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ADAPTATION OF QRIS TO INCREASE MSME INCOME (PHENOMENOLOGICAL STUDY ON THE PERCEPTION OF MSME TRANSACTION SECURITY)

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Abstract:

MSMEs are an economic sector that has also developed in the digital era through the adaptation of QRIS as a strategy to improve financial management and income, by paying attention to security perceptions as a basis for use. The purpose of this research is to analyze how security perceptions and barriers to the use of QRIS affect their use decisions in increasing the effectiveness of MSME transactions and income. This research is a descriptive qualitative using phenomenology by triangulating sources from MSME actors, buyers, and bank employees through in-depth interviews and observations to obtain data or information. This results showed that some business actors still face obstacles due to low understanding and skills in using QRIS, making it difficult to handle the occurrence of error transactions and continue to rely on cash transactions. However, QRIS transactions are proven to provide convenience, efficiency, and support better financial management and improved transaction quality for MSME players, and contribute to increased revenue. Positive perceptions of QRIS security also encourage MSME players' confidence in adapting QRIS.

Keywords:

QRIS adaptation, MSMEs, management accounting systems, digital transactions, security perception.

BACKGROUND

In today's digital era, information technology plays an important role in various sectors, including the economic sector of Micro, Small and Medium Enterprises (MSMEs), through digital payment technology innovations such as QRIS. Quick Response Code Indonesian Standard (QRIS) is a digital payment system in Indonesia that was officially launched on August 17, 2019 and became effective on January 1, 2020. QRIS integrates various QR code-based digital payment methods into one standard, thus simplifying the transaction process while increasing transaction efficiency and effectiveness (Bank Indonesia, 2020).

For MSME players, QRIS adaptation supports the use of electronic payments and improves the accuracy of financial recording and management. Therefore, business actors are required to be technologically literate in order to be able to develop their business and compete in the market (Adi, 2024). MSMEs are currently a sector that shows a positive trend and contributes significantly to the national economy, contributing around 60.5% or equivalent to IDR 9,580 trillion to the Gross Domestic Product (GDP), and absorbing more than 97% of the national workforce (Zasfayyard, 2023).

As the driver of the national economy, MSMEs face various challenges that can hinder their growth and operational efficiency (Kementerian Koperasi & UKM, 2021). Therefore, adaptation to QRIS is an important strategic step for MSMEs in improving transaction efficiency, strengthening management systems, and driving increased revenue through increased sales turnover and transaction volume. In addition, the use of QRIS also contributes to increased customer satisfaction, while still paying attention to security perceptions as a key factor in its successful implementation. MSMEs are also encouraged to implement good management accounting so that financial recording and management can be done regularly and effectively. To maximize its implementation, MSMEs need to improve several aspects that focus on internal reporting, such as an understanding that supports the planning process, operational control, and strategic decision making. This requires relevant and accurate data to forecast profitable sales (Ayuningtyas & Purwanti, 2025).

In addition, an open attitude in accepting and facing all forms of change can also maximize the implementation of management accounting, such as implementing QRIS digital payment access to improve understanding of QRIS technology and eliminate doubts about the security and reliability of the system through data protection, routine monitoring of financial activities and daily transaction control. Thus, the risk of QRIS transactions can be minimized and increase security confidence in the system which is an important element for the success of MSME businesses (Rismaini, 2024).

This study uses a phenomenological study approach to explore the experiences, perceptions, and challenges of MSMEs in QRIS adaptation with a focus on the perception of transaction security and its impact on management accounting practices and revenue increase through in-depth interviews to gain a more comprehensive understanding in helping MSMEs become better prepared to face digital challenges in creating efficient transactions and is expected to increase revenue.

This research focuses on MSMEs that adapt QRIS in their transactions with a different approach from previous research to support theory development and examine topics that are still rarely researched in taking the perception of transaction security to improve data quality and validity. The difference that exists is that the researcher took Petamburan Village as the research location and focused on the perception of transaction security as a decision to use it to hopefully increase income for MSMEs that adapt QRIS.

Then, this research is relevant to the application of TAM 3 theory because it analyzes how MSMEs assess transaction security to increase revenue and make it easier to manage risks through QRIS adaptation. Therefore, the researcher has an interest in conducting research with the title "Adaptation of QRIS to Increase MSME Income (Phenomenological Study on the Perception of MSME Transaction Security)".

THEORETICAL FRAMEWORK

Technology Acceptance Model 3 Theory

The development of technology encourages the improvement and renewal of technology adaptation theory, one of which is the emergence of TAM 3 introduced by Venkatesh and Bala in 2008. This theory was developed to broaden the understanding of technology acceptance in individual decision making towards broader and renewable adaptations of new technologies. TAM 3 adds trust variables to assess how much trust users have in technology in terms of utilization and safety of use, as well as facilitating conditions to explain what factors affect the ease of use of technology, while maintaining variables from the original TAM and TAM 2. Therefore, TAM 3 is considered relevant in this study because it highlights how security perceptions influence MSME decisions to adapt QRIS as a transaction strategy that is expected to increase revenue through the support of variables from the original TAM and TAM 2. TAM 3 consists of several constructs or aspects, including Trust; Facilitating conditions; Perceived usefulness and perceived ease of use; and Social influence (Wicaksono, 2022).

QRIS Adaptation

QRIS adaptation can be done by users for all available transactions, both from all bank service providers at all merchants with the QRIS logo and with payment applications that are different from the application used (Cahyani, 2024). QRIS adaptation in Indonesia was officially used on January 1, 2020 to facilitate non-cash transactions, in an effort to create a transaction process that is practical, efficient, and safe to use because it is a legal entity and has an official permit (Faizani & Indriyanti, 2021).

Increased Revenue

Increased revenue can indicate the achievement of the initial and main objectives of MSMEs to meet various business needs and operational success (Cahyani, 2024). Therefore, MSMEs need to create various innovative strategies in attracting consumer shopping interest, one of which is the use of QRIS which is expected to increase daily income and facilitate and ensure transaction security (Sihaloho, Ramadani, & Rahmayanti, 2020).

Micro, Small, and Medium Enterprises (MSMEs)

MSMEs are economic actors and a business sector that dominates and receives special attention in the national economy (Pakpahan, 2020). Based on the Central Statistics Agency around 2006 with the legal basis of Presidential Regulation Number 28 of 2008 concerning National Industrial Policy in the practice of BPS and the Ministry of Cooperatives and SMEs, MSMEs are classified as follows (Alifia, Permana, & Harnovinsah, 2024):

Table 2.1 Classification of MSMEs Based on the Number of Workers

No.	MSME Group	Total Workforce
1.	Micro	Less than 4 employees
2.	Small Business	5 to 19 employees
3.	Medium Business	20 to 99 employees

Source: Processed by the Author (2025)

Then, in accordance with Law No. 20/2008 Article 1 Chapter IV Article 6 related to "criteria", MSMEs are classified based on sales revenue each year, and have undergone changes through new legal breakthroughs in Government Regulation No. 7/2021. This change is due to the development and contribution of the increasingly large role of MSMEs to the national economy (Chalim et al., 2022).

TABLE 2. 1 CLASSIFICATION OF MSMES BASED ON ANNUAL SALES

By	Micro	Small Business	Medium Business
Law No.20 Article 1 of 2008	Has an annual sales revenue of up to IDR 300,000,000	Has annual sales of more than IDR 300,000,000 to IDR 2,500,000,000	Have a net worth of more than IDR 500,000,000 to IDR 10,000,000,000 and annual sales results of more than IDR 2,500,000,000 to IDR 50,000,000
Government Regulation No.7 of 2021	Has an annual sales result of up	Has an annual sales revenue of more than	Has an annual sales revenue of more than IDR

By	Micro	Small Business	Medium Business
	to IDR 2,000,000,000	IDR 2,000,000,000 to IDR 15,000,000,000	15,000,000,000 to IDR 50,000,000,000

Source: Processed by the Author (2025).

The change in the classification of MSMEs is due to the development of their dynamic role in creating new jobs and encouraging economic growth, so they need to be protected and supported (Zasfayyard, 2023).

Perception of Transaction Security

Digital transaction security is a significant thing in making decisions about its use, such as data encryption to protect information from theft, and increase user trust in technology (Putri, 2024). Based on the security indicators and benefits of QRIS, MSME transactions become easier and more efficient. Thus, security perceptions can encourage QRIS adaptation to minimize risk, increase consumer confidence, and contribute to increased business income (Rismaini, 2024).

Research Approach: Phenomenological Study

The phenomenological approach allows researchers to explain phenomena in depth through observation, understanding, collecting, and analyzing data to draw conclusions (Ramadhany & Tranggono, 2023). This research uses a phenomenological approach, especially to phenomena in the world of MSME businesses, to examine their assessment of the adaptation of QRIS as a digital transaction system in increasing transaction effectiveness and income.

METHOD

This study uses a descriptive qualitative method with a phenomenological study approach. According to (Purwohedi, 2022), research with phenomenological studies such as in this study gives informants the freedom to describe phenomena based on personal perceptions and experiences.

Data was collected through three main techniques: in-depth interviews, observation, and documentation. In-depth interviews were conducted directly with informants to explore data related to how MSMEs interpret QRIS, especially from the perception of transaction security and its impact on income. Observations were carried out to be able to reveal things related to the focus of this study. In addition, documentation and pages/websites were used as secondary data to support and strengthen the primary data obtained (Purwohedi, 2022).

The data obtained was then tested for validity and reliability to ensure that it produced credible and quality data findings (Purwohedi, 2022). Here are some techniques for assessing the validity and reliability of a data:

1. Observation Persistence

   This research uses various kinds of documents, previous research results, news or articles related to increasing observation diligence.
2. Triangulation

   Triangulation in this qualitative research is to test the validity of the data and improve and strengthen the validity of the data that has been obtained from interviews, observations and documentation from different sources (Purwohedi, 2022). In this study, researchers used source triangulation as follows: The researcher collected data from MSMEs, buyers and bank employees in Petamburan Village through interviews, observations and documentation to provide their experiences or perceptions during QRIS transactions as well as education and socialization of their use to strengthen the validity and increase the accuracy of research results.

The data that has been obtained is then processed and analyzed and interpreted in a descriptive form and produces non-numerical data analysis in the form of words, images and open answers from informants who are given the freedom to convey their experiences and perceptions at the time of the interview includes three simultaneous analyses through the process of data reduction, data display, and decision making and verification.

RESULT

1. Observation Results

1) Observation of MSME Actors

QRIS usage among MSMEs varies. Micro businesses such as Donut Mubarok and Aqmar Fotocopy show low usage (±30%) due to limited technical understanding, while Toko Ikbal and Toko Obat Naguna show high usage (±70%) without significant constraints. In small businesses, such as Toko Area Baru, Warteg Kharisma Bahari, and Ikobana Fried Chicken, QRIS usage is quite high (70-80%), while in Es Teh Solo, usage is moderate (50%) due to the dominance of student customers who prefer cash. This shows the importance of increasing digital literacy among certain MSME players.

2) Observation on the Buyer's Side

Direct observation results show that the use of QRIS in Petamburan by buyers is dominated by young people, especially generation z aged around 18 to 22 years. MSMEs confirm that most QRIS user customers are students, college students, and young workers who like practical and fast transactions. They feel QRIS provides payment security rather than using cash, as conveyed by four student informants namely Fajriyah, Natasha, Sofi, and Sherly.

3) Observation of Bank Staff

The results of direct observation of the socialization of digital banking applications integrated with QRIS in 2024 in Petamburan show that bank employees are active and communicative in explaining the use, benefits, and how to solve QRIS problems, including distinguishing between real and fake QR codes. Bank employees also realize that QRIS after its role which is currently a trend, QRIS has obstacles in its use, so they are ready to support the community in overcoming obstacles in its use.

2. Interview Results

1) Real Barriers for MSMEs During QRIS Usage QRIS Transactions

A. Challenges and Constraints of QRIS Usage for MSMEs

Informant	Challenge	Constraints
Micro Business	1. The transition to QRIS digital payments requires MSMEs to improve their understanding of digital literacy (Interviews with Mr. Rizal, Mr. Safrudin, and Mr. Fauzi).	1. Limited network infrastructure or internet signal can hamper the transaction process (Interview with Ms. Nabila and Mr. Safrudin). 2. Technical glitches in QRIS code scanning can lead to transaction failures and a switch to cash transactions (Interview with Mr. Fauzi).
Small Business	1. The transition to QRIS digital payments requires MSMEs to improve their understanding of digital literacy (Interviews with Mr. Adi).	1. Technical glitches in QRIS code scanning can cause the transaction process to be slow (Interview with Mr. Adi).

B. Challenges and Constraints of QRIS Use for Buyers

Informant	Challenge	Constraints
College Student	1. The transition to QRIS digital payments, requires shoppers to be able to increase digital literacy (Interview with Sofi).	1. QRIS technical and system glitches create uncertainty and decrease transaction confidence and convenience (Interview with Natasha). 2. Limited network or internet signal hampers the payment process (Interview with Sherly and Fajriyah).

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C. Challenges and Obstacles to QRIS Use for Users According to the Role of QRIS Socialization

Informant	Challenge	Constraints
Bank Employee	1. Able to provide in-depth education regarding increasing the understanding of digital literacy for QRIS users. 2. Able to provide direction during technical and QRIS system disruptions.	1. Socialize especially for traders to first pay attention to the place of business has a stable and strong signal.

2) Contribution of QRIS for MSMEs to Transaction Effectiveness and Revenue

A. Contribution of QRIS Usage for MSMEs

Informant	Contribution of the Impact of Using QRIS
Micro Business	1. Improve transaction operational efficiency (Interview with Mr. Safrudin). 2. Improve the quality of transaction recording as well as monitoring sales and business finances (Interview with Ms. Nabila and Mr. Fauzi). 3. Improve *internal control* of business finances (Interview with Ms. Nabila). 4. Increase daily transaction volume (Interview with Mr. Safrudin). 5. Increase sales turnover (Interview with Ms. Nabila, Mr. Safrudin and Mr. Fauzi). 6. Attract new buyer segments (Interview with Mr. Safrudin).
Small Business	1. Improve transaction operational efficiency (Interview with Mr. Imam). 2. Improve the quality of transaction recording as well as monitoring sales and business finances (Interview with Mr. Imam, Mr. Dani, and Ms. Elsa). 3. Improve *internal control* of business finances (Interview with Mr. Imam, Mr. Adi, Mr. Dani, and Ms. Elsa). 4. Increase daily transaction volume (Interview with Ms. Elsa). 5. Improve the efficiency of small cash flow management (Interview with Mr. Dani and Ms. Elsa). 6. Increase sales turnover (Interview with Mr. Imam, Mr. Adi, Mr. Dani and Ms. Elsa). 7. Attract new buyer segments (Interview with Mr. Adi). 8. Drive customer loyalty (Interview with Mr. Adi).

B. Contribution of QRIS Usage for the Buyer

Informant	Contribution of the Impact of Using QRIS
Buyer	1. Simplify the transaction process (Interview with Fajriyah and Natasha). 2. Makes it easier to verify the accuracy of the nominal transaction (Interview with Natasha). 3. Facilitate direct access to funds in the account (Interview with Sofi).

C. Contribution of QRIS Use for Users According to the Role of QRIS Socialization and Education

Informant	Contribution of the Impact of Using QRIS
Bank Employee	1. Improving the efficiency and security of transactions, especially for business actors. 2. Helping MSME customer loyalty. 3. Improve the accessibility of digital transactions.

3) Relationship between Perception of Transaction Security and Decision to Use QRIS for MSMEs on Revenue

A. Security Perceptions as the Basis for QRIS Usage Decisions by MSMEs

Informant	Perception of MSMEs
Micro Business	Influenced by personal positive experiences: 1. Secure, providing transaction accuracy (Interview with Mr. Safrudin) Influenced by initial assumptions and experience: 2. Initially felt apprehensive, but began to feel the reliability and security of the QRIS system (Interview with Ms. Nabila). Influenced by its minimal use: 3. Secure in terms of security, but buyers rarely choose to pay using QRIS (Interview with Mas Rizal). Influenced by feelings of emotional safety and comfort and trust: 1. Safe reliable, protects the risk of counterfeit money fraud (Interview with Ms. Nabila, and Mr. Rizal).
Small Business	Influenced by media and social information: 1. Safe, prevents the risk of cash transaction fraud (Interview with Mr. Imam and Mr. Adi).

B. Perception of Security as a Basis for QRIS Use Decisions for Buyers

Informant	Buyer Perception
College Student	Influenced by initial assumptions and experiences: 1. Had some concerns, but started to feel the reliability and security of the QRIS system (Interview with Natasha).

C. Security Perception as the Basis for QRIS Usage Decision by Users based on the Educative Role of Bank Employees

Informant	Banker's Perception
Bank Employee	Influenced by initial assumptions and experiences: 1. Provide socialization of QRIS security features.

DISCUSSION

Based on the results of interviews that have been validated through triangulation of three sources, the researcher found several findings in the field related to the Adaptation of QRIS to the Increase in MSME Income (Phenomenological Study on the Perception of MSME Transaction Security) in Petamburan Village with the following discussion:

1. Real Barriers for MSMEs During QRIS Transaction Usage

A summary of the results of interviews with several MSMEs above, it was found that during the application of QRIS for their business transaction activities, MSMEs realize the importance of initial knowledge and an attitude of adjustment and good acceptance of a new technology that can maximize its use and minimize challenges and obstacles that can hinder the transaction process, here are some of the challenges and obstacles of the research results obtained from interviews that have been validated by triangulation :

A. Transition to QRIS Digital Payments

The transition to digital payments through QRIS for MSMEs is a significant initial challenge because it makes it difficult for MSMEs to operate and access the QRIS system, as well as handle buyer transaction errors. Awareness and solutions to overcome and prevent existing obstacles require them to be able to increase their understanding of the use and systems and features of a QRIS-integrated banking application.

The transition to digital payments through QRIS shows that most MSME players are still in the early stages of technology adaptation, namely the knowledge → persuasion → decision stage in the innovation diffusion theory Rogers (2003) (Indiarma, 2023). They are just starting to recognize QRIS and consider its benefits and convenience in supporting business. In line with TAM 3 (Venkatesh & Bala, 2008), perceived ease of use influences intention to actual use of QRIS. Thus, the formation of initial knowledge is an important prerequisite before MSME actors can adopt QRIS effectively (Wicaksono, 2022).

B. Limited Network Infrastructure or Internet Signal

Limited network infrastructure or internet signal is an obstacle for MSMEs when carrying out the QRIS transaction process. This is an external factor that can hinder the smooth running of digital transactions and affect business perceptions of the reliability and effectiveness of the technology used, even though MSMEs already own and have QRIS devices available, and understand their use. So it can be said that the success of QRIS transactions is strongly influenced by the availability of a stable internet network.

Limited internet network is the main obstacle in the adaptation of QRIS by MSMEs. This can be overcome through technical education by related parties, such as socialization from bank employees, to emphasize the importance of a stable network. In the theory of innovation diffusion Rogers (003), this constraint affects the decision and confirmation stages, where technical glitches can hinder the decision and confidence to adopt the innovation. According to TAM 3 (Venkatesh & Bala, 2008), weak networks impact perceived ease of use and trust in technology. Thus, these obstacles are not just technical barriers, but external factors that affect the success of QRIS adoption and data accuracy for managerial decision making.

Education and digital literacy are key to support optimal diffusion of innovations & Kurniawan, 2021).

C. Technical Glitches in QRIS Code Scanning

Technical problems in scanning QRIS codes are technical obstacles that quite often occur for MSMEs when transactions use QRIS, especially in the QR code scanning process. Apart from the lack of readiness of MSME actors in using QRIS which can be an obstacle to QRIS adaptation, technical aspects both in the problem of unreadable QR code media and on the buyer's device which has a dirty cellphone lens, and application errors become obstacles in the smooth running of transactions.

Technical glitches in QRIS scanning, such as blurry codes, poor lighting, or non-optimal buyer devices, are common obstacles in the adaptation of QRIS by MSMEs. In innovation diffusion theory Rogers (2003), this falls under the issue of compatibility and complexity, where the mismatch between technology and field conditions hinders integration and slows down the confirmation stage (Indiarma, 2023). While in TAM 3 (Wicaksono, 2022), these constraints affect perceived ease, usefulness and trust. However, the findings show that adaptation barriers come not only from internal perceptions, but also from external factors that directly affect user experience. Therefore, innovation diffusion theory is considered more relevant in explaining the dynamics of QRIS adaptation, and TAM 3 can be developed by including aspects of contextual fit or environmental constraints.

2. Real Contribution of QRIS for MSMEs to Transaction Effectiveness and Revenue

A summary of the results of interviews with several MSMEs, saying that the use of QRIS for their business transaction activities makes a real contribution in supporting their transaction operational processes to be more efficient.

A. Improved Efficiency and Speed of Transaction Operations

Increasing the efficiency and speed of transaction operations through QRIS, has a real positive impact on MSMEs, can make the transaction process faster, more practical, and efficient with only buyers simply scanning the QR code, without having to manually count cash and change, and reduce queuing time with this accelerating MSME services. Therefore, the use of QRIS can be utilized in supporting a business to achieve its success goals by utilizing the minimum time, effort and cost possible (Salim & Nopiansyah, 2023). So, the meaning of efficiency is right in explaining the contribution of QRIS that can improve the transaction operations of

MSME players with the latest, automatic, and real-time systems that are recorded directly on cellphones (Indriani & Rahman, 2024).

The use of QRIS by MSMEs is proven to support smooth daily transactions through time efficiency, operational ease, and practicality, indicating a positive acceptance of this digital payment system. In the theory of innovation diffusion (Rogers, 2003), this reflects the characteristics of relative advantage and compatibility, where QRIS is considered superior to cash and suits the needs of daily transactions. MSMEs have also entered the confirmation stage, which is convinced and committed to continue using QRIS.

In line with TAM 3 (Wicaksono, 2022), the benefits and ease of use of QRIS form positive perceptions that strengthen the intention to continue using it (behavioral intention to use). The effectiveness of QRIS also increases MSME revenue, because transactions are faster to serve more customers, attract cashless buyers, and help record cash flow for more accurate business decision making.

3. **The Relationship between Perceptions of Transaction Security and Decisions to Use QRIS for MSMEs on Revenue**

A summary of the results of interviews with several MSMEs, it is found that the decision to use QRIS sustainably by MSMEs is based on initial assumptions and experiences as a transaction system.

A. **Persepsi Keamanan Transaksi QRIS Berdasarkan Asumsi Awal dan Pengalaman Pengguna sebagai Keputusan Penggunaan QRIS**

Positive perceptions of digital transaction security encourage MSME decisions to adapt the use of QRIS as a payment system. Where before deciding to use QRIS, it is possible for MSMEs to have initial assumptions that are skeptical, namely having doubts and concerns about its security and reliability as a digital transaction system which is considered only an artificial system. This initial assumption is based on the lack of knowledge of digital literacy of the QRIS system which may be damaged and cause security problems with personal data and accounts that can be blocked, as well as the lack of experience transacting with QRIS. However, this assumption changes as the feeling of security and comfort possessed by the QRIS system is based on the experience of its use which provides security and ease of transactions.

Perceptions of security encourage MSME players to use QRIS on an ongoing basis. Initially there are doubts, but positive experiences in security and ease of use form trust and confidence, in line with Rismaini's findings (2024) that good understanding increases trust in transactions. The digital recording of QRIS helps monitor daily cash flow, supporting financial control and management accounting functions.

This adaptation process is in accordance with the stages of innovation diffusion theory Rogers (2003), from knowledge to confirmation, where direct experience strengthens MSMEs' confidence in the benefits of QRIS, especially in maintaining transaction security. In TAM 3 (Wicaksono, 2022), this is reflected in decreasing perceived risk, increasing trust, perceived usefulness, and perceived ease of use, which encourages behavioral intention to actual use.

The decision of MSMEs to continue using QRIS has an impact on increasing income through transactions that are safe, recorded, and easy to monitor. This facilitates financial management, avoids recording errors, and increases customer trust in a practical and modern digital payment system, thus encouraging business loyalty and growth.

CONCLUSION

In using QRIS as a transaction system, MSME players and buyers face the main obstacles in the form of transition challenges to digital payments due to low initial user understanding of digital literacy, unfamiliarity with system security features, then technical problems in the QR code scanning process, limited network infrastructure or internet signals, and lack of technical assistance in the initial implementation process. In addition, some MSMEs also experience difficulties in fulfilling the administrative requirements needed by financial institutions to access QRIS services legally and formally. This factor hinders wider access to the benefits of using QRIS optimally and can hamper the transaction process and reduce trust in the reliability and authenticity of merchant QRIS QR codes.

Nevertheless, the use of QRIS for MSME players and buyers contributes and tangible benefits to the effectiveness of transactions, especially in terms of speed, convenience, and efficiency of transaction operations. MSMEs that have adapted well feel an increase in convenience in transactions and ease of financial recording. This indirectly affects the increase in revenue, especially for small businesses that have higher transaction volumes and buyers who are accustomed to non-cash payment methods, so as to increase buyer loyalty which also has an impact on increasing sales.

In addition, this study found that security perception is an important factor influencing the decision to use QRIS sustainably. Findings from MSME players, buyers (female students), as well as from financial institutions (bank employees) show that initial concerns about QRIS security can turn into trust after users get first-hand experience and educative information about the system's security features. Positive security perceptions encourage the intention and decision to actively use QRIS, which then has an impact on increasing the income and operational efficiency of MSMEs.

Thus, this conclusion strengthens the theoretical framework of the Technology Acceptance Model 3 (TAM 3), that perceptions of the ease and safety of using technology formed based on experience, education, and risk perceptions have a direct effect on technology use intentions and behavior. In addition, from the perspective of the diffusion of innovation theory, education and support from institutions such as banks play a key role in encouraging comprehensive technology adaptation for users, especially in the MSME ecosystem.

BIBLIOGRAPHY

Adi, D. S. (2024). “Analysis of Differences in the Successful Performance of MSMEs Before and After Using Quick Response Indonesian Standard (QRIS) in Purwokerto City.” State Islamic University (Uin) Prof. K.H. Saifuddin Zuhri Purwokerto.

Ayuningtyas, N., & Purwanti, P. (2025). The Role of Management Accounting in Optimizing Cost Structure in MSMEs in the Digital Era. Journal of Financial Accounting and Taxation | E-ISSN: 3063-8208, 1(3), 257-260.

Bank Indonesia. (2020). QRIS Socialization Materials.

Cahyani, I. G. (2024). “Digitalization of Payment Strategy through QRIS to Increase Business Income at QRIS Partner MSMEs in Banjarnegara Regency.”

Chalim, M. A., Listyowati, P. R., Hanim, L., & Noorman, M. S. (2022). The Government's Role in the Development of Modern Cooperatives and MSMEs Based on PP No. 7 of 2021. Audi Et AP: Journal of Legal Research, 1(01), 21-29.

Indiarma, V. (2023). Information and Communication Technology Innovation in Rural Micro, Small and Medium Enterprises (Adoption of Innovation in the Utilization of Information and Communication Technology in MSMEs in Sukasari Village, Seluma). Tuturlogi: Journal of Southeast Asian Communication, 4(3), 131-141.

Indriani, S., & Rahman, Z. D. (2024). Financial Literacy, QRIS Utilization and Performance of Micro and Small Enterprises (MSEs) in South Jakarta. Indonesian Journal of Accounting, Business and Economics (JABEI). (Vol.3, No.2, pp.53-63).

Kementerian Koperasi & UKM. (2021). "The Role of MSMEs in the Economy," 2021.

Pakpahan, A. K. (2020). Covid 19 and Implications for Micro, Small and Medium Enterprises. Scientific Journal of International Relations.

Purwohedi, U. (2022). *Research Methods, Principles and Practices*. Edited By The RAS Team. Achieve Asa.

Putra, R. R., Kurniawan, F., Yusman, Y., & Alvin, A. (2024). User Interface Design of Digital Information System in Improving MSMEs in Pertumbukan Village, Wampu District. JOURNAL MAHAJANA INFORMASI, 9(1), 33-40.

Putri, A. F. C. (2024). "The Effect of Perceived Benefits, Ease, Risk, Security, and Word of Mouth on Interest in Using the Quick Response Code Indonesian Standard (QRIS) on Sleman Regency MSME Actors."

Ramadhany, N. A, & Tranggono, D. (2023). "Phenomenological Study of Adoption of Tourism Digitalization Innovation of Hendrosari Tourism Village in Menganti, Gresik Regency." JIIP - Scientific Journal of Education Sciences 6 (3): 1652-57. Https://Doi.Org/10.54371/Jiip.V6i3.1436.

Rismaini, E. (2024). "The Effect of the Convenience and Security of the QRIS Payment System on the Income of Halal Culinary MSMEs in Banda Aceh City."

Salim, A. S., & Nopiansyah, D. (2023). Efficiency of Using Quick Response Code Indonesia Standard (QRIS) to Increase Sales at Umkm in Le Garden Palembang Indah Mall. ECOMBIS REVIEW: Scientific Journal of Economics and Business, 11(2), 1385-1396.

Sihaloho, J. E., Ramadani, A. & Rahmayanti, S. (2020). "Implementation of the Indonesia Standard Quick Response Payment System at the University of North Sumatra." Journal of Business Management 17 (2): 287-97. Https://Doi.Org/10.38043/Jmb.V17i2.2384.

Wicaksono, S. R. (2022). Basic Theory of Technology Acceptance Model. CV. Thousand Stars. Https://Doi.Org/10.5281/Zenodo.7754254.

Zasfayyard, H. (2023). "Analysis of the Role of MSMEs in Increasing Community Income in Binjai City." University of Muhammadiyah North Sumatra Medan.