

Digital Transformation Strategy of SMEs Development in Framework for Today's (Case Study on Borondong Industry)

Rediawan Miharja^{1*} and Rabhi Fathan Muhammad²

¹ Management, Economy Faculty, Singaperbangsa Karawang University, Karawang, Indonesia

² Management, Economy Faculty, Singaperbangsa Karawang University, Karawang, Indonesia

ABSTRACT

This research aims to find out the implementation of strategies that can be carried out by SMEs in order to build a framework for era 4.0. This research presents the concept of a technology transformation development strategy for SMEs. The method in this research is utilized a qualitative approach, using SWOT tools combined with the Business Model Canvas for SMEs. The results of this study identified development factors in the framework of the company's strategy to face era 4.0, especially for SMEs in the Borondong Industry case study. The main finding of this research is that SMEs need to carry out specific strategies related to the proper technology adoptions in stages. The implications of the theory that can be implemented in this research are conceptual strategies that may contribute significantly to the SMEs.

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* Corresponding Author at Management, Economy Faculty, Singaperbangsa Karawang University, Karawang, Indonesia.
E-mail address: rediawan.miharja@fe.unsika.ac.id (author#1), rabhifm@fe.unsika.ac.id (author#2).

1. Introduction

The world's economy continues to grow, and this is inseparable from the involvement of technology. However, economic development can also be supported by several factors and support from various parties such as the government, business people and other stakeholders. This notion of technology's involvement with economic growth is supported by (Mowery, & Rosenberg, 1989). One that supports the economy is business people, both large to small businesses such as SMEs. Today, it is hoped that SMEs will become one of the solutions to problems in the national economy.

As for the international world, these SMEs are commonly called Small and Medium Enterprises (SMEs), both in developing countries and developed countries play a very important role in the economy. As one example (SMEs) often receive attention from international organizations such as the World Trade Organization (WTO), the United Nations (UN), the World Economic Forum, the World Bank (World Bank) and other world organizations. Likewise, national organizations such as KADIN, HIPMI and others organizations really recognize SMEs as drivers of the national economy. According to data from the Asian Development Bank (ADB) Institute in 2015, Indonesia is the country that has the most contribution from SMEs / SMEs to GDP 57.8%, employment 97.2%, and total exports 15.8%. According to (Lee, et.al, 2010) SMEs claim to have the capacity for innovation, lack of technology competencies for new product development, cost-effectiveness, operational efficiency, emerging market niches and process innovation are often seen to affect SMEs abilities to innovate. So many SME studies have been conducted in India, Ukraine, European countries or Indonesia such as research by (Moazzam, et.al, 2018, Antoniuk, et.al, 2017; Bogdanova, et.al, 2016; Khan & Sagar, 2015; Slamet, Nainggolan, et.al, 2016; Thamrin, et.al, 2017) researchers and practitioners there are still many gaps in the usefulness of research results that must be developed. The paper also "Suggested that a balanced set of food supply chain indicators must be considered, which includes total value-added activities, return on investment, chain business processes, lead time, responsiveness, inventory levels, delivery reliability, product quality, process efficiency, degree of utilization, human wellbeing and future perversion."

Based on the research needs for SMEs, this research conducted interviews with one of the industrial products, namely Borondong. Borondong is food made from the main raw materials, namely sticky rice, sugar and other supporting materials. Borondong is one of the superior types of food typical of Bandung Regency and West Java Province. This food is produced in Majalaya and Ibun District. It has become a tradition when there is a party or celebration, this product is always there. It is also a tradition when residents visit the area to bring souvenirs for relatives. This food has been around since 1960, old enough to become a local specialty. At this time there has been a decrease in the number of producers or craftsmen in this industry. Initial interview data shows that it was recorded as having

more than 25 producers, dropping to 13 producers and then until now there are only 7 active producers. It is possible that this phenomenon is caused by competition, either direct competition with the same product or with substitute products. Borondong is a traditional food, so until now the management process is also traditional. This is what can cause this industry to continue to be eroded by the times. Traditional connection with technology, understanding of technology with its development, and other limitations that are not yet owned to face the 4.0 era can also make this food competition continue to weaken.

Based on the consideration of these data, it can be seen that the problem is that the SME industry, especially in West Java, has not been optimal in terms of conceptual strategy in order to face the today's era. The main objective of this research is to formulate an SME strategy that focuses on facing the today's era by considering internal and external environmental factors and case studies in the Borondong SME Industry.

2. Literature Review

2.1 Strategic Management

The literature in this research is strategic management. Explicit strategy, namely an action plan that explains the allocation of resources and various activities to deal with the environment, gain competitive advantage, and achieve company goals (Slamet et al., 2016). According to (Wheelen et al., 2018) strategy like the process of bringing strategies and policies into effect through the creation of programs, budgets, and procedures. The results from previous research (Arasa & Obonyo, 2012; Natasha, 2013) systematic and formal effort of a company to determine company goals, rules, and strategies that involve making detailed plans to implement rules and strategies to achieve the main goal of the company. Some of the literature on strategic management, it shows that to make a strategy, it is necessary to consider the environment inclusively from internal and external elements so that it can bring the company to the technical transformation as expected.

2.2.1 SWOT Analysis

There are several stages that can be carried out in SWOT analysis, namely analyzing the internal-external environment and then formulating strategies that can be carried out. Internal analysis relates to the strengths and weaknesses possessed by the company, external analysis relates to the opportunities and threats possessed by the company, and strategy formulation is a combined analysis that produces strategies on the consideration of strengths, weaknesses, opportunities and threats (Slamet et al., 2016; Wheelen et al., 2018).

2.3 Business Model Canvas

BMI Process and Strategy is a tool that can be used to map out how the strategy will be executed. Some researchers have used these tools, one of them (Heikkilä, Bouwman, & Heikkilä, 2018).

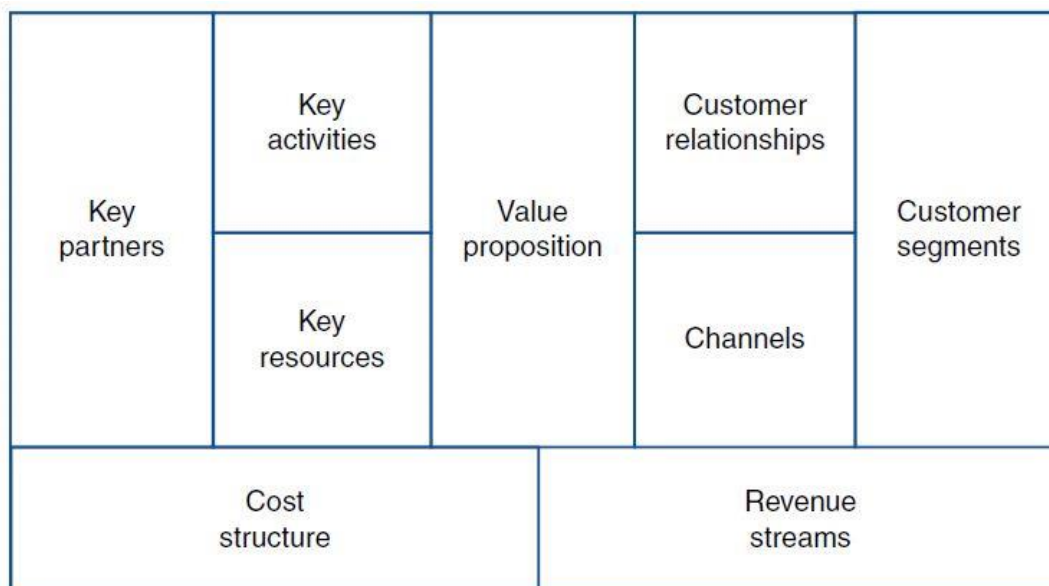


Figure 1 Business Model Canvas
 Source: Heikkilä, Bouwman, & Heikkilä, 2018

The nine building blocks related to the main factors pointing out the start-up business. This is explained in the following example as in the paper (Cosenz, 2017). 1) Key-partners, 2) Key-activities, 3) Key-resources, 4) Value proposition, 5) Customer relationships, 6) Channels, 7) Customer segments, 8) Cost structure, and 9) Revenue streams that define both product/service price and prospective sales volumes.

2.4 SMEs

SMEs can be differentiated from big companies by their limited financial means and unique management skills and procedures (Cohen & Kaimenakis, 2007). Business transformation, management principal changes, attrition, market demand changes, goals and objectives, performance in comparison to competitors, firm performance happiness, and development direction can all be used to evaluate SMEs (Sumiati, Rofiq, Risanto, & Yulianti, 2017).

Reference from (Rahmawati et al., 2016) Entrepreneurship is a scientific field that examines the beliefs, abilities, and behavior of an individual in confronting life's problems. According to (Nitisusastro, 2019) in the American heritage dictionary, an entrepreneur (entrepreneur), is defined as someone who plans, runs, and considers chances for a successful company. Whereas in the book (Alma, 2016) The

word "entrepreneur" is derived from the French word "entrepreneur," which means "taker" or "go-between" in English.

3. Method, Data, and Analysis

This research uses a qualitative approach using data collection methods such as literature and field studies in the form of direct observation and interviews. There are several stages of research conducted in this research as per the following figure:

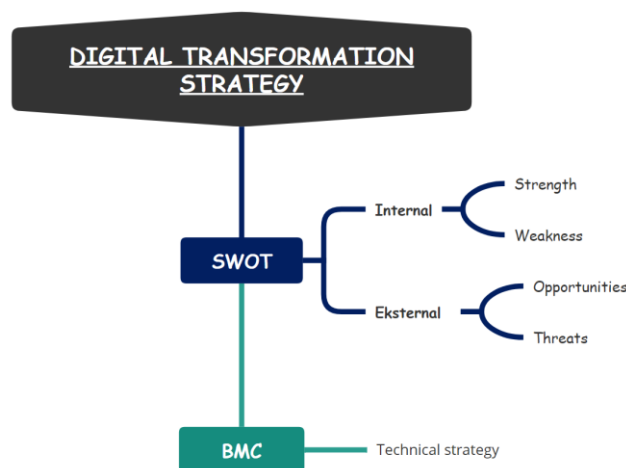


Figure 2. Stages Of Research

The first step is External Scanning and Internal Scanning, namely determining external and internal factors through several interviews. Based on (Sugiyono, 2012) there are triangulations, including (1) source triangulation, which is done by checking the data that has been obtained through several sources; (2) triangulation technique, which is checking data on the same source with different techniques; (3) time triangulation, which is checking data with interviews, observations or other techniques at different times. The concept of theoretical triangulation in this study involves various sources, namely the first expert came from the association (KADIN), then the two business owners and the three researchers themselves. Then sorting the factors into SWOT criteria. Typical SWOT analysis for an institution may proceed in eight steps approaches (Rangkuti, 2014; Thamrin et al., 2017). The next step is to put the strategy in the Business Model Canvas. Respondents in this study were the chairmen of the borondong industrial community as well as one of the borondong producers, then experts from the Bandung City Kadin and active business actors.

4. Result and Discussion

4.1 Result

The research results presented in this study are the results of data collection and processing obtained in a case study, so that the results of this study are more inclined towards the implementation of existing knowledge related to strategy. The implementation of science towards the Borondong SME industry is as follows:

External Scanning

From the results of interviews with several related parties, the researcher concluded several external factors for the transformation of digital development in Borondong Industrial SMEs, namely:

Table 1. *External Factors*

No	External Factors	Weight	Rating	Weighted Score
	Opportunities			
1	Increase in online purchases	0.35	3.33	1.17
2	Support from district and provincial governments	0.10	3.33	0.33
3	Increasing the number of tourist visits to the local area	0.05	3.33	0.17
4	Collaboration with related institutions in promoting local special food products	0.10	3.33	0.33
5	Indonesians are dominantly consumptive	0.05	4.00	0.20
6	<i>Digital Marketing</i>	0.35	2.33	0.82
		1.00		3.01
	Threats			
1	Supply chain efficiency (suppliers) on technology readiness	0.10	2.67	0.27
2	Competitors easy entry and technological capabilities	0.30	3.33	1.00
3	The market is easily saturated with existing trends	0.20	3.67	0.73
4	Raw material fluctuations	0.15	4.00	0.60
5	Consumer purchasing power which has the influence of the economic situation	0.05	4.00	0.20
6	The number of substitute products / substitutes other than borondong	0.20	3.67	0.73
		1.00		3.53

Source: Processed Data 2019

The table of external factors, overall opportunities have a score of 3.01, slightly above the average. The greatest value in opportunities is an increase in online purchases of 1.17. This increase is an opportunity for the company to gradually build online sales. It also has something to do with digital marketing, which has a value of 0.82 so that a sales strategy can be made with a digital strategy.

The external factor table also shows that threats as a whole have a value of 3.53. The biggest threat to this business is the easy entry competitors and their technological capabilities with a value of 1.00.

Internal Scanning

From the results of the initial study the researchers concluded several internal factors for the development of digital transformation in Borondong Industrial SMEs namely:

Table 2. Internal Factors

No	Internal Factors	Weight	Rating	Weighted Score
	Strength			
1	Borondong product branding is a superior product that is characteristic	0.15	4.67	0.70
2	Concern and desire to develop technology	0.30	4.67	1.40
3	Experience and business mentality	0.15	4.00	0.60
4	Continuity	0.20	4.00	0.80
5	Traditional production process	0.10	4.33	0.43
6	Channel distribution	0.10	3.33	0.33
		1.00		4.27
	Weakness			
1	Customer database records to improve service	0.15	3.33	0.50
2	Product Innovation and Process Innovation	0.15	3.33	0.50
3	Appropriate technology facilities and infrastructure	0.20	3.00	0.60
4	Appropriate technology-based marketing strategy	0.15	3.33	0.50
5	Understanding and skills in terms of appropriate technological updates	0.20	3.33	0.67
6	Coordination between employees and owners	0.05	3.33	0.17
7	Production capacity	0.05	3.00	0.15
8	Capital limitations	0.05	3.33	0.17
		1.00		3.25

Source: Processed Data 2019

In the Internal factors table specifically for strength, it can be seen that the concern and the need to develop technology has the highest value of 1.40, followed by the branding factor of borondong products, which are superior products which are characteristic, have the highest value of 0.93. The internal factors table also shows a weakness with the factor with the highest weakness in understanding and skills in terms of appropriate technological innovation with a value of 0.67 and the factor of appropriate technology facilities and infrastructure of 0.60.

Matrix SWOT Analysis

To explain the internal factors and external factors and SWOT considerations, a SWOT analysis matrix is carried out in the following table:

Table 3. Matrix SWOT Analysis

<p>Internal Factors</p> <p>External Factors</p>	<p>Strength – S</p> <ol style="list-style-type: none"> 1. Branding of borondong products is a superior product that is characteristic 2. Concern and desire to develop technology 3. Experience and business mentality 4. Continuity 5. Traditional production process 6. Channel distribution 	<p>Weakness – W</p> <ol style="list-style-type: none"> 1. Customer database records to improve service 2. Product Innovation and Process Innovation 3. Appropriate technology facilities and infrastructure 4. Appropriate technology-based marketing strategy 5. Understanding and skills in terms of appropriate technological innovation 6. Coordination between employees and owners 7. Production capacity 8. Limited capital
<p>Opportunities – O</p> <ol style="list-style-type: none"> 1. Increased purchases through online 2. Support from district and provincial governments 3. Increasing the number of tourist visits to the local area 4. Cooperation with related institutions in promoting local special food products 5. Indonesians are dominantly consumptive 	<p>Strategy of S–O</p> <ol style="list-style-type: none"> 1. Make a sales strategy with digital marketing. 2. Create cooperation with related institutions for technology development. 	<p>Strategy of W–O</p> <ol style="list-style-type: none"> 1. Training on understanding appropriate technology skills can take into account existing opportunities, such as collaboration with related institutions, digital marketing and so on. 2. The development of process innovation and product innovation also involves technological facilities and

<p>6. Digital Marketing</p>		<p>infrastructure with the cooperation of related parties and or government support.</p>
<p>Threats - T</p> <ol style="list-style-type: none"> 1. Supply chain efficiency (suppliers) regarding technology readiness 2. Competitors are easy to enter and technological capabilities 3. The market is easily saturated with existing trends 4. Raw material fluctuations 5. Consumer purchasing power which has the influence of the economic situation 6. The number of substitute products/substitutes other than borondong 	<p>Strategy of S–T</p> <ol style="list-style-type: none"> 1. Making a technology renewal strategy considering technological advances as well as thinking creatively about technology so that we can compete better. 	<p>Strategy of W–T</p> <ol style="list-style-type: none"> 1. Even with limited capital due to an understanding of technology, it can be done in stages.

Source: Processed Data 2019

Table 3 produces several strategies based on consideration of internal and external factors. The table shows that all strategies lead to improvements and increased understanding of technology. Alternatives that can be done are developing strategies in stages and collaborating with certain parties.

Business Model Canvas

In addition to the SWOT analysis in this study, the Business Model Canvas for the borondong industry is also included in the framework of technology development in the following table:

Table 4. Business Model Canvas

Key Partner <ul style="list-style-type: none"> Suppliers Distributors Resellers Creating cooperation with related institutions for the gradual development of appropriate technology 	Key Activities <ul style="list-style-type: none"> Continuous Borondong production gradual development of appropriate technology 	Value Proposition <ul style="list-style-type: none"> Local Typical Meals Maintaining regional culture 	Customer Relationships <ul style="list-style-type: none"> Service Emotional personality 	Customer Segments <ul style="list-style-type: none"> Out-of-town visitors or tourists Local residents
	Key Resources <ul style="list-style-type: none"> Labor Business assets 		Channels <ul style="list-style-type: none"> Community of business activists Government 	
Cost Structure <ul style="list-style-type: none"> Operating costs Promotion Expenses Labor costs 			Revenue Stream <ul style="list-style-type: none"> Product sale 	

Source: Processed Data 2019

Table 4 is explaining how the Business Model Canvas of the borondong industry has 9 blocks of consideration

- Key Partners which include the main partners involved in the value creation process in this industry, namely Suppliers, Distributors and Resellers.
- Key-activities: describes the main activities in generating value, in this industry, namely Wholesale Production in continuity
- Key-resources, namely in the form of resources such as Labor and Assets
- Value proposition, namely the relevance between customer needs and the value created by the business to satisfy them;

- Customer relationships that describe how the business interacts with its customers and methods for retaining them;
- Channels that are a community of business and government activists
- Customer segments, namely customer segmentation in this industry, there are out-of-town visitors or tourists and local residents
- The cost structure of the costs used are Operational Costs, Promotional Costs, and Labor Costs;
And
- Revenue streams: the main income in this industry is product sales.

4.2 Discussion

Based on the results of the research, it shows that this combination of SWOT and BMC can be an initial conceptual framework that can be implemented by SMEs in the context of digital transformation. As stated in the literature review in this study according to (Slamet et al., 2016; Wheelen et al., 2018) SWOT can describe considerations of internal factors and external factors which lead to alternative strategies that can be implemented. Furthermore, BMC in this study can map what can be done by SMEs, such as the example of the Key Partner box according to (Heikkilä, Bouwman, & Heikkilä, 2018) in the results showing that SMEs need to consider the involvement of Suppliers, Distributors, Resellers, Creating cooperation with related institutions for the gradual development of appropriate technology. And so, on technical that can be implemented by SMEs.

In the context of digital transformation, the wholesale industry SMEs using the Business Model Canvas can provide considerations and suggestions with 9 strategic blocks, namely Key Partners can maintain good relations with B2B partners and B2C partners. Key Activities Strategy with production development in terms of capacity, quality and other innovations needed and development of appropriate technology in order to upgrade traditional management. The Key Resources strategy is the development of a workforce that must be skilled as well as understand technology and assets associated with gradual technology development. The Value Propositions strategy is product innovation and practicality following the will of the customer. Customer Relationships Strategy by establishing personal emotional relationships. Channels strategy with the utilization of information technology systems is more elaborated. Customer Segments Strategy by maintaining existing segments and developing millennial segment products. Cost Structure strategy by means of a revenue target of 40% from turnover and profit provision for product development related to appropriate technology in stages. Then the Revenue Stream strategy is to calculate exact numbers which must be clearly described by considering the principles of financial calculations in entrepreneurship and

developing strategies for how to integrate budgeting using existing technology as well as continuity and habit.

5. Conclusion and Suggestion

In accordance with the main objective of this research is to formulate an SME strategy that focuses on facing the 4.0 era by considering internal and external environmental factors and case studies in the Borondong SME Industry. So based on the results of an analysis of external and internal factors with SWOT, strategic suggestions were obtained for Strengths and Opportunities, namely making and carrying out sales strategies with digital marketing and creating and collaborating with related institutions for the gradual development of appropriate technology. Then to consider the Weaknesses and Opportunities strategy, namely holding training in understanding appropriate technology skills, so that they can consider existing opportunities, such as collaboration with related institutions, digital marketing and the use of other appropriate technologies. Then carry out the development of process innovation and product innovation also involving technological facilities and infrastructure with the cooperation of related parties and or government support. In the Strength and Threats strategy can be done by making a strategy of technological renewal considering technological advances as well as thinking creatively about technology so that it can compete more competitively. Then for the factors of Weaknesses and Threats the strategy can be carried out with consideration even with limited capital because an understanding of technology can be done in stages.

For technical conclusions, the Business Model Canvas can be applied by owners in the context of business transformation such as directly maintaining good relations with partners, work teams, customers, then appropriate technology development can be carried out in stages according to capital capabilities and business capabilities, and according to the needs of business partners and customers.

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