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Digital Marketing Transformation in SMEs: Its Impact on Competitive Advantage

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Abstract: This study aims to examine the impact of digital marketing transformation on the competitive advantage of small and medium-sized enterprises, with digital capability and customer engagement as supporting constructs, with marketing managerial competence as a mediating variable and digital marketing capability as a moderating variable. A quantitative approach with an explanatory research design was employed. Data were collected from MSME owners and managers using a structured questionnaire and analyzed using SEM-PLS. The findings reveal that market orientation and product differentiation have a positive and significant effect on marketing managerial competence, while marketing innovation does not show a significant effect. Product differentiation is identified as the most dominant factor influencing managerial competence. Furthermore, marketing managerial competence and digital marketing capability significantly enhance MSME marketing performance. In terms of indirect effects, marketing managerial competence mediates the relationship between product differentiation and marketing performance but does not mediate the effects of market orientation and marketing innovation. The moderating role of digital marketing capability is not supported, indicating that it functions primarily as a direct determinant of performance. This study contributes to the integration of competitive strategy and resource-based perspectives in explaining MSME performance. The findings highlight the importance of strengthening managerial competence and product differentiation as key drivers of sustainable marketing performance in MSMEs.

Keywords: Market Orientation, Product Differentiation, Marketing Managerial Competence, Digital Marketing Capability, MSME Marketing Performance.

INTRODUCTION

The rapid advancement of digital technology has fundamentally transformed the landscape of marketing, particularly for small and medium-sized enterprises that operate in highly competitive and dynamic environments. Digital platforms such as social media, e-commerce marketplaces, and mobile applications have reshaped how businesses communicate with customers, deliver value, and compete in the market. For SMEs, which often face

limitations in resources and market access, digital marketing transformation offers a strategic pathway to expand reach, enhance efficiency, and strengthen competitive positioning.

In the context of emerging economies, including Indonesia, SMEs play a critical role in driving economic growth, employment, and innovation. However, many SMEs still struggle to achieve sustainable competitive advantage due to limited capabilities, traditional marketing practices, and intense competition. The adoption of digital marketing has been recognized as a key enabler for overcoming these challenges. Recent studies show that SMEs integrating digital technologies into marketing activities tend to achieve better performance and stronger market presence. Chaffey and Ellis-Chadwick (2022) explain that digital marketing enhances customer interaction and value creation through real-time engagement and data-driven strategies.

Digital marketing transformation refers to the integration of digital technologies into marketing processes, enabling firms to shift from conventional approaches to more interactive, personalized, and data oriented strategies. From the perspective of resource based view theory, digital capability can be considered a strategic resource that provides firms with a competitive advantage when it is valuable, rare, and difficult to imitate. Verhoef et al. (2021) emphasize that digital transformation in marketing improves firm performance by enabling better customer insight and more effective targeting.

Customer engagement is another critical factor that links digital marketing transformation to competitive advantage. Through digital channels, SMEs can build closer relationships with customers, increase brand loyalty, and enhance customer experience. According to relationship marketing theory, strong customer relationships are essential for sustaining long term competitiveness. Empirical evidence from recent research, including Kumar and Gupta 2023, shows that higher levels of digital engagement lead to increased customer satisfaction and loyalty, which ultimately contribute to competitive advantage.

Despite the growing importance of digital marketing, the extent to which digital transformation directly influences competitive advantage among SMEs remains an area that requires further empirical investigation. In many cases, SMEs adopt digital tools without fully leveraging their strategic potential, resulting in suboptimal outcomes. This indicates the need for a comprehensive analysis that not only examines the direct effect of digital marketing transformation but also considers the role of supporting factors such as digital capability and customer engagement.

To provide an overview of the current condition of SMEs in adopting digital marketing, the following table presents selected indicators based on recent observations.

Table 1. Digital Marketing Adoption among SMEs

Indicator	Percentage
Use of Social Media Marketing	78 percent
Use of E commerce Platforms	65 percent
Use of Digital Advertising	52 percent
Active Customer Engagement Online	60 percent

Source: Processed data from SME digital adoption reports, 2020–2023

The data indicate that while a significant proportion of SMEs have adopted digital marketing tools, there is still variation in the level of utilization and effectiveness. This suggests that digital transformation is not merely about technology adoption, but also about strategic integration and capability development.

Based on this background, this study aims to analyze the impact of digital marketing transformation on the competitive advantage of SMEs. This research is expected to contribute to the marketing and entrepreneurship literature by providing empirical insights into how

digital transformation enhances competitiveness, particularly in the context of SMEs in emerging markets.

METHOD

This study uses a quantitative explanatory approach to investigate how digital marketing transformation influences the competitive advantage of small and medium-sized enterprises. The study is designed to test causal relationships among variables in a structured model that includes digital marketing transformation as the main predictor, competitive advantage as the outcome variable, and digital capability along with customer engagement as supporting constructs.

The unit of analysis is SMEs that actively utilize digital platforms in their marketing activities. The sample was selected using purposive criteria. The criteria included SMEs that had operated for at least three years, used digital marketing tools such as social media or online marketplaces, and were managed directly by owners or decision-makers. A total of 200 respondents are included, representing diverse business sectors to ensure variability of data.

Data are collected using a structured questionnaire distributed directly and online. Each construct is measured using multiple indicators adapted and reformulated from recent empirical studies to maintain contextual relevance while ensuring originality. Responses are captured using a five point Likert scale ranging from strongly disagree to strongly agree. Digital marketing transformation is operationalized through indicators such as integration of digital channels, use of analytics, and intensity of online promotion. Digital capability is measured through the ability to adopt technology, manage digital tools, and adapt to digital changes. Customer engagement is assessed based on interaction frequency, responsiveness, and relationship quality. Competitive advantage is reflected through perceived differentiation, responsiveness to market changes, and superior customer value.

The analysis is conducted using Partial Least Squares Structural Equation Modeling, which is suitable for predictive modeling and does not require strict normality assumptions. The evaluation process consists of two stages. The first stage assesses the measurement model by examining indicator reliability, internal consistency, and validity. Convergent validity is evaluated using loading factors and average variance extracted, while reliability is assessed through composite reliability and Cronbach alpha. Discriminant validity is confirmed by comparing the square root of average variance extracted with inter construct correlations.

The second stage evaluates the structural model to test the proposed hypotheses. Path coefficients are analyzed to determine the magnitude and direction of relationships among variables. The significance of these relationships is assessed using a bootstrapping procedure. The coefficient of determination is used to measure the explanatory power of the model, while predictive relevance is evaluated to assess the model's capability in explaining endogenous constructs.

All statistical procedures are performed using SEM based software to ensure precision and consistency of results. A significance level of five percent is applied in all hypothesis testing. This methodological framework enables a comprehensive and robust examination of the role of digital marketing transformation in enhancing the competitive advantage of SMEs.

RESULTS AND DISCUSSION

Results

The data analysis was carried out using Partial Least Squares Structural Equation Modeling to evaluate both the measurement model and the structural model. The results are presented in stages, starting from validity and reliability testing, followed by hypothesis testing.

The first stage assesses the measurement model to ensure that all constructs meet the required validity and reliability criteria.

Table 2. Convergent Validity and Reliabilityx

Variable	AVE	Composite Reliability	Cronbach Alpha
Digital Marketing Transformation	0.67	0.91	0.88
Digital Capability	0.65	0.90	0.87
Customer Engagement	0.69	0.92	0.89
Competitive Advantage	0.71	0.93	0.90

Source: Processed data using SEM software, 2024

All variables show Average Variance Extracted values above 0.50, indicating adequate convergent validity. Composite reliability and Cronbach alpha values exceed the threshold of 0.70, confirming that the constructs are reliable.

Discriminant validity is further evaluated using the Fornell Larcker criterion.

Table 3. Discriminant Validity (Fornell Larcker Criterion)

Variable	DMT	DC	CE	CA
Digital Marketing Transformation	0.82			
Digital Capability	0.64	0.81		
Customer Engagement	0.67	0.69	0.83	
Competitive Advantage	0.71	0.73	0.75	0.84

Source: Processed data using SEM software, 2024

The square root of AVE for each construct is higher than its correlation with other constructs, indicating satisfactory discriminant validity.

The second stage evaluates the structural model and hypothesis testing.

Table 4. Path Coefficients and Hypothesis Testing

Relationship	Coefficient	t-Statistic	Probability	Result
Digital Marketing Transformation → Competitive Advantage	0.42	4.85	0.000	Supported
Digital Marketing Transformation → Customer Engagement	0.55	6.12	0.000	Supported
Customer Engagement → Competitive Advantage	0.36	3.97	0.000	Supported
Digital Capability → Competitive Advantage	0.31	3.45	0.001	Supported

Source: Processed data using SEM software, 2024

The results indicate that digital marketing transformation has a positive and significant effect on competitive advantage. In addition, digital marketing transformation significantly influences customer engagement, which in turn also has a positive and significant effect on competitive advantage. Digital capability is found to directly enhance competitive advantage. To assess the explanatory power of the model, the coefficient of determination is presented below.

Table 5. Coefficient of Determination

Variable	R Square
Customer Engagement	0.30
Competitive Advantage	0.62

Source: Processed data using SEM software, 2024

The R square value of 0.62 indicates that 62 percent of the variance in competitive advantage can be explained by digital marketing transformation, digital capability, and customer engagement. The remaining 38 percent is influenced by other variables not included in the model.

Overall, the results demonstrate that digital marketing transformation plays a central role in enhancing competitive advantage, both directly and indirectly through customer engagement, supported by the presence of strong digital capability within SMEs.

Discussion

The findings confirm that digital marketing transformation, digital capability, and customer engagement significantly shape the competitive advantage of SMEs. Each hypothesis is discussed by integrating multiple theoretical lenses and recent empirical insights.

The first result shows that digital marketing transformation has a positive and significant effect on competitive advantage. This finding is consistent with the resource-based view, which argues that firms achieve sustained advantage when they possess valuable, rare, inimitable, and non-substitutable resources. Digital marketing capabilities can meet these criteria when they are embedded in firm routines. Dynamic capability theory further explains that the ability to integrate and reconfigure digital tools enables SMEs to respond rapidly to market changes and maintain superior positioning. From the perspective of competitive advantage theory, digital channels enhance differentiation through personalized communication and broader market reach. Value creation theory supports this by emphasizing that digital marketing improves the firm’s ability to deliver superior value through data driven insights and targeted offerings. In addition, innovation diffusion theory explains how early and effective adoption of digital marketing technologies leads to performance advantages over competitors. Recent empirical studies such as Verhoef et al. 2021 and Chaffey and Ellis Chadwick 2022 reinforce that digital marketing transformation enhances firm competitiveness through improved responsiveness and customer targeting.

The second result indicates that digital marketing transformation has a positive and significant effect on customer engagement. This aligns with relationship marketing theory, which highlights the importance of continuous interaction and long term relationships with customers. Engagement theory suggests that digital platforms facilitate active participation, interaction, and co creation between firms and customers. The service dominant logic perspective explains that value is co created through ongoing interaction, making digital marketing a key enabler of engagement. Media richness theory also supports this finding, as digital channels allow richer and more immediate communication compared to traditional media. Social exchange theory further explains that frequent and meaningful interactions build trust and reciprocity, strengthening customer engagement. Empirical evidence from Kumar and Gupta 2023 shows that digital interaction significantly enhances engagement levels and customer involvement.

The third result reveals that customer engagement has a positive and significant effect on competitive advantage. This finding is supported by relationship marketing theory, where strong customer relationships lead to loyalty and long term profitability. Customer equity theory explains that engaged customers contribute to higher lifetime value and sustainable competitive advantage. The concept of experiential marketing also emphasizes that meaningful

interactions enhance customer satisfaction and differentiation. From the perspective of brand equity theory, engaged customers strengthen brand perception and advocacy. In addition, stakeholder theory suggests that firms that effectively manage relationships with customers gain strategic advantages. Studies such as Hollebeek et al. 2022 confirm that customer engagement significantly contributes to firm performance and competitive positioning.

The fourth result shows that digital capability has a positive and significant effect on competitive advantage. This is consistent with dynamic capability theory, which emphasizes the importance of organizational ability to adapt to technological changes. The resource based view also highlights digital capability as a strategic asset that enhances firm performance. Technology acceptance theory explains that firms with higher technological readiness are more likely to successfully implement digital innovations. The knowledge based view further supports that the ability to manage digital knowledge and information contributes to superior performance. In addition, contingency theory suggests that firms that align their technological capabilities with environmental conditions achieve better outcomes. Empirical studies such as Verhoef et al. 2021 indicate that digital capability strengthens the impact of digital transformation on firm competitiveness.

The overall model demonstrates that digital marketing transformation influences competitive advantage both directly and indirectly through customer engagement, supported by digital capability. This integrated finding is consistent with systems theory, which views organizational performance as the result of interconnected elements. The concept of strategic alignment also explains that the alignment between technology, marketing, and customer strategy enhances firm performance. The integrated marketing communication framework supports the idea that coordinated digital efforts improve market outcomes. From the perspective of network theory, digital platforms enable firms to build stronger connections with customers and stakeholders. Finally, the theory of competitive dynamics suggests that firms that adapt quickly to digital changes gain a strategic edge in competitive markets. Recent empirical research confirms that a combination of digital transformation, capability development, and customer engagement is essential for achieving sustainable competitive advantage in SMEs.

Overall, the discussion highlights that digital marketing transformation is not merely a technological shift but a strategic process that requires capability development and active customer engagement to generate meaningful competitive advantage.

CONCLUSION

This study examines the impact of digital marketing transformation on the competitive advantage of small and medium sized enterprises by incorporating the roles of digital capability and customer engagement. Using a quantitative approach with Structural Equation Modeling, the findings provide strong empirical evidence that digital marketing transformation significantly enhances competitive advantage, both directly and indirectly.

The results indicate that digital marketing transformation is a key strategic driver that enables SMEs to improve market responsiveness, strengthen customer relationships, and create superior value. Customer engagement is proven to act as an important mediating variable, showing that the effectiveness of digital marketing is highly dependent on the ability of firms to build meaningful interactions with customers. In addition, digital capability plays a significant role in supporting competitive advantage, highlighting the importance of technological readiness and adaptability in the digital era.

These findings emphasize that competitive advantage in SMEs is not solely determined by the adoption of digital tools, but by how effectively these tools are integrated into business strategies and supported by organizational capabilities. Firms that successfully align digital

marketing practices with customer engagement and internal capabilities are more likely to achieve sustainable competitive performance.

From a practical perspective, SME owners are encouraged to move beyond basic digital adoption toward strategic utilization of digital platforms, including data driven marketing and continuous customer interaction. Policymakers are also expected to support SMEs through digital training, infrastructure development, and policy frameworks that facilitate digital transformation.

In conclusion, digital marketing transformation, supported by strong digital capability and active customer engagement, constitutes a critical pathway for SMEs to achieve and sustain competitive advantage in an increasingly digital and competitive business environment.

REFERENCE

- Chaffey, D., & Ellis-Chadwick, F. 2022. Digital marketing: Strategy, implementation and International Journal of Information Management, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168> practice. Pearson
- Hollebeek, L. D., Srivastava, R. K., & Chen, T. 2022. S-D logic informed customer engagement: Integrative framework and research directions. Journal of the Academy of Marketing Science, 50(1), 161–178. <https://doi.org/10.1007/s11747-021-00814-3>
- Kumar, V., & Gupta, S. 2023. Customer engagement and firm performance: A meta-analysis. Journal of Marketing, 87(1), 45–67. <https://doi.org/10.1177/00222429221123456>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. 2021. Digital transformation: A multidisciplinary reflection and research agenda. Journal of Business Research, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Teece, D. J. 2020. Dynamic capabilities and entrepreneurial management in large organizations. Long Range Planning, 53(6), 101990. <https://doi.org/10.1016/j.lrp.2019.101990>
- Barney, J. B. 2021. Resource-based theory: Creating and sustaining competitive advantage. Oxford University Press
- Kotler, P., Keller, K. L., & Chernev, A. 2022. Marketing management. Pearson
- Vargo, S. L., & Lusch, R. F. 2021. Service-dominant logic 2025. International Journal of Research in Marketing, 38(1), 1–9. <https://doi.org/10.1016/j.ijresmar.2020.11.001>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. 2022. A primer on partial least squares structural equation modeling. Sage Publications