is expected to increase by 0.747 units. With a significance value of 0.000 (<0.05), this variable has a statistically significant and positive effect, making it the most influential factor with a standardized beta of 0.637.
3. The coefficients of Security (0.169) and Social Factors (0.137) indicate positive but insignificant relationships with Intention to Use QRIS, as their significance values of 0.132 and 0.101 exceed the 0.05 threshold. This suggests that while both factors tend to increase the intention to use QRIS, their effects are not strong enough to be considered statistically meaningful within this model.

**Coefficient of Correlation (R) and Coefficient of Determination ($R^2$)**

**Table 7. Coefficient of Correlation (R)** and **Coefficient of Determination ($R^2$)**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .809[a] | .655 | .648 | 4.870 |

*(Source: Data processed by SPSS, 2025)*

Based on Table 7, the multiple correlation coefficient (R) value of 0.809 indicates a very strong positive relationship between the independent variables Perceived Usefulness, Security, and Social Factors and the dependent variable, Intention to Use QRIS, among GenBI Sulut members. The coefficient of determination ($R^2$) obtained in this model

is 0.655. This means that 65.5% of the variation in Intention to Use QRIS can be explained by the three independent variables: Perceived Usefulness, Security, and Social Factors.

**Hypotheses Test Results**

**T-Test Result (Partial)**

Based on table 6, the results obtained are:

1. Perceived Usefulness ($X_1$) has a significant positive effect on Intention to Use QRIS, with a Sig. value of 0.000 (<0.05) and B = 0.747, meaning higher perceived usefulness increases users' intention to use. Based on this result, the null hypothesis ($H_{01}$) is rejected, and the alternative hypothesis ($H_1$) is accepted.
2. Security ($X_2$) shows a positive but insignificant effect (Sig. = 0.132 > 0.05, B = 0.169), indicating that security perception does not significantly influence intention to use QRIS. Based on this result, the null hypothesis ($H_{02}$) is accepted, and the alternative hypothesis ($H_2$) is rejected.
3. Social Factors ($X_3$) also have a positive but insignificant effect (Sig. = 0.101 > 0.05, B = 0.137), suggesting social influence is not a determining factor in this model. As a result, the null hypothesis ($H_{03}$) is accepted, and the alternative hypothesis ($H_3$) is rejected.

**F-Test Result (Simultaneous)**

**Table 8. F-test Result**

**ANOVA[a]**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 6479.171 | 3 | 2159.724 | 91.048 | .000b |
| | Residual | 3415.768 | 144 | 23.721 | | |
| | Total | 9894.939 | 147 | | | |

*(Source: Data processed by SPSS, 2025)*

Table 8 presents the results of the F-test, Perceived Usefulness ($X_1$), Security ($X_2$), and Social Factors ($X_3$) simultaneously have a significant effect on the Intention to Use QRIS among GenBI Sulut members. Therefore, it can be concluded that the null hypothesis (H04) is rejected and the alternative hypothesis (H4) is accepted, confirming that the regression model fits well and aligns with the extended Technology Acceptance Model (TAM).

**Discussion**

**The Influence of Perceived Usefulness on Intention to Use**

The findings of this study indicate that Perceived Usefulness (X1) has a positive and statistically significant effect on the Intention to Use QRIS among students who are members of GenBI Sulut. This result confirms that when GenBI Sulut members perceive QRIS as a beneficial, efficient, and practical payment tool for their financial transactions, their likelihood of adopting and using the service increases substantially. This finding reinforces the assumptions of the Technology Acceptance Model (TAM) proposed by Davis (1989), which highlights perceived usefulness as one of the primary determinants of an individual's intention to adopt a new technology. Similar results were also observed in previous research conducted by Ho & Lim (2021) and Morosan & DeFranco (2016), which concluded that perceived usefulness strongly influences behavioral intention in technology adoption contexts. In the specific context of QRIS adoption among GenBI Sulut members, this finding indicates that perceived benefits such as faster, more convenient, and more productive transaction processes play a pivotal role in driving digital payment adoption.

**The Influence of Security on Intention to Use**

The results of this study demonstrate that the Security variable (X2) does not have a statistically significant effect on the Intention to Use QRIS among GenBI Sulut members. This suggests that the respondents' intention to use QRIS is not significantly driven by concerns about transaction safety, data protection, or system reliability within this particular group. One possible explanation for this finding is that QRIS has already achieved a certain level of credibility and security assurance within the GenBI Sulut community. According to the classification results in this study, the majority of respondents have used QRIS frequently and for a considerable duration, with 75% having more than one year of usage experience. Such prolonged use likely fosters familiarity and reduces security-related concerns, thereby diminishing its direct influence on intention. This findings differ from Phuong et al. (2024), who reported a significant role of security in shaping continued usage of online payment applications among SMEs in Vietnam. However, this finding is consistent with research by Agustin (2023), which found that in communities with

established digital payment habits, security tends to become a secondary consideration after perceived usefulness. It also implies that for mature or highly engaged user groups like GenBI Sulut, security measures might be seen as standard and expected, thus no longer functioning as a differentiating factor in using QRIS decisions.

**The Influence of Social Factors on Intention to Use**

The empirical results of this study reveal that Social Factors (X3) also do not have a statistically significant influence on the Intention to Use QRIS among students in GenBI Sulut. This suggests that although peer influence, social norms, and recommendations from family or GenBI peers might be present, they do not significantly shape the respondents' intention to use QRIS in this context. This finding may be attributed to the demographic profile of the respondents, who are mostly young students actively engaged in digital financial platforms. The majority have already integrated QRIS into their daily transactional routines, as shown by the high frequency of use reported in this study. Within such a digitally literate and tech-savvy environment, social approval or peer recommendation may no longer play a decisive role in influencing adoption intention. This result is in line with Ramayanti et al. (2024), who observed that for technology-experienced groups, intention to use is primarily shaped by perceived usefulness and system performance rather than external social influences. Consequently, although social endorsement remains important in the early stages of technology diffusion, its impact may diminish as users become self-reliant and develop personal trust in the system's benefits.

**The Influence of Perceived Usefulness, Security, and Social Factors on Intention to Use**

Simultaneously, the results of the F-test indicate that Perceived Usefulness, Security, and Social Factors collectively exert a significant effect on the Intention to Use QRIS among GenBI Sulut members. This indicates that when considered together, these three independent variables significantly predict the intention to use QRIS within this community. These findings corroborate the theoretical foundation of the Technology Acceptance Model (TAM), which posits that multiple interrelated factors influence the acceptance and use of new technologies. While the individual effects of Security and Social Factors are not statistically significant when tested separately, their collective influence, along with Perceived Usefulness, contributes meaningfully to explaining the variation in Intention to Use QRIS. This emphasizes the importance of addressing both technical (usefulness and security) and social dimensions in promoting QRIS adoption initiatives, as their aggregated effect remains substantial even if individual factors vary in their significance.

## CONCLUSION AND RECOMMENDATION

**Conclusion**

Based on the research findings, several conclusions can be drawn related with the research problems proposed:

1. Perceived Usefulness has a significant positive effect on the Intention to Use QRIS among GenBI Sulut members. Indicators of efficiency, effectiveness, productivity, and convenience strongly motivate students to adopt and continue using QRIS as a practical and beneficial payment tool.
2. Security has no significant influence on students' intention to use QRIS. Most respondents already trust the system's reliability and data protection, as many have used QRIS for over a year, making security a secondary consideration in their continued usage.
3. Social Factors also do not significantly affect the intention to use QRIS. Peer influence and social norms have limited impact, as GenBI Sulut members tend to rely on personal experience and perceived benefits rather than social encouragement in deciding to use QRIS.
4. Simultaneously, Perceived Usefulness, Security, and Social Factors have a significant simultaneous effect on the intention to use QRIS, with Perceived Usefulness emerging as the most dominant factor. This highlights that practical advantages such as efficiency and convenience remain the key drivers of QRIS adoption among GenBI Sulut members.

**Recommendation**

Based on the study findings, several recommendations are proposed:

1. Bank Indonesia and QRIS providers can strengthen financial literacy programs through GenBI and university collaborations, emphasizing the practical benefits and ease of QRIS for daily transactions. Targeted campaigns on security standards and interoperability are also needed to enhance user trust. Continuous improvement of

system reliability, transaction speed, and data protection transparency will further increase public confidence and encourage adoption.

2. GenBI Sulut encouraged to actively promote QRIS through peer education, workshops, and digital payment campaigns to sustain awareness and usage among students. Collaborating with campus merchants and nearby SMEs can help expand QRIS adoption and strengthen the cashless ecosystem within academic settings.
3. SMEs encouraged to adopt QRIS as a primary payment option to align with students' growing preference for cashless transactions. Participation in Bank Indonesia's digitalization programs and collaborations with GenBI in QRIS promotions such as discounts or cashback can help increase visibility and transaction volume, while integrating QRIS into marketing efforts attracts more young consumers.
4. Future research can include additional variables such as perceived ease of use, trust, and perceived risk to provide broader insights into QRIS adoption. Comparative or mixed-method studies across different user groups are also recommended to explore deeper behavioral differences and motivations in adopting digital payments.

## REFERENCES

Agustin, R. (2023). *Pengaruh Kemudahan, Kecepatan, dan Keamanan terhadap Minat Menggunakan Sistem Pembayaran Quick Response Code Indonesian Standard (QRIS) pada Nasabah Bank Rakyat Indonesia Kantor Cabang Jember*. (Skripsi, UIN KH Achmad SIddiq Jember). https://digilib.uinkhas.ac.id/22200/

Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The Evolution Of Fintech: A New Post-Crisis Paradigm? *Georgetown Journal of International Law*, 47(4), 1271–1319. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2676553

Astivia, O. L. O., & Zumbo, B. D. (2019). Heteroskedasticity in Multiple Regression Analysis: What it is, How to Detect it and How to Solve it with Applications in R and SPSS. *Practical Assessment, Research & Evaluation*, Vol. 24, No. 1. https://openpublishing.library.umass.edu/pare/article/1590/galley/1541/view/

Batiz-Lazo, B., & Buckley, T. (2021). *Early "Frictions" in the Transition towards Cashless Payments*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3889737

Chang, V., Chen, W., Xu, Q. A., & Xiong, C. (2021). Towards the Customers' Intention to Use QR Codes in Mobile Payments. *Journal of Global Information Management (JGIM)*, 29(6), 1-21. https://www.igi-global.com/article/towards-the-customers-intention-to-use-qr-codes-in-mobile-payments/276945

Chee, J. D. (2015). *Pearson's Product-Moment Correlation: Sample Analysis.* https://www.researchgate.net/publication/277324930_Pearson's_Product-Moment_Correlation_Sample_Analysis

Cheng, C.-L., Shalabh., & Garg, G. (2014). Coefficient Of Determination For Multiple Measurement Error Models. *Journal of Multivariate Analysis*, Vol. 126, 137-152. https://www.sciencedirect.com/science/article/pii/S0047259X14000141

Davis, F. (1989). Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology. *MIS Quarterly*, 13(3), 319–340. https://www.jstor.org/stable/249008

Dwivedi, Y.K., Ismagilova, E., Hughes, D.L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A.S., Kumar, V., Rahman, M.M., Raman, R., Rauschnabel, P.A., Rowley, J., Salo, J., Tran, G.A., & Wa, Y. (2021). Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy. *International Journal of Information Management*, 57, Article 101994. https://eprints.whiterose.ac.uk/id/eprint/163654/1/1-s2.0-S0268401220308082-main.pdf

Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On The Fintech Revolution: Interpreting The Forces Of Innovation, Disruption, And Transformation In Financial Services. *Journal of Management*

*Information Systems*, 35(1), 220–265. https://www.tandfonline.com/doi/abs/10.1080/07421222.2018.1440766

Hanafi, W. N. W., & Toolib, S. N. (2020). Influences of Perceived Usefulness, Perceived Ease of Use, and Perceived Security on Intention to Use Digital Payment: A Comparative Study Among Malaysian Younger and Older Adults. *International Journal of Business Management (IJBM)*, Vol. 3, No. 1, Special Issue/Articles. https://journal.uniten.edu.my/index.php/ijbm/article/view/225

Ho, J. C., & Lim, J. S. (2021). Factors influencing the adoption of QR code mobile payment in Malaysia. Asian Journal of Business Research, 11(2), 1–24.

Ibrahim, M. H., Hussin, S . R., & Hussin, S. H. (2019). Factors Influencing Malaysian Consumers' Intention to Use Quick Response (QR) Mobile Payment. *Jurnal Pengurusan*, 57. https://www.ukm.my/jurnalpengurusan/wp-content/uploads/2022/10/jp_57-2.pdf

Karnia, R. (2024). Importance of Reliability and Validity in Research. *Psychology and Behavioral Sciences*, 13(6), 137-141. https://www.sciencepublishinggroup.com/article/10.11648/j.pbs.20241306.11

Kim, C., Tao, W., Shin, N., & Kim, K. S. (2010). An Empirical Study Of Customers' Perceptions Of Security And Trust In E-Payment Systems. *Electronic Commerce Research and Applications*, 9(1), 84–95. https://www.sciencedirect.com/science/article/abs/pii/S1567422309000283

Lee, I., & Shin, Y. J. (2020). Fintech: Ecosystem, Business Models, Investment Decisions, And Challenges. *Business Horizons*, 63(1), 35–46. https://www.sciencedirect.com/science/article/abs/pii/S0007681317301246

Liébana-Cabanillas, F., Ramos De Luna, I., & Montoro-Ríos, F. J. (2015). User Behaviour in QR Mobile Payment System: The QR Payment Acceptance Model. *Technology Analysis & Strategic Management*, 27, 1031-1049. https://www.tandfonline.com/doi/full/10.1080/09537325.2015.1047757

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive Statistics And Normality Tests For Statistical Data. *Annals Of Cardiac Anaesthesia*, 22(1), 67–72. https://pmc.ncbi.nlm.nih.gov/articles/PMC6350423/

Morosan, C., & DeFranco, A. (2016). It's About Time: Revisiting UTAUT2 To Examine Consumers' Intentions To Use NFC Mobile Payments In Hotels. *International Journal of Hospitality Management*, Vol. 53, 17-29. https://www.sciencedirect.com/science/article/abs/pii/S0278431915001735

Phuong, G. N. T., dong., T. T., Phuong, D. N. B., Huu, H. L., &nHong, N. L. T. (2024). Factors Affecting the Intention to Continue Using Online Payment Applications of SMEs at Viet Nam. *Theoretical and Practical Research in Economic Fields*, Vol. 15, No. 4, 1023-1038. https://journals.aserspublishing.eu/tpref/article/view/8691

Ramayanti, R., Azhar, Z., & Azman, N. (2024). Factors Influencing Intentions To Use QRIS: A Two-Staged PLS-SEM And ANN Approach. *International Journal of Business Information Systems*, 43(2), 221–239. https://www.researchgate.net/publication/387197592_Factors_influencing_intentions_to_use_QRIS_A_two-staged_PLS-SEM_and_ANN_approach

Roopa, S., & Rani, M. S. (2012). Questionnaire Designing For A Survey. *Journal of Indian Orthodontic Society*, 46(4), 273–277. https://journals.sagepub.com/doi/pdf/10.5005/jp-journals-10021-1104

Sampson. (2023, January). What is financial management? An expert guide. Oracle. https://www.oracle.com/za/erp/financials/financial-management/

Schober, P., Boer, C., & Schwarte, L. (2018) Correlation Coefficients: Appropriate Use and Interpretation. *Anesthesia & Anesthesia*, 126, 1763-1768. https://journals.lww.com/anesthesia-analgesia/fulltext/2018/05000/correlation_coefficients__appropriate_use_and.50.aspx

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics*, 9(1):4-11. https://pubs.sciepub.com/ajams/9/1/2/index.html

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance Of Information Technology: Toward A Unified View. *MIS Quarterly*, 27(3), 425–478. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3375136