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Analysis of Inclusive Business Model Development of Oogatamura Akitakomachi Seinsaya Kyokai Inc

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Abstract: Akita komachi is a variety of rice which is included as superior commodity in Japan. One of companies successfully developing processed food products made from Akita komachi rice is Oogatamura Akitakomachi Seinsanya Kyokai Inc. (OASKI). This research aims to: 1) map the business model of OASKI; 2) identify its strengths and weaknesses; 3) design a new business model that can be implemented by OASKI. It is conducted using descriptive method. The data used in this research are primary and secondary data that are collected through observation, interview, questionnaire, and literature study. The analytical tools utilized are Business Model Canvas (BMC) and Strength-Weakness-Opportunity-Threat (SWOT) matrix. The result of this research shows that the main strength of OASKI is in its Key Activities and Customer Relationship. Its main weakness is in Key Resources and Cost Structure. Its main opportunity lies in Customer Segments element. However, this element also has high threat. Several development strategies for OASKI refer to the development in Key Activities, for example the addition of halal accreditation, recruitment of experts in halal food, and human resource training on halal food. OASKI needs to open a new market segment as Japanese population tends to decline from year to year.

Keywords: akita komachi rice, OASKI, BMC, Strength Weakness Opportunity Threat (SWOT) Matrix

1. Introduction

Japan is one of the world's largest economy by Gross Domestic Product (GDP). Its GDP amounted to 4.6 trillion in 2015 (World Bank 2016). Although agriculture is not the major contributor for Japan's GDP, but it is a sector that is highly regarded by the government of Japan. One of commodities that plays an important role in developing Japan's economy is rice because it is the staple food of Japan.

Akita komachi is a rice variety that is included as superior commodities in Japan following Koshihikari. Akita komachi rice is often used in the making of sushi, mocha, and onigiri. Prefecture Akita is the first prefecture owning halal-certified rice products in Japan. One of companies which develops processed food products made from Akita komachi rice is Oogatamura Akitakomachi Seinsanya Kyokai Inc. (OASKI), located in Akita Japan. OASKI is a self-help partnership based company focusing on rice commodity development and has been established since 1988. According to an Intensive Study of SB IPB (2016), farmers that have been joining OASKI reach 90 people and OASKI has been owning 130 factory workers. OASKI currently has land area of 2 055 hectares, consisting of 55 hectares of OASKIowned land and 2 000 hectares of rented land. OASKI can produce 8 to 10 ton per hectare unhulled rice grain. This company has a total capital of ¥90 600 000 with the total sales as of September 2014 reaching 4.5 billion.

The growing world population causes a growing need for food. That market share size is expected to double from the current figure in the future. Global food market size (excluding Japan) is predicted to increase from \$340 trillion (US\$3.6 trillion) in 2009 to \$680 trillion (US\$7.2 trillion) in 2020 (estimated by MAAF based on the data of AT Kearney's).

Based on the above overview regarding global food market, OASKI needs strategies in developing competitive rice products and its market share. In addition to targeting gluten free market, an increasing Muslim market also gains special attention from OASKI. Japanese companies put a high expectation on Muslim market because domestic market will keep decreasing due to an increasing aging population and declining birthrate. Within 34 years, Muslim population in Japan currently exceeds 100 000 people and most of them are immigrants (www.japantimes.co.jp). The development of business strategy is an initial step for OASKI to penetrate a broader world market. The effort to expand the market share of OASKI's products is not easy. It needs strategies that can provide solutions and contributions for its product development (Aldehayyat el al. 2011). Given the existing problems, a comprehensive restructuring of OASKI's current business model and strategic development are need to be conducted (Bonazzi dan Zilber 2014).

The research carried out by Desai (2014) regarding Business Models for Inclusiveness supports this research. It discusses several cases of organizations adopting inclusiveness in their businesses. The analytical tool used is Business Model Canvas (BMC). It shows that BMC can be utilized to describe and discuss the inclusiveness of an organization. The research conducted by Agustina (2016) also supports this research. It suggests BMC improvement and strategic alternatives for the business development of PT IPB Shigeta Pharmaceuticals Animal.

Engdahl dan Rensfelt (2011) supports the use of BMC and Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis. It uses a combined score of -5 to 5 for strengths and weaknesses and individual score of 0 to 5 for opportunities and -5 to 0 for threats. The analysis is supported by making a priority list comprising all actions needed to implement the business model and time estimation needed for the implementation.

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Zoot C (2011) also utilizes BMC. Based on the research, due to the ineffectiveness in conducting the business model, SPR Maju Bersama needs new strategies to improve its business model. The business model can be improved through the proposed nine strategies.

A research regarding Competitiveness of The Nigerian Rice Industry conducted by Brisbe (2010) also supports this research. It conducts the mapping of agricultural condition in Nigeria using Porter's Diamond Model which is followed by SWOT analysis. The research reveals that although rice is produced domestically, various factors affect the growth of domestic rice industry, namely production process, tools and machines, low number of industry, government policy, supporting fund, research and training, and domestic poor infrastructure.

This research aims to: 1) map the current business model of OASKI; 2) identify the strengths and weaknesses of the current business model of OASKI; and 3) design a new business model that can be implemented by OASKI for its growth and development.

2. Data

This research is conducted for 2 months in OASKI, located in Akita, Japan. Primary data are collected through in-depth interview with the internal and external respondents. The internal respondents are Mr. Takayuki Kato (The President of OASKI), agricultural land owner, operational manager of OASKI, financial manager of OASKI, purchasing manager of OASKI, and marketing manager of OASKI. The external respondents are an expert in agriculture and rice business practitioner. Interview with internal respondents is conducted to identify OASKI's current profile and analyze OASKI's current condition through BMC. The information taken for OASKI's current profile include land area, production capacity, number of consumer, customer characteristics, relevant stakeholders, available capital, and revenue. The obtained primary data are then analyzed using descriptive and qualitative analysis with non-statistical approach. Secondary data are obtained through literature study and from institutions related to this research.

3. Methodology

The analysis of internal and external environment, in this research, are conducted on the nine elements of BMC. The analysis reveals the strengths and weaknesses of OASKI as the internal factors and opportunities and threats of OASKI as the external factors. Those information regarding those factors are obtained through the interview and literature study. The results of SWOT analysis are used for OASKI's business model improvement.

4. Empirical Result

Company Profile

OASKI currently owns individual customers amounts to 50 000 people and 7 000 companies. It can produce 8 to 10 ton per hectare unhulled rice grain. Its total capital amounts to

¥90 600 000, with the total sales as of September 2014 reaching ¥4.5 billion (Intensive Study of SB IPB 2016). The capacity of its warehouse is 19 100 ton per year.

The government of Japan understands the importance of capital investment in Japanese industries. It can be seen from the government policy of 50% subsidy of the total capital with the remaining 50% is not burdened by interest. The support from the government to develop agriculture is not only in the production, but also in the. The considerations for each company to obtain such supports from the government do not only include an increase in productivity, but also an increase in competitiveness of the commodity produced (Amit dan Zott 2012). A significant decline of rice price from ¥11 000/60 kg to ¥8 500/60 kg happened in 2014. It happened because in 2013, the Prime Minister of Japan, Shinzō Abe, implemented a tax policy of 777.7 % on imported rice and policy of land rent subsidy on rice farmers. Besides, government also offered several other policies that help the farmers.

Those policies cause OASKI to process rice into various gluten-free based innovative products. It is undertaken so that OASKU can continue to buy rice at a price of 10 500 which is higher 2 000 than the price offered by the government. One of the strategies used by OASKI to overcome those policies are by carrying out direct sale. A company will obtain a higher profit by conducting a direct sale (Kristov dan Kristov 2011). OASKI's products currently are pre-washed rice, brown rice, white rice, germinated brown rice, and rice that will be processed into rice flour as the raw material for noodle, bread, cake, and pasta. OASKI also produces emergency food products.

Each production activity of OASKI has value added. Value added is activities or steps in a process that add-a-value-to or transform a product. A customer that feels satisfied is a customer that feels to obtain a value from the producer or service provider. This value can come from the product, service, system, or something emotional. If the purchase can fulfil the need and desire of the customer or can provide satisfaction, a re-purchase will happen in the future (Paliliati 2007).

Inclusive Business Model of OASKI

Daryanto (2015) states that development ideally must be inclusive. Inclusive development is a quality development, namely a development that takes into account growth (progrowth), employment (pro-job), poverty alleviation (propoor), and environment (pro-environment). Therefore, inclusive business models need to be developed.

OASKI takes into account growth (pro-growth) based on the scale of industry it conducts. Pro-job characteristics can be seen from the increase of workers from 4 workers to 130 workers within 28 years. Pro-poor characteristics is based on the fact that the workers recruited are farmers' family. It indirectly supports the improvement of farmers' standard of living. OASKI's attention on environment (pro-environment) is marked by obtaining ISO 14 001. Other than seeking profits, Inclusive Business (IB) models can be adopted by big and small companies (Giesen et al. 2010).

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Identification of OASKI's Nine Elements of BMC

Based on the interviews, OASKI's business model can be mapped in BMC as shown in Figure 1.

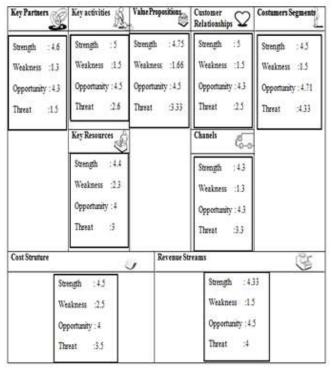


Figure 1: Current business model of OASKI

The current business of OASKI is then analyzed using SWOT analysis to analyze the internal and external condition of OASKI, in the form of strengths, weaknesses, opportunities, and threats. The results of SWOT analysis can be used to improve the current BMC that has been identified (Stan dan Nedelcu 2015). The evaluation on the current business model of OASKI is then followed by scoring on each element of BMC. The results of SWOT scoring on each element of BMC is summarized in Figure 2.

Based on the SWOT scoring results, the main strengths of OASKI lie in its Key Activities and Customer Relationships element, with the score of 5. OASKI's main weaknesses is in its Key Resources and Cost Structure element with the score of more than 2. The score of Opportunity in all elements are almost the same with the score of 4. The highest score of Opportunity is owned by Customer Segments element. Customer Segments is the most complex element as it is not only has high opportunity, but also high threat with the score of 4.5.

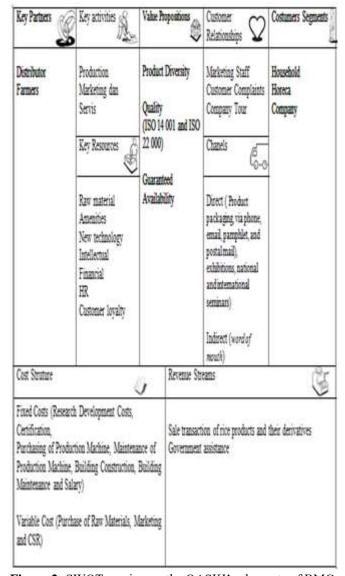


Figure 2: SWOT scoring on the OASKI's elements of BMC Information:Score 1 Very low, 2 Low, 3 Fair, 4High, 5Very high

According to Beneda (2008), the key factor to maintain the company's competitive position with a high growth is by observing the competitor using SWOT. The result of organizational calculation can be made as a reference for strategic planning. The result is also used as a tool to compare two or more companies (Helms dan Nixon 2010).

The improved BMC of OASKI, as shown in Figure 4, is obtained based on the SWOT analysis results. The improved BMC will be used as the basis to determine the alternative strategies of business development for OASKI.

The current BMC of OASKI can be made as the initial point to make a change and design an improved business model (BMC) for OASKI. Ammanullah et al. (2015) states that each element of BMC can be made as the initial point in generating new business model design as much as possible. The elements of BMC can then be analyzed using SWOT and/or Blue Ocean Strategy. The analysis results can be a strong basis to conduct business model innovation. The change on one element of BMC will affect the other elements (Osterwalder and Pigneur 2015). Bagindo M (2016)

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states that the improvement in Value Propositions, Customer Segments, and Customer Relationships will affect the revenue of the organization.

The improved BMC of OASKI is designed based on the result of SWOT analysis on the current BMC of OASKI.

Business model improvement is undertaken in Customer Segments element. The first step conducted is by altering Key Activities element. A change in this element refers to the value offered to the Customer Segments, namely halal food for Muslim consumers.

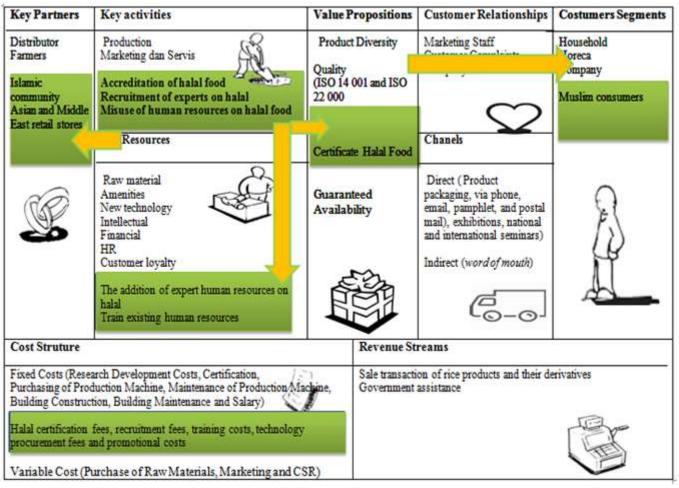


Figure 3: Improved BMC of OASKI

The change in Key Activities element will affect the Cost Structure element if OASKI. The strategy used is Strength-Opportunity. The scoring result in Figure 2 shows that the Key Activities element has a high score of Strength (5) and a high score of Opportunity (4.5). The improvement strategy referring to Key Activities improvement are the improvement in halal product accreditation, recruitment of experts in halal foods, human resource training on halal food. The changes in Key Activities element are followed by the change of other elements, namely Cost Structure, Key Resources, Key Partnerships, and Value Propositions.

The change in Cost Structure element makes use of Strength-Threat strategy. The characteristics of this Cost Structure consists of fixed cost and variable cost (Slávik dan Bednár 2014). The scoring result in Figure 2 shows that Cost Structure element has a high score of Strength (4.5) and a fair score of Threat (3.5). The strengths in this element lie in the stable price determination and the fact that consumers obtain a more competitive price compared to the other similar products. The threat in this element is that the cost incurred for training on new products is quite high but it does

not ensure whether the products are successfully marketed or able to improve revenue of the company. Therefore, adding a component in Cost Structure element must be done comprehensively. Adding components in Cost Structure is based on the Key Activities which is cost for halal certification, recruitment, training, technology provision, and promotion.

The improvement in Key Activities in the form of halal accreditation leads to the need of recruiting experts in halal foods and human resource training on halal foods (Key Resources element). Based on the form, Key Resources can be categorized into two, namely tangible and intangible (Mitchell dan Carol 2004). The strategy used is Weakness-Opportunity. Key resources are important assets for OASKI as company development is supported by its Key Resources. Key Resources element has a low score of Weakness (2.3) and a fair score of Threat (3). The weakness in this element is low but compared to the other elements, the weakness of this element ranked the second. One of the reasons is that the average age of OASKI's human resources is 50 which is a non-productive age. It needs an improvement, otherwise it

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will have a serious impact on the company. The opportunity of OASKI in this element rests on the support and partnership with Akita Prefecture University. According to those factors, OASKI should be able to increase younger human resources so that the company's creativity level can be more developed.

At the time OASKI will have obtained halal certification, OASKI's Key Partnerships will have experienced an addition, namely Islam Community in big cities and Asian and Mid-Eastern stores. Islam community is selected to communicate OASKI's Value Proposition to the right consumers or consumers in need of the value offered. Besides, the addition of sales partner in the form of retailers from Asia and Mid-East is needed because most of the Muslims come from those areas. The strategy used is Strength-Opportunity. The scoring result in Figure 2 reveals that Key Partnerships element has a very high score of Strength (4.6) and a high score of Opportunity (4.3). The very high strength of Key Partnerships is affected by the good relationship between the company and its customers, traders, and end users. The high opportunity is seen from the growing Muslim consumers. The company can harness this opportunity by partnering with Islam community.

Value propositions are values offered by the company for consumers. At the time OASKI will have obtained halal certification, the OASKI will have one additional Value Proposition, namely halal foods. Value Propositions hold an important role in a company because they determine the sale value of the products offered (Trimi dan Berbegal 2012). Muslim consumers are the main targets of OASKI as they highly pay attention to the halal of the products they consume. Eventually, OASKI's products that will have been halal-certified will surely attract their interest. Value-added has a major role in forming consumer behavior, such as determining the brand purchased and the shopping store (Idaman et al. 2012). The strategy used is Strength-Opportunity. According to the scoring result in Figure 3, this element has a very high score of Strength (4.75) and also a very high score of Opportunity (4.5). The strength of Value Propositions element is affected by the products of OASKI that are varied and according to the need of the customers, such as emergency food and pre-washed rice. In addition, the product safety is supported by ISO 14 001 and ISO 22 000 certification so that consumers put more trust on OASKI's products compared to the other similar products. Considering the upcoming potential of Value Propositions in the form of halal product addition, the current government of Japan's policy that is able to reduce the production cost will have a good impact on the company in the long term. Considering those factors, OASKI should be able to add the value offered in the form of halal foods.

5. Managerial Implications

This research is conducted to formulate operational strategies for OASKI's business development based on BMC with SWOT perspective. According to the results of this research, several development strategy are made based on Key Activities improvement, namely the addition of halal product accreditation, recruitment of experts in halal foods, and human resource training on halal foods. OASKI need to open

new market share because Japanese population tends to decrease from year to year. Besides, the current young population tends to not liking rice-based foods. Opening new market share does not mean that OASKI has to export its products because OASKI has not been able to export given the current resources owned. Considering the currently available potential, OASKI can harness it by delivering value desired by Muslim consumers, which is halal product.

6. Conclusion

Referring to current business model of OASKI, OASKI needs to develop its market share because its market is already saturated. One of the improvement is through halal foods. The main strengths of OASKI are in Key Activities and Customer Relationships element. The main weaknesses of OASKI are in Key Resources and Cost Structure element. The improved BMC of OASKI refers to the change in Key Activities with the target of Muslim consumers. Therefore, several improvements are needed in the business model. The improvements are addition of halal product accreditation, recruitment of experts in halal foods, and human resource training on halal foods. Those three activities are followed by additional costs incurred to recruit and train the human resources, purchase new technology, and promote the products. OASKI also needs to add distributor partners in the form of Asian and Mid-Eastern retailers and Islam community. Therefore, the value offered can be seized by the consumers. The two retailers are targeted because most of their market segments are Muslim.

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