

Financial-Management-Based Development Strategy for Micro, Small, and Medium Enterprises to Support Sustainable Economic Development

Zulhelmi^{1*}, Harfandi², Era Sonita³, Muhammad Zaidan Hakiki⁴

^{1,2,3,4}Faculty of Economics and Business, Universitas Islam Negeri Sjech M. Djamil Djambek Bukittinggi, Bukittinggi, 26181, Indonesia

ABSTRACT

Purpose – This study formulates a financial-management-based development strategy for Micro, Small, and Medium Enterprises (MSMEs) to support sustainable economic development in Indonesia.

Design/methodology/approach – The study adopts a qualitative descriptive design grounded in the resource-based view, dynamic-capabilities theory, and financial capability theory. Secondary data and documentary evidence were analyzed through a structured, dual-coded extraction protocol and a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis comprising Internal Factor Evaluation (IFE), External Factor Evaluation (EFE), a TOWS matrix, and a weighted scoring procedure for ranking alternative strategies.

Finding/Results – With weaknesses and threats reverse-coded from severity ratings, the IFE (2.62) and EFE (2.58) scores indicate moderately favorable internal capabilities and external conditions, consistent with positive net internal (0.24) and external (0.15) positions that place the sector in Quadrant I. Of the four alternatives, the Strength–Opportunity (SO) strategy scored highest (3.73) and emerges as the priority strategic hypothesis, pending validation through Delphi or Analytic Hierarchy Process (AHP) procedures. The strategy is operationalized through ten interrelated actions spanning financing expansion, financial-management coaching, production and marketing capacity building, bookkeeping support, and financial-reporting oversight, each mapped to its supporting SWOT factors, implementation actors, and monitoring indicators.

Originality/Value – The study offers a theoretically grounded, financial-management-centered strategic framework whose underlying logic is transferable to other emerging-market MSME contexts. It provides guidance for financial institutions, MSME support agencies, and policymakers seeking to strengthen MSMEs as a pillar of inclusive and sustainable growth.

ARTICLE INFO

Keywords:

Development Strategy;
Financial Management;
MSMEs;
Sustainable Economic
Development;
SWOT Analysis.

Article Information:

Received: 11/06/2026
Revise: 15/08/2026
Accepted: 13/09/2026

ISSN:

2985-3168 (Online)
2985-3222 (Print)

*Corresponding Author at:

Faculty of Economics and Business, State Islamic University Sjech M. Djamil Djambek Bukittinggi, Bukittinggi, Indonesia.

E-mail addresses: zulhelmi@uinbukittinggi.ac.id

The work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)



1. Introduction

Access to capital remains the most persistent constraint on the growth of micro, small, and medium enterprises (MSMEs) in Indonesia, and much of that capital still comes from external sources, chiefly the banking sector. Table 1 summarizes the growth of bank credit and financing channeled to MSMEs between 2020 and 2024.

Table 1. Growth of Bank Credit/Financing for MSMEs, 2020–2024

Year	Credit/Financing Disbursed (IDR billion)	Annual Change (%)
2020	1,088,332	–
2021	1,221,015	12.2
2022	1,348,813	10.5
2023	1,457,132	8.0
2024	1,500,000	3.0

Source: Statistik Perbankan Indonesia [Indonesia Banking Statistics], Financial Services Authority (OJK, 2024).

The nominal value of credit disbursed to MSMEs rose every year, but its growth rate moved in the opposite direction, falling from 12.2 percent in 2021 to 10.5 percent in 2022, 8.0 percent in 2023, and just 3.0 percent in 2024. Rising nominal totals combined with a declining growth rate signal that credit expansion to MSMEs is losing momentum, which constrains enterprises' capacity to grow. Before extending financing, banks assess prospective MSME borrowers chiefly on their financial condition, typically through liquidity, profitability, and solvency ratios, and regulatory and institutional constraints continue to complicate this assessment even where digital and Islamic financing channels exist (Saifurrahman & Kassim, 2024). Yet MSME financial reporting in Indonesia is often too weak to support such assessment, for five recurring reasons documented in the literature:

- Many owners lack accounting training, leaving them unable to prepare statements that meet accepted standards and complicating financing decisions (Widagdo & Sa'diyah, 2023).
- Personal and business finances are frequently commingled, obscuring the enterprise's actual financial performance (Mulyadi et al., 2024).
- Bookkeeping, where it exists at all, is often unstructured or purely manual, increasing the likelihood of reporting errors (Sardjono et al., 2025).
- Cash flow is managed reactively rather than planned, leaving owners unable to anticipate inflows and outflows with any precision (Hasanah et al., 2025).
- Financial statements, on the whole, rarely conform to applicable accounting standards, which undermines their credibility with lenders (Perdana et al., 2024).

These weaknesses extend beyond financing access to the broader goal of sustainable economic development. Limited understanding of financial management makes it difficult for MSMEs to track cash flow, calculate profit and loss, or manage working capital, which weakens long-term planning and resilience to economic shocks (Ratnawati et al., 2024). Because MSMEs are

a major source of local employment, disorganized financial management also dampens job creation and inclusive growth (Nugraheni et al., 2026), and enterprises preoccupied with day-to-day survival rarely invest in staff training, digitalization, or product diversification, which erodes their competitiveness (Choudhari et al., 2025). Stronger managerial capacity and financial literacy are therefore needed if MSMEs are to meet banking standards and integrate more fully into the formal economy.

Digitalization is reshaping this picture without yet resolving it. Financial technology (fintech) has been shown to narrow the financing gap facing informal MSMEs in Indonesia by broadening access through microfinance institutions and cooperative networks (Rahayu et al., 2023), and digitally recorded financial data is increasingly treated as the foundation for innovative and sustainable MSME growth (Sardjono et al., 2025). Even so, evidence from Islamic banking and microfinance institutions shows that regulatory and institutional barriers continue to constrain MSME financial inclusion regardless of the digital channels available (Saifurrahman & Kassim, 2024; Septianingsih et al., 2024), while the performance of public credit guarantee schemes depends heavily on how they are structured and administered across regions (Tambunan, 2018). Digital and institutional innovation, in other words, complements rather than substitutes for stronger financial management at the enterprise level.

These weaknesses are not unique to Indonesia. Comparative evidence from South Africa shows that limited use of formal financial-management practices constrains MSME performance in much the same way (Brijlal et al., 2014), while studies of agricultural MSMEs in Tanzania and of MSMEs in the Philippines link weak financial-management and working-capital practices to constrained business sustainability (Mang'ana et al., 2023; Tenedero et al., 2025). In Indonesia, adoption of the Financial Accounting Standards for Micro, Small, and Medium Entities (Standar Akuntansi Keuangan Entitas Mikro, Kecil, dan Menengah, SAK EMKM) remains inconsistent (Idrus & Rastina, 2026), even though accounting practice plays a direct role in sustaining MSME operations (Silaen & Tulig, 2023) and financial literacy shapes how owners manage business finances (Fauzan et al., 2023). Qualified accounting support and risk-aware financial literacy likewise mediate MSME performance elsewhere in the region (Ahmad, 2024), and the use of digital accounting systems has been shown to improve MSME performance (Lutfi et al., 2022). This convergence across very different national settings suggests that the constraints documented here reflect a structural feature of MSME development rather than a problem specific to Indonesia's institutional setting.

Prior research has examined MSME development broadly, but little work treats financial management as the organizing focus of MSME development strategy within a sustainability framework. This study addresses that gap by formulating a financial-management-centered development strategy for MSMEs aimed at advancing sustainable economic development in Indonesia. The unit of analysis is the Indonesian MSME sector as a whole, with financial management as the point of strategic intervention; the financing channel, whether conventional banking, Islamic banking, or fintech, is treated as a contextual and, where relevant, moderating factor rather than as the boundary of the population studied.

2. Literature Review

2.1 Access to Capital as a Determinant of MSME Growth

Research on MSME development can be examined through several interlocking strands of evidence. The first concerns access to capital. Cross-country and cross-institutional studies agree that capital access is decisive for MSME growth, although outcomes depend heavily on how financing is structured and administered: public credit guarantee schemes show markedly uneven regional performance (Tambunan, 2018), government-guaranteed microfinance improves access but creates distinct managerial demands for borrowers such as women microentrepreneurs (Panjinegara et al., 2024), Islamic banks and MSMEs continue to face regulatory constraints on financial inclusion (Saifurrahman & Kassim, 2024), and Islamic rural banks (Bank Pembiayaan Rakyat Syariah, BPRS) play a complementary role in extending financial inclusion alongside conventional and Islamic commercial banks (Ariani et al., 2020). Access to finance remains a binding constraint outside Indonesia as well, as evidence from India shows (Rajamani et al., 2022), while fintech is increasingly identified as a channel for closing this gap, whether through its direct contribution to MSME development (Candraningrat et al., 2021), its effect on MSME efficiency across member countries of the Organisation for Economic Co-operation and Development (Abbasi et al., 2021), or its application to coastal MSMEs in Indonesia (Purnomo & Kurriwati, 2025).

2.2 Strategic Planning for MSME Development and Sustainable Growth

A second body of work addresses strategies for MSME development in support of sustainable growth. Sector-specific evidence shows how sustainability practice contributes directly to national progress on the Sustainable Development Goals (Kartika & Rokhim, 2025), while structured strategic-planning approaches, such as an integrated Strengths, Weaknesses, Opportunities, and Threats (SWOT) and Analytic Hierarchy Process (AHP) model used to design a triple-helix MSME development strategy (Larisang et al., 2026), offer a methodological parallel to the present study. Regional and crisis-response evidence extends this picture to border-region economic development (Paulus et al., 2020), community welfare (Siahaan et al., 2026), village-owned enterprises (Soelarso et al., 2024), agritourism business models (Dolorosa et al., 2025), and recovery after the COVID-19 pandemic (Widiastuti et al., 2021). Despite differences in context and method, these studies agree that MSME development requires deliberate strategy rather than incremental, unplanned growth.

2.3 MSME Financial Management and Financial Literacy

A third stream focuses specifically on MSME financial management and literacy. Financial literacy has repeatedly been shown to shape MSME profitability and loan utilization (Hasanah et al., 2025), financial behavior and digitally mediated performance (Mulyadi et al., 2024), and broader business sustainability outcomes (Widagdo & Sa'diyah, 2023; Ratnawati et al., 2024; Susan, 2020, 2023; Benites-Medina et al., 2026), with Islamic financial literacy and inclusion producing comparable effects within Shariah-compliant business contexts (Masrizal et al., 2025). Structured reporting models, meanwhile, have been shown to improve MSME reporting quality directly and support long-term sustainability (Perdana et al., 2024). Collectively, this literature documents persistent weaknesses in MSME bookkeeping and financial management practice across regions and sectors, despite variation in the specific instruments each study examines.

Read together, these streams suggest that MSME development cannot be separated from the quality of enterprise-level financial management. What remains underdeveloped is a strategy that treats financial management as the organizing principle of MSME development for sustainable economic outcomes, and this study seeks to fill that gap.

2.4 Theoretical Foundation and International Contribution

This study is grounded in the resource-based view (RBV) of the firm, extended through dynamic-capabilities theory and financial capability theory. In RBV terms, sound financial management is a valuable, difficult-to-imitate internal resource: it enables an MSME to convert scarce capital into productive investment, to signal creditworthiness to external financiers, and thereby to secure financing access. Dynamic-capabilities theory treats financial management not as a static asset but as a capability that must be continuously reconfigured through bookkeeping discipline, cash-flow planning, and managerial coaching, so that the enterprise can sense and seize financing opportunities as market and regulatory conditions change (cf. [Asmawati et al., 2025](#)). Financial capability theory supplies the individual-level mechanism, linking an owner-manager's financial knowledge, skills, and attitudes to the recording, planning, and risk-assessment behaviors that determine firm-level resilience (cf. [Mulyadi et al., 2024](#); [Ratnawati et al., 2024](#)). Together, these perspectives yield the causal chain that organizes this study: financial-management capability strengthens financing access and firm resilience, which, aggregated across the MSME population, contributes to inclusive, formalized, and shock-resistant growth. Each of the ten actions in the proposed Strength–Opportunity (SO) strategy targets one link in this chain: individual capability (coaching, bookkeeping support), the firm-level resource base (financing expansion, oversight of productive use), or resilience outcomes (production and marketing capacity, reporting oversight).

Although the evidence is drawn from Indonesia, some structural features of the Indonesian MSME environment are transferable to other emerging economies, while others are context-dependent. The transferable core is the financing-constraint mechanism itself: information asymmetry between MSMEs and lenders, weak financial reporting, and the resulting reliance on collateral-based rather than cash-flow-based lending, a pattern that recurs in South Africa ([Brijlal et al., 2014](#)), Tanzania ([Mang'ana et al., 2023](#)), the Philippines ([Tenedero et al., 2025](#)), and India ([Rajamani et al., 2022](#)). The logic of pairing financial-management coaching with expanded financing access is therefore portable to any MSME population with low financial literacy and thin credit histories. What is context-dependent is the implementing architecture, namely Indonesia's dual conventional–Islamic banking system, its government-guaranteed Kredit Usaha Rakyat (KUR; People's Business Credit) scheme, and the financial-inclusion mandate of the Financial Services Authority (OJK), which would need to be replaced by equivalent local mechanisms elsewhere. The study's international contribution thus lies not in Indonesian policy detail but in a transferable, financial-management-centered framework that complements existing work on MSME finance ([Rajamani et al., 2022](#); [Abbasi et al., 2021](#)), financial inclusion ([Saifurrahman & Kassim, 2024](#); [Lakshmi & Anusha, 2026](#)), and enterprise resilience ([Tenedero et al., 2025](#); [Ratnawati et al., 2024](#)).

2.5 Emerging Directions in MSME Financial Management

Several forward-looking developments also merit attention. Dynamic-capability perspectives link financial literacy to firm-level adaptability and financial inclusion as joint drivers of MSME sustainability ([Asmawati et al., 2025](#)). Islamic microfinance institutions such as Baitul

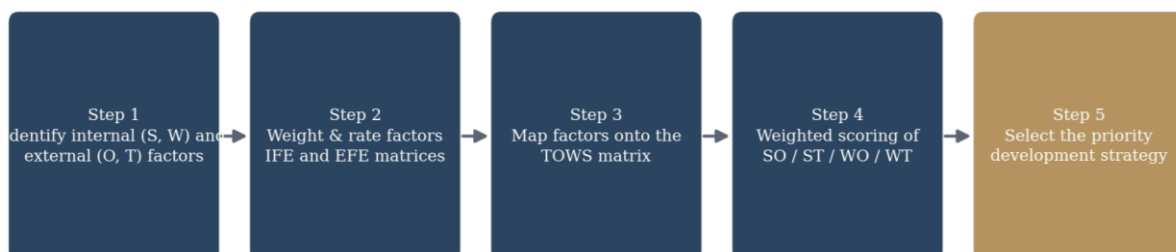
Maal wat Tamwil continue to face structural and regulatory challenges despite steady demand for Shariah-compliant financing (Septianingsih et al., 2024), while public expenditure and investment remain an underexplored lever for MSME growth (Prasetyo, 2020). Artificial intelligence (AI)-based tools are beginning to reshape financial decision-making and access to finance (Choudhari et al., 2025), green financing is emerging as a channel for environmentally oriented growth (Srivastava et al., 2026), and fintech-enabled financial inclusion is increasingly framed as a mechanism for advancing the Sustainable Development Goals (Lakshmi & Anusha, 2026). A related strand highlights financial literacy and inclusion as drivers of the performance and sustainability of women-led MSMEs (Kurniasari et al., 2026; Lestari et al., 2025). Future MSME strategy will therefore need to combine conventional financial-management coaching with an expanding set of digital, inclusion-oriented, and sustainability-oriented tools.

3. Methodology

3.1 Research Design

This study employs a qualitative descriptive design to describe, interpret, and synthesize evidence on the strategic position of MSME financial management in Indonesia. The research problem, namely identifying the strategic factors that shape MSME financial-management practice and translating them into a ranked set of development strategies, is exploratory and evaluative, and is better addressed through structured, evidence-based assessment of documentary sources than through hypothesis testing. The analytical backbone is the SWOT framework of Rangkuti (2014), operationalized through Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) matrices, a TOWS matrix (Wehrich, 1982), and a weighted scoring procedure for ranking alternative strategies. Combining qualitative factor identification with quantifiable weighting follows an established line of applied strategic-planning research. IFE, EFE, and Quantitative Strategic Planning Matrix (QSPM) analyses have informed business-development strategy in manufacturing and services (Zulkarnain et al., 2018; Ibrahim et al., 2019; Alamsyah et al., 2020; Awanda et al., 2023); an approach integrating SWOT, IFE, EE, the Internal–External (IE) matrix, and QSPM has been applied to resilient food and beverage MSMEs in Indonesia (Dini & Janet, 2024); and AHP has been used to rank SWOT criteria for MSME strategic planning (Ramlan et al., 2016; Larisang et al., 2026). Figure 1 summarizes the analytical flow.

Figure 1. Stages of SWOT-based strategy formulation (adapted from Rangkuti, 2014).



3.2 Research Setting and Scope

The study focuses on the financial-management practices of MSMEs operating across Indonesia during 2020–2024, with national bank credit and financing statistics (Table 1) as the principal empirical anchor for the financing dimension. Islamic banks and Islamic

microfinance institutions, including Baitul Maal wat Tamwil and BPRS, are treated as one financing channel among several, alongside conventional commercial banking, government-guaranteed schemes such as KUR, and fintech-based financing; where evidence specific to Islamic institutions is used, this is stated explicitly rather than generalized to the sector as a whole. No primary fieldwork, such as observation or interviews with financing officers or MSME owners, was conducted; the analysis rests entirely on secondary data and documentary evidence.

3.3 Data Sources

The study relies on three types of secondary sources: (1) national MSME financing statistics published by the Financial Services Authority (OJK, 2024), which underpin Table 1; (2) peer-reviewed Indonesian and international studies on MSME financing, financial management, financial literacy, and strategic development; and (3) institutional and regulatory documentation, including policy reports on Islamic banking and MSME financing programs. Internal and external strategic factors were derived by synthesizing these sources rather than through primary data collection. Because peer-reviewed sources on Islamic financial institutions are more extensive than those on conventional and informal channels, the evidence base draws somewhat disproportionately on the Islamic-finance literature relative to that channel's share of national MSME financing, a potential source of weighting bias that is addressed in Section 6.

3.4 Data Collection Technique

Data were collected through documentation study (*studi dokumentasi*): a systematic review of the secondary sources described in Section 3.3, focused on identifying recurring internal strengths and weaknesses and external opportunities and threats relevant to MSME financial management. Factors that appeared consistently across multiple independent sources were treated as more strongly supported and were prioritized in constructing the IFE and EFE matrices.

3.5 Research Instrument

A weighting-and-rating instrument, applied by the researchers to the synthesized evidence, was used to quantify the identified factors. Weights were normalized within each SWOT category, so that the weights of the ten strengths, ten weaknesses, eleven opportunities, and eleven threats each sum to 1.00; each weight expresses a factor's relative importance within its category, judged from its prominence and consistency across sources. Each factor was then rated on an anchored 1–4 magnitude scale. For strengths and opportunities, 1 denotes a minor strength or marginal opportunity and 4 a major strength or substantial opportunity; for weaknesses and threats, 1 denotes a minor weakness or marginal threat and 4 a severe weakness or serious threat. Summing the weight $\times$ rating products within each category yields four category scores (S, W, O, and T), each a weighted mean rating between 1 and 4. Because weaknesses and threats are rated by severity, higher W and T scores denote less favorable conditions and cannot simply be added to S and O.

Two quantities are derived from these scores. The first is the net position on each axis of the SWOT quadrant diagram, computed as $S - W$ (internal) and $O - T$ (external) (Rangkuti, 2014); positive values indicate that strengths outweigh weaknesses or that opportunities outweigh threats. The second is a composite IFE or EFE score on the conventional favorability metric (David, 2011), on which 2.50 marks the midpoint of the 1–4 range. To obtain it, the severity

ratings of weaknesses and threats were reverse-coded (5 – rating), and the two categories in each matrix were given equal shares of the matrix weight (0.50 each), reflecting within-category normalization and the equal number of factors in each pair (ten and ten; eleven and eleven). Hence, $IFE = 0.50 \times S + 0.50 \times (5 - W) = 2.50 + (S - W)/2$ and $EFE = 0.50 \times O + 0.50 \times (5 - T) = 2.50 + (O - T)/2$, so a composite exceeds 2.50 if, and only if, the corresponding net score is positive. These formulas and the four category scores are sufficient to reproduce every score reported in Section 4.

Factor extraction followed a structured protocol. Two of the four researchers independently read the sources and extracted candidate factors using common criteria; a factor was retained only when both coders had flagged it, consistent with the corroboration rule in Section 3.7. Disagreements over wording, category placement, or borderline weights were resolved through discussion with the other two researchers until consensus was reached. Weights were assigned by ranking factors within each category by the number of independent sources in which they appeared and the emphasis those sources gave them, and then normalizing the ranks to sum to 1.00; ratings followed the anchored scale described above. This protocol makes the derivation transparent, but it remains a researcher-administered synthesis rather than formal expert elicitation: no Delphi round, AHP pairwise comparison, or validation by MSME owners, banking officers, or regulators was carried out. This scope decision is consistent with the literature-based design and is treated as a limitation in Section 6.

3.6 Data Analysis Technique

Data analysis followed four sequential stages, consistent with the SWOT-IFE/EFE-TOWS approach of [Rangkuti \(2014\)](#):

- Stage 1 — Factor identification: internal (S, W) and external (O, T) factors relevant to MSME financial management were identified through documentation study of the secondary sources described in Section 3.3.
- Stage 2 — Factor evaluation: each internal and external factor was weighted and rated using the instrument in Section 3.5, producing the four category scores (S, W, O, T), the net internal (S – W) and external (O – T) scores, and the composite IFE and EFE scores. Consistent with the IFE/EFE convention established in the strategic-management literature ([David, 2011](#); [Rangkuti, 2014](#)), a composite score above 2.50, computed on the favorability metric defined in Section 3.5, indicates a favorable position on that dimension that the organization can actively leverage, while a score below 2.50 signals a comparatively weaker position requiring corrective attention.
- Stage 3 — Strategy mapping: the IFE and EFE results were cross-tabulated in a TOWS matrix ([Wehrich, 1982](#)), generating four categories of alternative strategy — SO (strength–opportunity), ST (strength–threat), WO (weakness–opportunity), and WT (weakness–threat).
- Stage 4 — Priority ranking: each alternative was scored by summing its relevant internal and external category scores (e.g., $SO = S + O$). Because all category scores are weighted mean ratings on the same 1-4 scale, a strategy's composite score indexes the combined magnitude of the conditions to which it responds; it measures strategic salience rather than favorability and is interpreted separately from the IFE and EFE composites. The alternative with the highest composite score was identified as the priority strategic hypothesis, subject to the stakeholder-validation caveat in Section 6.

3.7 Data Trustworthiness

To strengthen credibility, the study applied source triangulation: factors identified in one source were cross-checked against other independent sources, and only factors corroborated by at least two sources were retained in the IFE and EFE matrices. Because the design relies entirely on secondary data, no member-checking with primary informants was possible; this limitation is discussed in Section 6.

4. Results and Discussion

4.1 Internal Factors and Their Evaluation

SWOT identification of the internal environment surfaces ten strength factors and ten weakness factors relevant to MSME financial management. Strengths include the availability of financial management facilities for MSMEs; sound financial management practices; coaching in transaction bookkeeping; coaching in day-to-day operations; coaching in product marketing; broader coaching in financial management; oversight of financing use; oversight of business development; oversight of financial reporting; and oversight of financing repayment.

Weaknesses include recurring misuse of financing by MSMEs; limited disclosure of financial information to financial institutions; unprofessional business management; weak financial reporting systems; limited staff skills; limited resources for MSME management; underdeveloped internal oversight; underdeveloped oversight of business development; underdeveloped oversight of product marketing; and underdeveloped oversight of financial reporting.

The internal category scores are $S = 1.86$ and $W = 1.62$, giving a net internal score of 0.24. Expressed on the favorability metric, the resulting Internal Factor Evaluation score is 2.62 ($2.50 + 0.24/2$), above the 2.50 threshold. MSMEs' internal factors are therefore favorable on balance and can be actively leveraged in pursuing a financial-management-based development strategy, although the margin above the threshold is modest and should not be read as evidence of strong internal capability.

4.2 External Factors and Their Evaluation

On the external side, opportunities include government attention to MSME development; capital facilities offered by financial institutions; rising domestic demand for nationally produced goods; growth in the number of MSMEs; MSME resilience during economic downturns; MSME empowerment programs; availability of capital facilities from the financial sector; the economy's reliance on MSMEs as a growth driver; availability of economic resources supporting MSME development; MSME training programs; and access to supporting technology.

Threats include limited business-valuation efforts for MSMEs; limited information available about MSMEs; underdeveloped management coaching; underdeveloped operational coaching; underdeveloped marketing coaching; intense market competition; underdeveloped bookkeeping coaching; competition from quality imported products; shifting consumer preferences; limited capital for business development; and an uncertain macroeconomic environment.

The external category scores are $O = 1.87$ and $T = 1.72$, giving a net external score of 0.15 and an External Factor Evaluation score of 2.58 ($2.50 + 0.15/2 = 2.575$). This value also lies above the 2.50 threshold, indicating that the external environment offers opportunities that can be exploited despite the presence of real threats, although, as on the internal side, the favorable margin is narrow.

Table 2. Summary of Internal and External Factor Evaluation

Evaluation	Favorable category score	Severity category score	Net score	Composite score (favorability metric)	Interpretation (threshold = 2.50)
Internal Factor Evaluation (IFE)	$S = 1.86$	$W = 1.62$	$S - W = 0.24$	2.62	Above threshold – internal position moderately favorable
External Factor Evaluation (EFE)	$O = 1.87$	$T = 1.72$	$O - T = 0.15$	2.58	Above threshold – external position moderately favorable

Note: Weights are normalized within each SWOT category, and weaknesses and threats are rated by severity (1 = minor, 4 = severe), so higher W and T scores denote less favorable conditions. Composite score = $2.50 + (\text{net score})/2$, obtained by reverse-coding W and T and assigning equal weight to the two categories of each matrix (Section 3.5). Source: Authors' analysis.

4.3 SWOT (TOWS) Matrix

Combining the internal and external evaluations produces the TOWS matrix in Table 3, from which four alternative strategies emerge.

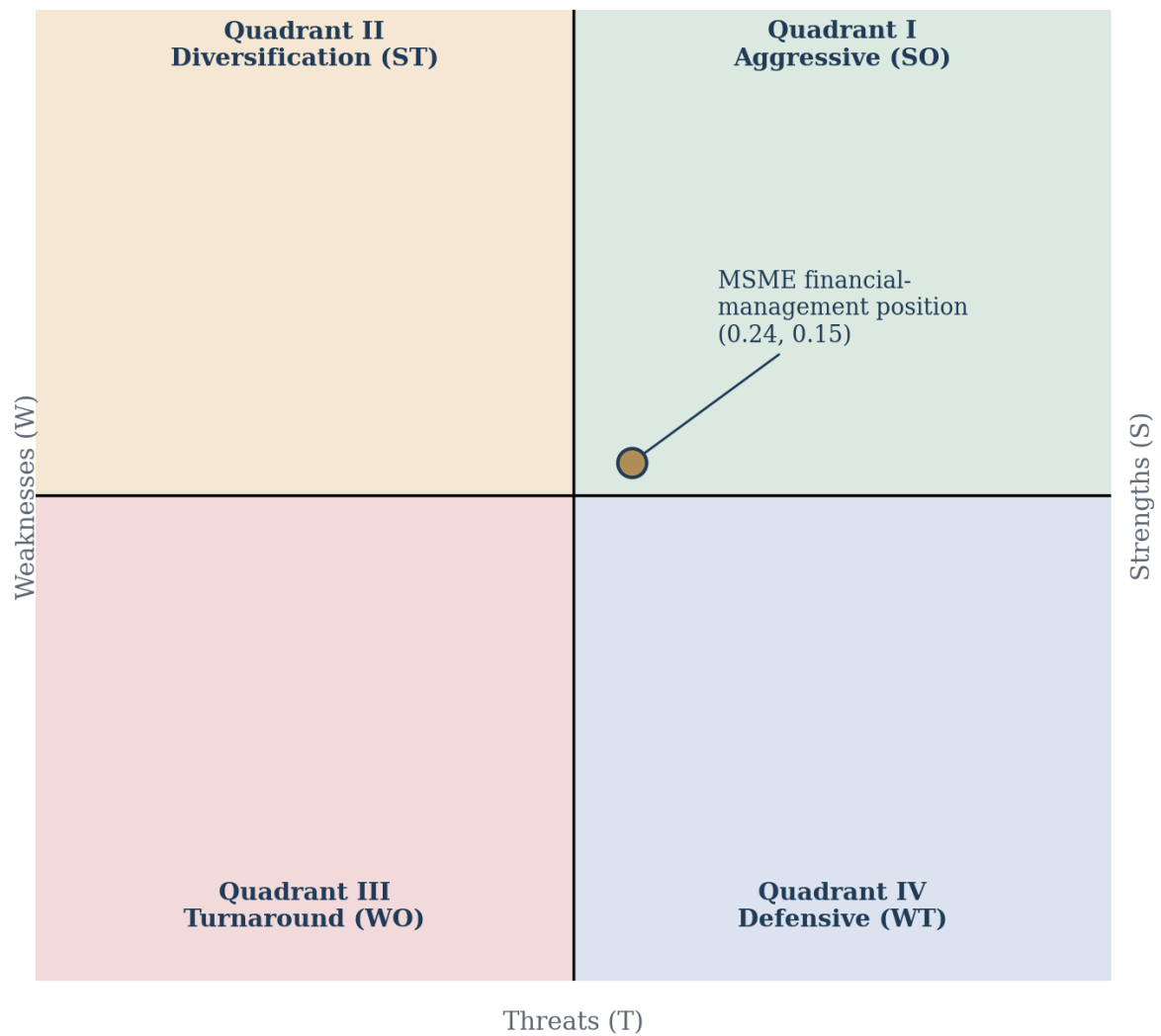
Table 3. TOWS Matrix

Internal \ External	Opportunities (O)	Threats (T)
Strengths (S)	SO Strategy: use existing strengths to capture available opportunities.	ST Strategy: use existing strengths to counter external threats.
Weaknesses (W)	WO Strategy: minimize weaknesses to capture available opportunities.	WT Strategy: minimize weaknesses while avoiding external threats.

Source: Authors' analysis.

Plotting the net internal score ($1.86 - 1.62 = 0.24$) against the net external score ($1.87 - 1.72 = 0.15$) locates MSME financial management in Quadrant I of the SWOT diagram (Figure 2), the aggressive-growth position in which strengths and opportunities outweigh weaknesses and threats, favoring an SO-type strategy. The quadrant position and the composite scores in Table 2 lead to the same conclusion because, under the procedure in Section 3.5, a positive net score and a composite score above 2.50 are equivalent conditions.

Figure 2. Strategic position of MSME financial management on the SWOT quadrant diagram.



4.4 Weighted Priority Strategy

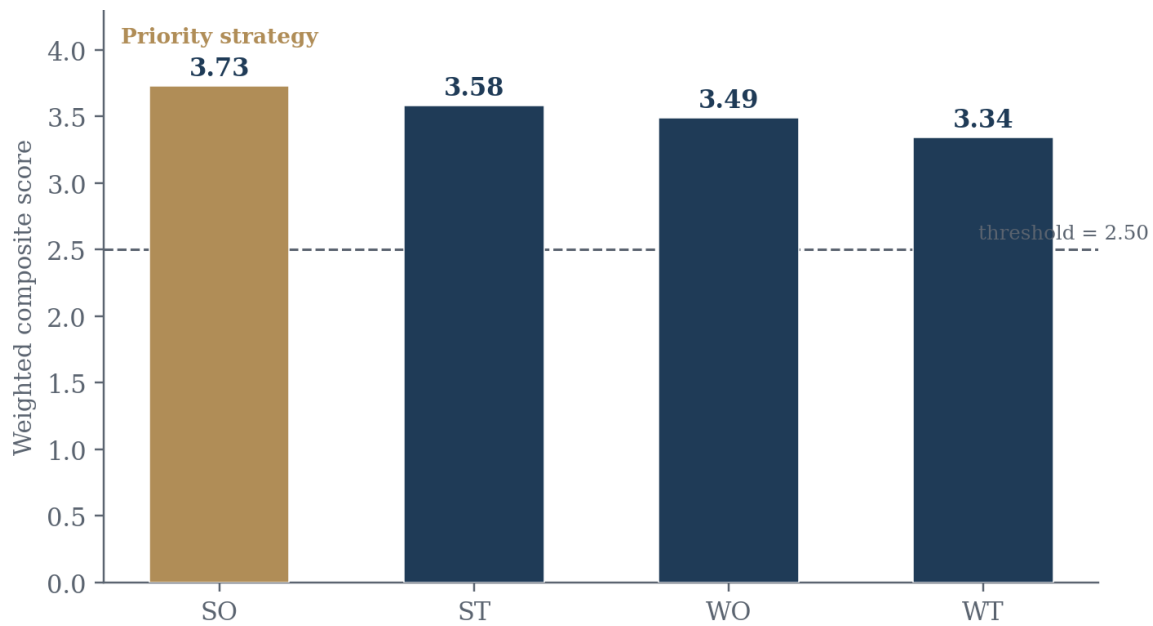
The four alternatives were scored by summing their respective internal and external component scores (Table 4 and Figure 3).

Table 4. Weighted Scoring of Alternative Strategies

Strategy	Internal Score	External Score	Composite Score
SO	1.86 (S)	1.87 (O)	3.73
ST	1.86 (S)	1.72 (T)	3.58
WO	1.62 (W)	1.87 (O)	3.49
WT	1.62 (W)	1.72 (T)	3.34

Source: Authors' analysis.

Figure 3. Weighted scores of the four alternative strategies.



The SO strategy obtained the highest composite score (3.73), followed by ST (3.58), WO (3.49), and WT (3.34). This ordering follows directly from the category scores: because S exceeds W and O exceeds T, the SO pairing necessarily ranks highest and the WT pairing lowest, so the ranking is consistent with, rather than an independent confirmation of, the Quadrant I position identified in Section 4.3. The SO strategy therefore emerges as the priority strategic hypothesis for financial-management-based MSME development. Because this ranking derives from documentary synthesis rather than stakeholder elicitation, it should be treated as a candidate priority pending Delphi- or AHP-based validation by MSME owners, financing officers, and regulators (Section 6).

The summation rule is a deliberate simplification. It assumes that the IFE and EFE weights already encode each factor's relative importance and that, at the level of the four broad TOWS categories, relative attractiveness can reasonably be approximated by the combined strength of the internal and external evidence. This assumption is defensible for choosing among categories that draw on the same resource base, but not for ranking the ten actions within the SO category, which differ considerably in cost, institutional dependency, and time horizon. Table 4 is therefore used only to select the strategy category, and Section 4.5 supplements this choice with an implementation matrix (Table 5) that traces each SO action to its supporting SWOT factors, implementation actors, time horizon and risk, and monitoring indicators. A full multicriteria ranking of the ten actions using QSPM, AHP, or the Analytic Network Process (ANP) is identified in Section 6 as the logical next step.

4.5 Elaborating the Priority (SO) Strategy

The SO strategy comprises ten interrelated actions, discussed in turn below.

For this study, sustainable economic development is defined operationally at the enterprise level through four measurable dimensions: (1) economic sustainability, proxied by business survival, turnover growth, and formalization (e.g., business registration and tax compliance); (2) financial sustainability, proxied by creditworthiness, repayment performance, and reduced reliance on informal credit; (3) social sustainability, proxied by employment creation,

income stability, and the inclusion of women-led and disability-inclusive enterprises (Panjinegara et al., 2024; Azizan et al., 2026); and (4) environmental sustainability, proxied by resource-use efficiency, uptake of green financing (Srivastava et al., 2026), and compliance with environmental standards. Each action below is discussed with reference to the SWOT factors it draws on, and Table 5 maps each action onto these dimensions, implementation actors, and monitoring indicators, so that the link between the strategy and sustainable economic development is demonstrated rather than merely asserted.

a. Expanding financing distribution to MSMEs

Expanding financing is fundamental to an inclusive and sustainable economic structure, since limited access to capital, driven by information asymmetry, insufficient collateral, and weak financial reporting, remains a primary constraint on MSME growth. Expansion should proceed through broader access to formal financing, optimization of government programs such as KUR, and continued reinforcement of financial-inclusion policy by OJK alongside the financial-system stability maintained by Bank Indonesia, recognizing that the design and administration of guarantee schemes strongly shape their reach (Tambunan, 2018). Diversifying financing through fintech-based schemes (Rahayu et al., 2023), crowdfunding and microfinance channels reshaped by the Omnibus Law on Job Creation (Hadi et al., 2023), BPRS financing (Ariani et al., 2020), and supply-chain and partnership-based arrangements offers a further avenue for reaching MSMEs that are not yet fully bankable, while green finance opens additional channels for environmentally oriented expansion (Srivastava et al., 2026). At the same time, transparent bookkeeping, disciplined cash-flow management, and measurable business planning will strengthen creditworthiness and reduce financing risk, and embedding sustainability principles in credit allocation will ensure that financing supports socially and environmentally responsible practice.

b. Strengthening financial management coaching

Coaching in financial management aims to improve owners' capacity to plan, manage, and control financial resources, spanning budgeting, cash-flow management, cost control, and investment and financing decisions. Many MSMEs still commingle personal and business finances, which reduces accountability and complicates performance evaluation. Systematic coaching improves financial discipline, strengthens capital structure, and raises creditworthiness, consistent with evidence that financial literacy and financial behavior predict MSME performance, particularly when reinforced by digital competency (Mulyadi et al., 2024) and dynamic capabilities (Asmawati et al., 2025). At the macro level, stronger MSME financial management contributes to financial-system stability and supports the financial-inclusion agenda of OJK.

c. Enhancing and evaluating production and marketing capacity

Strengthening marketing competence involves market segmentation, pricing strategy, branding, and digital marketing. MSMEs are expected to make fuller use of online platforms, social media, and standardized digital-payment infrastructure, such as Indonesia's Quick Response (QR) code payment standard, which has been shown to support MSME productivity (Syafriзал et al., 2025). Stronger marketing capacity translates into higher turnover, more stable cash flow, and greater capacity to meet financing obligations, making marketing literacy integral to financial-management strengthening. Evaluating production and marketing capacity, in turn, assesses an enterprise's real ability to meet demand

sustainably, covering raw-material efficiency, production technology, product quality, and distribution effectiveness, increasingly supported by AI-driven decision tools ([Choudhari et al., 2025](#)). Because capacity that is out of step with demand creates inefficiency and financial risk, this evaluation helps ensure that financing is used productively rather than producing overcapacity or underutilization.

d. Evaluating MSMEs' contribution to sustainable economic development

MSMEs contribute significantly to employment, income distribution, and poverty reduction. Within a sustainable-development framework, however, evaluation should extend beyond economic performance to social and environmental dimensions, using indicators such as contribution to Gross Domestic Product (GDP), local labor absorption, resource efficiency, and environmentally responsible practice. This pattern is documented in evidence on how sustainable food and beverage MSMEs contribute to Indonesia's progress on the Sustainable Development Goals ([Kartika & Rokhim, 2025](#)), and similar contributions appear in village-owned enterprises ([Soelarso et al., 2024](#)), border-region development ([Paulus et al., 2020](#)), community welfare ([Siahaan et al., 2026](#)), and public expenditure supporting MSME growth ([Prasetyo, 2020](#)). Consistent with Bank Indonesia's sustainable-finance policy, MSMEs are expected to act not only as engines of growth but also as socially and ecologically responsible economic actors.

e. Building managerial knowledge and skills

Business management encompasses strategic planning, resource organization, leadership, and operational control. Coaching in this area helps MSMEs articulate a longer-term vision and a measurable growth strategy while reducing the risk of failure from unsystematic management. Strengthened managerial capacity, including data-based decision-making, risk management, innovation, and adaptation to market change, makes owners more responsive to economic dynamics and better able to use financing opportunities. Such coaching also needs to reach groups that face particular barriers: women microentrepreneurs encounter distinct managerial challenges even where financing access has improved ([Panjinegara et al., 2024](#)), and entrepreneurs with disabilities, for whom entrepreneurship offers a pathway to economic independence and social inclusion, continue to face persistent barriers that targeted business-development support can help address ([Azizan et al., 2026](#)).

f. Supporting product marketing

Coaching in product marketing focuses on improving product quality, encouraging innovation, refining packaging design, and expanding distribution access. Products that are competitive and meet market standards raise the likelihood of penetrating domestic and export markets alike, while this coaching also supports MSME integration within the national economic ecosystem coordinated by the Ministry of Cooperatives and Small and Medium Enterprises. Successful product marketing, in turn, strengthens an enterprise's financial position and its resilience to economic fluctuation.

g. Supporting financial bookkeeping

Bookkeeping is the foundation of accountable financial management. Coaching in this area should focus on daily transaction recording and on preparing profit-and-loss statements, balance sheets, and cash-flow statements consistent with SAK EMKM, increasingly supported by digitalized record-keeping tools designed for MSME contexts ([Sardjono et al., 2025](#)) and by

structured reporting models such as the "3-in-1" financial reporting approach shown to support MSME sustainability (Perdana et al., 2024). Orderly bookkeeping reduces information asymmetry between MSMEs and financial institutions, improving the likelihood of obtaining formal financing, while transparent financial reporting also supports good governance more broadly.

h. Directing the productive use of financing

Financing obtained by MSMEs should be directed toward productive activity such as equipment investment, expanded production capacity, or market development. Diverting financing to other purposes raises default risk and disrupts business stability, so monitoring and mentoring are needed to ensure that funds are deployed according to the business plan. Productive schemes, including KUR and performance-guaranteed loans for MSMEs operating in digital marketplaces (Mulyati et al., 2025), remain important instruments for sustainable growth, particularly when financing decisions draw on the determinants of sustainable business practice identified among Islamic microfinance clients (Nugraheni et al., 2026).

i. Overseeing financial reporting

Oversight of financial reporting ensures that an enterprise's statements reflect its actual condition accurately and reliably, through simple audits, periodic monitoring, or accounting mentorship. Transparent reporting builds lenders' confidence, reduces moral hazard, and, over the longer term, contributes to a healthier and more accountable financial system.

j. Overseeing business development

Oversight of business development covers turnover growth, profitability, market expansion, and operational sustainability, allowing risks to be identified early and addressed through timely intervention. From a sustainable-development perspective, such oversight ensures that MSMEs grow not only in size but also in quality and competitiveness.

Table 5. Implementation Matrix Linking the SO Strategy's Ten Actions to Supporting SWOT Factors and Sustainability Dimensions

Action	Key Supporting SWOT Factor(s)	Sustainability Dimension(s)	Implementation Actor(s)	Time Horizon / Key Risk	Monitoring Indicator
a. Expanding financing distribution	S: availability of financing facilities; O: capital facilities from financial institutions	Economic; Financial	OJK, Bank Indonesia, conventional and Islamic banks, KUR administrators	Medium-term (1–3 yrs); risk of over-indebtedness / moral hazard	Growth rate of MSME credit/financing disbursed; number of newly financed MSMEs
b. Strengthening financial management coaching	S: sound financial-management practice, broader coaching in financial management; W: unprofessional business management, limited staff skills	Financial; Social	Financial institutions, MSME support agencies, universities	Short–medium-term (6 mo–2 yrs); risk of low coaching uptake	Number of MSMEs completing coaching; pre/post financial-literacy score

Action	Key Supporting SWOT Factor(s)	Sustainability Dimension(s)	Implementation Actor(s)	Time Horizon / Key Risk	Monitoring Indicator
c. Enhancing and evaluating production and marketing capacity	S: coaching in product marketing; O: MSME training programs, access to supporting technology; T: intense market competition	Economic	Ministry of Cooperatives and Small and Medium Enterprises, MSME associations	Medium-term; risk of capacity mismatched with demand	Turnover growth; production-capacity utilization rate
d. Evaluating MSMEs' contribution to sustainable economic development	O: economy's reliance on MSMEs as growth driver, growth in number of MSMEs	Economic; Social; Environmental	Statistics Indonesia (Badan Pusat Statistik, BPS), local government	Long-term / ongoing monitoring; risk of data unavailability	MSME contribution to GDP; local employment absorption; resource-use efficiency
e. Building managerial knowledge and skills	W: unprofessional business management, limited resources for MSME management; O: MSME training programs	Social	MSME support agencies, business incubators	Medium-term; risk of unequal access for women-led and disability-inclusive enterprises	Number of owners completing managerial training; share of women-led/disability-inclusive participants
f. Supporting product marketing	S: coaching in product marketing; O: rising domestic demand for nationally produced goods	Economic	Ministry of Cooperatives and Small and Medium Enterprises, e-commerce platforms	Short-term; risk of products not meeting market/export standards	Domestic and export market-penetration rate
g. Supporting financial bookkeeping	S: sound financial-management practice; W: weak financial-reporting systems	Financial	Financial institutions, accounting-standard bodies (SAK EMKM)	Short-term; risk of low digital-bookkeeping adoption	Share of MSMEs with SAK-EMKM-compliant records
h. Directing the productive use of financing	S: oversight of financing use; W: recurring misuse of financing	Financial	Lenders, KUR administrators	Ongoing; risk of diversion of funds	Non-performing-financing ratio; share of financing used per business plan
i. Overseeing financial reporting	S: oversight of financial reporting; W: underdeveloped oversight of financial reporting	Financial	Financial institutions, auditors/mentors	Ongoing; risk of reporting fatigue / compliance cost	Audit and monitoring coverage rate

Action	Key Supporting SWOT Factor(s)	Sustainability Dimension(s)	Implementation Actor(s)	Time Horizon / Key Risk	Monitoring Indicator
j. Overseeing business development	S: oversight of business development; W: underdeveloped oversight of business development	Economic	Financial institutions, local government	Ongoing; risk of delayed intervention	Early-warning flag rate; share of MSMEs graduating to a higher business scale

Source: Authors' analysis.

5. Conclusion

This study formulated a financial-management-based development strategy for Indonesian MSMEs, positioning financial management as the organizing focus for advancing sustainable economic development. The IFE (2.62) and EFE (2.58) composite scores, together with positive net internal (0.24) and external (0.15) positions, indicate moderately favorable internal capabilities and external conditions, placing the sector in the aggressive-growth position (Quadrant I) and supporting the SO strategy as the strongest of the four TOWS alternatives. This priority is a strategic hypothesis grounded in a triangulated but literature-based evidence base, and it warrants validation through Delphi- or AHP-based stakeholder elicitation before being treated as a settled national conclusion. Operationalized through ten interrelated actions and mapped to implementing actors and monitoring indicators (Table 5), the strategy offers a concrete pathway for strengthening MSME resilience and competitiveness as a pillar of inclusive and sustainable growth.

6. Limitations and Future Research

This study has several limitations. First, the analysis relies entirely on secondary data and documentary synthesis rather than on primary survey, interview, or observational data. Although a structured, dual-coded protocol was used (Section 3.5), no formal expert elicitation, such as a Delphi or AHP exercise involving MSME owners, banking officers, regulators, and practitioners, was conducted, and no member-checking with primary informants was possible; future applications should incorporate both to strengthen the validity of the factor weights. Relatedly, the composite IFE and EFE scores assume equal weights for the two categories in each matrix, although the net scores that determine the quadrant position do not depend on this assumption, and releasing a full factor–source matrix would make the evidence base fully verifiable. Second, because the evidence draws disproportionately on Islamic financial institutions, the weights may be skewed toward that channel; studies that balance evidence across conventional, Islamic, and informal channels would test the robustness of the present weighting. Third, the weighted scoring ranks the four TOWS categories but not the ten SO actions; future research could rank these actions formally using an integrated SWOT-AHP model (Larisang et al., 2026), QSPM, or a structural model linking financial-management practice to measurable MSME performance and sustainability outcomes. Finally, emerging tools such as AI-based decision support (Choudhari et al., 2025) and green financing (Srivastava et al., 2026) were not directly incorporated into the factor set and deserve examination in relation to the coaching-based interventions emphasized here.

Declaration of AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used generative artificial intelligence (AI) tools to assist with manuscript structuring, language refinement, methodological elaboration, and reference formatting. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

References

- Abbasi, K., Alam, A., Du, M., & Huynh, T. L. D. (2021). FinTech, SME efficiency and national culture: Evidence from OECD countries. *Technological Forecasting and Social Change*, 163, 120454. <https://doi.org/10.1016/j.techfore.2020.120454>
- Ahmad, K. (2024). The influence of financial literacy, risk orientation, and qualified accountants on performance in micro, small, and medium enterprises: The mediating role of management accounting. *International Review of Management and Marketing*, 14(6), 317–324. <https://doi.org/10.32479/irmm.17044>
- Alamsyah, N., Lubis, A. L., & Hamdi, D. (2020). Formulation of marketing strategies in expedition services company with SWOT and QSPM methods. In M. N. O. Zahid, R. A. Aziz, A. R. Yusoff, N. M. Yahya, F. A. Aziz, & M. Y. Abu (Eds.), *iMEC-APCOMS 2019: Proceedings of the 4th International Manufacturing Engineering Conference and the 5th Asia Pacific Conference on Manufacturing Systems* (pp. 3–9). Singapore: Springer. https://doi.org/10.1007/978-981-15-0950-6_1
- Ariani, N., Yuyetta, E. N. A., & Hardiningsih, P. (2020). The support of sharia rural banks financing on national financial inclusion. *International Journal of Islamic Business and Economics*, 4(1), 40–50. <https://doi.org/10.28918/ijibec.v4i1.1980>
- Asmawati, Laba, A. R., Dewi, A. R. S., & Alamzah, N. (2025). The influence of dynamic capabilities, financial literacy, and financial inclusion on sustainability of MSMEs in East Kalimantan, Indonesia: The mediating role of financial performance. *Global Business and Finance Review*, 30(10), 216–234. <https://doi.org/10.17549/gbfr.2025.30.10.216>
- Awanda, A. P., Ismiyah, E., & Rizqi, A. W. (2023). Inovatif engineering strategies for revenue growth: A SWOT and QSPM analysis of UD AMJ Jaya Teknik. *Advance Sustainable Science, Engineering and Technology*, 5(3), 02303010. <https://doi.org/10.26877/asset.v5i3.17253>
- Azizan, F., Rahim, H. L., Syed Marzuki, S. Z., & Samat, M. F. (2026). Entrepreneurship challenges for persons with disabilities: A bibliometric analysis. *Journal of Emerging Economies and Islamic Research*, 14(1), 8640. <https://doi.org/10.24191/jeeir.v14i1.8640>
- Benites-Medina, R., Méndez Reyes, J., Ochoa Padilla, G., & López-Chila, R. (2026). Business sustainability of SMEs in emerging markets and entrepreneurs' financial literacy. *Journal of the International Council for Small Business*. <https://doi.org/10.1080/26437015.2026.2686395>
- Brijlal, P., Enow, S., & Isaacs, E. B. H. (2014). The use of financial management practices by small, medium and micro enterprises: A perspective from South Africa. *Industry and Higher Education*, 28(5), 341–350. <https://doi.org/10.5367/ihe.2014.0223>

- Candraningrat, I. R., Abundanti, N., Mujiati, N. W., Erlangga, R., & Jhuniantara, I. M. G. (2021). The role of financial technology on development of MSMEs. *Accounting*, 7(1), 225–230. <https://doi.org/10.5267/j.ac.2020.9.014>
- Choudhari, A. A., Meshram, K. A., Das, N. J., Mahankal, M. D., Ghadage, A. H., & Shah, A. H. (2025). AI-driven financial management for MSMEs: Transforming decision-making and access to finance in developing economies. *Enterprise Development and Microfinance*, 35(2), 74–90. <https://doi.org/10.3362/edm.v35i2.560>
- David, F. R. (2011). *Strategic management: Concepts and cases* (13th ed.). Upper Saddle River, NJ: Prentice Hall.
- Dini, I., & Janet, M. (2024). Formulating strategies to strengthen resilient MSMEs in the F&B sector of Central Java: An integrated SWOT, IFE, EFE, IE, and QSPM approach. *Central Community Development Journal*, 4(2), 41–59. <https://doi.org/10.55942/ccdj.v4i2.825>
- Dolorosa, E., Suharyani, A., Kurniati, D., & Sawerah, S. (2025). Agritourism business model development in Kubu Raya, West Kalimantan, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1469(1), 012043. <https://doi.org/10.1088/1755-1315/1469/1/012043>
- Fauzan, Almira, F., Setiawati, E., & Suwarno, A. E. (2023). Does financial literacy and attitudes influence financial management behavior in the MSME's sector? *Riset Akuntansi dan Keuangan Indonesia*, 8(3), 309–316. <https://doi.org/10.23917/reaksi.v8i3.4319>
- Hadi, D. P., Adi, P. H., Arintoko, & Ahmad, A. A. (2023). The impact of the Omnibus Low Cipta Kerja on the sustainability of MSMEs and economic growth by applying the canvas model business method and the use of financial technology, especially crowdfunding and microfinance. *International Journal of Sustainable Development and Planning*, 18(2), 505–513. <https://doi.org/10.18280/ijstdp.180219>
- Hasanah, N., Qizam, I., Amelia, E., & Hidayah, N. (2025). Enhancing MSME profitability: The affect of financial literacy, personal capital, and loan utilization. In R. K. Hamdan (Ed.), *Sustainable data management: Navigating big data, communication technology, and business digital leadership* (Vol. 2, pp. 167–174). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-031-83915-3_14
- Ibrahim, S., Nurrochmat, D. R., & Maulana, A. (2019). Analysis of footwear business development strategy using QSPM and SWOT analysis. *Leather and Footwear Journal*, 19(4), 167–176. <https://doi.org/10.24264/lfj.19.4.1>
- Idrus, M. I., & Rastina. (2026). The implementation of financial statements based on SAK EMKM in micro, small, and medium enterprises (case study of Mutiara Laundry UMKM). *Multidisciplinary Science Journal*, 8(3), e2026212. <https://doi.org/10.31893/multiscience.2026212>
- Kartika, D. R., & Rokhim, R. (2025). The role of sustainable MSMEs in the food and beverage sector for Indonesia's SDG achievement. *World Journal of Entrepreneurship, Management and Sustainable Development*, 21(1), 79–95. <https://doi.org/10.47556/J.WJEMSD.21.1.2025.5>

- Kurniasari, F., Lestari, E. D., Muslim, N. A., & Mohd Ali, M. A. (2026). From knowledge to prosperity: Financial literacy driving women entrepreneur led-small medium enterprises through technology innovation. *Social Sciences & Humanities Open*, 13, 102443. <https://doi.org/10.1016/j.ssaho.2026.102443>
- Lakshmi, M. R., & Anusha. (2026). The role of FinTech-enabled financial inclusion in promoting Sustainable Development Goals. *Indian Journal of Information Sources and Services*, 16(2), 535–543. <https://doi.org/10.51983/ijiss-2026.16.2.54>
- Larisang, Hasibuan, R. P., Sanusi, Afrija, F., & Zatura, I. (2026). Integrated SWOT-AHP mathematical model for strategic development of MSMEs: Triple helix approach in the Riau Islands region. *International Journal of Sustainable Development and Planning*, 21(2), 663–678. <https://doi.org/10.18280/ijstdp.210217>
- Lestari, E. D., Kurniasari, F., Pratiwi, P. Y., Thilaga, S., & Ooi, B. W. (2025). Empowering women entrepreneurs: The role of financial literacy, inclusion, and access in enhancing MSE's performance and sustainability via women development program in Indonesia. *Cogent Business & Management*, 12(1), 2593078. <https://doi.org/10.1080/23311975.2025.2593078>
- Lutfi, A., Alkelani, S. N., Al-Khasawneh, M. A., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., . . . Ibrahim, N. (2022). Influence of digital accounting system usage on SMEs performance: The moderating effect of COVID-19. *Sustainability*, 14(22), 15048. <https://doi.org/10.3390/su142215048>
- Mang'ana, K. M., Ndyetabula, D. W., & Hokororo, S. J. (2023). Financial management practices and performance of agricultural small and medium enterprises in Tanzania. *Social Sciences & Humanities Open*, 7(1), 100494. <https://doi.org/10.1016/j.ssaho.2023.100494>
- Masrizal, Sukmana, R., & Trianto, B. (2025). The effect of Islamic financial literacy on business performance with emphasis on the role of Islamic financial inclusion: Case study in Indonesia. *Journal of Islamic Marketing*, 16(1), 166–192. <https://doi.org/10.1108/JIMA-07-2022-0197>
- Mulyadi, M., Hendratni, T. W., & Wulandjani, H. (2024). Analysis of the effect of financial literacy and financial behavior on the performance of MSMEs Setu Babakan with digital competency as a moderating variable. *Edelweiss Applied Science and Technology*, 8(6), 5310–5328. <https://doi.org/10.55214/25768484.v8i6.3176>
- Mulyati, E., Murwadi, T., & Bernike, G. (2025). Strategy development for MSMEs in the Indonesian marketplaces through loans with performance guarantees. *Cogent Social Sciences*, 11(1), 2548860. <https://doi.org/10.1080/23311886.2025.2548860>
- Nugraheni, P., Anggraini, L. C., Darma, E. S., Muhammad, R., & Priahita, A. R. (2026). Determinants of MSME financing decisions to enhance business sustainability at Islamic microfinance institutions. *Discover Sustainability*, 7, 792. <https://doi.org/10.1007/s43621-026-03175-z>
- Otoritas Jasa Keuangan. (2024). *Statistik perbankan Indonesia*. Jakarta, Indonesia: Author.

- Panjinegara, P., Nadzri, F. A. A., & Yusuf, S. N. S. (2024). Management challenges faced by women microentrepreneurs participating in the government-guaranteed microfinance scheme in Indonesia. *Management and Accounting Review*, 23(2), 21–40. <https://doi.org/10.24191/MAR.V23i02-02>
- Paulus, C. A., Azmanajaya, E., Pellokila, M. R., & Paranoan, N. (2020). Prospective strategies for sustainable local economic development in support of the SDGs' goal of inclusive and sustainable economic growth in the border region of Indonesia–Timor Leste, Belu Regency, East Nusa Tenggara Province, Indonesia. *Journal of Physics: Conference Series*, 1464(1), 012053. <https://doi.org/10.1088/1742-6596/1464/1/012053>
- Perdana, B. S., Ma'shum, A. M. M. H., & Susminingsih, S. (2024). Evaluation of the effectiveness of the “3-in-1” financial reporting model in supporting the sustainability of MSMEs. *Accounting and Financial Control*, 5(1), 16–28. [https://doi.org/10.21511/afc.05\(1\).2024.02](https://doi.org/10.21511/afc.05(1).2024.02)
- Prasetyo, P. E. (2020). The role of government expenditure and investment for MSME growth: Empirical study in Indonesia. *Journal of Asian Finance, Economics and Business*, 7(10), 471–480. <https://doi.org/10.13106/jafeb.2020.vol7.no10.471>
- Purnomo, A. S. D., & Kurriwati, N. (2025). Analysis of financial inclusion and technology about implementation of coastal MSMEs in Sumenep, Madura. *Daengku: Journal of Humanities and Social Sciences Innovation*, 5(2), 277–286. <https://doi.org/10.35877/454RI.daengku3845>
- Rahayu, S. K., Budiarti, I., Firdaus, D. W., & Onegina, V. (2023). Digitalization and informal MSME: Digital financial inclusion for MSME development in the formal economy. *Journal of Eastern European and Central Asian Research*, 10(1), 9–19. <https://doi.org/10.15549/jeecar.v10i1.1056>
- Rajamani, K., Jan, N. A., Subramani, A. K., & Raj, A. N. (2022). Access to finance: Challenges faced by micro, small, and medium enterprises in India. *Engineering Economics*, 33(1), 73–85. <https://doi.org/10.5755/j01.ee.33.1.27998>
- Ramlan, R., Omar, S. S., Wong, J. Y., & Sorooshian, S. (2016). SME SWOT ranking for strategic planning using analytic hierarchy process (AHP). *Information (Japan)*, 19(10), 4755–4760.
- Rangkuti, F. (2014). *Analisis SWOT: Teknik membedah kasus bisnis*. Jakarta, Indonesia: Gramedia Pustaka Utama.
- Ratnawati, K., Koval, V., Arsawan, I. W. E., Kazancoglu, Y., Lomachynska, I., & Skyba, H. (2024). Leveraging financial literacy into sustainable business performance: A mediated-moderated model. *Business, Management and Economics Engineering*, 22(2), 333–356. <https://doi.org/10.3846/bmee.2024.21449>
- Saifurrahman, A., & Kassim, S. H. (2024). Regulatory issues inhibiting the financial inclusion: A case study among Islamic banks and MSMEs in Indonesia. *Qualitative Research in Financial Markets*, 16(4), 589–617. <https://doi.org/10.1108/QRFM-05-2022-0086>

- Sardjono, W., Anggraini, L. D., Sarim, Radito, I., Perdana, W. G., & Maryani, M. (2025). Digitalization of MSME financial records: The foundation of innovation and sustainable industrialization in Indonesia. In *Proceedings of the 2025 13th International Conference on Orange Technology (ICOT 2025)*. <https://doi.org/10.1109/ICOT68409.2025.11425375>
- Septianingsih, R., Abdullah, A., & Salleh, M. Z. M. (2024). A systematic review: Challenge of Islamic microfinance Baitul Maal wat Tamwil in Indonesia. In N. Mansour & L. Bujosa (Eds.), *Islamic finance: New trends in law and regulation* (pp. 19–26). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-031-48770-5_3
- Siahaan, L. M., Sihombing, E. E., Siahaan, N. S. E., & Siahaan, K. E. B. (2026). Challenges and opportunities for community welfare sustainable development in Padangsidempuan, Indonesia. *Local Development & Society*. <https://doi.org/10.1080/26883597.2026.2656370>
- Silaen, P., & Tulig, S. (2023). The role of accounting in managing micro, small and medium enterprises (MSMEs): The case of Indonesia. *Australasian Accounting, Business and Finance Journal*, 17(2), 113–121. <https://doi.org/10.14453/aabfj.v17i2.08>
- Soelarso, S., Ahmad, A. A., Suharno, S., & Adawiyah, W. R. (2024). The development strategies for village-owned enterprises in optimizing local economy development in Banyumas Regency, Indonesia. In *2024 IEEE Technology & Engineering Management Conference – Asia Pacific (TEMSCON-ASPAC)*. <https://doi.org/10.1109/TEMSCON-ASPAC62480.2024.11024648>
- Srivastava, S., Kumar, M., Thacker, P., Rathore, P. R., Bairagi, P., & Roy, S. (2026). Empowering MSME sector: Unleashing green finance. In S. Roy, P. Bairagi, S. Bhattacharyya, & D. De (Eds.), *Humanized intelligence in sustainable finance and economic behaviours: Concepts, frameworks, and applications* (pp. 75–89). Singapore: Springer. https://doi.org/10.1007/978-981-95-0599-9_4
- Susan, M. (2020). Financial literacy and growth of micro, small, and medium enterprises in West Java, Indonesia. In W. A. Barnett & B. S. Sergi (Eds.), *Advanced issues in the economics of emerging markets* (Vol. 27, pp. 39–48). Bingley, England: Emerald Publishing Limited. <https://doi.org/10.1108/S1571-038620200000027004>
- Susan, M. (2023). Financial literacy on loans and budgets of micro, small, and medium enterprises. *International Journal of Trade and Global Markets*, 17(3–4), 355–362. <https://doi.org/10.1504/IJTGM.2023.132056>
- Syafrizal, A. Z., Majid, M. S. A., & Agustina, M. (2025). Digital payments for local growth: The role of Indonesia's QR code standard in MSME productivity. In *Proceedings of the 2025 3rd International Conference on Sustaining Heritage (ICSH 2025)*. <https://doi.org/10.1109/ICSH68040.2025.11547976>
- Tambunan, T. T. H. (2018). The performance of Indonesia's public credit guarantee scheme for MSMEs: A regional comparative perspective. *Journal of Southeast Asian Economies*, 35(2), 319–332. <https://doi.org/10.1355/ae35-21>
- Tenedero, E. Q., Sintos, J. R., & Araza, J. B. (2025). Working capital management practices of MSMEs in Samar, Philippines towards triple bottom line sustainability. *Environment and Social Psychology*, 10(2). <https://doi.org/10.59429/esp.v10i2.3271>

- Wehrich, H. (1982). The TOWS matrix—A tool for situational analysis. *Long Range Planning*, 15(2), 54–66. [https://doi.org/10.1016/0024-6301\(82\)90120-0](https://doi.org/10.1016/0024-6301(82)90120-0)
- Widagdo, B., & Sa'diyah, C. (2023). Business sustainability: Functions of financial behavior, technology, and knowledge. *Problems and Perspectives in Management*, 21(1), 120–130. [https://doi.org/10.21511/ppm.21\(1\).2023.11](https://doi.org/10.21511/ppm.21(1).2023.11)
- Widiastuti, W., Handayani, A., & Hermawan, A. (2021). Spatial distribution on recovery strategy due to the impact of the COVID-19 pandemic on the conditions of micro, small, and medium enterprises (MSMEs) in Central Java Province, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 887(1), 012026. <https://doi.org/10.1088/1755-1315/887/1/012026>
- Zulkarnain, A., Wahyuningtias, D., & Putranto, T. S. (2018). Analysis of IFE, EFE and QSPM matrix on business development strategy. *IOP Conference Series: Earth and Environmental Science*, 126(1), 012062. <https://doi.org/10.1088/1755-1315/126/1/012062>