



Analysis of Entrepreneurship Strategies for Enhancing the Competitiveness of MSMEs Based on Local Wisdom

Yunita Tamo Ina^{1*}, Katrin Adja², Michael Aleysandro Foenay³, Josep F. B. Piran⁴, Enike Tje Yustin Dima⁵

Universitas Katolik Widya Mandira Kupang^{1,2,3,4,5}

yunitaina139@gmail.com¹

Submitted: 20 April 2026, Accepted: 20 June 2026, Published: 26 June 2026

ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in Indonesia's economy, particularly in job creation and improving community welfare. However, amid globalization and increasingly competitive markets, MSMEs are required to enhance their competitiveness. This study analyzes entrepreneurial strategies for MSMEs based on local wisdom as an effort to improve competitiveness through the integration of culture, innovation, and digital technology. The research employs a qualitative descriptive approach using literature review from recent journals, books, and academic articles. The results indicate that leveraging local wisdom such as local raw materials, cultural values, and regional specialties combined with product innovation, cultural branding, digital marketing, and storytelling can create sustainable competitive advantages. Key challenges include low digital literacy, limited access to financing, and the risk of losing authentic cultural value. Therefore, government support, inter-MSME collaboration, and training programs are crucial for the successful implementation of these strategies.

Keywords : *Entrepreneurial Strategies, Competitiveness, MSMEs, Local Wisdom*

1. Introduction

Micro, small, and medium enterprises (MSMEs) constitute one of the primary drivers of Indonesia's economic development by generating employment opportunities, stimulating local economic activities, and contributing significantly to poverty reduction and regional economic resilience (Nursini, 2020; Weldeslassie et al., 2019). Despite their substantial contribution, MSMEs continue to encounter considerable challenges in maintaining competitiveness amidst globalization, rapid technological advancement, and increasingly dynamic consumer preferences. The emergence of digital markets, changing business models, and intensified competition require MSMEs not only to survive but also to continuously innovate and develop sustainable competitive advantages (Mukherjee, 2018; Jackson, 2021).

Recent empirical studies indicate that the competitiveness of Indonesian MSMEs remains constrained by several structural factors, including limited digital capability, inadequate innovation capacity, insufficient managerial competence, and restricted access to financial technology. A systematic review by Angraini et al. (2024) revealed that although digital transformation has become a strategic necessity, the adoption of digital technology among Indonesian MSMEs remains uneven due to limitations in digital literacy, infrastructure, and entrepreneurial capabilities. Similarly, Pranata et al. (2022) found that many MSMEs, particularly in the food and beverage sector, experience difficulties in utilizing digital technology effectively despite its proven benefits for expanding market access and improving operational efficiency. Furthermore, studies by Caraballo Payares et al. (2024) and Hal et al. (2023) demonstrate that digital marketing and personal branding significantly improve market competitiveness, yet many MSMEs still lack the competencies required to maximize these opportunities.

Innovation has also been consistently recognized as a fundamental determinant of MSME competitiveness. Open innovation, collaborative research, and continuous product development enable enterprises to respond more effectively to market changes and generate sustainable competitive advantages (Paiva et al., 2020). Likewise, local studies emphasize that product innovation supported by digitalization substantially improves the competitiveness of Indonesian MSMEs (Vega et al., 2025; Muh Fajrul & Sptyana, 2025). Beyond technological innovation, responsible business practices and corporate social responsibility have also been shown to strengthen firm performance and long-term competitiveness (Ansong & Agyemang, 2017; Apospori et al., 2012; Bose et al., 2017). These findings suggest that enhancing MSME competitiveness requires a comprehensive entrepreneurial strategy integrating innovation, technology adoption, and sustainable business management.

Another strategic resource that has attracted increasing scholarly attention is local wisdom. Local wisdom reflects indigenous cultural values, traditional knowledge, and regional identity that can differentiate MSME products in highly competitive markets. Previous studies have demonstrated that incorporating local cultural characteristics into products strengthens uniqueness, increases customer value, and supports tourism-based economic development (Samodro, 2018; Ari et al., 2023). More recent evidence further indicates that local wisdom contributes to sustainable competitive advantage by creating product differentiation that is difficult for competitors to imitate (Gunawan, 2026). In addition, financial literacy, financial technology, and community-based entrepreneurial development have been recognized as supporting factors that enhance the effectiveness of local wisdom implementation within MSMEs (Lubis & Nurhayati, 2024; Masril, 2021).

Although previous studies have extensively examined digital transformation (Angraini et al., 2024), technology adoption (Pranata et al., 2022), innovation (Paiva et al., 2020), corporate responsibility (Ansong & Agyemang, 2017), and local wisdom individually (Samodro, 2018; Gunawan, 2026), relatively limited research has comprehensively analyzed how entrepreneurial strategies integrate these dimensions simultaneously to improve MSME competitiveness. Existing studies generally investigate technology adoption, innovation, or local wisdom as separate determinants, while the interaction between entrepreneurial orientation, digital capability, innovation, and local wisdom remains insufficiently explored. Consequently, there is still a research gap regarding the formulation of an integrated entrepreneurship strategy capable of strengthening MSME competitiveness in an increasingly digital and globally competitive environment.

This study addresses this gap by proposing an integrated perspective that combines entrepreneurship strategy, innovation capability, digital transformation, and local wisdom as complementary factors in strengthening MSME competitiveness. The novelty of this research lies in positioning local wisdom not merely as a cultural identity but as a strategic entrepreneurial resource that complements digital transformation and innovation in creating sustainable competitive advantage. Therefore, this study aims to analyze entrepreneurship strategies based on local wisdom that can enhance the competitiveness of MSMEs while supporting their long-term sustainability in the era of globalization and digital transformation.

2. Research Methods

This study employed a qualitative research approach using a narrative literature review design to synthesize existing knowledge regarding entrepreneurship strategies, MSME competitiveness, digital transformation, innovation, and local wisdom. A literature review was selected because it enables the identification, comparison, and critical interpretation of findings from previous studies to develop a comprehensive understanding of the research topic.

The data used in this study consisted exclusively of secondary data obtained from peer-reviewed journal articles, books, conference proceedings, and other reputable academic publications. Literature searches were conducted through major academic databases, including Scopus, ScienceDirect, SpringerLink, Google Scholar, and Crossref. To ensure the relevance and quality of the reviewed literature, publications were selected based on the following inclusion criteria: (1) discussing entrepreneurship strategies, MSME competitiveness, innovation, digital transformation, or local wisdom; (2) published in reputable national or international journals; (3)

available in full text; and (4) primarily published between 2017 and 2025, while several seminal references published before this period were retained to strengthen the theoretical foundation.

The literature selection process consisted of four stages: identification, screening, eligibility assessment, and final inclusion. Initially, relevant publications were identified using keywords such as *entrepreneurship strategy*, *MSME competitiveness*, *local wisdom*, *digital transformation*, and *innovation*. Duplicate records and publications unrelated to the research objectives were subsequently removed during the screening stage. Eligible publications were then evaluated based on their relevance to the research focus before being included in the final analysis.

Data were analyzed using qualitative content analysis. The selected literature was systematically coded and categorized into several major themes, including entrepreneurship strategies, innovation capability, digital transformation, local wisdom, and competitive advantage. The findings from previous studies were subsequently compared, synthesized, and interpreted to identify recurring patterns, research inconsistencies, and existing research gaps. Finally, the synthesized findings were presented descriptively to develop an integrated understanding of how entrepreneurship strategies based on local wisdom can enhance the competitiveness and long-term sustainability of micro, small, and medium enterprises.

3. Results and Discussions

Results

Local Wisdom as a Strategic Resource for MSME Competitiveness

The literature consistently identifies local wisdom as one of the most valuable strategic resources for enhancing the competitiveness of micro, small, and medium enterprises (MSMEs). Rather than functioning solely as a cultural heritage, local wisdom has evolved into a business asset capable of creating product differentiation, strengthening regional identity, and generating sustainable competitive advantages. Across the reviewed studies, local wisdom encompasses indigenous knowledge, traditional production techniques, local raw materials, cultural values, and regional characteristics embedded within products and business practices (Samodro, 2018; Ari et al., 2023).

The synthesis of previous studies indicates that MSMEs integrating local wisdom into their products achieve greater product uniqueness than businesses relying exclusively on standardized commercial products. Traditional recipes, local craftsmanship, indigenous materials, and cultural narratives create emotional value for consumers while simultaneously preserving cultural heritage. Ari et al. (2023) demonstrated that developing products based on regional identity not only supports local tourism but also strengthens market positioning by differentiating products from competitors. Likewise, Samodro (2018) emphasized that incorporating local wisdom into product development increases export competitiveness because consumers increasingly appreciate authentic products with strong cultural identities.

Recent studies further reveal that local wisdom contributes not only to product differentiation but also to business sustainability. Gunawan (2026) argued that local wisdom enables MSMEs to establish competitive advantages that are difficult for competitors to imitate because cultural identity represents an intangible resource developed over generations. Unlike technological innovations that can be rapidly replicated, cultural uniqueness remains embedded within communities and therefore provides long-term strategic value.

The reviewed literature also highlights several forms of local wisdom implementation within MSMEs. These include the utilization of local raw materials, preservation of traditional production methods, incorporation of regional symbols into product packaging, promotion of local stories through branding, and development of tourism-oriented products reflecting regional identities. Collectively, these practices enhance customer experiences while simultaneously supporting cultural preservation and local economic development.

Overall, the findings indicate that local wisdom functions as both an economic and socio-cultural resource. From an economic perspective, it creates product differentiation and market competitiveness, whereas socially it contributes to preserving local traditions and strengthening community identity.

Entrepreneurship Strategies for Integrating Local Wisdom

The literature review identified entrepreneurship strategy as the central mechanism through which local wisdom can be transformed into competitive business performance. Rather than treating local wisdom as a passive cultural asset, successful MSMEs actively integrate it into entrepreneurial activities through innovation, branding, digital marketing, collaboration, and continuous product development.

One of the dominant strategies identified across the literature is product innovation based on local culture. Innovation does not necessarily imply abandoning traditional values but instead adapting traditional products to meet contemporary consumer preferences. Vega et al. (2025) found that product innovation significantly enhances MSME competitiveness when innovation preserves cultural authenticity while improving product quality, packaging, and functionality. Similarly, Muh Fajrul and Saptyana (2025) demonstrated that culinary MSMEs adopting continuous product innovation were better able to respond to changing market trends and consumer demands.

Another frequently reported strategy involves cultural branding. Rather than competing primarily on price, MSMEs increasingly position themselves through storytelling that communicates cultural heritage, production history, and regional identity. This branding strategy establishes emotional relationships with consumers and strengthens customer loyalty. Ari et al. (2023) illustrated that consumers increasingly value products associated with authentic local traditions because such products provide unique consumption experiences beyond functional benefits.

Digital transformation emerged as another critical entrepreneurial strategy. The reviewed studies consistently demonstrate that digital technology substantially expands market access while improving operational efficiency. Angraini et al. (2024) reported that digital transformation enables MSMEs to overcome geographical limitations through e-commerce, social media marketing, and digital business platforms. Likewise, Pranata et al. (2022) found that technology adoption significantly improves business efficiency, although many Indonesian MSMEs continue experiencing difficulties due to limited digital capabilities.

The literature also emphasizes the growing importance of digital marketing. Caraballo Payares et al. (2024) found that social media platforms, digital advertising, and online marketplaces increase customer engagement while strengthening brand visibility. Similarly, Hal et al. (2023) showed that personal branding through digital media improves consumer trust and market recognition, particularly among community-based MSMEs.

Financial capability also emerged as a supporting entrepreneurial strategy. Lubis and Nurhayati (2024) demonstrated that financial literacy combined with financial technology adoption enables MSMEs to improve financial decision-making, business planning, and investment management. Improved financial management subsequently supports innovation activities and long-term business growth.

Business networking represents another important finding synthesized from the literature. Mian et al. (2016) emphasized that collaboration among MSMEs, universities, business incubators, and government institutions accelerates knowledge transfer and innovation development. Such collaboration facilitates access to technology, training programs, business mentoring, and wider distribution networks.

Overall, the reviewed literature suggests that entrepreneurship strategies integrating local wisdom consist of several complementary dimensions, including innovation capability, digital transformation, cultural branding, financial capability, strategic networking, and continuous organizational learning. These dimensions collectively strengthen MSMEs' capacity to create sustainable competitive advantages.

Digital Transformation and MSME Competitiveness

Another important finding emerging from the literature concerns the increasingly inseparable relationship between digital transformation and MSME competitiveness. Digital technologies have transformed the way MSMEs produce, market, distribute, and communicate

with consumers. Consequently, digital capability has become one of the primary determinants of business competitiveness.

The reviewed studies consistently indicate that digital transformation improves operational efficiency while expanding market opportunities. Angraini et al. (2024) concluded that digitalization enables MSMEs to optimize marketing, improve customer services, reduce transaction costs, and strengthen competitive performance. Similarly, Caraballo Payares et al. (2024) found that digital marketing adoption significantly enhances customer acquisition and market expansion among small businesses.

Nevertheless, the literature also reveals substantial barriers limiting digital transformation among MSMEs. Pranata et al. (2022) reported that many enterprises continue facing inadequate digital literacy, insufficient technological infrastructure, and limited financial resources required for technology investment. These limitations reduce the ability of MSMEs to maximize digital business opportunities despite increasing consumer reliance on online platforms.

Innovation capability further strengthens the positive relationship between digital transformation and competitiveness. Paiva et al. (2020) emphasized that collaborative innovation and knowledge sharing accelerate technological adaptation while improving organizational performance. Jackson (2021) similarly argued that sustainable innovation enables firms to respond continuously to market changes by transforming existing business practices into more competitive models.

Corporate responsibility and sustainable business management also emerged as supporting determinants of competitiveness. Ansong and Agyemang (2017) demonstrated that socially responsible business practices improve organizational reputation, customer trust, and long-term performance. Likewise, Apospori et al. (2012) concluded that responsible management practices contribute significantly to SME competitiveness because they strengthen stakeholder relationships and organizational legitimacy.

The literature synthesis therefore indicates that competitiveness in the digital era cannot be achieved solely through technology adoption. Sustainable competitiveness requires integrating digital transformation with innovation capability, entrepreneurial orientation, responsible business practices, financial management, and local wisdom. MSMEs successfully combining these elements demonstrate stronger adaptability to market changes while simultaneously preserving their cultural identity and achieving long-term business sustainability.

Discussion

Integrating Local Wisdom and Digital Transformation for Sustainable MSME Competitiveness

The findings of this literature review demonstrate that sustainable MSME competitiveness can no longer rely solely on traditional entrepreneurial practices or technological adoption independently. Instead, competitiveness emerges from the successful integration of local wisdom with digital transformation and innovation. This finding extends previous studies by showing that local wisdom should not merely be regarded as a cultural attribute but as a strategic entrepreneurial resource capable of generating long-term competitive advantages when supported by digital capabilities.

Digital transformation has fundamentally reshaped the competitive landscape for MSMEs. The rapid expansion of e-commerce, digital payment systems, social media platforms, and online marketplaces has significantly lowered market entry barriers while simultaneously intensifying competition. Consequently, MSMEs must continuously improve their technological capabilities to remain competitive. This interpretation is consistent with Angraini et al. (2024), who emphasized that digital transformation enables MSMEs to increase productivity, expand market access, and improve business efficiency. Likewise, Pranata et al. (2022) argued that technology adoption positively affects MSME performance, although digital literacy and technological readiness remain major obstacles.

However, this review indicates that technology alone is insufficient to sustain competitiveness. Numerous businesses can adopt identical digital platforms, resulting in limited differentiation if technology is implemented without distinctive business value. Therefore, local wisdom becomes an important complementary resource because it provides unique product

characteristics that are difficult for competitors to imitate. Gunawan (2026) highlighted that local wisdom represents an intangible strategic asset capable of strengthening sustainable competitive advantage through cultural uniqueness. Similarly, Samodro (2018) emphasized that integrating local identity into product development increases product authenticity and strengthens export competitiveness by offering consumers distinctive cultural experiences.

The findings further suggest that digital technology actually amplifies the economic value of local wisdom rather than replacing it. Social media, e-commerce platforms, and digital marketing allow MSMEs to communicate cultural stories, production processes, and regional identities to much broader markets than conventional marketing methods. Consequently, digital transformation functions as a dissemination mechanism through which local wisdom reaches national and international consumers while preserving cultural authenticity. This interpretation is supported by Caraballo Payares et al. (2024), who demonstrated that digital marketing significantly increases customer engagement and market visibility, particularly for small businesses operating in highly competitive environments.

Entrepreneurship Strategy as the Driver of Competitive Advantage

Another important implication emerging from this review is that entrepreneurship strategy functions as the central mechanism connecting innovation, digital transformation, and local wisdom. The reviewed studies consistently indicate that entrepreneurship is no longer limited to identifying business opportunities but increasingly involves the capability to combine internal resources with external environmental changes to create sustainable value.

One of the most dominant entrepreneurial strategies identified is continuous innovation. The literature demonstrates that innovation should not only focus on technological advancement but also encompass product design, packaging, branding, production processes, and customer experience. Paiva et al. (2020) argued that collaborative innovation enables organizations to respond more effectively to dynamic market conditions through knowledge sharing and continuous learning. Similarly, Jackson (2021) explained that sustainable innovation requires organizations to continuously adapt existing business models while maintaining their core competitive strengths.

This review also reveals that entrepreneurial innovation becomes more effective when supported by local cultural values. Rather than abandoning traditional products, successful MSMEs modernize traditional products while maintaining their authenticity. Vega et al. (2025) demonstrated that local product innovation significantly increases competitiveness because consumers increasingly value products combining authenticity with contemporary quality standards. Likewise, Muh Fajrul and Sptyana (2025) found that innovation in culinary MSMEs enhances customer satisfaction, strengthens customer loyalty, and increases business sustainability.

Another significant entrepreneurial strategy identified concerns branding. Modern consumers increasingly purchase products not only because of their functional characteristics but also because of the stories and values attached to them. Consequently, cultural branding has become an important differentiation strategy for MSMEs. Ari et al. (2023) illustrated that integrating cultural narratives into branding strengthens emotional relationships between consumers and products. This branding strategy enables MSMEs to avoid price-based competition by emphasizing product uniqueness and authenticity.

Financial capability also plays a significant supporting role within entrepreneurial strategy. Lubis and Nurhayati (2024) demonstrated that financial literacy and financial technology improve financial management quality, investment decisions, and innovation capability. Better financial management subsequently enables MSMEs to invest in technology, product development, and marketing activities, thereby strengthening long-term competitiveness.

Furthermore, business collaboration constitutes another strategic factor supporting entrepreneurial success. Mian et al. (2016) emphasized that partnerships among MSMEs, universities, government institutions, and business incubators facilitate innovation, technology transfer, entrepreneurial mentoring, and business networking. Such collaboration becomes increasingly important because MSMEs generally possess limited financial and technological resources compared with large enterprises.

Challenges and Opportunities for Local Wisdom-Based MSMEs

Although local wisdom offers substantial competitive advantages, the literature indicates that its implementation remains constrained by several challenges. One of the most frequently discussed obstacles concerns the limited capability of MSME owners to integrate traditional knowledge with modern business practices. Many entrepreneurs continue perceiving innovation and digital transformation as costly and technically difficult processes despite increasing government support for MSME digitalization (Angraini et al., 2024; Pranata et al., 2022).

Digital capability represents another persistent challenge. Many MSMEs continue experiencing limited digital literacy, inadequate technological infrastructure, and insufficient understanding of online marketing strategies. Hal et al. (2023) reported that many community-based MSMEs require continuous mentoring to effectively utilize digital platforms for branding and marketing activities. Similarly, Caraballo Payares et al. (2024) emphasized that successful digital marketing requires not only technological access but also strategic capabilities in content development, customer engagement, and digital communication.

Financial constraints also remain significant barriers. Limited access to formal financing frequently restricts investments in technology adoption, innovation, certification, and product quality improvement. Lubis and Nurhayati (2024) demonstrated that strengthening financial literacy substantially improves MSMEs' ability to manage business capital and utilize financial technology effectively. Therefore, financial capability should be regarded as an integral component of entrepreneurship strategy rather than merely an operational function.

Despite these challenges, the literature also identifies considerable opportunities. Consumer preferences increasingly favor authentic, environmentally responsible, and culturally distinctive products. This trend creates substantial market potential for MSMEs capable of integrating local wisdom with innovation and digital marketing. Samodro (2018) suggested that globalization does not necessarily threaten local products; instead, globalization provides broader opportunities for culturally distinctive products to penetrate international markets.

Government support also constitutes an important opportunity. Training programs, business incubation initiatives, financial assistance, digital transformation policies, and entrepreneurship development programs contribute significantly to improving MSME competitiveness (Masril, 2021). Moreover, digital platforms enable MSMEs to reach consumers across geographical boundaries while reducing marketing costs and increasing operational efficiency (Angraini et al., 2024).

Another opportunity concerns sustainable business practices. Responsible entrepreneurship has become increasingly important because consumers pay greater attention to ethical production, environmental responsibility, and social impact. Ansong and Agyemang (2017) demonstrated that corporate social responsibility positively influences SME performance by strengthening stakeholder trust and organizational reputation. Likewise, Apospori et al. (2012) argued that socially responsible business practices contribute significantly to long-term competitiveness by improving relationships with customers, suppliers, and local communities.

Overall, this review suggests that the future competitiveness of MSMEs depends on their ability to integrate four complementary dimensions: local wisdom, innovation capability, digital transformation, and entrepreneurial strategy. Rather than functioning independently, these dimensions reinforce one another to create sustainable competitive advantage. Local wisdom provides product uniqueness, innovation generates continuous value creation, digital transformation expands market opportunities, and entrepreneurship strategy integrates these resources into sustainable business performance.

Unlike previous studies that generally examined these factors separately, this study synthesizes the existing literature into a comprehensive framework demonstrating that sustainable MSME competitiveness results from the interaction among cultural resources, technological capability, innovation, and entrepreneurial orientation. This integrated perspective constitutes the primary theoretical contribution of the present study and provides practical guidance for policymakers, business practitioners, and MSME owners seeking to strengthen competitiveness while preserving local cultural identity.

4. Conclusion

Based on an analysis of MSME entrepreneurial strategies rooted in local wisdom, it can be concluded that local wisdom is a strategic asset capable of enhancing the competitiveness of MSMEs. Cultural values, local raw materials, and regional specialty products provide distinctive characteristics that set SME products apart from competitors, while also creating added value that appeals to consumers. However, to maximize this potential, SMEs need to integrate local wisdom with product innovation, cultural branding, digital marketing, and storytelling, thereby not only strengthening cultural identity but also expanding market reach and increasing customer loyalty.

In the digital age, the ability to adapt to technology is a key factor in maintaining and enhancing competitiveness. However, MSMEs still face various challenges, such as low digital literacy, limited access to capital, and the risk of losing authentic cultural value due to excessive commercialization. Therefore, the success of entrepreneurship strategies rooted in local wisdom heavily depends on external support, including training, mentoring, and collaboration with other parties whether fellow SMEs or the government.

By implementing the right strategy one that strikes a balance between cultural preservation and modern innovation, SMEs are not only able to survive in the face of market competition but also create sustainable competitive advantages, penetrating both local and global markets without losing the cultural identity and values inherent in their products. This strategy demonstrates that local wisdom and innovation can coexist as the foundation for the growth of SMEs that are adaptive, creative, and highly competitive.

References

- Angraini, D., Riady, Y., Putimasurai, P., Pratama, A., Sadria, A., & Rosmiati, R. (2024). Transformasi digital dalam meningkatkan daya saing usaha mikro, kecil, dan menengah (UMKM) Indonesia: Sebuah tinjauan sistematis. *Eklektik: Jurnal Pendidikan Ekonomi dan Kewirausahaan*, 7(2), 132–145. <https://doi.org/10.24014/ekl.v7i2.33958>
- Ansong, A., & Agyemang, O. S. (2017). Corporate social responsibility and firm performance of Ghanaian SMEs. *Journal of Global Responsibility*, 8(1), 47–62. <https://doi.org/10.1108/JGR-03-2016-0007>
- Apospori, E., Zografos, K. G., & Magrizos, S. (2012). SME corporate social responsibility and competitiveness: A literature review. *International Journal of Technology Management*, 58(1–2), 10–31. <https://doi.org/10.1504/IJTM.2012.045786>
- Ari, M., Irvi, A., Husna, N., Ez, K. H., & Purwakarta, M. (2023). Pembentukan usaha mikro kecimpring sebagai makanan ciri khas kampung wisata. *Jurnal Abdimas Komunikasi dan Bahasa*, 3(1), 14–24.
- Bose, S., Podder, J., & Biswas, K. (2017). Philanthropic giving, market-based performance and institutional ownership: Evidence from an emerging economy. *The British Accounting Review*, 49(4), 429–444. <https://doi.org/10.1016/j.bar.2016.11.001>
- Caraballo Payares, A., Luna, J., & Carbal Herrera, A. (2024). Digital marketing adoption in small and medium-sized enterprises (SMEs). *Panorama Económico*, 31(4), 360–374. <https://doi.org/10.32997/pe-2023-4774>
- Gunawan, S. (2026). Local wisdom-based competitive advantage strategy in small and medium businesses. *International Research Journal of Business Studies*.
- Hal, D., Anandita, S. R., Hidayat, R., Qomariyah, S. N., Kh, U., & Hasbullah, A. W. (2023). Sosialisasi pengembangan personal branding UMKM Desa Murukan melalui pelatihan digital marketing. *Jurnal Pengabdian Masyarakat*, 4(3).
- Jackson, E. A. (2021). *Fostering sustainable innovation through creative destruction theory*. Springer. <https://doi.org/10.1007/978-3-030-50896-9>
- Lubis, E. F. M., & Nurhayati, N. (2024). Pengaruh literasi keuangan dan financial technology terhadap kinerja keuangan UMKM. *Journal of Business and Economics Research*, 5(2), 178–187. <https://doi.org/10.47065/jbe.v5i2.5259>
- Masril, M. (2021). Persiapan pengembangan usaha masyarakat. *Jurnal Abdidas*, 2(5), 1092–1098. <http://abdidas.org/index.php/abdidas>

- Mian, S., Lamine, W., & Fayolle, A. (2016). Technology business incubation: An overview of the state of knowledge. *Technovation*, 50–51, 1–12. <https://doi.org/10.1016/j.technovation.2016.02.005>
- Muh Fajrul, & Saptyana, R. F. (2025). Strategi peningkatan daya saing UMKM kuliner di era digital: Studi kasus pada pelaku usaha di Kota Semarang. *MAMEN: Jurnal Manajemen*, 4(2), 143–157. <https://doi.org/10.55123/mamen.v4i2.5066>
- Mukherjee, S. (2018). Challenges to Indian micro, small, and medium enterprises in the era of globalization. *Journal of Global Entrepreneurship Research*, 8(1), Article 28. <https://doi.org/10.1186/s40497-018-0115-5>
- Nursini, N. (2020). Micro, small, and medium enterprises (MSMEs) and poverty reduction: Empirical evidence from Indonesia. *Development Studies Research*, 7(1), 153–166. <https://doi.org/10.1080/21665095.2020.1823238>
- Paiva, T., Ribeiro, M., & Coutinho, P. (2020). R&D collaboration, competitiveness development, and open innovation in R&D. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), Article 116. <https://doi.org/10.3390/joitmc6040116>
- Pranata, N., Soekarni, M., Mychelida, E., Novandra, R., Nugroho, A. E., Rifai, B., Buhaerah, P., Zulhamdani, M., & Yuliana, R. R. D. (2022). Technology adoption issues and challenges for micro, small, and medium enterprises: A case study of the food and beverage sub-sector in Indonesia. *The Journal of Asian Finance, Economics and Business*, 9(3), 265–274. <https://doi.org/10.13106/JAFEB.2022.VOL9.NO3.0265>
- Samodro, M. H. (2018). Upaya meningkatkan daya saing ekspor produk UMKM makanan dan minuman melalui pengembangan usaha berbasis kearifan lokal di Indonesia. *Seminar Hasil Pengabdian pada Masyarakat*, 130–137.
- Santoso, G., Rizal, M., Wiyana, H., & Subagja, S. N. (2025). Digitalisasi UMKM: Strategi dan model bisnis berbasis teknologi untuk keberlanjutan. *JUBISDIGI: Jurnal Bisnis Digital*, 1(1), 21–30.
- Vega, N., Natalia, N., Zai, B., Nasution, A. R., Silalahi, N. E. L., Malau, C. O., & Sibarani, A. (2025). Analisis inovasi produk lokal untuk meningkatkan daya saing UMKM di era digital. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(4), 7314–7322. <https://doi.org/10.31004/riggs.v4i4.4750>
- Weldeslassie, H. A., Vermaack, C., Kristos, K., Minwuyelet, L., Tsegay, M., Tekola, N. H., & Gidey, Y. (2019). Contributions of micro, small, and medium enterprises (MSMEs) to income generation, employment, and GDP: Case study Ethiopia. *Journal of Sustainable Development*, 12(3), 46–59. <https://doi.org/10.5539/jsd.v12n3p46>