

# ANALYSIS OF THE INFLUENCE OF INFORMATION TECHNOLOGY AND INNOVATION ON STRATEGY AND COMPETITIVE ADVANTAGE OF INDONESIAN CULINARY SMES

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#### Abstract

Micro Small and Medium Enterprises (MSMEs) play an important role in the national and regional economies. With the advancement of the global economy and intensified market competition, the ability to innovate and integrate information technology has become crucial factors that can determine the survival and success of MSMEs. However, there are differing findings and practical implications that warrant further exploration through a comprehensive theoretical review of literature within a broader context. This study will comprehensively analyze the substantial impact of information technology capabilities and innovation on strategy development and competitive advantage in culinary micro, small, and medium enterprises in Indonesia. It seeks to incorporate findings from previous studies, assess the direct and indirect impacts of technology and innovation capabilities, and propose potential avenues for further research that could assist stakeholders in formulating effective strategies to improve competitiveness in global markets.

Keyword: Competitive Advantage, IT Innovation and Capabilities, Improve Competitiveness.

# **1. INTRODUCTION**

Micro Small and Medium Enterprises (MSMEs) play an important role in the national and regional economies. According to the Ministry of Cooperatives and SMEs, Kominfo, and BPS in 2020, the workforce in Indonesia absorbed by MSMEs is 97.02% and the national gross domestic product contributed by MSMEs is 61.07%. With the advancement of the global economy and intensified market competition, the ability to innovate and integrate information technology has become crucial factors that can determine the survival and success of MSMEs (Hilmiana and Kirana, 2021; Wardhana, 2015). In today's digital era, mastering information technology offers various advantages such as operational efficiency, enhanced market access, and better adaptability to the dynamic needs of consumers. Meanwhile, innovation capabilities enable MSMEs to differentiate their products and services, which is essential for achieving competitive advantage in a fast-paced market (Putri F and Hasin, 2022).

Understanding the impact of innovation and information technology capabilities on the strategy and competitive advantage of small and medium enterprises in the culinary sector is essential for their success. Prior studies have demonstrated a positive correlation between these capabilities and a competitive edge. However, there are differing findings and practical implications that warrant further exploration through a comprehensive theoretical review of literature within a broader context.



This study will comprehensively analyze the theoretical aspects of how information technology and innovation capabilities affect the strategy and competitive advantage of small-scale culinary enterprises. It seeks to incorporate findings from previous studies, assess the direct and indirect impacts of technology and innovation capabilities, and propose potential avenues for further research that could assist stakeholders in formulating effective strategies to improve competitiveness in global markets.

# **Information Technology Capabilities**

Information technology facilitates the operational effectiveness and market growth of small and medium-sized culinary businesses, allowing them to more effectively adjust and react to evolving market needs. The adoption of digital technologies such as online platforms and management software optimizes operations and reduces costs, which are essential for maintaining a competitive edge (H Putri, 2023; Tyoso & Haryanti, 2020).

# **Innovation Capabilities**

Information technology plays a critical role in enhancing the operational effectiveness and market growth of small and medium-sized culinary enterprises. It enhances their ability to adjust and react to fluctuating market needs, while also empowering them to maintain competitiveness in a changing business environment. Studies show a positive relationship between innovation and competitive advantage, underscoring the importance of innovating for growth and business continuity (Ma'ruf & Hasin, 2022).

#### **Strategy and Competitive Advantage**

The incorporation of IT and innovation supports the creation of successful business plans, allowing small and medium-sized enterprises to establish and sustain a competitive advantage. Utilization of IT accelerates decision-making, while innovation strengthens market differentiation. Together, these capabilities support MSMEs in facing global competition and enhancing their ability to attract and retain customers (Hilmiana and Kirana, 2021; Wardhana, 2015).

In summary, information technology and creativity play crucial roles in formulating tactics that result in long-term competitive edge for small and medium-sized culinary businesses in Indonesia.

# 2. RESEARCH METHODOLOGY

Our research utilized a comprehensive literature review method to theoretically examine the substantial impact of information technology capabilities and innovation on strategy development and competitive advantage in culinary Micro, Small, and Medium Enterprises. Specifically, we selected relevant peer-reviewed articles published from 2010 onwards that emphasized themes related to technology adoption, innovation strategies, and gaining competitive advantage within the context of MSMEs.

The research data was gathered by utilizing Google Scholar as the main source. Google Scholar offers extensive access to a wide range of scholarly journals encompassing subjects such as information technology, innovation, strategic management, and competitive advantage. The choice of using Google Scholar was made due to its ability to access interdisciplinary sources, thereby enabling this study to acquire an inclusive and diverse viewpoint.

# **3. RESULTS AND DISCUSSION**

This section examines and contrasts the results of three academic papers that explore the relationship between information technology capabilities, innovation, and their influence on



competitive advantage in MSMEs. The author's emphasis is on comparing findings from three interconnected journal articles, as outlined in the table below.

Table 1. Information on Articles and Key Findings	
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Author(s)	Year	Journal Article Title
Lani Diana Wijaya dan	2022	Influence of Information Technology Capabilities and
Virgo Simamora		Innovation Capabilities on Strategy and Its Impact on
		Competitive Advantage in Culinary MSMEs
Putri Henirsa,	2023	Analysis of Mastery of Digital Business Technology in
Verdianti, Aulia Azimi		Competitive Advantage during the Industrial Revolution 4.0
		in Culinary MSMEs in Pontianak
Zatia Zatia	2023	The Influence of Dynamic Capabilities and Innovation
		Capabilities on Competitive Advantage (Case Study of
		MSMEs in Kolaka District)

Research carried out in DKI Jakarta indicates that the use of information technology provides a substantial competitive edge, while innovation capabilities do not yield a significant impact. Nonetheless, according to Journal 3, innovation capabilities have a positive and notable influence on gaining a competitive advantage. Furthermore, findings from Journal 2 endorse the considerable advantages of digital technology in bolstering competitiveness. These results imply that both information technology capabilities and innovation can effectively bolster MSMEs' ability to attain a competitive advantage when implemented alongside an appropriate strategy. The outcomes will be detailed in the forthcoming table.

Journ	Influence of Information	Influence of	Additional Notes
al	Technology Capabilities	Innovation	
		Capabilities	
1	Significant impact	No Impact	Low market response to new
			products
2	Significant impact	Not specified	Digital technology enhances competitive advantage
3	Not specified	Significant impact	Product quality increases
			consumer

 Table 2. Summary of Key Findings from Each Journal

The different viewpoints on the impact of innovation capabilities in Journal 1 as opposed to Journals 2 and 3 highlight a crucial aspect of market-oriented research. While Journal 1 indicates that innovation capabilities did not have a substantial effect, this could be attributed to a restrained reaction from the market towards new products. This implies that the success of innovation is reliant not only on its capabilities but also significantly on market approval and consumer decisions.

Journals 2 and 3 highlighted the significant advantages of digital technology and innovation, emphasizing the importance of firms aligning with and surpassing consumer expectations for successful adoption of these technologies. The journals propose that a wider implementation of digital technology, along with efficient innovation strategies, can overcome market resistance while offering new avenues for growth, efficiency, and customer interaction to



enhance competitive advantage. Expanding on this further validates their relevance in today's business landscape.

The differing results emphasize the crucial need to thoughtfully evaluate external market conditions and effectively incorporate innovation. It also emphasizes the importance of Micro, Small, and Medium Enterprises being highly flexible and attuned to market demands. This ensures that innovations not only align with technological feasibility but also fully meet consumer needs and expectations while staying adaptive within dynamic environments.

# 4. CONCLUSION

Based on academic literature, it is evident that information technology and innovation are essential for culinary micro, small, and medium enterprises in Indonesia to enhance efficiency and broaden their markets. Information technology facilitates faster decision-making, reduces operational costs, and improves communication with customers. On the other hand, innovation plays a significant role in product differentiation and meeting customer needs. The successful integration of these elements enables MSMEs to compete internationally and maintain a sustainable competitive advantage. However, some MSMEs encounter challenges when implementing innovations due to lukewarm market responses or insufficient resources.

This research is constrained by differences in the thoroughness and standard of analysis, as well as a failure to consider external factors such as economic circumstances or regulations that may impact the efficacy of IT and innovation in MSMEs. As a result, the conclusions may not comprehensively represent the challenges encountered by MSMEs across diverse regions. Subsequent studies should extensively assess how external factors influence the success of IT and innovation in MSMEs.

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