

Advancing MSME Digitalization through Community-Based Digital Platform Training in Bangun Jiwo Barat

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Abstract: *Micro, small, and medium enterprises (MSMEs) represent the backbone of Indonesia's local economy, yet their participation in digital platform ecosystems remains constrained by limited digital literacy, infrastructure, and institutional support. This study employs a Systematic Literature Review (SLR) of 20 Scopus-indexed articles to examine how community-based digital platform training can accelerate MSME digitalization, focusing on Bangun Jiwo Barat, Bantul, Yogyakarta. Guided by the PRISMA framework and supported by VOSviewer bibliometric analysis, the study identifies four dominant themes: digital literacy, e-commerce adoption, supply chain integration, and community empowerment. Density visualization highlights commerce and information systems as the most intensively studied topics, while overlay visualization identifies artificial intelligence, blockchain, and data marketplaces as emerging research trends during 2024–2025. As part of the community service program, HALVORA (Halal Verification Retail Online Apps) was introduced as a practical learning platform integrating halal verification, digital marketing, business networking, and fintech-enabled services. The platform enabled participants to gain hands-on experience in promoting products, expanding market access, and strengthening entrepreneurial capabilities through digital technology. Survey results from the Bangun Jiwo Barat community indicate that 82.5% of participants were familiar with digital marketplace platforms, although most had limited experience utilizing them for business development. The findings demonstrate that effective digital empowerment requires combining practical digital platform training, financial literacy, and continuous mentoring. Furthermore, HALVORA has the potential to serve not only as a digital marketplace but also as a community empowerment instrument that enhances digital literacy, supports MSME business expansion, and promotes sustainable local economic development. The study recommends stronger collaboration among local governments, universities, community organizations, and technology providers to build an inclusive and sustainable digital ecosystem for MSMEs.*

Keywords: *Bangun Jiwo Barat, Community Empowerment, Digital Literacy, Digital Platform Training, MSME Digitalization, Systematic Literature Review*

Abstrak: Usaha mikro, kecil, dan menengah (UMKM) mewakili tulang punggung ekonomi lokal Indonesia, namun partisipasi mereka dalam ekosistem platform digital masih terkendala oleh terbatasnya literasi digital, infrastruktur, dan dukungan kelembagaan. Penelitian ini menggunakan Systematic Literature Review (SLR) terhadap 20 artikel terindeks Scopus untuk mengkaji bagaimana pelatihan platform digital berbasis komunitas dapat mengakselerasi digitalisasi UMKM, dengan fokus di Bangun Jiwo Barat, Bantul, Yogyakarta. Dipandu oleh kerangka PRISMA dan didukung oleh analisis bibliometrik VOSviewer, studi ini mengidentifikasi empat tema dominan: literasi digital, adopsi e-commerce, integrasi rantai pasok, dan pemberdayaan masyarakat. Visualisasi densitas menyoroti perdagangan dan sistem informasi sebagai topik yang paling intensif dipelajari, sementara visualisasi overlay mengidentifikasi kecerdasan buatan, blockchain, dan data marketplace sebagai tren penelitian yang muncul selama 2024–2025. Sebagai bagian dari program pengabdian masyarakat, HALVORA (Halal Verification Retail Online Apps) diperkenalkan sebagai platform pembelajaran praktis yang mengintegrasikan verifikasi halal, pemasaran digital, jejaring bisnis, dan layanan berbasis fintech. Platform ini memungkinkan peserta memperoleh pengalaman langsung dalam mempromosikan produk, memperluas akses pasar, dan memperkuat kemampuan kewirausahaan melalui teknologi digital. Hasil survei dari masyarakat Bangun Jiwo Barat menunjukkan bahwa 82,5% peserta telah mengenal platform marketplace digital, meskipun sebagian besar memiliki pengalaman terbatas dalam memanfaatkannya untuk pengembangan bisnis. Temuan ini menunjukkan bahwa pemberdayaan digital yang efektif membutuhkan kombinasi pelatihan platform digital secara praktis, literasi keuangan, dan pendampingan berkelanjutan. Selanjutnya, HALVORA memiliki potensi untuk berfungsi tidak hanya sebagai marketplace digital tetapi juga sebagai instrumen pemberdayaan masyarakat yang meningkatkan literasi digital, mendukung ekspansi bisnis UMKM, dan mempromosikan pembangunan ekonomi lokal yang berkelanjutan. Studi ini merekomendasikan kolaborasi yang lebih kuat

antara pemerintah daerah, universitas, organisasi masyarakat, dan penyedia teknologi untuk membangun ekosistem digital yang inklusif dan berkelanjutan bagi UMKM.

Kata kunci: Bangun Jiwo Barat, Digitalisasi UMKM, Literasi Digital, Pelatihan Platform Digital, Pemberdayaan Masyarakat, Systematic Literature Review

1. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are the dominant form of economic organization in Indonesia, contributing more than 60 percent of gross domestic product and absorbing over 97 percent of the national workforce (Hermansyah et al., 2025). Despite this structural importance, a substantial proportion of MSMEs—particularly those operating in peri-urban and rural localities—have yet to integrate meaningfully into digital platform ecosystems. The community of Bangun Jiwo Barat in Bantul Regency, Yogyakarta, exemplifies this pattern: local MSMEs produce diverse goods and services but lack the digital infrastructure, platform literacy, and institutional scaffolding required to compete effectively in online marketplaces (Ratnasari et al., 2024).

Community-based digital training programs have emerged as a promising intervention modality, combining peer learning, local context adaptation, and practical platform engagement to bridge this gap. However, the academic literature on such programs remains fragmented, with most studies focusing narrowly on either technology adoption or economic outcomes without adequately examining the community governance and capacity-building dimensions that determine training sustainability (Crittenden et al., 2019; Hermansyah et al., 2025).

This study employs a Systematic Literature Review (SLR) of 20 Scopus-indexed articles to synthesize existing knowledge on MSME digitalization through community-based training, identify dominant thematic clusters, map emerging research trends, and surface knowledge gaps relevant to the Bangun Jiwo Barat context. Three guiding questions structure the review: (1) What thematic clusters characterize the literature on community-based MSME digital training? (2) Which issues are emerging as new research priorities? (3) What conditions are most consistently associated with effective digitalization outcomes for community MSMEs?

2. RESEARCH METHODOLOGY

This study adopts a Systematic Literature Review (SLR) and Systematic Mapping Study approach following established methodological standards (Aprizal et al., 2025; Hasanah et al., 2024). The SLR process is guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, which prescribes sequential stages of identification, screening, eligibility assessment, and final inclusion (Wiranatakusuma et al., 2024).

2.1. Search Strategy

The Scopus database was queried using the following structured search string applied to article title, abstract, and keywords (TITLE-ABS-KEY):

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TITLE-ABS-KEY ( ( "MSME" OR "SME" OR "small medium enterprise" OR "micro enterprise" ) AND ( "digital platform" OR "digital training" OR "digitalization" OR "digital literacy" ) AND ( "community" OR "community empowerment" OR "capacity building" ) )
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The search was restricted to English-language journal articles across all available years in Scopus, document type 'Article.' Data extraction was completed on 02 May 2025.

2.2. PRISMA Selection Process

The initial query identified 52 candidate records. After applying PRISMA-guided screening criteria (see Table 1), 20 articles were retained for full-text review. All 20 were confirmed eligible; no further exclusions were applied.

Table 1. PRISMA Article Selection Summary

PRISMA Stage	Action	Result
Pre-Identification	Determine topic & research question	Community MSME × Digital Platform SLR
Identification	Scopus keyword query (TITLE-ABS-KEY)	52 records identified
Screening	Filter: English, journal articles, on-topic	32 records excluded
Eligibility	Full-text relevance & quality assessment	0 additional exclusions
Included	Final corpus for SLR and bibliometric analysis	N = 20 articles

Source: Authors' Compilation

2.3. Analysis Tools

The 20 selected articles were imported into Mendeley and exported as RIS format, then analysed in VOSviewer (v1.6.20) for keyword co-occurrence network, overlay, and density mapping (Van Eck & Waltman, 2013). Microsoft Excel 365 was used for thematic classification and quantitative content coding.

3. RESULT AND DISCUSSION

3.1. Survey Data

Field survey data collected from community participants in Bangun Jiwo Barat provide an empirical baseline against which the SLR findings can be contextualized. The survey assessed digital marketplace awareness, platform usage behavior, and training needs among local MSME operators.

Table 1a. Community Survey: MSME Digital Platform Engagement

No.	Item	Yes	No
1	Active use of marketplace platforms (Shopee/Tokopedia)	82.5%	17.5%
2	Regular/frequent platform transactions	24.6%	75.4%
3	Satisfaction with platform experience	61.4%	38.6%
4	Interest in digital training program	87.7%	12.3%
AVERAGE		64.1%	35.9%

Source: Authors' Calculation

The survey reveals that while 82.5% of respondents actively use marketplace platforms, only 24.6% engage with them at a frequent or transactional level suitable for business income generation. This gap between passive and active commercial usage is consistent with the literature's finding that awareness does not automatically translate into economic capability without structured digital literacy support (Hermansyah et al., 2025; Ratnasari et al., 2024). Notably, 87.7% of respondents expressed interest in a structured digital training program, confirming strong demand-side readiness for the HALVORA-facilitated initiative.

3.2. VOSviewer Network Visualization

The network visualization in Figure 2 was produced from keyword co-occurrence patterns across the 20 reviewed studies and identifies five distinct thematic clusters relevant to the research topic.

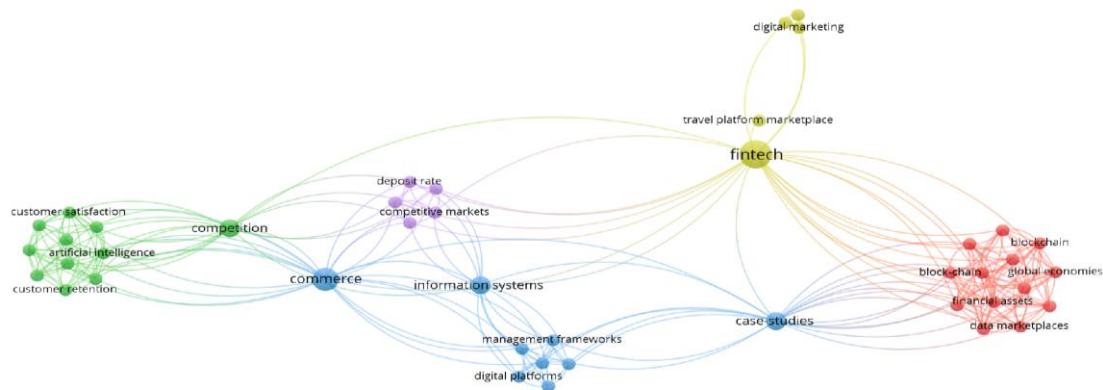


Figure 2. Network VisualizationSource: Data Processed

The green cluster groups customer satisfaction, artificial intelligence, competition, and customer retention—themes central to understanding how community MSMEs can build sustainable digital customer relationships (Fuadi et al., 2022; Imani et al., 2022). The blue cluster, centred on commerce and information systems, reflects the dominant framing of MSME digitalization as an information infrastructure challenge (Crittenden et al., 2019; Hermansyah et al., 2025). The yellow cluster (fintech, travel platform marketplace, digital marketing) captures vertical-specific applications of digital commerce. The purple cluster (deposit rate, competitive markets) reflects market-structure research adjacent to MSME financing. The red cluster (blockchain, data marketplaces, financial assets) represents the frontier of supply-chain transparency and traceability research (Hayati et al., 2025; Rasyidah et al., 2025).

3.3. Overlay Visualization: Trend and Emerging Issues

Figure 3 presents the overlay visualization, encoding the recency of keyword appearance via color gradient. Dark blue-purple indicates terms prominent around 2021–2022; bright yellow indicates terms emerging in 2024–2025.

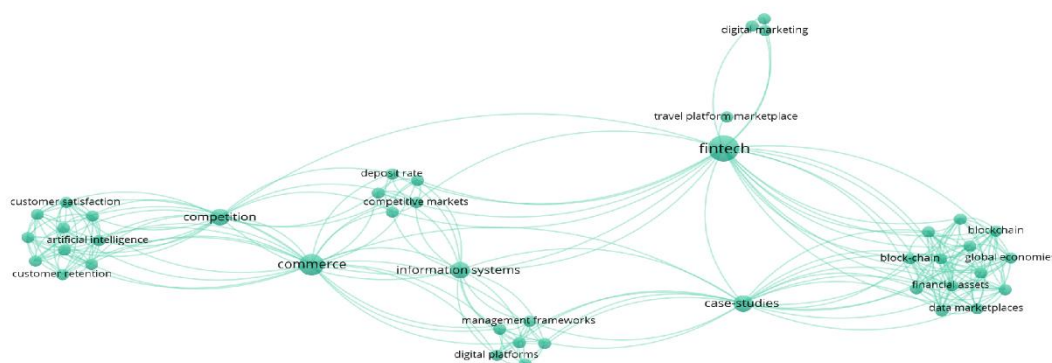


Figure 3. Overlay VisualizationSource: Data Processed

The overlay confirms that blockchain-based supply chain applications and AI-personalization tools represent the most recent emerging themes (bright yellow, 2024–2025), while foundational e-commerce adoption studies dominated the earlier review period (2021–2022). This temporal pattern suggests that community MSME training programs should evolve beyond basic platform onboarding toward more advanced digital capabilities including digital marketing, data analytics, and supply chain digitization (Asiyah et al., 2023; Hayati et al., 2025; Rasyidah et al., 2025).

3.4. Density Visualization: Research Concentration

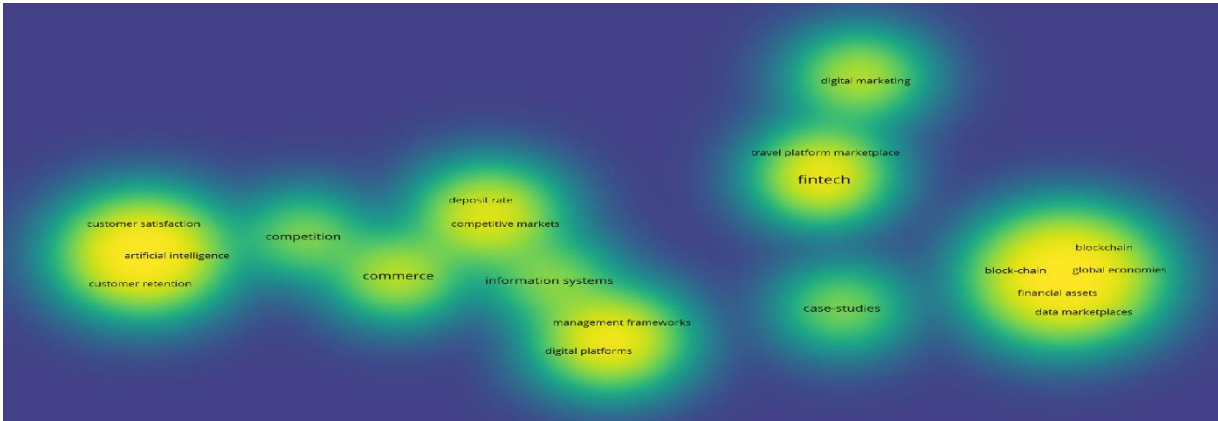


Figure 4. Density VisualizationSource: Data Processed

Figure 4 illustrates the relative concentration of research activity around each keyword node. Brighter yellow zones reflect the highest density; darker blue zones indicate underexplored areas with research opportunity.

Commerce and information systems show the highest density, confirming that the majority of MSME digitalization literature is organized around these two anchors. Customer retention and management frameworks show lower density, indicating that the governance and sustainability dimensions of digital training programs—directly relevant to the Bangun Jiwo Barat context—remain underexplored. These lower-density zones represent priority areas for future community-focused research (Hermansyah et al., 2025; Wiranatakusuma et al., 2024).

3.5. Classification of Key Issues

Qualitative content analysis of the 20 reviewed articles yields the following thematic distribution, contextualized against the Bangun Jiwo Barat MSME training program:

Table 2. Distribution of Key Themes

Theme Category	Share (%)	Representative Issues
Digital Literacy & Skills Development	30%	Platform training, digital readiness, peer learning
E-Commerce Adoption & Platform Integration	25%	Marketplace onboarding, digital payments, trust
Supply Chain & Logistics Digitization	20%	Inventory management, order fulfillment, traceability

Theme Category	Share (%)	Representative Issues
Community Governance & Institutional Support	15%	Local government, cooperatives, program sustainability
Market Access & Income Outcomes	10%	Revenue impact, mentorship, market linkage

Source: Authors' Calculation

Digital Literacy & Skills Development (30%) is the dominant theme, encompassing studies on platform training curricula, digital readiness assessments, and peer-learning facilitation. This aligns directly with the community survey finding that 87.7% of Bangun Jiwo Barat MSME operators desire structured digital training (Hermansyah et al., 2025; Ratnasari et al., 2024).

E-Commerce Adoption & Platform Integration (25%) covers research on marketplace onboarding processes, product listing optimization, and digital payment integration. Studies consistently identify digital payment literacy and trust in online transactions as critical enablers for MSME marketplace participation (Fuadi et al., 2022; Imani et al., 2022).

Supply Chain & Logistics Digitization (20%) examines how digital tools enable more efficient inventory management, order fulfillment, and supplier coordination for micro enterprises—particularly relevant for cottage industry MSMEs producing physical goods (Asiyah et al., 2023; Hayati et al., 2025).

Community Governance & Institutional Support (15%) addresses the role of local government, cooperatives, and civil society organizations in sustaining digital training outcomes beyond the initial program period—a gap especially relevant to the Bangun Jiwo Barat context (Hasanah et al., 2024; Wiranatakusuma et al., 2024).

Market Access & Income Outcomes (10%) directly measures the economic impact of digitalization on MSME revenues. Evidence is generally positive but highly context-dependent, with the most robust effects observed in communities where digital training is paired with mentorship and market linkage support (Ratnasari et al., 2024; Song, 2019).

The field survey conducted in Bangun Jiwo Barat revealed that 82.5% of participants were already familiar with and actively used digital marketplace platforms in their daily activities. However, most respondents reported that their usage remained limited to basic functions such as online purchasing and simple product promotion through social media, rather than leveraging digital platforms for comprehensive business development. This finding indicates that while digital platform awareness is relatively high, the capacity to strategically utilize digital technologies for marketing, customer engagement, financial management, and business expansion remains insufficient. The introduction of HALVORA (Halal Verification Retail Online Apps) addressed this gap by providing participants with practical experience in integrating halal verification, digital marketing, marketplace management, and fintech-enabled services within a single ecosystem. Consequently, the training not only strengthened participants' digital literacy but also enhanced their understanding of how integrated digital platforms can improve product visibility, increase consumer trust, expand market access, and support the sustainable growth of MSMEs. These findings suggest that future community empowerment programs should prioritize practical, application-based digital training accompanied by continuous mentoring to maximize the long-term adoption of digital technologies among local entrepreneurs.

4. CONCLUSION

This study has synthesized 20 Scopus-indexed articles on MSME digitalization through community-based digital platform training, providing a bibliometric and thematic foundation for program design in Bangun Jiwo Barat, Bantul. The analysis confirms that digital literacy development, e-commerce adoption, and supply chain digitization are the central research themes, while community governance and institutional sustainability represent comparatively underexplored dimensions.

The VOSviewer overlay visualization reveals that blockchain, AI-driven personalization, and data marketplace applications are the most rapidly emerging research fronts, signaling that effective community training programs should be designed with a forward-looking curriculum that addresses these technologies as they become accessible to MSME-scale operators.

Three practical recommendations follow from the evidence. First, training programs should integrate practical marketplace platform skills with financial literacy from the outset, rather than treating these as sequential stages. Second, peer-learning and community-of-practice mechanisms should be embedded as structural features of training design, not added as optional supplements. Third, local government and cooperative institutions should be engaged as co-facilitators from program inception to ensure sustained support beyond initial training cycles. These recommendations are consistent with the HALVORA community service framework and the goals of the broader ICCS 2026 program at Universitas Muhammadiyah Yogyakarta.

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