

ENTREPRENEURIAL CULTURE, INNOVATION, AND DIGITAL MARKETING CAPABILITY IN MSMEs' SUSTAINABLE COMPETITIVE PERFORMANCE

Eriyani^{1*}, Inaya Sari Melati², Lola Kurnia Pitaloka³, Rusdarti⁴

¹³⁴ Universitas Negeri Semarang, Indonesia

*Corresponding Author: eriyani.pe@mail.unnes.ac.id

ABSTRACT

Micro, small, and medium enterprises (MSMEs) require complementary organizational and digital capabilities to maintain competitiveness in increasingly dynamic markets. This study examines the effects of entrepreneurial culture and innovation on sustainable competitive performance and evaluates the direct and moderating role of digital marketing capability. A quantitative survey was administered to 136 owners or managers of processing-sector MSMEs in Semarang Regency, Indonesia. Data were analyzed using partial least squares structural equation modeling with 5,000 bootstrap resamples. Digital marketing capability had a strong positive effect on sustainable competitive performance ($\beta = 0.602$, $p < .001$), and innovation also had a positive effect ($\beta = 0.218$, $p = .048$). Entrepreneurial culture did not have a significant direct effect ($\beta = -0.033$, $p = .604$). Digital marketing capability negatively moderated the relationship between entrepreneurial culture and performance ($\beta = -0.215$, $p = .002$), indicating that entrepreneurial values may become less effective when they are not aligned with data-informed digital practices. Its positive moderation of the innovation–performance relationship did not reach the 5% significance level ($\beta = 0.147$, $p = .056$). The findings show that sustainable competitiveness depends more directly on actionable innovation and well-developed digital marketing capability than on entrepreneurial values alone. MSME support programs should therefore integrate product and process innovation with practical digital marketing, analytics, and managerial execution.

Keywords: Digital Marketing Capability; Entrepreneurial Culture; Innovation; Sustainable; Competitive Performance

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are productive business entities that operate with relatively limited capital, workforces, and organizational resources (Maulida & Yunani, 2017). Despite their modest scale, they occupy a central position in Indonesia's economic structure. In 2023, approximately 66 million MSMEs contributed about 61% of national gross domestic product, equivalent to IDR 9,580 trillion, and absorbed roughly 117 million workers, or 97% of the national workforce (Directorate General of Treasury, 2024). Their capacity to create employment, circulate local income, and stimulate community-based economic activity makes MSME competitiveness an important component of inclusive and sustainable development.

The present study focuses on processing-sector MSMEs in Semarang Regency. Official regional data indicate that the number of MSMEs increased from 12,151 in 2021 to 14,291 in 2022 and 19,180 in 2023 (Semarang Regency Open Data, 2021, 2023). This growth expands entrepreneurial opportunities but also intensifies competition for customers, suppliers, skilled labor, and market visibility. Local capacity-building programs have increasingly emphasized product development, entrepreneurship, and digital literacy; however, the ability of MSMEs to translate such support into sustainable competitive performance remains uneven.

MSMEs in developing economies commonly face limited managerial expertise, constrained finance and human resources, low technological readiness, and weak innovation systems (Ernawati et al., 2022; Fatimah et al., 2021; Habib & Sutopo, 2024). These constraints can reduce the speed and quality of strategic responses to changes in consumer preferences, technology, distribution channels, and competitive pressure. Sustainable competitive performance therefore requires more than short-term sales growth. It reflects an enterprise's continuing ability to generate economic value, respond to markets, improve operational efficiency, reduce waste, and maintain advantages that competitors cannot easily displace.

Entrepreneurial culture is one possible source of such performance. It refers to shared values and behavioral norms that support initiative, proactiveness, experimentation, controlled risk-taking, and continuous improvement. In the entrepreneurship literature, these orientations are expected to improve adaptability and opportunity recognition (Lumpkin & Dess, 1996). A culture that encourages employees

and owners to question established routines may support faster responses to market change. Nevertheless, entrepreneurial values do not automatically produce measurable outcomes. Their effects depend on whether they are embedded in managerial systems, resource allocation, market intelligence, and operational execution.

Innovation constitutes a more observable mechanism through which MSMEs can convert entrepreneurial intent into value. Product, process, marketing, and business-model innovation enable firms to differentiate their offerings, improve efficiency, reach new customers, and adapt to environmental change. Meta-analytic evidence has generally linked entrepreneurial and innovative orientation to stronger business performance (Rauch et al., 2009). From a dynamic capability perspective, innovation supports the sensing of opportunities, the seizing of new possibilities, and the reconfiguration of resources in response to changing market conditions (Teece, 2007). For processing-sector MSMEs, even incremental changes in product quality, packaging, production methods, and service delivery may have meaningful competitive consequences.

Digital marketing capability is another strategic capability that has become increasingly important. It encompasses the knowledge, routines, technology, and analytical competence required to use websites, social media, marketplaces, digital advertising, customer databases, and online interactions effectively. Digital channels may expand market reach and improve customer engagement, but their value depends on strategic coordination rather than mere platform adoption. Small firms often experience gaps in digital skills, infrastructure, content quality, and data use, which can prevent technology from producing the expected performance gains (Dwivedi et al., 2021). Digital marketing capability is therefore treated in this study both as a direct performance driver and as a condition that may alter the effects of entrepreneurial culture and innovation.

Previous studies have examined the direct relationships among entrepreneurial culture, innovation capability, digital marketing capability, and firm performance. Al Koliby et al. (2024), for example, linked these organizational capabilities to sustainable competitive performance in manufacturing SMEs in emerging economies. Other studies have emphasized the positive contribution of digital marketing to efficiency, customer relationships, and competitive advantage (Riyadi & Darma, 2023; Sharabati et al., 2024), while innovation has consistently been associated with differentiation and sustainable advantage (Astuti et al., 2023; Hameed et al., 2021). However, three gaps remain. First, direct-effect models may overlook the conditions under which entrepreneurial culture and innovation become more or less productive. Second, evidence concerning digital marketing capability as a moderator remains limited and mixed. Third, local evidence from processing-sector MSMEs is still insufficient, even though these enterprises face distinct constraints in technology, logistics, product development, and market access.

This study addresses these gaps by positioning digital marketing capability as both a direct antecedent of sustainable competitive performance and a moderator of the relationships between entrepreneurial culture, innovation, and performance. The model integrates the resource-based view, which regards organizational capabilities as strategic resources, with the dynamic capability perspective, which emphasizes adaptation and resource reconfiguration. Accordingly, the study examines whether digital marketing capability, entrepreneurial culture, and innovation directly influence sustainable competitive performance and whether digital marketing capability changes the strength of the entrepreneurial culture–performance and innovation–performance relationships among processing-sector MSMEs in Semarang Regency.

METHOD

Research Design and Context

The study used a quantitative, cross-sectional survey design within a positivist research paradigm. The design was selected to test theoretically specified relationships among entrepreneurial culture, innovation, digital marketing capability, and sustainable competitive performance. The unit of analysis was the MSME, while the respondent was the owner or manager who possessed sufficient knowledge of the enterprise's operations, marketing activities, innovation practices, and performance.

Population and Sample

The research population comprised 206 processing-sector MSMEs officially registered in the MSME development program of Semarang Regency. Processing-sector enterprises were selected because they

operate under substantial pressure to maintain product quality, control production costs, adjust packaging and distribution, and respond to changing customer preferences. From this population, 136 MSMEs participated in the study. Clusters were defined by subdistrict, and the sample was allocated proportionally to the distribution of registered MSMEs across the available clusters. Respondents within each cluster were selected from the official registry through random selection procedures to reduce selection bias and improve geographical representation.

A post-hoc power assessment based on a medium effect size ($f^2 = 0.15$), an alpha level of .05, and statistical power of .80 indicated that the achieved sample was adequate for detecting moderate relationships. Nevertheless, interaction effects are generally more difficult to identify than direct effects; therefore, small moderation coefficients were interpreted cautiously.

Instrument and Data Collection

Primary data were collected using a structured, closed-ended questionnaire administered to MSME owners or managers. All items were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Entrepreneurial culture assessed initiative, risk orientation, support for experimentation, and continuous improvement. Innovation assessed the enterprise's use of new ideas, alternative work methods, product development, and creative problem solving. Digital marketing capability measured the ability to use digital media to understand markets, develop customer relationships, coordinate partnerships, and support marketing decisions. Sustainable competitive performance assessed profitability, responsiveness, efficiency, waste reduction, delivery performance, and the ability to maintain competitiveness over time.

The instrument was adapted from previously validated scales and reviewed for clarity and contextual relevance before full distribution. A pilot test was conducted to identify ambiguous wording and evaluate internal consistency. The preliminary reliability results exceeded the commonly accepted threshold of .70 for all constructs. Participation was voluntary, and the questionnaire was used exclusively for research purposes.

Data Analysis

Data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 3. The method was appropriate because the research model contains multiple latent constructs and interaction terms and is oriented toward explaining variance in sustainable competitive performance. The analysis proceeded in two stages. First, the measurement model was evaluated through indicator loadings, average variance extracted (AVE), Cronbach's alpha, composite reliability, the Fornell–Larcker criterion, and the heterotrait–monotrait ratio (HTMT). Indicator loadings above .70, AVE values above .50, and reliability coefficients above .70 were treated as evidence of satisfactory convergent validity and internal consistency. Figure 1 presents the conceptual relationships tested in the model.

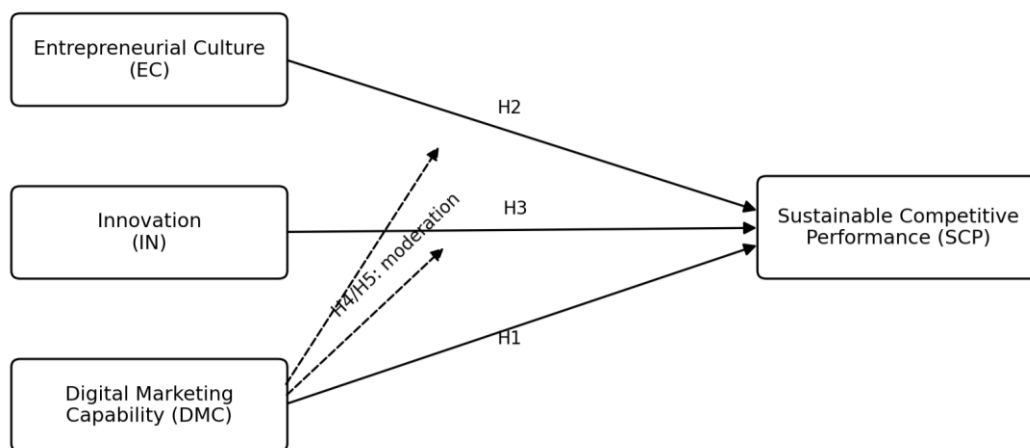


Figure 1. Research Framework

Second, the structural model was assessed by estimating standardized path coefficients and their significance. Interaction terms were created for entrepreneurial culture $\times$ digital marketing capability and innovation $\times$ digital marketing capability. Bootstrapping with 5,000 resamples generated standard errors, t statistics, and p values. Relationships were considered statistically significant at $p < .05$.

RESULTS AND DISCUSSION

Respondent Characteristics

The study involved 136 MSME owners or managers. Women represented 63.2% of respondents, while men represented 36.8%. Most respondents were older than 40 years (58.8%), indicating that the sample included a substantial proportion of experienced business actors. Senior secondary education was the most common educational level (60.3%), followed by bachelor's degrees (20.6%) and junior secondary education (16.2%). The profile indicates that the sample was dominated by mature owner-managers with secondary-level formal education, a pattern that is relevant when interpreting digital capability and managerial practices.

Table 1. Respondent Profile

Category	Description	Frequency (n)	Percentage (%)
Gender	Male	50	36.8
	Female	86	63.2
Age	20–40 years	56	41.2
	> 40 years	80	58.8
Education	Primary school	1	0.7
	Junior secondary school	22	16.2
	Senior secondary school	82	60.3
	Bachelor's degree	28	20.6
	Master's degree	3	2.2

Source: Survey data processed by the authors (2025).

Descriptive Assessment of the Constructs

Mean scores for the construct indicators ranged from approximately 4.00 to 4.35. Respondents therefore tended to agree that their enterprises supported initiative and improvement, experimented with new ideas, used digital media for marketing, and pursued sustainable performance outcomes. These descriptive results indicate favorable perceptions of all four constructs, but they do not establish causal or statistically significant relationships. In particular, positive self-assessments of entrepreneurial culture must be distinguished from the structural model result, which tests whether variation in that culture is associated with variation in sustainable competitive performance after the other predictors are considered.

Respondents generally reported experimentation with product and work-method improvements, suggesting that innovation was present mainly through incremental changes suited to the scale of MSME operations. Digital marketing practices were also widely reported, although the responses indicated uneven capability in market analysis, customer-data use, and strategic coordination. With respect to sustainable competitive performance, respondents perceived relatively strong profitability and market responsiveness but reported more varied performance in delivery efficiency and operational consistency.

Measurement Model

Convergent validity was assessed through the outer loadings, AVE, and composite reliability values presented in Table 2. All indicator loadings exceeded .70, ranging from .798 to .902. The AVE values ranged from .720 to .767, which means that each construct explained more than half of the variance in

its indicators. Composite reliability ranged from .894 to .923, demonstrating satisfactory internal consistency. These results support the retention of all indicators in the model.

Table 2. Convergent Validity and Composite Reliability

Construct	Indicator	Outer Loading	AVE	Composite Reliability
EC	EC1	0.894	0.767	0.908
	EC3	0.872		
	EC4	0.861		
IN	IN1	0.866	0.737	0.894
	IN2	0.869		
	IN3	0.841		
DMC	DMC1	0.818	0.750	0.923
	DMC2	0.857		
	DMC3	0.902		
	DMC4	0.884		
SCP	SCP1	0.798	0.720	0.911
	SCP2	0.832		
	SCP3	0.891		
	SCP4	0.870		

Source: SmartPLS output processed by the authors (2025).

Discriminant validity was assessed through the Fornell–Larcker criterion and HTMT. The square root of each construct's AVE exceeded its correlations with the other constructs, and all HTMT values were below .90. The constructs therefore demonstrated adequate empirical distinctiveness. Cronbach's alpha values ranged from .87 to .90, and composite reliability values remained above .89, as shown in Table 3. The measurement model was consequently considered suitable for structural analysis.

Table 3. Construct Reliability

Construct	Cronbach's Alpha	Composite Reliability	Assessment
Entrepreneurial Culture (EC)	0.88	0.908	Reliable
Innovation (IN)	0.87	0.894	Reliable
Digital Marketing Capability (DMC)	0.89	0.923	Reliable
Sustainable Competitive Performance (SCP)	0.90	0.911	Reliable

Source: SmartPLS output processed by the authors (2025).

Structural Model and Hypothesis Testing

The structural model results are summarized in Table 4 and illustrated in Figure 2. Digital marketing capability had the largest direct effect on sustainable competitive performance ($\beta = 0.602$, $t = 6.316$, $p < .001$). Innovation also had a positive effect ($\beta = 0.218$, $t = 1.978$, $p = .048$). By contrast, entrepreneurial culture did not have a significant direct effect ($\beta = -0.033$, $t = 0.520$, $p = .604$). The interaction between entrepreneurial culture and digital marketing capability was negative and significant ($\beta = -0.215$, $t = 3.092$, $p = .002$). The interaction between innovation and digital marketing capability was positive but did not reach the .05 significance threshold ($\beta = 0.147$, $t = 1.914$, $p = .056$). These results indicate that

digital marketing capability directly supports sustainable competitiveness, while its moderating influence differs across the two organizational antecedents.

Table 4. Structural Model and Hypothesis Testing

Relationship	Path Coefficient (β)	Sample Mean	Standard Deviation	t Statistic	p Value	Decision
DMC $\rightarrow$ SCP	0.602	0.598	0.095	6.316	< .001	Significant
EC $\rightarrow$ SCP	-0.033	-0.030	0.064	0.520	.604	Not significant
IN $\rightarrow$ SCP	0.218	0.211	0.110	1.978	.048	Significant
EC $\times$ DMC $\rightarrow$ SCP	-0.215	-0.208	0.070	3.092	.002	Significant negative moderation
IN $\times$ DMC $\rightarrow$ SCP	0.147	0.141	0.077	1.914	.056	Not significant at .05

Source: SmartPLS output processed by the authors (2025).

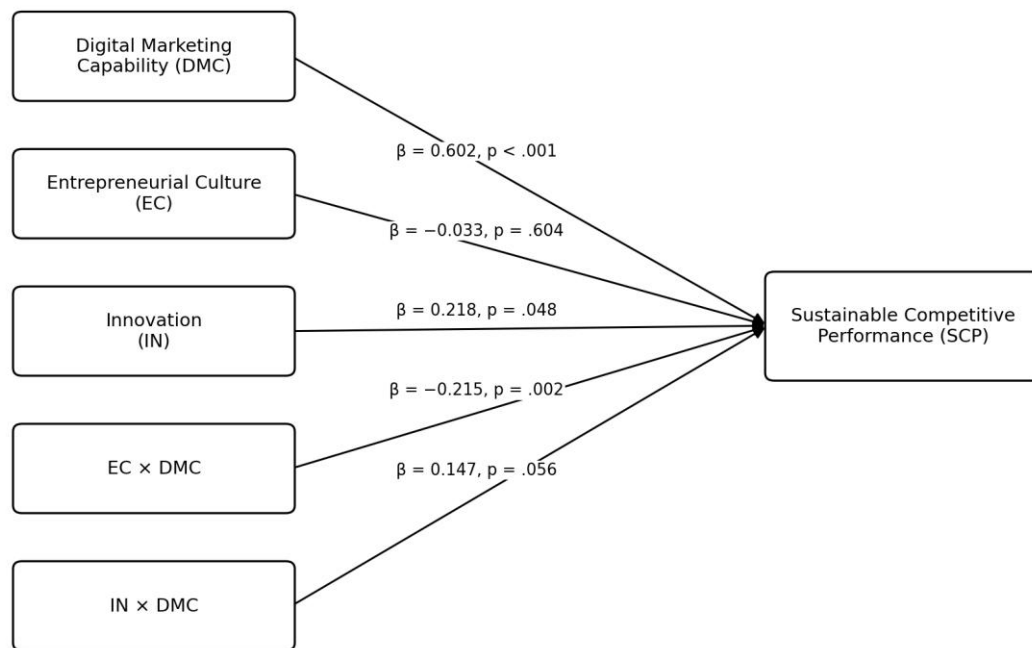


Figure 2. Structural Path Model

Digital Marketing Capability and Sustainable Competitive Performance

The strong positive relationship between digital marketing capability and sustainable competitive performance supports the resource-based view. Digital marketing capability is not merely the possession of social-media accounts or marketplace access; it is an organizational ability to coordinate technology, market knowledge, customer communication, content, and decision-making. When these elements are integrated, MSMEs can reduce the cost of reaching customers, improve promotional targeting, respond more quickly to market feedback, and develop relationships beyond their immediate geographic area.

The result is consistent with studies reporting that digital marketing capability improves MSME market reach, customer relationships, and competitive advantage (Riyadi & Darma, 2023; Sharabati et al., 2024). It also aligns with evidence that digital tools strengthen performance when they support customer-value creation and more accurate marketing decisions (Dahnil et al., 2023). For processing-sector MSMEs, digital marketing may be particularly valuable because product appearance, packaging,

customer reviews, ordering convenience, and delivery information can be communicated directly through digital channels. The effect therefore reflects both commercial visibility and a broader capability to use market information strategically.

The practical implication is that digitalization programs should move beyond introductory training on platform operation. MSMEs require competence in customer segmentation, content planning, conversion measurement, marketplace optimization, simple analytics, and the integration of online promotion with inventory and delivery. Without these complementary routines, digital adoption may remain symbolic and fail to generate sustained performance improvements.

Entrepreneurial Culture and Sustainable Competitive Performance

Entrepreneurial culture did not directly influence sustainable competitive performance. This result does not imply that initiative, risk-taking, or proactiveness are unimportant. Rather, it suggests that shared entrepreneurial values were not sufficient to explain performance differences once digital marketing capability and innovation were included in the model. A culture may encourage ideas and confidence, but performance depends on whether those values are converted into market-relevant actions, disciplined resource allocation, measurable experiments, and operational improvements.

The finding differs from studies that report a direct positive association between entrepreneurial culture and organizational performance, but it is compatible with research suggesting that the effect may operate indirectly through innovation or strategic orientation (Kantur & İşeri-Say, 2022; Mulyani & Yuliani, 2021). In small owner-managed enterprises, entrepreneurial culture may also be highly concentrated in the owner and insufficiently institutionalized in routines, employee participation, or formal planning. As a result, respondents may express strong entrepreneurial attitudes without consistently translating them into performance-enhancing practices.

Programs designed to strengthen entrepreneurship should therefore combine motivational and cultural components with concrete managerial competencies. Risk-taking needs to be accompanied by financial analysis; proactiveness needs market intelligence; and experimentation needs performance indicators. This combination is more likely to transform entrepreneurial values into sustainable results.

Innovation and Sustainable Competitive Performance

Innovation had a positive and statistically significant effect on sustainable competitive performance. The result supports the dynamic capability perspective because innovation enables enterprises to adjust products, processes, and business models as market conditions change. For processing-sector MSMEs, innovation does not necessarily require radical technology. Improvements in ingredients, design, packaging, production flow, quality control, distribution, and service can create differentiation and reduce operating inefficiencies.

The finding is consistent with previous evidence that product and process innovation improve performance and sustainable competitive advantage among SMEs (Astuti et al., 2023; Hameed et al., 2021). Innovation contributes to customer value by offering solutions that are more relevant, convenient, distinctive, or reliable. It can also reduce waste and production time, which directly supports the economic and operational dimensions of sustainable competitive performance. The relatively smaller coefficient compared with digital marketing capability suggests, however, that innovation must be communicated and commercialized effectively before its full value is realized.

MSME support agencies should consequently connect innovation assistance with market testing. Product-development activities should include customer validation, packaging evaluation, pricing analysis, and digital promotion. This approach reduces the risk that an innovative product remains disconnected from actual demand.

Moderating Role of Digital Marketing Capability

Digital marketing capability significantly weakened the relationship between entrepreneurial culture and sustainable competitive performance. The negative interaction indicates that higher digital marketing capability did not amplify the benefits of entrepreneurial culture. One plausible interpretation is a lack of alignment between intuitive entrepreneurial behavior and data-informed digital practice. When digital capability becomes more sophisticated, decisions increasingly depend on evidence, segmentation, platform metrics, and coordinated execution. Entrepreneurial risk-taking that is not

supported by these practices may become less productive or may introduce inconsistency into marketing decisions.

This interpretation is consistent with the argument that entrepreneurial culture must be integrated with analytical and technological competence in digitally mediated markets (Rahmawati & Santosa, 2022). Digital systems may also redistribute decision authority from personal intuition toward measurable customer behavior. The negative moderation should therefore not be read as evidence that digital marketing damages entrepreneurial culture; rather, it signals that the two capabilities require strategic alignment. Training should help MSME owners combine experimentation with digital data, so that entrepreneurial initiative is tested, refined, and scaled using market evidence.

The innovation $\times$ digital marketing capability interaction was positive but not significant at the 5% level. The coefficient suggests a tendency for digital marketing capability to strengthen the effect of innovation, but the evidence is not sufficiently strong for a definitive moderation claim. This cautious interpretation is important because interaction effects typically require substantial statistical power. Conceptually, innovative products should benefit from digital communication and distribution, and previous studies have reported such complementarity (Setiawan et al., 2023). In the present sample, however, differences in digital skill, infrastructure, innovation quality, and implementation consistency may have limited the strength of the interaction.

Taken together, the moderation results demonstrate that digital capability does not automatically reinforce every organizational strength. Its effect depends on fit. Innovation and digital marketing are potentially complementary because digital channels can communicate and commercialize new value. Entrepreneurial culture is more abstract and may require managerial systems before it can interact productively with digital capability. This distinction helps explain why the direct effect of digital marketing capability was strong, the innovation effect was positive, and the entrepreneurial-culture effect was not significant.

CONCLUSION

This study shows that sustainable competitive performance among processing-sector MSMEs is driven most directly by digital marketing capability and innovation. Digital marketing capability produced the strongest positive effect, demonstrating that coordinated use of digital channels, customer information, and market-oriented decision-making is a strategic resource rather than a supplementary promotional activity. Innovation also improved performance by enabling product, process, and business adjustments, whereas entrepreneurial culture did not have a significant direct effect, indicating that entrepreneurial values require managerial and technological execution before they generate measurable outcomes. Digital marketing capability significantly weakened the entrepreneurial culture–performance relationship, which suggests a misalignment between intuitive entrepreneurial behavior and data-informed digital practice, while its positive moderation of the innovation–performance relationship did not reach the 5% significance threshold. Local governments, MSME development agencies, and business-support institutions should therefore integrate digital marketing, analytics, managerial discipline, and market-tested innovation in a single capacity-building framework. Future research should test indirect pathways, particularly innovation as a mediator between entrepreneurial culture and performance, compare sectors and enterprise sizes through multigroup analysis, employ longitudinal designs, and incorporate organizational resilience, market orientation, and digital transformation to explain how MSMEs sustain competitiveness over time.

REFERENCES

- Al Koliby, I. S., Mehat, N. A. B., Al-Swidi, A. K., & Al-Hakimi, M. A. (2024). Unveiling the linkages between entrepreneurial culture, innovation capability, digital marketing capability and sustainable competitive performance of manufacturing SMEs: Evidence from emerging countries. *The Bottom Line*, 37(4), 473–500.
- Astuti, W., Pramono, R., & Nurhayati, S. (2023). Inovasi sebagai pendorong keunggulan kompetitif berkelanjutan pada UMKM. *Jurnal Inovasi Ekonomi*, 8(2), 55–67.
- Dahnil, M. I., Marzuki, K. M., Langgat, J., & Fabeil, N. F. (2023). Digital marketing capability and firm performance: A sustainability perspective. *Sustainability*, 15(21), 15668.

- Directorate General of Treasury. (2024). Perekonomian meningkat, UMKM hebat. Ministry of Finance of the Republic of Indonesia. <https://djpb.kemenkeu.go.id/kppn/curup/id/data-publikasi/artikel/2885-umkm-hebat,-perekonomian-nasional-meningkat.html>
- 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.
- Ernawati, R., Mardikaningsih, D., Darmawan, D., & Sinambela, E. A. (2022). Pengembangan keunggulan kompetitif UMKM melalui strategi orientasi pasar dan inovasi produk. *Jurnal Industri Kreatif dan Kewirausahaan*, 5(2), 144–153.
- Fatimah, S., Yahya, M., & Hisan, K. (2021). Pengaruh modal usaha, kualitas sumber daya manusia, dan strategi pemasaran terhadap pengembangan UMKM di Kecamatan Kota Kualasimpang Kabupaten Aceh Tamiang. *Jurnal Ilmiah Mahasiswa*, 3(2), 151–172.
- Habib, M. A. F., & Sutopo. (2024). Pembinaan UMKM dalam aspek komunikasi pemasaran sebagai wujud pemberdayaan perempuan di sekitar kawasan wisata pantai. *Ar Rehla: Journal of Islamic Tourism, Halal Food, Islamic Traveling, and Creative Economy*, 4(1), 85–100.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.
- Hameed, W. U., Basheer, M. F., Iqbal, J., & Anwar, A. (2021). The role of innovation in sustainable competitive advantage: Evidence from SMEs in emerging economies. *Sustainability*, 13(16), 9132.
- Kantur, D., & İşeri-Say, A. (2022). Entrepreneurial culture, innovation, and strategic orientation: Mediating roles and performance outcomes. *Journal of Entrepreneurship, Management and Innovation*, 18(4), 25–43.
- Kurniawan, D., Handoko, B., & Lestari, N. (2024). Digital marketing capability as a moderating factor in the relationship between human capital and organizational performance in technology-based industries. *International Journal of Business and Society*, 25(1), 88–104.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Maulida, S., & Yunani, A. (2017). Peluang dan tantangan pengembangan usaha mikro kecil menengah (UMKM) dari berbagai aspek ekonomi. *Jurnal Ilmiah Manajemen dan Bisnis*, 2(1), 181–197.
- Momaya, K. S. (2019). The past and the future of competitiveness research: A review in an emerging context of innovation and EMNEs. *International Journal of Global Business and Competitiveness*, 14(1), 1–10.
- Mulyani, E., & Yuliani, D. (2021). Pengaruh budaya kewirausahaan terhadap kinerja melalui inovasi pada UMKM. *Jurnal Manajemen dan Kewirausahaan*, 23(2), 112–124.
- Rahmawati, F., & Santosa, I. (2022). Digital transformation and entrepreneurial culture: Implications for MSME performance. *Jurnal Ekonomi dan Bisnis Terapan*, 12(3), 201–213.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761–787.
- Riyadi, A., & Darma, G. S. (2023). Digital marketing capability and competitive advantage of MSMEs in Indonesia. *Management Insight: Journal of Business, Economics, and Entrepreneurship*, 8(1), 45–58.
- Semarang Regency Open Data. (2021). Banyaknya jenis usaha UMKM di Kabupaten Semarang tahun 2021. <https://katalog.data.go.id/dataset/banyaknya-jenis-usaha-umkm-di-kab-semarang>
- Semarang Regency Open Data. (2023). Banyaknya jenis usaha UMKM di Kabupaten Semarang tahun 2023. <https://data.semarangkab.go.id/ckan/dataset/e7568817-05a6-491d-9455-aa651ea6d4c7/resource/1dc6b8-9362-4ca3-a9c5-279d3995424b/download/banyaknya-jenis-usaha-umkm-di-kab.semarang-tahun-2023.xlsx>
- Setiawan, R., Sari, P. D., & Wijaya, M. (2023). Digital capability as a moderating factor between innovation and competitive advantage of small businesses. *Journal of Small Business Strategy*, 33(2), 74–89.

- Sharabati, A. A. A., Ali, A. A. A., Allahham, M. I., Hussein, A. A., Alheet, A. F., & Mohammad, A. S. (2024). The impact of digital marketing on the performance of SMEs: An analytical study in light of modern digital transformations. *Sustainability*, 16(19), 1–25.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.