

Strategic Development of a Knitting Small Medium Enterprise Using SWOT and QSPM Analysis

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Keywords

msme; swot; qspm; knitting
industry; business strategy

Abstract

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economic development, yet knitting-based MSMEs continue to face challenges including limited digital marketing capabilities, fluctuating revenue, intensifying competition, and rapid fashion trend changes. This study aims to formulate and prioritize business development strategies for a knitting MSME in Kampoeng Radjoet Binongjati, Bandung, using SWOT analysis and the Quantitative Strategic Planning Matrix (QSPM). Internal factors were identified using the Feasibility Model for SMEs as a supporting framework, while external factors were examined using the PESTEL framework. The identified factors were subsequently analyzed using SWOT and the Quantitative Strategic Planning Matrix (QSPM) to determine the firm's strategic position and prioritize business development strategies. These frameworks were used to provide a structured and theoretically grounded factor identification process, addressing a limitation common in prior MSME-focused SWOT studies that rely on ad-hoc factor selection. IFAS results yielded a strengths score of 3.102 and a weaknesses score of 3.559; EFAS yielded an opportunities score of 3.503 and a threats score of 2.623. The firm was positioned in the Weakness–Opportunity (WO) quadrant at coordinates (−0.457; +0.880), indicating a turnaround strategy orientation. QSPM results identified strengthening digital marketing performance as the priority strategy, with a Total Attractiveness Score (TAS) of 11.36.

INTRODUCTION

Indonesia's fashion market continues to demonstrate positive growth potential, supported by increasing consumer spending and the expansion of digital commerce channels (Statista, 2024). Micro, Small, and Medium Enterprises (MSMEs) serve as a cornerstone of Indonesia's economy, contributing significantly to employment creation, income generation, and creative industry development (Kementerian Koperasi dan UKM, 2024). Among creative industry subsectors, the knitting fashion industry has experienced notable growth in Bandung, particularly in Kampoeng Radjoet Binongjati, a knitting industry cluster that has operated since the 1960s and is recognized as one of the icons of Bandung's creative economy.

One of the MSMEs operating within this cluster distributes knitting products through digital platforms and local artisan networks. Despite having strong product quality and an established local identity, the business continues to face operational challenges, including suboptimal digital marketing practices, fluctuating revenues, increasing competition, and

rapidly changing fashion trends. These conditions highlight the need for a structured and evidence-based strategic approach to enhance competitiveness and ensure long-term business sustainability (Ayoub & Sopuru, 2026; Denaro et al., 2016; Hasan & Shehun, 2022; Lobo et al., 2025; Seyi-Lande et al., 2022).

Prior research on MSME strategy development using SWOT and QSPM is extensive (Rangkuti, 2021; David et al., 2020). SWOT analysis remains one of the most widely applied strategic planning tools because it enables systematic evaluation of internal strengths and weaknesses as well as external opportunities and threats (Gürel & Tat, 2021). Although SWOT and QSPM have been widely utilized in SME strategic planning, previous studies often rely on subjective factor identification without a structured analytical framework, which may reduce transparency and replicability (Benzaghta et al., 2021). However, studies specifically addressing strategic development in knitting SMEs remain relatively limited, particularly in relation to systematic identification of internal and external strategic factors. A recurring limitation in existing studies is that these factors are often identified through general observation or unstructured expert opinion, without anchoring the process to a domain-specific analytical framework (Abd Rahman et al., 2017; Dong et al., 2023; Fairfield & Charman, 2017; Kay & Baker, 2015).

The present study uses the Feasibility Model for SMEs (Chumaidiyah et al., 2024) as a structured basis for identifying internal factors. The model covers five operational dimensions: supply chain, production, value proposition, marketing, and performance and provides a structured basis for assessing the firm's internal conditions. External factors are examined using the PESTEL framework to capture political, economic, social, technological, environmental, and legal factors that may influence organizational performance and strategic decision-making (Perera, 2022).

To the best of the authors' knowledge, limited studies have applied the Feasibility Model for SMEs as a structured foundation for internal factor identification within a SWOT-QSPM framework, particularly in the context of knitting MSMEs. This represents the methodological contribution and novelty of the present study, distinguishing it from previous research that predominantly applies ad hoc or unstructured factor selection processes (Cong et al., 2025; Lievens & Sackett, 2017; Miric et al., 2023; Sepasgozar & Davis, 2018).

To the best of the authors' knowledge, limited studies have integrated the Feasibility Model for SMEs with the SWOT-QSPM framework for strategic analysis in knitting MSMEs. This study contributes methodologically by providing a structured approach to factor identification and strategy formulation. Accordingly, this study aimed to: (1) systematically identify internal and external strategic factors using the Feasibility Model for SMEs and the PESTEL framework; (2) determine the business's strategic position using SWOT analysis; and (3) prioritize alternative business development strategies using QSPM. The findings of this research are expected to provide practical benefits for MSME owners in developing evidence-based business strategies, offer insights for policymakers in designing targeted MSME development programs, and contribute to the academic literature on strategic management in creative industries, particularly in the context of knitting MSMEs.

METHOD

This study employed a descriptive quantitative case study approach focusing on a knitting MSME in Kampoeng Radjoet Binongjati, Bandung, Indonesia. Primary data were collected through semi-structured interviews, field observations, company document reviews, and expert assessments. The respondents included the MSME owner and manager, as well as two owners of neighboring knitting businesses as comparative informants.

The research was conducted through a six-stage process. First, internal factors were identified using the Feasibility Model for SMEs, covering five dimensions: supply chain,

production, value proposition, marketing, and performance. Second, external factors were analyzed using the PESTEL framework. Third, the IFAS and EFAS matrices were developed, with factor weights calculated based on the proportion of each factor's mean urgency score relative to the total mean urgency score, while ratings were determined from respondents' mean scores on a 1–4 scale. Fourth, the SWOT quadrant position was determined based on the difference between strength and weakness scores (X-axis) and opportunity and threat scores (Y-axis). Fifth, a TOWS matrix was developed to formulate alternative strategies based on the identified strategic position. Sixth, the QSPM was applied to prioritize strategic alternatives, with experts assigning Attractiveness Scores (AS) on a 1–4 scale, and Total Attractiveness Scores (TAS) calculated by multiplying factor weights by the corresponding AS values.

RESULTS AND DISCUSSION

Internal and External Factor Identification

Based on the Feasibility Model for SMEs and PESTEL analysis, four key factors were selected per SWOT category through expert judgment and field observation, ensuring alignment with the MSME's actual operational conditions. Strength factors were selected to represent supply chain (S1), value proposition (S2, S3), and marketing (S4) dimensions. Weakness factors reflect the marketing (W1), performance (W2, W3, W4). The identified factors are presented in Tables 1–4.

Table 1. Strength Factors

Code	Factor
S1	Strong vendor partnerships supporting supply continuity
S2	Local knitting community facilitating collaboration and resource sharing
S3	Established heritage identity as a multigenerational knitting business
S4	Strong brand image as a local product

Source: Author's identification based on Feasibility Model for SMEs (Chumaidiyah et al., 2024), field observation, and expert judgment, 2024

Table 2. Weakness Factors

Code	Factor
W1	Suboptimal digital marketing practices via social media
W2	Fluctuating revenue due to unstable sales performance
W3	Limited employee adaptability to technology
W4	E-commerce service performance requires improvement

Source: Author's identification based on Feasibility Model for SMEs (Chumaidiyah et al., 2024), field observation, and expert judgment, 2024

Table 3. Opportunity Factors

Code	Factor
O1	Government MSME training and mentoring programs
O2	Growing demand for fashion products
O3	Rising consumer awareness of local products

O4	Rapid growth of e-commerce platforms in Indonesia
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Source: Author's identification based on PESTEL framework, field observation, and expert judgment, 2024.

Table 4. Threat Factors

Code	Factor
T1	Competition from low-priced imported knit products
T2	Increasing number of fashion industry competitors
T3	Rapid and dynamic fashion trend changes
T4	Changes in e-commerce platform policies on fees and revenue disbursement

Source: Author's identification based on PESTEL framework, field observation, and expert judgment, 2024

IFAS Analysis

The IFAS matrix was constructed based on internal factors identified through the Feasibility Model for SMEs. Weights were calculated by dividing each factor's mean urgency score by the total of all selected factors' mean urgency scores, ensuring the sum equals 1.000. Ratings represent mean scores from respondents on a 1–4 scale reflecting the company's response strength to each factor.

Table 5. IFAS Matrix

Internal Factor	Weight	Rating	Score
STRENGTHS			
S1 – Strong vendor partnerships	0.297	3.50	1.039
S2 – Local knitting community for collaboration	0.203	2.00	0.406
S3 – Heritage identity as multigenerational knitting business	0.219	2.75	0.602
S4 – Strong local brand image	0.281	3.75	1.055
Total Strengths	1.000		3.102
WEAKNESSES			
W1 – Suboptimal digital marketing via social media	0.240	3.75	0.901
W2 – Fluctuating revenue from unstable sales	0.253	3.50	0.886
W3 – Limited employee technology adaptability	0.253	3.50	0.886
W4 – E-commerce service performance needs improvement	0.253	3.50	0.886
Total Weaknesses	1.000		3.559

Source: Primary data processed from interviews and expert judgment assessments, 2024

The IFAS results yield a total strengths score of 3.102 and a total weaknesses score of 3.559. The higher weaknesses score indicates that, despite meaningful strengths in vendor relationships and brand identity, the MSME retains significant internal vulnerabilities—particularly in digital marketing capability and employee technology readiness. These findings are consistent with Chumaidiyah et al. (2024), who identified marketing and performance dimensions as the most critical internal constraints for Indonesian fashion MSMEs operating

under resource limitations. The application of the Feasibility Model as the identification basis ensured these dimensions were explicitly and systematically examined rather than emerging incidentally from unstructured observation, thereby strengthening the traceability of the IFAS results to the firm's specific operational context. Notably, S2 (local knitting community) received the lowest strength rating (2.00), suggesting that while community membership is a structural asset, the firm has not yet fully leveraged it as a collaborative or co-marketing resource. This represents a latent strength with strategic development potential.

EFAS Analysis

The EFAS matrix was constructed using the PESTEL framework, ensuring comprehensive coverage of external conditions. Ratings reflect the company's capacity to respond to each external condition.

Table 6. EFAS Matrix

External Factor	Weight	Rating	Score
OPPORTUNITIES			
O1 – Government MSME training and mentoring programs	0.234	3.50	0.818
O2 – Growing demand for fashion products	0.260	3.50	0.909
O3 – Rising consumer awareness of local products	0.247	3.25	0.802
O4 – Rapid e-commerce growth in Indonesia	0.260	3.75	0.974
Total Opportunities	1.000		3.503
THREATS			
T1 – Competition from low-priced imported knit products	0.267	2.50	0.667
T2 – Increasing number of fashion competitors	0.267	2.75	0.733
T3 – Rapid fashion trend changes	0.240	2.50	0.600
T4 – E-commerce platform policy changes	0.227	2.75	0.623
Total Threats	1.000		2.623

Source: Primary data processed from interviews and expert judgment assessments, 2024

The EFAS results yield an opportunities score of 3.503 and a threats score of 2.623. The positive gap of 0.880 indicates that the external environment is broadly favorable for the MSME's development, provided internal capabilities can be sufficiently strengthened to capitalize on available opportunities. The rapid growth of e-commerce in Indonesia (BPS, 2024) and rising local product consumer awareness (Katadata Insight Center, 2024) represent the two highest-scoring opportunities, underscoring the strategic centrality of digital channel development. The relatively lower threat scores suggest that while competitive and trend-related pressures are real, the firm's artisanal heritage and established community networks may provide a degree of natural differentiation that helps moderate these threats. However, these strengths have not yet been fully translated into competitive performance, as reflected by the firm's higher weakness score relative to its strengths score. Therefore, internal capability improvements remain essential for the business to fully capitalize on external opportunities. The PESTEL framework proved particularly valuable in surfacing the e-commerce policy dimension (T4), a structurally significant factor that might be overlooked in a general

competitive scan, especially given recent shifts in platform fee structures in Indonesia's e-commerce landscape (BPS, 2024).

SWOT Position

The SWOT quadrant position was determined by computing coordinate differences as follows:

$$X = S - W = 3.102 - 3.559 = -0.457$$

$$Y = O - T = 3.503 - 2.623 = +0.880$$

Table 7. SWOT Coordinate Summary

Component	Score	Coordinate
Strengths (S)	3.102	$X = S - W = -0.457$
Weaknesses (W)	3.559	
Opportunities (O)	3.503	$Y = O - T = +0.880$
Threats (T)	2.623	
Position: WO Quadrant		(-0.457 ; +0.880)

Source: Primary data processed from IFAS and EFAS calculations, 2024

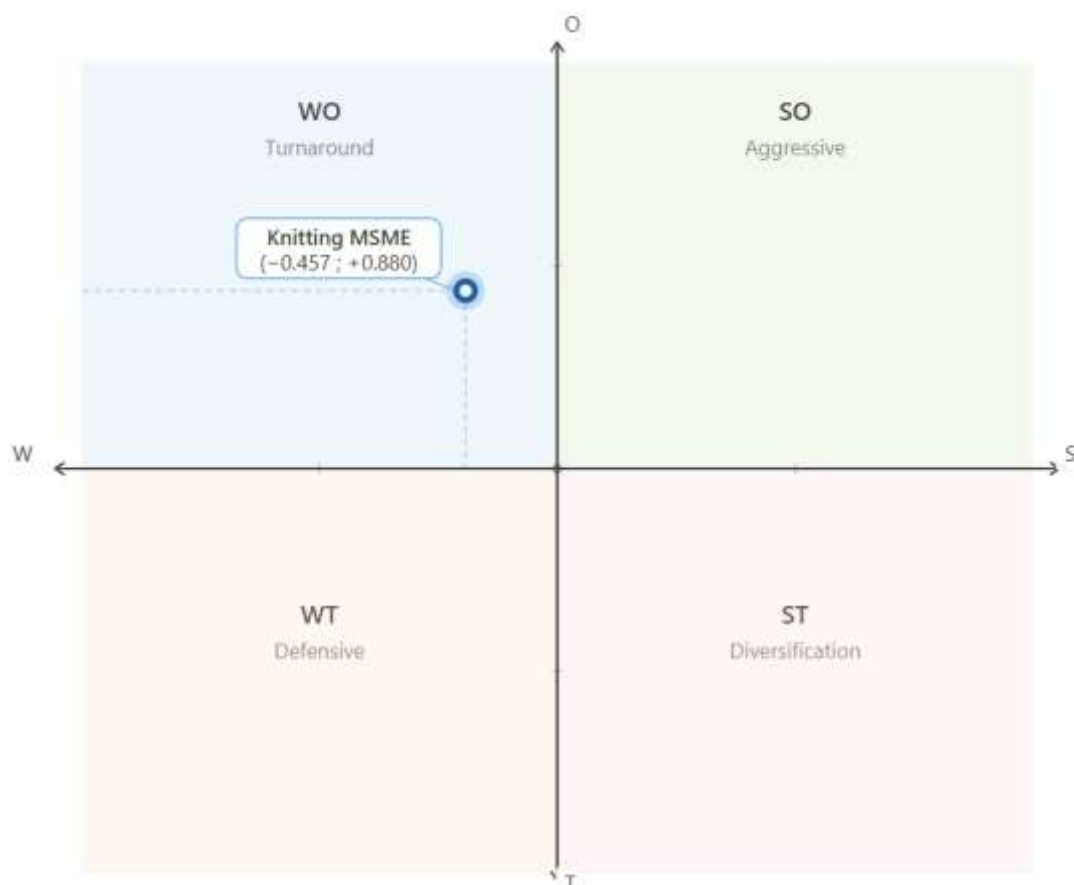


Figure 1. SWOT Quadrant Position

Source: Author's analysis based on IFAS and EFAS calculations, 2024.

The coordinates $(-0.457; +0.880)$ place the MSME in the Weakness–Opportunity (WO) quadrant. This position indicates significant external opportunities alongside internal

weaknesses that must be addressed to capitalize on them. A WO position calls for turnaround-oriented strategies that leverage external opportunities to offset internal limitations (David et al., 2020).

TOWS Matrix

Based on the WO quadrant positioning, a TOWS matrix was developed to generate alternative strategies. While all four quadrant strategy types (SO, ST, WO, WT) were considered for analytical completeness, WO strategies were prioritized as they directly address the intersection of internal weaknesses and external opportunities characterizing the firm's current strategic position. Four WO strategies were formulated:

- **WO1** : Optimize social media and e-commerce platform performance to capture rapid platform growth and rising local product awareness as primary sales drivers (addresses W1, W4; leverages O3, O4)
- **WO2**: Strengthen employee digital adaptability to maximize operational readiness in capturing expanding e-commerce and fashion market opportunities (addresses W3; leverages O2, O4)
- **WO3**: Diversify product offerings through trend-responsive designs aligned with local consumer preferences to reduce revenue volatility (addresses W2; leverages O2, O3)
- **WO4**: Enhance operational readiness and e-commerce service quality to effectively respond to increasing fashion product demand. (addresses W3, W4; leverages O2, O4)

QSPM Analysis

The QSPM was applied to rank the four WO strategies. Experts assigned Attractiveness Scores (AS) on a 1–4 scale for each internal and external factor relative to each strategy, where 1 = not attractive, 2 = somewhat attractive, 3 = reasonably attractive, and 4 = highly attractive. TAS values were computed as the sum of the products of each factor's weight and corresponding AS across all IFAS and EFAS factors.

Table 8. QSPM Results – WO Strategies

No.	WO Strategy	TAS
1	WO1 ★ – Strengthen digital marketing performance to leverage rapid e-commerce growth and increasing local product awareness.. (Priority Strategy)	11.54
2	WO4 – Enhance operational readiness and e-commerce service quality to effectively respond to increasing fashion product demand.	11.13
3	WO2 – Strengthen employee digital adaptability to capture expanding e-commerce opportunities	9.02
4	WO3 — Diversify product offerings through trend-responsive designs to reduce revenue volatility	7.75

Source: Primary data processed from expert assessments and QSPM calculations, 2024

WO1 emerges as the priority strategy with the highest TAS of 11.54, directly targeting suboptimal digital marketing (W1) and e-commerce performance (W4) — the weaknesses most concentrated in the marketing dimension of the Feasibility Model for SMEs — while aligning with the two highest-scoring external opportunities: rapid e-commerce growth (O4, score: 0.974) and rising local product awareness (O3, score: 0.802). In the knitting fashion industry, where consumer purchasing increasingly migrates to digital channels, digital marketing proficiency constitutes a strategic necessity rather than a competitive advantage.

The application of the Feasibility Model for SMEs as the identification basis for internal factors ensured that weaknesses concentrated in the marketing and operational dimensions were explicitly weighted throughout the QSPM process, producing a prioritization outcome traceable to the firm's specific operational context. The narrow TAS gap between WO1 (11.54) and WO4 (11.13) reflects a complementary relationship, with both strategies targeting digital channel performance and while WO4 strengthens operational readiness and e-commerce service quality to support increasing online demand. WO2 (9.02) and WO3 (7.75) represent medium-term initiatives, with WO2 serving as a capacity-building prerequisite and WO3 addressing product portfolio diversification once digital foundations are established.

CONCLUSION

This study formulated and prioritized business development strategies for a knitting MSME in Kampoeng Radjoet Binongjati, Bandung, through the sequential application of the Feasibility Model for SMEs, the PESTEL framework, SWOT analysis, and QSPM. The SWOT analysis positioned the business in the Weakness–Opportunity (WO) quadrant with coordinates of (−0.457; +0.880), indicating significant external opportunities accompanied by internal weaknesses, particularly in digital marketing capabilities and e-commerce performance, that needed to be addressed to optimize the business's strategic potential.

The QSPM analysis identified digital marketing optimization (WO1, TAS: 11.54) as the highest-priority strategy, followed by e-commerce performance and quality improvement (WO4, TAS: 11.13), strengthening employee digital adaptability (WO2, TAS: 9.02), and product portfolio diversification through trend-responsive designs (WO3, TAS: 7.75). A phased implementation approach was recommended, beginning with WO1 and WO4 as immediate parallel initiatives due to their complementary focus on improving digital marketing performance, operational readiness, and e-commerce service quality. This was followed by WO2 as a capacity-building initiative and WO3 as a medium-term product development strategy. The practical implications of this study extend to both MSME owners and policymakers. For business owners, the study provides an empirically prioritized strategic roadmap based on the firm's operational characteristics, with actionable strategies utilizing existing digital platforms and government-supported training programs. For policymakers, the findings highlight the strategic importance of expanding technology-oriented MSME development programs within traditional creative industry clusters, such as Kampoeng Radjoet Binongjati, as a means of accelerating the digital transformation of artisanal MSMEs.

The methodological contribution of this study lies in demonstrating the applicability of the Feasibility Model for SMEs (Chumaidiyah et al., 2024) as a structured and domain-specific foundation for internal factor identification within the SWOT-QSPM analytical framework. This approach provides a traceable and theoretically grounded alternative to the ad hoc factor selection processes commonly found in previous MSME strategy studies. Several limitations should be acknowledged. The expert panel consisted of four respondents, which was appropriate for a single-firm case study but limited the generalizability of the weighting and rating results. Furthermore, this study did not include a financial feasibility analysis of the recommended strategies, which would be necessary for comprehensive implementation planning. As a single-case study, the findings may not be directly applicable to other knitting MSMEs with different resource capabilities and market positions. Future research should involve a broader respondent base across multiple knitting MSMEs within and beyond Kampoeng Radjoet Binongjati to evaluate generalizability, incorporate financial feasibility assessments to complement strategic prioritization, and conduct longitudinal evaluations of the implementation outcomes of the identified priority strategies.

REFERENCE

- Abd Rahman, A., Singhry, H. B., Hanafiah, M. H., & Abdul, M. (2017). Influence of perceived benefits and traceability system on the readiness for Halal Assurance System implementation among food manufacturers. *Food Control*, 73, 1318–1326.
- Ayoub, H. S., & Sopuru, J. C. (2026). Reconfiguring strategic capabilities in the digital era: How AI-enabled dynamic capability, data-driven culture, and organizational learning shape firm performance. *Sustainability*, 18(3), 1157.
- Benzaghta, M. A., et al. (2021). SWOT analysis applications: An integrative literature review. *Journal of Global Business Insights*, 6(1), 55–73.
- Chumaidiyah, E., Fauzia, P. M., & Abdulbasah Kamil, A. (2024). Enhancement of SME feasibility through the integration of BMC, functional organization, and SCM. *Cogent Business & Management*.
- Cong, L. W., Liang, T., Zhang, X., & Zhu, W. (2025). Textual factors: A scalable, interpretable, and data-driven approach to analyzing unstructured information. *Management Science*, 71(12), 10727–10739.
- David, F. R., David, F. R., & David, M. E. (2020). *Strategic management: A competitive advantage approach* (17th ed.). Pearson.
- Denaro, N., Merlano, M. C., & Russi, E. G. (2016). Follow-up in head and neck cancer: Do more does it mean do better? A systematic review and our proposal based on our experience. *Clinical and Experimental Otorhinolaryngology*, 9(4), 287–297.
- Dong, L., Jiang, P., & Xu, F. (2023). Impact of traceability technology adoption in food supply chain networks. *Management Science*, 69(3), 1518–1535.
- Fairfield, T., & Charman, A. E. (2017). Explicit Bayesian analysis for process tracing: Guidelines, opportunities, and caveats. *Political Analysis*, 25(3), 363–380.
- Gürel, M., & Tat, M. (2021). SWOT analysis: A theoretical review. *Journal of International Social Research*, 15(82), 1–8.
- Hasan, M. M., & Shehun, M. T. F. (2022). Implementing sustainable supply chain practices in global apparel retail: A systematic review of current trends. *ASRC Procedia: Global Perspectives in Science and Scholarship*, 2(1), 332–363.
- Katadata Insight Center. (2024). *Preferensi konsumen terhadap produk lokal Indonesia 2024*. Katadata.
- Kay, A., & Baker, P. (2015). What can causal process tracing offer to policy studies? A review of the literature. *Policy Studies Journal*, 43(1), 1–21.
- Lievens, F., & Sackett, P. R. (2017). The effects of predictor method factors on selection outcomes: A modular approach to personnel selection procedures. *Journal of Applied Psychology*, 102(1), 43.
- Lobo, C. A., Marinho, A., Santos Pereira, C., Azevedo, M., & Moreira, F. (2025). The role of leadership and strategic alliances in innovation and digital transformation for sustainable entrepreneurial ecosystems: A comprehensive analysis of the existing literature. *Sustainability*, 17(13), 6182.
- Miric, M., Jia, N., & Huang, K. G. (2023). Using supervised machine learning for large-scale classification in management research: The case for identifying artificial intelligence patents. *Strategic Management Journal*, 44(2), 491–519.
- Perera, M. (2022). The PESTEL analysis framework: A comprehensive review. *International Journal of Management Studies*, 11(2), 78–89.
- Rangkuti, F. (2021). *Analisis SWOT: Teknik membedah kasus bisnis*. Gramedia Pustaka Utama.
- Sepasgozar, S. M. E., & Davis, S. (2018). Construction technology adoption cube: An investigation on process, factors, barriers, drivers and decision makers using NVivo and AHP analysis. *Buildings*, 8(6), 74.

- Seyi-Lande, O. B., Arowogbadamu, A. A.-G., & Oziri, S. T. (2022). Cross-functional key performance indicator frameworks for driving organizational alignment and sustainable business growth. *International Journal of Multidisciplinary Futuristic Development*, 1(2), 1–18.
- Statista. (2024). *Indonesia fashion market outlook 2024*. Statista.