

Understanding MSMEs' Resistance to QRIS Adoption: The Role of Perceived Usefulness and Social Influence in a Standardized Digital Payment System

David Limanta¹ and Dhyah Harjanti²

^{1,2}Department of Management, School of Business and Management, Petra Christian University
Jl. Siwalankerto 121-131, Surabaya 60236, East Java, Indonesia

DOI: <https://doi.org/10.9744/jremb.3.1.1-10>

Abstract

The rapid growth of digital payment systems has encouraged the use of QRIS in Indonesia, yet its adoption among micro and small enterprises (MSMEs) remains uneven. Many MSMEs still choose not to use QRIS in their daily transactions. This study aims to examine the factors that drive this resistance by focusing on perceived lack of usefulness, perceived difficulty of use, resource factors, technology anxiety, and social influence. In addition, the study explores the mediating role of perceived lack of usefulness in shaping resistance behavior. Data were collected from 204 MSMEs in Surabaya who have not adopted QRIS and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that perceived lack of usefulness and social influence significantly influence resistance to QRIS adoption. In contrast, perceived difficulty of use, resource factors, and technology anxiety do not have a significant effect. Furthermore, perceived lack of usefulness is found to mediate the relationship between social influence and resistance. These findings indicate that MSMEs' resistance is driven more by how they perceive the benefits of QRIS and by their social environment than by technical limitations. This suggests that efforts to increase adoption should focus not only on improving technical accessibility but also on strengthening perceived value and peer influence.

Article Info:

Submitted: Jan 30, 2026

Reviewed: May 07, 2026

Published: May 29, 2026

Keywords:

resistance to adopt,
perceived lack of usefulness,
perceived difficulty of use,
resources factor,
technology anxiety,
social influence factor.

Corresponding Author:

Dhyah Harjanti
Department of Management,
School of Business and Management,
Petra Christian University
Jl. Siwalankerto 121-131, Surabaya
60236, East Java, Indonesia
Email: dhyah@petra.ac.id

This is an open access article under the CC BY license



INTRODUCTION

In an era of massive technological development, the business payment landscape is undergoing a transformation from cash-based systems to digital payments that offer speed, efficiency, and transparency. In Indonesia, this transformation is bolstered by the launch of the Quick Response Code Indonesian Standard (QRIS), launched by Bank Indonesia in 2019 as a standardized payment system. QRIS enables the integration of various payment platforms into a single code, simplifying transactions while providing more systematic record-keeping.

Nationally, QRIS adoption has shown significant growth. Bank Indonesia data records a rapid increase in QRIS transactions, with millions of registered users and merchants. In East Java, including Surabaya, the number of QRIS merchants is dominated by Micro and Small Enterprises (MSEs), which are the primary target for payment system digitization efforts. Various local government programs continue to encourage QRIS use as part of the financial inclusion and digital transformation agenda.

However, this high growth rate does not fully reflect equitable acceptance at the business level. In practice, many MSEs still choose not to use QRIS for their daily transactions. This situation indicates a gap between institutional incentives for adoption and actual business decisions, indicating resistance to the use of standardized payment systems.

Unlike most research that focuses on factors driving technology adoption, this study places resistance as the starting point of analysis. In this context, resistance is influenced not only by technical aspects, but also by business actors' evaluations of the system's benefits and the surrounding social dynamics. Therefore, this study uses a modified Technology Acceptance Model (TAM) approach, emphasizing perceived lack of usefulness and perceived difficulty of use, and integrating resources, technology anxiety, and social influence to explain resistance to QRIS.

Furthermore, this study also examines the role of perceived lack of usefulness as a mediating variable, explaining how social influence and other factors shape resistance to adoption. This approach is expected to provide a more comprehensive understanding of the reasons behind MSEs' resistance to standardized digital payment systems.

Surabaya was chosen as the research location due to its position as one of Indonesia's major economic centers, with a large number of MSEs and a relatively high QRIS penetration rate. Nevertheless, the diverse characteristics of business actors—ranging from modern to traditional—make this city a relevant context for examining the phenomenon of resistance to QRIS adoption in more depth.

This study makes an important contribution to the literature. First, it shifts the dominant perspective of digital payment research from technology adoption to resistance, highlighting that non-adoption among MSMEs is not merely a matter of limited capabilities but also a deliberate evaluation of perceived value. Second, this study expands the application of the Technology Acceptance Model (TAM) by focusing on its reverse constructs—specifically, perceived lack of usefulness—as a central mechanism explaining resistance behavior. Third, by examining QRIS as a standardized, institution-driven payment system, this study emphasizes that resistance can arise not only from technological factors but also from perceived mismatches between the system's characteristics and the operational realities of SMEs. Finally, these findings offer practical insights by demonstrating that social influences and perceived value play a more significant role than technical barriers, highlighting the need to reorient policies and intervention strategies from technical training toward communicating benefits and fostering social engagement.

LITERATURE REVIEW

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM), developed by Davis (1989), is one of the most influential frameworks for explaining user acceptance of information systems. Grounded in the Theory of Reasoned Action (Fishbein and Ajzen, 1975), TAM proposes that perceived usefulness and perceived ease of use determine an individual's intention to adopt a technology. Perceived usefulness refers to the extent to which a user believes that a technology enhances job performance, while perceived ease of use reflects the degree to which the technology is perceived as effortless to use. Although TAM has been widely applied across various contexts, recent studies (e.g., Berisca et al., 2024) confirm its continued relevance in explaining digital payment adoption, including QRIS.

While TAM has been widely validated across various contexts, recent studies suggest that its explanatory power is limited when users are exposed to mandatory or institutionally driven technologies. In such contexts, non-adoption or resistance becomes a more relevant phenomenon than acceptance alone. In response to this limitation, several scholars have proposed inverse or resistance-based perspectives of TAM, emphasizing that users may actively reject technology when they perceive low value, high complexity, or misalignment with their needs. This shift has been particularly relevant in the context of micro and small enterprises (MSMEs), where technology decisions are often driven not only by capability, but also by perceived business relevance and environmental pressures.

Within MSME digital transformation literature, prior studies have identified multiple barriers to technology adoption, including resource constraints, lack of digital literacy, and perceived complexity. However, emerging evidence suggests that these factors alone do not fully explain resistance behavior, especially in developing country contexts where external support and simplified technologies are increasingly available. This indicates that psychological and social factors, such as perceived usefulness and social influence, may play a more dominant role in shaping adoption decisions.

In the context of digital payment systems such as QRIS, adoption is not purely voluntary but is also influenced by institutional promotion and standardization policies. QRIS is designed to unify digital payment systems in Indonesia, yet its implementation among MSMEs remains uneven. Existing studies on digital payment adoption tend to focus on ease of use and infrastructure readiness, while limited attention has been given to understanding why MSMEs consciously resist such standardized systems despite their availability and institutional support.

Therefore, this study positions resistance to QRIS adoption as a behavioral outcome shaped by both cognitive evaluation and social environment, integrating perceived lack of usefulness, perceived difficulty of use, resource constraints, technology anxiety, and social influence into a single explanatory framework.

Perceived Lack of Usefulness

Perceived lack of usefulness is the opposite of perceived usefulness in the Technology Adoption Model (TAM), which refers to the belief that a technology does not provide significant benefits to its users (Davis, 1989). When individuals perceive the value provided by a system to be limited, they tend to reject or avoid its use. In the context of MSMEs, QRIS may be considered unnecessary if it is not perceived to improve transaction efficiency or business performance. Previous studies (e.g., Berisca et al., 2024; Fauziah et al., 2025) consistently show that perceived usefulness is a key determinant of adoption, implying that its absence can significantly contribute to rejection behavior.

Perceived Difficulty of Use

Perceived difficulty of use is the inverse of perceived ease of use in the Technology Adoption Model (TAM), which describes the extent to which a technology is perceived as complex and requires considerable effort to operate (Davis, 1989). Previous research has shown that higher levels of perceived difficulty can reduce technology acceptance and increase resistance (Venkatesh and Davis, 2000; Laumer et al., 2009). In the context of MSMEs, difficulty in understanding and operating QRIS can hinder adoption, especially when the system is perceived as incompatible with daily business routines.

Resources Factor

Resource factors refer to the availability of the financial, technical, and infrastructure support required for technology adoption (Wardani & Silvy, 2025). In the context of MSMEs, limited financial capacity, a lack of equipment, and inadequate digital infrastructure are often identified as barriers to technology implementation (Suhartanto and Leo, 2018; Fauziah et al., 2025). Although QRIS reduces transaction barriers, perceived costs and resource constraints may still contribute to resistance among MSMEs.

Technology Anxiety

Technology anxiety refers to feelings of fear, discomfort, or lack of confidence when using digital technology (Widodo, 2020). Among MSMEs, this anxiety often arises due to limited digital experience, fear of making mistakes, or concerns about system security. These psychological barriers can reduce confidence in using QRIS and ultimately increase resistance to adoption.

Social Influence Factor

Social influence reflects the extent to which individuals are influenced by the opinions and behaviors of people in their environment, such as peers, family members, or customers (Halim et al., 2025). Positive social reinforcement can encourage technology adoption, while negative experiences or narratives can reinforce resistance (Suhartanto and Leo, 2018; Fauziah et al., 2025). In the context of MSMEs, social approval plays a crucial role in shaping perceptions of QRIS and the perceived value of the system.

The Relationship Between Perceived Lack of Usefulness and Resistance

Perceived lack of usefulness refers to the belief that QRIS does not provide meaningful benefits for business performance. When MSMEs perceive that QRIS does not improve transaction efficiency or operational

outcomes, they are more likely to reject its use. Prior studies (e.g., Berisca et al., 2024; Fauziah et al., 2025) show that perceived usefulness is a key determinant of technology adoption, implying that its absence strengthens rejection behavior. Therefore, perceived lack of usefulness is expected to increase resistance to QRIS adoption.

H₁: Perceived lack of usefulness has a positive effect on resistance to adopt QRIS.

The Relationship Between Perceived Difficulty of Use and Resistance

Perceived difficulty of use reflects the extent to which QRIS is considered complex and effortful to operate. When MSMEs perceive a technology as difficult to learn and integrate into daily business activities, they tend to avoid its usage. Prior research (Venkatesh and Davis, 2000; Laumer et al., 2009) confirms that perceived difficulty reduces adoption intention and increases resistance. Accordingly, higher perceived difficulty of use is expected to strengthen resistance to QRIS adoption.

H₂: Perceived difficulty of use has a positive effect on resistance to adopt QRIS.

The Relationship Between Resources Factor dan Resistance to Adopt

Research by Irianto and Chanvarasuth (2025) confirms that limited resources, both financial and non-financial, are a significant barrier to mobile payment adoption by MSEs in Indonesia. This finding suggests that even though the technology is considered beneficial, resistance still arises when adoption costs are perceived as high or supporting devices are unavailable. This aligns with research by Fauziah et al. (2025), which found that digital literacy and adequate infrastructure are essential prerequisites for encouraging QRIS adoption among MSEs. Resource factors are reflected in limited supporting devices, unstable internet connections, and perceived additional operational costs as a burden. Mustofa and Maula (2023) also revealed that resource constraints contribute to low interest in using QRIS despite the technology's significant potential benefits. Therefore, the more limited resources a business owner has, the greater their resistance to QRIS adoption.

H₃: Resource factors have a significant and positive effect on resistance to adoption.

The Relationship Between Technology Anxiety and Resistance to Adoption

Technology anxiety describes feelings of anxiety or a lack of confidence that arise when someone must use digital technology. Widodo (2020) explains that this anxiety can reduce the benefits users should experience, from convenience and security to satisfaction in transactions. In practice, MSEs experiencing technology anxiety often fear making mistakes when entering payment amounts, perceive the process of using QRIS as more complicated than manual transactions, or hesitate due to their limited technical skills. These conditions tend to delay, or even refuse, QRIS adoption. Therefore, the higher the level of technology anxiety experienced by MSEs, the more likely they are to show resistance to using QRIS in their daily business activities.

H₄: Technology anxiety has a significant and positive effect on resistance to adoption.

The Relationship Between Social Influence and Resistance

Social influence plays an important role in shaping behavioral decisions in MSMEs. Lack of encouragement or negative narratives from surrounding actors can strengthen reluctance toward new technology adoption. Prior studies (Fauziah et al., 2025; Mustofa and Maula, 2023) indicate that social environment significantly affects QRIS adoption behavior. Thus, weaker social support is expected to increase resistance to QRIS adoption.

H₅: Social influence has a positive effect on resistance to adopt QRIS.

The Relationship Between Social Influence and Perceived Lack of Usefulness

Social influence reflects the impact of opinions and experiences from surrounding actors such as peers, family, and customers. When MSMEs are exposed to negative or limited information regarding QRIS from their social environment, they tend to perceive lower usefulness of the system. Prior studies (Calisir et al., 2013; Suhartanto and Leo, 2018) suggest that social interaction shapes perceived value of technology. Therefore, social influence is expected to increase perceived lack of usefulness.

H₆: Social influence has a positive effect on perceived lack of usefulness.

Perceived Lack of Usefulness as a Mediator

According to Venkatesh and Davis (2000), social influence is one of the key factors that can indirectly shape an individual's perception of a technology's usefulness (perceived usefulness). This occurs because, in the decision-making process regarding the adoption of new technology, individuals often require support or the opinions of others as a basis for consideration in order to feel more confident. Findings by Mei and Aun (2019) also reinforce this, as social influence was found to have a significant effect on perceived usefulness.

Based on various previous studies, it can be said that social influence plays a crucial role and has a positive effect on the intention to adopt through the perception of technological usefulness. However, in the context of this study, which focuses on resistance to the use of QRIS by MSME actors, an adjustment was made by reversing the variables to align with the context of resistance. This adjustment was made to ensure a positive relationship between the variables under study. Consequently, the analysis results indicate that, following this adjustment, social influence can also exert a significant influence on resistance to adoption via perceived lack of usefulness (Pratama & Harsono, 2025).

H₇: Perceived lack of usefulness acts as a mediator in the relationship between the social influence factor and resistance to adoption.

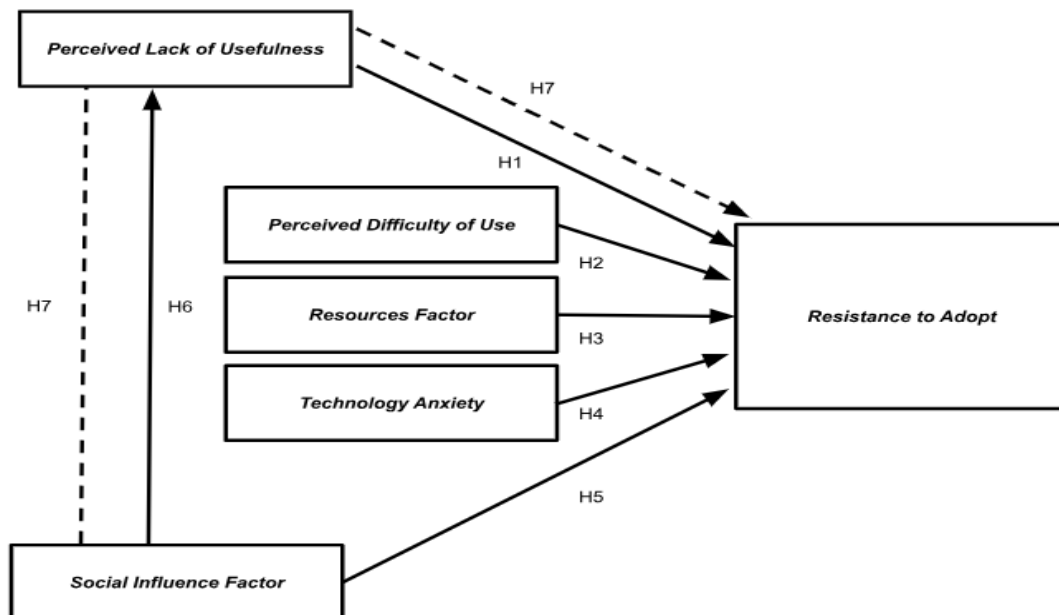


Figure 1. Research Model

RESEARCH METHOD

This study uses a quantitative approach to examine the factors influencing MSMEs' resistance to QRIS adoption, along with the mediating role of perceived lack of usefulness. A quantitative design is considered appropriate because the study aims to test relationships between variables and evaluate a structured research model.

The population in this study consists of micro and small enterprises (MSMEs) in Surabaya that have not yet adopted QRIS in their business transactions. Respondents were selected using purposive sampling under a non-probability sampling approach. This method was chosen to ensure that only relevant participants were included. The selection criteria were: MSMEs located in Surabaya, operating for at least one year, and not using QRIS as a payment method.

Since the exact number of MSMEs that meet these criteria is not known, the minimum sample size was calculated using the Lemeshow formula, resulting in at least 97 respondents. In practice, 211 responses were collected. After checking the data based on the screening criteria, 204 responses were considered valid and used for further analysis. This number is sufficient for conducting multivariate analysis using Structural Equation Modeling.

Data were collected through questionnaires distributed both online and offline. All variables were measured using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to capture respondents' perceptions of each construct in the study.

For data analysis, this study uses Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach, processed using SmartPLS 4.0. This method is suitable for examining complex relationships between variables and works well with survey data. The analysis was carried out in two stages. First, the measurement model was assessed by checking validity and reliability using factor loadings, AVE, Cronbach's Alpha, and Composite Reliability. Second, the structural model was evaluated using a bootstrapping procedure to test the hypotheses. A hypothesis is considered supported when the p-value is below 0.05.

RESULTS AND DISCUSSION

Respondent Profile

A total of 211 questionnaires were collected from MSME owners in Surabaya, with 204 responses meeting the screening criteria and used for further analysis. The screening process excluded respondents who either did not own a business or had already adopted QRIS.

The majority of respondents were male (65.7%), with most falling within the 41–50 age group (42.2%) and above 50 years (39.2%). In terms of education, most respondents completed senior high school (70.1%). The sample is dominated by micro-scale enterprises with annual revenue below IDR 2 billion (89.5%), and the largest sector represented is food and beverage businesses (56.9%). This profile reflects the typical structure of MSMEs in developing urban economies, where traditional business characteristics still dominate despite increasing digital exposure.

Measurement Model Evaluation

The measurement model demonstrates satisfactory validity and reliability. All constructs meet the criteria for convergent validity, with AVE values exceeding the 0.50 threshold. Factor loadings for all indicators are also above the acceptable level, confirming that each construct is well represented by its indicators (Table 1).

Similarly, the reliability assessment indicates strong internal consistency across all constructs. Composite reliability values range from 0.807 to 0.913, exceeding the recommended threshold of 0.70. Although a few Cronbach's Alpha values are slightly below 0.70, they remain acceptable for exploratory research and are supported by strong composite reliability values (Table 2). Overall, the measurement model is considered reliable and suitable for further structural analysis.

Table 1. AVE and Outer Loadings

Variable	Indicator	Loading Factor	AVE	Remarks
Perceived Difficulty of Use	PDOU1	0.759	0.547	Valid
	PDOU2	0.700		Valid
	PDOU3	0.731		Valid
	PDOU4	0.765		Valid
Resources Factor	RF1	0.804	0.726	Valid
	RF2	0.898		Valid
Technology Anxiety	TA2	0.852	0.630	Valid
	TA3	0.766		Valid
	TA4	0.761		Valid
Social Influence Factor	SIF1	0.704	0.512	Valid
	SIF2	0.660		Valid
	SIF3	0.774		Valid
	SIF4	0.718		Valid
Resistance to Adopt	RTA1	0.831	0.685	Valid
	RTA2	0.777		Valid
	RTA3	0.871		Valid
Perceived Lack of Usefulness	PLOU1	0.917	0.840	Valid
	PLOU2	0.916		Valid

Table 2. Composite Reliability

Variable	Cronbach's alpha	Composite reliability (rho_c)	Remarks
PDOU	0.723	0.828	Reliable
PLOU	0.809	0.913	Reliable
RF	0.630	0.841	Reliable
RTA	0.768	0.867	Reliable
SIF	0.689	0.807	Reliable
TA	0.708	0.836	Reliable

Structural Model Evaluation

The structural model explains 57.3% of the variance in resistance to QRIS adoption, indicating a moderate explanatory power. Meanwhile, perceived lack of usefulness is explained by social influence with an R^2 value of 0.289, suggesting a weaker but meaningful explanatory contribution. Multicollinearity is not a concern in this model, as all VIF values fall well below the critical threshold of 3. This confirms that the predictors operate independently without causing estimation bias.

Table 3. R-Square Value

Variable	R-Square
Perceived Lack of Usefulness	0.289
Resistance to Adopt	0.573

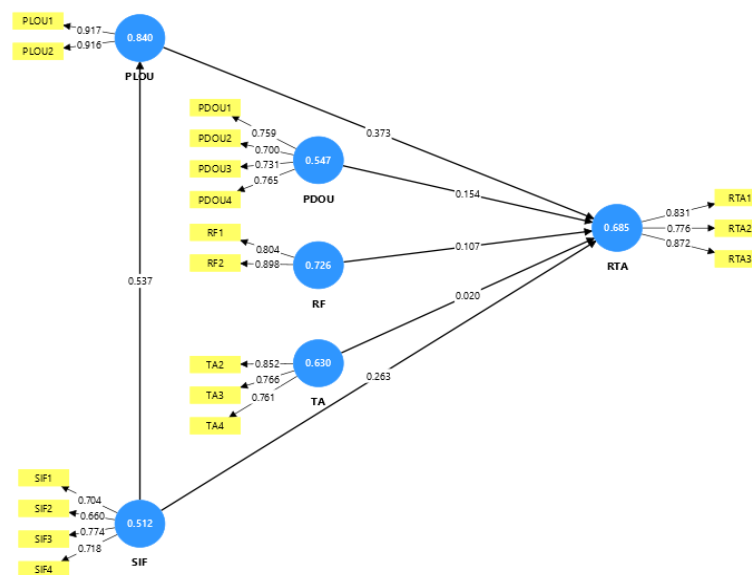


Figure 2. Path Diagram

Hypothesis Testing and Discussion

The structural relationships proposed in this study were tested using a bootstrapping procedure in PLS-SEM. This method provides an estimation of the strength and significance of each hypothesized relationship. The results are summarized in Table 4 below.

Table 4. Hypothesis Test Results

Hypothesis	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Remarks
PDOU -> RTA	0.154	0.100	1,543	0.061	Rejected
PLOU -> RTA	0.366	0.080	4,581	0.000	Accepted
RF -> RTA	0.107	0.113	0.940	0.174	Rejected
SIF -> PLOU	0.537	0.077	6,981	0.000	Accepted
SIF -> RTA	0.263	0.115	2,299	0.011	Accepted
TA -> RTA	0.047	0.087	0.542	0.294	Rejected
SIF -> PLOU -> RTA	0.201	0.050	4,035	0.000	Accepted

Perceived Lack of Usefulness and Resistance to Adopt

The results show that perceived lack of usefulness has a significant positive effect on resistance to QRIS adoption. This suggests that MSMEs are more likely to reject QRIS when they do not perceive clear benefits from its use in their daily operations. Even though QRIS offers efficiency and transaction advantages, many respondents still view it as offering limited practical value compared to conventional cash transactions. This finding reinforces the argument that perceived usefulness remains a central driver in technology rejection behavior.

Perceived Difficulty of Use and Resistance to Adopt

Interestingly, perceived difficulty of use does not significantly affect resistance. This indicates that operational complexity is no longer a major barrier for MSMEs. The widespread use of smartphones and familiarity with digital applications appear to have reduced technical concerns. In other words, even if QRIS is perceived as somewhat complex, it does not necessarily discourage adoption decisions.

Resources Factor and Resistance to Adopt

Similarly, resource-related constraints do not significantly influence resistance. This finding suggests that financial limitations or lack of equipment are no longer decisive barriers. The increasing affordability of smartphones and supportive QRIS fee structures—particularly the low or zero MDR policy for micro transactions—likely reduce the perceived burden of adoption.

Technology Anxiety and Resistance to Adopt

Technology anxiety also shows no significant effect on resistance. This implies that fear or nervousness in using digital systems is not a dominant concern among MSME owners. The improved usability of digital payment platforms, including QRIS, appears to have reduced psychological barriers, making users more confident in handling digital transactions.

Social Influence Factor and Resistance to Adopt

In contrast, social influence has a significant positive effect on resistance to adoption. This indicates that MSME decisions are strongly shaped by their social environment. Lack of encouragement or negative narratives from peers and business communities tends to reinforce reluctance toward QRIS. This finding highlights that adoption behavior is not purely individual but socially embedded.

Social Influence and Perceived Lack of Usefulness

Social influence is also found to significantly shape perceived lack of usefulness. Information shared within business communities, particularly negative experiences such as delayed settlements or operational concerns, contributes to the perception that QRIS provides limited benefits. This highlights the role of informal communication channels in shaping technology evaluation among MSMEs.

Mediating Role of Perceived Lack of Usefulness

The mediating effect is statistically supported, indicating that social influence affects resistance both directly and indirectly through perceived lack of usefulness. In practice, negative social narratives first shape how MSMEs evaluate the usefulness of QRIS, which then strengthens their resistance to adoption. This suggests that resistance is not only socially driven but also cognitively reinforced through perceived value judgments.

Overall, the results of this study indicate that MSMEs' resistance to QRIS adoption is not primarily influenced by technical barriers or resource limitations, but rather is shaped more by how business owners interpret the technology's benefits and the influence of their surrounding social environment. The perception that QRIS provides little added value, along with strong social influence, proved to be the most influential factors in shaping resistance, both directly and through the formation of perceived usefulness.

Meanwhile, factors traditionally considered barriers to technology adoption (such as difficulty of use, resource limitations, and technology anxiety) did not play a significant role in this study. These findings indicate that the primary issue is no longer technical readiness, but rather how the technology is understood, discussed, and valued within the social environment of MSEs. Therefore, increasing QRIS adoption cannot be achieved solely through a technical approach; it also needs to address the perceived value and social dynamics that shape business owners' decisions to accept or reject new technology.

CONCLUSION

The findings of this study indicate that the resistance of Micro and Small Enterprises (MSEs) in Surabaya to the adoption of QRIS is not primarily due to resource constraints, technical barriers, or anxiety about the technology. Rather, this resistance is largely influenced by a perceived lack of usefulness and social influence within the business owners' social circles. These findings confirm that resistance to QRIS is more perceptual and social in nature than technical; therefore, efforts to increase adoption should focus on strengthening the perception of value and building trust in digital payment systems.

Efforts to increase QRIS adoption are not sufficient if they merely emphasise ease and efficiency; they must also strengthen SME operators' understanding of tangible economic benefits, such as transaction efficiency and better-organised financial record-keeping. At the same time, it is important to address aspects of perceived security and perceived risk, particularly regarding fund security, transaction data protection, and concerns about the fund disbursement process. Strengthening system transparency, procedural clarity, and service consistency are key to reducing the perception of risk that still persists among business operators.

Furthermore, as social influence has been shown to play a significant role in shaping resistance, the QRIS implementation strategy needs to strengthen the trust of MSME operators in the system and the implementing institutions. Such trust is built not only through regulation and oversight, but also through positive user experiences and the dissemination of credible information within the business community. Engaging SME operators who have successfully adopted QRIS can serve as an effective mechanism to strengthen social trust and reduce negative perceptions circulating within their communities.

Theoretically, this study demonstrates that resistance to the adoption of digital payment technology cannot be adequately explained solely through technical factors and resources. These findings reinforce the importance of a resistance-based approach that considers the role of perceived value, security, risk, and trust in shaping users' attitudes towards digital technology, particularly within the SME context.

However, this study has limitations as it has not explicitly tested the constructs of perceived security, perceived risk, and trust within the empirical model. Further research is recommended to include these variables in order to gain a more comprehensive understanding of the mechanisms of resistance to QRIS adoption. Furthermore, an expansion of the geographical context is also recommended so that the study's findings have broader generalisability.

REFERENCES

- Berisca, A., Clive, S., Hardani, J. A., & Hutabarat, A. S. (2024). Development of the TAM model of factors that influence the acceptance of mobile payments. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 8(2), 42–66. <https://doi.org/10.31955/mea.v8i2.3967>
- Bisnis.com. (2024, Januari 8). Merchant QRIS di wilayah kerja BI Malang mencapai 602.347 usaha. *Bisnis.com*.
- Calisir, F., Atahan, L., & Saracoglu, M. (2013). *Factors affecting social network sites usage on smartphones of students in Turkey*. In *Proceedings of the World Congress on Engineering and Computer Science 2013* (Vol. II, pp. 1081–1085). San Francisco, USA: WCECS. ISBN 978-988-19253-1-2.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Digibank by DBS. (2023). Sejarah QRIS di Indonesia dan manfaatnya hingga kini. *DBS Bank*.
- Fauziah, K. W. A., Juwiyani, Y. L., Lestari, M. I., Kurniawati, H., & Deviarti, H. (2025). The QRIS Effect: What Truly Motivates MSMEs to Go Digital? *Airlangga Journal of Innovation Management*, 6(2), 280–302. <https://doi.org/10.20473/ajim.v6i2.72231>

- Fauziah, F., Sudarma, M., & Saraswati, E. (2025). MSMEs in digital transformation: Determinants of QRIS e-payment acceptance. *Jurnal Manajemen*, 29(2).
- Ghozali, I. (2011). *Aplikasi analisis multivariate dengan program SPSS*. Semarang, Indonesia: Badan Penerbit Universitas Diponegoro.
- Halim, E. S., Talim, A., Tarigan, R. S., & Maer, M. N. D. (2025). The effect of green country image on green trust on purchase intention in the case of electric and hybrid cars in Indonesia. *Jurnal Riset Ekonomi, Manajemen, Dan Bisnis*, 2(1), 39–50. <https://doi.org/10.9744/jremb.2.1.39-50>
- Mei, Y. C., & Aun, N. B. (2019). *Factors Influencing Consumers' Perceived Usefulness of M-Wallet in Klang Valley, Malaysia*.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Harlow, UK: Pearson Education Limited.
- Indonesia.go.id. (2023, Oktober 3). Transaksi QRIS melonjak 226,54%, revolusi pembayaran digital di Indonesia. *Indonesia.go.id*.
- Irianto, A. B. P., & Chanvarasuth, P. (2025). Drivers and barriers of mobile payment adoption among MSMEs: Insights from Indonesia. *Journal of Risk and Financial Management*, 18(5), 251. <https://doi.org/10.3390/jrfm18050251>
- Jati, A. G. N., Margono, F. P., Ardiyono, T. A., & Wulansari, A. (2023). Analisis faktor tingkat kepercayaan penggunaan QRIS pada UMK di Surabaya menggunakan Technology Acceptance Model (TAM). *Djtechno: Jurnal Teknologi Informasi*, 4(1), 141–150. <https://doi.org/10.46576/djtechno.v4i1.3319>
- Jawa Pos. (2024, Maret 27). Penggunaan QRIS semakin meningkat di Jawa Timur, berikut penjelasan Bank Indonesia terkait pembayaran di masyarakat. *Jawa Pos*.
- Kontan.co.id. (2024). QRIS untuk digitalisasi usaha mikro. *Kontan*.
- Laumer, S., Maier, C., & Eckhardt, A. (2009). Towards an understanding of an individual's resistance to IT change: Theoretical foundations and empirical evidence. *Proceedings of the 2009 ACM SIGMIS Computer Personnel Research Conference*, 200–208.
- Lemeshow, S., Hosmer, D. W., Klar, J., & Lwanga, S. K. (1990). *Adequacy of sample size in health studies*. John Wiley & Sons.
- Mani, Z., & Chouk, I. (2017). Drivers of consumers' resistance to smart products. *Journal of Marketing Management*, 33(1–2), 76–97. <https://doi.org/10.1080/0267257X.2016.1245212>
- Mustofa, R. H., & Maula, P. I. (2023). Faktor yang berpengaruh pada adopsi penggunaan QRIS. *Management Studies and Entrepreneurship Journal*, 4(5), 6714–6726.
- Paramita, R. W. D., Rizal, N., & Sulistyan, R. B. (2021). *Metode penelitian kuantitatif: Buku ajar perkuliahan metodologi penelitian bagi mahasiswa akuntansi & manajemen* (Edisi ke-3). Widya Gama Press.
- Pratama, R. Y., & Harsono, S. (2025). The influence of perceived risk on trust, E-WOM, and purchase intention in shopee users. *Jurnal Riset Ekonomi, Manajemen, Dan Bisnis*, 2(1), 1–5. <https://doi.org/10.9744/jremb.2.1.1-5>
- Priyatna Darmawan, A., & Pratiwi, I. E. (2024, Oktober 17). BI gratis biaya QRIS untuk transaksi hingga Rp 500.000 di usaha mikro per 1 Desember 2024. *Kompas.com*.
- Saleh, N. R. (2024). Quishing: QR code untuk penipuan. *LinkedIn*.
- Sholihah, E., & Nurhapsari, R. (2023). Percepatan Implementasi Digital Payment Pada UMKM: Intensi Pengguna QRIS Berdasarkan Technology Acceptance Model. *Nominal Barometer Riset Akuntansi dan Manajemen*, 12(1), 1–12. <https://doi.org/10.21831/nominal.v12i1.52480>
- Suhartanto, D., & Leo, G. (2018). Small business entrepreneur resistance of ICT adoption: A lesson from Indonesia. *International Journal of Business and Globalisation*, 21(1), 5. <https://doi.org/10.1504/IJBG.2018.094092>
- Sulistiati, L. D., Mahrinasari, M., & Fihartini, Y. (2025). The role of application design quality on e-wallet adoption in Indonesia with gender as a moderating variable. *International Journal of Business and Technology Studies and Research*, 7(1).
- Rahadi, D. R. (2021). *Pengantar Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Wardani, A. N., & Silvy, M. (2025). The effect of financial knowledge and income on pension fund planning behavior with locus of control as a mediation variable. *Jurnal Riset Ekonomi, Manajemen, Dan Bisnis*, 2(2), 78–88. <https://doi.org/10.9744/jremb.2.2.78-88>