

## THE IMPACT OF E-TRUST ON USERS' CONTINUANCE INTENTION TOWARD QRIS USAGE IN CASHLESS SOCIETY

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### ABSTRACT

This study aims to examine the impact of Electronic Trust (E-Trust) on the Continuance Intention of QRIS (Quick Response Code Indonesian Standard) usage within Indonesia's cashless society. Employing a descriptive-verified quantitative approach, data were collected from 100 active QRIS users through purposive sampling to ensure experience-based responses. The instrument consisted of 17 valid and reliable items (Cronbach's Alpha = 0.953). Data were obtained via an online questionnaire using a five-point Likert scale and analyzed using simple linear regression after passing the validity, reliability, normality, and linearity tests. The results show that E-Trust has a strong and positive influence on Continuance Intention ( $R = 0.786$ ;  $R^2 = 0.619$ ;  $\beta = 0.443$ ;  $p < 0.001$ ), meaning that 61.9% of users' willingness to continue using QRIS is explained by their trust in the system's integrity, security, and reliability. Therefore, the hypothesis (H1) stating that E-Trust has a positive and significant effect on Continuance Intention is accepted. These findings confirm that trust functions not only as psychological assurance but also as a behavioral driver sustaining user engagement in digital payments. Theoretically, this research reinforces the Expectation Confirmation Model and Consumer Behavior theory, while practically recommending that policymakers and service providers enhance transparency, strengthen anti-fraud mechanisms, and ensure user protection to maintain long-term trust and adoption in Indonesia's cashless ecosystem.

Keywords: QRIS; electronic trust; continuance intention; cashless society; digital payments

### INTRODUCTION

In recent years, Indonesia has experienced a rapid transformation toward digital payments, with the Quick Response Code Indonesian Standard (QRIS) leading the nation's transition toward a cashless society. As of the first semester of 2025, QRIS has reached 57 million users and 39.3 million merchants, facilitating 6.05 billion transactions valued at IDR 579 trillion (Bank Indonesia, 2025). These figures demonstrate QRIS's deep integration within Indonesia's national payment ecosystem. However, a critical question persists—whether users continue using QRIS consistently over time or discontinue after initial adoption. This issue, known as *continuance intention*, is fundamental for evaluating the long-term sustainability of digital payment systems.

Globally, the cybersecurity landscape surrounding QR-based payments has intensified. The *APWG Phishing Activity Trends Report Q1 2025* recorded over one million phishing attacks in a single quarter, highlighting a sharp rise in QR code-based phishing (“quishing”), which redirects users to fraudulent or malware-infected websites (APWG, 2025). In Indonesia, the risk has become increasingly concrete. BBC Indonesia (2025) reported that a suspect identified as MIML allegedly attached fake QRIS donation stickers to 38 mosques across Jakarta since April 1, 2023, diverting public charity funds into personal accounts. Similarly, CNBC Indonesia (2025) revealed a new scam method in which cybercriminals use counterfeit QRIS codes embedded with malicious links to drain victims' bank accounts instantly.

Despite these escalating risks, QRIS usage continues to expand nationwide, suggesting that users' *Electronic Trust (E-Trust)*—their belief in the system's integrity, security, and reliability—remains a decisive factor in sustaining continued usage amid growing digital fraud threats. Empirical evidence supports this view. Wicaksono (2025) found that trust significantly predicts QRIS continuance intention, while satisfaction and perceived usefulness exert no direct influence. Similarly, Herviana and Abidin (2024) confirmed that trust and satisfaction jointly determine continuance intention among QRIS users, and Ansori and Nugroho (2024) demonstrated that trust directly and positively affects continuance intention in mobile payment applications. These findings underline that user trust in the integrity, security, and technological reliability of digital payment systems is fundamental to behavioral persistence, even under increasing cybersecurity uncertainty.

Nevertheless, most previous research has not isolated E-Trust as a standalone independent variable within the QRIS context, often embedding it within broader theoretical frameworks such as the Expectation-Confirmation Model (ECM) or Information System Success Model (ISSM). Consequently, a conceptual and empirical gap remains regarding how trust directly influences continuance intention in Indonesia's evolving cashless ecosystem.

Accordingly, this study aims to address that gap by examining E-Trust as the primary antecedent of Continuance Intention in QRIS usage. The novelty lies in exploring how users' electronic trust drives sustained QRIS adoption despite growing digital fraud incidents, contributing to a deeper understanding of trust-based behavioral continuity in Indonesia's digital economy.

**H1:** *E-Trust has a positive and significant effect on the Continuance Intention of QRIS usage in the cashless society.*

## METHOD

This study employs a quantitative descriptive-verification approach to examine the effect of Electronic Trust (E-Trust) on the Continuance Intention of QRIS usage within Indonesia's cashless society. Quantitative research enables objective measurement and hypothesis testing through numerical data and statistical analysis, allowing the identification of causal relationships between variables (Malhotra & Dash, 2020; Hair et al., 2021). The research population consists of individuals who have used QRIS for digital payments in Indonesia. Given the continuously expanding number of users, the population is classified as infinite. Using the Isaac and Michael (1981) formula with a 10% margin of error, a sample of 100 respondents was determined as appropriate for small-scale quantitative research. The sampling technique applied was purposive sampling, targeting respondents who had used QRIS for at least three consecutive months to ensure experience-based responses. Data were collected through an online questionnaire distributed via Google Forms, employing a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The research instrument measured two constructs: (1) E-Trust, adapted from Mayer et al. (1995), encompassing three dimensions integrity, benevolence, and competence; and (2) Continuance Intention, adapted from Bhattacharjee (2001), comprising intention to continue, future usage plan, commitment, and preference to reuse. All indicators were measured on an interval scale and had demonstrated internal reliability coefficients (Cronbach's  $\alpha > 0.70$ ) in prior research (Hair et al., 2021). Data analysis employed simple linear regression to test the direct effect of E-Trust on Continuance Intention. Prior to hypothesis testing, validity and reliability tests were conducted, followed by classical assumption tests including normality, heteroscedasticity, and linearity to ensure data quality. Hypothesis testing was performed at a 0.05 significance level to determine whether E-Trust significantly influences users' willingness to continue using QRIS amid growing digital fraud risks.

## RESULTS AND DISCUSSION

Based on data collected from 100 active QRIS users across Indonesia, this mini quantitative study found that Electronic Trust (E-Trust) has a significant and positive influence on the Continuance Intention of QRIS usage.

**Table 1. Respondents' Demographic Characteristics**

Demographic Profile	Category	Percentage (%)
<b>Gender</b>	Male	50
	Female	50
<b>Age</b>	< 20 years old	22
	20–29 years old	44
	30–39 years old	34
<b>QRIS Usage Frequency per Month</b>	>10 times	100

(Source: Primary Data Processed, 2025)

As shown in Table 1, the respondents consisted of an equal proportion of males and females (50% each), indicating balanced gender representation. The majority of users were aged 20–29 years (44%), followed by those aged 30–39 years (34%), and users under 20 years (22%). This suggests that QRIS adoption is most prevalent among young adults who are digitally literate and highly engaged in cashless transactions. All respondents reported using QRIS more than ten times per month, confirming their active engagement and habitual reliance on the platform. Prior to hypothesis testing, instrument validation was conducted to ensure data quality. The validity test using Pearson Product Moment showed that all statement items had correlation coefficients ( $r$  count) greater than the critical value ( $r_{table} = 0.195$ ) with Sig. (2-tailed) =  $0.000 < 0.05$ , indicating that all 17 items were valid and measured the intended construct. Reliability analysis using Cronbach's Alpha produced a coefficient of 0.953, which exceeds the threshold of 0.70, demonstrating that the instrument possesses high internal consistency and reliability. Hence, the questionnaire used in this study can be trusted to produce accurate and consistent data.

**Table 2. One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Predicted Value
N		100
Normal Parameters <sup>a,b</sup>	Mean	27.7000000
	Std.Deviation	2.67228471
Most Extreme Differences	Absolute	.087
	Positive	.055
	Negative	.087
Test Statistic		.059
Asymp. Sig. (2-tailed) <sup>c</sup>	Sig.	.063
	99% Confidence Interval	
	Lower Bound	.057
	Upper Bound	.069

Source: Processed Primary Data (2025)

The results of the **normality test** using the One-Sample Kolmogorov–Smirnov method are presented in Table 2. The obtained Asymp. Sig. (2-tailed) value of 0.059 and Monte Carlo Sig. value of 0.063 are greater than 0.05, indicating that the residual data are normally distributed. Thus, the assumption of normality is fulfilled, and regression analysis can be appropriately applied

**Table 3. Anova Table for Linearity**

			Sum of Squares	df	Mean Square	F	Sig.
Continuance Intention *E-Trust	Between Groups	(Combined)	819.195	26	31.507	7.103	<.001
		Linearity	706.969	1	706.969	159.382	<.001
		Deviation from Linearity	112.225	25	4.489	1.012	.464
	Within Groups		323.805	73	4.436		
Total			1143.000	99			

Source: Processed Primary Data (2025)

The **linearity test** results, shown in Table 3, confirm that the relationship between *E-Trust* and *Continuance Intention* is linear. The significance value for Linearity is less than 0.001 (significant), while the Deviation from Linearity is 0.464 ( $> 0.05$ , not significant). This indicates that the relationship between the two variables follows a linear pattern, fulfilling the linearity assumption required for regression and the **simple linear regression analysis** presented in Table 4 shows that :

**Table 4. Result of Simple Linear Regression Analysis**

Variable	Unstandardized Coefficient (B)	Std. Error	Standardized Coefficient (Beta)	t	Sig. (p)	R	R <sup>2</sup>	F	Sig. (Model)
(Constant)	17.664	0.824	–	21.445	< 0.001				
E-Trust	0.443	0.035	0.786	12.605	< 0.001	0.786	0.619	7.103	< 0.001
<b>Interpretation</b>	E-Trust significantly and positively affects Continuance Intention (p < 0.001).								

Source: Processed Primary Data (2025)

The correlation coefficient (R) between *E-Trust* and *Continuance Intention* is 0.786, indicating a strong positive relationship. The coefficient of determination ( $R^2$ ) is 0.619, meaning that 61.9% of the variation in *Continuance Intention* can be explained by *E-Trust*, while 38.1% is influenced by other factors such as perceived value, satisfaction, and habit. The regression equation formed is  $Y = 17.664 + 0.443X$ , where *E-Trust* contributes positively and significantly ( $\beta = 0.443$ ;  $t = 12.605$ ;  $p < 0.001$ ) to *Continuance Intention*.

These findings empirically support the hypothesis that higher *E-Trust* leads to stronger *Continuance Intention*. In practical terms, users who trust QRIS—believing it to be secure, transparent, and reliable—tend to maintain their continued use of the platform. This result aligns with Mayer et al. (1995), who conceptualized trust through integrity, benevolence, and competence, which collectively sustain long-term behavioral engagement. In the context of QRIS, integrity reflects users' confidence in transparent and secure transactions; benevolence reflects the perception that providers prioritize consumer welfare; and competence represents the reliability and technological capability of the system.

The findings are consistent with previous research by Wicaksono (2025), who found that trust and habit significantly affect QRIS continuance intention amid rising digital fraud cases. Similarly, Hamid et al. (2025) and Shofia (2023) identified trust—alongside satisfaction and perceived usefulness—as key predictors of e-wallet users' continuance intention. Despite media reports (BBC Indonesia, 2025; CNBC Indonesia, 2025) regarding incidents of counterfeit QRIS codes and phishing-based fraud, users' willingness to continue using QRIS remains high. This resilience demonstrates the strong institutional credibility of QRIS, regulatory assurance from Bank Indonesia, and the existence of technological safeguards such as encryption and two-step verification.

Theoretically, these findings reinforce the **Expectation Confirmation Model (Bhattacharjee, 2001)** and the **Consumer Behavior Theory (Schiffman & Wisenblit, 2019)**, confirming that trust plays a central role in post-adoption behavior. Practically, they emphasize the need for policymakers and service providers to enhance transparency, improve anti-fraud mechanisms, and strengthen user education to sustain digital trust. Overall, *E-Trust* functions as a fundamental driver of *Continuance Intention*, establishing trust as a cornerstone of digital payment sustainability within Indonesia's rapidly evolving cashless ecosystem.

## CONCLUSION

This study concludes that **Electronic Trust (E-Trust)** serves as a key determinant influencing the **Continuance Intention** of QRIS users in Indonesia's digital payment ecosystem. The empirical results demonstrate that users' confidence in the integrity, reliability, and security of QRIS significantly strengthens their willingness to continue using the platform. These findings highlight that trust not only functions as a psychological assurance but also as a behavioral driver that sustains user engagement in cashless transactions. Theoretically, this research reinforces the Expectation Confirmation Model and Consumer Behavior theory, positioning trust as a central post-adoption construct in technology acceptance. Practically, the findings suggest that enhancing digital trust through improved transparency, fraud prevention, and user protection mechanisms is crucial for maintaining long-term adoption and public confidence in national payment innovations. Future studies are encouraged to incorporate additional variables such as perceived value, satisfaction, and habit to develop a more comprehensive understanding of continuance intention in Indonesia's evolving digital finance landscape.

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