

Internal and External Factors on the Performance of Halal Food MSMEs in Bekasi Regency

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ARTICLE INFO



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Keywords:

Internal Factors; External Factors;
Information Technology; Cooperation;
Performance; Halal Food; MSMEs.

DOI:

<https://doi.org/10.33096/jmb.v11i2.895>

ABSTRACT

This study analyzes the performance of halal food MSMEs in Bekasi Regency. Internal factors of information technology and external factors of cooperation influence the performance of MSMEs. The unit of analysis in this study amounted to 100 halal food MSME players in Bekasi Regency. The findings in this study further strengthen the findings of previous studies where internal factors of information technology affect the performance of MSMEs with a p-value of 0.009 and external factors of cooperation affect the performance of MSMEs with a p-value of 0.000. This study further strengthens previous findings regarding information technology and cooperation. This research is new to previous research conducted on the halal food industry in the Bekasi district. The selection of internal variables with the Resource Base View (RBV) and Market Base View (MBV) theories is a novelty in this study.

ABSTRAK

Penelitian ini menganalisa kinerja UMKM makanan halal di Kabupaten Bekasi. Faktor internal teknologi informasi dan faktor eksternal kerjasama menjadi faktor yang mempengaruhi kinerja UMKM. Unit analisis dalam penelitian ini berjumlah 100 pelaku UMKM makanan halal di Kabupaten Bekasi. Hasil temuan dalam penelitian ini semakin memperkuat temuan dari penelitian sebelumnya dimana faktor internal teknologi informasi berpengaruh terhadap kinerja UMKM dengan nilai p value sebesar 0,009 dan faktor eksternal kerjasama berpengaruh terhadap kinerja UMKM dengan nilai p value sebesar 0,000. Penelitian ini semakin memperkuat temuan sebelumnya mengenai teknologi informasi dan kerjasama. Penelitian ini memberikan kebaharuan dari penelitian sebelumnya yang dilakukan pada industri makanan halal di kabupaten Bekasi. Pemilihan variabel internal dengan teori Resource Base View (RBV) dan Market Base View (MBV) menjadi kebaharuan dalam penelitian ini.



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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have been the backbone of Indonesia's economy, significantly contributing to employment and economic growth. According to the Ministry of Finance (Djpb.kemenkeu.go.id, 2023), MSMEs in Indonesia are primarily household businesses that can absorb substantial labor. In 2019, the Ministry of Cooperatives and SMEs reported 65.4 million MSMEs in Indonesia, employing approximately 123.3 thousand workers. This demonstrates the substantial impact and contribution of MSMEs to reducing unemployment rates in Indonesia. The increasing workforce involvement in MSMEs helps mitigate the country's unemployment issues. However, the uncertain business environment necessitates that MSMEs be creative and seek ways to survive and grow (Rianto et al., 2022). In Bekasi Regency, the growth of halal food MSMEs presents a significant potential due to the predominantly Muslim population and the increasing awareness of the importance of religious principles as a guide to life. The potential growth of halal food MSMEs in this region warrants a thorough investigation of the internal and external factors influencing their performance. Therefore, this study explores these factors to provide a comprehensive understanding of what drives the success and sustainability of halal food MSMEs in the Bekasi Regency.

The literature on MSMEs' performance has extensively covered various factors affecting their success. Previous studies have highlighted the crucial role of information technology in organizational performance, as it enables broader market reach and quicker task completion. Dehning and Stratopoulos (2003) assert that information systems can drive radical and sustainable changes within companies. A computer-based information system facilitates the exchange and processing of information, making it easier to implement structured data. In addition to internal factors, external factors such as collaboration can also enhance MSME performance. Research by Chung and Paredes (2015) indicates that organizational cooperation can streamline business channels, connecting vertically with suppliers and horizontally with customers (Claro & Claro, 2011). Other studies, such as those by Adawiyah (2014) and Aryansyah et al. (2020), have examined various factors influencing MSME performance, demonstrating the multifaceted nature of this topic. Despite the extensive research on MSMEs, there remains a need to investigate the specific factors that affect the performance of halal food MSMEs, particularly in regions with a high demand for halal products like Bekasi Regency. This study seeks to fill this gap by focusing on the impact of information technology and collaboration on the performance of halal food MSMEs.

While numerous studies have explored factors affecting MSME performance, there is a notable gap in the literature regarding halal food MSMEs in Indonesia, particularly in Bekasi Regency. The importance of this research lies in its focus on a specific subset of MSMEs that cater to a growing demand for halal products. This study is unique in examining internal factors (such as information technology) and external factors (such as collaboration) that influence the performance of halal food MSMEs. Despite the significant contributions of MSMEs to the Indonesian economy, limited research explicitly addresses halal food MSMEs operating within unique cultural and religious contexts. These businesses meet the dietary needs of a predominantly Muslim population and adhere to strict halal standards, adding complexity to their operations. The significance of this research gap underscores the need for this study, which aims to fill this void and provide valuable insights into the performance of halal food MSMEs.

The novelty of this research lies in its dual focus on technological and collaborative influences, providing a comprehensive understanding of the determinants of performance for halal food MSMEs. This study offers new insights into their growth strategies by examining how these enterprises can utilize information technology to reach broader markets and streamline operations. It also explores the benefits of collaborative efforts with suppliers and customers. This approach sheds light on the dynamic interplay between internal and external factors, offering practical recommendations for halal food MSMEs to thrive in a competitive and uncertain business environment. This study, therefore, fills a critical gap by addressing both the technological and collaborative aspects that can drive the success of halal food MSMEs in Bekasi Regency.

Based on the literature review and identified research gaps, this study proposes the following hypotheses: Information Technology significantly influences the performance of halal food MSMEs in Bekasi Regency, and Collaboration substantially influences the performance of halal food MSMEs in Bekasi Regency. These hypotheses are grounded in the understanding that technological advancements and cooperative efforts are critical drivers of organizational success, especially for MSMEs operating in the halal food sector. By examining these

relationships, the study aims to uncover the specific impacts of these factors on MSME performance in a region where halal food demand is high.

To address the research questions and test the hypotheses, this study will employ a quantitative approach, using a structured questionnaire to collect data from halal food MSMEs in Bekasi Regency. The questionnaire will be meticulously designed to measure the impact of information technology and collaboration on MSME performance, with items adapted from previous studies to ensure reliability and validity. The data collection process will involve reaching out to a representative sample of MSME owners and managers, ensuring that the findings are generalizable to the region's broader halal food MSMEs. Once the data is collected, it will be analyzed using statistical techniques such as multiple regression analysis. This method will allow the researchers to determine the significance and strength of the relationships between the independent variables (information technology and collaboration) and the dependent variable (MSME performance). By employing a robust analytical approach, the study aims to provide empirical evidence to support the proposed hypotheses, thereby contributing to a deeper understanding of the factors influencing the performance of halal food MSMEs.

The primary objectives of this study are to assess the impact of information technology on the performance of halal food MSMEs in Bekasi Regency and to evaluate the influence of collaboration on their performance. Additionally, the study aims to provide actionable recommendations for halal food MSMEs leveraging information technology and collaborative efforts to enhance their performance. Based on empirical evidence, these recommendations will be of significant practical value to MSME owners and managers, policymakers, and other stakeholders interested in the growth and sustainability of halal food MSMEs. By focusing on a specific subset of MSMEs in a region with a high demand for halal products, the research intends to fill a critical gap in the existing literature on MSME performance. Ultimately, the study seeks to contribute valuable insights that can inform strategies for supporting the growth and sustainability of halal food MSMEs, thereby aiding economic development and employment generation in Bekasi Regency and similar regions.

Internal Factors of Information Technology

Internal factors within an organization play a crucial role in establishing a competitive edge, as outlined by the Resource Base View (RBV) theory. According to RBV, internal factors are the key to an organization's ability to achieve superior competitiveness compared to external factors (Rianto et al., 2022). Among these internal factors, information technology (IT) has emerged as a critical component in the contemporary global competitive landscape (Widiarta et al., 2020). Organizations increasingly rely on IT to grow and adapt to the rapidly changing business environment. The significance of IT in fostering organizational growth and competitive advantage cannot be overstated, as it enables organizations to respond swiftly to environmental changes and leverage technological advancements for sustained success. Research has consistently demonstrated that organizations with robust IT capabilities are better positioned to compete than those unprepared for technological changes (Dehning & Stratopoulos, 2003). For instance, Abdurrahman et al. (2020) and Asashi and Sukaatmadja (2017) found that firms with advanced IT infrastructure and systems could enhance operational efficiency, streamline processes, and improve decision-making, leading to better overall performance. This capacity to leverage IT effectively allows organizations to maintain their current market position and

innovate and expand their market reach.

The rapid pace of technological advancement further highlights the strategic importance of IT. Organizations must continuously upgrade their IT systems to stay ahead of competitors and meet evolving market demands. Widiarta et al. (2020) emphasize that IT is integral to an organization's navigating and thriving in a volatile business environment. This assertion is supported by empirical evidence showing that IT contributes significantly to an organization's adaptability and resilience in market fluctuations. IT's role extends beyond operational enhancements and impacts strategic planning and execution. Dehning and Stratopoulos (2003) argue that IT enables organizations to implement radical and sustainable changes, fostering innovation and long-term growth. By facilitating efficient information exchange and processing, IT systems allow organizations to make informed decisions quickly, thus gaining a competitive advantage. Several studies have explored the relationship between IT capabilities and organizational performance. For example, Abdurrahman et al. (2020) found that IT infrastructure directly correlates with improved productivity and efficiency. Similarly, Asashi & Sukaatmadja (2017) and Widiarta et al. (2020) noted that organizations with advanced IT systems could better manage resources, reduce costs, and enhance customer satisfaction, which is critical to maintaining a competitive edge.

The RBV theory emphasizes that internal resources and capabilities, such as IT, are vital for achieving and sustaining competitive advantage. This theoretical framework supports the notion that organizations with superior IT infrastructure can outperform competitors by efficiently managing and utilizing their resources. It enables organizations to innovate, adapt to market changes, and improve performance. The rapid advancement of technology necessitates continuous investment in IT systems. Organizations that must catch up with technological changes risk losing their competitive edge. As Widiarta et al. (2020) suggest, organizations need to thrive in a volatile business environment, and those that invest in advanced IT systems are better equipped to handle market fluctuations and remain competitive. Empirical evidence supports the critical role of IT in organizational success. Studies by Abdurrahman et al. (2020) and Asashi and Sukaatmadja (2017) demonstrate that advanced IT infrastructure enhances productivity, efficiency, and customer satisfaction. These improvements, in turn, contribute to a stronger competitive position in the market.

External factors of cooperation

External factors fundamentally influence strategic decision-making by providing a basis for adapting to environmental changes. The Market-Based View (MBV) theory posits that companies should perceive the external environment as a reflection of strategic decision-making (Rianto et al., 2022). Collaboration, a critical external factor, involves forming partnerships with various business entities, both vertically (suppliers and distributors) and horizontally (customers) (Claro & Claro, 2011). Broad and frequent collaboration is expected to enhance organizational performance by enabling better resource management, which is necessary for improving performance. Collaboration is anticipated to be a competitive advantage for MSMEs since not all can replicate this advantage. According to Barney (1986), organizational resources that competitors cannot imitate will provide a competitive edge in the market. By establishing strong partnerships, organizations can access and manage essential resources more efficiently, thus boosting their performance and market position.

Several studies have underscored the importance of collaboration in achieving superior organizational performance. For instance, Claro & Claro (2011) highlighted that effective collaboration with suppliers and distributors facilitates smoother supply chain operations, leading to cost reductions and improved service delivery. This seamless integration of business processes across partners ensures organizations respond swiftly to market demands and changes, enhancing their overall performance. Collaboration extends beyond operational efficiencies to strategic advantages. Organizations that engage in broad and frequent partnerships can leverage these relationships to gain insights into market trends, customer preferences, and emerging opportunities. This strategic collaboration enables organizations to innovate and adapt their offerings to meet evolving market needs, thus maintaining a competitive edge.

Collaboration is particularly crucial for MSMEs, which often face resource constraints. By partnering with other businesses, MSMEs can pool resources, share risks, and access new markets, overcoming some of the limitations they face independently. This collaborative approach enhances the operational capabilities of MSMEs and fosters innovation and growth. Collaboration can create a sustainable competitive advantage by building complex long-term relationships for competitors to replicate. As Barney (1986) suggests, unique and inimitable resources provide a sustained competitive advantage. By developing solid partnerships, MSMEs can create relationships that enhance their market position and contribute to long-term success. Research by Claro & Claro (2011) supports the notion that collaboration is integral to achieving superior performance. They found that organizations with extensive collaboration networks could better manage supply chain complexities and enhance customer satisfaction. This improved performance, in turn, reinforces the value of collaboration as a strategic asset.

Innovation and Technology Adoption

Innovation and technology adoption are critical drivers of competitiveness and growth for micro, small, and medium enterprises (MSMEs), particularly in the dynamic halal food sector. The ability to innovate and effectively integrate new technologies can determine an MSME's ability to meet market demands, enhance operational efficiency, and ensure compliance with halal standards. In the context of halal food MSMEs in Bekasi Regency, these factors are pivotal in shaping business performance and sustainability. Innovation in product development is essential for MSMEs aiming to differentiate themselves in the competitive halal food market. Product innovation can involve the development of new halal-certified food items that cater to evolving consumer tastes and preferences. As noted by Tidd & Bessant (2020), innovation in product offerings attracts new customers and retains existing ones by continuously meeting their changing needs. For halal food MSMEs, this can mean developing new flavors, healthier options, or convenience foods that adhere to halal standards.

Technological advancements are equally crucial in improving the operational processes of halal food MSMEs. Adopting modern food processing technologies can enhance product quality and safety, critical for maintaining consumer trust in halal certifications. A study by Lubis et al. (2016) emphasizes the role of technology in ensuring food traceability and safety, which are paramount in the halal food industry. Technologies such as blockchain can provide transparent and tamper-proof records of the halal supply chain, from raw materials to the finished product, thereby ensuring compliance with halal standards and enhancing consumer confidence. Digital

technology adoption, including e-commerce platforms and digital marketing tools, has revolutionized how MSMEs operate and engage with customers. As Awa et al. (2015) highlighted, e-commerce allows MSMEs to reach a broader market, reduce operational costs, and improve customer service. For halal food MSMEs, an effective online presence can significantly boost sales and brand visibility. Utilizing social media platforms for marketing can also help target halal-conscious consumers and build a loyal customer base. Additionally, digital payment systems facilitate smoother transactions, enhancing the overall customer experience.

The role of innovation in packaging and labeling is vital for halal food MSMEs. Packaging innovations improve product shelf life, reduce waste, and enhance product appeal, while clear labeling communicates halal status and builds consumer trust (Mokhtar et al., 2021). Technology adoption in supply chain management optimizes efficiency and reduces costs. Advanced technologies like integrated management systems and real-time tracking streamline operations and improve coordination with suppliers and distributors, leading to better inventory management and resource utilization (Vaka, 2024). Sustainable practices are also linked to innovation within the halal food sector. Green technologies help MSMEs reduce their environmental footprint and attract environmentally conscious consumers. Incorporating sustainability into business operations meets regulatory requirements and enhances brand image and competitiveness (Tuhin et al., 2022). Investment in research and development (R&D) is crucial for fostering innovation. MSMEs that invest in R&D are better positioned to develop new products, improve existing ones, and adopt cutting-edge technologies. R&D investment is strongly correlated with business innovation and long-term success, enabling MSMEs to discover new ingredients, processing methods, and packaging solutions that comply with halal standards and cater to market trends (Serrat, 2017).

Socio-Cultural Factors and Consumer Behavior

Socio-cultural factors and consumer behavior profoundly shape the dynamics of the halal food market. Understanding these influences is crucial for halal food MSMEs aiming to navigate and succeed in this competitive landscape. The increasing awareness and preference for halal-certified products among Muslim consumers significantly drive the growth of the halal food market. Cultural and religious beliefs are pivotal in shaping consumer purchasing decisions, with halal certification as a critical indicator of product authenticity and compliance with Islamic dietary laws. Jaiyeoba et al. (2020) underscore the critical role that halal certification plays in assuring consumers about adherence to Islamic principles, thus influencing their buying behavior. Consumer behavior in the halal food market is also significantly influenced by brand reputation, product quality, and effective marketing strategies. Akpoviroro et al. (2020) highlight that effective branding and communication are essential for building consumer trust and loyalty. Halal food MSMEs must emphasize the halal attributes of their products through clear labeling, targeted marketing campaigns, and engaging with halal-conscious consumers. Effective communication strategies highlighting the authenticity and quality of halal products can strengthen brand reputation and foster consumer loyalty.

The rise of health-conscious and ethical consumption trends has further contributed to the growth of the halal food market. Consumers increasingly seek products that align with their health, sustainability, and ethical sourcing values. This shift in consumer behavior presents significant opportunities for halal food MSMEs. Asiyah et al. (2023) argue that halal food MSMEs

can leverage these trends by emphasizing halal products' health benefits and ethical considerations. By doing so, they can appeal to a broader consumer base that values religious compliance and health and ethical standards. The role of cultural identity in consumer behavior cannot be overstated. According to the study by Khan et al. (2017), cultural identity significantly influences Muslim consumers' preferences and purchasing decisions. The authors suggest halal food MSMEs align their branding and marketing strategies with their target market's cultural values and identity to enhance consumer engagement and loyalty. This alignment helps create a solid emotional connection between the brand and the consumer, fostering long-term loyalty.

The influence of digital media and online reviews is growing in shaping consumer behavior. Cahyani and Sumadi (2023) highlighted the impact of social media and online reviews on consumer purchasing decisions in the halal food market. Positive online reviews and an active social media presence can significantly increase the credibility and appeal of halal food products. Therefore, MSMEs should invest in digital marketing strategies, utilize social media platforms to interact with consumers and manage their online reputation. The ethical dimension of halal products includes religious compliance and broader ethical issues such as animal welfare and environmental sustainability. A study by Talib et al. (2018) revealed that modern Muslim consumers are increasingly concerned about the ethical aspects of food production. Halal food MSMEs can capitalize on this trend by ensuring their production practices comply with halal standards and uphold high ethical standards regarding animal welfare and environmental sustainability. Communicating these ethical practices effectively can enhance brand image and attract ethically conscious consumers.

Framework and Hypothesis

The framework is one of the important processes in decision-making in research (Rianto et al., 2022). The existence of a framework will make it easier for researchers to identify variables based on the phenomena raised in the study. The following is a framework that is built based on phenomena and research variables:

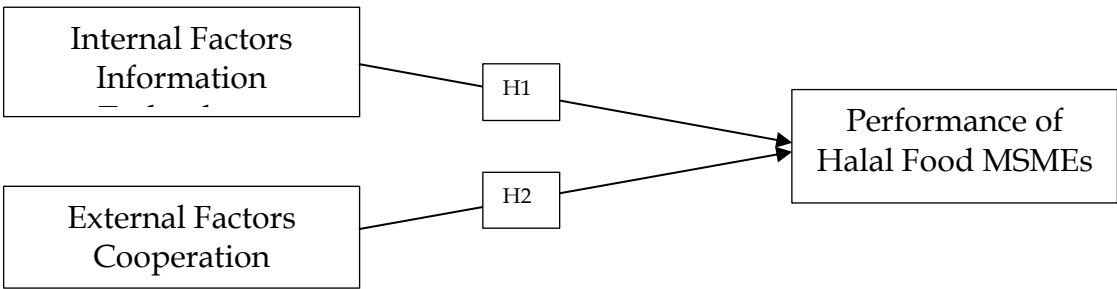


Figure 1. Framework of Thought

The hypothesis is a temporary answer to the research argument (Rianto et al., 2022). Based on the results of problem identification and theory development, the hypothesis is built as follows:

Information technology (IT) has become essential to business growth in the current era. It encompasses using computers, software, and networks to manage and process information efficiently. For Micro, Small, and Medium Enterprises (MSMEs), IT includes tools and systems that help streamline operations, enhance communication, and support decision-making processes. The ability to effectively manage and leverage IT can significantly impact an organization's performance, particularly in the context of Industry 4.0, where digital transformation is critical to competitiveness and growth (Lin & Lee, 2005; Rianto et al., 2022). Information Technology (IT) uses digital tools and systems to collect, store, process, and disseminate information within an organization. It includes hardware such as computers and servers, software applications, databases, and networks like the internet and intranet that facilitate these processes. On the other hand, MSME Performance measures how well MSMEs achieve their business objectives, including financial performance, operational efficiency, customer satisfaction, and market competitiveness. It is crucial for MSMEs as it enables them to operate more efficiently and effectively. With advanced IT systems, MSMEs can automate routine tasks, improve data accuracy, and enhance internal and external communication. This leads to better decision-making, reduced operational costs, and increased productivity. In today's digital age, leveraging IT is not just an advantage but a necessity for survival and growth. MSME Performance, in contrast, is an indicator of an organization's success and sustainability. High performance means that the MSME is achieving its goals, satisfying its customers, and maintaining a competitive edge in the market. Improved performance also leads to business growth, increased revenue, and enhanced reputation.

The relationship between IT and MSME Performance is inherently optimistic. Effective use of IT can lead to significant improvements in MSME performance by enabling better management of resources, faster response times to market changes, and more efficient business processes. When MSMEs invest in IT, they will likely see improvements in their operational efficiency, customer service, and overall business outcomes. Recent studies support the positive impact of IT on MSME performance. For instance, a study by Gao et al. (2023) found that IT adoption positively influences the performance of MSMEs by enhancing their operational efficiency and market responsiveness. Similarly, a study by AlSharji et al. (2018) demonstrated that IT capabilities significantly improve business processes and customer satisfaction in MSMEs. Additionally, research by Edwy et al. (2023) highlighted that IT implementation helps MSMEs achieve better financial performance and competitive advantage through improved data management and communication.

H1: Information technology affects the performance of MSMEs

Collaboration is an alternative for companies to enhance organizational performance externally (Chung & Paredes, 2015). By collaborating, MSMEs can improve their performance through vertical and horizontal channels. In this context, collaboration refers to the strategic partnership and cooperation between MSMEs and other entities, such as suppliers, distributors, and customers. This involves working together to achieve common goals, share resources, and enhance business operations. On the other hand, MSME Performance measures how well these enterprises achieve their business objectives, including financial performance, operational efficiency, customer satisfaction, and market competitiveness. Collaboration is essential because it provides MSMEs with access to resources, knowledge, and networks they might not possess individually. Through collaboration, MSMEs can optimize their supply chain, reduce costs, enhance innovation, and improve market reach. For instance, vertical collaboration with suppliers and distributors can lead to more efficient supply chain management, while horizontal collaboration with customers can enhance customer satisfaction and loyalty. Collaboration also plays a crucial role in overcoming challenges, reassuring MSMEs, and instilling confidence in their ability to adapt and thrive. MSME Performance, as an indicator of success, reflects the effectiveness of an enterprise in achieving its goals and maintaining a competitive edge. High performance signifies that the MSME is operating efficiently, satisfying its customers, and growing in the market – improved performance results in increased revenues, better market position, and long-term sustainability.

The relationship between collaboration and MSME Performance is inherently optimistic. Effective collaboration enables MSMEs to leverage the strengths and resources of their partners, leading to improved efficiency, innovation, and market responsiveness. When MSMEs engage in strategic partnerships, they are better equipped to manage challenges, adapt to market changes, and capitalize on new opportunities. Several recent studies support the positive impact of collaboration on MSME Performance. For example, a study by Sutrisno (2023) found that collaboration significantly enhances MSMEs' innovation capabilities and market performance. This study highlighted that collaborative efforts enable MSMEs to access new technologies and market insights, which are crucial for innovation and growth. Similarly, research by Aulia et al. (2024) demonstrated that strategic alliances and partnerships contribute to improved operational efficiency and customer satisfaction in MSMEs. By collaborating with suppliers and customers, MSMEs can streamline their operations and better meet customer needs. Additionally, a study by (Menne et al., 2022) showed that collaborative networks positively impact the financial performance of MSMEs. The study found that MSMEs involved in extensive collaboration networks tend to have higher revenues and profitability due to improved resource management and market access.

H2: Cooperation affects the performance of Halal Food MSMEs in Bekasi Regency.

RESEARCH METHODS

This study employs a quantitative approach, utilizing numerical data as the basis for decision-making (Untari, 2018). The unit of analysis in this research focuses on halal food entrepreneurs in Bekasi Regency. The exact population of this study is unknown, so it adopts the method proposed by Sarstedt et al. (2022) to determine the minimum sample size, where the number of indicators (X) is multiplied by 5. Based on this method, with 20 indicators, the study requires a minimum of 100 respondents. The research adopts items from previous studies for its survey statements. The internal factors of information technology are adapted from (Miftahurrohman and Muthohir, 2019) and consist of 4 statement items. The variable of external factors of collaboration is adapted from Widyastuti et al. (2023), comprising 9 statement items. The variable of MSME performance is adapted from Rianto et al. (2022), with 7 statement items. This study employs SmartPLS 4 as the statistical tool to test data validity and research hypotheses.

RESULTS AND DISCUSSION

Result

This study examines the data adequacy (Outer Model) and produces the following results:

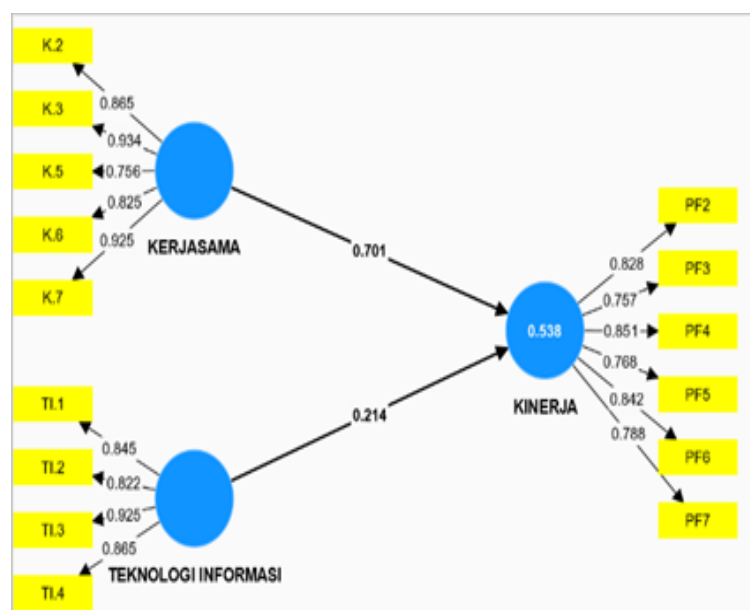


Figure 2. Outer Model Validity

The outer model is used to test the adequacy of the research data. Juliandi (2018) states that model adequacy can be measured by testing validity and reliability. Based on the outer model's output, some indicators had to be eliminated because they did not meet the minimum data acceptance criteria (valid) with an outer loading value > 0.7 .

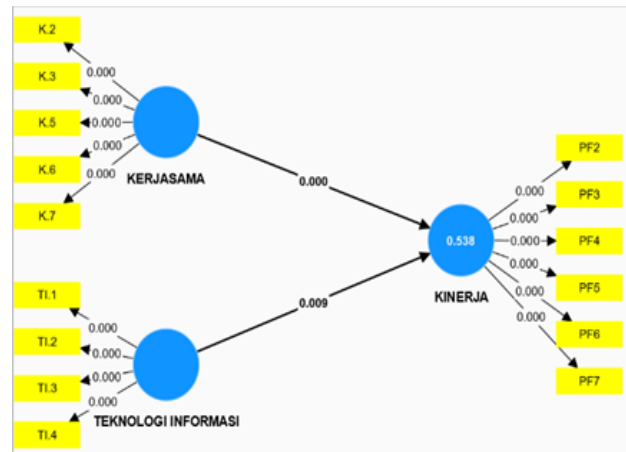
In addition to assessing validity, model adequacy must meet reliability requirements (Juliandi, 2018). Data is reliable if the Cronbach's Alpha value is > 0.7 and the AVE is > 0.5 (Edeh et al., 2022).

Table 1. Outer Model Reliability

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Cooperation	0.913	0.929	0.936	0.745
Performance	0.894	0.906	0.918	0.650
Information Technology	0.888	0.897	0.922	0.749

Based on the outer model reliability test output, Cronbach's Alpha values were all > 0.7, with the internal factor of Information Technology at 0.888, the external factor of collaboration at 0.913, and MSME performance at 0.894. The AVE values for each variable also met the research requirements, being more significant than 0.5.

The next step is to test the hypotheses (inner model). The inner model predicts the influence (relationship) between independent and dependent variables. The following are the output results from SmartPLS for the inner model test.

**Figure 3.** Inner Model**Table 2.** Inner Model Path Coefficients

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-statistics (O/STDEV)	P-values
Collaboration -> Performance	0.701	0.700	0.047	14.894	0.000
Information Technology -> Performance	0.214	0.221	0.081	2.629	0.009

The SmartPLS 4 output in the inner model test, as shown in Figures 4 and 5, indicates that the internal factor of information technology significantly influences MSME performance, with a p-value of $0.009 < 0.05$, meaning H1 is accepted. Meanwhile, the external collaboration factor also significantly influences MSME performance, with a p-value of $0.000 < 0.05$, meaning H2 is accepted.

Dicussion

The effect of Information Technology on MSME Performance

The findings of this study underscore the transformative power of information technology (IT) in the performance enhancement of MSMEs, offering a beacon of hope for business owners and policymakers. A comprehensive analysis of the research results reveals that IT is a catalyst for improving operational efficiency, customer satisfaction, and revenue growth. These outcomes validate the foundational concepts and hypotheses proposed earlier, reinforcing the theoretical underpinnings that technological integration within business operations is a pivotal driver of performance. One of the primary performance aspects directly impacted by IT usage is service speed. With appropriate IT systems, MSMEs can accelerate their business processes from sales to customer service, ensuring quick responses to customer demands and efficient order management. Systems such as Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) have been proven to enhance service speed by automating routine tasks and integrating business operations. This aligns with our hypothesis and supports existing theories on the benefits of IT in streamlining business processes and enhancing efficiency.

Customer satisfaction significantly benefits from the adoption of IT. Enhanced data analysis capabilities allow MSMEs to better understand customer needs and preferences, enabling them to offer more personalized and targeted services. This improved personalization boosts customer satisfaction and fosters loyalty and repeat purchases, which are vital in today's competitive market environment. This finding is consistent with previous research indicating that IT tools facilitate deeper customer insights and improve service quality. In the context of sales growth, IT provides tools that allow MSMEs to expand their market reach and enter new markets through digital platforms. E-commerce and digital marketing, for instance, are channels that have opened vast opportunities for MSMEs to reach a broader audience without geographical limitations. An effective online presence enables MSMEs to increase sales and strengthen their market position, supporting the hypothesis that IT positively impacts business growth and market expansion. To enhance IT effectiveness, MSMEs must consider several key factors. Employee training is a crucial element in maximizing IT's benefits. Adequate training ensures that employees can effectively utilize existing technologies and reduces operational errors that may arise from a lack of understanding of new systems. Investment in the proper hardware and software is also critical. Selecting IT solutions that meet the business's specific needs and can be integrated with existing systems can minimize technical barriers and maximize operational efficiency.

Implementing systems that support advanced data analysis is essential for making accurate business decisions and responding promptly to dynamic market conditions. This study further corroborates previous findings that internal IT factors significantly influence MSME performance. Research by Papenhausen & Einstein (2006),

Aminu et al. (2014), and Effasa et al. (2023) has consistently shown that effective utilization of IT leads to improved business performance. The results of this study demonstrate that proper use of IT significantly enhances the performance of halal food MSMEs in the Bekasi Regency. Field evidence shows that most MSMEs benefit greatly from delivery applications like GoFood and GrabFood. Additionally, technologies like WhatsApp and Google My Business have become essential tools for MSME operators in Bekasi Regency. According to these operators, in the digital era, connectivity rather than location has become a critical factor for business success, underlining the importance of IT in achieving business excellence.

The Effect of Collaboration on MSME Performance

The findings of this study underscore the empowering role of collaboration in enhancing the performance of MSMEs. This in-depth analysis reveals that collaboration can impact various aspects of MSME performance, such as operational efficiency, product quality improvement, and market expansion. Effective collaboration empowers MSMEs to integrate their business processes better, optimize resource utilization, and enhance their ability to respond to dynamic market demands. Through collaboration, MSMEs can design and execute more efficient strategies, ultimately increasing productivity and reducing operational costs. Collaboration also plays a crucial role in improving product quality. By partnering with suppliers and other business partners, MSMEs can access higher-quality raw materials, advanced technology, and the technical knowledge needed to improve their products. This not only boosts the competitiveness of their products in the market but also strengthens their brand and increases customer loyalty. Leveraging collaboration empowers MSMEs to continuously innovate and develop new products that better meet consumer needs and preferences. Regarding market expansion, collaboration strategically provides MSMEs access to broader distribution networks and previously unreachable markets. MSMEs can strategically expand their geographical reach and increase market penetration through partnerships with distributors and marketing agents. This collaboration allows MSMEs to reach new customers and grow their customer base, ultimately boosting sales volume and business growth. The tangible benefits of collaboration for MSMEs are diverse. First, collaboration provides access to better resources. By collaborating, MSMEs can access raw materials, technology, and information that might be difficult to obtain independently. This access enables MSMEs to enhance production efficiency and product quality. Second, collaboration enhances innovation capabilities. Partnering with other businesses can spark new ideas and creative solutions to the challenges faced by MSMEs. This innovation is crucial for maintaining competitiveness and relevance in an ever-changing market. Third, collaboration increases bargaining power in negotiations with suppliers and distributors. By establishing strong partnerships, MSMEs can negotiate better prices and business terms, which can be financially beneficial.

Factors supporting the effectiveness of collaboration are also crucial to consider. They were first building mutually beneficial relationships. Effective collaboration must be based on mutually beneficial principles, where all parties benefit equally – second, good communication. Clear, open, and regular communication between all parties involved in the collaboration is essential to ensure smooth operations and resolve any issues that may arise. Third, trust among the parties involved. Trust is the foundation of any successful collaboration. Trust is necessary for collaboration to be stable and practical. The external collaboration factor is also an essential consideration for the performance of halal food MSMEs in Bekasi Regency. Similar studies reinforce this finding, showing that collaboration positively impacts organizational performance Kim et al. (2018); Chung & Paredes (2015); Tamamudin (2020). Through collaboration, MSMEs can access more effective resources than when operating independently. Partnerships with distributors and suppliers allow MSMEs to gain competitive pricing and better financing facilities, enhancing their business performance. These results are consistent with the foundational concepts and hypotheses proposed earlier, confirming that collaboration is critical in improving MSME performance. The findings align with previous research, indicating that collaborative efforts can significantly enhance operational efficiency, product quality, and market reach. This consistency reinforces the validity of the current study and supports the theoretical framework that emphasizes the importance of external collaboration in business performance.

CONCLUSION

The study on tourism visits to Bukit Kayoe Putih in Kupang Village utilized a SWOT analysis. The SWOT analysis was used to determine the appropriate and suitable strategy to continuously increase the number of visitors to the Bukit Kayoe Putih tourism site. Based on the analysis of the research results, it was concluded that the Bukit Kayoe Putih tourism site is highly suitable for using an aggressive strategy to increase tourist visits. The strategies obtained can be recommended to the management of the Bukit Kayoe Putih tourism site to further improve the development and implement several aspects of the aggressive strategy. Additionally, based on the internal and external environmental conditions, this tourism site is suitable for using the SO strategy. The SO strategy was derived from the analysis of internal and external factors. The recommended strategy that the researchers can provide is to maximize the available opportunities, such as developing the tourism object and preserving the white kayu trees as educational materials, maintaining affordable food prices for the surrounding community, and continuously striving to utilize ideas, suggestions from relevant parties, and input from the community to support the progress of the tourism site, thereby increasing the appreciation from the tourism government and the economic status of the surrounding community.

Based on the research conclusions and analysis, the researchers have provided several recommendations for the Bukit Kayoe Putih tourist attraction. These include the need to add more recreational facilities within the area, implement more greenery and provide additional shaded areas and seating to enhance visitor comfort. The attraction should also emphasize the implementation of the recommended strategies across all staff to increase visitor numbers.

Furthermore, the researchers suggest recruiting certified experts, such as those with K3 certifications, to operate high-altitude attractions as a diversification of the available offerings. Promoting community participation, both as employees and as vendors selling souvenirs, is also recommended to foster local involvement and increase the availability of memorabilia for visitors. Additionally, the researchers advise improving the main entrance by adding signage to make the site more visually appealing and inviting to the general public. Lastly, the development of a clear vision and mission for the Bukit Kayoe Putih attraction is recommended to provide guidance and alignment for the staff in working towards the desired objectives.

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