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Business Model Canvas as a Strategic Tool for Enhancing Competitive Advantage in Bakery MSMEs: A Case Study of Nadia Roti, Bandar Lampung

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Abstract

Micro, Small, and Medium Enterprises (MSMEs) play a significant role in Indonesia's economic development by contributing to employment generation and national economic growth. Nevertheless, increasing market competition, rapid technological development, and changing consumer preferences require MSMEs to continuously improve their business models to maintain competitiveness. This study aims to analyze the implementation of the Business Model Canvas (BMC) and examine its role in enhancing the competitive advantage of Nadia Roti, a bakery MSME located in Bandar Lampung, Indonesia. A qualitative case study approach was employed using observations, in-depth interviews, and documentation as primary data collection techniques. The analysis was conducted using the nine elements of the Business Model Canvas, namely Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. The findings indicate that the Business Model Canvas provides a comprehensive framework for identifying business strengths, weaknesses, opportunities, and strategic improvements. Nadia Roti has successfully created competitive value through affordable product pricing, product quality, customer-oriented services, and effective utilization of digital marketing channels. However, several areas require further improvement, particularly digital transformation, product innovation, customer relationship management, and strategic partnerships. The study concludes that the Business Model Canvas is an effective strategic planning tool that supports business sustainability, operational efficiency, and competitive advantage for bakery MSMEs operating in increasingly competitive markets.

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Keywords: Business Model Canvas; Competitive Advantage; Bakery MSMEs; Business Strategy; Business Model Innovation

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in promoting economic growth, employment creation, and poverty reduction in many developing countries. In Indonesia, MSMEs contribute more than 60% of the national Gross Domestic Product (GDP) and absorb approximately 97% of the national workforce, making them the backbone of the national economy (Ministry of Cooperatives and SMEs of the Republic of Indonesia, 2024). Similar findings were reported by Osterwalder and Pigneur (2010), who argued that sustainable business growth depends not only on operational performance but also on the effectiveness of the underlying business model. The bakery industry has become one of the fastest-growing sectors among Indonesian MSMEs due to changing consumer lifestyles and increasing demand for convenient food products. However, this rapid growth has intensified market competition, forcing business owners to continuously improve product quality, operational efficiency, innovation capability, and customer experience to remain competitive (Kotler et al., 2021). In highly competitive markets, competitive advantage is no longer achieved solely through pricing strategies but also through innovation and value creation that distinguish one business from another.

Business model innovation has therefore become an important strategic issue for MSMEs. According to Teece (2018), an effective business model enables organizations to create, deliver, and capture value in ways that generate sustainable competitive advantage. Likewise, Clauss (2017) emphasized that business model innovation significantly improves firm performance by aligning organizational resources with customer needs and market opportunities. One of the most widely adopted strategic frameworks for business model analysis is the Business Model Canvas (BMC) developed by Osterwalder and Pigneur (2010). The framework consists of nine interconnected building blocks, namely Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. These elements provide a comprehensive overview of how organizations create and deliver value while maintaining business sustainability. Recent studies have demonstrated that the Business Model Canvas assists MSMEs in identifying strategic opportunities, improving operational efficiency, and enhancing competitiveness (Putra et al., 2024; Haryani et al., 2023).

Nadia Roti is one of the bakery MSMEs operating in Bandar Lampung that has experienced consistent sales growth in recent years. Despite this positive trend, the business continues to face several managerial challenges, including limited product innovation, insuffi-

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cient digital marketing utilization, dependence on offline sales, and the absence of a structured business model. These issues may reduce the firm's ability to compete effectively against competitors that have successfully adopted digital technologies and more innovative business strategies. Digital transformation has significantly changed consumer purchasing behavior. Customers increasingly prefer interacting with businesses through digital platforms, including social media and online marketplaces, requiring MSMEs to adapt their business strategies accordingly (Kotler et al., 2021). Consequently, implementing an integrated business model such as the Business Model Canvas may provide MSMEs with a practical framework for evaluating existing operations and identifying opportunities for strategic improvement.

Previous studies have confirmed the effectiveness of the Business Model Canvas in improving organizational performance across various business sectors. Altafin et al. (2025) found that the Business Model Canvas facilitates systematic business analysis and strategic decision-making, while Putra et al. (2024) reported that the framework contributes to business sustainability through improved customer value creation. Nevertheless, empirical studies focusing specifically on bakery MSMEs in Indonesia remain relatively limited. Therefore, this study aims to analyze the implementation of the Business Model Canvas at Nadia Roti and examine how each component of the framework contributes to strengthening the company's competitive advantage. The findings are expected to enrich the literature on business model innovation among MSMEs while providing practical recommendations for bakery entrepreneurs seeking sustainable business growth.

THEORETICAL REVIEW

Business Model Canvas

The Business Model Canvas (BMC), developed by Alexander Osterwalder and Yves Pigneur (2010), is one of the most widely used strategic management frameworks for designing, analyzing, and improving business models. The framework provides a visual representation of how an organization creates, delivers, and captures value through nine interconnected building blocks: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. Unlike traditional business planning approaches, the Business Model Canvas enables business owners to evaluate their entire business ecosystem in a simple yet comprehensive manner, facilitating strategic decision-making and organizational innovation.

According to Osterwalder and Pigneur (2010), an effective business model explains the rationale of how an organization creates value for customers while simultaneously generating sustainable revenue. The visual nature of the Business Model Canvas allows entrepreneurs

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to identify strengths, weaknesses, and potential areas for business improvement. Consequently, the framework has become increasingly popular among Micro, Small, and Medium Enterprises (MSMEs), particularly those operating in highly competitive industries where business adaptability is essential.

Several empirical studies have confirmed the effectiveness of the Business Model Canvas in supporting MSME development. Clauss (2017) reported that business model innovation significantly enhances organizational performance by improving value creation and resource utilization. Similarly, Putra et al. (2024) found that implementing the Business Model Canvas enables MSMEs to better understand customer needs, optimize operational processes, and develop more sustainable competitive strategies. Likewise, Haryani et al. (2023) concluded that systematic analysis of the nine Business Model Canvas components contributes positively to business sustainability and long-term competitiveness.

Competitive Advantage

Competitive advantage refers to an organization's ability to outperform competitors by creating superior value for customers through unique resources, capabilities, innovation, or cost efficiency. According to Michael E. Porter (1985), competitive advantage arises when firms implement strategies that competitors cannot easily imitate, enabling them to achieve above-average performance within their industries. Porter identified two primary sources of competitive advantage: cost leadership and differentiation.

In dynamic business environments, competitive advantage is increasingly influenced by innovation, customer experience, digital transformation, and organizational flexibility rather than solely by production efficiency or pricing strategies. Teece (2018) emphasized that organizations capable of continuously adapting their business models and developing dynamic capabilities are more likely to sustain competitive advantage under rapidly changing market conditions.

For MSMEs, competitive advantage often depends on their ability to respond quickly to customer preferences, maintain product quality, establish strong customer relationships, and utilize digital technologies effectively. Therefore, strategic management tools such as the Business Model Canvas provide valuable guidance for identifying opportunities that enhance organizational competitiveness.

Business Model Canvas and Competitive Advantage

The relationship between the Business Model Canvas and competitive advantage has attracted considerable attention in entrepreneurship and strategic management research. The Business Model Canvas enables organizations to align internal resources with external

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market demands, thereby improving organizational effectiveness and customer value creation. Each of the nine Business Model Canvas elements contributes to strengthening competitive advantage. Customer Segments help businesses identify target markets more accurately, while Value Propositions define the unique benefits offered to customers. Channels and Customer Relationships improve customer engagement and satisfaction, whereas Revenue Streams and Cost Structure enhance financial sustainability. Furthermore, Key Resources, Key Activities, and Key Partnerships strengthen operational capabilities and organizational resilience (Osterwalder & Pigneur, 2010).

Recent studies support this relationship. Altafin et al. (2025) demonstrated that the Business Model Canvas facilitates strategic planning by integrating business activities into a coherent framework. Similarly, Haryani et al. (2023) found that MSMEs adopting the Business Model Canvas achieved greater operational efficiency, stronger market positioning, and improved business sustainability. Putra et al. (2024) also reported that systematic implementation of the Business Model Canvas encourages innovation, improves customer satisfaction, and enhances long-term competitive performance.

Within the bakery industry, where product innovation, customer loyalty, and operational efficiency are essential success factors, the Business Model Canvas serves as an effective strategic framework for evaluating existing business models and identifying opportunities for continuous improvement. Consequently, this study adopts the Business Model Canvas as the primary analytical framework to examine how Nadia Roti develops and strengthens its competitive advantage.

Conceptual Framework

This study is based on the assumption that effective implementation of the Business Model Canvas positively influences competitive advantage. The nine components of the Business Model Canvas collectively determine how MSMEs create customer value, manage resources efficiently, establish strategic partnerships, and maintain sustainable business performance. By systematically evaluating these components, businesses can identify strategic improvements that contribute to long-term competitiveness.

Accordingly, this study examines the implementation of the Business Model Canvas in Nadia Roti Bakery MSME and evaluates how each element contributes to strengthening the firm's competitive advantage in an increasingly competitive business environment.

METHOD

This study employed a qualitative research approach using a case study design to examine the implementation of the Business Model Canvas (BMC) in enhancing the competi-

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tive advantage of Nadia Roti, a bakery Micro, Small, and Medium Enterprise (MSME) located in Bandar Lampung, Indonesia. A qualitative case study was considered appropriate because it enables an in-depth exploration of business phenomena within their real-life context while providing comprehensive insights into organizational strategies and managerial practices (Yin, 2018).

The research was conducted at Nadia Roti, a local bakery MSME that has operated in the bakery industry for several years and serves various customer segments in Bandar Lampung. The business was selected purposively because it demonstrates stable business growth while simultaneously facing challenges related to business model development, product innovation, digital marketing, and competitive positioning. These characteristics make Nadia Roti an appropriate case for analyzing the implementation of the Business Model Canvas.

Primary data were collected through direct observation, semi-structured interviews, and documentation. Observations were conducted to understand daily business operations, production activities, customer interactions, and marketing practices. Semi-structured interviews were carried out with the business owner as the primary informant to obtain detailed information regarding each of the nine Business Model Canvas components. Supporting information was also obtained from business documents, sales records, promotional materials, and photographs to strengthen data validity.

Purposive sampling was employed to determine the research informants. The business owner was selected as the key informant because of comprehensive knowledge regarding strategic planning, operational management, customer relationships, supplier partnerships, and financial management. Additional information was obtained from employees and relevant business documents whenever necessary to enrich the analysis and facilitate data triangulation.

Data analysis followed the interactive model proposed by Miles, Huberman, and Saldaña (2014), consisting of three stages: data condensation, data display, and conclusion drawing. During data condensation, interview transcripts, observation notes, and documentation were organized and categorized according to the nine elements of the Business Model Canvas. The organized data were then presented systematically to facilitate interpretation and comparison across business model components. Finally, conclusions were drawn by identifying strategic strengths, weaknesses, opportunities for improvement, and their implications for competitive advantage.

To ensure research trustworthiness, data credibility was established through source triangulation, method triangulation, and member checking. Information obtained from interviews was compared with observational findings and documentary evidence to verify

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consistency and accuracy. In addition, the interview results were confirmed with the business owner to ensure that the interpretations accurately reflected the actual business conditions.

DISCUSSION

The findings presented in Figure 1 indicate that Nadia Roti has developed a business model that integrates the nine building blocks of the Business Model Canvas (BMC) to create customer value and strengthen its competitive position. The analysis demonstrates that each component of the BMC contributes differently to business performance, while the interaction among these components forms a comprehensive business strategy. This finding supports the concept proposed by Alexander Osterwalder and Yves Pigneur (2010), who argued that competitive advantage is achieved when organizations successfully integrate customer value, operational activities, strategic resources, partnerships, and financial structures into a coherent business model.

The Customer Segments identified in this study show that Nadia Roti serves diverse customer groups, including students, office employees, households, retailers, and resellers. This market diversification reduces dependence on a single customer group and provides greater business stability. By targeting both end consumers and business customers, the company has expanded its market opportunities while increasing sales potential. According to Kotler et al. (2021), businesses that clearly identify and understand their target customers are more capable of developing products and marketing strategies that satisfy customer needs, thereby improving customer retention and long-term profitability.

The Value Proposition emerged as one of the strongest components of Nadia Roti's business model. The company differentiates itself through affordable pricing, consistent product quality, daily fresh production, product variety, and attractive packaging. These characteristics provide functional value that meets customer expectations while simultaneously strengthening brand competitiveness. In the bakery industry, where product freshness and quality significantly influence purchasing decisions, maintaining consistent product standards becomes an important source of competitive advantage. This finding is consistent with Clauss (2017), who emphasized that business model innovation should continuously focus on creating superior customer value that competitors cannot easily imitate.

Another important finding relates to the Channels and Customer Relationships components. Nadia Roti utilizes direct sales through physical outlets, WhatsApp Business, social media platforms, and word-of-mouth promotion to communicate with customers. These communication channels enable the company to maintain close relationships with customers through responsive service and personalized interactions. However, the study also indi-

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cates that digital marketing activities remain relatively limited. The absence of integrated e-commerce platforms, customer relationship management systems, and digital advertising strategies may restrict market expansion. As consumer purchasing behavior increasingly shifts toward digital platforms, greater investment in digital marketing and online customer engagement would further strengthen the company's competitive position.

The analysis also highlights the importance of Key Resources and Key Activities in supporting operational excellence. Physical resources, including production equipment and quality raw materials, combined with skilled employees and standardized production processes, enable Nadia Roti to consistently produce high-quality bakery products. Daily production schedules, quality control procedures, marketing activities, and product distribution ensure business continuity and customer satisfaction. Nevertheless, innovation activities remain relatively limited, particularly in developing new products and adopting digital technologies. Continuous innovation is essential because consumer preferences within the bakery industry evolve rapidly, requiring businesses to respond proactively to market trends.

Furthermore, the findings reveal that Key Partnerships play a strategic role in maintaining business sustainability. Collaboration with raw material suppliers, packaging providers, retailers, and local distribution partners ensures the availability of production inputs while reducing operational risks. Strategic partnerships also improve supply chain efficiency and enable the company to maintain stable production quality. This finding supports Teece (2018), who argued that sustainable competitive advantage depends not only on internal organizational capabilities but also on external collaborations that facilitate access to valuable resources, knowledge, and innovation. Expanding partnerships with universities, government agencies, financial institutions, and digital marketplace providers could further enhance organizational capabilities and business growth.

Regarding the Revenue Streams and Cost Structure, the findings indicate that Nadia Roti generates most of its revenue through direct product sales, retail distribution, and bulk orders for events. Meanwhile, operational costs primarily consist of raw materials, employee salaries, packaging, utilities, and promotional expenses. Although the current financial structure supports stable business operations, future business sustainability could be enhanced by diversifying revenue sources through catering services, online subscriptions, bakery training programs, or customized product offerings. Similarly, investments in employee development, digital marketing, and technological innovation should be regarded as strategic investments rather than operational costs because they contribute to long-term competitiveness.

Overall, the findings demonstrate that Nadia Roti's competitive advantage is not derived from a single Business Model Canvas component but rather from the integration of all nine

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building blocks. Customer-oriented value propositions, efficient operational management, strategic partnerships, and effective resource utilization collectively create a business model that supports sustainable growth. However, the study also identifies opportunities for improvement, particularly in digital transformation, product innovation, customer relationship management, and strategic collaboration. These improvements are essential for ensuring that the business remains competitive in an increasingly dynamic and technology-driven market environment.

From a managerial perspective, this study confirms that the Business Model Canvas is not merely a business planning tool but also an effective strategic management framework that assists MSMEs in evaluating business performance, identifying weaknesses, and formulating development strategies. Regular evaluation of each Business Model Canvas component enables business owners to adapt more quickly to market changes, improve operational effectiveness, and strengthen long-term competitive advantage. Therefore, continuous refinement of the business model should become an integral part of strategic decision-making for bakery MSMEs seeking sustainable business growth.



Figure 1. Business Model Canvas of Nadia Roti, Bandar Lampung

Figure 1 presents the Business Model Canvas (BMC) developed from the findings of this study. The model illustrates how Nadia Roti creates, delivers, and captures value through

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the integration of the nine building blocks of the Business Model Canvas. The analysis indicates that the company has established a customer-oriented business model by focusing on affordable prices, high product quality, daily fresh production, and responsive customer service. These value propositions are supported by effective business operations, reliable partnerships with suppliers and distribution channels, as well as efficient resource management. The Customer Segments block shows that Nadia Roti serves a diverse market consisting of students, university students, office employees, households, retailers, and resellers. This diversified market segmentation enables the company to reach broader customer groups and reduce dependence on a single market segment.

The Value Proposition emphasizes high-quality bakery products, affordable prices, product freshness, attractive packaging, and product variety. These attributes differentiate Nadia Roti from competitors and represent the primary source of customer value.

The Channels and Customer Relationships blocks indicate that the company distributes products through physical stores, direct orders, social media, and WhatsApp Business while maintaining close relationships with customers through responsive communication, promotional programs, and personalized services.

Furthermore, Key Resources and Key Activities demonstrate that the business relies on qualified human resources, production equipment, quality raw materials, standardized production processes, marketing activities, and continuous product development to maintain operational effectiveness. The Key Partnerships component highlights collaboration with raw material suppliers, retailers, packaging providers, delivery services, and promotional partners. These partnerships strengthen supply chain efficiency and support business continuity.

Finally, the Revenue Streams and Cost Structure blocks illustrate that business income is primarily generated through retail sales, reseller transactions, and special-event orders, while operational costs mainly consist of raw materials, labor, utilities, packaging, transportation, and promotional expenses. Overall, the Business Model Canvas demonstrates that Nadia Roti possesses a relatively integrated business model capable of supporting sustainable growth and enhancing competitive advantage in the bakery industry.

CONCLUSION

This study examined the implementation of the Business Model Canvas (BMC) as a strategic tool for enhancing the competitive advantage of Nadia Roti, a bakery Micro, Small, and Medium Enterprise (MSME) in Bandar Lampung. The findings indicate that the Business Model Canvas provides a comprehensive framework for understanding how the business creates, delivers, and captures value through the integration of its nine building blocks. The analysis revealed

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that Nadia Roti has established a customer-oriented business model by offering high-quality bakery products at affordable prices, maintaining strong customer relationships, utilizing multiple distribution channels, and developing strategic partnerships that support operational sustainability. Among the nine building blocks, Value Proposition, Customer Relationships, Key Activities, and Key Partnerships were identified as the primary contributors to the company's competitive advantage. These components enable the business to consistently deliver customer value, maintain product quality, improve operational efficiency, and strengthen customer loyalty. Nevertheless, the study also identified several areas requiring further development, including product innovation, digital marketing, customer relationship management, and business collaboration with external stakeholders. Continuous improvement in these areas is essential to enhance the company's adaptability and competitiveness in an increasingly dynamic business environment.

The findings confirm that the Business Model Canvas is not merely a business planning tool but also an effective strategic management framework for evaluating business performance and identifying opportunities for sustainable growth. By systematically assessing each building block, business owners can recognize organizational strengths and weaknesses, formulate appropriate strategic decisions, and improve long-term business sustainability.

From a theoretical perspective, this study enriches the literature on the application of the Business Model Canvas in MSMEs, particularly within the bakery industry. From a practical perspective, the proposed Business Model Canvas can serve as a strategic reference for Nadia Roti and other bakery MSMEs seeking to improve business performance, strengthen competitive advantage, and achieve sustainable growth through continuous business model innovation. Future studies are recommended to expand the analysis by involving multiple bakery MSMEs or other business sectors, applying comparative case studies or mixed-method approaches, and evaluating the long-term impact of Business Model Canvas implementation on organizational performance and business sustainability.

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