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The Effectiveness of Business Model Canvas (BMC) in Enhancing The Competitiveness of Culinary MSMEs In Palopo City

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Abstrack

Micro, Small, and Medium Enterprises (MSMEs) in the culinary sector contribute significantly to local economic growth in Palopo City. However, many MSME actors face challenges in sustaining their businesses due to the lack of systematic business strategies. This study aims to analyze the effectiveness of implementing the *Business Model Canvas* (BMC) in improving the performance of culinary MSMEs in Palopo. The research employed a quantitative approach by distributing questionnaires to 80 culinary MSME respondents, complemented by in-depth interviews to enrich the qualitative data. Data analysis was conducted using the *Structural Equation Modeling* (SEM) method to examine the influence of the nine BMC elements on competitiveness and business sustainability. The results indicate that *Value Proposition*, *Customer Relationship*, and *Key Activities* have a significant impact on revenue growth and customer loyalty. Meanwhile, *Channels*and *Revenue Streams* play an important role in expanding market access and enhancing profitability. These findings confirm that BMC is an effective strategic framework for strengthening the competitiveness of culinary MSMEs in Palopo and can serve as a reference for local governments and supporting institutions in formulating sustainable MSME development programs.

Keywords: Business_Model_Canvas; MSMEs; Culinary; Effectiveness; Palopo_City

1. Intoduction

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of Indonesia's economy. According to data from the Ministry of Cooperatives and SMEs (2022), MSMEs contribute 60.6% to the national Gross Domestic Product (GDP) and absorb approximately 97% of the total workforce. This indicates that MSMEs not only serve as the main driver of economic growth but also act as instruments for equitable development and job creation.

However, despite their significant contribution, the sustainability of MSMEs continues to face serious challenges. According to [1], the failure rate of MSMEs ranges between 50–70% within the first three years. Such failures are generally attributed to weak managerial capacity, limited access to financing, lack of innovation, and insufficient strategic planning. Similarly, [2], in The Five Stages of Small Business Growth, emphasized that MSMEs are vulnerable to failure due to their inability to adapt to changes in the business environment, particularly during the early stages of growth.

This phenomenon is also evident at the regional level, particularly in Palopo City, South Sulawesi. The culinary sector has become one of the main pillars of the local economy, growing at a rate of 12.3% per year—higher than the national average of 8.5%. Data from the Palopo City Office of Cooperatives and MSMEs (2023) recorded 724 culinary MSMEs contributing 23.7% to local revenue (PAD). However, the competitiveness of Palopo's culinary MSMEs remains low, with a business sustainability rate of only 38% over five years.

The low competitiveness of culinary MSMEs is caused by several factors, including a lack of understanding of strategic business models, weak adaptation to changing consumer

preferences, limited distribution and marketing networks, and inefficiencies in cost structure management.

[3] state that a business's success is determined by its ability to formulate marketing strategies aligned with changes in consumer behavior. Meanwhile, the Dynamic Capabilities theory by [4] emphasizes that sustainable competitiveness can only be achieved when organizations are able to integrate, build, and reconfigure internal competencies to respond to external environmental changes.

To enhance MSME competitiveness, one relevant approach is the implementation of the Business Model Canvas (BMC). [5] define BMC as a strategic visual framework consisting of nine key elements: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. Through this framework, MSME actors can create a more holistic picture of their business, understand interconnections among business components, and design more innovative strategies.

According to [5], a well-designed business model can be a source of competitive advantage. Similarly, Wirtz et al. (2016) argue that BMC can help small businesses identify opportunities, minimize risks, and develop sustainable growth strategies. This aligns with [6]; [7] Resource-Based View (RBV) theory, which asserts that competitive advantage can be achieved when a business effectively utilizes resources that are valuable, rare, inimitable, and non-substitutable.

Furthermore, [8]; [9] emphasizes that innovation and entrepreneurship are key factors for MSMEs to survive and grow. Through systematic business strategy mapping such as BMC, MSMEs can create value propositions that better meet consumer needs while increasing operational efficiency.

However, the implementation of BMC cannot be generic. Local socio-economic characteristics, culture, and consumer behavior must be primary considerations. Therefore, an in-depth study on the effectiveness of BMC implementation in the culinary MSME sector of Palopo City is needed to develop an adaptive, innovative, and contextual business development model. Thus, this study is expected to make a tangible contribution to enhancing the competitiveness of culinary MSMEs while simultaneously strengthening the regional economy.

2. Methodology

This research was conducted in Palopo City. The main variable in this study is the Business Model Canvas (BMC), which consists of nine dimensions: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. Meanwhile, competitiveness consists of six dimensions: Product Quality, Product Price, Promotion and Marketing, Technology and Digitalization, Human Resources, and Business Management.

The data collection method used in this study involved questionnaires. The questionnaires were distributed by meeting respondents directly. In addition to questionnaires, data were also collected through interviews. The sample in this study consisted of 80 culinary MSME actors in Palopo City. The sampling technique used was incidental (accidental) sampling, which involves selecting respondents who happen to be available and suitable to participate in the study.

To obtain the research results, a descriptive analysis was employed—an analysis method that describes or explains a particular situation. Descriptive analysis was conducted to illustrate the distribution of respondents' answers regarding the Effectiveness of the Business Model Canvas (BMC) in Enhancing the Competitiveness of Culinary MSMEs in Palopo City.

Table 1. Respondents' Perception Range

Range	Keterangan
1.00-1.80	Strongly Disagree / Very Poor / Highly Inappropriate
1.81-2.60	Disagree / Poor / Inappropriate
2.61-3.40	Fairly Agree / Fair / Fairly Appropriate
3.41-4.20	Agree / Good / Appropriate
4.21-5.00	Strongly Agree / Very Good / Highly Appropriate

3. Result and Discussion

3.1. Result

Outer Model Submission

Validity Test

The validity test is intended to determine the extent to which the questionnaire items accurately represent the variables being measured. The validity test was conducted using the loading factor values obtained from the Partial Least Squares (PLS) calculation. The results showed that all questionnaire items met the recommended threshold values, indicating that the indicators used to measure the variables in this study are valid.

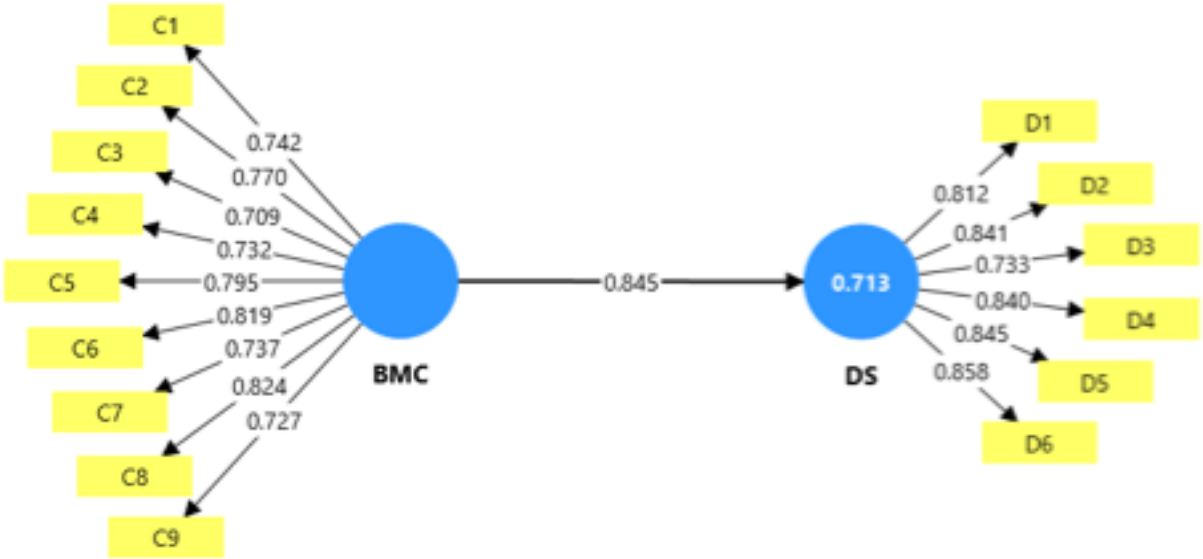

Figure 1. Path Analysis

From the figure above, it can be seen that all loading factor values are above 0.70, as stated by Hair et al. (2016) and Sarwono (2014), who suggest that values above 0.70 indicate a strong correlation and good validity.

Reliability Test

The reliability test was conducted to measure the consistency and stability of the scores (measurement scales) of an instrument in assessing a particular concept, as well as to evaluate the goodness value of the measurement instrument. Data quality testing was carried out by examining the composite reliability values obtained from the Partial Least Squares (PLS) calculation for the variables, namely WH, JS, IWB, and WP. To determine composite reliability, if the composite reliability value (ρc) > 0.8, the construct is considered to have high reliability (reliable), while a value of ρc > 0.6 indicates that it is sufficiently reliable (Ghozali, 2011). In addition, the Average Variance Extracted (AVE) should be greater than 0.50.

Table 3. Reliability Test

Variabel	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)	Kesimpulan
Bussines Model Canvas	0.910	0.913	0.582	Reliabel
Daya Saing	0.904	0.906	0.677	Reliabel

The results of the reliability test above indicate that all research variables function as suitable measurement instruments, as the values of Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) meet the required thresholds. The composite reliability values for each construct are very good, as they exceed 0.80. In addition, the Cronbach's Alpha values are all above 0.70, further confirming the internal consistency of the constructs. The AVE values are also greater than 0.50, indicating that each construct has good convergent validity (Ghozali, 2015).

R-Square (R^2)

One of the key measures used to assess the quality of a model is the R-Square (R^2) value. According to Hair et al. (2019), R-Square (R^2), or the coefficient of determination, is a measure that indicates how well the independent variables can explain the variation in the dependent variable within a structural model. R^2 serves as a primary indicator for evaluating the predictive power of the developed model.

Hair et al. (2019) also provide guidelines for categorizing R-Square values in PLS-SEM–based research as follows:

0.75 = Substantial (Strong)
0.50 = Moderate (Medium)
0.25 = Weak

Table 3. R-Square (R^2) Test

	R-square	R-square adjusted
DS	0.713	0.710

Thus, if the R^2 value in this study is 0.713, it can be categorized as strong based on Hair's criteria. This indicates that the model has a high ability to explain the dependent variable, meaning the independent variables used in the study effectively account for most of the variance in the dependent construct.

Hypothesis Testing

In the context of Structural Equation Modeling–Partial Least Squares (SEM-PLS), hypothesis testing aims to assess whether the relationships between latent variables in the structural model are statistically significant. This is done using the bootstrapping method, which generates t-statistics and p-values to determine the significance of each path coefficient (Hair et al., 2019).

Table 4. Hypothesis Testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
BMC -> DS	0.845	0.850	0.029	28.861	0.000

Based on the table, the path coefficient value (Original Sample) is 0.845, indicating that the Business Model Canvas (BMC) has a positive effect on Competitiveness (DS). This means that the better the implementation of the BMC, the higher the competitiveness of MSMEs. Furthermore, the t-statistics value of 28.861 is far greater than the critical threshold of 1.96 at a 5% significance level ($\alpha = 0.05$), and the p-value of 0.000 (< 0.05) confirms that the effect is highly significant. Therefore, the hypothesis stating that the Business Model Canvas has a positive and significant effect on competitiveness is accepted. These findings align with [10], who state that in SEM-PLS, an effect is considered significant when t-statistics ≥ 1.96 or p-values ≤ 0.05. Hence, it can be concluded that the research model is strongly supported by empirical evidence.

3.2. Discussion

The implementation of the Business Model Canvas (BMC) among culinary MSMEs in Palopo City demonstrates that this framework serves as a strategic instrument for strengthening local business competitiveness. As emphasized by [5], the BMC provides a comprehensive overview of nine interrelated key business elements. In Palopo, the application of BMC is not only theoretically relevant but also practically significant, as the culinary sector represents one of the main drivers of the local economy with a highly heterogeneous market structure.

The Customer Segments and Value Propositions dimensions have been proven to form the foundation for developing MSME competitiveness strategies. Culinary consumers in Palopo consist of students, workers, and tourists, which necessitates diverse product adaptations. [4] emphasizes that a value proposition is only effective when customer segments are accurately understood. Culinary MSMEs in Palopo that prioritize distinctive local flavors, affordable pricing, and friendly service have successfully established differentiation aligned with the concept of a unique selling proposition (USP).

Customer Relationships and Channels also serve as key strengths of Palopo's culinary MSMEs. The communal social culture of the local community fosters strong customer loyalty

through personal interaction. [11] assert that customer loyalty is a strategic asset, while [12] adds that relationship marketing plays a vital role in strengthening long-term market positioning. Alongside the rise of digitalization, the use of food delivery applications has emerged as a new distribution channel. [13] highlight that the digitalization of distribution channels acts as a catalyst for efficiency and expands market reach.

From a financial perspective, Revenue Streams and Cost Structure remain key challenges. Most MSMEs in Palopo still rely on traditional sales with limited diversification. [14] warn that a single-source revenue model poses a risk to business resilience, while [9] emphasizes the importance of maintaining a balance between revenue flows and cost structures. On the other hand, the involvement of family members in the operations of Palopo's MSMEs serves as a distinctive efficiency strategy, although it may also limit managerial professionalization.

The aspects of Key Resources, Key Activities, and Key Partnerships serve as major strengths of Palopo's MSMEs, supported by the abundant availability of fresh local raw materials. [6], through the Resource-Based View (RBV) theory, emphasizes that valuable, unique, and inimitable resources form the foundation of competitive advantage. Collaboration with local suppliers, culinary communities, and digital platforms strengthens the value chain of Palopo's MSMEs, aligning with the findings of [15], which highlight that technology-based strategic partnerships enhance the adaptability of small enterprises.

The competitiveness indicators of MSMEs show that product quality, pricing, promotion, technology, human resources, and business management are closely interconnected with the implementation of the BMC framework. [16] emphasizes that competitive advantage is determined by a combination of quality and cost efficiency. In Palopo, MSMEs that rely on distinctive local flavors and affordable prices have been able to maintain their position in the local market. However, weaknesses in promotional activities are still evident, indicating the need for a more aggressive marketing communication strategy, particularly through digital channels.

The strengthening of technology, human resources, and business management aspects has become an urgent agenda for MSMEs in Palopo. [17] emphasize that competency-based human resources are a source of sustainable competitive advantage. [18] further assert that sound business management through strategic approaches such as the Balanced Scorecard can enhance competitiveness. In the context of Palopo, the relatively simple managerial capacity of MSMEs needs to be improved to make businesses more professional, adaptive, and oriented toward long-term growth.

Thus, this discussion affirms that the competitiveness of culinary MSMEs in Palopo City is shaped through the synergy between the nine dimensions of the Business Model Canvas (BMC) and the six indicators of competitiveness. The main strengths of these MSMEs lie in customer relationships, value-based differentiation rooted in local culture, and the availability of local raw materials. However, weaknesses still exist in the areas of revenue diversification, promotion, and managerial professionalization. The implication is that the development strategy for Palopo's MSMEs should focus on digitalization, strengthening partnerships, and enhancing managerial capacity to enable them to compete not only in local markets but also at the national and even international levels.

4. Conclusion

This study shows that the implementation of the Business Model Canvas (BMC) has a significant effect on enhancing the competitiveness of culinary MSMEs in Palopo City. BMC serves as a strategic framework that helps business owners understand and manage the nine key elements of a business in an integrated manner — ranging from Customer Segments and Value Propositions to Cost Structure. Through this approach, MSME owners can more accurately map market potential, formulate value propositions that align with consumer preferences, and improve operational efficiency and effectiveness. The results of this study also affirm that consistent implementation of BMC strengthens customer relationships, encourages product innovation, and creates sustainable competitive advantages for culinary MSMEs in Palopo City.

The results of the study reveal that most culinary MSMEs in Palopo City still operate their businesses conventionally with limited planning, resulting in relatively low competitiveness and business sustainability. The implementation of the Business Model Canvas (BMC) has proven to assist business owners in designing strategies that are more adaptive to changing consumer preferences, expanding distribution and marketing networks, and enhancing product innovation.

Theoretically, these findings align with the Resource-Based View (Barney, 1991) and Dynamic Capabilities framework (Teece, Pisano, & Shuen, 1997), which emphasize the importance of leveraging internal resources and developing adaptive capabilities in response to external environmental changes to achieve sustainable competitive advantage. Thus, the use of the Business Model Canvas (BMC) can serve as a strategic instrument that not only enhances competitiveness but also strengthens the sustainability of culinary MSMEs in Palopo City.

Nevertheless, this study has limitations due to its specific focus on the Palopo area, meaning that the results may differ when applied to other regions with different socio-economic characteristics. Therefore, future research is recommended to expand the scope of study to other MSME sectors and to conduct empirical testing using quantitative and experimental approaches in order to measure the impact of the Business Model Canvas (BMC) more comprehensively on business performance.

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