

# The Effect of Social Media Capabilities on Market Capitalizing Agility with Exploitative and Exploratory Innovation as mediating variables

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**Abstract.** This study aims to investigate the effect of social media capabilities on market capitalizing agility in both direct and indirect manners through exploitative and exploratory innovation. Two hundred and thirty-five respondents participated in this study. Partial Least Square analysis was used to analyse the data. The results of measurement analysis shows that measures used are valid and reliable. Thus, hypotheses can be tested. The results indicate that social media capabilities has a direct significant effect on market capitalizing agility. Apart from its direct effect on market capitalizing agility, this study found that exploitative innovation mediates the impact of social media capabilities on market capitalizing agility. In addition, this study showed that social media capabilities has important role in affecting both exploitative and exploratory innovation. After accomplishing the research objectives, this study provides both theoretical and practical contributions.

**Keywords:** market capitalizing agility, social media capabilities, exploitative innovation, exploratory innovation

## Introduction

The development of the Batik industry in Indonesia is a rich blend of cultural heritage, economic growth, and global recognition. Originating centuries ago, Batik is a traditional Indonesian art form involving intricate wax-resist dyeing techniques to create patterns on fabric, often symbolizing philosophical beliefs and social values. Over time, regions such as Yogyakarta, Solo, and Pekalongan became renowned for unique styles, each with distinct motifs and color schemes that reflect local identity. The Batik industry experienced significant growth during the Indonesian independence movement when Batik became a symbol of national pride (Phelps & Wijaya, 2020). This momentum continued into modern times as the Indonesian government actively promoted Batik as a cultural identity and heritage symbol. In 2009, UNESCO recognized Indonesian Batik as an Intangible Cultural Heritage of Humanity, further spurring international interest and demand. Today, Batik is a celebrated craft and a major economic asset, with artisans and large-scale manufacturers catering to domestic and export markets. Innovations in design and production have expanded Batik's appeal, incorporating it into fashion, home decor, and art, and the industry continues to adapt by blending traditional methods with contemporary aesthetics to attract younger generations and global consumers.

The Batik industry in Indonesia, a blend of traditional craftsmanship and modern enterprise, faces an urgent need for market-capitalizing agility to maintain its competitiveness in a rapidly changing global market. Agility in market capitalizing refers to the industry's ability to adapt to consumer preferences swiftly, respond to fashion trends, and meet the demand for sustainable and innovative products (Alghamdi & Agag, 2024). With increasing competition from fast fashion and alternative textile industries, Batik producers must embrace flexible production methods, digital marketing strategies, and rapid design iterations (Aminullah et al., 2024). Furthermore, by tapping into global e-commerce platforms and strategically expanding international reach, Batik makers can access diverse markets and grow beyond local boundaries. There is also a demand for eco-consciousness in textile production, requiring agile innovation in sustainable

practices to attract environmentally aware consumers. For traditional artisans and larger manufacturers alike, achieving agility in market capitalization is essential to stay relevant, appeal to younger demographics, and safeguard the cultural heritage embedded in Batik while effectively competing on the world stage.

Social media plays a pivotal role in enhancing market capitalizing agility (Li et al., 2020) for the Batik industry, enabling businesses to swiftly adapt to consumer preferences and trends, engage with a global audience, and drive brand loyalty. By leveraging social media platforms like Instagram, Facebook, and TikTok, Batik artisans and businesses can share visually compelling content that highlights the artistry, heritage, and modern appeal of Batik, creating an authentic connection with consumers. This direct engagement fosters a flexible market approach, where businesses can quickly gauge audience reactions and adjust designs or marketing strategies accordingly. Social media also allows for targeted advertising and real-time insights, helping Batik businesses to reach niche markets and develop products that align with emerging preferences, such as sustainable and ethically-produced items (Du et al., 2016). Moreover, collaborations with influencers and brand ambassadors amplify Batik's appeal to younger, fashion-forward audiences, driving demand across both domestic and international markets. Through these capabilities, social media empowers the Batik industry to dynamically capitalize on market opportunities, thereby sustaining growth and relevance.

The three recent studies provide valuable insights into how social media capabilities influence market capitalizing agility by enhancing firm responsiveness, customer relationships, and adaptability. In the first study, Tehranian et al. (2024) explore the role of social media in improving firm performance by mediating factors like organizational agility and innovation capability. Their research suggests that social media offers real-time consumer insights and fosters quick adaptation, which are essential for firms to stay competitive in dynamic markets. Chuang (2020) emphasizes the concept of "social media agility," where firms actively co-create value with customers through immediate engagement and feedback, strengthening customer relationships. This agility in communication and service fosters trust and loyalty, which in turn enhances market flexibility. Lastly, Ye et al., (2022) approach the topic from a dynamic capability perspective, showing how social media applications allow firms to quickly adapt to market trends, positioning them to capitalize on emerging opportunities and enhance competitiveness. Together, these studies highlight how social media not only facilitates rapid responses but also builds core capabilities in firms that help sustain long-term adaptability and market relevance.

Despite the growing recognition of social media's impact on market responsiveness, a significant research gap exists in understanding how social media capabilities enhance market capitalizing agility in traditional industries like Batik. While studies have explored general social media benefits in marketing and consumer engagement, few have delved into how these platforms enable businesses to swiftly respond to real-time consumer data, forecast trends, and implement agile strategies in the context of cultural and traditional products. The unique needs of traditional industries, such as balancing cultural preservation with market adaptation, add complexity that is often overlooked in existing social media research (Hartono et al., 2022). Additionally, although social media analytics offer insights into consumer behavior, there is limited research on how traditional businesses can leverage these insights to foster agile decision-making that capitalizes on shifting market demands. Finally, the specific role of influencer collaborations and their contribution to enhancing agility within traditional sectors is underexplored, leaving a gap in understanding how strategic partnerships on social platforms might increase market adaptability for cultural products (Hasya et al. 2020). Addressing these gaps could provide critical insights for traditional industries aiming to strengthen their market positioning through digital agility.

Both exploitative and explorative innovation can effectively bridge the gap in understanding how social media capabilities enhance market capitalizing agility, particularly for traditional industries like Batik. Exploitative innovation, which focuses on refining and improving existing processes, allows Batik businesses to leverage social media platforms for efficiency in marketing, customer feedback collection, and rapid response to consumer trends. For instance, by continuously improving their use of social media analytics and targeted advertising, these businesses can optimize product offerings to meet immediate market demands more swiftly (Zhang et al., 2024). On the other hand, explorative innovation encourages Batik makers to experiment with new digital marketing strategies, such as virtual try-on technology or live selling events, which can foster agility by opening up new customer engagement channels and

differentiating them from competitors (Gligor & Bozkurt, 2021). Together, these dual innovation approaches allow traditional businesses not only to respond quickly to current consumer needs but also to anticipate future market shifts through forward-looking initiatives. This combination of incremental and radical innovation thus provides a robust framework for capitalizing on the agility that social media capabilities can offer, filling the research gap by linking digital tools directly to agile market responses.

Based on the phenomenon, this study aims to develop a conceptual model to explain the relationship among social media capabilities, exploitative innovation, explorative innovation and market capitalizing agility in the context of Batik industry in Indonesia. Upon the completion of this study, both theoretical and practical contributions provided.

## **Methods**

### ***Research Design***

This study adopts an explanatory research design to investigate the relationships between social media capabilities (SMC), innovation (including both exploitative and exploratory innovation), and market capitalizing agility (MCA) among small businesses in the Batik sector in East Java Province. The goal is to understand how social media capabilities influence innovation activities and market agility within these businesses, providing insights that could support strategic decision-making in this traditional industry adapting to digital tools.

### ***Population and Sample in Research***

The population of this study consists of small businesses in the Batik sector within East Java Province, Indonesia. The Batik sector is selected due to its traditional roots and the growing relevance of digital capabilities like social media in expanding market reach and adapting to modern consumer demands. Given the study's objectives, purposive sampling ensures that respondents meet specific criteria relevant to the research focus. The criteria for inclusion are:

1. The business must have been established for at least two years to ensure operational stability and some level of market presence.
2. The business must be involved in both the production and sale of Batik products to provide relevant insights on the entire value chain from production to market interaction.

### ***Data Collection***

Data was collected through a self-administered questionnaire designed to measure the core constructs of the study: social media capabilities, exploitative and exploratory innovation, and market capitalizing agility. The questionnaire was distributed directly to 235 owners or managers of Batik businesses, who are best positioned to provide information on their business's use of social media, innovation practices, and agility in responding to market opportunities. The survey items were adapted from established scales in prior research to enhance validity and reliability, with adjustments made to ensure relevance to the Batik sector context.

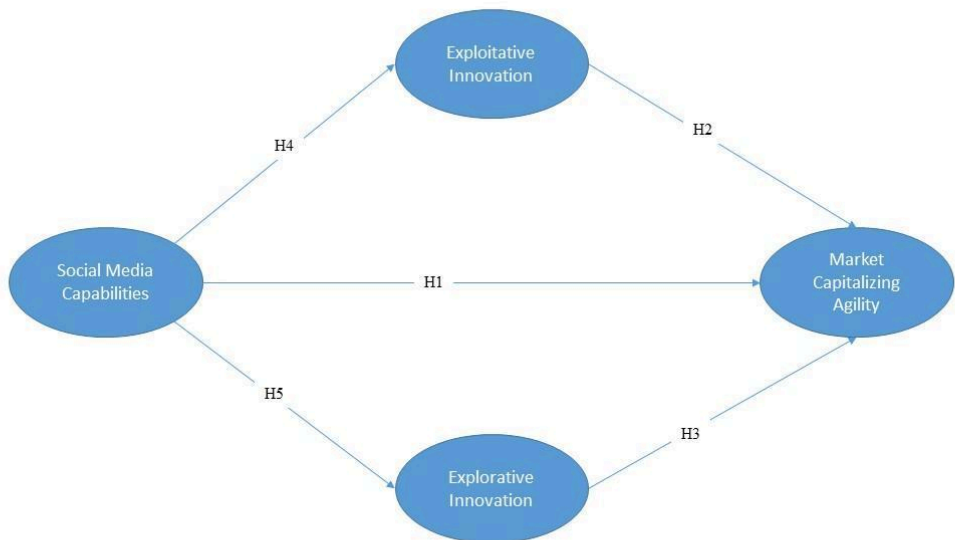
The self-administered format allows respondents to complete the survey at their own convenience, which is particularly useful in a small business context where owners and managers may have limited availability. Additionally, the questionnaire was designed to be straightforward, with clear language and culturally appropriate terminology to ensure respondent comprehension and engagement.

### ***Measurement Model Evaluation***

First, the measurement model was assessed to confirm the reliability and validity of the constructs. This involved examining outer loadings, composite reliability (CR), average variance extracted (AVE), and discriminant validity using the Fornell-Larcker criterion. Constructs that did not meet these thresholds would have been reconsidered, but in this study, all constructs demonstrated satisfactory measurement properties, ensuring the reliability and validity of the instrument (Hair et al., 2014).

## **Result and Discussion**

Seven hypotheses were tested in this study. Before testing the hypothesis, the measurement analyses were performed. The following section discusses the results of measurement evaluation.



H6 : Exploitative innovation mediates the effect of social media capabilities on market capitalizing agility  
 H7 : Explorative innovation mediates the effect of social media capabilities on market capitalizing agility

**Figure 1.** Conceptual Framework

All items for each construct have high outer loadings, with values above 0.7, which indicates a strong relationship between each observed variable and its respective latent construct. For example, loadings for the items under exploitative innovation (EI1, EI2, EI3) range from 0.763 to 0.868, demonstrating good convergent validity within this construct. The AVE values for each construct exceed the threshold of 0.5, with EI, Ino, MAC, and SMC showing AVEs of 0.686, 0.889, 0.752, and 0.710, respectively. This confirms that each construct explains a substantial portion of the variance in its indicators, further supporting convergent validity. All constructs meet the recommended composite reliability threshold of 0.7, with values such as 0.867 for EI, 0.941 for Ino, 0.901 for MAC, and 0.924 for SMC. These high CR values indicate that the constructs are internally consistent, reflecting high reliability.

The Fornell-Larcker criterion is satisfied for discriminant validity, as the square root of each construct’s AVE (shown on the diagonal) is greater than the correlations between constructs (off-diagonal values). For instance, the AVE square root for EI (0.828) is greater than its correlations with Ino (0.654), MAC (0.513), and SMC (0.377). This suggests that each construct is distinct, confirming discriminant validity.

In summary, the outer model evaluation demonstrates that the measurement model is reliable and valid, with high outer loadings, adequate AVE, strong composite reliability, and acceptable discriminant validity based on the Fornell-Larcker criterion. These results indicate that the constructs are well-measured by their indicators and sufficiently distinct from each other, ensuring the robustness of the model’s measurement properties. Table 1 summarises the results of the measurements analysis.

**Table 1.** Measurement Analysis

	FL	AVE	CR	Fornell-Larcker			
				EI	Ino	MAC	SMC
EI1	0.849	0.686	0.867	0.828			
EI2	0.763						
EI3	0.868						
Ino1	0.932	0.889	0.941	0.654	0.943		
Ino2	0.954						

MAC1	0.836						
MAC2	0.883						
MAC3	0.882	0.752	0.901	0.513	0.440	0.867	
SMC1	0.834						
SMC2	0.795						
SMC3	0.890						
SMC4	0.842						
SMC5	0.848	0.710	0.924	0.377	0.426	0.506	0.842

After evaluating the measures used, this study test the proposed hypothesis. The hypothesis testing results presented in the table 1 reveal insights into the relationships between social media capabilities (SMC), market capitalizing agility (MCA), exploitative innovation (EI), and exploratory innovation (Ino). Specifically, the results support the positive effect of SMC on MCA (H1,  $b = 0.349$ ,  $t = 3.838$ ,  $p < 0.001$ ) and on EI (H4,  $b = 0.377$ ,  $t = 4.804$ ,  $p < 0.001$ ), indicating that enhanced social media capabilities contribute to both market agility and exploitative innovation practices. Similarly, a significant positive relationship exists between SMC and Ino (H5,  $b = 0.426$ ,  $t = 5.519$ ,  $p < 0.001$ ), underscoring the role of social media in fostering exploratory innovation within organizations.

Additionally, exploitative innovation (EI) positively impacts market capitalizing agility (H2,  $b = 0.333$ ,  $t = 3.723$ ,  $p < 0.001$ ), suggesting that efforts focused on refining and optimizing existing processes contribute to agility in capitalizing on market opportunities. However, the effect of exploratory innovation (Ino) on MCA (H3) is not statistically significant ( $b = 0.074$ ,  $t = 0.831$ ,  $p = 0.406$ ), implying that innovation focused on new opportunities may not directly enhance market agility.

In more complex relationships, SMC's indirect effect on MCA via exploitative innovation is supported (H6,  $b = 0.125$ ,  $t = 2.975$ ,  $p = 0.003$ ), highlighting a pathway where social media capabilities facilitate agility through exploitation-focused innovation. Conversely, the indirect effect of SMC on MCA via exploratory innovation (H7) is insignificant ( $b = 0.031$ ,  $t = 0.820$ ,  $p = 0.413$ ), indicating that social media capabilities do not significantly impact market agility through exploratory innovation. Overall, these findings emphasize the pivotal role of social media capabilities in fostering agility and innovation, particularly exploitative innovation, within organizations.

**Table 2. Hypothesis Test**

		b	t	sig	Remarks
H1	SMC --> MCA	0.349	3.838	0.000	Supported
H2	EI --> MCA	0.333	3.723	0.000	Supported
H3	Ino --> MCA	0.074	0.831	0.406	NS
H4	SMC --> EI	0.377	4.804	0.000	Supported
H5	SMC --> Ino	0.426	5.519	0.000	Supported
H6	SMC -> Exploitative_Innovation -> Market Capitalizing Agility	0.125	2.975	0.003	Supported
H7	SMC -> Explorative_Innovation -> Market Capitalizing Agility	0.031	0.820	0.413	NS

## DISCUSSIONS

The findings of this study provide important theoretical and managerial implications, particularly regarding the roles of social media capabilities (SMC), market capitalizing agility (MCA), and types of innovation (exploitative and exploratory) in achieving organizational agility and innovation. The results suggest that SMC is critical in enhancing MCA and fostering exploitative and exploratory innovation, indicating that organizations with robust social media capabilities are better positioned to respond to market opportunities and drive innovation. This aligns with prior research highlighting the value of social media as a tool for sensing and shaping market trends and customer preferences (Dwivedi et al., 2021). By integrating real-time

customer insights from social media, companies can adapt to dynamic market conditions more effectively, enhancing their ability to exploit existing capabilities and explore new opportunities

From a theoretical perspective, these findings extend the concept of absorptive capacity by demonstrating how social media capabilities contribute to both potential and realized absorptive capacities. The direct positive impact of SMC on MCA and both types of innovation supports Zahra and George's (2002) absorptive capacity framework, which posits that organizations need mechanisms to acquire, assimilate, transform, and exploit external knowledge. In this context, social media serves as a vital channel for acquiring and assimilating market knowledge, which can be transformed into strategic actions to achieve greater market agility. Additionally, the study provides empirical support for the firm's resource-based view (RBV) (Barney, 1991) which emphasizes the importance of unique, valuable resources – such as social media capabilities – in creating a competitive advantage. By leveraging social media to enhance innovation and agility, firms can build sustainable competitive advantages that are difficult for competitors to replicate.

Managerially, the study emphasizes the importance of investing in social media capabilities as a strategic resource. Companies aiming to improve their market responsiveness and innovation capabilities should prioritize social media platforms not only as communication tools but also as strategic assets for knowledge acquisition and market sensing. This requires a structured approach to managing and analyzing social media data, using advanced analytics and customer relationship management (CRM) systems to turn raw data into actionable insights. By enhancing their social media capabilities, organizations can improve their ability to exploit current market opportunities and explore new ones, leading to a balanced approach that supports both short-term and long-term growth. Additionally, managers should foster an organizational culture that values data-driven decision-making, encouraging teams to integrate social media insights into innovation processes to remain competitive in fast-evolving markets (Kaplan & Haenlein, 2010).

Furthermore, this study highlights the importance of distinguishing between exploitative and exploratory innovation within organizations. Exploitative innovation focuses on refining and enhancing existing capabilities, which is essential for incremental improvements and efficiency gains. In contrast, exploratory innovation involves experimenting with new ideas, technologies, and market segments, which can lead to breakthrough innovations and competitive differentiation. Managers need to balance these two types of innovation, as overemphasis on one at the expense of the other can undermine organizational adaptability. Social media capabilities can facilitate both types of innovation by providing diverse information and insights that inspire creative thinking and support strategic decision-making. By adopting a dual approach to innovation, managers can create agile organizations capable of sustaining competitive advantages across different market conditions.

In conclusion, this study provides evidence that social media capabilities are a key enabler of market capitalizing agility and innovation, supporting both exploitative and exploratory activities. The findings underscore the importance of strategic social media management for firms aiming to build absorptive capacity and achieve a balanced approach to innovation. Future research could further investigate how different social media platforms and analytics tools contribute to various innovation outcomes, as well as how organizational structures and cultures affect the effective use of social media in innovation and agility. These insights could help managers and scholars understand the broader implications of social media in building dynamic capabilities within organizations, contributing to both theoretical advancements and practical applications in strategic management.

### **Conclusion**

In conclusion, this study underscores the critical role of social media capabilities (SMC) in enhancing an organization's agility and innovation potential. By leveraging SMC effectively, firms can achieve greater market capitalizing agility (MCA), allowing them to respond quickly and strategically to market changes. The study demonstrates that SMC contributes positively to both exploitative and exploratory innovation, highlighting its dual role in driving incremental improvements and supporting breakthrough innovations. These findings align with theoretical perspectives, including absorptive capacity and the resource-based view, which suggest that unique and strategically managed resources – like social media capabilities – can create sustainable competitive advantages.

Managerially, the insights suggest that organizations should treat social media not merely as a communication platform but as a strategic tool for knowledge acquisition, market sensing, and innovation. Investment in social media analytics and fostering a culture that values data-driven insights are essential for capitalizing on social media's potential. Additionally, balancing exploitative and exploratory innovation

through strategic use of social media insights can help organizations navigate the complexity of modern markets, sustaining both short-term efficiency and long-term adaptability. Overall, this research contributes to a deeper understanding of how digital capabilities can enhance organizational agility and innovation. Future research should explore the nuanced impacts of specific social media tools and organizational factors on innovation outcomes, providing further insights into how firms can harness digital resources to remain competitive in an increasingly dynamic business environment.

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