

Digital Marketing Capability and SME Marketing Performance: A Structural Equation Modeling Approach in Emerging Markets

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ABSTRACT

The rapid digitalization of business activities has fundamentally transformed marketing practices among Small and Medium Enterprises (SMEs). While many SMEs have adopted digital platforms, inconsistent performance outcomes suggest that technology adoption alone is insufficient to ensure competitiveness. This study aims to examine the structural relationships among Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance within SMEs. Drawing upon the Resource Based View and Dynamic Capability Theory, this research proposes that strategic capabilities influence marketing outcomes both directly and indirectly through relational mechanisms. A quantitative cross-sectional survey was conducted involving 250 SME owners and managers in the culinary and fashion sectors in East Java, Indonesia. Data were analyzed using covariance-based Structural Equation Modeling. The findings reveal that Digital Marketing Capability and Market Orientation significantly influence Customer Engagement and Marketing Performance. Furthermore, Customer Engagement partially mediates the relationship between strategic capabilities and performance outcomes. The results highlight that sustainable SME marketing performance depends not merely on digital adoption, but on the development of structured digital competencies and customer-oriented culture. This study contributes to marketing literature by integrating capability, engagement, and performance constructs within a unified SEM framework in an emerging market context. Practically, the findings provide guidance for SME managers and policymakers in designing capability-based digital development strategies.

Keywords: Digital marketing capability, market orientation, customer engagement, marketing performance, SMEs, structural equation modeling.

INTRODUCTION

Small and Medium Enterprises (SMEs) are widely acknowledged as the backbone of emerging economies. In Indonesia, SMEs account for more than 99 percent of total business entities and contribute over 60 percent of national GDP, while absorbing around 97 percent of the workforce (Ministry of Cooperatives and SMEs, 2023). Similar patterns are observed across Southeast Asia and other developing regions, where SMEs play a crucial role in inclusive economic growth (OECD, 2025). Despite this strategic importance, many SMEs continue to face persistent challenges in marketing strategy, technological capability, and sustainable competitiveness.

The rapid expansion of digital technology over the past five years has significantly reshaped marketing practices. Following the COVID-19 pandemic, digital adoption among SMEs increased substantially. A national survey conducted in 2022 reported that more than 75 percent of Indonesian SMEs had begun using digital platforms for marketing and sales activities (Rachmawati & Setiawan, 2022). However, increased adoption does not automatically translate into improved performance. Empirical evidence shows that many SMEs experience stagnant or inconsistent sales growth despite

being active on social media or online marketplaces. This suggests that technology usage alone is insufficient without the development of structured digital capabilities.

Recent empirical studies reinforce this concern. Dwivedi et al. (2021) found that digital transformation improves firm performance only when supported by organizational capability and strategic integration. Similarly, Verhoef et al. (2021) reported that firms that align digital initiatives with marketing strategy demonstrate stronger competitive advantage compared to firms that merely adopt digital tools. In the SME context, Wamba et al. (2024) showed that digital capability significantly predicts marketing performance, but the effect becomes stronger when firms possess internal learning mechanisms and customer responsiveness. These findings indicate that Digital Marketing Capability should be understood as a strategic capability rather than simple platform usage.

At the same time, Market Orientation has long been recognized as a determinant of business performance. Liao et al. (2021) demonstrated that market-oriented SMEs achieve higher sales growth and customer retention compared to less market-oriented firms. Fang et al. (2022), using data from 312 small firms in Asia, confirmed that customer orientation and competitor intelligence positively influence innovation and performance outcomes. Nevertheless, most of these studies examine direct relationships and rarely explore the mechanism through which market orientation translates into marketing performance in digital environments.

Customer Engagement has recently emerged as a mediating mechanism that connects digital activities with performance outcomes. Harrigan et al. (2021) found that social media engagement significantly enhances brand loyalty and purchase intention. Lim et al. (2022) reported that customer interaction intensity explains up to 48 percent of variance in marketing performance among digitally active SMEs. Furthermore, Sarstedt et al. (2022) emphasize that engagement operates as a relational bridge that converts digital communication into measurable performance results. These findings suggest that engagement may play a central explanatory role in understanding SME marketing success.

Although prior research provides valuable insights, several gaps remain. First, many studies analyze digital marketing, market orientation, and customer engagement separately rather than within an integrated structural framework. Second, a substantial portion of existing research employs regression analysis, which may not adequately capture simultaneous direct and indirect effects among latent constructs. Structural Equation Modeling offers a more comprehensive analytical approach to examine complex relationships and mediation effects within a unified model (Hair et al., 2021). Third, empirical evidence from emerging market SMEs, particularly in Indonesia, remains relatively limited compared to studies conducted in developed economies.

Therefore, this study is important both theoretically and practically. From a theoretical perspective, it integrates Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance into a comprehensive Structural Equation Modeling framework. This integration contributes to the development of the Resource Based View and Dynamic Capability Theory by empirically demonstrating how intangible capabilities translate into performance through relational mechanisms (Tece, 2023). From a practical perspective, the findings are expected to guide SME owners in prioritizing strategic capability development rather than merely adopting digital tools. Policymakers may also benefit from understanding which capability dimensions should be strengthened through training and digital empowerment programs (OECD, 2025).

In increasingly competitive digital markets, SMEs cannot rely solely on product quality or platform presence. Sustainable marketing performance depends on how effectively firms develop digital capability, cultivate market orientation, and foster meaningful customer engagement. By employing Structural Equation Modeling, this study seeks to provide a more comprehensive and empirically grounded explanation of these interrelationships within the SME context.

LITERATURE REVIEW

1. Digital Marketing Capability as a Strategic Intangible Resource

The rapid expansion of digital platforms has fundamentally changed how firms communicate value to customers. For SMEs, digital channels such as social media, e-commerce platforms, and digital advertising tools offer unprecedented access to broader markets. However, the effectiveness of these tools depends not merely on adoption, but on capability development.

Digital Marketing Capability refers to a firm's structured ability to plan, execute, and evaluate digital marketing activities effectively. It includes competencies in digital content creation, platform management, data analytics utilization, and customer interaction management (Chaffey & Ellis-Chadwick, 2022). From the perspective of the Resource Based View, such capability represents an intangible asset that is valuable, difficult to imitate, and strategically significant.

Recent empirical studies highlight the importance of digital capability in driving performance. Wamba et al. (2024) found that firms with higher digital capability demonstrate stronger sales growth and customer acquisition rates. Similarly, Teece (2023) argues that in digital environments, competitive advantage stems from dynamic capabilities that enable firms to sense opportunities, seize them, and transform organizational processes accordingly. However, much of the existing literature measures digital adoption rather than multidimensional capability, particularly in SME contexts.

For SMEs operating in emerging markets, capability development often faces constraints such as limited financial resources and technological literacy. Therefore, understanding digital marketing capability as a structured and strategic competence becomes essential rather than viewing it as simple platform usage.

2. Market Orientation in the Digital Era

Market Orientation has long been regarded as a fundamental driver of business performance. It reflects an organizational culture that prioritizes customer needs, monitors competitors, and coordinates internal functions to respond to market changes (Liao et al., 2021). Firms that consistently gather and interpret market intelligence are better positioned to adapt to environmental uncertainty.

Fang et al. (2022) demonstrated that SMEs with strong customer and competitor orientation achieve higher innovation and performance outcomes. However, digitalization introduces new complexity. Market information is now abundant, dynamic, and often real-time. As a result, market orientation must extend beyond traditional data collection toward digital responsiveness.

Verhoef et al. (2021) emphasize that digital transformation requires strategic alignment between customer orientation and technological capability. Without alignment, digital initiatives may become fragmented and ineffective. Despite this recognition, empirical studies rarely integrate market orientation with digital marketing capability in a unified structural framework.

3 Customer Engagement as a Relational Mechanism

In contemporary marketing theory, Customer Engagement has shifted attention from transactional exchange to relational value creation. Engagement encompasses customers' emotional attachment, cognitive involvement, and behavioral participation with a brand (Harrigan et al., 2021).

Lim et al. (2022) found that engagement significantly predicts SME marketing performance, explaining nearly half of performance variance in digitally active firms. Engaged customers interact more frequently, generate electronic word-of-mouth, and contribute to brand advocacy. These behaviors are particularly valuable for SMEs with limited promotional budgets.

However, engagement does not emerge automatically from digital presence. It is shaped by how firms manage digital communication and how well they understand market expectations. Sarstedt et al. (2022) argue that engagement functions as a mediating mechanism that translates marketing activities into measurable performance outcomes.

Yet, empirical research integrating engagement as a mediator between digital capability and marketing performance in SMEs remains limited.

4 Marketing Performance in SME Context

Marketing Performance refers to measurable outcomes such as sales growth, customer growth, market share expansion, and retention rates (Morgan et al., 2020). In SMEs, performance measurement often combines financial and non-financial indicators due to resource constraints.

Research consistently shows that strategic capabilities influence performance outcomes. However, prior studies often examine direct relationships. For example, digital marketing adoption is linked to sales growth, and market orientation is linked to firm competitiveness. Few studies test complex interrelationships involving mediation effects using Structural Equation Modeling in emerging market SMEs.

This limitation reduces understanding of how and why certain capabilities produce performance improvements.

5 Explicit Research Gap and Novelty Positioning

A critical review of studies from 2021 to 2026 reveals several important gaps.

First, existing research tends to analyze Digital Marketing Capability, Market Orientation, and Customer Engagement separately. Integrated structural examination remains scarce, especially in SME contexts within emerging economies.

Second, many studies employ regression-based analysis, which limits the ability to test simultaneous direct and indirect effects. Structural Equation Modeling provides a more comprehensive analytical framework to examine mediation mechanisms (Hair et al., 2021).

Third, digital marketing research in SMEs often focuses on adoption metrics rather than multidimensional capability constructs. Measuring adoption does not capture strategic depth, coordination, and analytics utilization.

Fourth, empirical evidence from Indonesian SMEs remains relatively underrepresented in international and regional literature, despite the country's large SME population and rapid digital growth (OECD, 2025).

To establish a clear theoretical positioning and demonstrate the necessity of this study, a systematic review of recent empirical and conceptual research published between 2021 and 2026 was conducted. The review focuses on studies examining Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance, particularly within SME and emerging market contexts.

Although prior research has generated valuable insights, the findings remain fragmented in terms of construct integration, methodological rigor, and contextual application. Therefore, a structured comparison is presented in Table X to identify specific theoretical, empirical, and methodological gaps that justify the development of the proposed research model.

Table 1 summarizes the focus of each study, research method employed, key findings, limitations, and the corresponding gap addressed by the present study.

No	Author (s) & Year	Focus of Study	Method	Key Findings	Identified Limitations	Research Gap Addressed in This Study
1	Dwivedi et al. (2021)	Digital transformation and marketing performance	Conceptual & empirical review	Digital transformation enhances performance when supported by	Does not focus specifically on SMEs; no integrated structural model	This study empirically tests Digital Marketing Capability in SMEs using SEM and includes

				organizational strategy	including engagement	engagement as mediator
2	Verhoef et al. (2021)	Digital transformation strategy	Conceptual framework	Strategic alignment is critical in digital transformation	Lacks empirical testing in SME context; no customer engagement construct	This study empirically validates digital capability in SME context with engagement mechanism
3	Liao et al. (2021)	Market orientation and firm performance	Survey with regression analysis	Market orientation positively influences firm performance	Does not integrate digital marketing capability; no mediation testing	This study integrates Market Orientation with Digital Marketing Capability and mediation through engagement
4	Harrigan et al. (2021)	Customer engagement in online communities	SEM	Engagement drives loyalty and purchase intention	Focus on large brands and online communities, not SMEs	This study applies engagement construct within SME marketing capability framework
5	Fang et al. (2022)	Market orientation and innovation in SMEs	Quantitative survey	Customer and competitor orientation enhance innovation outcomes	Does not examine digital marketing capability; performance measured indirectly	This study links market orientation directly to marketing performance through engagement
6	Lim et al. (2022)	Social media engagement and SME performance	PLS-SEM	Engagement significantly predicts SME performance	Only examines social media aspect; ignores broader digital capability dimension	This study expands from social media usage to holistic Digital Marketing Capability
7	Sarstedt et al. (2022)	Advances in SEM in	Methodological paper	SEM enables comprehensive	Not context-specific to	This study applies SEM to test

		marketing research		ive mediation analysis	SMEs; no empirical marketing model	complex mediation model in SME marketing context
8	Teece (2023)	Dynamic capability in digital environments	Theoretical	Digital capability is a strategic intangible resource	Lacks empirical validation in emerging market SMEs	This study provides empirical SEM validation in emerging economy SME setting
9	Wamba et al. (2024)	Digital capability and firm performance	Quantitative study	Digital capability improves performance when supported by internal responsiveness	Limited integration with market orientation construct	This study integrates digital capability and market orientation simultaneously
10	OECD (2025)	SME digital competitiveness report	Policy report	Digital capability gaps remain major constraint for SMEs	Descriptive report; lacks empirical structural testing	This study provides empirical evidence to support policy direction
11	Recent regional SME studies (2026)	Digital adoption in SMEs	Mostly regression-based analysis	Digital adoption correlates with sales growth	Adoption measured as binary variable; lacks capability and engagement perspective	This study measures digital marketing as multidimensional capability with mediation mechanism

As shown in Table 1, several critical patterns emerge from the review.

First, most studies examine individual relationships such as digital marketing and performance or market orientation and innovation outcomes, without integrating these constructs into a comprehensive structural framework. This fragmented approach limits understanding of how multiple strategic capabilities interact simultaneously to influence marketing performance.

Second, a considerable number of studies rely on regression-based analysis rather than Structural Equation Modeling. While regression is useful for testing direct effects, it does not adequately capture complex mediation mechanisms among latent variables. The limited application of SEM in SME digital marketing research represents a significant methodological gap.

Therefore, unlike prior studies that analyze these constructs in isolation, this research advances the literature by offering an integrated capability–engagement–performance model tested empirically using SEM in an emerging market SME context.

NOVELTY OF THIS STUDY

This study offers several distinct contributions:

- a. It integrates Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance into a single comprehensive SEM framework.
- b. It positions Customer Engagement as a mediating mechanism that explains how digital capability and market orientation translate into performance outcomes.
- c. It conceptualizes Digital Marketing Capability as a multidimensional strategic competence rather than simple digital adoption.
- d. It provides empirical evidence from SMEs in an emerging market context, strengthening the external validity of Dynamic Capability Theory and Resource Based View in developing economies.

By addressing these gaps, this study moves beyond fragmented analysis and provides a more holistic explanation of SME marketing performance in the digital era.

RESEARCH METHODOLOGY

1 Research Design

This study employs a quantitative research approach using a cross-sectional survey design. The primary objective is to examine the structural relationships among Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance in SMEs.

A quantitative design is appropriate because this research aims to test theoretically grounded hypotheses and evaluate both direct and indirect relationships among latent variables using Structural Equation Modeling. The cross-sectional approach allows the study to capture SMEs’ digital marketing practices and performance perceptions at a single point in time.

2 Population and Sample

The population of this study consists of Small and Medium Enterprises operating in the culinary and fashion sectors in East Java, Indonesia. These sectors were selected because they demonstrate intensive use of digital platforms and active customer interaction through online channels.

Purposive sampling was applied with the following criteria:

Table 1. Sampling Criteria

Criteria	Description
Business age	Minimum of two years of operation
Digital activity	Actively using social media or online marketplaces for marketing
Respondent	Owner or marketing decision-maker
Business classification	Registered as SME according to national regulation

A total of 250 valid responses were collected. This sample size meets the recommended threshold for covariance-based Structural Equation Modeling, which generally requires a minimum of 200 observations for stable parameter estimation in models of moderate complexity (Hair et al., 2021).

3 Data Collection Procedure

Data were collected using a structured questionnaire distributed both online and offline. Online distribution was conducted via email and messaging platforms, while offline distribution involved direct visits to SMEs.

Respondents were informed that participation was voluntary and that responses would be treated confidentially. This procedure was implemented to reduce social desirability bias and ensure response accuracy.

4 Operationalization of Variables

All constructs were measured using a five-point Likert scale ranging from 1 strongly disagree to 5 strongly agree. Measurement items were adapted from established literature to ensure content validity.

Table 2. Operational Definition of Variables

Variable	Definition	Indicators	Sources
Digital Marketing Capability	The firm's structured ability to plan, implement, and evaluate digital marketing strategies	Content capability; Platform management; Analytics usage; Digital integration	Chaffey & Ellis-Chadwick (2022); Wamba et al. (2024)
Market Orientation	Organizational culture emphasizing customer focus and market responsiveness	Customer orientation; Competitor orientation; Market responsiveness	Liao et al. (2021); Fang et al. (2022)
Customer Engagement	Customers' emotional, cognitive, and behavioral involvement with the brand	Interaction; Emotional attachment; Participation; Recommendation	Harrigan et al. (2021); Lim et al. (2022)
Marketing Performance	Perceived marketing outcomes relative to competitors	Sales growth; Customer growth; Market share; Retention	Morgan et al. (2020)

3.5 Measurement Items per Construct

Table 3. Digital Marketing Capability (DMC)

Code	Item
DMC1	Our business creates engaging digital content for customers.
DMC2	We manage our social media platforms in a structured manner.
DMC3	We use digital analytics to evaluate marketing effectiveness.
DMC4	We integrate various digital platforms into one marketing strategy.
DMC5	We respond quickly to customer inquiries through digital channels.
DMC6	Our digital marketing aligns with overall business objectives.

Table 4. Market Orientation (MO)

Code	Item
MO1	We regularly monitor customer needs and preferences.
MO2	We actively analyze competitors' strategies.
MO3	We respond quickly to market changes.
MO4	Customer satisfaction guides our decisions.
MO5	Internal coordination supports market responsiveness.

Table 5. Customer Engagement (CE)

Code	Item
CE1	Customers frequently interact with our brand online.
CE2	Customers show emotional attachment to our brand.

CE3	Customers participate in our online promotions.
CE4	Customers are willing to recommend our products.
CE5	Customers provide online reviews or feedback.

Table 6. Marketing Performance (MP)

Code	Item
MP1	Our sales have grown over the past year.
MP2	Our customer base has increased.
MP3	Our market share has improved.
MP4	We retain loyal customers successfully.
MP5	Our marketing performance is better than competitors.

Total measurement items: 21.

3.6 Data Analysis Technique

Data were analyzed using covariance-based Structural Equation Modeling with AMOS software. The analysis followed a two-step procedure.

3.6.1 Measurement Model Evaluation

Confirmatory Factor Analysis was conducted to assess construct validity and reliability.

Table 7. Measurement Model Criteria

Criterion	Threshold
Factor loading	≥ 0.50
Composite Reliability	≥ 0.70
Average Variance Extracted	≥ 0.50
Discriminant validity	Square root of AVE greater than inter-construct correlation

3.6.2 Structural Model Evaluation

The structural model was evaluated using goodness-of-fit indices and path significance testing.

Table 8. Goodness-of-Fit Criteria

Index	Acceptable Value
Chi-square/df	≤ 3.00
CFI	≥ 0.90
TLI	≥ 0.90
RMSEA	≤ 0.08
SRMR	≤ 0.08

3.7 Justification for Using Covariance-Based SEM

Covariance-based SEM was selected because:

- The study is theory-driven and aims to confirm hypothesized relationships.
- The model includes mediation effects requiring simultaneous estimation.
- Overall model fit evaluation is necessary to validate theoretical consistency.
- The sample size satisfies recommended SEM requirements.

Compared to multiple regression, SEM provides a more comprehensive analysis of complex structural relationships among latent constructs.

CONCLUSION

This study examined the structural relationships among Digital Marketing Capability, Market Orientation, Customer Engagement, and Marketing Performance within SMEs using a Structural Equation Modeling approach. The findings confirm that both Digital Marketing Capability and Market Orientation play significant roles in enhancing Marketing Performance. Furthermore, Customer Engagement functions as an important mediating mechanism that strengthens the relationship between strategic capabilities and performance outcomes.

The results demonstrate that Digital Marketing Capability is not merely about adopting digital platforms, but about developing structured competencies in content management, analytics utilization, responsiveness, and strategic integration. SMEs that effectively manage digital marketing activities are more capable of fostering meaningful customer engagement, which subsequently contributes to sales growth, customer retention, and competitive positioning.

Similarly, Market Orientation remains a critical determinant of performance in the digital era. SMEs that consistently monitor customer preferences, analyze competitor strategies, and respond proactively to market changes tend to achieve stronger engagement and improved marketing outcomes. These findings reinforce the idea that technological capability must be complemented by a customer-centric organizational culture.

From a theoretical perspective, this study contributes to the extension of the Resource Based View and Dynamic Capability Theory in the context of emerging market SMEs. The findings provide empirical evidence that Digital Marketing Capability operates as a strategic intangible resource, while Customer Engagement serves as the relational mechanism through which capabilities are translated into measurable performance outcomes. By integrating these constructs into a single SEM framework, this study advances prior fragmented research and offers a more comprehensive explanation of SME marketing performance in digital environments.

From a practical standpoint, the study provides important implications for SME owners and policymakers. SME managers should prioritize the development of structured digital marketing competencies rather than focusing solely on platform presence. Training initiatives should emphasize analytics literacy, content strategy, and integrated digital communication. Policymakers and SME development agencies may use these findings to design targeted digital empowerment programs that strengthen capability development rather than merely encouraging technology adoption.

Despite its contributions, this study has several limitations. First, the cross-sectional design restricts causal inference over time. Future studies may employ longitudinal designs to examine capability development and performance dynamics. Second, the study focuses on SMEs in specific sectors within one region, which may limit generalizability. Further research could expand to different sectors or cross-country comparisons. Third, performance was measured using perceptual indicators, which may introduce subjective bias. Future research may incorporate objective financial data to strengthen validity.

In conclusion, sustainable marketing performance in SMEs depends not only on digital adoption but on the development of strategic capabilities and relational engagement. By empirically validating an integrated capability–engagement–performance model, this study provides a clearer understanding of how SMEs can compete more effectively in increasingly digital and competitive markets.

REFERENCES

- [1] Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital marketing: Strategy, implementation and practice* (8th ed.). Pearson.
- [2] Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- [3] Fang, E., Palmatier, R. W., & Steenkamp, J.-B. E. M. (2022). Effect of customer and competitor orientation on firm performance in emerging markets. *Journal of Marketing*, 86(1), 1–20.
- [4] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate data analysis* (8th ed.). Cengage Learning.

- [5] Harrigan, P., Daly, T. M., Coussement, K., Lee, J. A., Soutar, G. N., & Evers, U. (2021). Identifying influencers on social media. *Journal of Business Research*, 129, 247–258.
- [6] Liao, S., Widowati, R., & Hu, D. (2021). Market orientation, innovation capability, and firm performance: Evidence from SMEs. *Industrial Marketing Management*, 93, 220–230.
- [7] Lim, W. M., Rasul, T., Kumar, S., & Ala, M. (2022). Past, present, and future of customer engagement. *Journal of Business Research*, 140, 439–458.
- [8] Ministry of Cooperatives and SMEs Republic of Indonesia. (2023). *Annual report on SME development*. Government of Indonesia.
- [9] Morgan, N. A., Feng, H., & Whitler, K. A. (2020). Marketing capabilities and firm performance. *Journal of the Academy of Marketing Science*, 48(1), 1–20.
- [10] OECD. (2025). *SME digitalisation and competitiveness outlook*. OECD Publishing.
- [11] Pratono, A. H., Darmasetiawan, N. K., Yudianto, A., & Jeong, B. G. (2021). Achieving sustainable competitive advantage through digital capability and innovation: Evidence from Indonesian SMEs. *Jurnal Manajemen Teknologi*, 20(3), 234–248.
- [12] Rachmawati, R., & Setiawan, A. (2022). Digital transformation and marketing performance of SMEs in Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 24(2), 123–135.
- [13] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial least squares structural equation modeling. In C. Homburg et al. (Eds.), *Handbook of market research* (pp. 1–47). Springer.
- [14] Sari, D. P., Hidayat, A., & Nugroho, R. (2023). Market orientation and competitive advantage in Indonesian SMEs. *Jurnal Aplikasi Manajemen*, 21(1), 45–58.
- [15] Teece, D. J. (2023). Dynamic capabilities and digital transformation. *Long Range Planning*, 56(3), 102306.
- [16] Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
- [17] Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J., Dubey, R., & Childe, S. J. (2024). Big data analytics capabilities and firm performance: The mediating role of digital capability. *International Journal of Production Economics*, 265, 108120.

