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Integrated mentoring strategies for enhancing the digital competitiveness of MSMEs

Strategi mentoring terpadu untuk meningkatkan daya saing digital UMKM

Ismarina[1], Dini Rachmaniah[1], Dewi Anggraini[1]

[1]Department of Master of Public Health, Faculty of Health Sciences, Universitas Faletehan, Indonesia

Correspondence: Ismarina, rinaismarina77@gmail.com

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) serve as the primary engine of Indonesia's economy, yet they remain hindered by low digital literacy and traditional management practices. This community service program aimed to accelerate the digital transformation of MSMEs through a structured, participatory mentoring framework. The intervention was executed in five strategic phases: socialization, intensive training, technology implementation, monitoring and evaluation, and sustainability planning. Through this approach, MSME partners successfully integrated digital ecosystems, including e-commerce platforms (Shopee and Tokopedia), social media marketing, and digital financial management applications. The results demonstrate a significant shift in business capacity, particularly in precise production cost calculation, professional branding, and digital content creation. Post-program evaluation revealed that over 70% of participants experienced expanded market reach and increased sales volume. Sustainability is secured through the formation of "Digital Champion" groups and the integration of program outcomes into university curricula. This initiative proves that systematic assistance is vital for transitioning traditional MSMEs into the digital landscape. To foster long-term economic resilience, this model recommends cross-institutional collaboration and collective branding strategies as a blueprint for MSME empowerment in other regions.

Keywords: digitalization, e-commerce, financial management, MSMEs

ABSTRAK

Usaha Mikro, Kecil, dan Menengah (UMKM) berperan sebagai penggerak utama perekonomian Indonesia, namun masih terhambat oleh rendahnya literasi digital dan praktik manajemen tradisional. Program pengabdian masyarakat ini bertujuan untuk mempercepat transformasi digital UMKM melalui kerangka pendampingan partisipatif yang terstruktur. Intervensi dilaksanakan dalam lima fase strategis: sosialisasi, pelatihan intensif, implementasi teknologi, pemantauan dan evaluasi, serta perencanaan keberlanjutan. Melalui pendekatan ini, mitra UMKM berhasil mengintegrasikan ekosistem digital, termasuk platform e-commerce (Shopee dan Tokopedia), pemasaran media sosial, dan aplikasi manajemen keuangan digital. Hasilnya menunjukkan pergeseran signifikan dalam kapasitas bisnis, khususnya dalam perhitungan biaya produksi yang tepat, branding profesional, dan pembuatan konten digital. Evaluasi pasca-program mengungkapkan bahwa lebih dari 70% peserta mengalami perluasan jangkauan pasar dan peningkatan volume penjualan. Keberlanjutan dijamin melalui pembentukan kelompok "Juara Digital" dan integrasi hasil program ke dalam kurikulum universitas. Inisiatif ini membuktikan bahwa bantuan sistematis sangat penting untuk mentransisikan UMKM tradisional ke lanskap digital. Untuk mendorong ketahanan ekonomi jangka panjang, model ini merekomendasikan kolaborasi lintas lembaga dan strategi branding kolektif sebagai cetak biru pemberdayaan UMKM di wilayah lain.

Kata kunci: *digitalisasi, manajemen keuangan, perdagangan elektronik, UMKM*

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) represent the foundational pillar of the Indonesian economy, serving as both a primary driver of Gross Domestic Product (GDP) and a vital instrument for social welfare equity (Tambunan, 2023). Beyond their economic contribution, MSMEs act as a safety net for national resilience, particularly in absorbing a significant portion of the domestic workforce (Satpathy et al., 2024). Recognizing this strategic importance, the Indonesian government, through the Asta Cita national development vision, has prioritized enhancing MSME productivity and competitiveness (Evinita et al., 2025). This vision emphasizes an economy rooted in sovereignty and equity, positioning MSMEs as the primary engine for achieving a prosperous, globally competitive nation (Kumari, 2025).

However, the transition toward a globalized market presents significant hurdles that MSMEs must navigate to remain relevant (Susilawati, 2024). Despite their potential, many small businesses are hindered by persistent structural issues, most notably low digital literacy, restricted access to capital, and a lack of product innovation (Rujitoningtyas et al., 2024). These barriers create a competitive gap between local MSMEs and large-scale corporations or imported goods (Hardini et al., 2025). Without a fundamental shift in how these businesses operate, the disparity in market share will continue to widen, threatening the long-term sustainability of traditional business actors in an increasingly digital-centric landscape (Muchamad et al., 2026).

The urgency of this digital gap is evident in traditional trade hubs, where MSMEs—spanning the culinary and handicraft sectors—produce high-quality, culturally rich products but lack the tools to showcase them (Mulyono & Rolando, 2024). Field observations indicate that the majority of these entrepreneurs still rely heavily on conventional, face-to-face transactions at physical stalls (Cueto et al., 2022). Products with immense market potential, such as traditional bamboo handicrafts and local culinary goods, remain underutilized due to the absence of digital branding and modern marketing strategies (Pieter & Utomo, 2023). This reliance on traditional methods severely limits their reach, confining their market to local foot traffic while the broader digital economy passes them by (Yusof et al., 2025).

Through a detailed situational analysis, four critical challenges were identified that impede the growth of these MSME partners. First, there is a profound lack of technical skill in utilizing e-commerce marketplaces and social media for business (Amornkitvikai et al., 2022). Second, the absence of digital financial recording leads to unstructured management and difficulty in assessing profitability (Yuniarto & Siregar, 2025). Third, a generational gap exists in which elderly entrepreneurs lack access to tailored, hands-on mentoring in smartphone-based productivity (Silfiani et al., 2026). Finally, there is no collective synergy to establish the region as

a unified, branded digital MSME hub, leaving individual actors to struggle in isolation (Syofya & Pernanda, 2023).

To address these multifaceted issues, a systematic community service intervention centered on integrated digitalization assistance is essential. This community service program aimed to accelerate the digital transformation of MSMEs through a structured, participatory mentoring framework. This program is designed to bridge the digital divide by strengthening business management capacity, professionalizing branding, and implementing technology-based marketing frameworks (Sulaeman et al., 2024). By shifting the paradigm from conventional to digital operations, this initiative aims to empower MSMEs not only to survive but to thrive in the digital economy. Ultimately, this intervention serves as a strategic effort to transform traditional business potentials into sustainable, technology-driven enterprises that contribute to national economic resilience (Yani et al., 2025).

IMPLEMENTATION METHOD

This community service program used a systematic, participatory framework to help MSME partners transition from conventional operations to a digital-centric business model. At the core of this methodology was a participatory approach that positioned business owners as active subjects rather than passive recipients. This collaborative dynamic ensured that the technological solutions were not only technically sound but also culturally and operationally aligned with the specific needs of traditional market entrepreneurs. The program was executed through a structured five-stage intervention cycle to ensure a seamless transfer of knowledge and technology.

Stages of Implementation

The intervention commenced with Program Socialization, a foundational phase aimed at securing stakeholder buy-in and building trust. This stage involved intensive dialogues with MSME actors, community leaders, and local stakeholders to align expectations and emphasize the long-term benefits of digitalization. Following this, the Training and Knowledge Transfer phase was launched, focusing on critical competencies such as digital financial management, Cost of Goods Sold (COGS) calculation, and visual branding. To bridge the digital literacy gap, these sessions utilized "hands-on" pedagogical methods, supported by comprehensive modules and instructional video tutorials to facilitate self-paced learning.

The third stage, Technology Implementation, moved from theory to practice through a co-creation principle. In this phase, the program team worked alongside partners to activate e-

commerce accounts on platforms like Shopee and Tokopedia, establish business-oriented social media profiles, and implement simple digital bookkeeping applications. This was followed by a rigorous Mentoring and Evaluation phase, conducted through a hybrid model of offline field visits and online consultations. Progress was measured using both quantitative growth metrics and qualitative feedback, ensuring that technical hurdles were addressed in real time to maintain business momentum.

To ensure the intervention's longevity beyond the program's timeline, the final stage focused on Program Sustainability. This was achieved through the cultivation of "Digital Champions", a localized group of early adopters trained to provide peer-to-peer mentoring within the community. Furthermore, the program's outcomes were institutionalized by integrating them into university entrepreneurship curricula and formalizing them into a "Digitalization Guideline for Traditional MSMEs." This multifaceted approach ensures that the digital transformation is not a one-time event but a sustainable ecosystem that continues to evolve.

Methods and Strategies of Implementation

The implementation strategy was operationalized through three integrated pillars designed to address the core facets of business sustainability: production optimization, professionalization of management, and digital market penetration. The Production pillar focused on upgrading the tangible quality of MSME offerings by identifying essential raw materials and introducing specialized digitalization tools, including professional packaging, branding labels, and basic multimedia hardware such as mobile stabilizers and tripods. This was complemented by intensive workshops on digital product documentation, during which partners were trained in photography and videography to transform physical goods into high-conversion digital assets.

Simultaneously, the Business Management pillar sought to transition partners from intuitive to data-driven decision-making. This involved structured training in cash flow management and the precision calculation of the Cost of Goods Sold (COGS). To ensure accessibility, the program introduced user-friendly digital tools such as offline-capable Google Sheets and the BukuKas application, followed by practical simulations of monthly financial reporting and weekly strategic business planning. These activities were designed to instill a culture of financial discipline, enabling MSME actors to better manage liquidity and profitability.

Finally, the Digital Marketing pillar served as the primary vehicle for market expansion. This phase moved beyond mere account activation on marketplaces (Shopee, Tokopedia) and social media platforms (Instagram, Facebook, WhatsApp Business) to the actual cultivation of a digital presence. Partners were guided through the development of professional promotional content and the creation of structured content calendars. By mastering strategies to enhance digital

engagement and algorithmic visibility, MSME partners were equipped to compete effectively in the hyper-competitive online landscape, ensuring their products reached a broader, non-local audience.

Partner Participation

The success of this intervention was fundamentally rooted in the high level of active partner participation, which evolved from initial consultation to long-term ownership. A three-tiered participatory framework characterized this engagement. First, planning participation ensured that the program was grounded in reality; MSME partners were deeply involved in situational dialogues and in prioritizing digital needs, ensuring the intervention addressed their most pressing operational bottlenecks. Second, implementation participation was evidenced by the partners' consistent attendance in intensive training modules and their proactive role in testing new digital applications. During this phase, partners moved beyond theoretical learning to active troubleshooting and routine performance evaluations, providing critical feedback that allowed for real-time adjustments to the mentoring approach.

Finally, the commitment to sustainability participation marked the transition of the project from a university-led initiative to a community-driven movement. Partners formally agreed to establish internal task forces designated as "digital enablers." These internal teams were trained to serve as localized technical support and peer mentors, effectively de-risking the program from the cessation of formal external intervention. By fostering this sense of collective agency, the program ensured that the digital ecosystem established during the residency would continue to thrive and adapt to future technological shifts.

RESULT AND DISCUSSION

The initial phase of the community service program focused on strategic socialization to build a solid foundation of trust and shared vision among MSME actors in the Pasar Lama area of Serang City. By integrating the implementation team with local market leaders and key community figures, the socialization successfully bridged the gap between academic intervention and grassroots needs. This stage recorded exceptionally high attendance and proactive engagement during the discussion sessions, signaling a profound enthusiasm for change within the community. Beyond mere information sharing, this phase facilitated a critical cognitive shift among participants; MSME owners transitioned from viewing digitalization as a passing technological trend to recognizing it as an essential strategic imperative for survival and

competitiveness in the modern economy. This collective realization served as a vital catalyst for the successful adoption of subsequent technical interventions (Shebeen et al., 2024).

The training phase was meticulously structured into four specialized modules: digital financial management, precision Cost of Goods Sold (COGS) calculation, professional product branding, and integrated digital marketing for e-commerce. Post-training evaluations indicated a significant mastery of these competencies, as participants successfully transitioned from theoretical understanding to practical application. Specifically, food and beverage (F&B) practitioners achieved a marked increase in financial accuracy in COGS determination, thereby ensuring more sustainable profit margins. Simultaneously, entrepreneurs in the fashion sector demonstrated enhanced creative skills, producing high-quality visual content that aligned with contemporary branding standards. The inclusion of interactive training modules and video tutorials proved a critical success factor; these resources not only facilitated initial learning but also empowered partners to achieve independent, self-paced mastery of digital tools (Shebeen et al., 2024).

The technology implementation phase facilitated a tangible shift in the MSMEs' operational landscape, as partners transitioned from conventional sales to integrated digital ecosystems. A significant majority of participants successfully established verified accounts on major e-marketplaces, including Shopee and Tokopedia, while optimizing business-oriented social media channels for customer engagement. The immediate impact of this digital migration was evidenced by the influx of online orders via WhatsApp Business and e-commerce platforms, providing partners with real-time proof of market expansion. Furthermore, adopting digital bookkeeping via the BukuKas application revolutionized their internal management, replacing fragmented manual notes with a systematic, real-time financial tracking system. These results underscore a fundamental transformation in business orientation, demonstrating that the strategic adoption of e-commerce platforms offers Indonesian MSMEs substantial opportunities for scalable growth (Yacob et al., 2023).

The mentoring process was designed as a bespoke support system, utilizing a hybrid model of periodic offline field visits and responsive online consultations to address the unique operational nuances of each business. This personalized approach ensured that the theoretical knowledge gained in training was effectively translated into daily business routines. Evaluation metrics revealed a significant surge in digital proficiency, with over 70% of participants reporting measurable business growth, characterized by increased sales volume and broader market reach. Tangible evidence of this transformation was further validated by visual documentation showcasing professionalized product packaging, cohesive branding, and a sophisticated social

media presence. These findings highlight that consistent mentoring and rigorous evaluation are the linchpins of success, ensuring that digitalization initiatives move beyond temporary adoption toward long-term institutional sustainability (Raihan, 2024).

Table 1. Implementation of the Integrated Digital Mentoring Program and Its Achievements

Program Stages	Activities Conducted	Results and Achievements
Program Socialization	Community discussions, stakeholder engagement, identification of MSME needs, and introduction to digital business transformation.	Increased awareness of digitalization, active participation of MSME owners, and stronger commitment to adopting digital business practices.
Training and Knowledge Transfer	Practical training in digital financial management, Cost of Goods Sold (COGS) calculation, product branding, and digital marketing.	Improved financial management skills, more accurate production cost calculations, and enhanced ability to develop professional promotional content.
Technology Implementation	Assistance in creating Shopee and Tokopedia accounts, optimizing social media platforms, and implementing digital bookkeeping applications.	Adoption of e-commerce platforms, improved digital business presence, increased opportunities for online transactions, and more systematic financial recording.
Mentoring and Evaluation	Continuous technical assistance through field visits, online consultations, business monitoring, and evaluation of digital adoption.	More than 70% of participants reported business growth, particularly increased sales volume and expanded market reach.
Program Sustainability	Establishment of Digital Champion groups, peer-to-peer mentoring, and integration of program outcomes into university entrepreneurship curricula.	Development of community-based technical support networks and mechanisms to sustain digital transformation beyond the program period.

A defining feature of this initiative was its shift from a project-based intervention to a self-sustaining ecosystem. This was primarily achieved through the cultivation of "Digital Champions", a localized cohort of early adopters within the Pasar Lama community trained to facilitate peer-to-peer knowledge sharing. By establishing this internal support network, the program ensures that the momentum of digital transformation remains resilient against future technological shifts. Furthermore, the commitment to institutionalizing this experience by integrating the program's outputs into the university's entrepreneurship and MSME digitalization curricula ensures a continuous feedback loop between academic theory and community practice. This dual approach

of strengthening both human and institutional capital serves as a vital blueprint for ensuring sustainable economic transformation through community-led entrepreneurship (Sutomo, 2024).

Table 2. Outcomes of Digital Mentoring on MSME Business Capacity and Competitiveness

Evaluation Aspects	Initial Conditions	Outcomes After Mentoring	Reported Indicators of Achievement
Digital Literacy	Limited knowledge and practical skills in utilizing digital technologies for business activities.	Improved understanding and practical application of digital business tools.	Participants demonstrated the ability to operate digital platforms and apply technology in business activities.
Financial Management	Conventional bookkeeping practices and limited accuracy in calculating production costs.	Improved financial recording practices and more accurate Cost of Goods Sold (COGS) calculations.	Adoption of digital bookkeeping tools and improved financial management practices.
Product Branding	Limited product promotion and insufficient development of professional branding materials.	Improved product presentation, packaging, and promotional content development.	Development of more professional branding materials and digital promotional content.
Digital Marketing	Marketing activities primarily depended on conventional transactions and local customers.	Increased utilization of e-commerce platforms and social media marketing channels.	Activation of marketplace accounts and increased online customer engagement.
Market Reach and Sales	Business activities were largely concentrated within local markets.	Expanded market accessibility and increased sales opportunities through digital platforms.	More than 70% of participants reported increased sales volume and broader market reach.
Business Sustainability	Limited access to continuous technical assistance and collaborative digital business networks.	Establishment of peer-support mechanisms to facilitate continued digital adoption.	Formation of Digital Champion groups and integration of program outcomes into academic programs.

The digitalization assistance program yielded a multifaceted impact, fundamentally enhancing the digital literacy and operational maturity of the MSME partners. A cornerstone of this success was the transition to digital financial recording systems, which empowered entrepreneurs with the transparency and data-driven insights necessary for informed decision-making. Beyond management, the intervention significantly increased the community's creative

capital; the implementation of sophisticated branding and digital marketing strategies directly enhanced the competitiveness of local products within the broader creative economy (Lubis et al., 2025).

The establishment of peer networks through Digital Champion groups has fostered a new culture of collaboration, accelerating the adoption of innovation across different business sectors (Bosua & Evans, 2024). From an academic perspective, the program's success was formalized by preparing a manuscript for a nationally accredited journal, contributing to the body of knowledge on digital literacy as a foundation for MSME resilience. Collectively, these outcomes demonstrate that the program exceeded its primary objectives, creating a ripple effect of empowerment, academic contribution, and public dissemination. These findings underscore the urgent need to replicate this integrated mentoring model in other traditional markets to support Indonesia's national agenda of inclusive digital transformation (Saiful et al., 2025).

CONCLUSION AND SUGGESTIONS

The community service program in Pasar Lama, Serang City, successfully demonstrated that a structured, participatory digitalization framework is a powerful catalyst for enhancing the economic resilience of traditional MSMEs. By integrating intensive training in financial management, professional branding, and e-commerce adoption, the intervention facilitated a critical shift from conventional business models to technology-driven operations, resulting in expanded market reach and professionalized management for over 70% of participants. The program's sustainability is underpinned by the creation of "Digital Champion" peer-networks and the institutionalization of outcomes into university curricula, ensuring a lasting impact beyond the formal intervention period. To build upon these achievements, it is recommended that this model be replicated across other traditional market hubs, supported by a "triple-helix" collaboration between academia, government, and the private sector to provide more robust financial and infrastructural support. Furthermore, future initiatives should prioritize collective branding strategies and sustained mentoring to accelerate Indonesia's vision of a globally competitive, digitally inclusive economy.

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REFERENCES

Amornkitvikai, Y., Tham, S. Y., Harvie, C., & Buachoom, W. W. (2021). Barriers and factors affecting the e-commerce sustainability of Thai micro-, small- and medium-sized enterprises (MSMEs). *Sustainability*, *14*(14), 8476. https://doi.org/10.3390/su14148476

Bosua, R., & Evans, N. (2024). Going digital: Developing social capital through online social networks in regional SMEs—An Australian study. *Knowledge and Process Management*, *31*(1), 69–80. https://doi.org/10.1002/kpm.1765

Cueto, L. J., Frisnedi, A. F., Collera, R. B., Batac, K. I., & Agaton, C. B. (2022). Digital innovations in MSMEs during economic disruptions: Experiences and challenges of young entrepreneurs. *Administrative Sciences*, *12*(1), Article 8. https://doi.org/10.3390/admsci12010008

Evinita, L. L., Tangkau, J. E., Pesak, P. J., & Cahyono, S. (2025). Policy framework to improve MSME competitiveness and financial performance with Indonesia's Asta Cita vision goals. *Journal of Risk and Financial Management*, *18*(12), Article 692. https://doi.org/10.3390/jrfm18120692

Hardini, H. T., Subroto, W. T., & Sakti, N. C. (2025). A systematic literature review: The impact of imported products on the competitiveness of MSMEs in Indonesia. *Economics and Business Journal (ECBIS)*, *3*(2), 195–206. https://doi.org/10.47353/ecbis.v3i2.182

Kumari, N. (2025). Empowering progress: The pivotal role of MSMEs in sustainable global development. *International Journal of Multidisciplinary and Current Research*, *13*(2), 100–105. https://doi.org/10.14741/ijmcr/v.13.2.1

Lubis, U. S., Wulandari, N., Wahyudi, I., Widiyanto, A., Wibowo, E. A., Hakim, L., Apriyansyah, B., Hardiati, N., Swastika, A. Y., & Meyzia, B. (2025). Digital marketing strategies in expanding the market for MSME creative products in Indonesia—State of art. *Frontiers in Communication*, *10*, Article 1647391. https://doi.org/10.3389/fcomm.2025.1647391

Muchamad, W., Hurriyati, R., & Dirgantari, P. D. (2026). Driving sustainable competitiveness through holistic marketing and ESG: An empirical study on MSMEs in Sukabumi Regency, Indonesia. *Sinergi International Journal of Management and Business*, *4*(1), 1–7. https://doi.org/10.61194/ijmb.v4i1.913

Mulyono, H., & Rolando, B. (2024). Savoring the success: Cultivating innovation and creativity for Indonesian culinary MSMEs growth. *Economics and Business Journal (ECBIS)*, *2*(4), 413–428. https://doi.org/10.47353/ecbis.v2i4.142

Pieter, L. A. G., & Utomo, M. M. B. (2023). Performance and development challenges of micro–small bamboo enterprises in Gunungkidul, Indonesia. *Advances in Bamboo Science*, *4*, Article 100037. https://doi.org/10.1016/j.bamboo.2023.100037

Raihan, A. (2024). A review of the digitalization of the small and medium enterprises (SMEs) toward sustainability. *Global Sustainability Research*, *3*(2), 1–16. https://doi.org/10.56556/gssr.v3i2.695

Rujitoningtyas, C. N., Nugraha, E. R., Laksana, H. D., Apriyanto, Y., & Dewi, N. G. (2024). Enhancing digital literacy for business development in micro, small, and medium enterprises (MSMEs) through banking initiatives at the rural level in Indonesia. *Jurnal Akuntansi dan Bisnis*, *10*(02), 122–132. https://doi.org/10.47686/jab.v10i02.735

Saiful, S., Nugraha, T., Wahyudi, W., & Napitupulu, S. (2025). Strategic foresight and digital transformation: Enhancing the resilience and sustainability of Indonesian MSMEs. *Preprints*. https://doi.org/10.20944/preprints202505.1168.v1

Satpathy, A. S., Sahoo, S. K., Mohanty, A., & Mohanty, P. P. (2024). Strategies for enhancements of MSME resilience and sustainability in the post-COVID-19 era. *Social Sciences & Humanities Open*, *11*, Article 101223. https://doi.org/10.1016/j.ssaho.2024.101223

Shebeen, T. M., Shanthi, R., & Mathiyarasan, M. (2024). Navigating Industry 4.0: Skill development strategies for empowering MSMEs in the digital age. In *Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations: Volume 2* (pp. 453–462). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-63402-4_38

Silfiani, M., Fitria, I., Irawan, H., Padli, R., Sari, D. L., Annisa, N., … Patricia, M. (2026). Empowering local MSMEs through branding, product design, and digital marketing: A community engagement program at Pringgondani Market, Balikpapan. *Jurnal Pengabdian UNDIKMA*, *7*(1), 14–24. https://doi.org/10.33394/jpu.v7i1.18166

Sulaeman, M. M., Parwati, A. S., Saputra, M. S. A., Pinatih, R., & Abidin, K. (2024). Strategies for improving the MSME economy through the implementation of technology-based business management. *Technology and Society Perspectives (TACIT)*, *2*(2), 218–224. https://doi.org/10.61100/tacit.v2i2.193

Susilawati, M. (2024). Entrepreneurial resilience: Strategies for MSMEs to navigate uncertainties and challenges in contemporary markets. *International Journal of Business, Law, and Education*, *5*(2), 1687–1695. https://doi.org/10.56442/ijble.v5i2.661

Sutomo, D. A. (2024). Community-led economic resilience: Fostering SME growth through financial education. *Golden Ratio of Data in Summary*, *4*(2), 361–371. https://doi.org/10.52970/grdis.v4i2.657

Syofya, H., & Pernanda, N. D. (2023). Collaboration between the regional government, local MSMEs, and local influencers in maximizing Jambi's economic potential. *Jurnal Teknologi dan Manajemen Industri Terapan*, *2*(3), 2130–2133. https://doi.org/10.55826/jtmit.v4i3.1461

Tambunan, T. T. (2023). The potential role of MSMEs in achieving SDGs in Indonesia. In *Role of Micro, Small and Medium Enterprises in Achieving SDGs: Perspectives from Emerging Economies* (pp. 39–72). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-4829-1_3

Yacob, S., Sulistiyo, U., Marzal, J., Siregar, A. P., & Mukminin, A. (2023). An investigation of entrepreneurial orientation, social media adoption and e-commerce on MSME business performance: An empirical study in Indonesia. *Revista Galega de Economía*, *32*(3), 1–24. https://doi.org/10.15304/rge.32.3.9001

Yani, A., Manafe, M. W. N., & Santosa, S. (2025). Analysis of the role of digital technology in driving business model innovation in MSMEs: Implications for enhancing operational efficiency and sustainable economic growth. *Technology and Society Perspectives (TACIT)*, *3*(1), 306–313. https://doi.org/10.61100/tacit.v3i1.253

Yuniarto, A. A., & Siregar, I. W. (2025). From manual to digital: Modernizing the sales recording system for growth at MSME Rumah Abon. *Journal of Scientific Insights*, *2*(5), 510–525. https://doi.org/10.69930/jsi.v2i5.537

Yusof, M. S. B., Razak, N. A., & Fauzi, N. (2025). Empowering small and medium enterprises in Terengganu through technological learning and innovation for economic growth. *Veredas do Direito*, *22*, Article e224108. https://doi.org/10.18623/rvd.v22.n7.4108