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QRIS Usage and Transaction Efficiency among Culinary Micro-Enterprises in Kendari City

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Abstract

The development of digital payment systems has encouraged micro-enterprises to adopt non-cash transaction methods that offer greater efficiency. This study aims to examine the effect of QRIS usage on transaction efficiency from the perspective of micro-enterprises in the culinary sector in Kendari City. The study employs a quantitative explanatory approach using a survey method involving 84 micro-enterprise owners who have used QRIS for at least six months. Data were collected through structured questionnaires and analyzed using simple linear regression. The results indicate that QRIS usage has a positive and significant effect on transaction efficiency. Increased utilization of QRIS is proven to accelerate transaction processes, reduce operational costs associated with cash handling, and improve the accuracy of financial record-keeping. The coefficient of determination shows that QRIS usage explains a substantial proportion of the variance in transaction efficiency. These findings highlight that QRIS functions not only as a digital payment instrument but also as a mechanism to enhance operational efficiency among micro-enterprises in the culinary sector. This study provides empirical evidence that enriches the literature on digital payment systems in the context of micro-enterprises, particularly in Eastern Indonesia, and offers practical insights for business actors and policymakers in promoting payment system digitalization.

Keywords

Culinary Sector, Digital Payments, Micro-Enterprises, QRIS, Transaction Efficiency.

1. Introduction

Micro-enterprises constitute a crucial pillar in Indonesia's economic structure due to their role in generating employment, stimulating local economic growth, and strengthening community economic resilience. The existence of micro-enterprises serves as a primary buffer for regional economies, particularly in areas with limited large-scale industrial development (Agboola et al., 2023; Biswas et al., 2025). Within the context of regional economic development, micro-enterprises are often the most adaptive sector in responding to changing economic environments. Therefore, the sustainability and operational efficiency of micro-enterprises have become strategic issues in local economic development (Indarti, 2021).

In Kendari City, the culinary sector is one of the most dominant and rapidly growing micro-enterprise subsectors. Culinary businesses are characterized by highly intensive and repetitive daily transactions, making transaction systems a critical factor for smooth operations (Sedyowidodo, 2022; Sulistyono et al., 2022; Zaidi et al., 2022). This high transaction frequency requires payment methods that are fast, practical, and efficient in terms of cost and record accuracy, as inefficient systems may cause queuing, recording errors, and wasted operational time. Additionally, reliance on cash transactions increases risks such as loss, counterfeit money, and poor financial administration, which may hinder long-term professionalism and business sustainability.

Advancements in digital technology have transformed payment systems from cash-based to cashless transactions, with digitalization widely viewed as a means to enhance efficiency, transparency, and security across economic sectors. This shift has reshaped interactions between business actors and consumers, making digital payments an essential component of micro-enterprise modernization (Astuti et al., 2021; Alghamdi & Alghamdi, 2022; Böttcher et al., 2024). In Indonesia, a major innovation is the Quick Response Code Indonesian Standard (QRIS), developed to simplify QR-based transactions through interoperability among multiple payment providers within one integrated system. Studies consistently show that QR-based payments improve transaction convenience and speed, positioning QRIS as a strategic tool for promoting transaction efficiency among micro-enterprises (Benyam et al., 2021; Agboola et al., 2023).

Empirical evidence indicates that QRIS usage in Kendari City has grown rapidly in recent years. This growth is reflected in both transaction volumes and the number of merchants adopting QRIS. This condition suggests a relatively high level of acceptance of digital payment systems (Indarti, 2021; Agboola et al., 2023). However, widespread adoption does not necessarily translate into optimal. Various socialization and assistance initiatives undertaken by monetary authorities and local business communities have accelerated QRIS adoption. Educational programs, transaction incentives, and technical assistance have become key drivers in expanding QRIS usage. These efforts aim to enhance digital literacy and strengthen business actors' trust in cashless payment systems. Nevertheless, high adoption rates do not always reflect effective utilization of QRIS in practice. This indicates a distinction between formal adoption and functional use of QRIS.

Digital payments, including QRIS, can enhance transaction efficiency among MSMEs through faster payment processes, lower operational costs, and more accurate financial records. However, not all business actors experience these benefits equally, as variations are often linked to differences in digital literacy, infrastructure availability, and consumer payment preferences (Benyam et al., 2021). This suggests that the impact of QRIS is not uniform, since its effectiveness is strongly shaped by business context, regional characteristics, and the readiness of the digital ecosystem, which may either strengthen or limit the advantages of digital payment systems (Alghamdi & Alghamdi, 2022; Böttcher et al., 2024). Therefore, empirical studies

grounded in specific local contexts remain essential to generate more accurate conclusions.

Based on the literature and observed empirical phenomena, a research gap remains, as most studies have examined QRIS within the broader MSME context or from policy and consumer perspectives, while research focusing on transaction efficiency from the viewpoint of culinary micro-enterprise actors is still limited. Moreover, prior work has largely emphasized adoption levels and perceptions, whereas empirical analysis of the direct relationship between the intensity of QRIS usage and transaction efficiency in terms of speed, cost, and accuracy remains scarce (Dewi & Prianthara, 2022; Sedyowidodo, 2022; Sukriani et al., 2023). This gap is particularly evident in Eastern Indonesia, including Kendari City, which has received little attention despite its distinct micro-enterprise characteristics and digital infrastructure conditions compared to major urban areas. Therefore, this study aims to analyze the effect of QRIS usage on transaction efficiency among culinary micro-enterprises in Kendari.

2. Literature Review and Hypothesis Development

2.1. Transaction Efficiency in MSMEs

Transaction efficiency in the context of micro-enterprises refers to the ability of payment processes to generate better outcomes while using fewer resources (Christian & Ardianti, 2023; Hartono et al., 2024). In payment system research, efficiency is commonly operationalized through three core dimensions: transaction speed, transaction-related costs, and the accuracy or reliability of record-keeping. These dimensions are especially important in the culinary sector, which involves repetitive transactions, small-to-medium payment values, and a strong demand for rapid service delivery.

Recent literature demonstrates that QR-based digital payments can enhance efficiency by reducing waiting times, minimizing manual recording errors, and lowering indirect costs such as the need for cash change and exposure to counterfeit money risks (Silaen et al., 2021; Sholikhah & Soesilo, 2023; Juliani et al., 2024; Astuti, 2025). At the same time, studies also identify several barriers that may limit these efficiency gains, including service fees in the form of merchant discount rates, network constraints, and uneven levels of digital literacy. As a result, the impact of QR payments on efficiency can vary across business actors and locations.

Micro-enterprises in the culinary sector are characterized by high transaction frequency, relatively narrow profit margins, and strong dependence on daily cash flows. In this context, efficient payment systems become a critical supporting factor because they influence service smoothness, customer experience, and financial recording discipline (Hartono et al., 2024). Contemporary MSME studies further indicate that payment digitalization can strengthen basic managerial practices, particularly in sales tracking, transaction summarization, and cash flow control, although its impact remains shaped by the specific operational conditions faced by micro-enterprise actors (Manley et al., 2021; Hair & Alamer, 2022).

2.2. The Effect of QRIS Usage on Transaction Efficiency

Quick Response Code Indonesian Standard (QRIS) is a national QR-based payment standard that integrates multiple payment service providers into a single unified code format. In the digital payment literature, QR code standardization is viewed as a mechanism to reduce transaction frictions, enhance interoperability, and improve the user experience through simpler, more uniform payment processes (Haqbin & Thaker, 2025). At the MSME level, QRIS adoption is closely associated with accelerated transaction digitalization, wider access to cashless payments, and improved digital transaction records that can support financial reporting and access to financing (Pangarso et al., 2022; Zaidi et al., 2022). Empirical studies by Agustin

et al. (2025), Amelia and Yuniarsih (2025), Al Ansori and Lestari (2025), and Zalukhu and Sembiring (2025) indicate that QRIS adoption is mainly influenced by perceived ease of use, perceived usefulness, security, and trust among merchants and consumers. These findings are consistent with broader international research highlighting trust and usefulness as key determinants of electronic payment adoption, while evidence from Indonesia also emphasizes the importance of digital readiness and everyday transaction experience (Dwiyanisa et al., 2023; Amri et al., 2025).

QRIS, as a digital payment innovation, has the potential to enhance transaction efficiency through three primary mechanisms: reduction of transaction frictions by enabling faster and more practical payment processes, reduction of indirect transaction costs, such as cash change handling and cash-related risks, and improvement in record-keeping accuracy through automated transaction records. Several empirical studies report a positive association between QRIS utilization and efficiency or performance among MSMEs, although outcomes may be moderated by service fees, digital literacy, and network quality (Dwiyanisa et al., 2023; Sholikhah & Soesilo, 2023). This study formulates the hypothesis that higher levels of QRIS usage lead to greater perceived transaction efficiency among micro-enterprises in the culinary sector.

H1: QRIS usage has a significant effect on transaction efficiency.



Figure 1. Research Framework

Figure 1 illustrates the research framework developed in this study, which is based on the proposed hypothesis that QRIS usage influences transaction efficiency among culinary micro-enterprises. The framework positions QRIS usage as the independent variable, representing the adoption and intensity of QR-based digital payment utilization, while transaction efficiency serves as the dependent variable, reflecting improvements in transaction speed, cost reduction, and accuracy of payment records.

3. Methods

This study employs a quantitative explanatory approach aimed at analyzing the effect of QRIS usage on transaction efficiency from the perspective of micro-enterprises in the culinary sector. The quantitative approach is adopted because the study focuses on testing causal relationships between variables that can be measured numerically and analyzed statistically to produce objective and measurable conclusions. The research was conducted among culinary micro-enterprises operating in Kendari City, Southeast Sulawesi Province. The study population comprised all culinary micro-enterprises registered with the Provincial Office of Cooperatives and MSMEs of Southeast Sulawesi in 2024, totaling 516 business units. The sample was determined using purposive sampling, with the following criteria: micro-enterprises operating in the culinary sector, and having used QRIS as a payment method for at least six months. Based on these criteria, 84 respondents were selected as the research sample.

The type of data used in this study is quantitative data, with primary data serving as the main data source. Data were collected directly from respondents through the distribution of structured questionnaires. The questionnaire was designed to measure business actors' perceptions of the level of QRIS usage and the transaction efficiency experienced in daily business operations. Data collection was carried out

using closed-ended questionnaires with a five-point Likert scale, ranging from strongly disagree to strongly agree. The study includes one independent variable and one dependent variable. The independent variable is QRIS usage, defined as the extent to which micro-enterprise actors utilize the QRIS payment system in their business transactions. This variable is measured using several indicators, including business actors' knowledge of QRIS, understanding of its operational use, perceived practicality, perceived business benefits, support from service providers, and perceived business advantages resulting from QRIS usage. The dependent variable is transaction efficiency, defined as business actors' perceptions of improvements in the effectiveness of transaction processes after adopting QRIS. Transaction efficiency is measured through three main indicators: transaction completion speed, transaction cost efficiency, and the accuracy of financial record-keeping generated through the use of digital payment systems.

Data analysis was carried out using statistical software through several stages, beginning with validity and reliability testing of the research instruments. Validity was assessed by comparing each item's correlation coefficient with the r-table value at a 5% significance level, while reliability was measured using Cronbach's Alpha, where values above 0.60 indicated good internal consistency. Classical assumption tests were then performed, including the Kolmogorov-Smirnov normality test and heteroskedasticity analysis through residual scatter patterns, to ensure the regression model met statistical requirements. Simple linear regression was subsequently applied to examine the effect of QRIS usage on transaction efficiency, followed by t-test hypothesis testing at a 5% significance level. The coefficient of determination was calculated to evaluate how much variation in transaction efficiency could be explained by QRIS usage within the model.

4. Results

This study involved 84 micro-enterprise actors in the culinary sector in Kendari City who had been using QRIS for at least six months. All respondents were business owners or managers directly involved in daily transaction processes, making them relevant and reliable sources for assessing QRIS usage and perceived transaction efficiency.

Table 1. Validity Test

Variable	Range of r-count	r-table	Remark
QRIS Usage	0.659 – 0.902	0.214	Valid
Transaction Efficiency	0.816 – 0.950	0.214	Valid

Table 1 presents the results of the validity test conducted to ensure that each questionnaire item accurately measured the intended research constructs. The test was performed by comparing the calculated correlation coefficients (r-count) of each item with the r-table value at a 5% significance level, where the r-table was 0.214. The results show that the r-count values for the QRIS usage variable ranged from 0.659 to 0.902, while the transaction efficiency variable ranged from 0.816 to 0.950. Since all r-count values exceeded the r-table threshold, all questionnaire items for both variables were considered valid, indicating that the instruments were appropriate and suitable for further statistical analysis.

Table 2. Reliability Test

Variable	Cronbach's Alpha	Criterion
QRIS Usage	0.966	Reliable
Transaction Efficiency	0.945	Reliable

Table 2 presents the results of the reliability test conducted to evaluate the internal consistency of the research instruments using Cronbach's Alpha. The variable QRIS usage obtained a Cronbach's alpha of 0.966, while transaction efficiency scored 0.945. Both values exceed the commonly accepted threshold of 0.60, indicating that the instruments are highly reliable. These results confirm that the measurement items consistently capture the intended constructs, ensuring the credibility and stability of the data collected for subsequent analysis.

Table 3. Classical Assumption Test

Test	Statistics	Value
Normality Test	N	84
	Asymp. Sig. (2-tailed)	0.097
Heteroscedasticity Test	Sig.	0.250

The normality test was performed using the Kolmogorov–Smirnov method on the residual values. Based on Table 3, the significance value of 0.097 is greater than 0.05, indicating that the residual data are normally distributed and satisfy the normality assumption. The heteroskedasticity test was conducted by examining the residual scatter plot. The significance value for QRIS usage is 0.250, which is greater than 0.05. This indicates that QRIS usage does not significantly affect the absolute residual values. Therefore, it can be concluded that the regression model does not exhibit heteroskedasticity and satisfies the assumption of homoskedasticity.

Table 4. Simple Linear Regression Results

Variable	Coefficient (B)	Std. Error	t-value	Sig.
Constant	-7.619	1.813	-4.203	0.000
QRIS Usage (X)	0.590	0.024	24.972	0.000

Simple linear regression analysis was conducted to determine the influence of QRIS usage on transaction efficiency among culinary micro-enterprises. As shown in Table 4, the regression model produced the equation $Y = -7.619 + 0.590X$. The coefficient for QRIS usage is positive ($B = 0.590$) and statistically significant, indicating that greater adoption of QRIS is associated with increased transaction efficiency. Furthermore, the significance value of 0.000, which is below the 0.05 threshold, confirms that QRIS usage has a meaningful and significant effect on transaction efficiency. Thus, the proposed research hypothesis is supported and accepted.

Table 5. Coefficient of Determination

Test	Value
R	0.940
R Square	0.884
Adjusted R-Square	0.882

Table 5 presents the coefficient of determination results from the regression analysis. The R value of 0.940 indicates a very strong positive relationship between QRIS usage and transaction efficiency. Meanwhile, the R Square value of 0.884 shows that approximately 88.4% of the variation in transaction efficiency can be explained by QRIS usage. The Adjusted R-Square of 0.882 further confirms that the model remains highly reliable even after adjusting for sample size, suggesting that QRIS usage is a major contributing factor in improving transaction efficiency among culinary micro-enterprises.

5. Discussion

The findings of this study indicate that QRIS usage has a positive and significant effect on transaction efficiency from the perspective of micro-enterprises in the culinary sector in Kendari City. These results suggest that the more intensively QRIS is utilized in business transactions, the higher the level of perceived transaction efficiency, particularly in terms of transaction speed, cost efficiency, and record-keeping accuracy (Juliani et al., 2024; Amri et al., 2025). Empirically, this finding confirms that QR-based digital payment systems function not only as transaction tools but also as instruments that support operational efficiency among micro-enterprises.

The positive impact of QRIS usage on transaction efficiency is most evident in transaction speed, as business actors perceive that payment processes become faster than cash-based transactions because they no longer require physical cash handling or the provision of change (Sholikhah & Soesilo, 2023; Hartono et al., 2024). This finding is consistent with recent studies showing that QR-based payments reduce waiting times and enhance service smoothness, particularly in high-frequency sectors such as the culinary industry, thereby improving operational productivity through faster daily transaction cycles. Beyond speed, efficiency gains are also reflected in the management of transaction-related costs, as although QRIS involves service fees, business actors view these costs as proportional to the benefits obtained, including reduced risks of counterfeit money, cash loss, and manual cash management. This reinforces the argument that transaction efficiency should be understood not only in terms of direct monetary costs but also through the reduction of indirect costs and operational risks inherent in cash-based transactions.

Transaction record accuracy represents another important dimension explaining the relationship between QRIS usage and transaction efficiency. The QRIS system enables automatic and real-time transaction recording, thereby minimizing manual recording errors commonly encountered in micro-enterprises (Puspitasari & Salehudin, 2022; Astuti, 2025). This finding strengthens the existing literature, which emphasizes that digital payment system adoption improves the quality of financial information among MSMEs and, in turn, supports more informed business decision-making. In this context, QRIS not only enhances transaction efficiency but also contributes to more orderly and accountable managerial practices.

The high coefficient of determination obtained in this study indicates that QRIS usage plays a dominant role in explaining variations in transaction efficiency. Nevertheless, this finding does not negate the influence of other factors outside the research model. Digital literacy among business actors, internet network quality, and consumer preferences for cashless payment methods may moderate or reinforce the impact of QRIS usage on transaction efficiency (Gainau et al., 2023; Fadhil et al., 2025; Purbowo & Trinugroho, 2025). This aligns with prior studies emphasizing that the benefits of digital payments are highly contextual and dependent on the readiness of the local digital ecosystem. Moreover, by examining micro-enterprises in Kendari City, this study expands the empirical understanding of digital payment adoption in Eastern Indonesia, highlighting that the benefits of QRIS extend beyond major metropolitan areas and can support more inclusive efficiency and modernization for small-scale businesses in regions with diverse levels of digital readiness.

6. Conclusion

This study aims to analyze the effect of QRIS usage on transaction efficiency from the perspective of micro-enterprises in the culinary sector in Kendari City. Based on the empirical analysis, QRIS usage is proven to have a positive and significant effect on transaction efficiency. The findings indicate that higher levels of QRIS utilization

in business activities are associated with higher perceived transaction efficiency, particularly in terms of transaction speed, cost efficiency, and accuracy of financial record-keeping.

This study strengthens the literature by offering empirical evidence that the intensity of QRIS usage is directly associated with improved transaction efficiency, while also reinforcing the multidimensional concept of efficiency encompassing speed, cost, and accuracy. The findings suggest that consistent and optimized QRIS utilization can enhance operational efficiency, accelerate customer service, and improve financial record-keeping for culinary micro-enterprises. In addition, the results highlight the need for governments and relevant authorities to strengthen digital literacy programs, infrastructure support, and the broader cashless ecosystem, so that QRIS can function as a strategic tool for promoting digitalization and competitiveness among micro-enterprises, particularly in regional settings.

This study has several limitations. First, the research scope is limited to culinary micro-enterprises in Kendari City, which constrains the generalizability of the findings to other business sectors or regions. Second, the study employs only a single independent variable, meaning that other factors potentially influencing transaction efficiency are not fully captured. Future research is encouraged to expand the geographical and sectoral scope of analysis and to incorporate additional variables such as digital literacy, infrastructure quality, and consumer preferences in order to obtain a more comprehensive understanding of the impact of digital payments on micro-enterprise efficiency.

References

- Agboola, O., Adelugba, I. A., & Eze, B. U. (2023). Effect of financial technology on the survival of micro-enterprises. *International Journal of Entrepreneurial Knowledge*, 11(1), 1-13.
- Agustin, D., Litriani, E., Junaidi, H., Arodha, D., & Arifin, I. (2025). Digital-QRIS: Optimization of zakat initiative service in Palembang City to increase infak and shadaqah fund collection. *Jurnal I-Philanthropy: A Research Journal on Management of Zakat and Waqf*, 5(1), 1-13.
- Al Ansori, M. M., & Lestari, E. P. (2025). The effect of ease of use, benefits, and risks on QRIS usage intention with trust as moderator. *Research Horizon*, 5(4), 1049-1062.
- Alghamdi, N. S., & Alghamdi, S. M. (2022). The role of digital technology in curbing COVID-19. *International journal of environmental research and public health*, 19(14), 8287-8299.
- Amelia, N., & Yuniarsih, Y. (2025). Analisis pengaruh QRIS terhadap efisiensi pembayaran lansia di Pasar Baros Cimahi. *Indonesian Journal of Social Science and Education (IJOSSSE)*, 1(3), 194-200.
- Amri, A., Malik, R. F., & Fachrandi, M. K. (2025). Determinants influencing QRIS adoption as a digital payment tool in Ciledug, Tangerang City. *Airlangga Journal of Innovation Management*, 6(1), 154-170.
- Astuti, M., Arifin, Z., Mutohhari, F., & Nurtanto, M. (2021). Competency of digital technology: the maturity levels of teachers and students in vocational education in Indonesia. *Journal of Education Technology*, 5(2), 254-262.
- Astuti, N. (2025). QRIS adoption determinants: Analysis of the role of ease of use, trust, and promotion with user satisfaction as an intervening. *Sibatik Journal: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, dan Pendidikan*, 4(4), 289-306.
- Benyam, A. A., Soma, T., & Fraser, E. (2021). Digital agricultural technologies for food loss and waste prevention and reduction: Global trends, adoption opportunities and barriers. *Journal of Cleaner Production*, 323(1), 129-140.
- Biswas, B., Gupta, R. P., & Sharma, M. (2025). Parameters of sustainability: a systematic literature review and bibliometric analysis with respect to micro enterprises. *Vilakshan-XIMB Journal of Management*, 22(1), 116-132.
- Böttcher, T. P., Empelmann, S., Weking, J., Hein, A., & Krcmar, H. (2024). Digital sustainable business models: Using digital technology to integrate ecological sustainability into the core of business models. *Information Systems Journal*, 34(3), 736-761.

- Christian, A. G., & Ardianti, R. R. (2023). Continuance intention pelaku usaha mikro dan kecil terhadap penggunaan QRIS untuk transaksi pembayaran. *Journal of Practical Management Studies (JPMS)*, 1(1), 07-15.
- Dewi, N. W. C., & Prianthara, I. B. T. (2022). Examining MSME strategies in the culinary sector to survive in the new normal era. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(2), 1712-1721.
- Dwiyanisa, A., Larashati, I., & Annisa, D. B. (2023). Factors forming the quality of electronic services of Payment System Service Providers (PJSP) QRIS on micro businesses (merchants) in Bandung City with e-service quality and its success approaches. *Jurnal Computech & Bisnis (e-journal)*, 17(2), 125-144.
- Fadhil, M., Dawood, T. C., & Seftarita, C. (2025). The analysis of QRIS usage and its impact on the velocity of money in Indonesia. *Grimsa Journal of Business and Economics Studies*, 2(2), 104-112.
- Gainau, P. C., Engko, C., & Gaspersz, Y. T. (2023). Sistem pembayaran QRIS sebagai upaya pengembangan UMKM di kota Ambon. *Journal of Business & Banking*, 13(2), 177-191.
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100-112.
- Haqbin, N., & Thaker, M. T. M. A. B. (2025). The behavioral intention of micro enterprises to use the integrated Qardhul Hasan and equity-based microenterprise development (IQEMD) model as a source of financing. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(2), 333-359.
- Hartono, M. F., Nandang, N., Ramadhani, D. B., & Rosalia, I. (2024). Evaluating the use of QRIS in MSME services: insights for financial education in Tawang, Tasikmalaya. *Journal Corner of Education, Linguistics, and Literature*, 4(001), 434-446.
- Indarti, S. (2021). The effects of education and training, management supervision on development of entrepreneurship attitude and growth of small and micro enterprise. *International Journal of Organizational Analysis*, 29(1), 16-34.
- Juliani, P., Safitri, H., & Hariyanto, D. (2024). The influence of financial literacy, financial attitudes, and perceptions of ease of use on decisions to use qris in Singkawang City MSMEs. *Journal Dimensie Management and Public Sector*, 5(2), 18-28.
- Manley, S. C., Hair Jr, J. F., Williams Jr, R. I., & McDowell, W. C. (2021). Essential new PLS-SEM analysis methods for your entrepreneurship analytical toolbox. *International Entrepreneurship and Management Journal*, 17(4), 1805-1825.
- Pangarso, A., Sisilia, K., Setyorini, R., Peranginangin, Y., & Awirya, A. A. (2022). The long path to achieving green economy performance for micro small medium enterprise. *Journal of Innovation and Entrepreneurship*, 11(1), 1-19.
- Purbowo, G., & Trinugroho, I. (2025). Overcoming barriers to digital payment: insights from qris adoption in rural West Sulawesi. *Journal of Management and Entrepreneurship Research*, 6(1), 31-46.
- Puspitasari, A., & Salehudin, I. (2022). Quick response Indonesian standard (QRIS): Does government support contribute to cashless payment system long-term adoption?. *Journal of Marketing Innovation (JMI)*, 1(2), 27-41.
- Sedyowidodo, U. (2022). Entrepreneurial orientation and innovation in micro-enterprises east jakarta culinary sector. *Journal of Entrepreneurship, Management and Industry (JEMI)*, 5(2), 125-146.
- Sholikhah, T. H., & Soesilo, N. I. (2023). QRIS' impacts on turnover based on business scale and sectoral study on MSME. *Indonesian Journal of Multidisciplinary Science*, 2(11), 4032-4042.
- Silaen, M. F., Manurung, S., & Nainggolan, C. D. (2021). Effect analysis of benefit perception, ease perception, security and risk perception of merchant interest in using quick response indonesia standard (QRIS). *International Journal of Science, Technology & Management*, 2(5), 1574-1581.
- Sukriani, N., Febrina, D., & Dewi, D. S. (2023). Knowledge, abilities, skills and its impact on business performance of business actors in the culinary sector. *International Journal of Islamic Business and Management Review*, 3(1), 119-129.
- Sulistyono, M., Hidayat, Y., & Syafari, M. R. (2022). Strategy for empowerment of micro, small and medium enterprises (MSMEs) food sector by the office of cooperatives, small/micro businesses and industry of balangan regency. *International Journal Political, Law, and Social Science*, 3(1), 12-25.

- Zaidi, M. A. N. M., Sapuan, N. M., & Kusairi, S. (2022). The business survival of micro-enterprises in facing economic uncertainty. *Journal of Governance and Integrity*, 5(3), 328-335.
- Zalukhu, S., & Sembiring, F. (2025). The effect of QRIS payment on consumer purchase decisions using technology acceptance model. *Research Horizon*, 5(4), 1359–1374.

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Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.



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