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The Role of Digital Transformation in the Performance of Micro and Small Enterprises

Said Mala[1*], Yuliyana Susan Kalengkongan[1], Riskal Muslim[1], Bakri Soamole[1], Muhajir Zam-zam[1]

[1] Department of Management, Faculty of Economics and Business, Universitas Khairun, Ternate, Indonesia

[*] *Corresponding author: Said Mala (Saidmala@unkhair.ac.id)*

Abstract

Digital transformation involves WhatsApp Business for digital marketing and QRIS for digital payments. This study analyzes the role of digital transformation in improving the performance of micro, small, and medium enterprises. This study uses a qualitative case study approach, with data collected through observations, in-depth interviews, and documentation, and analyzed using SWOT, IFAS, and EFAS matrices. The results show that the use of digital technology has a positive impact on improving MSME performance, particularly in increasing business turnover, customer numbers, and transaction efficiency. Business actors using QRIS have an average daily turnover of IDR 1,000,000 to IDR 2,000,000 with approximately 50-80 customers per day, while those who do not use QRIS earn around IDR 500,000 to IDR 1,000,000 with 25-50 customers per day. The IFAS and EFAS results indicate that it has a strong internal position (2.79) and a highly favorable external environment (3.06), with strengths and opportunities outweighing weaknesses and threats. The SWOT analysis indicates that the business development strategy lies in the aggressive strengths-opportunities quadrant, meaning that the business possesses strong internal capabilities and significant external opportunities for expansion. Therefore, digital transformation plays an important role in improving the competitiveness and sustainability of MSMEs.

Keywords

Business Performance, Competitiveness, Digital Transformation, MSME, QRIS, WhatsApp Business.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in Indonesia's economy by contributing approximately 61% of national Gross Domestic Product (GDP) and providing employment for a substantial proportion of the population (Antaranews, 2024). Beyond their national contribution, MSMEs are important drivers of local economic activity, including in Ternate City, North Maluku, where trade, services, culinary businesses, and tourism-related activities provide important sources of community income. The development of the tourism sector in Ternate further creates opportunities for local MSMEs to expand their markets and strengthen their competitiveness (Mustadin et al., 2024). However, many MSMEs continue to face limited market access, low digital capabilities, inadequate technological infrastructure, and restricted access to financial resources. These challenges grow more pressing as competition shifts toward a digital marketplace that requires businesses to respond more quickly to changing consumer behavior.

Digital transformation offers a practical way to address these challenges. Previous studies indicate that digital transformation can improve business performance, competitiveness, organizational development, and the sustainability of MSMEs by supporting more efficient business processes and broader market access (Ketut et al., 2024; Rauf et al., 2024; Samuel et al., 2025; Mendrofa & Zebua, 2026). Digital marketing through social media can help MSMEs promote products and communicate directly with customers without requiring substantial investment in conventional marketing channels (Librianty, 2025). In this context, WhatsApp Business represents an accessible digital tool for product promotion, customer communication, order management, and maintaining customer relationships. Meanwhile, QRIS provides a practical digital financial infrastructure that facilitates faster, more convenient, and increasingly inclusive cashless transactions among MSMEs (Yudianto et al., 2026). The integration of these technologies therefore has the potential to improve both market reach and operational efficiency.

This phenomenon is particularly relevant in North Maluku, where digitalization has increasingly become part of efforts to strengthen MSME development. Recent initiatives involving Bank Indonesia and the provincial government have emphasized digitalization, market expansion, and access to export opportunities for local MSMEs (Antaranews, 2026). The increasing use of QRIS in North Maluku also indicates growing digital financial awareness among local businesses and consumers (InterActive QRIS, 2025). Nevertheless, digital transformation is not automatically successful. Limited digital literacy, unstable internet connectivity, technology-related costs, insufficient training, and cybersecurity concerns may prevent business owners from fully utilizing digital technologies. Training and assistance programs have therefore become important mechanisms for enabling MSMEs to integrate QRIS, social media, and other digital technologies into their daily operations (Turangan, 2025; Safadila et al., 2026).

Although previous research has established the relationship between digital transformation and MSME performance and competitiveness, much of the literature examines digital transformation at the national or general MSME level. Scientometric evidence also shows that digital transformation in small and medium enterprises has become an increasingly developed research field, while Parra-Sánchez and Talero-Sarmiento (2024) continue to explore diverse technological and organizational dimensions. However, limited attention has been given to how specific, low-cost technologies such as WhatsApp Business and QRIS are simultaneously implemented by individual MSMEs in peripheral regions such as Ternate. Existing studies also tend to emphasize the effects of digital transformation rather than examining the practical transformation process, the internal and external factors affecting implementation, and the operational changes individual businesses experience.

This study addresses this gap by examining Kedai Mangga Dua in Ternate City as a case of digital transformation through the integration of WhatsApp Business and QRIS. Its novelty lies in combining a qualitative case study with SWOT analysis and descriptive operational data to examine not only the contribution of digital technologies to business performance but also the factors that facilitate or constrain their implementation in a local MSME context. This study aims to analyze the role of digital transformation in improving MSME performance, particularly by investigating the digital transformation process at Kedai Mangga Dua and examining how WhatsApp Business and QRIS contribute to business performance, including the internal and external factors influencing their implementation. The findings are expected to provide practical insights for MSME owners, local governments, and other stakeholders in developing more accessible and sustainable strategies for accelerating digital transformation and strengthening the competitiveness of MSMEs in North Maluku.

2. Literature Review

2.1. Digital Transformation

Digital transformation refers to the integration of digital technologies into business activities to improve operational efficiency, expand market access, foster innovation, strengthen customer relationships, and enhance competitiveness. In MSMEs, digital transformation involves shifting from conventional practices to digitally supported marketing, communication, transactions, information management, and business processes. This transformation extends beyond the adoption of individual digital platforms and involves changes in how enterprises manage their activities, interact with customers, and respond to changing market conditions. Situmorang et al. (2026) explain that digital technologies can facilitate the transition of traditional traders toward digital practices, strengthen customer relationships, and expand market reach. Similarly, Azionya and Mashigo (2025) emphasize that digital platforms can function as engagement tools between business owners and customers. However, their effectiveness depends on digital capabilities, customer engagement, and the ability to integrate technology into daily business activities. According to Suginam et al. (2026), digital business practices provide MSMEs with opportunities to improve marketing effectiveness and business processes through relatively accessible technologies.

Beyond the adoption of specific digital tools, digital transformation encompasses broader changes in the way MSMEs conduct business and create value. These changes may involve digital communication, marketing, financial transactions, customer interaction, and business management. Alfiyyani et al. (2024) indicate that digital technologies can support MSME digitalization by improving product promotion, facilitating transactions, and increasing business accessibility. However, implementation remains influenced by digital literacy, technological readiness, infrastructure, and entrepreneurs' ability to adapt to digital business models. MSMEs transitioning from traditional models continue to face challenges related to digital skills, infrastructure, technological adaptation, and changing market demands (Djou & Abdullah, 2025). Therefore, digital transformation requires not only technological adoption but also digital competencies and adaptive capabilities to support market expansion, operational efficiency, customer engagement, and sustainable competitiveness.

2.2. Digital Transformation in MSME Performance

The performance of MSMEs is commonly evaluated using indicators such as sales revenue, customer growth, operational efficiency, and long-term business sustainability. Digital transformation has become a key driver of these outcomes by enabling businesses to expand market reach, improve operational processes, and strengthen customer relationships through technologies such as WhatsApp Business and QRIS. WhatsApp Business enables direct customer communication, digital product promotion, and order management, while QRIS simplifies payments, reduces reliance on cash, and improves transaction efficiency. Empirical evidence supports these benefits, with Salma et al. (2026) reporting that the adoption of WhatsApp Business increased customer engagement and sales by up to 25%, while Yanti et al. (2026) found that QRIS reduced operational costs by approximately 15–30% and accelerated transaction processing.

Previous studies by Sinambela (2026) and Yanti et al. (2026) consistently demonstrate that different dimensions of digital transformation contribute to MSME performance. Marketing through WhatsApp Business has been associated with higher customer acquisition and increased sales, with reported sales growth ranging from 25% to 50%. Similarly, the integration of QRIS and other digital payment methods improves transaction efficiency and lowers operating costs (Zakariya & Arifin, 2025). Beyond technology adoption, digital literacy and training are also critical factors supporting business sustainability and organizational adaptability. Loo et al. (2023) and Junaidi et al. (2025) found that digital capacity-building programs significantly enhance technology adoption, with implementation rates increasing by up to 40%, thereby strengthening the long-term competitiveness and resilience of MSMEs.

3. Methods

This study employed a qualitative approach using a single case study design to examine digital transformation and MSME performance at Kedai Mangga Dua, Ternate City. The study explored the adoption of WhatsApp Business for marketing and the use of QRIS, bank transfers, and cash as payment alternatives. The study obtained qualitative and quantitative data from primary and secondary sources. The study collected primary data through fieldwork with purposively selected key informants, including the business manager, local community members, customers, and owners of similar culinary businesses. Secondary data comprised organizational documents, business profiles, institutional reports, photographs, and previous studies, which complemented and validated the primary findings.

Data collection used three complementary field research techniques. First, non-participant observation examined daily business activities, digital marketing practices, customer interactions, and the implementation of digital payment systems without direct researcher involvement. Second, unstructured interviews allowed participants to express their experiences freely while enabling the researcher to explore emerging issues in greater depth. Although no predetermined list of questions was used, the interviews followed a general topic guide focusing on business development, digital marketing practices, payment system implementation, and challenges encountered during the digital transformation process. Third, documentation was collected in the form of photographs, organizational records, vision and mission statements, promotional materials, and other relevant documents to provide additional evidence supporting the research findings.

To ensure the trustworthiness of the findings, the study applied credibility and confirmability criteria. Credibility was established through data triangulation by comparing information obtained from multiple informants and different data collection techniques, including interviews, observations, and documentary evidence. This process enabled the researcher to identify inconsistencies and verify the accuracy of the collected information. Confirmability was achieved by cross-checking findings with different participants and maintaining consistency between empirical evidence and the interpretations presented in the study.

Data analysis followed the interactive model proposed by Miles et al. (2014), consisting of data reduction, data display, and conclusion drawing and verification. Following the qualitative analysis, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted to evaluate the internal and external factors influencing the digital transformation. Internal factors were assessed using the Internal Factor Analysis Summary (IFAS) matrix to identify the organization's key strengths and weaknesses. External factors were analyzed using the External Factor Analysis Summary (EFAS) matrix to evaluate opportunities and threats arising from the broader business environment, including political, economic, socio-cultural, technological, competitive, distributional, infrastructural, and human resource factors. The IFAS and EFAS matrices were subsequently integrated into the SWOT framework to formulate strategic recommendations that leverage organizational strengths and external opportunities while addressing internal weaknesses and mitigating potential threats. This integrated analytical approach provided a comprehensive understanding of how digital transformation supports the performance and long-term sustainability of micro and small enterprises in Ternate City.

4. Results

4.1. Digital Transformation Process

Kedai Mangga Dua's digital transformation includes WhatsApp Business for marketing, customer communication, and order management, and QRIS as the primary cashless payment method, complemented by bank transfers and cash. WhatsApp Business enables the business to use product catalogs, promotional broadcasts, and direct messaging to engage customers, expand market reach, and attract new consumers at relatively low cost. Meanwhile, the integrated payment system simplifies transactions, reduces recording errors, and enhances customer convenience through multiple payment options. The implementation of these technologies has improved both the financial and non-financial performance of Kedai Mangga Dua. Interviews indicated increased revenue as sales expanded beyond walk-in customers to include WhatsApp orders, particularly during promotional campaigns. Digital transactions also improved cash flow monitoring, reduced administrative tasks, and lowered operational time and costs. Furthermore, digital transformation attracted younger customers and consumers beyond the café's immediate area, strengthening competitiveness through improved convenience, broader market reach, and service differentiation (Alfiyyani et al., 2024).

Table 1. Comparison of Business Actors Who Use and Do Not Use QRIS

Comparison Aspect	**Using QRIS (10 Businesses)**	**Not Using QRIS (10 Businesses)**
Number of Businesses	10 businesses	10 businesses
Payment System	Cash and cashless (QRIS)	Cash only
Transaction Convenience	Fast and convenient transactions	Manual transactions
Consumer Interest	Higher, especially among younger consumers	Relatively limited
Cash Handling Risk	Lower (minimal cash handling)	Higher
Financial Record Keeping	Easier and better documented	Manual and less structured
Time Efficiency	More efficient	Less efficient
Business Competitiveness	More competitive	Less competitive
Digital Adaptation	High	Low
Revenue Growth Potential	Tends to increase	Tends to remain stagnant

Table 1 shows that the comparative analysis between businesses adopting QRIS and those relying solely on cash payments reveals substantial differences in business performance. Businesses using QRIS reported significantly higher daily revenue, ranging from IDR 1,000,000 to IDR 2,000,000, compared with IDR 500,000 to IDR 1,000,000 among non-users. Assuming 30 operating days per month, QRIS adopters generated monthly revenues of approximately IDR 30,000,000–IDR 60,000,000, while non-adopters achieved approximately IDR 15,000,000–IDR 30,000,000. These findings suggest that the convenience and efficiency of cashless payments enable higher transaction values and encourage more frequent purchases, thereby improving business performance.

A similar pattern was observed in customer volume and sales performance. Businesses using QRIS attracted 50–80 customers per day (approximately 1,500-2,400 customers per month), nearly double the 25–50 daily customers (750-1,500 customers per month) recorded by businesses without QRIS. Likewise, QRIS users sold 20-30 product packages per day (600-900 packages per month), whereas non-users sold only 10-20 packages per day (300-600 packages per month). These results indicate that digital payment systems not only simplify transactions but also enhance business attractiveness, particularly among consumers who prefer fast and contactless payment methods. Higher customer traffic and sales volume among QRIS adopters show that digital payment adoption supports business growth by improving purchasing convenience, expanding market reach, and increasing the competitiveness of culinary micro and small enterprises in the digital economy (Zakariya & Arifin, 2025).

4.2. Digital Performance, IFAS, EFAS, and SWOT Analysis

Influenced by supporting and inhibiting factors. Supporting factors include business owners' willingness to adopt WhatsApp Business and QRIS, growing consumer preferences for digital services, platform accessibility and ease of use, and relatively affordable adoption costs (Loo et al., 2023). These factors facilitate the integration of digital marketing and payment systems into daily operations. However, limited digital literacy, unstable internet connectivity, intense competition from other digitally adopting MSMEs, and dependence on third-party platforms constrain implementation, limiting operational flexibility and exposing businesses to changes in platform policies or service availability. The SWOT analysis systematically assessed these conditions by examining internal strengths and weaknesses and external opportunities and threats. The identified internal factors were then evaluated using the Internal Factor Analysis Summary (IFAS) matrix to determine their relative importance in supporting digital transformation, and are shown in Table 2. The analysis provides a basis for developing appropriate strategies to improve performance and long-term sustainability.

Table 2. Internal Factors

Internal Factors	Indicator	Descriptions
Strength Factors	Unique culinary products aligned with market preferences	Offers distinctive menu items that match local consumer preferences, particularly among young customers, creating strong market appeal.
	Use of WhatsApp Business for marketing and communication	Utilizes WhatsApp Business for promotions, product catalogs, customer communication, and order management, expanding market reach and improving operational efficiency.
	Adoption of digital payment (QRIS)	Facilitates fast, convenient, and secure cashless transactions while reducing transaction errors.

Internal Factors	Indicator	Descriptions
	Affordable pricing and strong customer relationships	Competitive pricing and direct communication foster customer trust and loyalty.
Weakness Factors	Limited digital literacy	Business owners have limited skills in advanced WhatsApp Business features, sales data analysis, and QRIS management.
	Suboptimal financial management	Financial and operational records are maintained using simple methods, limiting business evaluation and long-term planning.
	Dependence on third-party platforms	Heavy reliance on WhatsApp and QRIS increases vulnerability to platform policy changes and technical disruptions.
	Inconsistent digital promotion	Promotional broadcasts and product catalog updates on WhatsApp Business are not conducted regularly, reducing marketing effectiveness.

In addition to internal factors, external factors also influence the development of Kedai Mangga Dua in Ternate City. These factors consist of opportunities and threats arising from the external business environment that may either support or hinder business development. The identified external factors were subsequently evaluated using the External Factor Analysis Summary (EFAS) matrix and are presented in Table 3.

Table 3. External Factors

External Factors	Indicator	Descriptions
Opportunity Factors	Growth in WhatsApp Business users in Ternate City	Expanding WhatsApp Business adoption creates opportunities to reach more customers through messaging, product catalogs, and promotional broadcasts.
	Growing digital consumption trends	Increasing consumer preference for ordering via WhatsApp and paying with QRIS supports higher sales and more frequent transactions.
	Government support for MSME digitalization	Digital literacy training and QRIS adoption programs encourage technology implementation and improve business competitiveness.
	Social media and WhatsApp as low-cost promotional channels	WhatsApp Business provides an accessible and cost-effective platform for promoting products and attracting new customers.
Threat Factors	Competition among digitally enabled culinary MSMEs	The increasing number of competitors using WhatsApp Business and QRIS intensifies market competition.
	Dependence on digital platform policies	Changes in WhatsApp or QRIS policies and features may disrupt business operations and revenue.
	Internet connectivity issues	Unstable internet connections may interrupt digital marketing activities and QRIS payment transactions.

The development strategy for Kedai Mangga Dua was formulated by considering both internal and external factors. After identifying and classifying these factors, the next step was to construct the IFAS and EFAS matrix based on questionnaire responses collected from respondents. The IFAS and EFAS scores were calculated by multiplying the assigned weight by the corresponding rating for each factor. Factor weights ranged from 0.00 (not important) to 1.00 (very important). The total weights assigned to the strength and weakness factors equaled 1.00, and similarly, the combined weights for the opportunity and threat factors also totaled 1.00. The resulting IFAS and EFAS matrices served as the basis for evaluating the strategic position of Kedai Mangga Dua and formulating appropriate development strategies.

Table 4. IFAS Matrix

Internal Factors	Indicator	Weight	Rate	Score
Strengths	Unique culinary products aligned with market preferences	0.15	4	0.60
	Use of WhatsApp Business for marketing and communication	0.14	4	0.56
	Adoption of digital payment (QRIS)	0.11	3	0.33
	Affordable pricing and strong customer relationships	0.10	3	0.30
Subtotal Strengths		0.50		1.79
Weaknesses	Limited digital literacy	0.15	2	0.30
	Suboptimal financial management	0.13	2	0.26
	Dependence on third-party platforms	0.12	2	0.24
	Inconsistent digital promotion	0.10	2	0.20
Subtotal Weaknesses		0.50		1.00
Total IFAS		1.00		2.79

The IFAS produced a total score of 2.79, exceeding the average benchmark of 2.50, indicating that Kedai Mangga Dua has a strong internal strategic position. The total strength score of 1.79 exceeds the weakness score of 1.00, demonstrating that its competitive advantages outweigh internal limitations. Key strengths include unique culinary products aligned with market preferences, effective use of WhatsApp Business for marketing and communication, QRIS adoption, and affordable pricing supported by strong customer relationships (Ketut et al., 2024). These strengths enhance competitiveness through improved accessibility, transaction convenience, and market reach. Nevertheless, several weaknesses may hinder future growth, including limited digital literacy, suboptimal financial management, dependence on third-party platforms, and inconsistent digital promotion. Although these limitations require attention, their overall influence remains lower than the business's strengths. Therefore, Kedai Mangga Dua has a solid internal foundation to sustain digital transformation and strengthen long-term business performance and competitiveness.

Table 5. EFAS Matrix

External Factors	Indicator	Weight	Rate	Score
Opportunities	Growth in WhatsApp Business users in Ternate City	0.18	4	0.72
	Growing digital consumption trends	0.15	4	0.60
	Government support for MSME digitalization	0.12	3	0.36
	Social media and WhatsApp as low-cost promotional channels	0.10	3	0.30
Subtotal Opportunities		0.55		1.98
Threats	Competition among digitally enabled culinary MSMEs	0.18	3	0.54
	Dependence on digital platform policies	0.15	2	0.30
	Internet connectivity issues	0.12	2	0.24
Subtotal Threats		0.45		1.08
Total EFAS		1.00		3.06

The EFAS produced a total score of 3.06, well above the benchmark value of 2.50, indicating that Kedai Mangga Dua operates within a highly favorable external environment. This result suggests that external opportunities outweigh potential threats and that the business is well positioned to respond to developments in the digital economy. Key opportunities include the growing adoption of WhatsApp Business, increasing digital consumption trends, government support for MSME digitalization, and the availability of WhatsApp as a low-cost promotional platform (Rauf et al., 2024). These conditions enable the business to expand market reach, strengthen customer engagement, and facilitate cashless transactions through QRIS. Although threats such as increasing competition from digitally enabled culinary MSMEs, dependence on digital platform policies, and unstable internet connectivity remain, their overall influence is less significant than the available opportunities. Therefore, the EFAS results indicate that digital transformation provides a strategic opportunity to enhance Kedai Mangga Dua's long-term performance, resilience, and competitiveness of Kedai Mangga Dua in Ternate City.

IFAS / EFAS	**S** 1.79	**W** 1.00
O 1.98	**SO** 1.79 + 1.98 = 3.77	**WO** 1.00 + 1.98 = 2.98
T 1.08	**ST** 1.79 + 1.08 = 2.87	**WT** 1.00 + 1.08 = 2.08

Figure 1. SWOT Matrix

As shown in Figure 1, the SWOT matrix indicates that the SO strategy has the highest score (3.77), combining strengths (1.79) and opportunities (1.98). The WO strategy (2.98) ranks second, followed by ST (2.87) and WT (2.08). This indicates that Kedai Mangga Dua is in a favorable position to leverage its strengths to capitalize on available opportunities. Thus, an SO-oriented strategy is most appropriate for supporting digital transformation and business development.

Table 6. Alternative Order of SWOT Strategies

Priority	Strategy	Weight Value
I	Strength - Opportunities (SO)	3.77
II	Weakness - Opportunities (WO)	2.98
III	Strength - Threats (ST)	2.87
IV	Weakness - Threats (WT)	2.08

Based on the ranking of the SWOT strategic alternatives presented in Table 6, the Strength–Opportunity (SO) strategy received the highest score. This indicates that the most appropriate development strategy is to leverage the business's internal strengths to capitalize on the available external opportunities. The business development strategy for Kedai Mangga Dua was formulated based on the results of the IFAS and EFAS, which identified the key internal and external factors affecting the enterprise. Based on these results, the business's strategic position was determined using the SWOT quadrant analysis, as shown in Figure 2.

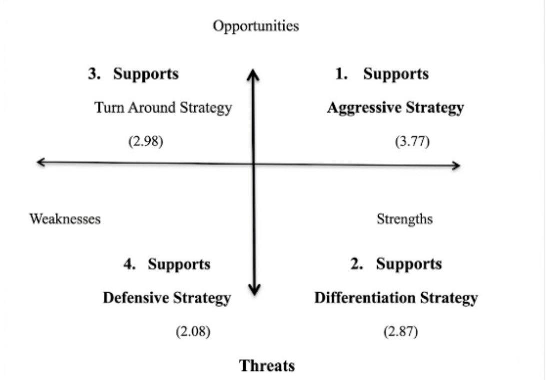

Figure 2. SWOT Diagram Analysis

The SWOT mapping results in Figure 2 indicate that the SO strategy achieved the highest score of 3.77, placing Kedai Mangga Dua in Quadrant I, which represents an aggressive growth strategy. This position reflects strong internal capabilities combined with favorable external opportunities. Key strengths, including unique culinary products, WhatsApp Business for marketing and customer communication, and QRIS adoption, can be leveraged to capitalize on increasing digital consumption, growing WhatsApp Business usage, and government support for MSME digitalization. Accordingly, the recommended strategy emphasizes business expansion through stronger digital marketing, increased production capacity, and enhanced brand communication via WhatsApp Business. The ST strategy scored 2.87, focusing on using internal strengths to address digital competition, platform policy changes, and technological disruptions. The WO strategy scored 2.98, emphasizing external opportunities to overcome limited digital literacy and management capabilities. Meanwhile, the WT strategy recorded the lowest score of 2.08, supporting a defensive approach to minimize risks and platform dependence.

5. Discussion

The IFAS analysis produced a total score of 2.79, exceeding the benchmark value of 2.50, indicating that Kedai Mangga Dua has a relatively strong internal position, with strengths outweighing weaknesses. The business's key strengths include unique culinary products, the use of WhatsApp Business for marketing and customer communication, QRIS adoption, and strong customer relationships. These factors enhance customer accessibility, transaction convenience, and market reach, thereby strengthening competitiveness. This finding aligns with Arundari and Sulistyowati (2025), who found that social media use and QRIS adoption contribute positively to MSME income growth. Similarly, Panggabean et al. (2025) emphasized that increasing cashless consumer behavior encourages MSMEs to adopt digital payment systems to improve customer satisfaction and business performance. These findings indicate that the integration of digital marketing and digital payments provides an important internal foundation for business sustainability.

Despite these strengths, several weaknesses remain, including limited digital literacy, suboptimal financial management, dependence on third-party platforms, and inconsistent digital promotion. If not properly addressed, these limitations may reduce the effectiveness of digital transformation. This finding supports Aini and Fikri (2026), who demonstrated that financial literacy and digital financial literacy play a significant role in improving financial planning and business control among micro-enterprises. Likewise, Awaluddin (2023) found that the successful adoption of mobile-based business applications depends on users' technological readiness and perceived usefulness. Therefore, strengthening digital competencies and managerial capabilities is essential to maximize the benefits of WhatsApp Business and QRIS in supporting long-term business performance.

The EFAS analysis generated a total score of 3.06, indicating that Kedai Mangga Dua operates in a favorable external environment with substantial growth opportunities. Increasing adoption of WhatsApp Business, government support for MSME digitalization, and growing digital consumer behavior provide opportunities to expand market reach, increase sales, and strengthen competitiveness. This finding is in line with Rahma et al. (2026), who identified digital transformation as an important opportunity for entrepreneurship in the digital economy. Similarly, Kawane et al. (2024) found that digitization functions as an adaptation and resilience strategy for MSMEs, particularly in the food service sector. However, external threats remain, including increasing competition among digitally enabled businesses, dependence on digital platforms, and internet connectivity issues. These challenges require continuous adaptation, risk management, and the development of sustainable digital strategies (Awaluddin, 2023).

The integration of IFAS and EFAS through SWOT analysis showed that the SO strategy achieved the highest score of 3.77, followed by WO (2.98), ST (2.87), and WT (2.08). The highest SO score places Kedai Mangga Dua in Quadrant I, indicating an aggressive growth strategy supported by strong internal capabilities and favorable external opportunities. This strategy emphasizes strengthening digital marketing through WhatsApp Business, expanding QRIS utilization, and enhancing brand communication to increase customer engagement. The findings support Arundari and Sulistyowati (2025), who found that social media and QRIS integration improve MSME performance, and Panggabean et al. (2025), who highlighted the importance of digital financial technologies in responding to changing consumer behavior. Meanwhile, the WO strategy highlights the importance of utilizing government-supported digital literacy programs to improve managerial and financial capabilities (Aini & Fikri, 2026). The ST strategy emphasizes product differentiation and personalized customer service to address increasing competition, while the WT strategy focuses on minimizing dependence on individual digital platforms. The findings demonstrate that digital transformation through WhatsApp Business and QRIS is not only an operational necessity but also a strategic mechanism for strengthening competitiveness, resilience, and the long-term sustainability of micro and small enterprises in Ternate City.

6. Conclusion

This study examined the role of digital marketing and payment transformation in supporting the development strategy of Kedai Mangga Dua, an MSME in Ternate City. The findings indicate that the business possesses a strong internal position, as reflected by an IFAS score of 2.79, driven by its unique culinary products, effective use of WhatsApp Business for marketing and customer communication, and adoption of QRIS as a digital payment system. The external environment was also highly favorable, with an EFAS score of 3.06, highlighting opportunities from increasing digital consumer behavior, government support for MSME digitalization, and the growing adoption of WhatsApp Business. The SWOT analysis positioned the business in Quadrant I, with the SO strategy emerging as the highest priority. Furthermore, the comparison between QRIS users and non-users demonstrated that digital payment adoption was associated with higher revenue, greater customer volume, and improved business competitiveness.

These findings provide practical implications for MSME owners and policymakers. Business owners should continue to optimize WhatsApp Business and QRIS while strengthening digital literacy, financial management, and marketing consistency to sustain long-term competitiveness. Meanwhile, local governments and relevant stakeholders should expand digital literacy programs, improve digital infrastructure, and provide ongoing support for MSMEs of adopt digital marketing and payment technologies. Despite these contributions, this study is limited to a single case study, which may restrict the generalizability of the findings. Future research should include a larger sample of MSMEs across sectors or regions, use quantitative or mixed-methods approaches, and examine additional variables such as customer satisfaction, customer loyalty, business performance, or the adoption of other digital platforms to provide a more comprehensive understanding of digital transformation in small businesses.

References

Aini, A. N., & Fikri, M. A. (2026). Financial literacy and digital financial literacy: The mediating role of financial planning and control in micro furniture enterprises. *Golden Ratio of Auditing Research*, *6*(1), 268-283. https://doi.org/10.52970/grar.v6i1.1657.

Alfiyyani, E. F., Berry, Y., & Marginingsih, R. (2024). Penerapan program digitalisasi pada UMKM melalui WhatsApp Bisnis dan pembayaran dengan QRIS di Desa Sirnajati. *An-Nizam*, *3*(3), 78-88. https://doi.org/10.33558/an-nizam.v3i3.10402.

Antaranews. (2024). *Presiden Jokowi kemukakan sektor UMKM sokong 61 persen PDB nasional.* Retrieved on May 27, 2026, from https://ambon.antaranews.com/berita/204894/presiden-jokowi-kemukakan-sektor-umkm-sokong-61-persen-pdb-nasional.

Antaranews. (2026). *BI-Pemprov Malut perkuat UMKM lewat digitalisasi dan akses ekspor*. Retrieved on May 30, 2026, from https://ambon.antaranews.com/berita/329688/bi-pemprov-malut-perkuat-umkm-lewat-digitalisasi-dan-akses-ekspor.

Arundari, I. S., & Sulistyowati, S. N. (2025). Pengaruh media sosial dan QRIS (Quick Response Code Indonesian Standard) pada peningkatan pendapatan UMKM di Jombang. *JPEKBM (Jurnal Pendidikan Ekonomi, Kewirausahaan, Bisnis dan Manajemen)*, *9*(1), 7-17. https://doi.org/10.32682/8epwp157.

Awaluddin, M. (2023). Evaluating factors affecting the adoption of a mobile assisted business application using the Technology Acceptance Model. *Economic and Business Horizon*, *2*(3), 75-87. https://doi.org/10.54518/ebh.2.3.2023.793.

Azionya, C. M., & Mashigo, R. D. (2025). WhatsApp Business as a digital engagement tool: Factors influencing success among South African small and micro-retailers. *Communitas*, *30*(1), 1-16. https://doi.org/10.38140/com.v30i.9321.

Djou, S. H. N., & Abdullah, A. R. (2025). Transformation of traditional MSME business models in Gorontalo City due to digitalization: Analysis of adaptation and challenges in the digital economy era. *Journal La Bisecoman*, *6*(6), 1287-1301. https://doi.org/10.37899/journallabisecoman.v6i6.2904.

InterActive QRIS. (2025). *Warga Maluku Utara makin melek digital! Transaksi QRIS melejit, bisnismu siap ikut maju?* Retrieved on May 27, 2026, from https://qris.interactive.co.id/homepage/blog-detail.php?lang=id&page=MjA1-warga-maluku-utara-makin-melek-digital-transaksi-qris-melejit-bisnismu-siap-ikut-maju.

Junaidi, J., Parela, E., & Ariswandy, D. (2025). The improvement of managerial capacity of MSMEs in facing global competition. *Devotion: Journal Corner of Community Service*, *3*(3), 15-25. https://doi.org/10.54012/devotion.v3i3.428.

Kawane, T., Adu-Gyamfi, B., Cao, Y., Zhang, Y., Yamazawa, N., He, Z., & Shaw, R. (2024). Digitization as an adaptation and resilience measure for MSMEs amid the COVID-19 pandemic in Japan: Lessons from the food service industry for collaborative future engagements. *Sustainability*, *16*(4), 1550-1559. https://doi.org/10.3390/su16041550.

Ketut, M. I., Nyoman, U. I. D., & Wayan, S. N. (2024). The importance of micro, small, and medium enterprises competitiveness through digital transformation. *JASF: Journal of Accounting and Strategic Finance*, *7*(1), 18-38. https://doi.org/10.33005/jasf.v7i1.467.

Librianty, N. (2025). UMKM dapat memanfaatkan strategi pemasaran digital, khususnya melalui media sosial, untuk mempercepat pertumbuhan bisnis. *Jurnal Ekonomi, Kewirausahaan dan Inovasi Bisnis*, *1*(1), 14-19.

Loo, M. K., Ramachandran, S., & Raja, Y. R. N. (2023). Unleashing the potential: Enhancing technology adoption and innovation for micro, small and medium-sized enterprises (MSMEs). *Cogent Economics & Finance*, *11*(2), 226-237. https://doi.org/10.1080/23322039.2023.2267748.

Mendrofa, R. C. L., & Zebua, D. (2026). Pengaruh transformasi digital terhadap kinerja usaha mikro, kecil, dan menengah (UMKM) di Indonesia. *Jurnal Ilmu Ekonomi Dan Bisnis*, *3*(1), 270-275. https://doi.org/10.70134/jukoni.v3i1.1253.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). New York: Sage Publications.

Mustadin, S., Mananda, I. G. P. B. S., & Sendra, I. M. (2024). Marketing strategy of Tolire Lake as a tourist destination in Ternate City, North Maluku. *Asian Journal of Management, Entrepreneurship and Social Science*, *4*(3), 1140-1160. https://doi.org/10.63922/ajmesc.v4i03.997.

Panggabean, E. P. A., Khairani, R., Purba, M. I., Sinaga, J. B. L. A. B., Putri, T. O. D. S., Nasution, I. A., & Lubis, N. W. (2025). Edukasi fintech untuk UMKM UP2K PKK Tanjung Morawa berbasis perilaku konsumen cashless. *Wahana Jurnal Pengabdian kepada Masyarakat*, *4*(2), 132-139. https://doi.org/10.56211/wahana.v4i2.1553.

Parra-Sánchez, D. T., & Talero-Sarmiento, L. H. (2024). Digital transformation in small and medium enterprises: A scientometric analysis. *Digital Transformation and Society*, *3*(3), 257-276. https://doi.org/10.1108/DTS-06-2023-0048.

Rahma, M., Aziz, F. A., Turyandi, I., Hanawidjaya, R. R., Hidayat, S., Rahayu, Y. S., ... Danasasmita, W. M. (2026). *Transformasi digital dalam kewirausahaan desa: Peluang dan tantangan di era ekonomi digital*. Bandung: Penerbit Widina.

Rauf, R., Syam, A., & Randy, M. F. (2024). Optimalisasi transformasi digital dalam mendorong pertumbuhan usaha mikro, kecil dan menengah di Indonesia. *BJRM (Bongaya Journal of Research in Management)*, *7*(1), 95- 102. https://doi.org/10.37888/bjrm.v7i1.594.

Safadila, L., Saputri, M. Y., Fujianto, O. T., Rahman, F., & Habibi, N. S. (2026). Strategi transformasi digital untuk meningkatkan daya saing IKM Batik Klampar Pamekasan. *EconoPulse Nexus: Journal of Economics, Business, and Finance*, *2*(1), 25-39.

Salma, S., Widyanti, R., & Basuki, B. (2026). The influence of e-commerce and social media on increasing micro-enterprise revenue in Banjarmasin City South Kalimantan Province. *Jurnal Ekonomi, Akuntansi dan Manajemen Indonesia (JEAMI)*, *4*(2), 160-168.

Samuel, P., Ating, S., Wahyu, H., & Titus, I. (2025). Model transformasi struktur organisasi usaha mikro dan kecil (UMK): Peran wirausaha dan transformasi digital dalam transisi UMK. *Journal of Social and Economics Research*, *7*(2), 2200-2212. https://doi.org/10.54783/jser.v7i2.1350.

Sinambela, M. (2026). Transformasi digital dalam mendorong daya saing usaha mikro, kecil, dan menengah di era ekonomi digital. *JANITA: Journal of Accounting and Management*, *1*(1), 1-12.

Situmorang, I. R., Mariani, M., Kelrin, K., Stephanie, S., & Wijaya, S. (2026). Transformasi pemasaran konvensional ke digital bagi pedagang pasar tradisional melalui pemanfaatan marketplace dan WhatsApp Business. *Eastasouth Journal of Effective Community Services*, *4*(3), 675-686. https://doi.org/10.58812/ejecs.v4i03.565.

Suginam, S. E., Ak, M., Fadillah, R., Kom, M., & Joli Afriany, M. M. (2026). *Manfaat bisnis digital bagi UMKM*. Kuningan: Goresan Pena.

Turangan, J. A. (2025). Implementasi pelatihan digital untuk warung pinggir jalan: Integrasi QRIS, media sosial, dan AI dalam peningkatan daya saing UMKM. *Jurnal Serina Abdimas*, *3*(3), 1044-1050. https://doi.org/10.24912/jsa.v3i3.37018.

Yanti, N. S., Zahri, N., Wulandari, R., & Panorama, M. (2026). Pengaruh sistem pembayaran QRIS terhadap kepuasan konsumen pada UMKM kuliner di Kota Palembang. *Nusantara: Jurnal Ilmu Pengetahuan Sosial*, *13*(7), 1842-1857. https://doi.org/10.31604/jips.v13i7.2026.1842-1857.

Yudianto, V. W., Rezeki, N. S., & Astuti, N. (2026). QRIS as a digital financial infrastructure: Multidimensional analysis of adoption and financial inclusion in Indonesian MSMEs. *Journal of Economic Development and Village Building*, *4*(1), 15-28. https://doi.org/10.59261/jedvb.v4i1.61.

Zakariya, A., & Arifin, A. A. (2025). The application of digital payments (QRIS & e-wallet) on the efficiency of MSME transactions. *Journal of Finance, Economics and Business*, *4*(2), 1-19. https://doi.org/10.59827/jfeb.v4i2.326.

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