CONTINUED INTENTION TO USE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) DIGITAL PAYMENT: MERCHANT PERSPECTIVE

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Abstract

This study aims to determine the effect of performance expectancy, effort expectancy, social influence, facilitating conditions, government support, and personal innovativeness on continuance usage intention using the UTAUT-3 theoretical framework. The survey was conducted on MSME players in Semarang City with a sample size of 203 respondents selected using purposive sampling method. Model testing using Structural Equation Modeling (SEM). The results showed that performance expectancy, social influence, and facilitating conditions have a direct effect on continuance usage intention. The positive impact of performance expectancy, social influence, and facilitating conditions on the continuance intention of using QRIS by Semarang City MSMEs is reflected in increased operational efficiency, ease of transactions, and trust that encourages growth in turnover, competitiveness, and the ability of MSMEs to adapt to digitalization to expand markets through practical and secure digital payments.

Keywords: continuance intention, QRIS, UTAUT, government support, personal innovativeness

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INTRODUCTION

On a global scale, financial technology (fintech) has experienced rapid growth, particularly with the increasing use of mobile devices and the internet, which has enabled various financial services, including payments, loans, and investments, to be conducted online. According to data from the Asosiasi Penyedia Layanan Internet Indonesia (APJII) in 2024, around 78.19% of Indonesia's total population of 275.77 million people are internet users. According to Bank Indonesia's 2025 Payment System Blueprint, demand for financial services is increasing, reflecting the principles of a fast, efficient, and digital era, which is currently transforming various aspects, including payment systems. (Puspitasari et al., 2022). This transformation has not only changed traditional transaction methods but also expanded access to financial services to communities that were previously unreachable by conventional banking systems.

As part of the vision for the Indonesian Payment System 2025, Bank Indonesia and the Indonesian Payment System Association launched QRIS on January 1, 2020. QRIS is a QR code standard for digital payment transactions that can be accessed through e-wallets or mobile banking applications, aiming to facilitate transactions and support the development of MSMEs in Indonesia (Nurhapsari & Sholihah, 2022; Puspitasari et al., 2022). Bank Indonesia reported in 2022 that 22.7 million merchants had implemented the QRIS payment system

out of a total of 65 million micro, small, and medium enterprises (MSMEs) in Indonesia. This shows that the adoption rate of QRIS stands at 34.92% of all MSMEs in Indonesia (Paramita & Cahyadi, 2024a). In April 2024, users of the Quick Response Code Standard (QRIS) experienced significant growth, reaching 194.06% year-on-year, with a total of 48.90 million users and 31.86 million merchants. Additionally, in August 2024, QRIS transaction growth increased to 217.33% year-over-year, with the number of users reaching 52.55 million and the number of merchants at 33.77 million (Perhimpunan Bank Nasional, 2024).

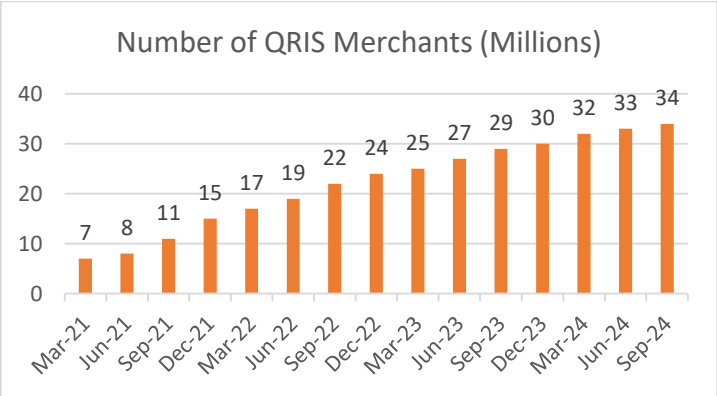

Figure 1. QRIS Merchant Data

The existence of QRIS has created new opportunities to optimize business models and marketing strategies, which can have a significant impact on the industry, especially in the trade sector. (Saputra & Lastiati, 2024). Based on Figure 1, the increase in the number of merchants using QRIS shows the growing popularity of QRIS among micro, small, and medium enterprises (Wardhani et al., 2023). In Central Java, 97.98% of QRIS users are from the micro, small, and medium-sized enterprises (MSME) sector. Semarang City ranks first with 741,000 QRIS merchants, equivalent to 243.58% of the total number of merchants in other regions. This number is significantly higher than those of Magelang Regency and Semarang Regency, which have approximately 150,000 and 75,000 merchants, respectively (Kompas, 2024). The mayor of Semarang, Hevearita Gunaryanti Rahayu, continues to encourage the use of digital technology to simplify all service transactions in the Semarang City Government. The Semarang City Government plans to implement an administrative payment method using QRIS for all services (Pemerintah Kota Semarang, 2023). The high usage of QRIS among MSMEs in Semarang indicates that the level of technology adoption among these MSMEs is very high, as reflected in their intention to use digital payment services (Nurhapsari & Sholihah, 2022). This phenomenon is interesting and worth researching, as the findings will be valuable and influence the continued use of QRIS by users. Jumaan et al., (2020) stated that a satisfying experience in using information technology can significantly influence users' intention to continue using a service. When users are satisfied with their experience using QRIS, they tend to want to continue using the service.

Bagla & Sancheti (2020) explain that many studies have discussed the adoption of various types of virtual payments, with digital wallets considered the most advanced form of payment, especially in developing countries such as Indonesia. Previous studies have shown varying results and inconsistencies in the factors that influence continuance usage intention. Pratiwi & Lawita, (2024) states that performance expectancy has no effect on continuance

usage intention. This result appears because respondents already understand the benefits of e-wallets, so their intention to continue using them is not affected. The influence of perceived usefulness is stronger in the early stages, so service providers need to continuously update features to remain attractive. Research by Alexandra & Setiawan, (2023), Banjarnahor & Setyorini, (2022) Narendrar et al., (2023), and Gavriel & Ardianti, (2023) shows that effort expectancy does not have a significant effect on continuance usage intention. Although the Sakuku app is easy to use, this does not influence people's desire to continue using Sakuku. Gavriel & Ardianti (2023) state that social influence has a positive but insignificant effect. The insignificant contribution of social influence to continuance intention may be because the use of sustainable technology is driven more by business decisions and consumer demand than by direct social influence. In addition, social influence tends to play a greater role in the early stages of adoption than in long-term usage intentions.

In their study, Pratiwi & Lawita, (2024) explain that facilitating conditions have no influence on continuance usage intention. This negative and insignificant correlation occurs because customers feel that the support and access available are insufficient to increase their intention to use the Dana electronic wallet. Although facilities are important for technology adoption, these results show that this factor is not the main determinant for customers in using Dana. Zhong & Moon, (2022) also explain that the quality of QR-based payment services is based on three main dimensions of contactless payment quality, namely user perceived ease, perceived usefulness, and service security. Previous studies examining the Technology Acceptance Model (TAM) and QRIS have primarily focused on aspects of ease of use and perceived usefulness. However, a few studies have delved deeply into security and the sustainability of system usage. Additionally, a common limitation of research is the use of samples restricted to specific regions (Hasyim et al., 2024; Sefrika, 2023; Shasanti & Bagana, 2024; Susanti & Reza, 2022). To address the gaps and inconsistencies in previous research on the factors influencing the continued use of QRIS, a theory is needed that can measure the acceptance and use of this technology. One model that is often used for this purpose is the Unified Theory of Acceptance and Use of Technology (Paramita & Cahyadi, 2024b; Rafiani et al., 2024).

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a model developed by Venkatesh et al to explain the acceptance and use of technology by individuals. This model is capable of predicting approximately 70% of the variation in behavioural intentions to use technology and has been widely used as a basis for research in various fields of technology (Venkatesh & Bala, 2008). This theory combines and expands on several existing theories, including the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Innovation Diffusion Theory (Paramita & Cahyadi, 2024a). The UTAUT model has four components, namely performance expectations, effort expectations, social influence, and facilitating conditions (Venkatesh et al., 2003). UTAUT then evolved into UTAUT 2 through the addition of constructs taken from the context of technology use from the consumer perspective, namely hedonistic motivation, price value, and habit (Venkatesh & Bala, 2008). UTAUT 2 has evolved into Extended UTAUT, also known as UTAUT-3, with the addition of a new construct called personal innovativeness (Agarwal & Prasad, 1998; Farooq et al., 2017)

This study aims to identify the factors influencing the sustainability of QRIS usage among SMEs using the UTAUT-3 theory, focusing on the aspects of performance expectancy, effort

expectancy, social influence, facilitating conditions, government support, and personal innovativeness. By understanding these factors, it is hoped that deeper insights into SME behavior related to the sustainability of QRIS usage can be gained. The uniqueness of this study lies in its perspective, which focuses on merchants as QRIS users, differing from previous studies that have emphasized the customer side. Meanwhile, merchants are the primary target of the QRIS payment system's implementation (Muchtar et al., 2024). The novelty of this research is evident in two main aspects that contribute significantly both academically and practically to the study of digital payment technology adoption. First, the focus of this research is on micro, small, and medium enterprises (MSMEs) as QRIS users, who have received less attention compared to consumers, despite being the primary target of the government's digital transformation policies. Second, this study uses the Unified Theory of Acceptance and Use of Technology 3 (UTAUT-3) framework, expanded by adding the constructs of government support and personal innovativeness to capture the unique context of Indonesia's digital ecosystem, particularly in major cities like Semarang with high QRIS penetration. This approach is rarely applied comprehensively in the context of SMEs using QRIS. Therefore, this study not only deepens theoretical understanding of QR Code technology adoption but also provides empirical contributions that can serve as a basis for strategies to enhance adoption and sustain QRIS usage by SMEs, while also serving as a reference for policymakers and digital payment service providers in developing more effective and sustainable programs.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

Unified Theory of Acceptance and Use of Technology-3 (UTAUT-3)

Farooq et al., (2016) developed the UTAUT-2 model into the Unified Theory of Acceptance and Use of Technology-3 (UTAUT-3) model, which is a more complete technology acceptance model. The UTAUT-3 model includes eight main factors that influence technology acceptance, namely Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Price Value, Hedonic Motivation, Habit, and Personal Innovativeness, which is an addition to UTAUT-3 as the eighth factor. As an extension of UTAUT-2, UTAUT-3 adds a new construct, “Personal Innovativeness,” which is significant in understanding the adoption of educational technology by teachers in previous studies (Raaij & Schepers, 2008). However, research applying UTAUT-3 in the banking context is still minimal. Therefore, the UTAUT-3 model was chosen in this study to provide further insight into technology adoption in the fintech sector by examining this model.

Quick Response Code Indonesian Standard (QRIS)

The Quick Response Code Indonesian Standard (ORIS) is a national standard for QR codes used in digital payments via server-based electronic money applications, electronic wallets, or mobile banking services. Bank Indonesia requires every Payment System Service Provider, including those from overseas, to implement QRIS. This provision is regulated in Board of Governors Regulation (PADG) No. 21/18/2019 concerning the implementation of QRIS for payments (Nastiti et al., 2021). The main objective of QRIS is to facilitate digital payments for the public while enabling centralized regulatory oversight. With international standards, QRIS can be used across platforms without being limited to specific payment systems (Karniawati et al., 2021).

Continuance Usage Intention

Continuance usage intention refers to a user's desire to continue using a product or service for a specified period after having previously used it. Unlike initial usage intention, which focuses only on the reasons why individuals or organizations use the product for the first time, continuance intention emphasizes continued use. In the context of technology, Santhanamery & Ramayah, (2013) explain that continuance usage intention is a person's intention to continue using a technology sustainably in the long term. For business actors, this intention of sustainable use is very important because it is a major factor in maintaining business continuity (Han et al., 2018).

Performance Expectancy

Performance expectancy refers to the degree of confidence a person has that they can achieve expected performance results through the use of certain technologies (Wardhani et al., 2023). It can be concluded that individuals who believe an information system enhances their work tend to continue using the technology for a longer period, as performance expectancy is the primary factor influencing their intention to use the system (Suprapti et al., 2024). Umam & Puspawati, (2024) explain that with the Expectation Confirmation Model (ECM), perceived usefulness has a positive effect on continuance use intention. An increase or decrease in the benefits perceived by users will influence their intention to continue using the system on an ongoing basis. Therefore, fintech companies strive to provide digital payment services that offer convenience to their users. Previous studies have shown that perceived usefulness or performance expectancy influences continuance usage intention (Banjarnahor & Setyorini, 2022; Jumaan et al., 2020; Pradana & Yolanda, 2024; Prayudi et al., 2022). Research by Gavriel & Ardianti, (2023) shows that performance expectancy has a positive and significant contribution to continuance intention. Therefore, this study formulates the following hypothesis:

H1: Performance Expectancy has a positive effect on continuance usage intention.

Effort Expectancy

Effort expectancy reflects the level of comfort a person desires when using a system. Individuals expect new technologies to be easy to use and not require much effort. If a technology is easy to use, individuals will switch to it more quickly. This factor is influenced by perceptions of ease, complexity, and user-friendliness of the technology. The greater the expectation of ease of use, the greater the desire of individuals to adopt the technology (Venkatesh et al., 2003). Several studies by Prayudi et al., (2022), Pratiwi & Lawita, (2024), and Rahmaniar et al., (2025) show that effort expectancy or perceived ease of use directly influences continuance usage intention. Therefore, this study formulates the following hypothesis:

H2: Effort Expectancy has a positive effect on continuance usage intention.

Social Influence

Istijanto & Handoko, (2022) explain that social influence refers to the extent to which a person pays attention to the opinions and perceptions of people who are important to them. In this context, the intention of MSME actors to use QRIS can be influenced by the support or encouragement of those closest to them, such as family, friends, and the surrounding

community (Esawe, 2022; Farzin et al., 2021). This social influence is based on the concept of social image and subjective norms, whereby individuals tend to choose behaviours that are supported by their social relationships. According to research conducted by Istijanto & Handoko, (2022), Pratiwi & Lawita, (2024), and Zainuddin et al., (2022) shows that social influence affects continuance usage intention. Therefore, this study formulates the following hypothesis:

H3: Social Influence has a positive effect on continuance usage intention.

Facilitating Conditions

Facilitating conditions refer to the level of confidence an individual has that adequate organizational infrastructure and technical support are available to support the use of a technology system (Venkatesh et al., 2012). This includes the existing infrastructure, support teams, and how information is managed within the company to facilitate the use of this technology. In short, the worse the supporting conditions, the lower the interest of users in adopting information technology (Kurniawan et al., 2025). Research by Arifin & Wahyuhastuti, (2022) and Istijanto & Handoko, (2022) shows that facilitating conditions influence continuance usage intention. Therefore, this study formulates the following hypothesis:

H4: Facilitating Conditions has a positive effect on continuance usage intention.

Government Support

In the context of technology adoption by the community, the government plays an important role in facilitating the use of such technology. According to Aji et al., (2020) government support can take the form of providing network infrastructure, policy packages, access speeds, and security guarantees for digital transactions. In addition, the ease and affordability of internet access and other banking facilities also influence business actors' decisions to continue using technology. The greater the support provided by the government, the greater the likelihood that business actors will continue to use the technology (Gavriel & Ardianti, 2023). Research conducted by Gavriel and Ardianti (2023) found that government support has a positive and significant relationship, directly impacting continuance intention. Therefore, this study formulates the following hypothesis:

H5: Government Support has a positive effect on continuance usage intention.

Personal Innovativeness

Personal innovativeness is a personal trait that reflects a person's willingness to try and adopt new technologies. In the context of information technology, this term is often used to describe an individual's openness to innovation and their confidence in their ability to utilize new technologies effectively. This concept is a key element of the UTAUT 3 model (Unified Theory of Acceptance and Use of Technology 3), which was developed to analyze the factors influencing the acceptance and use of technology. Research by Lu, (2016) shows a significant relationship between personal innovativeness and the intention to continue using technology. Similar findings were reported by Sadewo et al., (2025) which states that personal innovativeness has a positive impact on the intention to continue using ChatGPT. Hao et al., (2024) also shows that personal innovativeness influences the intention to continue using FRP. Therefore, this study formulates the following hypothesis:

H6: Personal Innovativeness has a positive effect on continuance usage intention.

RESEARCH METHODOLOGY

The purpose of this study is to analyze the impact of the sustainable use of QRIS on MSMEs in Semarang City as an electronic payment system using quantitative methods. Data were collected through questionnaires using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The questionnaire was designed based on the Unified Theory of Acceptance and Use of Technology-3 (UTAUT-3) to operationalize the research variables. In total, 23 questions were used to assess the sustainability of QRIS use among MSMEs in Semarang City.

Data Collection

This study refers to research conducted Aji et al., (2020) and Zhong & Moon (2022) which utilize the UTAUT (Unified Theory of Acceptance and Use of Technology) to analyze the sustainability of financial technology (fintech) use in the financial sector. The UTAUT theory encompasses four core variables under investigation: performance expectancy, effort expectancy, social influence, and facilitating conditions (Muchtar et al., 2024). This study also expands the UTAUT model by adding government support and personal innovativeness as independent variables. The measurement instruments used in this study are presented in table 1.

Table 1. Variable Statements

Variables	Items	Source
Continuous Usage Intention (CUI)	1. I plan to use QRIS payment technology for sales transactions in the coming months 2. I will continue to use QRIS payment technology to conduct transactions with customers 3. I prefer to continue using QRIS payment technology over other payment methods 4. Overall, I want to continue using QRIS payment technology in my business	(Zhong & Moon, 2022)
Performance Expectancy (PE)	1. I find QRIS useful in my daily life 2. Using QRIS helps me achieve my business goals 3. QRIS can be used anytime, anywhere 4. QRIS increases my productivity in business 5. QRIS enables faster financial transactions	(Venkatesh et al., 2003)
Effort Expectancy (EE)	1. Learning how to use QRIS was easy for me 2. QRIS is easy to understand 3. I find QRIS tools easy to use	(Venkatesh et al., 2003)

	4. I find it easy to become proficient in using QRIS 5. The QRIS usage process is fast 6. The QRIS app has a user-friendly interface	
Social Influence (SI)	1. People who are important to me think that I should use QRIS 2. People who influence my behavior believe that I should use QRIS 3. I value the opinions of people around me who prefer that I use QRIS 4. I use QRIS because of advice from bank staff 5. I use QRIS because of encouragement from family and friends 6. Advertisements have influenced me to use QRIS 7. Using QRIS is seen as a status symbol in my social circle	(Venkatesh et al., 2003)
Facilitating Conditions (FC)	1. I have the resources to use the QRIS app 2. I have the knowledge to use the QRIS application 3. The QRIS application is compatible with the technology I use 4. I can get help from my family if I have difficulty using the QRIS application 5. The QRIS application can function 24/7 without any problems 6. The QRIS application is always updated 7. Registering as a user on the QRIS application is easy	(Venkatesh et al., 2003)
Government Support (GS)	1. The government encourages transactions through QRIS 2. The government ensures that QRIS server facilities can run 3. The government encourages payment innovation through QRIS 4. The government controls the operation of digital payment systems through QRIS.	(Aji et al., 2020)
Personal Innovativeness (PI)	1. I like experimenting with new technology. 2. Among my friends, I am usually the first to try new information technology. 3. In general, I would not hesitate to try new information technology.	(Agarwal & Prasad, 1998)

	4. I would look for ways to experiment with new technology.

The population of this study consisted of MSMEs in Semarang City, and the sample selection was conducted using a non-probability sampling approach with a purposive sampling method. The sample criteria included MSME business owners or managers operating in the Semarang area who had adopted QRIS as a means of payment for one month to customers. Data collection was conducted through an online questionnaire. The online questionnaire was designed using Google Forms and distributed through various social media platforms, including Facebook, Instagram, X, and WhatsApp. The questionnaire was distributed in March 2025 and received feedback from 203 respondents.

Data analysis was performed using Structural Equation Modeling (SEM). In SEM, there is no definitive agreement on the minimum and maximum sample sizes (Masrizal et al., 2022). Hair et al., (2010) stated that the minimum sample size for SEM analysis is between 100 and 200. In simple models, a sample size between 100 and 150 is considered adequate, while more complex models require a larger sample size. The more complex the model, the larger the sample size required to ensure accurate analysis results.

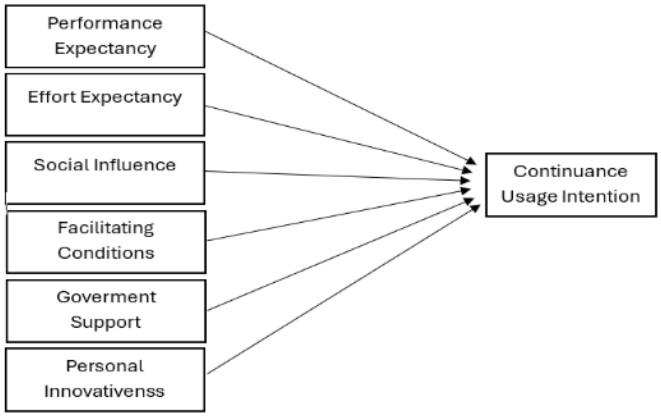

Figure 2. Research Conceptual Framework

RESULT AND DISCUSSION

Validity and Reliability Test

Smart PLS 3.0 software was used to analyze the data, where the measurement model serves to ensure that the construct is measured with a sufficient level of accuracy, while the structural model is used to assess how strongly the model can explain the relationship between variables. Evaluation of the measurement model includes an assessment of the loading factor, average variance extracted (AVE), and discriminant validity or Cronbach's Alpha value. The recommended loading factor (FL) and Average Variance Extracted (AVE) values to ensure convergent validity should exceed 0.5 (Darmansyah et al., 2020; Ryu, 2018). The recommended Composite Reliability (CR) and Cronbach's alpha values to support convergent validity should be above 0.7 (Bagozzi & Yi, 1988; Jamshidi & Kazemi, 2020).

Based on table 3, the factor loading coefficient and AVE of the seven research variables have exceeded the minimum limit of 0.5.This proves that all indicators used in the study are valid. The reliability test results also show the CR (Composite Reliability) and Cronbach's Alpha values above 0.7 which confirm that all indicators have good internal consistency in measuring latent variables. By meeting the validity and reliability criteria, this research model is declared feasible to proceed to the SEM-PLS analysis stage (Hair et al., 2010).

Table 3. Validity and Reliability Test

Construct	Indicator	Outer-Loading	AVE	Cronbach's Alpha	Conclusion
Continuance Usage Intention (CUI)	CU1	0.873	0.815	0.924	Valid
	CU2	0.935			Valid
	CU3	0.882			Valid
	CU4	0.919			Valid
Performance Expectancy (PE)	PE2	0.928	0.881	0.866	Valid
	PE3	0.949			Valid
Effort Expectancy (EE)	EE1	0.866	0.820	0.891	Valid
	EE2	0.922			Valid
	EE3	0.928			Valid
Social Influence (SI)	SI1	0.904	0.799	0.874	Valid
	SI2	0.888			Valid
	SI3	0.890			Valid
Facilitating Conditions (FC)	FC1	0.947	0.794	0.934	Valid
	FC2	0.923			Valid
	FC5	0.877			Valid
	FC7	0.865			Valid
Goverment Support (GS)	GS1	0.942	0.839	0.936	Valid
	GS2	0.901			Valid
	GS3	0.941			Valid
	GS4	0.879			Valid
Personal Innovativeness (PI)	P13	0.946	0.885	0.871	Valid
	P14	0.936			Valid

Structural Model Evaluation

Testing the structural model aims to analyze the relationship between constructs, statistical significance, and R-square value in the research model. This model includes one dependent variable, namely continuance usage intention (Y). Based on the analysis results, the coefficient of determination (R^2) for the continuance usage intention variable is 0.564, which indicates that 56.4% of the variability of continuance usage intention can be explained by the variables of performance expectancy, effort expectancy, social influence, facilitating conditions, government support and personal innovativeness. Meanwhile, 0.551 which shows that the remaining 55.1% is influenced by other factors outside the research model.

The data from table 5 shows that of the six hypotheses proposed in this study, three hypotheses are accepted because they have a value of more than 1.96 or a p-value of less than 0.05 so they are considered to have a significant effect. Meanwhile, the other three

hypotheses were rejected because they did not meet these criteria. Hypothesis 1 is accepted, performance expectancy positively and significantly affects the continued use of QRIS with a path coefficient of 0.192. Hypothesis 2 is rejected, effort expectancy does not show a positive and significant effect on the continued use of QRIS with a path coefficient of 0.087. Hypothesis 3 is accepted, social influence positively and significantly affects the continued use of QRIS with a path coefficient of 0.232. Hypothesis 4 is accepted, facilitating conditions positively and significantly affect the continued use of QRIS with a path coefficient of 0.330. Hypothesis 5 is rejected, government support does not show a positive and significant effect on the continued use of QRIS with a path coefficient of 0.124. The last hypothesis or hypothesis 6 is rejected, personal innovativeness does not show a positive and significant effect on the continued use of QRIS with a path coefficient of -0.080.

Table 5. Hypothesis Test

Hypothesis	Original Sample	t-statistics	p-values	Results
PE – CUI	0.192	2.759	0.006	Influential
EE – CUI	0.087	0.975	0.330	Not Affected
SI – CUI	0.232	2.474	0.014	Influential
FC – CUI	0.335	3.409	0.001	Influential
GS – CUI	0.124	1.842	0.066	Not Affected
PI – CUI	-0.080	1.272	0.204	Not Affected

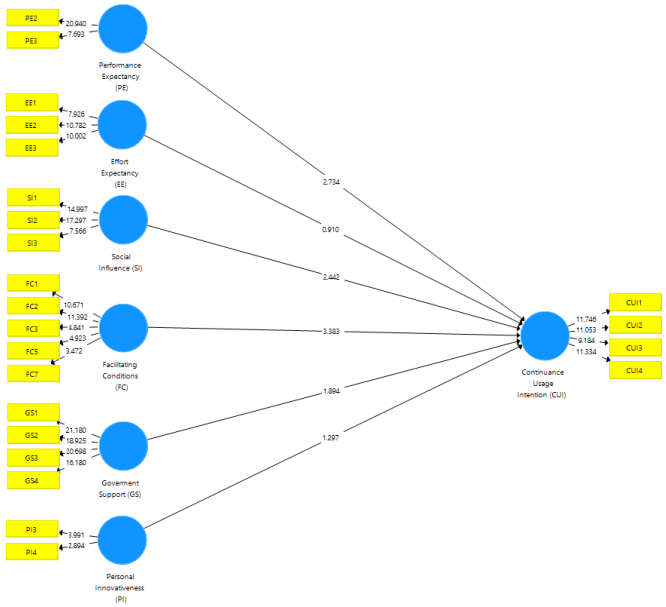

Figure 3. Research Model

Performance Expectancy

The results showed that the p-value for the performance expectancy variable was 0.006 ($p < 0.05$). This indicates that performance expectancy is proven to have a positive and significant influence on continuance usage intention, thereby supporting the first hypothesis. This means that MSME players believe that technology, including QRIS, can increase business efficiency. QRIS speeds up payments, minimizes errors, and simplifies financial records, thereby improving business performance. Because QRIS is considered

more practical and faster than cash payments, especially in crowded areas, the desire to continue using it increases. This concept also describes the benefits of products and services offered to users in terms of productivity, task performance, effectiveness, importance to the task, and overall usefulness. This shows that perceived usefulness influences continuance intention to use (Pradana & Yolanda, 2024). This finding is in line with some previous research Banjarnahor & Setyorini, (2022); Jumaan et al., (2020)

; Prayudi et al., (2022) which states that perceived usefulness has a positive effect on continuance intention. In research Gavriel & Ardianti, (2023) where QRIS used by micro and small businesses (MSEs) in Surabaya affects continuance intention so that they continue to use the technology. However, research by Pratiwi & Lawita, (2024) shows a negative correlation. This means that even though users recognize the benefits of digital wallets (such as efficiency and convenience), there are obstacles or unmet expectations that actually reduce their intention to continue using them.

Effort Expectancy

Effort expectancy shows no positive and significant effect on continuance usage intention with a p-value of 0.330 (p> 0.05), so the second hypothesis is rejected. The perceived ease of use is not enough to influence their intention to use QRIS on an ongoing basis. In other words, the higher or lower the perceived ease of use of QRIS by MSMEs does not directly increase or decrease their intention to continue using QRIS. This can happen because ease of use has been considered a standard or basic thing by MSME actors, so this factor is not a major factor in their decision to continue using QRIS. The results of the research on the effort expectancy variable are consistent with previous research which shows that the convenience factor alone is not the main determinant in the intention to continue using it (Alexandra & Setiawan, 2023; Banjarnahor & Setyorini, 2022; Gavriel & Ardianti, 2023; Narendrar et al., 2023). In their research Gavriel & Ardianti, (2023) mention that the insignificant contribution of effort expectancy in influencing continuance intention may be due to the ease of use of this technology, so that business actors feel that there is no additional effort required to continue using QRIS in transactions with customers. On the other hand, research by Pratiwi & Lawita, (2024) states that effort expectancy has a significant effect on continuance usage intention. This significant finding indicates that the ease of using the application, the clarity of its functions, and the time and effort savings offered by digital wallets encourage customers to continue using the application. When the application's features are easy to operate and do not require much effort to understand, users are more likely to adopt and maintain the use of the application.

Social Influence

The results showed that the p-value for the social influence variable was 0.014 (p < 0.05). This indicates that social influence has a positive and significant effect on continuance usage intention, thereby supporting the third hypothesis. This means that social influence plays a crucial role in encouraging the continued use of QRIS by MSMEs, as the views of people around them, such as friends, family, or business partners, can strengthen a person's confidence in using the technology. When individuals see that their social environment accepts and recommends the use of QRIS technology, the tendency to continue using it increases due to social validation and confidence in its use. These findings are in line with research Istijanto & Handoko, (2022); Pratiwi & Lawita, (2024); Zainuddin et al., (2022)

mentioned that a person's tendency to use an e-wallet system will be stronger if they believe that the system is safe, especially in making transactions. In addition, the researchers also emphasized the importance of social influence in influencing people's long-term intention to continue using e-wallets. However, research by Gavriel & Ardianti, (2023) states that social influence has an insignificant effect. The insignificant contribution of social influence to continuance intention may be because the use of sustainable technology is driven more by business decisions and consumer demand than by direct social influence. In addition, social influence tends to play a greater role in the early stages of adoption than in long-term usage intentions.

Facilitating Conditions

The results showed that the p-value for the facilitating conditions variable was 0.001 ($p < 0.05$). This indicates that facilitating conditions have a positive and significant effect on continuance usage intention so that the fourth hypothesis can be accepted. This means that facilitating conditions play a crucial role in the continued use of QRIS by MSMEs, as the availability of infrastructure, resources, and technical support facilitates consistent access and use of this technology. When MSMEs find devices, internet connections, and support services such as training and technical assistance easily accessible, they become more confident and motivated to continue using QRIS in their daily activities. These favorable conditions reduce technical barriers and increase comfort of use, encouraging continued adoption, These findings are in line with research Arifin & Wahyuhastuti, (2022); Istijanto & Handoko, (2022) which states that facilitating conditions have a positive effect on continuance intention. The better the supporting conditions available, the greater the influence on increasing the intensity of sustainable use. On the other hand, research by Pratiwi & Lawita, (2024) explains that facilitating conditions have no influence on continuance usage intention. This negative and insignificant correlation occurs because customers feel that the support and access available are insufficient to increase their intention to use electronic wallets. Although facilities are important for technology adoption, these results show that this factor is not the main determinant for customers in using electronic wallets.

Government Support

Government Support shows no positive and significant effect on continuance usage intention with a p-value of 0.066 ($p > 0.05$), so the fifth hypothesis is rejected. This finding is not in line with research Gavriel & Ardianti, (2023) which says that the role of government is considered to be very important in making technology adoption decisions. This difference is due to the characteristics of MSMEs in Semarang, which tend to be more independent in making business decisions, including technology adoption, without relying too much on government support. Although the government has provided facilities, it is not the main consideration for MSME players in deciding the sustainability of QRIS use. This suggests that government policies should be made more precise and in accordance with the real needs of MSMEs in order to better assist them in using digital payment technology. Aji et al., (2020) mentioned the need to strengthen government support for the use of electronic money for the community. Therefore, the incentives provided by regulators to use QRIS need to be strengthened. For example, merchant discount rate (MDR) subsidies will encourage

merchants to promote the use of QRIS rates through concurrent campaigns across Indonesia and through paid promotions.

Personal Innovativeness

Personal Innovativeness shows no positive and significant effect on continuance usage intention with a p-value of 0.204 (p> 0.05), so the sixth hypothesis is rejected. This finding is not in line with research Hao et al., (2024); Lu, (2016); Sadewo et al., (2025) which states that personal innovativeness affects continuance intention. This difference is because business actors tend to prioritize practical aspects and direct experience with technology over the urge to try new things. In the context of MSMEs, the motivation to continue using QRIS is more influenced by perceived benefits, facilitating conditions, and the influence of those around them, rather than a desire to try new things. This occurs because personal innovativeness is not always the primary factor influencing a person's intention to use QRIS, especially when perceived benefits, social influence, and facilitating conditions take a greater role in user decision-making.

CONCLUSIONS

The results of this study indicate that performance expectations, social influence, and facilitating conditions have a positive impact on the sustainability of QRIS use in MSMEs in Semarang City. This means that MSMEs tend to continue using QRIS if they perceive the direct benefits of technology, receive support from the social environment, and have facilities and conditions that facilitate the ease of using QRIS. On the other hand, business expectations, government support, and personal innovativeness have no significant effect, indicating that ease of use, government support, and personal innovativeness are not significant factors in MSMEs' decision to continue using QRIS. The obvious implication of these findings is the importance of focusing on increasing benefits, strengthening social influence, and providing adequate facilities to encourage the continued use of QRIS among MSMEs. This study also suggests that future researchers use a wider sample, consider additional variables such as digital literacy, usage trust, security to enrich understanding of the factors affecting the sustainability of QRIS use, and develop research models that combine UTAUT theory with other theories such as Theory of Planned Behavior (TPB), Innovation Diffusion Theory, and Expectation Confirmation Theory (ECT).

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