

Determinants of QRIS User Information: The Role of Usage Barriers, Value Barriers, Risk Barriers, Initial Trust, and Perceived Usefulness

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ABSTRACT

This study examines the determinants of QRIS user information by integrating innovation resistance and technology acceptance perspectives within Indonesia's nationally standardized digital payment system. Using a quantitative explanatory design, data were collected from 105 QRIS users in Kupang City through a structured questionnaire. Multiple linear regression analysis was employed to test the effects of usage barrier, value barrier, risk barrier, initial trust, and perceived usefulness on user information, following validity, reliability, and classical assumption testing. The results show that usage barriers negatively influence QRIS user information, whereas value barrier, risk barrier, initial trust, and perceived usefulness have significant positive effects. Among all predictors, risk barrier emerges as the most dominant determinant, indicating that security and uncertainty perceptions play a critical role in shaping users' informational engagement. The proposed model explains 65.8% of the variance in user information, demonstrating strong explanatory power. This study adopts a cross-sectional design and focuses on a single geographic context, which may limit generalizability. Future research may employ longitudinal or comparative approaches to capture dynamic and contextual variations. This study advances digital payment and information systems literature by repositioning user information as a central cognitive outcome of user-technology interaction rather than merely an antecedent of adoption, offering an information-centric framework for evaluating the effectiveness of standardized digital payment systems.

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INTRODUCTION

The transformation of the digital payment system is an increasingly crucial structural issue in the modern financial industry landscape. Although payment technology innovation is growing rapidly, the main problem that still emerges is not only the availability of technology, but in how users understand, interpret, and utilize the information generated by the digital payment system (Kamuri & Anabuni, 2025; Dahniar et al., 2025). The imbalance between technological innovation and the cognitive readiness of users has the potential to cause resistance, misunderstandings, and suboptimal utilization, as has long been highlighted in studies of financial technology adoption (Laukkanen et al., 2007; Kim et al., 2009).

In the Indonesian context, the Quick Response Code Indonesian Standard (QRIS) was introduced as a national standard for QR code-based payment systems with the aim of simplifying transactions, increasing interoperability, and encouraging financial inclusion. However, the existence of QRIS as a

national digital payment instrument does not automatically guarantee the quality of information received and used by users (Dahniar et al., 2025). In line with the deductive approach, this study from the beginning placed the focus of the study on the determination of QRIS user information, assuming that information quality is the result of complex interactions between individuals and technology, not just technical system outputs.

Conceptually, information in a digital payment system is understood as data that has been processed and interpreted so that it is relevant for user decision-making. The information systems literature confirms that quality information depends not only on the accuracy of the system, but also on the perception, experience, and attitude of users towards the technology used (Wang et al., 2006; Lee & Chung, 2009). Therefore, in the context of QRIS, user information reflects the user's level of understanding, clarity, and confidence in utilizing QR code-based digital payment services.

The theoretical framework of this research is rooted in the literature on innovation resistance and technology adoption that places barriers as a key factor in the acceptance of digital systems. *Usage barriers* represent the difficulty of use, limited knowledge, and operational complexity that users feel when interacting with new technologies (Laukkanen et al., 2007). In the context of QRIS, these obstacles can arise in the form of a lack of understanding of transaction procedures, limitations of digital literacy, and technical obstacles that affect the use of information (Kamuri & Anabuni, 2025; Siahaan & Kamuri, 2025).

In addition, *the value barrier* describes a user's rational evaluation of the relative benefits of the technology compared to alternative payment methods. When the benefits of QRIS are not clearly perceived or do not exceed the value of conventional payments, the information provided by the system is likely to be ignored by users (Kuisma et al., 2007). Thus, value perception has an important role in shaping the extent to which QRIS information is seen as relevant and suitable for use in transaction activities.

The risk dimension is also a major concern in the study of digital financial services. *Risk barriers* reflect users' perceptions of uncertainty, potential financial losses, and threats to the security of personal data. Previous research has shown that high risk perceptions can hinder the adoption of technology and reduce the utilization of information provided by the system (Kim et al., 2009; Lin, 2011). In the context of QRIS, concerns related to transaction security and data protection have the potential to affect how users process and trust the information received.

On the other hand, *initial trust* plays a strategic role in the early stages of user interaction with digital payment systems. Initial trust is formed when users first interact with technology and have not had adequate experience (Lowry et al., 2008). Previous studies have confirmed that an adequate initial level of trust can reduce risk perception and increase user openness to the information provided by the system (Lee & Chung, 2009; Li & Yeh, 2010). Therefore, in the use of QRIS, *initial trust* is an important foundation for effective use of information.

Furthermore, *perceived usefulness* is a central construct in explaining the acceptance of information technology. The perception of usefulness reflects the user's belief that the use of technology will improve the performance and efficiency of their activities (Wang et al., 2006). Research on the adoption of digital financial services shows that when technology is perceived as useful, users tend to be more active in utilizing the information generated by the system (Lin, 2011). In the context of QRIS, the perception of usefulness has the potential to strengthen the relationship between technology and the quality of user information.

Although normatively (*das sollen*) QRIS is designed to improve transaction efficiency and expand financial inclusion, empirical reality (*das sein*) shows that there is a gap in the utilization of information by users. Various research findings in the context of *mobile banking* and *internet banking* indicate that barriers to use, risk, and initial trust are still significant issues in user interaction with digital financial technology (Kim et al., 2009; Laukkanen & Kiviniemi, 2014). However, these results do not fully explain the dynamics of user information in the standardized and cross-provider QRIS payment system.

The research gap is increasingly evident when most previous studies have placed more emphasis on intention *to use* or the level of adoption of technology, while user information as a cognitive output of interaction with the system is still relatively neglected. In fact, a number of experts affirm that information plays a crucial role in the sustainability of technology use and the quality of user decision-making (Wang et al., 2006; Lee & Chung, 2009). Thus, there is still unfilled space in the literature related to the determinants of user information in the context of QRIS.

The most specific research gap lies in the empirically untested simultaneous effect of *the use barrier*, *value barrier*, *risk barrier*, *initial trust*, and *perceived usefulness* on QRIS user information. Previous researchers emphasized that understanding these factors is important to prevent pseudo-adoption, which is a

condition when technology is used in a limited way without optimal use of information (Laukkanen et al., 2007; Kim et al., 2009). Therefore, filling this gap has significance both theoretically and practically.

The novelty of this research lies in the conceptual repositioning of the study of financial technology adoption from the context of *mobile banking* towards QRIS as a standardized and cross-provider national digital payment system. In contrast to previous studies that generally focused analysis on the intent of use or the level of adoption of technology, this study explicitly places user information as the primary cognitive output of interactions between individuals and digital payment systems. Thus, this study expands the horizon of information system studies by emphasizing that the success of QRIS is not only measured by the frequency of use, but also by the extent to which the information produced by the system is understood, trusted, and utilized by users in making transaction decisions.

The next novelty lies in the empirical testing of the simultaneous influence of *the use barrier*, *value barrier*, *risk barrier*, *initial trust*, and *perceived usefulness* on QRIS user information in one integrated analytical framework. This approach makes a conceptual contribution by bridging the perspective of innovation resistance and initial beliefs that have tended to be studied separately. Academically, the findings of this study are expected to be able to fill the literature gap related to information determinants in QR code-based digital payment systems, as well as offer a sharper theoretical basis to understand the quality of user interaction with digital payment technology in the era of integrated finance.

Based on this description, the purpose of this study is to analyze the influence of *usage barrier*, *value barrier*, *risk barrier*, *initial trust*, and *perceived usefulness* on QRIS user information on digital banking payment services.

LITERATURE REVIEW

Digital Payment

The study of digital payment systems places technology as part of a socio-technical system, where the success of its implementation is determined not only by the sophistication of the technology, but also by how users understand and utilize the information generated by the system. From an information systems perspective, quality information is the main determinant in shaping users' attitudes, beliefs, and behaviors towards digital financial technology (Wang et al., 2006; Lee & Chung, 2009). Therefore, user information is an important construct in explaining the effectiveness of using digital payment systems such as Quick Response Code Indonesian Standard (QRIS).

QRIS as a national standard for QR code-based payments is designed to simplify transactions and improve interoperability between financial service providers. However, the innovation resistance literature shows that the adoption of new technologies is often faced with various forms of barriers that affect the utilization of the systems and information provided (Laukkanen et al., 2007). Thus, even though QRIS is widely available, the quality of the information understood and used by users remains dependent on their perception and experience in interacting with the system.

Usage Barrier

The concept of *usage barrier* refers to the use barriers that arise due to system complexity, limited knowledge, and technological incompatibility with user habits. Research by Laukkanen et al. (2007) shows that barriers to use are the dominant factor in resistance to digital financial services. In the context of QRIS, operational difficulties, low digital literacy, and unclear transaction procedures have the potential to hinder the optimal use of information by users.

Value Barrier

In addition to barriers to use, *the value barrier* reflects a user's rational evaluation of the relative benefits of the technology compared to existing alternatives. Kuisma et al. (2007) emphasized that when the added value of a technology is not significantly felt, users tend to ignore the information provided by the system. In the use of QRIS, the perception of value is crucial because users will consider whether the digital payment system really provides efficiency, convenience, and profits compared to conventional payment methods.

Risk Barrier

The risk dimension also plays an important role in shaping users' attitudes towards digital payment technology. *The risk barrier* represents the perception of uncertainty and potential losses that may arise, both related to transaction security and personal data protection. The study of Kim et al. (2009) and Lin (2011) shows that high risk perception can lower trust and limit the use of information in digital financial services. In the context of QRIS, concerns about security and privacy can affect the way users process and trust transaction information.

Initial Trust

Initial *trust* is a key factor in the initial stage of user interaction with the technology system. Lowry et al. (2008) stated that initial trust serves to reduce uncertainty and encourage user openness to information. In digital financial services, initial trust has been shown to be able to mediate the influence of risk and barriers on user response (Lee & Chung, 2009). Therefore, in the use of QRIS, initial trust is an important foundation for the receipt and utilization of digital payment system information.

Perceived Usefulness

Furthermore, *perceived usefulness* describes the user's belief that technology provides real benefits in improving the efficiency and performance of their activities. The technology adoption literature confirms that the perception of usefulness has a direct influence on user attitudes and behaviors in utilizing information systems (Wang et al., 2006; Lin, 2011).

In the context of QRIS, perceived usefulness plays a role in determining the extent to which transaction and service information is considered relevant, useful, and suitable for use by users.

Relationship Between Attitudes

Although the relationship between barriers, risk, trust, and benefits has been extensively studied in the context of *mobile banking* and *internet banking*, most previous research has still focused on outcomes on the intention to use or adopt the technology (Kim et al., 2009; Laukkanen & Kiviniemi, 2014).

Relatively few studies explicitly place user information as a dependent variable, particularly in the context of nationally standardized QR code payment systems such as QRIS. Therefore, the integration of *the constructs of use barrier, value barrier, risk barrier, initial trust, and perceived usefulness* in explaining the determinants of information of QRIS users is relevant to fill the conceptual gap in the literature on digital information systems and finance.

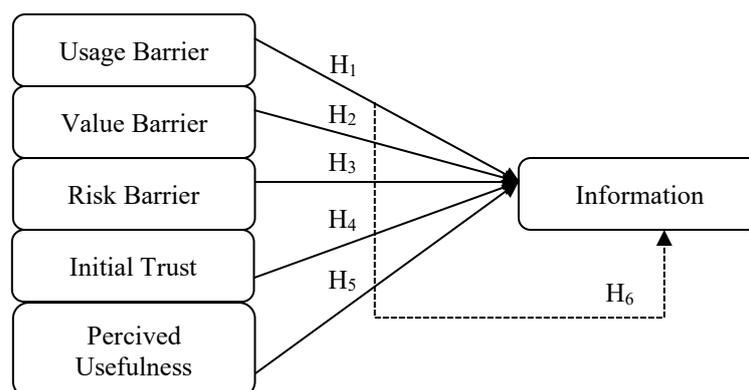


Figure 1. Conceptual Framework

RESEARCH METHOD

This study uses a quantitative approach with an explanatory research design, which aims to test the causal relationship between perceptual and psychological constructs in explaining QRIS user information. The quantitative approach was chosen because it allows for systematic empirical testing of the influence of *usage barrier, value barrier, risk barrier, initial trust, and perceived usefulness* on user information as

dependent variables. Explanatory design is used to ensure that the analysis does not stop at the description of the phenomenon, but is able to explain the patterns of relationships between variables inferentially.

The population in this study is users of QRIS digital payment services in Kupang City. The research sample was obtained by *purposive sampling* technique, namely respondents who met the criteria as QRIS users and had experience using the payment system in transaction activities. This technique was chosen to ensure that the data collected came from individuals who had direct relevance to the context of the study. The number of respondents used in this study was 105 people, which was considered adequate for multiple linear regression analysis and in line with common practice in information systems research and digital finance.

The research data was collected through a structured questionnaire instrument compiled based on theoretical constructs that have been validated in previous research. Each variable is measured using multiple indicators representing its conceptual dimensions, with a five-point Likert measurement scale. The use of questionnaires was chosen because it allows the measurement of the perceptions, attitudes, and subjective experiences of QRIS users in a systematic and standardized manner, making it relevant to uncover user information as a cognitive output of interactions with digital payment systems.

Before the main analysis, the research data is tested for quality through validity and reliability tests to ensure that the measurement instrument is able to accurately and consistently represent the constructs being studied. Furthermore, data analysis was carried out using multiple linear regression with the help of SPSS statistical software. This method was chosen because it is suitable for testing the simultaneous and partial influence of independent variables on dependent variables. In addition, a series of classical assumption tests, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests, were performed to ensure that the resulting regression model met scientifically accountable statistical criteria.

RESULTS AND DISCUSSIONS

RESULTS

The assessment of data quality was conducted through validity and reliability testing involving 105 respondents at a significance level of 0.05, resulting in a critical r-value of 0.1918. The findings indicate that the calculated correlation coefficients for all measurement items exceeded the critical r-value, thereby confirming that all questionnaire items administered to the respondents meet the criteria for construct validity.

Following the completion of the validity assessment, a reliability analysis was subsequently conducted. The results of the reliability testing for each research variable are presented as follows.

Table 1. Reliability Test Result

Reliability Statistics		
Variabel	Cronbach's Alpha	N of Item
Information	0.769	3
<i>Usage Barrier</i>	0.776	5
<i>Value barrier</i>	0.777	3
<i>Risk barrier</i>	0.769	4
<i>Initial trust</i>	0.752	3
<i>Perceived Usefulness</i>	0.875	3

Source: Primary Data Processed, 2025

Based on the reliability test results, the constructs of information output, usage barrier, value barrier, risk barrier, initial trust, and perceived usefulness each demonstrated Cronbach's Alpha values exceeding the

threshold of 0.60. These findings indicate that all measurement instruments employed in this study exhibit satisfactory internal consistency and are therefore considered reliable.

The coefficient of determination (R Square) represents the extent to which the regression model explains the variance of the dependent variable based on the included independent variables. The value of R^2 ranges from 0 to 1, where values closer to 1 indicate a greater proportion of explained variance, reflecting stronger explanatory power of the model. Conversely, values approaching 0 suggest a limited ability of the model to account for variations in the dependent variable.

Table 2. Coefficient of Determination (R Square) Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.811 ^a	.658	.640	.461	1.808

a. Predictors: (Constant), Perceived Usefulness, Value Barrier, Initial Trust Barrier, Risk Barrier, Usage Barrier
b. Dependent Variable: Information

Source: Primary Data Processed, 2025

The R Square value of 0.658 indicates that 65.8% of the variance in the information variable is explained by perceived usefulness, value barrier, initial trust barrier, risk barrier, and usage barrier. The remaining 34.2% of the variance is attributable to other factors not included in the model.

Multicollinearity was assessed using Tolerance and the Variance Inflation Factor (VIF) to ensure that high correlations among independent variables were absent. Tolerance values greater than 0.1 and VIF values below 5 indicate low multicollinearity, confirming that the regression coefficients can be interpreted reliably.

Table 3. Multicollinearity Statistics Result

Variable	Tolerance	VIF
Usage Barrier	.256	3.902
Value Barrier	.789	1.268
Risk Barrier	.271	3.684
Initial Trust	.467	2.141
Perceived Usefulness	.367	2.724

Source: Primary Data Processed, 2025

Based on the results of the multicollinearity test, all independent variables had a Tolerance value of > 0.1 and $VIF < 5$, so there was no indication of high multicollinearity. This shows that all variables can be safely used in regression analysis and that the regression coefficient can be interpreted validly.

In quantitative research, particularly in regression analysis, the t-test is employed to examine the partial effect of independent variables on the dependent variable. The test decision is based on a comparison between the calculated t-value and the critical t-value or the associated significance level (p-value). If the significance level is lower than the predetermined threshold (commonly $\alpha = 0.05$), the null hypothesis is rejected, indicating that the tested variable has a statistically significant effect.

Table 4. Partial Effect (T-Test) Result

Model		Unstandardized		Standardized		t	Sig.
		Coefficients		Coefficients			
	B	Std. Error	Beta				
1	(Constant)	.110	.342			.322	.748
	Usage Barrier	-.324	.129	-.291		-2.504	.014

Value Barrier	.196	.069	.189	2.861	.005
Risk Barrier	.531	.117	.510	4.521	.000
Initial Trust	.339	.088	.330	3.833	.000
Perceived Usefulness	.239	.092	.251	2.581	.011

a. Dependent Variable: Information

Source: Primary Data Processed, 2025

The results of the partial regression analysis (t-test) indicate that the independent variables contribute differently to explaining the dependent variable, Information. Usage Barrier exhibits a negative regression coefficient ($B = -0.324$; $\beta = -0.291$), suggesting that increased usage difficulty is associated with a reduction in information acquisition. This finding highlights that complexity or operational challenges can impede information formation and utilization.

In contrast, Value Barrier has a positive effect on Information ($B = 0.196$; $\beta = 0.189$), indicating that higher perceived value promotes greater information acquisition or processing. Although the effect size is moderate, the consistent positive relationship underscores the relevance of utilitarian value in adoption contexts.

Risk Barrier demonstrates the strongest impact among all independent variables ($B = 0.531$; $\beta = 0.510$). The high standardized beta suggests that perceived risk is a primary determinant in explaining variations in Information, emphasizing the central role of risk perceptions in shaping user behavior and informational responses.

Additionally, Initial Trust Barrier shows a significant positive effect ($B = 0.339$; $\beta = 0.330$), indicating that initial trust substantially contributes to enhanced Information. Initial trust functions as a cognitive mechanism that mitigates uncertainty during early interactions with a system or technology.

Perceived Usefulness also positively influences Information ($B = 0.239$; $\beta = 0.251$), suggesting that higher perceived utility increases users' likelihood to access, process, and utilize information. This variable reinforces the importance of perceived benefits in driving informational engagement.

Overall, the t-test results confirm that the independent variables exert significant partial effects on Information, with Risk Barrier identified as the most dominant predictor based on standardized coefficients. These findings provide empirical support for the conceptual framework and enhance understanding of the determinants of information behavior in technology adoption contexts.

The F-test was conducted to examine the joint effect of all independent variables on the dependent variable. The results indicate that the regression model is statistically significant ($p < 0.05$), confirming that the independent variables collectively have a meaningful impact on the dependent variable. This outcome validates the model's adequacy and supports further analysis of causal relationships among the variables.

Table 5. Simultaneous Effect (F-Test) Result

ANOVA ^b					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.485	5	8.097	38.032	.000 ^a
1 Residual	21.077	99	0.213		
Total	61.562	104			

a. Predictors: (Constant), Perceived Usefulness, Value Barrier, Initial Trust Barrier, Risk Barrier, Usage Barrier

b. Dependent Variable: Information

Source: Primary Data Processed, 2025

The F-test results indicate that the regression model is statistically significant ($F = 38.032$, $p < 0.001$), supporting the simultaneous hypothesis (H_0). This finding demonstrates that perceived usefulness, value barrier, initial trust barrier, risk barrier, and usage barrier collectively exert a significant effect on

Information. Subsequent partial testing using t-tests further supports the model, showing that each independent variable exhibits varying directions and strengths of influence on Information. These results confirm that the significant overall relationship at the model level is consistent with the contributions of the individual predictors, providing empirical support for the partial hypotheses (H₁–H₅) in line with the proposed conceptual framework.

DISCUSSION

This study provides robust empirical evidence that QRIS user information is fundamentally a cognitive outcome arising from the interaction between users and digital payment systems, rather than a purely technical by-product of system functionality. Consistent with the information systems perspective, the findings reaffirm that information quality and utilization depend on users' perceptions, beliefs, and psychological readiness to engage with technology (Wang et al., 2006; Lee & Chung, 2009). In this regard, the results validate the conceptual positioning advanced in the introduction, which views information as a socio-cognitive construct embedded in user–technology interaction.

The negative and significant effect of usage barrier on QRIS user information confirms the relevance of innovation resistance theory in explaining informational outcomes. As articulated by Laukkanen et al. (2007), complexity, operational difficulty, and limited user knowledge constitute critical obstacles that impede effective engagement with digital systems. The present findings extend this argument by demonstrating that usage barriers do not merely reduce adoption likelihood, but also constrain users' ability to comprehend, interpret, and utilize system-generated information. In the context of QRIS, this suggests that standardization and interoperability alone are insufficient to ensure meaningful informational engagement without adequate user capability and system clarity.

The positive influence of value barrier indicates that perceived relative advantage plays a pivotal role in shaping information utilization. In line with Kuisma et al. (2007), when users perceive that a digital payment system offers superior benefits compared to conventional alternatives, they are more inclined to regard its information as relevant and worth processing. This finding reinforces the argument that information engagement is contingent upon users' rational evaluations of technological value, thereby highlighting the instrumental role of perceived benefits in transforming data into actionable information.

Among all predictors, risk barrier emerges as the most dominant determinant of QRIS user information. This result corroborates prior evidence emphasizing the central role of perceived risk in digital financial services (Kim et al., 2009; Lin, 2011). High levels of uncertainty related to transaction security and data privacy significantly shape users' informational responses, often overriding system efficiency and usability considerations. The dominance of risk perception in this study underscores that information quality cannot be detached from users' security concerns; even well-designed systems may fail to generate effective informational outcomes when perceived risk remains salient.

The significant positive effect of initial trust further substantiates trust-based models in information systems research. As suggested by Lowry et al. (2008), initial trust functions as a cognitive mechanism that mitigates uncertainty in early-stage interactions. The findings indicate that users who possess higher initial trust in QRIS are more receptive to the information provided by the system, supporting the notion that trust facilitates informational openness and engagement (Lee & Chung, 2009; Li & Yeh, 2010). This result highlights the strategic importance of trust-building mechanisms in nationally standardized digital payment systems.

Similarly, perceived usefulness demonstrates a positive and significant effect on user information, aligning with the core propositions of technology acceptance theory. Consistent with Wang et al. (2006) and Lin (2011), users who believe that QRIS enhances transactional efficiency and effectiveness are more likely to actively process and rely on system information. This finding extends prior adoption-focused studies by empirically positioning perceived usefulness as a driver of informational engagement rather than merely a predictor of usage intention.

The significant simultaneous effect of all independent variables (H₆) confirms that QRIS user information is shaped by an integrated constellation of resistance-related and acceptance-related factors. This finding directly addresses the research gap identified in the introduction, where previous studies predominantly emphasized adoption intention while neglecting information as a dependent construct (Laukkanen & Kiviniemi, 2014). By empirically validating this integrated framework, the study advances

the literature by reconceptualizing information as a critical cognitive outcome that reflects the depth and quality of user–technology interaction.

Overall, the findings suggest that the success of QRIS should be evaluated not only in terms of adoption rates or transaction frequency, but also in terms of users' ability to meaningfully understand, trust, and utilize the information generated by the system. This study thus contributes to digital payment and information systems literature by extending innovation resistance and technology acceptance perspectives toward an information-centric analytical orientation.

CONCLUSION

This study provides a comprehensive explanation of the determinants of QRIS user information by integrating usage barrier, value barrier, risk barrier, initial trust, and perceived usefulness within a unified analytical framework. The findings demonstrate that user information in digital payment systems is not an automatic outcome of technological availability or standardization, but a cognitive construct shaped by users' perceptions, evaluative judgments, and initial beliefs. The results confirm that while usage barriers undermine informational engagement, perceived value, trust, and usefulness enhance users' ability to interpret and utilize system-generated information. Notably, perceived risk emerges as the most influential determinant, underscoring the central role of security and uncertainty considerations in shaping informational outcomes in digital financial environments.

Beyond empirical validation, this study advances theory by repositioning user information as a central outcome of user–technology interaction rather than a peripheral antecedent of adoption. By integrating innovation resistance theory with trust-based and technology acceptance perspectives, the study offers an information-centric framework that captures the interplay between inhibiting and enabling forces in digital payment systems. This contribution is particularly salient in the context of nationally standardized infrastructures such as QRIS, where adoption metrics alone are insufficient to explain the depth and quality of user engagement.

From a managerial standpoint, the findings suggest that payment service providers and financial institutions should complement adoption-driven strategies with initiatives that enhance informational clarity, reduce perceived risk, and foster initial trust. Managerial interventions aimed at simplifying system use, clearly articulating value propositions, and strengthening security communication are essential to prevent superficial or pseudo-adoption. At the policy level, the results imply that regulators should align standardization and interoperability policies with robust frameworks for consumer protection, data security, and digital literacy enhancement. Evaluating the success of national payment systems should therefore extend beyond transaction volume toward users' capacity to meaningfully understand and utilize financial information.

Despite these contributions, several limitations warrant consideration and point toward promising directions for future research. The cross-sectional design of this study limits the ability to capture temporal dynamics in user information as experience with QRIS accumulates and as system features evolve. Longitudinal research could provide deeper insights into how perceptions of risk, trust, and usefulness change over time and how these shifts affect informational engagement. Additionally, the focus on a single geographic context may constrain the generalizability of the findings. Future studies could adopt comparative or cross-national designs to examine whether the determinants of user information differ across institutional, cultural, or regulatory environments. Further theoretical refinement may also be achieved by incorporating constructs such as digital literacy, institutional trust, or system transparency, as well as by employing mixed-method or experimental approaches to uncover the underlying cognitive mechanisms shaping user information in digital payment ecosystems.

References

- Dahniar, Hasriani, & Ardiansyah. (2025). Digital Payment: Driven Digital Transformation and Its Impact on Culinary Business Development in Kendari City. *Journal of Management and Business Innovation*, 01(01), 28–39. <https://doi.org/10.65792/jombinov.v1i01.27>

- Kamuri, Klaasvakumok J., & Anabuni, A. U. T. (2025). An Integrated Innovation Diffusion Trust-Building Framework for Understanding Mobile Payment Adoption in Indonesia's Cross-Border Regions. *Journal of Management and Business Innovation*, 1(1), 64–77. <https://doi.org/10.65792/jombinov.v1i01.30>
- Kamuri, Klaasvakumok Jehezkielomi, & Anabuni, A. U. T. (2025). The Influence of Entrepreneurship Education, Self-Efficacy, and Digital Literacy on The Competitiveness of Bajawa Coffee Sector MSMEs in The International Market. *Journal of Management : Small and Medium Enterprises (SMEs)*, 18(1), 383–397. <https://doi.org/10.35508/jom.v18i1.20011>
- Kim, G., Shin, B. and Lee, H.G. (2009), “Understanding dynamics between initial trust and usage intention of mobile banking”, *Information Systems Journal*, Vol. 26 No. 3, pp. 310-22.
- Kuisma, T., Laukkanen, T. and Hiltunen, M. (2007), “Mapping the reasons for resistance to internet banking: a ,means-end approach”, *International Journal of Information Management*, Vol. 27 No. 2, pp. 75-85.
- Laukkanen, T., & Kiviniemi, V. (2014). The role of information in mobile banking resistance. *International Journal of Bank Marketing*, 370-382
- Lee, K.C. and Chung, N. (2009), “Understanding factors affecting trust in and satisfaction with mobile banking in Korea: a modified DeLone and McLean’s model perspective”, *Interacting with Computers*, Vol. 21 No. 5-6, pp. 385-92
- Li, Y.-M. and Yeh, Y.-S. (2010), “Increasing trust in mobile commerce through design aesthetics”, *Computers in Human Behavior*, Vol. 26 No. 4, pp. 673-84.
- Lin, H.-F. (2011). An empirical investigation of mobile banking adoption: The effect of innovation attributes and knowledge-based trust. *International Journal of Information Management*, 31(3), 252-260.
- Lowry, P.B., Vance, A., Moody, G., Beckman, B. and Read, A. (2008), “Explaining and predicting the impact of branding alliances and web site quality on initial consumer trust of e-commerce web sites”, *Journal of Management Information Systems*, Vol. 24 no. 4, pp. 199-224.
- Moni Y. Siahaan, & Klaasvakumok J. Kamuri. (2025). Causal Model of Emotional Intelligence, Digital Literacy, and Employee Work Productivity of Banking Staff in Kupang: A Structural Equation Modeling Approach. *Journal of Management and Business Innovation (JOMBINOV)*, 1(1), 14–27. <https://v-learnov.com/index.php/jombinov/article/view/25>
- Muhammad Ali, Junjie, dan Haohong li. (2015). Influence of Psychographics and Risk Perception on Internet Banking Adoption: Current State of Affairs in Britain. *International Journal of Economics and Financial Issues*, Vol 5(2), 461-468
- Romdhany, risky dan Saragih, hoga (2012). Pengaruh Intensi Pelanggan Dalam Berbelanja Online Kembali Melalui Media Teknologi Informasi Forum Jual Beli (FJB) Kaskus. *Journal of Information Systems*, Volume 8, Issue 2
- Setiawan, Jasmira, dan sharipuddina.(2017). User Behavior in Adopt Mobile Commerce (Scale Development: Perspective of Trust and Risk). *Jurnal teknologi dan Sistem Informasi*. Vol. 03. No. 03
- Szmigin, I. Maddock, S. and Carrigan, M. (2003), “Conceptual Community Consumption: farmers Markets and the Older Consumer”, *British Food Journal*, Vol. 105 No. 8, pp. 542-50.
- Suryani. 2013. Perilaku Konsumen di Era Internet Implikasinya pada Strategi Pemasaran. Yogyakarta : Graha Ilmu.
- Wadie Nasri, Mohamed Zarai (2014). “Empirical Analysis Of Internet Banking Adoption In Tunisia”. *Journal Asian Economic and Financial Review*. Vol. 4. Pp 1812-1825
- Wang, Y.-S., Lin, H.-H. and Luarn, P. (2006), “Predicting consumer intention to use mobile service”, *Information Systems Journal*, Vol. 16 No. 2, pp. 157-79
- Wawan Dhewanto, Hendrati Dwi Mulyaningsih, Anggraeni Permatasari, Grisna Anggadwita, dan Indriany Ameka. 2014. Manajemen Inovasi Peluang Sukses Menghadapi Perubahan, Yogyakarta : Penerbit Andi.
- Yendra dan Idayamti . (2017) An Analysis on Factors that Influence Customers’ Intention to Use Internet Banking in Jayapura City. *Scientific Research Journal (SCIRJ)*, Volume V, Issue VIII.