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MANAGEMENT

Exploring QRIS Continuance Use Intention Among Generation Z: Integrating TAM and ECM with Trust and Perceived Risk as Moderators

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ABSTRACT

Purpose: This study aims to investigate the impact of perceived value and service quality on the continuance use intention of QRIS among Generation Z, with user satisfaction serving as a mediating variable, and trust and perceived risk as moderating variables.

Method: A quantitative research approach was employed, utilizing a survey conducted with 240 Generation Z respondents in Solo Raya who have used QRIS in their daily transactions. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS 4 software.

Result: The findings indicate that both perceived value and service quality positively influence user satisfaction. Additionally, perceived value and user satisfaction significantly affect continuance use intention. Although service quality does not have a direct effect, it indirectly influences continuance use intention through user satisfaction. Trust and perceived risk, however, do not moderate the relationship between user satisfaction and continuance use intention.

Practical Implications for Economic Growth and Development: This study supports Indonesia's digital economy agenda by identifying strategies to sustain QRIS adoption among youth. By strengthening perceived value and service quality, QRIS can enhance financial inclusion, improve transaction efficiency, and foster the digital integration of MSMEs.

Originality/Value: This study offers a unique contribution by integrating the Technology Acceptance Model (TAM) and the Expectation Confirmation Model (ECM) within the QRIS context. It also examines trust and perceived risk as moderators between user satisfaction and continuance use intention.

Keywords: *Generation Z, QRIS, Continuance Use Intention, Perceived Value, Service Quality*

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INTRODUCTION

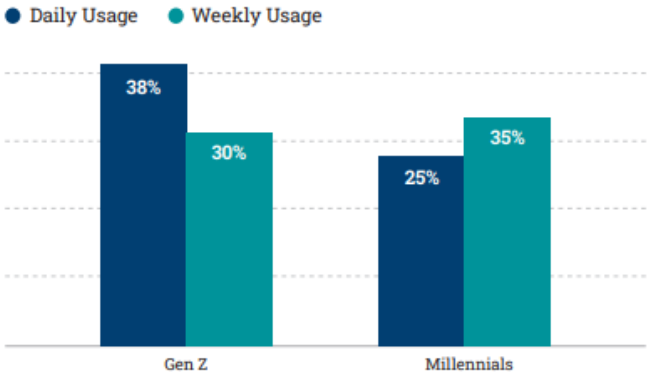
The rapid advancement of digital technology has significantly influenced economic activities, particularly within the payment systems sector. Innovations in financial technology have redefined the traditional role of cash as the primary medium of exchange, giving rise to non-cash payment methods that are perceived as more effective, efficient, and economically advantageous (Tarantang et al., 2019). Mobile payments, for instance, enable users to complete transactions anytime and anywhere, offering convenience, speed, efficiency, and secure data transmission between devices (Putri et al., 2020). In response to these developments, Bank Indonesia launched the National Non-Cash Movement (Gerakan Nasional Non-Tunai) in 2014, aiming to foster the creation of a more efficient, secure, and reliable payment ecosystem (Rodiah & Melati, 2020).

Among the technologies facilitating cashless payments is the Quick Response Code Indonesian Standard (QRIS) (Lau & Kulsum, 2023). QRIS is a standardized payment system that utilizes QR codes to enable digital transactions across Indonesia. This mobile payment mechanism allows users to execute payments through digital wallets or mobile banking applications in a fast and flexible manner (Hamid et al., 2025). QRIS is expected to enhance transaction efficiency, speed, and security through the integration of standardized QR codes. Furthermore, QRIS plays a crucial role in expanding the acceptance of cashless payments nationwide and in strengthening connectivity within the broader digital ecosystem, including the e-commerce, financial technology, and banking sectors (Puspitasari & Salehudin, 2022).

The number of QRIS users in Indonesia has shown consistent and substantial growth from the first quarter of 2022 to the first quarter of 2025. According to the latest data from the Indonesian Payment System Association (*Asosiasi Sistem Pembayaran Indonesia*), the number of QRIS users reached 56 million in the first quarter of 2025 (GoodStats, 2025). This significant increase reflects the growing public acceptance of digital payment systems. QRIS has experienced rapid adoption, particularly among younger, technologically literate demographics (Nisa et al., 2025). The surge in QRIS usage signals a notable shift in consumer behavior, marked by an increased emphasis on transaction speed, convenience, and security (Hamid et al., 2025).

QRIS has evolved into a vital component of daily life, particularly among Generation Z. Generation Z refers to individuals born between 1997 and 2010, a period marked by rapid technological advancement (Rembulan & Firmansyah, 2020). Figure 1 presents data from the IDN Research Institute (2025), derived from the Indonesia Millennial and Gen Z Report 2025, which shows that Generation Z recorded a daily QRIS usage frequency of 38%, surpassing Millennials, whose usage rate was only 25%. The growing adoption of QRIS in Indonesia is primarily driven by Generation Z, who tend to embrace a cashless lifestyle and use QRIS as a practical payment tool integrated with various financial applications (Fitriati et al., 2024).

Figure 1. QRIS Usage Frequency Among Gen Z and Millennials



Source: IDN Research Institute (2025)

Despite the high adoption rate of QRIS, limited research has examined the factors that influence users, particularly Generation Z, to continue utilizing QRIS over the long term. This concept, referred to as continuance use intention, pertains to a user's decision to continue relying on certain services or technologies (Nisa et al., 2025). Most previous studies have been based on the Technology Acceptance Model (TAM) introduced by Davis (1989), which posits that perceived usefulness and perceived ease of use are the key factors determining user behavior toward technology adoption (Syabila & Khasanah, 2023; Yuniarti & Ernawati, 2023; Gunawan et al., 2023). In the context of QRIS, additional factors such as perceived value, service quality, and user satisfaction also significantly influence users' continuance use intention (Kumari & Biswas, 2023).

Bhattacherjee (2001) proposes the Expectation Confirmation Model (ECM), which explains that user satisfaction serves as the primary predictor of continuance use intention. Previous studies have highlighted that trust and perceived risk are pivotal factors influencing user satisfaction with digital payment services (Alrawad et al., 2023; Khan & Abideen, 2023; Herviana & Abidin, 2024; Koloseni & Mandari, 2025). Trust is identified as a key determinant influencing continuance use intention toward QRIS in mobile payment contexts. Moreover, perceived risk remains a central concern among mobile payment users, with some discontinuing the use of QRIS services due to the risks involved (Herviana & Abidin, 2024).

This study offers a distinct contribution to the digital payment literature through its novel integration of the Technology Acceptance Model (TAM) and the Expectation Confirmation Model (ECM). While previous research has often applied these frameworks separately, this investigation combines them to explain continuance use intention. Furthermore, it innovatively positions trust and perceived risk as moderating variables between user satisfaction and continuance use intention. The empirical focus on Generation Z in Solo Raya addresses a significant demographic and contextual gap, as most prior studies on payment systems have centered on older cohorts or more developed markets.

This study aims to examine how perceived value and service quality influence continuance use intention of QRIS among Generation Z. Additionally, it also examines the role of user satisfaction as a mediating variable in the relationship between perceived value and service quality and continuance use intention. Furthermore, the study includes trust and perceived risk as moderating variables to examine the relationship between user satisfaction and continuance use intention.

Hypotheses Development

Perceived Value on User Satisfaction

The Technology Acceptance Model (TAM), proposed by Davis (1989), provides a key framework for understanding technology adoption, with perceived value added to reflect users' evaluations of digital payment services (Sinha et al., 2024). Perceived value refers to a customer's overall judgment and perception of the usefulness of a product or service, determined by the trade-off between its quality and the benefits received (Amoroso & Ackaradejruangsri, 2024). In essence, when users perceive that the advantages gained from a service surpass the costs or efforts required to obtain it, their perceived value increases, which subsequently enhances their level of satisfaction (Samudro et al., 2020). Within the scope of digital transactions, perceived value is closely associated with relational benefits such as ease of use, as well as the customer's sacrifices in terms of monetary cost, time, and effort (Zhong & Moon, 2022).

H1: Perceived value has a positive and significant effect on user satisfaction.

Service Quality on User Satisfaction

According to the Technology Acceptance Model (TAM), service quality has been recognized as a contextual construct that extends TAM to capture users' assessments of how well a

technology performs (Sinha et al., 2024). Service quality is commonly described as the difference between customers' expectations regarding service provider performance and their evaluation of the actual service delivered (Yiğitoğlu et al., 2025). When service quality is high, it generally results in greater customer satisfaction, whereas poor performance that fails to meet expectations leads to dissatisfaction (Zhong & Moon, 2020). In the context of QRIS, service quality refers to users' assessment of the performance and reliability of the QRIS services they experience (Mualifah & Muharrami, 2025).

H2: Service quality has a positive and significant effect on user satisfaction.

Perceived Value on Continuance Use Intention

Value refers to an individual's overall evaluation of a product or service based on the comparison between the benefits obtained and the costs incurred in its use. Understanding value is essential for explaining customer consumption and purchasing behavior, as it represents one of the most influential factors in the service industry (Zhong & Moon, 2022). In the context of digital transactions, users who perceive high value in terms of utility, convenience, and cost-effectiveness are more likely to continue using the service (Kumari & Biswas, 2023). Continuance use intention refers to a user's decision to continue using a digital platform based on their previous experience (Hamid et al., 2025).

H3: Perceived value has a positive and significant effect on continuance use intention.

Service Quality on Continuance Use Intention

Customers' purchasing behaviors and decisions are strongly influenced by their overall evaluation of a product or service experience (Zhong & Moon, 2020). Service quality represents an evaluation made by consumers or users by comparing the services received with their prior expectations (Mualifah & Muharrami, 2025). In recent years, the quality of mobile payment services has greatly contributed to users' intention to continue using such services due to the convenience offered by digital payments. When the quality of M-payment services meets customers' expectations, they are more inclined to continue using the service (Kumari & Biswas, 2023).

H4: Service quality has a positive and significant effect on continuance use intention.

User Satisfaction on Continuance Use Intention

The intention to maintain long-term engagement with a service is strongly reinforced by user satisfaction. Satisfied customers tend to develop positive perceptions of the service provider and demonstrate a stronger commitment to continued use (Ha et al., 2024). This aligns with the Expectation Confirmation Model (ECM), developed by Bhattacherjee (2001), which explains that users' continuance behavior is driven by the confirmation of their expectations and the satisfaction that follows. When expectations are met or exceeded, satisfaction arises, which subsequently motivates users to continue using the system. In this study, QRIS user satisfaction is defined as the emotional response, either pleasure or disappointment, experienced by users after utilizing QRIS services. High levels of satisfaction enhance users' willingness to continue using the service over time (Mualifah & Muharrami, 2025).

H5: User satisfaction has a positive and significant effect on continuance use intention.

Perceived Value, User Satisfaction, and Continuance Use Intention

User satisfaction with mobile payment is influenced by perceived value. When users perceive that mobile payment systems are easy to use, secure, and efficient, they are more likely to feel satisfied and continue using them. Meanwhile, dissatisfied users may choose to stop

using the service (Kumari & Biswas, 2023). Studies on mobile payment services show that satisfaction mediates the relationship between perceived value and continuance use intention, acting as the key mechanism linking the two (Karjaluoto et al., 2019). Therefore, user satisfaction is anticipated to serve as a mediator in the relationship between perceived value and continuance use intention.

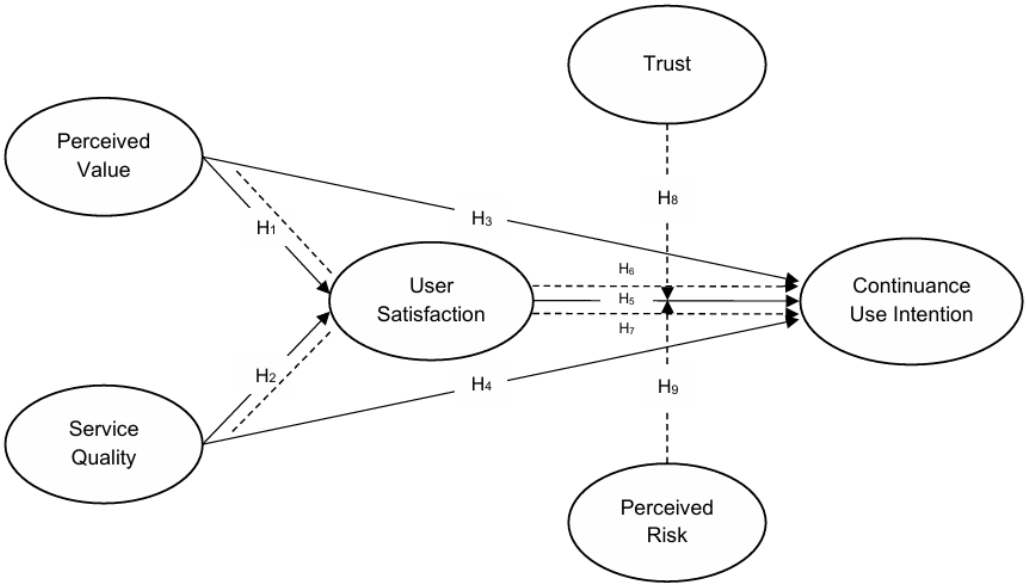
H6: User satisfaction mediates the effect of perceived value on continuance use intention.

Service Quality, User Satisfaction, and Continuance Use Intention

Service quality is recognized as one of the essential success factors for service-oriented businesses (Suryawirawan et al., 2022). Service quality embodies assurance, personalization, reliability, and responsiveness. In other words, when users perceive that the service is dependable and that the mobile payment provider is consistently available to assist them when needed, their expectations are fulfilled, encouraging them to continue using the system. Therefore, mobile payment providers must maintain high service quality to enhance user satisfaction and service credibility, which in turn promotes the continued use of mobile payment services (Franque et al., 2021). Accordingly, user satisfaction is expected to mediate the influence of service quality on continuance use intention.

H7: User satisfaction mediates the effect of service quality on continuance use intention.

Figure 2. Conceptual Framework



Source: Developed by the authors (2025)

User Satisfaction, Trust, and Continuance Use Intention

Several researchers have further expanded TAM by including additional factors, such as trust, within mobile payment environments (Kumari & Biswas, 2023). Trust represents the extent to which users have confidence in the reliability and integrity of QRIS services provided through mobile payment platforms (Herviana & Abidin, 2024). Within the QRIS framework, a transparent and easily understandable transaction process—such as payment procedures, balance top-ups, and fund transfers—can effectively foster user trust (Septyanto et al., 2023).

In the context of this study, trust functions as a moderating variable that influences the relationship between user satisfaction and continuance use intention.

H8: Trust moderates the effect of user satisfaction on continuance use intention.

User Satisfaction, Perceived Risk, and Continuance Use Intention

Perceived risk has been incorporated by several scholars as an extension of the TAM to better explain user behavior in mobile payment contexts. Perceived risk is defined as a user's assessment of potential losses or negative outcomes that may arise from using information technologies or systems (Mutahar et al., 2022). Regarding QRIS payment services, perceived risk is often associated with concerns about privacy, data loss, and transaction security, which represent significant issues for users (Ifada & Abidin, 2023). As perceived risk among users rises, their satisfaction with the service may decline correspondingly (Jangir et al., 2022).

H9: Perceived risk moderates the effect of user satisfaction on continuance use intention.

METHOD

The current research adopts a quantitative approach that includes data collection, analysis, and interpretation to derive conclusions based on empirical evidence. The population comprises Generation Z in Solo Raya who actively engage with QRIS for their daily financial transactions. A purposive sampling technique was employed, as it is deemed the most appropriate method given the difficulty of identifying every element within the target population (Kumari & Biswas, 2023). The minimum sample size was determined following Hair et al. (2021), who recommend multiplying the number of indicators by ten. With 24 indicators, this study required a minimum of 240 respondents. The sample selection was based on the following criteria: (1) Generation Z (born between 1997 and 2010); (2) residing in Solo Raya; and (3) having used QRIS at least three times in the past month.

Data were collected using Google Forms through an online questionnaire, which served as the primary research instrument. Social media platforms such as Instagram, WhatsApp, and X (Twitter) were utilized to distribute the questionnaire, ensuring broader reach and accessibility among Generation Z respondents. According to Tian et al. (2023), employing social media platforms for data collection is both appropriate and effective in contemporary research contexts. The measurement indicators for each construct were adapted from relevant previous studies. Responses were recorded using a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5), to assess respondents' perceptions regarding perceived value, service quality, user satisfaction, trust, perceived risk, and continuance use intention toward QRIS.

Table 1. Operational Variables

Variable	Item	Statement	Reference
Perceived Value	PV1	I find QRIS useful in my daily financial activities.	Qiu et al. (2024)
	PV2	I feel happy and comfortable every time I make a transaction using QRIS.	
	PV3	I feel that using QRIS reflects a modern lifestyle and keeps up with technological developments.	
	PV4	I consider QRIS to be cost-effective and efficient in supporting my financial transactions.	
Service Quality	SQ1	I find QRIS easy to use for payment transactions.	Suryawirawan et al. (2022)

Variable	Item	Statement	Reference
	SQ2	I find transactions using QRIS to be fast and reliable.	Nursalim et al. (2025)
	SQ3	I find QRIS providers to be responsive in handling transaction issues or problems.	
	SQ4	I find QRIS services to be consistent and stable every time I use them.	
User Satisfaction	US1	I feel a sense of satisfaction and enjoyment when conducting transactions using QRIS.	Zhong & Moon (2022) Wicaksono et al. (2024)
	US2	I am satisfied with my experience using QRIS.	
	US3	The QRIS payment service meets my expectations.	
	US4	Overall, my experience with QRIS transactions has been highly satisfactory.	
Trust	T1	I believe that QRIS is safe to use for transactions.	Puspitasari & Salehudin (2022)
	T2	I believe that QRIS protects the confidentiality of my personal data.	
	T3	I believe that QRIS is reliable for every transaction.	
	T4	I believe that the QRIS system provides good protection against the risk of misuse.	
Perceived Risk	PR1	I am concerned about transaction errors when using QRIS.	Jangir et al. (2022) Khan & Abideen (2023)
	PR2	I perceive potential risks related to data security when using QRIS.	
	PR3	I am concerned that my personal information may be leaked when using QRIS.	
	PR4	I feel there is a risk of losing money or financial loss when using QRIS.	
Continuance Use Intention	CI1	I intend to continue using QRIS rather than discontinue its use.	Franque et al. (2021) Hamid et al. (2025)
	CI2	I intend to continue using QRIS rather than other digital payment methods.	
	CI3	I intend to continue using QRIS for a long period of time.	
	CI4	I intend to increase the frequency of QRIS usage in future transactions.	

Source: Compiled by the authors (2025)

This study employed the PLS-SEM technique for data analysis, utilizing SmartPLS 4 software. SmartPLS is a variance-based analytical technique that comprises two primary components. The measurement model focuses on evaluating the relationships between latent constructs and their observed indicators to establish reliability and validity, while the structural model examines the causal linkages among latent constructs to test the hypothesized relationships within the research framework. The method was selected due to its suitability for examining complex causal relationships among latent constructs, including the testing of mediation and moderation effects within the research framework (Hair et al., 2021).

The PLS-SEM analysis involves two primary stages: the outer model and the inner model. The outer model evaluates the extent to which indicators accurately represent their respective latent variables through tests of convergent validity, discriminant validity, and construct reliability. Following Hair et al. (2021), validity and reliability evaluations are conducted comprehensively. An instrument is considered valid if all factor loadings exceed 0.7 and the discriminant validity values for each construct are greater than the correlations between constructs. A construct is considered reliable if its Average Variance Extracted (AVE) value surpasses 0.5 and its Construct Reliability (CR) value exceeds 0.7. Meanwhile, the inner model evaluates the structural relationships among latent variables by examining collinearity, assessing path significance using bootstrapping, and determining the predictive power of the model using R^2 values.

RESULT AND DISCUSSION

Demographics of Respondents

This study aims to identify the factors influencing continuance use intention of QRIS by conducting a survey among Generation Z respondents residing in Solo Raya who actively use QRIS in their daily transactions. The survey was completed by 240 respondents who met all specified selection requirements. The demographic characteristics of the respondents are summarized in Table 2. Female respondents constituted the majority at 82.50%, while male respondents accounted for 17.50%. Regarding age distribution, most respondents were between 20 and 24 years old, reflecting the core demographic of Generation Z. The distribution of respondents' areas of residence was relatively balanced across the Solo Raya region, with the following proportions: Surakarta (16.67%), Boyolali (14.58%), Sukoharjo (14.58%), Karanganyar (13.75%), Sragen (13.75%), Klaten (13.75%), and Wonogiri (12.92%). Moreover, the majority of respondents reported using QRIS payments more than ten times in the past month, indicating a high level of adoption and familiarity with the system among Generation Z users.

Table 2. Respondents' Demographic Profile

Demographic	Category	Frequency	Percentage (%)
Gender	Male	42	17.50
	Female	198	82.50
Age	15-19 years old	36	15.00
	20-24 years old	201	83.75
	25-28 years old	3	1.25
Residence	Surakarta	40	16.67
	Boyolali	35	14.58
	Sukoharjo	35	14.58
	Karanganyar	33	13.75
	Wonogiri	31	12.92
	Sragen	33	13.75
	Klaten	33	13.75
Frequency of QRIS Use in the Past Month	3-5 times	55	22.92
	6-10 times	46	19.17
	> 10 times	139	57.92

Source: Processed data (2025)

Preliminary Analysis

Data analysis for this study was performed using the PLS-SEM approach with the help of SmartPLS 4 software. In recent years, the PLS-SEM technique has become increasingly prominent in management and behavioral sciences. In general, the PLS approach is particularly suitable for explaining complex causal relationships, as it can minimize issues

related to invalid solutions and factor indeterminacy (Zhong & Moon, 2020). This study involved six interrelated variables within a conceptual framework designed to examine direct and indirect relationships, as well as mediation and moderation effects.

To evaluate the validity of the measurement model, several tests were conducted. The initial stage involved analyzing indicator reliability and internal consistency. An indicator is considered to exhibit a strong contribution if its outer loading value exceeds 0.70, whereas a construct with a Composite Reliability (CR) value above 0.60 is regarded as having acceptable internal consistency, and above 0.70 as demonstrating good internal reliability (Hair et al., 2021).

The results of outer loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) for all indicators included in the study are presented in Table 3. The initial evaluation focused on the outer loading values, which are considered acceptable when exceeding 0.70. Three indicators (PV4, SQ1, and US3) were removed from the analysis because their outer loading values were below 0.50, suggesting inadequate representation of their respective constructs. As shown in Table 3, the majority of indicators demonstrate loading values above this threshold, indicating a good level of convergent validity. However, two indicators, PV3 and SQ3, exhibited loading values slightly below 0.70, though still above the minimum acceptable limit of 0.50. These indicators were retained within the path model because other items within their respective constructs exhibited strong loadings, resulting in overall CR and AVE values that remained within the recommended criteria.

Furthermore, all constructs achieved Composite Reliability (CR) values above 0.70, signifying a satisfactory level of internal consistency. In addition, the Average Variance Extracted (AVE) values for all constructs exceeded 0.50, confirming the constructs' validity. Therefore, the measurement model in this study meets the required standards of validity and reliability.

Table 3. Measurement Model

Variable	Item	Loading	CR	AVE
Perceived Value	PV1	0.781	0.761	0.516
	PV2	0.717		
	PV3	0.651		
Service Quality	SQ2	0.755	0.782	0.545
	SQ3	0.671		
	SQ4	0.785		
User Satisfaction	US1	0.764	0.783	0.546
	US2	0.718		
	US4	0.735		
Trust	T1	0.755	0.818	0.529
	T2	0.708		
	T3	0.738		
	T4	0.706		
Perceived Risk	PR1	0.759	0.885	0.658
	PR2	0.819		
	PR3	0.843		
	PR4	0.822		
Continuance Use Intention	CI1	0.803	0.834	0.557
	CI2	0.717		
	CI3	0.755		
	CI4	0.707		

Source: Processed data (2025)

The final stage of measurement model evaluation involves testing discriminant validity. Discriminant validity ensures that the variables in the model do not overlap. This was assessed using the HTMT criterion. The recommended threshold value for HTMT is 0.90, with

discriminant validity considered satisfactory if all construct HTMT values fall below this limit. As presented in Table 4, all HTMT values among the constructs in this study are below the threshold of 0.90, confirming that each construct is adequately distinct from the others. Therefore, it can be concluded that there is no overlap among the measured constructs, and the discriminant validity of the research model is satisfactorily established.

Table 4. Discriminant Validity (HTMT Criterion)

	CI	PR	PV	US	SQ
CI					
PR	0.210				
PV	0.664	0.261			
US	0.848	0.244	0.871		
SQ	0.668	0.185	0.667	0.866	
T	0.686	0.366	0.499	0.678	0.641

CI: Continuance Use Intention, PR: Perceived Risk, PV: Perceived Value, US: User Satisfaction, SQ: Service Quality, T: Trust

Source: Processed data (2025)

The coefficient of determination is used to evaluate the accuracy of a model in predicting the variance of a dependent variable based on its independent variables. According to Hair et al. (2021), R^2 values can be classified as weak (< 0.25), moderate (0.25–0.75), or strong (> 0.75). As presented in Table 5, the R^2 value for continuance use intention is 0.420, which falls within the moderate range. This signifies that 42.0% of the variance in continuance use intention is accounted for by the independent variables in the model, namely perceived value, service quality, and user satisfaction, with the residual variance attributable to factors external to the model. Furthermore, an R^2 value of 0.354 for user satisfaction, also categorized as moderate, indicates that 35.4% of its variance is explained by the predictors of perceived value and service quality.

Table 5. Coefficient of Determination

Variable	R^2	Description
Continuance Use Intention	0.420	Moderate
User Satisfaction	0.354	Moderate

Source: Processed data (2025)

Hypotheses Testing

The structural model in this study was tested using the bootstrapping technique with 5,000 resamples to evaluate the significance of the path coefficients between latent variables. The testing criteria followed the recommendations of Hair et al. (2021), which state that the relationship between constructs is considered statistically significant if the t-value > 1.96 and the p-value < 0.05 at the 5% significance level. The results of the hypothesis testing are summarized in Table 6. Based on the analysis results, perceived value (t-value = 5.155; p-value = 0.000) and service quality (t-value = 5.379; p-value = 0.000) were found to have a positive and significant influence on user satisfaction, thus H1 and H2 are accepted. Furthermore, perceived value (t-value = 2.096; p-value = 0.036) and user satisfaction (t-value = 3.968; p-value = 0.000) were shown to have a positive and significant effect on continuance use intention, thus H3 and H5 are accepted. Meanwhile, service quality (t-value = 1.671; p-value = 0.095) did not exhibit a significant positive effect on continuance use intention, thus H4 is rejected.

Table 6. PLS-SEM Analysis for Direct Effects

Hypothesis	Path	STDEV	T Statistics	p-value	Result
H1	PV → US	0.068	5.155	0.000	Accepted
H2	SQ → US	0.070	5.379	0.000	Accepted
H3	PV → CI	0.074	2.096	0.036	Accepted
H4	SQ → CI	0.064	1.671	0.095	Rejected
H5	US → CI	0.065	3.968	0.000	Accepted

PV: Perceived Value, SQ: Service Quality, US: User Satisfaction, CI: Continuance Use Intention

Source: Processed data (2025)

The mediation effect analysis was conducted to examine whether user satisfaction functions as a mediating variable in the relationship between perceived value and service quality on continuance use intention. The results of the mediation analysis are summarized in Table 7. The mediation path between perceived value and continuance use intention through user satisfaction produced a t-value of 2.960 and a p-value of 0.003. These findings indicate that user satisfaction significantly mediates the relationship between perceived value and continuance use intention, so H6 is accepted. Furthermore, the mediation path between service quality and continuance use intention through user satisfaction shows a t-value of 3.439 and a p-value of 0.001. This result indicates that user satisfaction also significantly mediates the relationship between service quality and continuance use intention, so H7 is accepted.

Table 7. PLS-SEM Analysis for Indirect Effects

Hypothesis	Path	STDEV	T Statistics	p-value	Result
H6	PV → US → CI	0.031	2.960	0.003	Accepted
H7	SQ → US → CI	0.028	3.439	0.001	Accepted

PV: Perceived Value, SQ: Service Quality, US: User Satisfaction, CI: Continuance Use Intention

Source: Processed data (2025)

An analysis was also conducted to examine the moderating effects of trust and perceived risk on the relationship between user satisfaction and continuance use intention. The results of this analysis are summarized in Table 8. Based on the findings, the moderating effect of trust produced a t-value of 1.053 and a p-value of 0.293, while the moderating effect of perceived risk resulted in a t-value of 0.445 and a p-value of 0.656. These values indicate that neither trust nor perceived risk significantly moderates the relationship between user satisfaction and continuance use intention. Therefore, H8 and H9 are rejected.

Table 8. PLS-SEM Analysis for Moderation Effects

Hypothesis	Path	STDEV	T Statistics	p-value	Result
H8	T*US → CI	0.070	1.053	0.293	Rejected
H9	PR*US → CI	0.056	0.445	0.656	Rejected

T: Trust, PR: Perceived Risk, US: User Satisfaction, CI: Continuance Use Intention

Source: Processed data (2025)

Discussion

The results indicate that perceived value has a positive and significant effect on user satisfaction. This finding aligns with the study by Nursalim et al. (2025), which demonstrated that customer-perceived value significantly influences user satisfaction. In the context of this research, perceived value emerges as a key determinant of satisfaction among QRIS users.

Users tend to experience higher satisfaction when the benefits or value derived from using QRIS outweigh the costs, efforts, or potential risks associated with its use. Furthermore, the results reveal that service quality also shows a positive and significant influence on user satisfaction. This finding is consistent with the work of Mualifah & Muharrami (2025), who found that service quality plays a vital role in enhancing user satisfaction with QRIS services. This study highlights the importance of good service quality, which includes transaction speed, system reliability, operational consistency, and the responsiveness of service providers in addressing transaction-related issues.

Continuance use intention refers to the degree to which consumers intend to persist in engaging with a particular activity or system (Amoroso & Ackaradejruangsri, 2024). In the context of QRIS payment services, this construct captures the users' tendency to consistently utilize QRIS in their daily financial transactions. The findings of this study reveal that perceived value has a positive and significant effect on continuance use intention, suggesting that users are more likely to continue using QRIS when they perceive that the benefits gained outweigh the sacrifices in terms of cost, time, or effort. This result supports the findings of Kumari & Biswas (2023), who stated that a high perceived value in mobile payment services serves as a crucial determinant of users' long-term intention to continue using such technologies. Furthermore, user satisfaction was also found to have a positive and significant influence on continuance use intention. A high level of satisfaction tends to foster positive behavioral intentions, encouraging users to repeatedly engage with the QRIS payment system. This result aligns with Herviana & Abidin (2024), who stated that greater satisfaction with QRIS payment services strengthens users' continuance use intention.

Meanwhile, the results show that service quality does not have a significant direct effect on continuance use intention, indicating that QRIS service quality does not automatically encourage users to continue using the service. These findings are in line with the research by Putri & Puspawati (2024), which reported that service quality did not significantly influence the intention to continue using mobile banking services. In the specific context of Solo Raya, this result can be explained by the fact that QRIS has become a widely adopted and standardized payment method, with relatively uniform service quality across different platforms and merchants. As a result, users no longer perceive differences in quality that might influence their decision to continue using the service. Moreover, most Generation Z users in Solo Raya use QRIS out of habit and convenience, rather than based on a conscious evaluation of its service quality. However, the analysis revealed that user satisfaction mediates the relationship between service quality and continuance use intention. This indicates that service quality contributes to continuance use intention indirectly, only when users perceive the service as satisfying and beneficial. This finding aligns with Franque et al. (2021), who demonstrated that satisfaction functions as a mediating variable between service quality and the intention to continue using mobile payment services.

The findings also reveal that user satisfaction mediates the relationship between perceived value and continuance use intention. This suggests that perceived value influences continuance use intention both directly and indirectly through the enhancement of user satisfaction. In other words, when users perceive that QRIS provides high benefits, they are more likely to experience a higher level of satisfaction, which subsequently strengthens their intention to continue using the service over time. This result is consistent with the findings of Karjaluoto et al. (2019), who highlighted that a high perceived value in mobile banking applications increases consumer satisfaction, which ultimately encourages the intention to maintain the use of these applications.

This study also examined the moderating role of trust in the relationship between user satisfaction and continuance use intention. The results indicate that trust does not significantly moderate the relationship between user satisfaction and continuance use intention. This finding can be explained by the fact that users, particularly Generation Z in Solo Raya, already exhibit high inherent trust toward QRIS and digital payment systems in general. Since QRIS is regulated and standardized by Bank Indonesia, users perceive it as an official and secure platform for financial transactions. Users rely on QRIS not because they continuously evaluate

its trustworthiness, but because they have become accustomed to its presence in their daily activities. These findings differ from previous studies that found a significant moderating effect of trust. Herlina et al. (2025) explained that trust plays a crucial role in strengthening the relationship between satisfaction and continuance intention in QRIS payment services.

In addition, the results of this study also indicate that perceived risk does not moderate the relationship between user satisfaction and continuance use intention. Perceived risk describes the extent to which users perceive potential losses or uncertainties associated with the use of a technology. In the context of QRIS payment systems, these risks commonly involve concerns over data security, transaction errors, information privacy, and financial safety. The findings suggest that when users are satisfied and have developed familiarity with using QRIS, perceived risks no longer serve as a dominant factor in influencing their decision to continue using the service. In the context of Solo Raya, this can be explained by the low-risk nature of QRIS transactions and the high level of user familiarity. Generation Z users are digitally confident and accustomed to online financial activities, making them less sensitive to perceived risks.

CONCLUSION

This study extends the application of the Technology Acceptance Model (TAM) and the Expectation Confirmation Model (ECM) to examine the effect of perceived value and service quality on the continuance use intention of QRIS among Generation Z, with user satisfaction as a mediating variable, and trust and perceived risk as moderating variables. The findings reveal that perceived value and service quality have a positive and significant effect on user satisfaction, while user satisfaction serves as the key determinant driving continuance use intention. Although service quality does not have a direct impact on continuance use intention, it exerts an indirect effect through user satisfaction. Furthermore, trust and perceived risk were found not to moderate the relationship between user satisfaction and continuance use intention.

This study supports Indonesia's digital economy agenda by identifying strategies to sustain QRIS adoption among youth. Strengthening perceived value and service quality can enhance financial inclusion, increase transaction efficiency, and promote MSME digital integration. The findings offer practical insights for developing user-oriented payment systems that foster continued use and inclusive economic growth. This research is limited to Generation Z users in Solo Raya and a restricted set of variables. Future research is recommended to expand the geographical scope and demographic diversity of respondents to achieve broader representativeness. Additionally, subsequent studies should integrate additional variables to develop a more comprehensive understanding of the factors that shape the continuance use intention of QRIS and other digital payment technologies in Indonesia.

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