WINGKO INDUSTRY SUSTAINABILITY IMPROVEMENT STRATEGY USING THE BUSINESS MODEL CANVAS (BMC) METHOD

Khoirul Hidayat, Firman Arief Soejana, M Fuad Fauzul Mu'tamar
Department of Agroindustrial Technology, Faculty of Agriculture,
Trunojoyo University
Jl. Raya Telang, Kamal, Bangkalan, 69162
irul_ie@yahoo.co.id

ABSTRACT

Wingko is one of Indonesian Snack from Babat of Lamongan Regency which is produced by UMKM Klapa Muda. Compete makes the production unstable, even decreased. UMKM Klapa Muda must develop rapidly because there are already many competitors selling similar products. This study uses the Business Model Canvas Development that is assisted using the Internal factor Evaluation matrix, External Factor Evaluation, Internal-External, SWOT matrix analysis, and QSPM (Quantitative Strategic Planning Matriks) analysis. For the weighting stage, 5th priority strategies used for market penetration and product development by applying Business Model Canvas (BMC) concept to UMKM Klapa Muda Babat strategy, is 1) Customer Relationship Increasing promote activities with a value of 2,401, 2) Customer Segments establish customer loyalty with a value of 2,386, 3) Value Proposition guarantees production quality and improves products with a value of 2.24, 4) Channels has a relationship with the government with a value of 2,015, 5) Key Resources Development of machine and equipment technology with a value of 1,308.

Keywords: Business Model Canvas, SWOT, Wingko

1. INTRODUCTION

The UMKM Klapa Muda is a small factory that has produced wingko since 1974, and the second generation of its founder currently leads it. UMKM Klapa Muda Klapa can produce up to 1000-1500 bags/day (2005-2015). However, the competition that occurs makes production unstable, even decreasing. Wingko babat comes from the Babat district in Lamongan Regency because the district is the largest production area of wingko babat. Some people say this snack comes from the Chinese nation (Febriatmoko et al., 2015)(Sukrama, 2009). The shelf life of wingko babat is only had three or four days, and the texture will harden and reduce the taste of wingko when it exceeds the storage time (Rudiyanto, 2016).

To improve the sustainability of the UMKM Klapa Muda, requires a suitable new business strategy (Ginanti et al., 2021). According to (Osterwalder & Pigneur, 2010), many business models are currently the main concepts in product marketing competition. One of the business models is to maintain and improve competitiveness is the Business Model Canvas, which has nine simple and easy to understand building models such as 1) Customer Segment, 2) ValueProposition, 3) Channels, 4) C ustomer Relationship, 5) Revenue Streams, 6) Key Resources, 7) Key Activities, 8) Key Partnership, 9) Cost Structure.

Several studies using the BMC method include the Solaris store (Boedianto, 2015), the onion cracker industry (Rukka et al., 2018), and the service industry (Guyana, 2013), industrial agriculture (Dudin et al., 2015), restaurant (Surjogondokusumo, 2016). The advantage of the Business Model Canvas is to increase industrial sustainability and add value to the industry by using a simple and easy method to understand and to gain profit (Hartatik & Baroto, 2017; Tjitradi, 2015).

2. RESEARCH METHODS

The research was conducted at the UMKM Klapa Muda, located on Violate Waqf Street No. 13 RT/RW: 02/01 Sawo Village, Babat District, Lamongan Regency. The focus of this research is to find out the strategy for increasing the sustainability of the wingko industry in the UMKM Klapa Muda using the Business Model Canvas (BMC) approach (Boedianto, 2015; Dudin et al., 2015; Hong & Fauvel, 2013; Rukka et al., 2018).

2.1 DATA TYPE
2.1.1 Primary Data

The primary data obtained through direct interviews with the owners of UMKM Klapa Muda. The data includes the history of the company's establishment and information needed by researchers to analyze the nine building blocks of the Business Model Canvas.

2.1.2 Secondary Data

Secondary data obtained from exploring theories from other sources, such as the results of previous studies, books, and journals, can be used to support problem-solving in research.

2.2 Data Processing and Analysis Method

This study processes data by identifying internal and external factors to determine the strengths, weaknesses, opportunities, and threats of the UMKM Klapa Muda, after knowing the internal factors and external factors, then matching it using IFE and EFE to get each weight of each factor (David, 2011).

After obtaining the total IFE value and the total EFE value, it can then be used to see the position of the UMKM Klapa Muda in what quadrant is currently using the IE matrix. The IFE and EFE factors are used for the matching stage utilizing a SWOT analysis to get a new strategy proposal.

The SWOT analysis has four strategies formulated, namely SO (Strength and Opportunities), WO (Weakness and Opportunities) strategy, ST strategy (Strength and Treats), and WT strategy (Weakness and Treats) (NOYA et al., 2014; Padhil et al., 2018). After getting a new strategy from the SWOT analysis, the strategic priority selection stage is carried out using the QSPM (Quantitative Strategic Planning Matrix) (Cahyawati, 2017) by taking the five highest priorities used for the

proposed improvement of the UMKM Klapa Muda sustainability strategy using the Business Model Canvas which has nine buildings including 1) Customer Segment, 2) Value Proposition, 3) Channels, 4) Customer Relationship, 5) Revenue Streams, 6) Key Resources, 7) Key Activities, 8) Key Partnership, 9) Cost Structure.

3. RESULTS AND DISCUSSION

The identification carried out the internal and external factors of the UMKM Klapa Muda with results of matching factors previously obtained through a questionnaire filled out by UMKM owners for the internal environment and the Cooperative Service for the external environment. The overall total of the IFE (strengths and weaknesses) with a result of 2,539. And the overall total EFE (opportunities and threats) with a result of 2,606 can be seen in **Table 1**.

Table 1. Analysis Results IFE and EFE

IFE	Weight	Rating	Score
Strength Indicator			
Raw material planning	0,043	3	0,129
UMKM klapa muda production process as needed	0,039	3	0,117
Quality raw materials	0,044	4	0,176
No preservatives	0,044	4	0,176
No imported raw materials	0,023	3	0,069
Affordable product prices	0,048	4	0,192
Consumed by all	0,046	4	0,184
UMKM own capital	0,046	3	0,138
Routine employee payroll system	0,034	3	0,102
Experienced in making wingko	0,043	4	0,172
Total Score Strenght			1,455
Weakness Indicator			
There is no written industry history	0,026	1	0,026
Belum adanya struktur organisasi	0,039	2	0,078
No organizational structure	0,043	2	0,086
Traditional machinery and equipment	0,043	2	0,086
Product defects occur	0,038	2	0,076
Only produce one type of wingko size	0,033	2	0,066
Marketing area is still limited	0,036	2	0,072
Don't have a PIRT license yet	0,048	1	0,048
Marketing relies on agents	0,039	3	0,117
Lack of capital owned	0,043	2	0,086
No financial bookkeeping	0,043	2	0,086
Late paying agent	0,040	3	0,12
Small number of employees	0,03	2	0,06
Low education level	0,028	1	0,028
No recruitment system	0,026	1	0,026
Absence of R&D	0,023	1	0,023
Total Score Weakness			1,084
Total IFE			**2,539**
EFE	Weight	Rating	Score
Opportunity Indicator			
The national economy does not affect umkm	0,064	3	0,192
Positive community response	0,081	4	0,324
Social culture that increases sales	0,087	3	0,261
Government attention to development umkm	0,090	4	0,36

Assistance in the licensing process umkm	0,087	3	0,261
There is training from the government	0,081	2	0,162
Total Score Opportunity			**1,560**
Threat Indicator			
Raw material prices are unstable	0,083	2	0,166
Initial capital using bank loans	0,090	3	0,27
There is no modern technology used	0,106	1	0,106
No marketing through social media	0,090	2	0,18
Competitors who offer lower prices	0,083	2	0,166
The size of the wingko is just the same	0,079	2	0,158
Total Score Threat			**1,136**
Total EFE			**2,606**

The IE matrix is a matrix that positions the UMKM Klapa Muda in a nine-cell display that shows the state of the UMKM Klapa Muda internal factors obtained from the total IFE at coordinate V with a total score of 2.539, and external factors obtained from the total EFE at coordinate V with a total score of 2.606.

The current position of the UMKM Klapa Muda, can be seen in quadrant V, which can see as a strategy carried out by the UMKM Klapa Muda, such as maintaining, maintaining by penetrating the market and developing products. This can be achieved by a combination of a competitive pricing strategy and more active sales. Meanwhile, UMKM Klapa Muda can increase sales for product development by improving existing wingko products and maintaining their quality. IE matrix analysis can be seen in **Figure 1.**

Figure 1. Analysis Results Matrix IE

For further analysis using a SWOT matrix with four kinds of strategies that are used to create a new strategy which previously obtained several internal factors and external factors of the UMKM Klapa Muda, are SO (strengths and opportunities), WO strategy (weaknesses and opportunities), ST strategy (strengths and opportunities). treats) and WT (weaknesses and threats) strategies. SWOT matrix analysis can be seen in **Figure 2**.

Figure 2. Analysis Results SWOT

There are four main strategies results of the SWOT matrix analysis, called SO Strategy Establish customer loyalty, ST Strategy Increase promotional activities, WO Strategy Build relationships with the government and improve the quality of employees, WT Strategy Development of machine and equipment technology, Increase market reach, Ensure production quality and improve products. QSPM matrix analysis is used to choose the best alternative strategy that has been obtained from the previous SWOT matrix. From the SWOT matrix analysis, there are seven strategies. The QSPM matrix will analyze which strategies can be prioritized and applied to the UMKM Klapa Muda, which can be seen in **Table 2**.

Table 2. Analysis Results matrix QSPM

Alternative Strategy	Total
Strategy 1 Increase promotional activities	2,401
Strategy 2 Establish customer loyalty	2,386
Strategy 3 Ensure production quality and improve product	2,240
Strategy 4 Build relationships with the government	2,015
Strategy 5 Development of machinery and equipment technology	1,308
Strategy 6 Increase market reach	1,175
Strategy 7 Improving the quality of employees	0,885

From the table above, it can be seen that the priority strategies to be implemented in UMKM Klapa Muda are 1) Increasing promotional activities, 2) Maintaining customer loyalty, 3) Ensuring production quality and improving products, 4) Establishing relationships with the government, 5) Development of machine technology and equipment, 6) Increase market reach, 7) Improve the quality of employees.

Business Model Canvas development uses the results of the previous QSPM analysis obtained from the five highest strategic priorities used as the proposed strategy to improve the UMKM Klapa Muda. Preparation of improvement proposals is carried out with the highest score by matching as follows:

1. Customer Relationship on priority 1 with a value of 2.401, namely Increasing promotional activities. The relationship between producers and consumers can be built by UMKM Klapa Muda through several ways to promote products both from personal and media. UMKM Klapa Muda strategy is to increase sales by promoting through print media such as newspapers, pamphlets, brochures, and social media such as Instagram, Facebook, and so on.

2. Customer Segments are listed on 2nd priority with 2,386 values, is Maintaining customer loyalty. Because good relations with consumers create opportunities for UMKM Klapa Muda to support the production and sale of wingko. Consumer satisfaction is the most important thing for the sustainability of UMKM Klapa Muda. The strategy of UMKM Klapa Muda is to increase production and increase consumers through tourists and local snack lovers.

3. Value Proposition on the 3rd priority with a value of 2.24 guarantees production quality and improving products. To maintain consumer confidence, UMKM Klapa Muda must maintain and guarantee the quality of its production. But UMKM Klapa Muda also needs to improve their products by making attractive packaging designs and innovating the wingko size, which is currently only one size.

4. Channels on the 4th priority with a value of 2.015 are Establishing relationships with the government. UMKM Klapa Muda works together with the government to build distribution channels, communication, and sales can be a liaison through the UMKM Cooperative, which the Lamongan Regency government manages.

5. Key Resources on the 5th priority, with a weighted value of 1,308, is machine and equipment technology development. To produce wingko, UMKM Klapa Muda currently uses traditional machines and equipment to be prone to product defects. UMKM Klapa Muda needs to develop modern machines and use ovens that have temperature control.
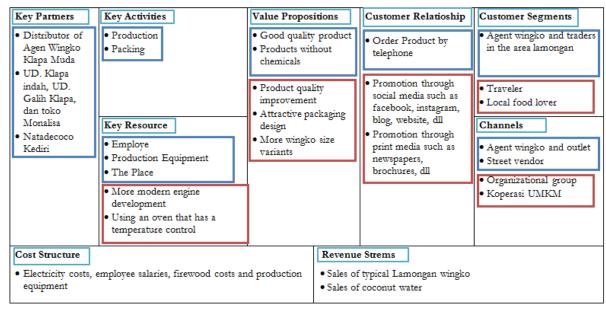
Key Partners	Key Activities	Value Propositions	Customer Relatioship	Customer Segments
• Distributor of Agen Wingko Klapa Muda • UD. Klapa indah, UD. Galih Klapa, dan toko Monalisa • Natadecoco Kediri	• Production • Packing **Key Resource** • Employe • Production Equipment • The Place • More modern engine development • Using an oven that has a temperature control	• Good quality product • Products without chemicals • Product quality improvement • Attractive packaging design • More wingko size variants	• Order Product by telephone • Promotion through social media such as facebook, instagram, blog, website, dll • Promotion through print media such as newspapers, brochures, dll	• Agent wingko and traders in the area lamongan • Traveler • Local food lover **Channels** • Agent wingko and outlet • Street vendor • Organizational group • Koperasi UMKM

Cost Structure	Revenue Strems
• Electricity costs, employee salaries, firewood costs and production equipment	• Sales of typical Lamongan wingko • Sales of coconut water

Figure 3. Development results Business Model Canvas UMKM Klapa Muda

4. CONCLUSIONS AND SUGGESTIONS

4.1 Conclusions

Results of the analysis strategy to increase the sustainability of the UMKM Wingko of the Klapa Muda Babat industry with IFE, EFE, IE, SWOT, and QSPM obtained the results of 5 priority strategies for market penetration and product development by applying the Business Model Canvas (BMC) concept for the UMKM Klapa Muda Babat strategy, are 1) Customer Relationship Increase promotional activities with a value of 2,401, 2) Customer Segments establish customer loyalty with a value of 2,386, 3) Value Proposition guarantees production quality and improves products with a value of 2.24, 4) Channels Establishes relationships with the government with a value of 2,015, 5) Key Resources Development of machinery and equipment technology with a value of 1,308.

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