

Digital Payment Adoption and Financial Performance of MSMEs in Indonesia

Subur Gunawan¹✉ Artadhea Aurelia Candra Chairina², and Desinta Hafina Sari³

Universitas Putra Bangsa, Kebumen, Indonesia¹; Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia²; Universitas Terbuka, Yogyakarta, Indonesia¹

ABSTRACT

Digital transformation has driven changes in the operations of micro, small, and medium-sized enterprises (MSMEs), including in the use of digital payment systems. This study aims to synthesize the literature on the relationship between the adoption of digital payments and the financial performance of MSMEs in Indonesia, as well as to identify the factors that support and hinder their adoption. The study employs a literature review method with a qualitative descriptive approach through the identification, comparison, and synthesis of relevant prior research. The analyzed literature covers discussions on QRIS, e-wallets, financial literacy, financial knowledge, perceived ease of use, perceived benefits, perceived risk, sales performance, business performance, and financial performance. The results of the synthesis indicate that digital payments can support ease of transactions, payment flexibility, sales activities, and the financial performance of MSMEs. However, their utilization is influenced by financial knowledge and literacy, ease of use, perceived benefits, perceived risks, and the readiness of business owners. Therefore, the optimization of digital payments must be accompanied by improvements in digital capabilities and financial literacy to provide sustainable benefits for MSMEs.

Keywords: *Digital Payment, Financial Performance, Financial Literacy, MSMEs, QRIS.*

CORRESPONDING AUTHOR:

Subur Gunawan
 Universitas Putra Bangsa, Kebumen, Indonesia
contact: subur454@gmail.com

ARTICLE HISTORY

Received : February 3, 2026
 Final Revised : May 23, 2026
 Accepted : June 16, 2026
 Published : June 30, 2026

1. | INTRODUCTION

Digital transformation has increasingly changed the way Micro, Small, and Medium Enterprises (MSMEs) conduct business activities, particularly in relation to payment transactions. Digital payment systems provide MSMEs with alternative methods for receiving payments that are more practical and compatible with the changing preferences of consumers. The use of digital payment applications has therefore become an important part of the digitalization process among small businesses (Anggadini & Putri, 2021). In Indonesia, this development is increasingly visible through the adoption of Quick Response Code Indonesian Standard (QRIS) and other digital payment instruments that enable MSMEs to conduct transactions without relying entirely on cash. The adoption of QRIS has consequently become an important component of the broader digital transformation of Indonesian MSMEs (Atahau & Himaya, 2022).

The decision of MSMEs to adopt digital payment systems, however, is not determined by the availability of technology alone. Previous studies indicate that financial knowledge, perceived ease of use, and the role of e-commerce can influence MSMEs' interest in adopting digital payment applications (Damayanti & Putra, 2022). Similarly, financial literacy and the perceived ease of digital payment have been associated with MSME performance, indicating that the ability to understand and utilize digital financial services is an important consideration in the digitalization process (Aulia et al., 2022). Other studies have examined the determinants of e-wallet adoption among MSMEs, demonstrating that digital payment adoption involves considerations beyond the technical availability of payment systems (Apriani & Wuryandari, 2022).

At the same time, digital payment adoption may provide several potential business benefits. Digital payment systems can facilitate transactions and provide consumers with greater payment flexibility. The utilization of e-commerce and QRIS has also been associated with sales performance through competitive advantage among MSMEs (Wahyudin et al., 2022). In a broader financial context, digital payment has been examined alongside digital marketing and digital finance in relation to the financial performance of Indonesian SMEs (Daud et al., 2022). These findings suggest that digital payment should not only be viewed as a payment mechanism but also as part of the operational and financial transformation of MSMEs.

Nevertheless, the adoption of digital payment is not without challenges. MSMEs may face barriers related to knowledge, capability, perceived risk, and other factors that affect their willingness to use digital payment systems (Widayani et al., 2022). Research on QRIS adoption has similarly highlighted the importance of perceived benefits, perceived ease of use, and perceived risk in MSMEs' decisions to use digital payment systems. Therefore, understanding digital payment adoption requires consideration of both its potential benefits and the factors that may constrain its implementation.

The relationship between digital payment adoption and MSME financial performance has received increasing attention in previous research. Studies have

examined QR payment adoption in relation to MSME financial performance in Indonesia (Wardhani et al., 2023), while more recent research has considered the role of digital payment in the relationship between financial behavior and financial performance (Islamic Business and Management Journal, 2024). Research on digital adoption, business performance, and financial literacy has also further emphasized the connection between digital transformation and MSME performance (Research in International Business and Finance, 2024). More recently, research has specifically examined QRIS adoption and its impact on MSME financial performance in Indonesia (Utami, 2025).

Although these studies provide valuable evidence, their findings remain distributed across different aspects, including payment adoption, financial literacy, sales performance, business performance, and financial performance. Therefore, a literature-based synthesis is needed to bring these findings together and provide a clearer understanding of how digital payment adoption relates to the financial performance of MSMEs in Indonesia. This study aims to synthesize previous literature concerning digital payment adoption, the factors supporting or hindering adoption, and its relationship with MSME financial performance. Accordingly, the study addresses two questions: (1) How does digital payment adoption relate to the financial performance of MSMEs in Indonesia? and (2) What factors support or hinder digital payment adoption among Indonesian MSMEs?

2. | LITERATURE REVIEW

Digital Payment Adoption among MSMEs

Digital payment adoption refers to the use of electronic payment instruments to facilitate business transactions. For MSMEs, digital payment provides an alternative to conventional cash transactions and can support more practical payment processes. Anggadini and Putri (2021) explain the application of payment systems as a means of supporting small, micro, and medium enterprises. The adoption of digital payment has subsequently developed through various instruments, including e-wallets and QR-based payment systems. Apriani and Wuryandari (2022) examine the determinants of e-wallet adoption among MSMEs and demonstrate that adoption decisions involve several considerations associated with the transition toward digital business activities. In Indonesia, QRIS has also become an important digital payment instrument for MSMEs. Atahau and Himaya (2022) specifically examine QRIS adoption among MSMEs using the Theory of Interpersonal Behavior. Meanwhile, Damayanti and Putra (2022) highlight financial knowledge, perceived ease of use, and e-commerce as factors related to MSMEs' intention to use digital payment applications. These studies indicate that digital payment adoption represents not merely a technological change but also a behavioral and business decision influenced by the capabilities and perceptions of MSME owners.

Factors Supporting and Hindering Digital Payment Adoption

The adoption of digital payment among MSMEs is influenced by both supporting and inhibiting factors. Financial knowledge and perceived ease of use can encourage MSMEs to consider digital payment applications because users need to understand the benefits and operation of the technology (Damayanti & Putra, 2022). Financial literacy is also relevant because a better understanding of financial services may support the effective utilization of digital payment systems (Aulia et al., 2022). In addition, perceived benefits and perceived ease of use may shape MSMEs' decisions to use QRIS, while perceived risk can become a consideration that limits adoption. Widayani et al. (2022) further identify barriers to digital payment adoption among micro, small, and medium enterprises, indicating that technological adoption may be constrained by various practical and behavioral conditions. Therefore, digital payment adoption should be understood as a process influenced by the perceived usefulness and simplicity of the technology, financial capability, and the risks or barriers perceived by MSME owners. These factors help explain why the level of digital payment adoption may differ among MSMEs even when similar payment technologies are available.

Digital Payment and MSME Financial Performance

Financial performance represents an important dimension for evaluating whether digital transformation provides meaningful benefits to MSMEs. Previous studies have examined digital payment alongside business and financial performance, providing evidence that payment digitalization may be connected with improvements in business activities. Wahyudin et al. (2022) find that the utilization of e-commerce and QRIS is associated with sales performance through competitive advantage in MSMEs. Daud et al. (2022) directly examine digital marketing, digital finance, and digital payment in relation to the financial performance of Indonesian SMEs. Furthermore, Wardhani et al. (2023) examine QR payment adoption and financial performance among MSMEs in Indonesia, while research published in 2024 considers digital payment in relation to financial behavior and financial performance. The literature therefore suggests that digital payment may contribute to MSME performance through easier transactions, increased payment flexibility, and broader digital business practices. However, the relationship should not be interpreted as automatic causation because financial performance can also be influenced by financial literacy, business capabilities, market conditions, and other factors. Recent research on QRIS adoption and MSME financial performance further demonstrates the continuing relevance of this relationship in Indonesia (Utami, 2025).

3. | RESEARCH METHOD

This study employs a literature study method with a qualitative descriptive approach to examine the relationship between digital payment adoption and the financial performance of Micro, Small, and Medium Enterprises (MSMEs) in

Indonesia. A literature study was selected because the purpose of this research is not to collect primary data through questionnaires, interviews, or observations, but to identify, examine, compare, and synthesize findings from previous academic studies that are relevant to digital payment adoption and MSME performance. This approach allows the study to develop an integrated understanding of the existing literature and identify patterns in previous findings concerning the use of digital payment systems among Indonesian MSMEs. The literature reviewed includes studies discussing digital payment applications, QRIS, e-wallet adoption, financial literacy, financial knowledge, perceived ease of use, perceived benefits, perceived risks, sales performance, business performance, and financial performance.

The sources used in this study consist primarily of academic publications that were already identified as relevant to the research topic. The literature covers studies published between 2021 and 2025, allowing the review to capture developments in digital payment adoption among MSMEs before the publication period targeted by this study. The selected literature includes studies by Anggadini and Putri (2021), Aulia et al. (2022), Damayanti and Putra (2022), Widayani et al. (2022), Atahau and Himaya (2022), Apriani and Wuryandari (2022), Wahyudin et al. (2022), Daud et al. (2022), Wardhani et al. (2023), studies concerning QRIS adoption and perceived benefits, ease of use, and risk, as well as studies published in 2024 and 2025 concerning digital payment, financial behavior, business performance, financial literacy, and MSME financial performance. These sources provide different perspectives on the adoption and utilization of digital payment systems among MSMEs in Indonesia. The literature was selected based on its relevance to the main research focus. Studies were considered relevant when they discussed MSMEs or SMEs and examined at least one aspect of digital payment adoption, digital payment utilization, QRIS, e-wallets, financial capability, business performance, sales performance, or financial performance. Particular attention was given to studies conducted in the Indonesian MSME context because the objective of this study is to understand the relationship between digital payment adoption and financial performance within Indonesia. Studies that focused on factors influencing adoption were also included because understanding the determinants and barriers of adoption is important for interpreting the potential relationship between digital payment use and MSME performance. For example, previous research has examined financial knowledge, perceived ease of use, and e-commerce in relation to digital payment adoption, while other research has specifically investigated barriers to digital payment adoption among MSMEs.

The analysis was conducted through a thematic synthesis of the selected literature. First, the relevant studies were identified and grouped according to their main topics. The first theme concerns digital payment adoption among MSMEs, including the adoption of QRIS and e-wallets. The second theme concerns factors supporting or hindering adoption, including financial literacy, financial knowledge, perceived benefits, perceived ease of use, and perceived risk. The third theme concerns the relationship between digital payment and sales or business performance. The fourth

theme focuses specifically on financial performance and examines how digital payment has been discussed in relation to the financial outcomes of MSMEs. This thematic organization enables the findings of different studies to be compared without converting the existing findings into statistical estimates.

The final stage involved interpreting similarities, differences, and relationships among the findings reported in the selected literature. Studies that discuss digital payment adoption were connected with studies examining sales, business, and financial performance in order to develop a broader understanding of the role of digital payment in MSME development. The analysis does not claim that digital payment adoption directly causes improved financial performance because such a causal relationship would require primary quantitative or experimental evidence. Instead, the study synthesizes previous findings to identify the extent to which the existing literature associates digital payment adoption with improved transaction processes, business or sales performance, and financial performance. Through this approach, the study provides a concise literature-based explanation of digital payment adoption and its potential contribution to the financial performance of MSMEs in Indonesia.

4. | RESULTS

The results of the literature review indicate that the adoption of digital payments has become a key component of the digital transformation process for Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. Digital payments offer an alternative to cash transactions through the use of payment apps, digital wallets, and QR code-based payment systems. The use of these systems can help MSMEs conduct transactions more conveniently and adapt their payment processes to evolving consumer needs (Anggadini & Putri, 2021). In the Indonesian context, the Quick Response Code Indonesian Standard (QRIS) has become an increasingly relevant tool because it enables MSME operators to accept digital payments without relying entirely on cash transactions (Atahau & Himaya, 2022).

The analyzed literature indicates that SMEs' decisions to adopt digital payments are not solely influenced by the availability of technology. Internal factors and business owners' perceptions also play a role in determining their interest in and decisions regarding the use of digital payments. Financial knowledge, perceived ease of use, and the role of e-commerce were found to be associated with SMEs' interest in using digital payment applications (Damayanti & Putra, 2022). These findings suggest that an understanding of financial aspects and the ability to comprehend how technology works are crucial components of the adoption process. Consequently, the mere existence of digital payment systems does not necessarily guarantee the same level of usage across all SMEs.

In addition to financial knowledge, financial literacy has also been shown to be linked to the utilization of digital financial services and SME performance. Aulia et al. (2022) demonstrated a relationship between financial literacy and the ease of digital payments on SME performance. These results indicate that business owners' ability to

understand and utilize digital financial services can serve as a factor supporting more effective technology adoption. Findings regarding financial literacy are further supported by research by Affandi et al. (2024), which links digital adoption, business performance, and financial literacy among ultra-micro, micro, and small businesses in Indonesia. Therefore, the adoption of digital payments can be understood as part of broader digital and financial capabilities, rather than merely a decision to use a specific payment method.

For QRIS-based payment instruments, perceptions of benefits, ease of use, and risk are also factors that need to be considered. Research by Atahau and Himaya (2022) shows that QRIS adoption among MSMEs is related to behavioral factors in technology use. Meanwhile, Setyaningtyas and Suranto (2024) specifically identified perceived benefits, perceived ease of use, and perceived risk as factors related to MSMEs' decisions regarding the use of QRIS. Their findings indicate that MSME operators tend to consider the benefits gained, the level of ease of use, and potential risks before deciding to use a digital payment system.

On the other hand, the literature also highlights various barriers to digital payment adoption. Widayani et al. (2022) identified barriers to digital payment adoption among MSMEs. These barriers indicate that the digitization process does not always proceed uniformly, as each business owner possesses different levels of knowledge, capabilities, perceptions, and business conditions. Perceived risk factors can also influence the decision to use QRIS, as demonstrated by Setyaningtyas and Suranto (2024). Thus, the success of digital payment adoption is determined not only by the availability of infrastructure but also by the readiness of MSME business owners to understand and use the technology.

Further synthesis results indicate a relationship between the use of digital payments and MSME sales activity. Wahyudin et al. (2022) found that the use of e-commerce and QRIS as digital payment tools is associated with improved sales performance through competitive advantages. These findings suggest that digital payments can provide broader benefits beyond simply facilitating the transaction process. When digital payments are used in conjunction with e-commerce, this technology can become part of a business strategy that supports the expansion of market access and enhances the competitiveness of SMEs.

The relationship between digital payments and business performance is also evident in Yuldinawati's (2025) study, which examines the use of e-commerce and QRIS as digital payment solutions to improve the sales performance of MSMEs in West Java. These findings reinforce the view that the use of digital payments can be linked to growth in sales activity when this technology is integrated with other business activities. Therefore, the benefits of digital payments for MSMEs lie not only in the speed or convenience of transactions but also in their ability to support broader business processes.

In terms of financial performance, several studies indicate a relationship between digital payments and the financial performance of MSMEs. Ibrahim et al. (2021) included digital payments alongside digital marketing and digital finance in their discussion of the financial performance of SMEs in Indonesia. Furthermore, Wardhani (2023) specifically examined the impact of adopting payments via Quick Response (QR) codes on the financial performance of MSMEs in Indonesia. The findings indicate that digital payments are relevant to discussions regarding business financial outcomes, although this relationship must be understood by considering other factors that also influence MSME performance.

Research by Qomariyah et al. (2024) also demonstrates a relationship between financial behavior, digital payments, and financial performance among SMEs in Bluru, Sidoarjo Regency. These results show that digital payments can be linked to financial performance through aspects of financial behavior. Thus, the benefits of payment technology do not stand alone but can be influenced by how business owners manage and use their financial resources. These findings are consistent with the results of a study by Aulia et al. (2022), which highlights the importance of financial literacy and the ease of digital payments in relation to MSME performance.

Utami's (2025) study specifically examines the adoption of digital payments via QRIS and its impact on the financial performance of MSMEs in the Special Region of Yogyakarta. The findings of this study reinforce the relevance of QRIS in discussions regarding the relationship between digital payments and the financial performance of MSMEs in Indonesia. Meanwhile, Affandi et al. (2024) demonstrate that digital adoption, business performance, and financial literacy are interrelated aspects in the context of ultra-micro, micro, and small businesses. Both findings indicate that digitalization and financial literacy must be considered together when assessing the benefits of digital technology for MSMEs.

Overall, the synthesis results reveal three main patterns. First, the adoption of digital payments among MSMEs is influenced by factors such as knowledge, financial literacy, ease of use, perceived benefits, and perceived risks (Damayanti & Putra, 2022; Aulia et al., 2022; Setyaningtyas & Suranto, 2024). Second, digital payments can support business activities and sales, particularly when used in conjunction with e-commerce and other digital strategies (Wahyudin et al., 2022; Yuldinawati, 2025). Third, digital payments are linked to financial performance, but this relationship cannot be viewed as a standalone cause-and-effect relationship because MSME performance is also influenced by financial literacy, financial behavior, business capabilities, and business conditions (Ibrahim et al., 2021; Qomariyah et al., 2024; Utami, 2025).

Thus, the findings of this literature-based study indicate that digital payments have the potential to play a significant role in improving transaction efficiency, expanding business activities, and enhancing the financial performance of MSMEs in Indonesia. However, the extent of the benefits obtained may vary among MSMEs, as they are influenced by the readiness, knowledge, perceptions, and ability of business owners to

integrate payment technology into their business activities (Widayani et al., 2022; Atahau & Himaya, 2022).

5. | DISCUSSION

The results of the literature review indicate that the adoption of digital payments by MSMEs in Indonesia should be understood as part of a broader business transformation process. The use of digital payments is not only related to changes in how payments are accepted but also to the ability of MSMEs to adapt their business processes to technological advancements and shifts in consumer behavior. Anggadini and Putri (2021) highlight the importance of implementing payment systems to support MSME activities, while Atahau and Himaya (2022) position the adoption of QRIS as part of a shift in technology usage behavior among MSMEs. This suggests that payment digitization can serve as an initial step toward establishing business operations that are more integrated with the digital business environment.

The relationship between digital payments and MSME performance cannot be separated from business owners' ability to understand the technology being used. Damayanti and Putra (2022) show that financial knowledge and perceived ease of use are associated with MSMEs' interest in using digital payment applications. This finding suggests that the decision to adopt technology is determined not only by the availability of digital payment facilities but also by users' level of understanding regarding the benefits and methods of use. Thus, the easier a system is to understand and use, the greater the likelihood that the technology will be adopted in business activities. This perspective is important because the same technology can yield varying levels of utilization when applied to business owners with different capabilities and knowledge.

Financial literacy is another aspect that strengthens the relationship between digitalization and MSME performance. Aulia et al. (2022) demonstrate a correlation between financial literacy, the ease of digital payments, and MSME performance. These findings suggest that the benefits of digital payments will be maximized when business owners have the ability to understand transactions and manage their finances effectively. This aligns with the findings of Affandi et al. (2024), who linked digital adoption, business performance, and financial literacy among ultra-micro, micro, and small businesses in Indonesia. Therefore, efforts to increase the use of payment technologies should not only focus on providing digital infrastructure but also on enhancing the financial capabilities of MSME owners.

From a business perspective, digital payments can facilitate transactions and sales activities. Wahyudin et al. (2022) demonstrate that the use of e-commerce and QRIS can be linked to improved sales performance through competitive advantage. These findings indicate that digital payments hold strategic value not when used in isolation, but rather as part of a business's digital ecosystem. The use of QRIS combined with e-commerce, for example, can support the transaction process while expanding opportunities for SMEs to reach consumers. Yuldinawati (2025) also discusses the use of e-commerce and QRIS as digital solutions to improve SME sales performance.

Therefore, the benefits of digital payments can be even greater if business owners are able to integrate them with digital-based marketing and sales activities.

However, the adoption of digital payments cannot be viewed as a process that automatically yields benefits. Widayani et al. (2022) highlight various barriers to the adoption of digital payments among SMEs. These barriers indicate that digitalization is still influenced by the practical circumstances and capabilities of individual business owners. Setyaningtyas and Suranto (2024) also highlight the importance of perceived benefits, perceived ease of use, and perceived risk in SMEs' decisions to use QRIS. This means that business owners not only assess the benefits of the technology but also consider the ease of use and potential risks. Therefore, policies and programs for SME digitalization must address aspects of user trust, understanding, and readiness—not merely expand the availability of payment systems.

The relationship between digital payments and financial performance also requires careful consideration. Ibrahim et al. (2021) examined digital marketing, digital finance, and digital payments in relation to the financial performance of SMEs in Indonesia. Wardhani (2023) also discussed the adoption of Quick Response Code payments and the financial performance of SMEs. Meanwhile, Qomariyah et al. (2024) linked financial behavior, digital payments, and financial performance among SMEs. This body of research demonstrates that digital payments play a relevant role in discussions of financial performance but are not the sole factor determining a business's financial outcomes. Financial performance remains closely tied to how business owners manage their finances, conduct operational activities, and leverage available technology.

Utami's (2025) findings regarding the adoption of digital payments via QRIS and the financial performance of MSMEs in the Special Region of Yogyakarta further reinforce the relevance of this relationship in the Indonesian context. However, the results of the literature synthesis in this study do not support the conclusion that the use of digital payments directly and solely leads to improved financial performance. This is consistent with the research approach used—a literature review with thematic synthesis—meaning this study focuses on the patterns of relationships identified in the literature and does not directly test for causality.

Conceptually, these findings suggest that the impact of digital payments on MSME performance may occur through several mechanisms. Digital payments can facilitate transactions, support payment flexibility, and form part of digital business activities. These conveniences can then support sales activities and competitiveness when combined with e-commerce and other digital strategies (Wahyudin et al., 2022). In the next stage, improvements in the quality of business activities have the potential to be linked to financial performance, particularly if MSME operators possess adequate financial literacy and sound financial behavior (Aulia et al., 2022; Qomariyah et al., 2024). Thus, the relationship between digital payments and financial performance is

more accurately understood as one involving several supporting factors rather than a direct and simple relationship.

Based on the overall discussion, the adoption of digital payments by Indonesian SMEs can be viewed as an opportunity to strengthen business efficiency and adaptability, but its success depends on the readiness of human resources and the business environment. Improving financial literacy, digital knowledge, perceptions of benefits, ease of use, and risk management are crucial aspects for ensuring that the technology can be utilized effectively (Damayanti & Putra, 2022; Widayani et al., 2022; Setyaningtyas & Suranto, 2024). Therefore, the development of digital payments for MSMEs should not stop at increasing the number of users but should be directed toward the use of technology that truly supports business management, increases sales, and strengthens financial performance in a sustainable manner.

6. | CONCLUSION

Based on the results of the literature review, it can be concluded that the adoption of digital payments plays a crucial role in supporting the transformation and development of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. Digital payments simplify the transaction process and can support payment flexibility for both consumers and business owners. The use of QRIS, e-wallets, and other digital payment instruments can also be part of developing business activities that are more integrated with digital technology. The adoption of digital payments is influenced by various factors, including financial knowledge, financial literacy, ease of use, perceived benefits, and perceived risks among MSME business owners.

Therefore, the availability of technology alone is not sufficient to ensure the optimal utilization of digital payments. The readiness and ability of business owners to understand and use technology are crucial components of a successful digitalization process. The literature also indicates that the use of digital payments is linked to sales activity, competitive advantage, business performance, and the financial performance of SMEs. However, this relationship cannot be viewed as a standalone cause-and-effect relationship because the performance of MSMEs is also influenced by financial management capabilities, financial behavior, financial literacy, business capabilities, and business conditions. Thus, the optimization of digital payments must be accompanied by improvements in financial literacy and digital capabilities so that technology can provide sustainable benefits for the development of MSMEs in Indonesia.

Acknowledgement

We gratefully acknowledge the contributions of individuals who supported the completion of this article.

Declaration of Conflicting Interests

The authors declare that there is no conflict of interest.

Ethical Approval and Originality Statement

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.

REFERENCES

- Affandi, Y., Ridhwan, M. M., Trinugroho, I., & Adiwibowo, D. H. (2024). Digital adoption, business performance, and financial literacy in ultra-micro, micro, and small enterprises in Indonesia. *Research in International Business and Finance*, 70, 102376.
- Anggadini, S. D., & Putri, W. D. (2021). Application in Payment to Support Small, Micro, and Medium Enterprise. *Journal of Business and Behavioural Entrepreneurship*, 5(1), 142-148.
- Apriani, A., & Wuryandari, N. E. R. (2022). Determinants of intention to adopt e-wallet: Considerations for MSMEs going digital. *Journal of Management and Business Innovations*, 4(02), 51-62.
- Atahau, A. D. R., & Himaya, D. N. (2022). Adopsi qris oleh umkm dengan menggunakan theory of interpersonal behavior. *Performance: Jurnal Personalia, Financial, Operasional, Marketing Dan Sistem Informasi*, 29(2), 125-139.
- Aulia, P., Asisa, W., Dalianti, N., & Handa, Y. R. (2022). Pengaruh Pemahaman Literasi Keuangan dan Kemudahan Digital Payment Terhadap Kinerja UMKM di Kota Makassar. *Jurnal Dinamika*, 3(1), 23-50.
- Damayanti, N. K. M., & Putra, I. P. D. S. (2022). Pengaruh Financial Knowledge, Perceived Ease of Use Serta Peran E-Commerce Terhadap Minat Umkm Dalam Menggunakan Aplikasi Digital Payment. *Hita Akuntansi Dan Keuangan*, 3(3), 200-210.
- Ibrahim, D., Nurjannahe, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., ... & Jihadi, M. (2021). The effect of digital marketing, digital finance and digital payment on finance performance of indonesian smes. *International Journal of Data and Network Science*, 6(1), 37-44.
- Qomariyah, N., Zaki, A., Mustaqim, M., & Violita, C. E. (2024). The Influence of Financial Behavior on Financial Performance Through Digital Payment (Case Study of MSMEs in Bluru Village, Sidoarjo Regency). *Islamic Business and Management Journal*, 7(1), 63-72.
- Setyaningtyas, R. A., & Suranto, S. (2024). The Influence of Perceived Benefits, Perceived Ease of Use, And Perceived Risk on MSME Decisions in Using QRIS as a Digital Payment System in Surakarta. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 7(2), 4611-4626.
- Utami, N. (2025). Adopsi pembayaran digital melalui QRIS dan dampaknya terhadap kinerja finansial UMKM di Daerah Istimewa Yogyakarta. *TRANSAKSI*, 17(1), 1-13.
- Wahyudin, N., Herlissha, N., Christianingrum, C., & Aldiesi, D. R. (2022). The utilization of e-commerce and QRIS as digital payment tools to improve

sales performance through competitive advantage in MSME. *Journal of Consumer Sciences*, 7(2), 135-148.

Wardhani, R. A. *Pengaruh Adopsi Quick Response Code Pembayaran Pada Kinerja Keuangan UMKM di Indonesia* (Doctoral dissertation, IPB University).

Widayani, A., Fiernaningsih, N., & Herijanto, P. (2022). Barriers to digital payment adoption: micro, small and medium enterprises. *Management & Marketing*, 17(4), 528-542.

Yuldinawati, L. (2025). The use of e-commerce and QRIS as digital payment solutions to enhance sales performance in MSMEs in West Java. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 8(1), 1157-1178.