Effects of Entrepreneurial Orientation, Social Media Usage, Marketing and Innovation Capabilities and Competitive Intensity on SME performance: A Conceptual Model

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Abstract

Small and medium-sized enterprises (SMEs) face increasing pressure to sustain performance under volatile competitive environments. Entrepreneurial orientation (EO) has been widely acknowledged as a strategic posture that fosters innovativeness, risk-taking, and proactiveness, thereby enhancing business outcomes. Yet, the mechanisms through which EO translates into superior performance remain contested and context-dependent. This paper proposes an integrated model, where social media usage (SMU), marketing capabilities (MC), and innovation capabilities (IC) act as key mediating variables between EO and SME performance, and these relationships vary under differing competitive intensities (CI). Drawing on extant literature, this study conceptualizes EO as the strategic driver that stimulates SMU, which in turn strengthens MC, and subsequently fosters IC—culminating in enhanced SME performance for different environmental conditions. The paper integrates insights from entrepreneurship, marketing, and information systems literature to propose a research model and testable hypotheses. The proposed framework extends prior work by linking fragmented streams of EO–SME research, offering both theoretical and practical implications for SMEs operating in emerging and developed markets.

Keywords: Entrepreneurial orientation; SME performance; social media usage; marketing/innovation capabilities; competition intensity

Track choice: Marketing strategy; Digital Marketing

1. Introduction

Small and medium-sized enterprises (SMEs) constitute the backbone of most economies, making substantial contributions to employment creation, innovation diffusion, and overall socio-economic development (Fu et al., 2024). Despite their importance, SMEs often face significant challenges to survival and growth, including limited resources, intense competition, and rapidly evolving technological environments (Ahmad et al., 2019). In this context, entrepreneurial orientation (EO) has emerged as a critical strategic posture, enabling SMEs to adopt proactive, innovative, and risk-taking behaviors that are essential for achieving sustainable performance (Susanto et al., 2023).

Although EO is generally associated with improved firm performance, empirical evidence remains mixed. While some studies identify a strong positive relationship (Fang et al., 2022), others report that the effects are indirect or conditional, operating through organizational resources and capabilities (Anim et al., 2024). These inconsistencies underscore the need to investigate the underlying mechanisms that explain how EO translates into performance outcomes—particularly in relation to digital technologies and knowledge-based capabilities.

Social media platforms represent one such mechanism, having become indispensable tools for SMEs to engage with customers, co-create value, and access new markets at relatively low cost (Ahmad et al., 2018). Prior research indicates that EO fosters social media adoption, which in turn strengthens marketing and innovation capabilities (Qalati et al., 2022). However, studies that examine these variables within a unified framework—particularly through a serial mediation process—remain scarce. Furthermore, the role of business tangible/intangible resources and business capabilities in shaping specific business performance under varying levels of competitive intensity has received limited attention.

This study seeks to address these gaps by proposing an integrated model in which EO influences SME performance through the serial mediation of social media usage (SMU), marketing capabilities (MC), and innovation capabilities (IC), while competitive intensity moderates the relationships between business capabilities development and business performance level. By synthesizing insights from entrepreneurship, marketing, and information systems research, the study contributes to theory by positioning SMU, MC, and IC as complementary mechanisms that illuminate the pathways through which EO enhances SME performance.

2. Conceptual Background and Literature Review

SME performance is a multidimensional construct that incorporates both financial and non-financial indicators. Financial outcomes typically include sales growth and profitability, while non-financial outcomes involve customer satisfaction, market share, and brand recognition (Ahmad et al., 2019). Prior research consistently shows that entrepreneurial orientation (EO) contributes to SME performance, but this effect often unfolds indirectly through complementary mediators. For example, Tajvidi and Karami (2021) found that social media usage (SMU) enhances customer engagement and market intelligence, which in turn improves performance. Similarly, Khaki and Khan (2024a) demonstrated that innovation capabilities (IC) play a mediating role in the SMU–performance relationship. Building on these insights, the present study conceptualizes SME performance as the ultimate outcome of EO-driven capability development, facilitated through SMU, marketing capabilities (MC), and IC.

Entrepreneurial orientation (EO) captures the strategic posture of a firm, expressed through innovativeness, proactiveness, and risk-taking (Lumpkin & Dess, 1996). In the SME context, EO reflects managers' willingness to pursue novel opportunities, anticipate market shifts, and accept calculated risks to achieve growth. Although EO has been widely linked to firm performance, the results are far from uniform. For example, Susanto et al. (2023) reported a significant EO–performance relationship mediated by marketing capabilities and social media adoption, while Fang et al. (2022) emphasized innovation capabilities as a central mediator in emerging economies. At the same time, Anim et al. (2024) highlighted mixed or context-

specific outcomes, suggesting that EO alone is insufficient to guarantee superior performance without complementary resources and digital technologies. Taken together, these findings indicate that EO's contribution to performance is contingent on the firm's ability to leverage digital tools and build dynamic capabilities, particularly in social media marketing and innovation.

Social media platforms provide SMEs with cost-effective opportunities to interact with customers, co-create value, and strengthen brand visibility (Tajudeen et al., 2018). Unlike traditional marketing, SMU enables real-time communication and access to rich customer insights, making it not just an operational tool but a strategic capability. Entrepreneurially oriented firms are more likely to adopt SMU, given their openness to experimentation with new technologies (Ahmad et al., 2018; Anim et al., 2024). Empirical studies highlight SMU's mediating role in the EO–performance link: Tajvidi and Karami (2021) showed that SMU enhances responsiveness and customer relationship management, while Susanto et al. (2023) demonstrated that EO-driven SMU adoption improves marketing effectiveness and business outcomes. Likewise, Qalati et al. (2022) found that SMU strengthens SMEs' strategic orientation and innovation, leading to superior performance.

Marketing capabilities (MC) represent a firm's ability to understand markets, design customer-oriented strategies, and implement marketing activities effectively (Day, 1994). Recognized as a dynamic capability, MC enables SMEs to sense and adapt to market changes. EO provides the strategic drive for building MC, as entrepreneurial firms proactively seek new market opportunities and experiment with customer engagement (Susanto et al., 2023). SMU further complements MC development by offering interactive channels and real-time market intelligence (Ahmad et al., 2019; Khaki & Khan, 2024b). Empirical research confirms MC's mediating role: Susanto et al. (2023) found that MC links EO to performance, while Fang et al. (2022) highlighted MC's synergy with innovation. Thus, MC acts as a key pathway through which EO and SMU are transformed into tangible performance gains.

Innovation capabilities (IC) refer to a firm's ability to create, adopt, and apply new ideas, processes, or products (Lawson & Samson, 2001). For resource-constrained SMEs, IC is particularly critical, as it drives differentiation and long-term competitiveness. EO naturally fosters innovation by encouraging experimentation and investment in new offerings (Fang et al., 2022). Yet IC does not arise automatically—it is nurtured through complementary capabilities such as MC and SMU, which provide insights into customer needs and facilitate knowledge sharing. Khaki and Khan (2024a) showed that social media marketing strengthens IC, which then enhances firm performance in tourism enterprises. Similarly, Fang et al. (2022) confirmed that IC mediates the EO–performance relationship, positioning it as a pivotal capability that translates entrepreneurial intent into sustainable outcomes.

3. Proposed Model and Hypothesis Development

3.1. Direct effects

Entrepreneurial orientation (EO) is widely acknowledged as a key strategic posture that enables SMEs to survive and thrive in turbulent environments. However, the relationship between EO and performance is not always straightforward; it is shaped by digital adoption and business capabilities' development (Susanto et al., 2023; Fang et al., 2022). Building on the Resource-Based View (RBV) (Barney, 1991) and the Dynamic Capabilities View (DCV) (Teece et al., 1997), we propose a set of hypotheses exploring both direct and mediated effects of EO on SME performance through social media usage (SMU), marketing capabilities (MC), and innovation capabilities (IC).

EO has traditionally been linked to firm performance, since innovativeness, proactiveness, and risk-taking provide the strategic posture needed to exploit opportunities and gain competitive advantage (Lumpkin & Dess, 1996). Empirical studies reinforce this view. Susanto et al. (2023) found EO to be a significant predictor of SME performance in Malaysia and Indonesia, while

Fang et al. (2022) demonstrated EO's role in driving growth and competitiveness in emerging economies. Similarly, Anim et al. (2024) show that EO fosters superior outcomes in African SMEs by shaping proactive digital adoption. Although contextual contingencies may weaken this relationship (e.g., environmental turbulence, industry type), the preponderance of evidence supports EO as a direct driver of performance.

H1: Entrepreneurial orientation has a positive effect on SME performance.

EO reflects a firm's openness to experimentation, willingness to take risks, and proactiveness in adopting new technologies (Lumpkin & Dess, 1996). Firms with high EO tend to be early adopters of digital platforms, including social media, because they are motivated to explore innovative ways of reaching customers (Ahmad et al., 2018; Anim et al., 2024). Ahmad et al. (2019) emphasize that entrepreneurial firms in the UAE perceive SMU as a growth enabler, while Qalati et al. (2022) show that EO significantly predicts social media adoption in SMEs across emerging markets.

H2: Entrepreneurial orientation has a positive effect on social media usage.

EO is also a foundation for the development of MC, as it encourages firms to proactively sense market opportunities, experiment with novel marketing techniques, and engage customers in innovative ways (Susanto et al., 2023). Fang et al. (2022); Elgarhy & Abou-Shouk (2023) ; and Santos-Vijande et al. (2022) argue that entrepreneurial firms, through their risk-taking and particularly proactiveness, are better positioned to allocate resources toward marketing experimentation, thereby strengthening MC. From a DCV perspective, EO enables firms to build dynamic capabilities that transform entrepreneurial intent into effective customer engagement strategies.

H3: Entrepreneurial orientation has a positive effect on marketing capabilities.

EO and innovation are deeply intertwined. Firms with high EO proactively pursue novel solutions, take risks in product and service development, and act ahead of competitors in market entry (Lumpkin & Dess, 1996). Santos-Vijande et al. (2022) and Fang et al. (2022) empirically demonstrate that EO fosters IC in SMEs across emerging markets. Similarly, Susanto et al. (2023) and Elgarhy & Abou-Shouk (2023) highlight that EO facilitates innovative practices, such as new product development and process improvement, which are critical for sustained competitiveness. This aligns with the RBV, which sees EO as an intangible asset enabling the development of innovation-related capabilities.

H4: Entrepreneurial orientation has a positive effect on innovation capabilities.

SMU empowers firms with real-time customer data, interactive communication channels, and platforms for co-creation, which collectively strengthen MC (Tajudeen et al., 2018; Tajvidi & Karami, 2021). Ahmad et al. (2019) found that social media adoption in SMEs enhances market sensing and customer responsiveness, both of which are central to MC. Khaki and Khan (2024b) add that SMU improves customer relationship management, which directly feeds into marketing capability development. Thus, social media is not only a communication tool but also a strategic enabler of MC.

H5: Social media usage has a positive effect on marketing capabilities.

MC provide the market insights, customer intelligence, and brand strategies that serve as inputs for innovation (Day, 1994). Susanto et al. (2023) argue that MC allow entrepreneurial firms to transform social media knowledge into innovative offerings. Fang et al. (2022) and Santos-Vijande et al. (2022) also demonstrate that MC and IC are complementary, with MC serving as a knowledge foundation upon which innovation is built. Khaki and Khan (2024a) and Elgarhy & Abou-Shouk (2023) extend this reasoning, showing that marketing-oriented customer insights facilitate innovation in tourism SMEs.

H6: Marketing capabilities have a positive effect on innovation capabilities.

The adoption of social media directly improves SME performance by expanding market reach, reducing communication costs, and enhancing customer engagement (Ahmad et al., 2018; Tajudeen et al., 2018). Tajvidi and Karami (2021) empirically confirm that SMU positively influences firm performance by improving brand visibility and responsiveness. Qalati et al. (2022) further highlight that SMU enables SMEs in emerging countries to compete more effectively in globalized markets. In tourism, Khaki and Khan (2024a) found that SMU directly boosts performance through greater innovation in customer engagement.

H7: Social media usage has a positive effect on SME performance.

MC enable SMEs to differentiate their offerings, build strong customer relationships, and adapt to rapidly shifting market dynamics (Day, 1994). Empirical findings confirm that MC significantly enhance performance outcomes. Susanto et al. (2023) identified MC as a mediator linking EO and performance in SMEs, while Fang et al. (2022) found that strong MC allow firms to capitalize on entrepreneurial strategies. By effectively deploying MC, SMEs can achieve superior sales, customer loyalty, and brand strength.

H8: Marketing capabilities have a positive effect on SME performance.

IC directly contribute to firm performance by enabling SMEs to introduce new products, services, and processes that differentiate them from competitors (Lawson & Samson, 2001). Fang et al. (2022) empirically found IC to be a significant mediator between EO and SME performance. Similarly, Khaki and Khan (2024a) demonstrated that innovation capability translates social media-driven opportunities into improved performance in tourism SMEs. From a dynamic capabilities' perspective, IC are essential for long-term competitiveness and resilience.

H9: Innovation capabilities have a positive effect on SME performance.

3.2. Moderation Effects

Competitive intensity (CI) is one of the most critical business environmental factors, reflecting market conditions in which competition is fierce due to the large number of rival firms and limited opportunities for growth (Martin & Javalgi, 2016). Prior studies have shown that CI not only shapes strategic decisions but also interacts with firm-level characteristics. For example, Tai and Tsang (2013) and Bayighomog et al. (2020) empirically validated that the relationship between firm innovativeness and performance is positively moderated by CI. In highly competitive markets, innovative firms are compelled to acquire and interpret insights from their environment and competitors in order to design creative and effective strategic responses. Accordingly, the following hypothesis is proposed:

H10: Competitive intensity will moderate the link between firm IC and firm performance, such that the relationship will be stronger when competitive intensity is high.

Furthermore, evidence suggests that in highly competitive environments, the adoption of environmental marketing strategies allows firms to gain a sustainable competitive advantage that is difficult for rivals to imitate or neutralize (Bayighomog et al., 2020). In this context, SMEs that actively develop and adapt their marketing systems—both digital and traditional—are expected to enhance their competitiveness and improve their overall performance. Based on this reasoning, the following hypotheses are proposed:

H11. Competitive intensity will moderate the link between firm a) SMU and b) MC and firm performance, such that the relationship will be stronger when competitive intensity is high.

3.4. Conceptual Model

The proposed model (Figure 1) illustrates EO as the antecedent, SME performance as the outcome, SMU, MC, and IC as sequential mediators and CI as moderator. SMEs' size and age are used as control variables.

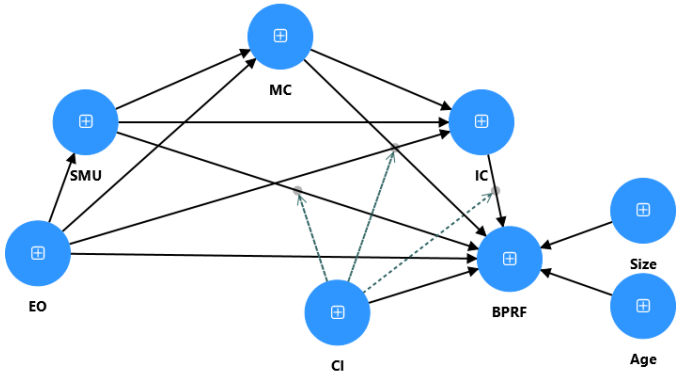

Figure 1: Conceptual Model

5. Theoretical Implications

This study contributes to the entrepreneurship and digital marketing literature in several ways: 1) Integration of EO and Digitalization Literature: It extends EO research by positioning SMU as a strategic mediator linking EO to performance; 2) Dynamic Capability Perspective: It conceptualizes MC and IC as dynamic capabilities that translate digital adoption into sustainable outcomes; 3) Serial Mediation Model: Unlike prior studies that examined single mediators, this paper proposes a sequential chain, enriching the understanding of how EO-driven digital adoption enhances performance.

6. Managerial Implications

For SME managers, the model highlights several actionable priorities. First, cultivating an entrepreneurial orientation should be accompanied by deliberate investments in marketing routines that enable market sensing and customer engagement. Second, marketing and innovation capabilities should be developed in tandem: marketing capabilities inform which innovations to pursue, while innovation capabilities operationalize the development and commercialization of those opportunities. Third, SMEs should view social media not merely as a promotional channel but as an integrative platform that connects market insights and innovation processes to customers, enabling faster learning and diffusion at low cost.

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