



## **The Impact of QRIS Use on the Financial Performance of MSMEs in West Java**

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### **Abstract**

This study examines the effect of Quick Response Code Indonesian Standard (QRIS) usage on the financial performance of Micro, Small, and Medium Enterprises (MSMEs) in West Java. The digitalization of payment systems through QRIS is considered a strategic tool to enhance transaction efficiency, market expansion, and financial transparency. This research is grounded in the Technology Acceptance Model (Davis, 1989), Resource-Based View (Barney, 1991), and Financial Performance Theory. A quantitative approach using Structural Equation Modeling – Partial Least Squares (SEM-PLS) was applied. Data were collected from 180 MSME owners who had adopted QRIS in West Java. The results indicate that QRIS usage significantly influences transaction efficiency ( $\beta = 0.621$ ,  $p < 0.001$ ), which in turn has a strong impact on financial performance ( $\beta = 0.589$ ,  $p < 0.001$ ). QRIS usage also directly affects financial performance ( $\beta = 0.214$ ,  $p = 0.012$ ). These findings confirm that QRIS functions not merely as a digital payment instrument but also as a driver of MSME profitability, cash flow, and revenue growth.

**Keywords:** QRIS; Digital Payments; Financial Performance; MSMEs; SEM-PLS.

## **1 Introduction**

Digital transformation in the financial sector has significantly changed business transaction patterns, including in the Micro, Small, and Medium Enterprises (MSMEs) sector. One significant innovation in Indonesia is the implementation of QRIS, a QR code-based payment standard initiated by Bank Indonesia to increase financial inclusion and payment system efficiency. In West Java Province, one of the largest centers of MSME activity in Indonesia, QRIS adoption has increased rapidly along with the development of the digital economy.

Theoretically, the Technology Acceptance Model (Davis, 1989) explains that technology adoption is influenced by perceptions of usefulness and ease of use. In the context of MSMEs, QRIS enables faster, more secure, and more documented transactions, potentially improving operational efficiency and the quality of financial management. Meanwhile, the Resource-Based View (Barney, 1991) views technology as a strategic resource that can create competitive advantage when optimally utilized.

The financial performance of MSMEs reflects a business's ability to generate profits, maintain cash flow, and sustain growth. Previous research has shown that digital payments contribute to increased sales, reduced transaction costs, and improved financial transparency (Sfenrianto et al.,

2023; Bank Indonesia, 2024). However, empirical studies specifically examining the effect of QRIS on MSME financial performance, particularly in West Java, are still relatively limited. Therefore, this study aims to analyze the relationship between QRIS usage, transaction efficiency, and MSME financial performance. This study is expected to provide theoretical and practical contributions to the development of MSME digitalization policies.

## 2 Literature Review

QRIS is a QR Code-based digital payment system that enables interoperability between various payment service providers within a single national standard. According to Bank Indonesia (2024), QRIS is designed to improve payment system efficiency by accelerating transactions, reducing cash management costs, and expanding business access to formal financial services. In the context of MSMEs, QRIS serves not only as a payment instrument but also as a gateway to the broader digital economy ecosystem, including banking services, financing, and system-based transaction recording. From a *Technology Acceptance Model* (TAM) perspective, the *perceived ease of use* and *perceived usefulness* of QRIS increases its acceptance and adoption rate among MSMEs. When business owners perceive that QRIS simplifies transactions while improving the quality of business management, their intention and intensity of use tends to increase, ultimately impacting business performance.

The financial performance of MSMEs reflects a business's ability to generate profits, maintain liquidity, and sustain sustainable revenue growth. This indicator not only represents the current financial condition but also reflects the long-term sustainability and competitiveness of the business. The use of digital payment systems has been proven to improve the quality of transaction recording and reduce the risk of cash leakage due to human error or cash misuse (Sari & Putra, 2023). Payment digitization also enables MSMEs to have more accurate and documented transaction data, thus simplifying financial planning, financing applications, and business performance evaluation. Within the *Resource-Based View framework* (Barney, 1991), technology such as QRIS is seen as a valuable strategic resource that is difficult to imitate and can create a competitive advantage when optimally utilized. Thus, QRIS adoption can be a crucial instrument in strengthening the position of MSMEs amidst increasingly digital-based market competition. Transaction efficiency plays a key role in bridging the use of QRIS with the financial performance of MSMEs. Digital payments enable faster transactions, reduce queues and service times, and minimize recording errors that often occur in cash transactions. Furthermore, digital payment systems enhance customer convenience by offering a variety of convenient and secure payment methods. This improved customer experience impacts purchase intensity and loyalty, ultimately increasing sales volume. Research by Rahmawati et al. (2024) shows that transaction efficiency has a positive relationship with MSME profitability, as savings in time and operational costs allow businesses to allocate resources more productively. Thus, transaction efficiency is not only a result of technology adoption but also a determining factor in creating economic value for MSMEs.

Conceptually, the relationship between QRIS use and financial performance is not solely direct, but rather works through improvements in business processes, particularly in transactions and financial management. QRIS increases the transparency and accuracy of transaction data, which in turn drives operational efficiency and quality decision-making. From an accounting information system perspective, transaction data quality is the primary foundation for reliable financial performance measurement. Therefore, the more intensive and effective the use of QRIS, the greater the potential for improving transaction efficiency and, ultimately, the financial performance of MSMEs.

Based on the theoretical study and empirical findings, this study develops a conceptual framework that positions transaction efficiency as a mediating variable in the relationship between QRIS usage and MSME financial performance. This model is formulated as follows: QRIS Usage → Transaction Efficiency → MSME Financial Performance.

This model emphasizes that the financial benefits of QRIS come not only from the technology itself, but also from how the technology improves the quality and efficiency of transaction processes carried out by MSMEs.

### 3 Research Methods

This study uses a quantitative approach with a survey design to analyze the effect of QRIS usage on the financial performance of MSMEs in West Java through transaction efficiency. The study population was MSMEs using QRIS in West Java Province, with a sample of 180 respondents selected using a purposive sampling technique, namely MSMEs who have actively used QRIS in their business transactions.

Data were collected using a questionnaire with a five-point Likert scale (1–5) to measure respondents' perceptions of the research variables. QRIS usage was measured using indicators such as ease of use, transaction security, and frequency of use, while transaction efficiency was measured using transaction speed, transaction costs, and recording accuracy.

The financial performance of MSMEs was measured using turnover, profit, and cash flow indicators. Data analysis was performed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method using SmartPLS 4 software, as this method is suitable for testing causal relationships and mediation models with latent constructs and medium sample sizes. Evaluation was carried out through testing the outer model to ensure the validity and reliability of the instrument, and the inner model to test the strength and significance of the relationships between variables in the research model.

### 4 Results and Discussion

The measurement model evaluation results indicate that all constructs meet excellent reliability and validity criteria. The Composite Reliability values for all variables are above 0.90, and the Average Variance Extracted (AVE) value exceeds 0.50, indicating that each indicator consistently and accurately represents the latent construct. This confirms the instrument's suitability for measuring QRIS usage, transaction efficiency, and MSME financial performance.

Table 1. Relationship Structural

Connection			$\beta$ coefficient	p-value	Interpretation
QRIS → Transaction	Efficiency		0.621	< 0.001	Significant strong
Efficiency → Performance	Financial		0.589	< 0.001	Significant strong
QRIS → Performance	Financial		0.214	0.012	Significant moderate

The results of the structural model show that QRIS use has a very strong effect on MSME transaction efficiency ( $\beta = 0.621$ ;  $p < 0.001$ ). This indicates that the more intensive and effective QRIS use, the faster, cheaper, and more accurate the transaction process carried out by MSMEs.

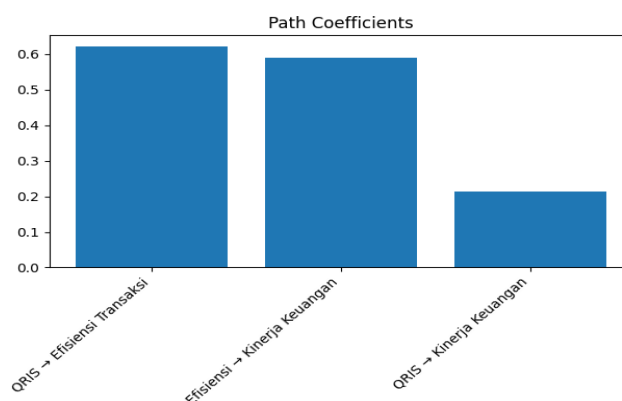
This finding is consistent with Bank Indonesia's (2024) view that QRIS accelerates the payment system and reduces cash management costs.

Transaction efficiency has also been shown to have a strong and significant impact on the financial performance of MSMEs ( $\beta = 0.589$ ;  $p < 0.001$ ). This indicates that MSMEs capable of conducting transactions quickly, cheaply, and accurately will experience increased turnover, profits, and cash flow stability. Economically, this efficiency reduces operational costs and increases transaction volume, thus directly impacting business profitability. This finding supports the research findings of Rahmawati et al. (2024) which stated that transaction efficiency is an important determinant of MSME profitability.

Furthermore, QRIS usage also has a direct impact on MSME financial performance ( $\beta = 0.214$ ;  $p = 0.012$ ). Although smaller than the indirect pathway, these results indicate that QRIS adoption itself provides added financial value, for example through increased customer convenience, consumer trust, and a more modern business image. Thus, QRIS not only improves financial performance through process efficiency but also through reputational mechanisms and market appeal.

The  $R^2$  value of 0.53 for the financial performance variable indicates that 53% of the variation in MSME financial performance can be explained by QRIS usage and transaction efficiency. This value is considered strong in social and business research, indicating the model has good predictive power.

The results of the mediation test indicate that transaction efficiency significantly mediates the relationship between QRIS usage and financial performance. This means that QRIS's influence on financial performance operates largely through improving the quality and efficiency of transaction processes. This finding reinforces the *Resource-Based View framework*, which argues that digital technologies like QRIS will only create economic value if they can be internalized into more efficient and productive operational processes.



Graph 1. Graph Path Coefficient

Chart This show that QRIS path → Efficiency Transactions and Efficiency → Financial Performance own stem highest , affirmed that mechanism play improvement performance MSME finance through QRIS is past efficiency transactions .

Path coefficient graphs provide a visual representation that clarifies the relative strength of the relationships between variables in the research model. By displaying beta coefficient values as bars, these graphs make it easy for readers to directly compare the magnitude of the effect of QRIS usage on transaction efficiency and the effect of transaction efficiency on MSME financial performance. This visualization serves as an important interpretive tool, as it helps intuitively

confirm the statistical test results obtained through SEM-PLS. The taller the bar in the graph, the greater the contribution of that variable in explaining changes in the endogenous variable, making this graph an effective complement to the numerical analysis presented in the table.

The graph shows that the QRIS channel's influence on Transaction Efficiency and Financial Efficiency and Performance has the highest bar, confirming that the primary mechanism for improving MSME financial performance through QRIS works through increased transaction efficiency. This indicates that the financial benefits of QRIS adoption do not solely stem from the use of the technology itself, but rather from how the technology optimizes business processes, accelerates transaction flows, and improves financial accuracy and transparency. Thus, this graph visually supports the empirical finding that transaction efficiency acts as a key bridge transforming QRIS use into increased turnover, profits, and cash flow stability for MSMEs.

## 5 Conclusion

This study demonstrates that QRIS usage significantly impacts the financial performance of MSMEs in West Java, both directly and indirectly through transaction efficiency. SEM-PLS analysis results indicate that QRIS can improve the speed, accuracy, and cost efficiency of transaction processes, which in turn positively impacts MSMEs' turnover, profits, and cash flow stability. These findings confirm that digitalization of payment systems is not merely a technological innovation but also a strategic instrument in strengthening the competitiveness and sustainability of small and medium enterprises.

Furthermore, transaction efficiency has been shown to act as a key mediating variable linking QRIS use to MSME financial performance. This means that the financial benefits of QRIS are largely derived from improved business processes, particularly in transaction management and financial recording. MSMEs that optimally utilize QRIS tend to have more organized, accurate, and transparent transaction systems, enabling them to make more informed business decisions and respond more responsively to market dynamics. This reinforces the view that digital technology will only generate economic value if it is effectively integrated into business operations.

Practically, the results of this study provide important implications for developing policies and strategies for empowering MSMEs. Local governments, banks, and digital payment service providers need to encourage QRIS adoption not only through expanded access, but also through mentoring, digital literacy, and integration with MSME bookkeeping systems. With this approach, QRIS can be maximized as a tool for improving financial performance and as a foundation for MSMEs' transformation toward a more inclusive and sustainable digital economic ecosystem.

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