

## An Analysis of the Continuance Intention of QRIS Users in Southeast Sulawesi Using the Expectation Confirmation Model (ECM)

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### Abstract

The rapid growth of digital payment technologies has transformed how people conduct financial transactions in Indonesia. As one of the leading innovations, QRIS (Quick Response Code Indonesian Standard) plays a key role in promoting a cashless society across various regions. This study aims to analyze users' continuance intention toward the use of QRIS in Southeast Sulawesi through the lens of the Expectation Confirmation Model (ECM) framework. Given the growing adoption of digital payment systems, the research seeks to systematically identify and evaluate the key determinants influencing users' sustained usage behavior. Quantitative methods were applied by collecting data from 250 respondents who are QRIS users. The results of the analysis show that expectation confirmation and perceived usefulness have a significant influence on user satisfaction. However, despite high satisfaction, no significant relationship was found between satisfaction and intention to continue using. In addition, habit was shown to contribute positively to intention to continue. These findings highlight the importance of user experience and trust in digital services. This study recommends further exploration to understand other factors that may influence intention to continue using in the context of digital payment systems.

**Keywords:** Continuance Intention, Digital Payment, Habit, Satisfaction

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### INTRODUCTION

Mobile payment systems are a concept that refers to technologies and services that allow users to make financial transactions using mobile devices such as smartphones, tablets or wearable devices. In recent years, these systems have become increasingly popular with the development of digital technology and the significant increase in internet access and smartphone adoption (Dahlberg et al., 2015; Singh et al., 2017; Franque et al., 2021). *QRIS* (*Quick Response Code Indonesian Standard*) is a payment system that utilizes QR codes to facilitate digital transactions in Indonesia. This mobile payment service, users can make payments through digital wallet applications (e-wallets) or mobile banking quickly and flexibly. Although it provides convenience, concerns about

security risks, such as fraud and data theft, can hinder users' intention to continue using the service. Therefore, it is very important to strengthen trust and ensure service quality in order to increase user satisfaction (Herviana & Abidin, 2024).

Bank Indonesia (BI) noted that the number of transactions using the Standard QRIS experienced a rapid increase of 186 percent year on year (yoy), reaching 689.07 million transactions by November 2024. This growth was supported by the increasing number of users which had reached 55.02 million.(CNN Indonesia, 2024). This significant surge reflects the growing public acceptance of digital payment methods and the success of BI's efforts to promote cashless transactions nationwide (Ratten & Usmanij, 2021; Strömbäck et al., 2017).

The increasing use of QRIS reflects a noticeable change in consumer habits, with a stronger focus on speed, convenience, and security in transactions. More small businesses, even in rural regions, have started embracing digital payment methods, expanding QRIS adoption across the country. Government initiatives and Bank Indonesia's campaigns continue to enhance public understanding of digital finance, supporting wider financial inclusion. Improved access to smartphones and internet services has also contributed to this rapid growth. In the future, digital payment platforms such as QRIS are likely to play a key role in shaping Indonesia's digital economy (Hamzah Muchtar et al., 2024; Nurqamarani et al., 2023).

**Table 1.** Volume and Nominal of QRIS Transactions 2020-2024

| Year | Transaction Volume (Rp) | Transaction Amount (Rp) |
|------|-------------------------|-------------------------|
| 2020 | 124.11 million          | 8.21 trillion           |
| 2021 | 374.69 million          | 27.63 trillion          |
| 2022 | 1 billion               | 99.98 trillion          |
| 2023 | 2.14 billion            | 226 trillion            |
| 2024 | 6.24 billion            | 659.93 trillion         |

Source: Indonesian Payment Systems Association (ASPI), 2025

Meanwhile, based on Table 1 Demonstrates that in January 2025, the number of QRIS users was 271,531 or grew by around 23.18% compared to 2024 and the number of transactions using digital payments in the period from 2024 to January 2025 had reached 1.5 million transactions. (Between News, 2025). Meanwhile, data from the Bank Indonesia Representative Office for Southeast Sulawesi shows a noticeable increase in the number of QRIS users, demonstrating a growing trend in digital payment adoption. The volume of transactions using digital payments has also experienced a significant rise, reflecting the region's shift toward more efficient and modern payment methods. This trend highlights the growing confidence in QRIS as a reliable and accessible payment solution. As more users embrace digital payments, the region is likely to see continued growth in financial inclusion and economic activity (Johan et al., 2021; Permatasari et al., 2024).

This phenomenon not only exhibits the increasing adoption of the QRIS but also indicates the strong potential for continuation intention among users. Expectation confirmation model (ECM) developed by Bhattacherjee (2001) is an approach that is often used to analyze the ongoing behavior of users. ECM explains that users form expectations before using a system and then evaluate its performance after use. If the system meets or exceeds expectations, users are satisfied and vice versa. User satisfaction is the main predictor continuance intention is influenced by confirmation of expectations and perceptions of the usefulness of the system.(Bhattacherjee, 2001; Pereira & Tam, 2021).

Continuance intention serves as the main driver that directs users to take real action in the form of continuance behavior. When the intention to continue using is supported by positive experiences, users are more likely to continue using it, tend to be committed and involved in the continued use of the system. (Lai et al., 2016).

According to Limayem et al., (2007) defines continuance behavior as the actual behavior shown by users in using an information system (actual usage). Actual usage behavior reflects the level of user involvement and satisfaction with the information system, and can influence their intention to continue using it in the future.(Liu et al., 2023; Rabaa'i et al., 2022; Osang et al., 2018).

Based on the above, this study aims to explore the mechanisms that influence the formation of continuance intention and continuance behavior of QRIS users in South east Sulawesi by combining the Expectation Confirmation Model (ECM) framework and the concept of habit (Mishra et al., 2023; Dhia & Kholid, 2021). According to Söllner et al., (2024) that Habits formed through repeated use make usage behavior automatic, thus increasing the user's intention to continue using the system. In addition, habits also contribute to the frequency of actual use, where users who are familiar with the system tend to be more active. The interaction between habit and continuance intention can strengthen system usage, indicating that the two support each other in the context of technology use (Wahyuni, 2024).

This research introduces a novel approach by combining the concept of 'habit' with the ECM. This is significant because ECM, while useful, often underemphasizes the automation aspect in usage behavior. The

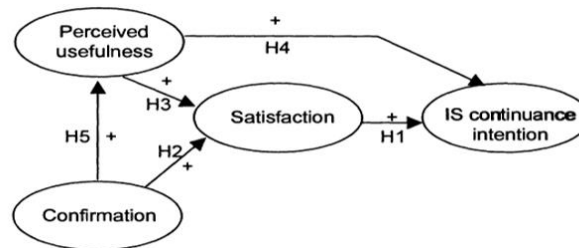
integration of 'habit' allows the research to explain how repeated QRIS usage can become a habit that influences continuance intention, even if user expectations or satisfaction change. The addition of the habit concept to the ECM framework offers a clearer understanding of how behaviors become ingrained and automatic over time, leading to sustained usage. It also highlights how these habitual behaviors can persist, even when initial expectations or satisfaction levels change.

## LITERATURE REVIEW

### Expectation Confirmation Theory (ECT)

Expectation-Confirmation Theory (ECT) was first introduced by Richard L. Oliver in 1977 and 1980, explaining how the expectations consumers hold before purchasing a product can influence their performance evaluation of the product used, and how disconfirmation (the difference between expectations and perceived performance) can affect consumer satisfaction (Oliver, 1977; Oliver, 1980). This theory suggests that if a product meets or exceeds expectations, consumers are likely to feel satisfied, reinforcing future purchase intentions. Conversely, when the product does not meet expectations, it leads to dissatisfaction, which can result in negative reviews or the choice to turn to competing brands.

Bhattacharjee (2001) developed the Expectation Confirmation Model (ECM) as an application of ECT to information systems, explaining how a user's initial expectations of the system, the perceived performance after use, and the confirmation (or disconfirmation) of those expectations influence their satisfaction. The ECM demonstrates that confirmation of expectations and perceived performance significantly influence user satisfaction, which in turn is a key predictor of continued information system usage intention; thus, this model provides a useful framework for understanding and improving user retention in the context of information systems.



**Figure 1.** Expectation Confirmation Model (ECM) by Bhattacharjee (2001)

ECT explains how confirmation of user expectations about a system affects satisfaction, perceived usefulness, and system usage. Users have expectations before using a system, and after actual experience, they compare them to those expectations. If the experience meets or exceeds expectations, the confirmation is perceived positively, which increases user satisfaction. High satisfaction further strengthens the perception that the system is useful, driving continued use intentions (Nawanda & Tambotoh, 2024; Mehriaboun, 2024). The theory developed by Bhattacharjee (2001b) states first, users form initial expectations before using a service or product. Second, after actual use, users will compare actual performance with initial expectations. Third, if actual performance meets or exceeds expectations, positive confirmation occurs which increases satisfaction and intention to continue using the service.

Kim et al. (2019); Wahyudi et al. (2021) and Ari barisa & Suryandari (2022) explains that confirmation can increase perceived usefulness through evaluating the results of using the application that are in accordance with user expectations. When users feel that the application meets or exceeds their expectations, their level of satisfaction will increase, which further contributes to the perception that the application is useful. Positive confirmation serves as a link that strengthens the relationship between user experience and perceived usefulness, thereby encouraging the intention to continue using the application in the future (Huang & Liu, 2024).

H<sub>1</sub>: Confirmation has a positive and significant on perceived usefulness.

H<sub>2</sub>: Confirmation has a positive impact on satisfaction

H<sub>3</sub>: Perceived usefulness increases satisfaction

H<sub>4</sub>: Perceived usefulness increases continuance intention

### Satisfaction and Continuance Intention

Satisfaction can be defined as a positive affective state experienced by users after interacting with a digital service. Users who rate a digital service as an effective and easy-to-use tool tend to experience a higher level of satisfaction, which contributes to a stronger intention to continue using the digital service (Rajeh et al., 2021). Factors such as informativeness, self-expression, sense of belonging and trendiness contribute to the level of satisfaction. When users feel satisfied, they tend to have a stronger intention to continue using the application, and create a positive emotional attachment (Sharabati et al., 2022).

User satisfaction is the main factor in encouraging continued intention so that satisfaction becomes the main factor (Wan et al., 2020). Continuance intention refers to a user's decision to continue using a digital platform based on their previous experience. High satisfaction can increase continuance intention and vice versa (Maqableh et al., 2021; Ab Hamid et al., 2022). When users feel their expectations are consistently met or exceeded, they are more likely to remain loyal and engaged with the platform over time.

H<sub>5</sub>: Satisfaction contributes positively to continuance intention

## Habits and Continuance Intention

Habit refers to a person's tendency to perform a certain action automatically without thinking about the decision. Strong habits can increase continuation intention (Dai et al., 2020; Mangunsong & Sobari, 2024; Tekaqnetha & Rodhiah, 2020). In certain situations, habits can trigger associations between cues and behaviors that have been learned through previous experiences. Habits emerge without the need for conscious thought. It is hypothesized that habits can weaken the influence of intentions on behavior. When the situation is favorable, actions are more likely to be guided by habits than by momentary intentions. This means that under certain conditions, habits can dominate decisions made based on intentions (Gardner et al., 2020). This opinion is also in line with Yeriha Zehra et al. (2022) which explains Strong habits can reduce the influence of intentions, so that someone who is used to using a particular service may continue to use it even though their initial intention was not very strong. Under supportive conditions, such as a familiar environment, habits tend to dominate users' decisions, leading to more automatic actions. In addition, the user's level of self-control also plays an important role; when self-control is low, habits are more likely to dominate, while when self-control is high, users are better able to follow through on their intentions despite strong habits.

H<sub>6</sub>: Strong habits can reduce the influence of continuance intention.

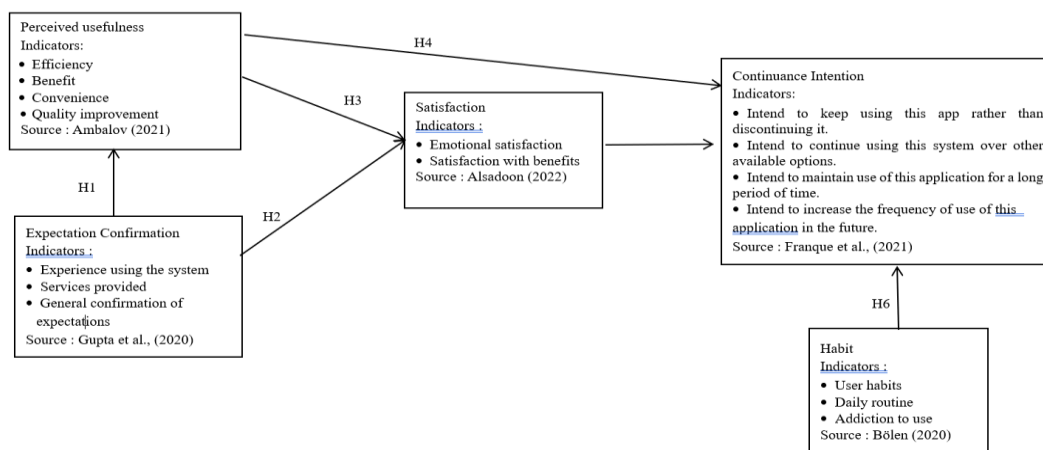


Figure 2. Research Model

## METHOD

The design of this research is a quantitative approach, namely exploring the causal relationship between variables that play a role according to the previously formulated hypothesis or called explanatory research. The population in this study were residents of South east Sulawesi who used QRIS digital payments, the number of which was unknown, so the sample determination in this study used purposive sampling, namely taking samples by selecting individuals or groups based on certain criteria that were relevant to the research objectives (Sugiyono, 2019). The criteria are that respondents are users of the QRIS application and have made transactions in the last six months. Based on the above, the number of samples in this study is 250 respondents. This is in accordance with Roscoe's opinion that the ideal sample size for most research is more than 30 and less than 500 (Sekaran, 2006).

Table 2. Operational Definition

| Variables                              | Definition of Research Variable   | Indicator   |
|--|---|---|
| Perceived usefulness<br>Ambalov (2021) | Specific measures used to assess how much users believe that using a system or technology will increase the effectiveness and productivity of QRIS users. | a. Efficiency<br>b. Benefit<br>c. Convenience<br>d. Quality improvement |

| Variables   | Definition of Research Variable   | Indicator  |
|---|---|--|
| Confirmation<br>Gupta et al.<br>(2020)            | Users feel that their experience with a system or service meets, exceeds, or falls short of the initial expectations they had before using the system.  | a. Experience using the system<br>b. Services provided<br>c. General confirmation of expectations  |
| Satisfaction<br>Alsadoon (2022)                   | User satisfaction levels reflect subjective evaluations of how well a system or service meets their expectations and needs after use.   | a. Emotional satisfaction<br>b. Satisfaction with benefits   |
| Habits<br>Bölen (2020)                            | The automatic tendency of users to repeatedly utilize this digital payment system without deep consideration, driven by prior experience and confirmation of expectations regarding ease of use and benefits obtained." | a. User habits<br>b. Daily routine<br>c. Addiction to use  |
| Continuance intention<br>Franque et al.<br>(2021) | User's intention to continue using an application or system after an initial usage experience.  | a. Intend to keep using this app rather than discontinuing it.<br>b. Intend to continue using this system over other available options.<br>c. Intend to maintain use of this application for a long period of time.<br>d. Intend to increase the frequency of use of this application in the future. |

Structural Equation Modeling (SEM) is a statistical technique used to analyze the relationship between latent variables (not directly measured) and measured variables in this study. SEM allows researchers to test complex models, including cause-and-effect relationships between variables. The analysis of the outer model and inner model in Structural Equation Modeling (SEM) aims to ensure that the relationships between latent variables and their indicators are valid and reliable. The outer model assesses the extent to which indicators represent latent variables through convergent validity, discriminant validity, and construct reliability, using parameters such as loading factor, Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha. Meanwhile, the inner model evaluates the relationships between latent variables by measuring collinearity through Variance Inflation Factor (VIF), path significance using bootstrapping, and model predictive power with  $R^2$  and  $Q^2$ . Additionally, the model must be tested for Goodness-of-Fit using indicators such as Standardized Root Mean Square Residual (SRMR) to ensure its compatibility with the data (Hair et al., 2017).

## RESULT

### Evaluation of Measurement Model (Outer Model)

Evaluation of the Measurement Model (Outer Model) in SEM-PLS assesses the relationship between latent variables and indicators through convergent validity (loading factor  $> 0.70$ , AVE  $> 0.50$ ) and discriminant validity. Reliability is tested with Composite Reliability and Cronbach's Alpha ( $> 0.70$ ) to ensure the accuracy and reliability of the construct. For further details, refer to Table 3, which presents the results of these evaluations.

**Table 3.** Loading Factor

|     | PU   | C    | S    | H    | CI   |
|-----|------|------|------|------|------|
| PU1 | .884 |      |      |      |      |
| PU2 | .882 |      |      |      |      |
| PU3 | .852 |      |      |      |      |
| PU4 | .709 |      |      |      |      |
| C1  |      | .871 |      |      |      |
| C2  |      | .799 |      |      |      |
| C3  |      | .833 |      |      |      |
| S1  |      |      | .906 |      |      |
| S2  |      |      | .918 |      |      |
| H1  |      |      |      | .838 |      |
| H2  |      |      |      | .970 |      |
| H3  |      |      |      | .804 |      |
| CI1 |      |      |      |      | .819 |
| CI2 |      |      |      |      | .851 |

|     | PU | C | S | H | CI   |
|-----|----|---|---|---|------|
| CI3 |    |   |   |   | .742 |
| CI4 |    |   |   |   | .866 |

Notes: PU; Perceived Usefulness, C; Confirmation, S; Satisfaction, H; Habit, CI; Continuance Intention

**Table 4.** Reliability and Validity

| Variables | Items | Cronbach's alpha | Rho_A | Composite reliability | AVE  |
|-----------|-------|------------------|-------|-----------------------|------|
| PU        | 4     | .841             | .854  | .894                  | .680 |
| C         | 3     | .783             | .796  | .873                  | .697 |
| S         | 2     | .798             | .801  | .908                  | .832 |
| H         | 3     | .859             | 1.368 | .906                  | .763 |
| CI        | 4     | .841             | .867  | .892                  | .674 |

Notes: PU; Perceived Usefulness, C; Confirmation, S; Satisfaction, H; Habit, CI; Continuance Intention

The results of the SEM-PLS analysis presented in Tables 3 and 4 highlight that the evaluation of the measurement model is confirmed to be accurate and the construct is reliable.

**Table 5.** Discriminant Validity

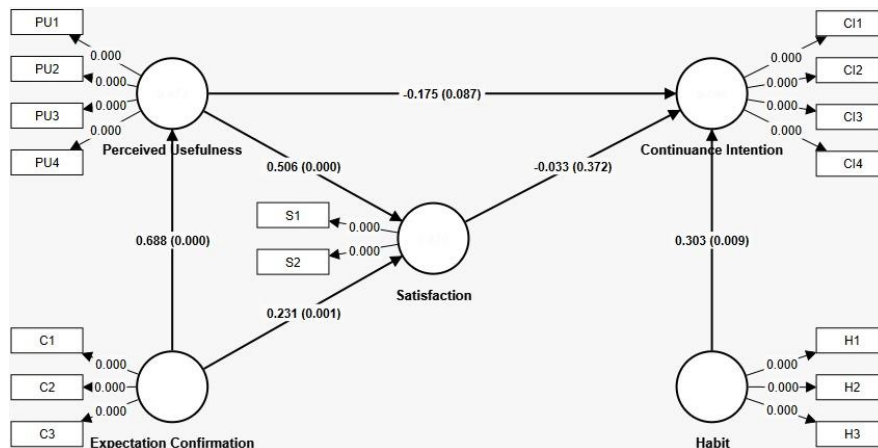
|                              | PU   | C     | S    | H    | CI   |
|------------------------------|------|-------|------|------|------|
| Fornell-Lacker Criterion     |      |       |      |      |      |
| PU                           | .824 | .688  | .013 | .692 |      |
| C                            |      | .835  |      |      | .042 |
| S                            | .665 | .579  | .192 | .594 | .030 |
| H                            |      | .549  |      | .874 | .162 |
| CI                           |      |       |      |      | .821 |
| Heterotrait Monotrait (HTMT) |      |       |      |      |      |
| PU                           |      | 0.841 |      | .817 | .107 |
| C                            |      |       |      |      | .104 |
| S                            | .803 | .726  |      | .713 | .103 |
| H                            |      | .644  |      |      | .143 |
| CI                           |      |       |      |      |      |

Notes: PU; Perceived Usefulness, C; Confirmation, S; Satisfaction, H; Habit, CI; Continuance Intention

Table 5 indicates that the diagonal values are greater than the non-diagonal values for the criteria. Fornell Larcker and HTMT values are below 0.90 so it can be concluded that the construct has good discriminant validity. This indicates that each construct in the model is separate and not strongly related to the others. Consequently, the measurement model shows sufficient validity, affirming that the constructs assess distinct elements of the data.

### Structural Model Evaluation (Inner Model)

The t-statistic value is an important indicator in hypothesis testing in SEM-PLS. The relationship is considered significant if the t-statistic > 1.96 (5%). The higher the t-statistic, the stronger the evidence to accept the alternative hypothesis. Significance is tested through bootstrapping to ensure the accuracy of the results.



**Figure 3.** Bootstrapping SEM PLS

Figure 3. represents a Partial Least Squares (PLS) structural model that illustrates the relationships between several variables such as Expectation Confirmation, Perceived Usefulness, Satisfaction, Habit, and Continuance Intention. From this model, it is evident that Expectation Confirmation has a significant impact on Perceived Usefulness (0.688) and Satisfaction (0.231). Perceived Usefulness also has a significant effect on Satisfaction (0.506), but does not have a direct significant impact on Continuance Intention (-0.175,  $p = 0.087$ ). Satisfaction also does not show a direct significant effect on Continuance Intention (-0.033,  $p = 0.372$ ). In contrast, the Habit variable has a significant effect on Continuance Intention (0.303,  $p = 0.009$ ), indicates that user habit plays a more crucial role in determining continuance intention than satisfaction or perceived usefulness directly.

**Table 6.** Hypothesis Testing

| Hypothesis                                       | Path Coefficient | T-Statistics | P-Value | F2   | Decision  |
|--|------------------|--------------|---------|------|-----------|
| H1. Confirmation → Perceived Usefulness          | .688             | 16,913       | 0.000   | .897 | Supported |
| H2. Confirmation → Satisfaction                  | .231             | 2,974        | 0.001   | .053 | Supported |
| H3. Perceived Usefulness → Satisfaction          | .506             | 6,173        | 0,000   | .255 | Supported |
| H4. Perceived Usefulness → Continuance Intention | -0.175           | 1,362        | 0.087   | .013 | Rejected  |
| H5. Satisfaction → Continuance Intention         | -0.033           | 0.325        | 0.372   | .001 | Rejected  |
| H6. Habit → Continuance Intention                | .303             | 2,358        | 0.087   | .047 | Supported |

Table 6 present that confirmation and perceived usefulness have a significant positive effect on satisfaction, while satisfaction has an effect on continuance intention. However, there is no significant relationship between satisfaction and continuance intention in hypothesis H5, and similarly, no significant relationship between perceived usefulness and continuance intention in hypothesis H4. This indicates that other factors may need to be considered to understand continuance intention.

**Table 7.** R<sup>2</sup> Value

| Variables             | R-square |
|-----------------------|----------|
| Continuance Intention | .046     |
| Perceived Usefulness  | .474     |
| Satisfaction          | .470     |

Table 7 reveals the R<sup>2</sup> value for Satisfaction shows a fairly good model in explaining satisfaction, while for Continuance Intention and Perceived Usefulness, the model is less effective. This indicates the need for further research or the addition of other variables to better understand the factors that influence the intention to continue using and perceived usefulness.

## DISCUSSION

The results of the SEM PLS analysis show that H1 shows a positive and significant influence between confirmation and perceived usefulness. The P-value of 0.001 indicates that this result is very statistically significant. A positive experience using QRIS in making transactions without obstacles and smoothly can increase the perceived usefulness of the benefits of digital payments, thus encouraging more people to use them. These findings confirm that positive confirmation can strengthen perceived usefulness because the services used meet and exceed user expectations. (Pereira & Tam, 2021; Ubaidillah et al., 2023). QRIS users in Southeast Sulawesi experience the benefits of QRIS digital payments for several reasons, namely convenience, security, and inclusivity in transactions. Payments via QRIS can be made quickly through smartphones, and reducing the risk of losing cash is also a reason. Another advantage of the benefits felt by QRIS is government support as part of efforts to encourage financial inclusion and economic digitization, such as the government providing subsidies to people who use QRIS for certain transactions, such as paying for public transportation or purchasing SMEs (Micro, Small, and Medium Enterprises) products.

The statistical value of hypothesis 2 states that it is accepted, namely confirmation has a positive impact on satisfaction. A significant positive influence between confirmation and user satisfaction, with a path coefficient of 0.231 and a t-statistic of 4.029. A p-value of 0.000 indicates that this relationship is highly significant. This means that when users feel that the service meets or exceeds their expectations, this directly increases their level of satisfaction (Tyas & Azizah, 2022; Andrew & Ardianti, 2022). The results of observations and questionnaire data collection in the field provide a positive confirmation statement regarding the QRIS user experience in Southeast Sulawesi, which exceeds or meets the initial expectations of QRIS users regarding the ease, speed, and security of transactions. This positively confirmed experience is crucial to ensuring the continued use of QRIS in Southeast Sulawesi. User satisfaction with QRIS as a digital payment tool has a significant impact on QRIS

adoption by merchants, and this can serve as a reference for further research. Field data shows that when consumers use QRIS and are satisfied, merchants are more motivated to provide QRIS digital payment services as a payment option. This phenomenon naturally creates a positive effect because the more satisfied users there are, the higher the QRIS adoption rate, and the more people are interested in using QRIS.

Hypothesis 3 states a positive and significant relationship between perceived usefulness and satisfaction with a path coefficient of 0.506 and a t-statistic of 6.173. The p-value reaching 0.000 confirms that this relationship is very significant. This means that the higher the user feels the usefulness of the service, the greater their level of satisfaction. In other words, positive perceptions of service benefits contribute directly to the user's satisfaction experience (Boliona et al., 2025; Umam & Puspawati, 2024). Perceived usefulness is a key factor in increasing QRIS user satisfaction in Southeast Sulawesi, given that this perception directly influences perceived value, fulfillment of needs, efficiency, reduced frustration, and motivation for continued use. When the people of Southeast Sulawesi perceive QRIS as a tool that simplifies transactions in traditional markets, saves time when paying for local transportation, and provides a sense of security in transacting without cash, they are more likely to be satisfied and motivated to continue using it. This encourages the widespread adoption of QRIS in Southeast Sulawesi, especially among communities that prioritize convenience and efficiency in their daily economic activities.

Referring to the statistical value in hypothesis 4 shows that the hypothesis is rejected. The relationship between perceived usefulness and continuance intention is not significant with a path coefficient value of -0.175 and a p-value of 0.172. High p-value indicates that there is insufficient evidence to support a positive relationship between the two. This means that users' perceptions of the usefulness of a service do not affect their intention to continue using the service. Bhattacharjee et al., (2012) explains that even if users perceive usefulness, if their experience is unsatisfactory or there are other problems (such as difficulty of use or poor customer support), they may not have the intention to continue. In this case, perceived usefulness is not enough to increase the satisfaction needed to drive the intention to continue using the service. Hypothesis H4 was likely rejected because QRIS is already considered good enough by users, meaning perceived usefulness no longer significantly increases continuance intention. QRIS users in Southeast Sulawesi feel that QRIS sufficiently helps them by providing transaction convenience, so small improvements in usefulness do not make a fundamental difference in their intention to continue using QRIS. To understand why perceived usefulness may not increase continuance intention, it is important to consider other variables such as enjoyment and trust. Alternatively, further analysis, such as moderation or mediation analysis, can be conducted to uncover more complex relationships between the two variables, namely perceived usefulness and continuance intention.

Hypothesis 5 states that there is no significant positive relationship between satisfaction and continuance intention. The negative path coefficient value (-0.033) indicates that increased satisfaction is not related to increased continuance intention. The very low p-value (0.001) indicates that this relationship is statistically significant, but in this context, the hypothesis is rejected because it does not support the expected relationship. Garg & Sharma (2020) emphasizes that user satisfaction is key to continuance intention. The quality of the user experience, including support and features, influences satisfaction and the decision to continue using a service. While satisfaction is conceptually linked to continuance intention, empirical studies suggest that in the context of QRIS, its influence may not be significant. This could be attributed to a threshold effect, where a minimum level of satisfaction has been met, such that further increases do not correlate with the intention to continue using the system. Furthermore, other variables such as usage habits, perceived ease of use, perceived instrumental value, trust in the system, and the availability of alternative payment options, potentially exert a stronger influence on continuance intention compared to satisfaction alone. Therefore, further investigation is needed to identify the dominant factors influencing the sustained adoption of QRIS.

Hypothesis 6 states that there is a positive and significant relationship between user habits and intention to continue using. The path coefficient value (0.303) shows that the stronger the habit of users in using the service, the higher their intention to continue using it. The p-value (0.047) indicates that this result is statistically significant, which supports the hypothesis that habits have an effect on intention to continue. Habits are considered as an important factor influencing intention to continue using, which refers to the use that occurs automatically and gradually in the process of intention to continue using (Guo & Lv, 2019; Tekanetha & Rodhiah, 2020; Lai, 2016). Strong habits can diminish the influence of continuance intention because behavior becomes automated and less reliant on conscious thought. Users with a strong habit of using QRIS, for example, are likely to continue using it even if their intention to do so is weak or even negative. This is because habits trigger behavior automatically through contextual cues, reducing the need for cognitive evaluation and deliberate decision-making. Even if an individual has a weak or even negative intention to continue using QRIS, the strength of the established habit can override that intention and promote continued usage behavior. The implication of this phenomenon is that strategies to encourage the sustained adoption of technology should focus on the formation and reinforcement of user habits, rather than solely manipulating intentions through increased satisfaction or perceptions of usefulness.



## CONCLUSION

This study demonstrates that confirmation of expectations and perceived usefulness significantly influence user satisfaction in the context of QRIS. Positive user experiences enhance satisfaction and contribute to the intention to continue using the system. However, the absence of a significant relationship between satisfaction and continuance intention suggests that satisfaction alone may not be a sufficient predictor of long-term use. Similarly, perceived usefulness does not significantly affect the intention to continue using QRIS, indicating that functional improvements may not be the primary driver of user retention. Instead, the results highlight the stronger influence of user habit on continuance intention. This suggests that repetitive and automatic use of the system can foster user loyalty over time. Therefore, to strengthen user commitment, service providers should prioritize enhancing user experience, building trust, and encouraging.

This study is limited to the variables tested within the Expectation Confirmation Model (ECM) framework, with a specific focus on QRIS users. The findings may not be generalizable to other digital payment platforms or user segments with different behavioral patterns. In addition, the use of a cross-sectional survey design limits the ability to infer causality between variables. Future research should consider incorporating longitudinal data to better understand the development of habits and changes in user behavior over time. It is also recommended to explore other relevant factors such as trust, perceived risk, social influence, and availability of alternative payment methods. Comparative studies across different digital payment platforms could also offer broader insights into user continuance behavior in the digital financial ecosystem.

## REFERENCES

- Ab Hamid, S. N., Omar Zaki, H., & Che Senik, Z. (2022). Students' satisfaction and intention to continue online learning during the Covid-19 pandemic. *Malaysian Journal of Society and Space*, 18(3), 138–152. <https://doi.org/10.17576/geo-2022-1803-09>
- Alsadoon, E. (2022). Intentions of students to continue using virtual desktop infrastructure: expectation confirmation model perspective. *IEEE Access*, 10(Vdi), 49080–49087. <https://doi.org/10.1109/ACCESS.2022.3173299>
- Ambalov, I. A. (2021). Decomposition of perceived usefulness: A theoretical perspective and empirical test. *Technology in Society*, 64(April 2020), 101520. <https://doi.org/10.1016/j.techsoc.2020.101520>
- Andrew, R., & Ardianti, R. (2022). Perceived playfulness, perceived usefulness, confirmation dan continuance intention pada layanan video on demand: satisfaction sebagai mediasi. *MBR (Management and Business Review)*, 6(2), 195–211. <https://doi.org/10.21067/mbr.v6i2.7549>
- Antara News. (2025). *Pengguna QRIS di Sultra capai 275 ribu pengguna*. Sultra.Antaranews.Com.
- Aribarisa, N., & Suryandari, R. T. (2022). Is an Intention to Use Electronic Wallets Being Driven by Perceived Susceptibility, Perceived Usefulness, and Confirmation to the Covid-19 Virus? *International Journal of Economics, Business and Management Research*, 06(03), 76–84. <https://doi.org/10.51505/ijebmr.2022.6305>
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351–370. <https://doi.org/https://doi.org/10.2307/3250921>
- Bhattacharjee, Anol. (2001). Bhattacharjee/Information Systems Continuance MIS Qarterjy Understanding Information Systems Continuance: An Expectation-Confirmation Modell Motivation for the Study. *MIS Quarterly*, 25(3), 351–370.
- Bhattacharjee, Anol, Limayem, M., & Cheung, C. M. K. (2012). User switching of information technology: A theoretical synthesis and empirical test. *Information and Management*, 49(7–8), 327–333. <https://doi.org/10.1016/j.im.2012.06.002>
- Bölen, M. C. (2020). Exploring the determinants of users' continuance intention in smartwatches. *Technology in Society*, 60, 101209. <https://doi.org/10.1016/j.techsoc.2019.101209>
- Boliona, B., Keraf, B., Pramana, E., Sains, I., Surabaya, T., & Java, E. (2025). *Factors Influencing Continuance Intention to Play Online Games*. 14(March), 78–88. <https://doi.org/10.34148/teknika.v14i1.1163>
- CNN Indonesia. (2024). *BI Catat Transaksi QRIS Melonjak, Pengguna Kartu Debit Turun*. Cnnindonesia.Com.
- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14(5), 265–284. <https://doi.org/10.1016/j.elerap.2015.07.006>
- Dai, H. M., Teo, T., & Rappa, N. A. (2020). Understanding continuance intention among MOOC participants: The role of habit and MOOC performance. *Computers in Human Behavior*, 112, 106455. <https://doi.org/10.1016/j.chb.2020.106455>
- Dhia, A. W., & Kholid, M. N. (2021). Explaining e-wallet continuance intention: A modified expectation confirmation model. *Jurnal Minds: Manajemen Ide Dan Inspirasi*, 8(2), 287. <https://doi.org/10.24252/minds.v8i2.23592>
- Franque, F. B., Oliveira, T., & Tam, C. (2021). Understanding the factors of mobile payment continuance intention: empirical test in an African context. *Heliyon*, 7(8), e07807.

- <https://doi.org/10.1016/j.heliyon.2021.e07807>
- Gardner, B., Lally, P., & Rebar, A. L. (2020). Does habit weaken the relationship between intention and behaviour? Revisiting the habit-intention interaction hypothesis. *Social and Personality Psychology Compass*, 14(8), 1–24. <https://doi.org/10.1111/spc3.12553>
- Garg, S., & Sharma, S. (2020). User Satisfaction and Continuance Intention for Using E-Training: A Structural Equation Model. *Vision*, 24(4), 441–451. <https://doi.org/10.1177/0972262920926827>
- Guo, Y., & Lv, X. (2019). *Research on influencing factors of users' continuance intention to use car-hailing Apps*. 80(Bems), 191–199. <https://doi.org/10.2991/bems-19.2019.34>
- Gupta, A., Yousaf, A., & Mishra, A. (2020). How pre-adoption expectancies shape post-adoption continuance intentions: An extended expectation-confirmation model. *International Journal of Information Management*, 52(April 2019), 102094. <https://doi.org/10.1016/j.ijinfomgt.2020.102094>
- Hair et al. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. In *International Journal of Research & Method in Education* (Vol. 38, Issue 2). <https://doi.org/10.1080/1743727x.2015.1005806>.
- Hamzah Muchtar, E., Trianto, B., Maulana, I., Alim, M. N., Marasabessy, R. H., Hidayat, W., Junaedi, E., & Masrizal. (2024). Quick response code Indonesia standard (QRIS) E-payment adoption: customers perspective. *Cogent Business & Management*, 11(1), 2316044.
- Herviana, W. H., & Abidin, Z. (2024). Evaluating user continuance intentions for QRIS Mobile Payments Services Using Information System Success Model and Expectation Confirmation Model. *Journal of Advances in Information ...*, 6(April), 87–105.
- Huang, F., & Liu, S. (2024). If I Enjoy, I Continue: The Mediating Effects of Perceived Usefulness and Perceived Enjoyment in Continuance of Asynchronous Online English Learning. *Education Sciences*, 14(8). <https://doi.org/10.3390/educsci14080880>
- Johan, I., Rowlingson, K., & Appleyard, L. (2021). The Effect of Personal Finance Education on The Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia. *Journal of Family and Economic Issues*, 42(2), 351–367. <https://doi.org/10.1007/s10834-020-09721-9>
- Kim, S. H., Bae, J. H., & Jeon, H. M. (2019). Continuous intention on accommodation apps: Integrated value-based adoption and expectation-confirmation model analysis. *Sustainability (Switzerland)*, 11(6), 1–17. <https://doi.org/10.3390/su11061578>
- Lai, H., Chen, C., & Chang, Y. (2016). Expectation-Confirmation Model of Information System Continuance : A Meta-Analysis. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 10(7), 2162–2167.
- Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). R Esearch a Rticle H Ow H Abit L Imits the P Redictive P Ower of I Ntention : T He C Ase of I Nformation. *MIS Quarterly*, 31(4), 705–737.
- Liu, Y., Li, Q., Edu, T., & Negricea, I. C. (2023). Exploring the Continuance Usage Intention of Travel Applications in the Case of Chinese Tourists. *Journal of Hospitality and Tourism Research*, 47(1), 6–32. <https://doi.org/10.1177/1096348020962553>
- Mangunsong, E. P., & Sobari, N. (2024). The Role of Habit and Perceived Usefulness on the Continuance Intention of Subscription Video on Demand Services in Indonesia. *Eduvest - Journal of Universal Studies*, 4(8), 6795–6806. <https://doi.org/10.59188/eduvest.v4i8.1704>
- Maqableh, M., Obeidat, Z., Obeidat, A., Jaradat, M., Shah, M. H., & Masa'deh, R. (2021). Examining the determinants of facebook continuance intention and addiction: The moderating role of satisfaction and trust. *Informatics*, 8(3). <https://doi.org/10.3390/informatics8030062>
- Mehraboun, M. (2024). A multi-theoretical view on social media continuance intention: Combining theory of planned behavior, expectation-confirmation model and consumption values. *Digital Business*, 4(1), 100070. <https://doi.org/10.1016/j.digbus.2023.100070>
- Mishra, A., Shukla, A., Rana, N. P., Currie, W. L., & Dwivedi, Y. K. (2023). Re-examining post-acceptance model of information systems continuance: A revised theoretical model using MASEM approach. *International Journal of Information Management*, 68(April 2022), 102571. <https://doi.org/10.1016/j.ijinfomgt.2022.102571>
- Nawanda, A. K., & Tambotih, J. J. C. (2024). *Evaluating the Success of Learning Management Systems using the EESS Model and Expected Confirmation Theory*. 04. <https://doi.org/10.21456/vol14iss4pp337-352>
- Nurqamarani, A. S., Fadilla, S., & Juliana, A. (2023). Adoption of QRIS as a digital payment mode in the culinary subsector: A conceptual framework study. *Proceedings of the 5th Open Society Conference (OSC 2023)*, 263, 60.
- Osang, F., Osang, F. B. &, & Onwodi, G. (2018). Predicting ATM Bank Customers Satisfaction and Continued Usage in Developing Countries Using Expectation Confirmation Model. *Advances in Multidisciplinary & Scientific Research Journal*, 4(2), 100–109.

- Pereira, R., & Tam, C. (2021). Impact of enjoyment on the usage continuance intention of video-on-demand services. *Information and Management*, 58(7), 1–11. <https://doi.org/10.1016/j.im.2021.103501>
- Permatasari, D., Sartika, F., Ekonomi, F., Islam, U., Maulana, N., Ibrahim, M., Gajayana, J., & Malang, N. (2024). *Determinants of Financial Management Behavior among Young Millennial Entrepreneurs*. 12(2), 142–152.
- Rabaa'i, A., Al-Lozi, E., Hammouri, Q., Muhammad, N. B., Alsmadi, A. A., & Al-Gasawneh, J. A. (2022). Continuance intention to use smartwatches: An empirical study. *International Journal of Data and Network Science*, 6(4), 1643–1658. <https://doi.org/10.5267/j.ijdns.2022.4.012>
- Rajeh, M. T., Abduljabbar, F. H., Alqahtani, S. M., Waly, F. J., Alnaami, I., Aljurayyan, A., & Alzaman, N. (2021). Students' satisfaction and continued intention toward e-learning: a theory-based study. *Medical Education Online*, 26(1). <https://doi.org/10.1080/10872981.2021.1961348>
- Ratten, V., & Usmanij, P. (2021). Entrepreneurship education: Time for a change in research direction? *International Journal of Management Education*, 19(1). <https://doi.org/10.1016/j.ijme.2020.100367>
- Sharabati, A. A. A., Al-Haddad, S., Al-Khasawneh, M., Nababteh, N., Mohammad, M., & Abu Ghoush, Q. (2022). The Impact of TikTok User Satisfaction on Continuous Intention to Use the Application. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3). <https://doi.org/10.3390/joitmc8030125>
- Singh, N., Srivastava, S., & Sinha, N. (2017). Consumer preference and satisfaction of M-wallets: a study on North Indian consumers. *International Journal of Bank Marketing*, 35(6), 944–965. <https://doi.org/10.1108/IJBM-06-2016-0086>
- Söllner, M., Mishra, A. N., Becker, J. M., & Leimeister, J. M. (2024). Use IT again? Dynamic roles of habit, intention and their interaction on continued system use by individuals in utilitarian, volitional contexts. *European Journal of Information Systems*, 33(1), 80–96. <https://doi.org/10.1080/0960085X.2022.2115949>
- Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, 14, 30–38. <https://doi.org/10.1016/j.jbef.2017.04.002>
- Sugiyono. (2019). *Metode Penelitian*. Jakarta: Alfabeta.
- Tekaqnetha, G., & Rodhiah, R. (2020). Faktor Yang Mempengaruhi Continuance Intention GO-PAY Di Jakarta. *Jurnal Manajerial Dan Kewirausahaan*, 2(1), 173. <https://doi.org/10.24912/jmk.v2i1.7457>
- Tyas, R. W., & Azizah, N. (2022). Analisa Kepuasan Pengguna Dompot Digital DANA Melalui Continuance Use Intention Dengan Expectation Confirmation Model. *Jurnal Ilmiah Poli Bisnis*, 14(2), 126–140. <https://doi.org/10.30630/jipb.v14i2.772>
- Ubaidillah, M. Y., Pramana, E., & Chandra, F. H. (2023). Continuance Intention Pada Aplikasi Mobile Payment Dengan Menggunakan Extended Expectation Confirmation Model. *JTIM : Jurnal Teknologi Informasi Dan Multimedia*, 5(2), 149–161. <https://doi.org/10.35746/jtim.v5i2.359>
- Umam, M. K., & Puspawati, D. (2024). *Continuance Use Intention in the use of E-wallets by using the Expectation Confirmation Model through E-Satisfaction*. 5(5), 4815–4827.
- Wahyudi, W., Mukhsin, M., & Nupus, H. (2021). Meningkatkan Intention To Use Aplikasi Mobile JKN Melalui Perceived Usefulness Dan Attitude Towards Use Sebagai Variabel Intervening (Studi pada Pengguna Aplikasi Mobile JKN Segmen Pekerja Penerima Upah Badan Usaha di Wilayah BPJS Kesehatan Cabang Serang). *Jurnal Riset Bisnis Dan Manajemen Tirtayasa*, 5(1), 98–116. <https://doi.org/10.48181/jrbmt.v5i1.11545>
- Wahyuni, H. (2024). The Influence of Financial Literacy, Income, and Lifestyle on Personal Financial Management with Self Control as a Moderating Variable. *Jurnal Manajemen Dan Kewirausahaan*, 12(1), 14–20. <https://doi.org/10.26905/jmdk.v12i1.11692>
- Wan, L., Xie, S., & Shu, A. (2020). Toward an Understanding of University Students' Continued Intention to Use MOOCs: When UTAUT Model Meets TTF Model. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020941858>
- Yeriha Zehra, Shehzadi, Y., Muhammad Tahir, & Masood. (2022). Continuance Intention of Food Blog Users in Pakistan. *Reviews of Management Sciences*, 4(1), 30–62. <https://doi.org/10.53909/rms.04.01.0113>