The Development Strategy of Fish-Processing Products

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Abstract—This research aims to formulate a strategy for developing processed fishery products at CV X in the future. This research was conducted with a case study in CV X. This research used a qualitative method. The type of data collected includes primary data and secondary data. The technique of deciding the respondents was snowball sampling, and the interviewed respondents are the owner of the company, manager of education and business development, head of production, administration, quality control, reseller of two people, and consumers. Analysis of the data used in this research is descriptive analysis using the SWOT tool. The results show the company's position is at the coordinates (3,274; 3,018) located in quadrant I which means the company has the opportunity and strength so it can take advantage of existing opportunities. The biggest strength that companies calculate is the variety of products in processing, while the biggest opportunity that is needed by the company is the GEMARIKAN program. The strategy applied in this condition is the S-O strategy. This research provides information to CV X in making decisions to implement effective and efficient business development strategies.

Keywords—External Environment, Internal Environment Product, Strategy, SWOT

I. INTRODUCTION

Fish is rich in protein and low in fat, fish is also an excellent source of protein for human growth and health. Indonesia's natural geographic condition which is an archipelagic country should be able to support the availability of affordable fish food for all Indonesian people so we should increase the production of the fisheries sector [1]. Seafood has two important ingredients needed by the body, namely protein and fat. Protein is needed to build body tissues, the body's defense against disease, and other activities [2]. Seafood as a product is a good source of biological nutrition and is widely consumed.

One of the steps taken by the government in increasing the production of the fisheries sector was by establishing several areas as minapolitan areas. Minapolitan area is an area that is used for the development of fisheries-based agribusiness ranging from upstream to downstream subsystems. Bogor Regency is one of 197 regencies or cities chosen to be a minapolitan area by the Ministry of Maritime Affairs and Fisheries [3]. The establishment of Bogor Regency as a minapolitan area is because Bogor Regency is the hinterland of the Jakarta area, which is a supplier of the national and international fishery product markets. Mc.Conney stated that network perspective help in developing value chains fisheries that contribute to development which is socially and economically sustainable [4].

The establishment of Bogor Regency as a minapolitan area is also supported by the large number of fisheries processing industries in the region. According to the data gathered from the Office of Maritime Affairs and Fisheries of West Java Province [5], there are 110 industries engaged in the processing of fishery products located in Bogor Regency. One of the industries in Bogor Regency is CV X. CV X is one of the industries engaged in the processing of fishery products located in Bogor Regency. This industry has been operating since 2007 and often receive awards from various agencies because of its achievements. The company currently sells 23 kinds of processed products made from fish and shrimp which are packaged in plastic packages with the trademark Bening Food. In running a fish product processing business, the company's turnover is currently declining. The reason for the decline in the company's sales turnover is because the company currently experiencing difficulties in marketing its products. Besides, public purchasing power is also a problem that has resulted in a decrease in the company's sales turnover [6].

The occurrence of external problems faced by the company at this time requires the company to make strategies to overcome this situation. One strategy that can be taken is through a product development strategy. Through the right product development strategy, it is hoped that the company can be better prepared to deal with changes that occur in the external environment by looking at the company's internal environment.

In determining the product development strategy, an analysis is needed to prove whether the strategy is appropriate for the industry, in this case CV X. Based on these problems, it is necessary to do research on strategies for developing processed fishery products at CV X as a
material consideration for decision-makers to increase product sales and expand business[7-9].

The method used in this research is the case study method; the type of data collected includes primary data and secondary data. The technique of deciding the respondents was snowball sampling and interviewed respondents were the owner of the company, the manager of education and business development, the head of the production, administration, quality control, two resellers, and consumers. Analysis of the data used in this research is descriptive analysis using the SWOT tool. The results of research conducted at CV X show that CV X strategy occupies a position in quadrant I which means the company has the opportunity and strength so that it can take advantage of existing opportunities, it is shown from the results of the matrix calculation

II. METHODS

This research was conducted in CV X and the data collection was conducted from February to March 2019.

The method used in this research is the case study method using descriptive analysis. The types of data collected in this study based on the source include secondary data and primary data. The technique of deciding the respondents in this study was conducted using the snowball sampling method, and the respondents interviewed were the owner of the company, the manager of education and business development, the head of the production, administration, quality control, two resellers, and consumers. Identification of internal and external factors of the company and the formulation of development strategies using SWOT tools.

III. RESULTS AND DISCUSSION

Company's Internal Environment

A. Human Resources

The company's workforce comes from Java, Solo, Purwalingga, Cianjur, Sukabumi, Lampung, and mostly from the area around the company. The company currently employs 32 people with primary, junior high, high school or vocational, and tertiary educational backgrounds. When the company needs a new workforce, the company will conduct training throughout the company's activities to prospective employees. It is intended that the prospective employee knows the procedures for business activities, and capable to do all business activities.

B. Capital Resources

The business capital used by the company originally came from the owner, Mrs. Purnani, therefore, when she wanted to develop her business, the owner was often constrained by funding. In 2012, company owners made loans to banks because the company needed a large amount of fund. This is because the company did not have their own equipment since the amount of production is increasing.

C. Marketing

Marketing is carried out in several regions such as Jakarta, Bogor, Depok, Tangerang, and Bekasi. CV X sells 23 kinds of processed products. The promotion carried out by CV X is by holding training in collaboration with various parties such as the Bogor Regency Livestock and Fisheries Service, the Ministry of Manpower, and the Ministry of Maritime Affairs and Fisheries, so that most consumers know the products of these activities. Promotions conducted by CV X can be said to have not explicitly been promoted such as through printed or electronic media because it costs a considerable amount of money.

D. Production

The production activities carried out by CV X can be said to be good enough. In running production, the company has implemented procedures based on the Hazard Analysis and Critical Control Points (HACCP) standards. Processed production processes differ depending on the processed product. In general, the production process of processing CV X can be seen in Figure 1.

![Fish Processing Production Process (CV X, 2019)](image)

Procurement of raw materials and additional materials
- Washing ingredients
- Milling ingredients
- Mixing additional ingredients
- Forming the dough
- Boiling or steaming
- Draining

Fig 1. Fish Processing Production Process (CV X, 2019)

Company External Environment

A. Macro Environment

1. Economic Conditions

Indonesia's economic condition is currently experiencing a decline. This is caused by fluctuations in the exchange rate of the rupiah. An unstable rupiah will greatly affect Indonesia's macro economy. The weakening of the Indonesian economy is also caused by rising prices for fuel or Bahan Bakar Minyak (BBM) and gasoline. This is because fuel subsidies provided by the government have been revoked during the administration of President Joko Widodo in 2014. The impact of this fuel price increase is the increase in all prices of raw materials produced by companies and the basic needs of the community.

2. Social, Cultural, Demographic, and Environmental Conditions

Practical and instant culture in Indonesia has become a habit and even a culture that is carried out continuously by
Indonesian people, so that the market opportunity for processed fish products is still broad for development. Today's society increasingly understands the importance of health and also understands that one of the nutritious foods is fish. This can be seen from the level of fish consumption which has increased from year to year although it is still relatively low (Table 1). The increase in national fish consumption is indicated to occur due to an increase in the population of Indonesia, especially the Greater Jakarta area as the company's target distribution area. The total population of Jabodetabek is presented in Table 2.

### TABLE I. NATIONAL FISH CONSUMPTION RATE FOR 2015-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Target (Kg/Kap)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>40.90</td>
<td>41.11</td>
</tr>
<tr>
<td>2016</td>
<td>43.88</td>
<td>43.94</td>
</tr>
<tr>
<td>2017</td>
<td>47.12</td>
<td>47.34</td>
</tr>
<tr>
<td>2018</td>
<td>50.65</td>
<td>50.69</td>
</tr>
</tbody>
</table>

### TABLE II. JABODETABEK POPULATION IN 2017

<table>
<thead>
<tr>
<th>District</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jakarta</td>
<td>10,177,924</td>
</tr>
<tr>
<td>Bogor</td>
<td>1,047,922</td>
</tr>
<tr>
<td>Depok</td>
<td>2,106,110</td>
</tr>
<tr>
<td>Tangerang</td>
<td>1,795,436</td>
</tr>
<tr>
<td>Bekasi</td>
<td>2,384,413</td>
</tr>
</tbody>
</table>

3. Government Conditions
In order to increase the level of fish consumption, the Ministry of Maritime Affairs and Fisheries has launched a program to Promote Fish Eating hereinafter referred to as GEMARIKAN. The program acted as a national movement carried out continuously by involving all components of the nation. With the GEMARIKAN program, an increase in community welfare is expected especially fishermen, cultivators, processors, and marketing of fishery products. The Ministry of Maritime Affairs and Fisheries also provides material and non-material assistance to fisheries businesses, including fishery product processors.

4. Technology
Advances in communication technology in the form of telephones and cellular phones have been proven to facilitate transaction buying and selling of products from producers to distributors or consumers who are far apart from more effectively. In addition, the development of the internet world can be used as an opportunity to sell their products online. The use of transportation technology in the form of cars and motorbikes can be a tool for marketing or distributing products that have been produced to consumers.

B. Micro Environment
1. Competition Between Industries
The number of other companies that produce and market similar products makes CV X inseparable from the intense competition. The company owner said that one of the competitors in the same field is CV Y. This company has the same marketing area as CV X, which is around Jabodetabek.

2. Consumers
Consumers of CV X processed fish products consist of all ages from young children to adults. In CV X the price is not an obstacle to attracting consumers because the prices offered with the prices of other similar products are no different and tend to be cheaper. However, the obstacle for the company is the change in consumer tastes that tend to be difficult to be controlled by the company.

3. Substitution Products
The existence of a large number of substitute products will limit the flexibility of companies in the industry to determine the selling price of the product. This is because if a company raises the price of a product without considering the price of its substitute products, then it is likely that consumers will switch to buy their substitute goods. Substitution products from processed fish products are beef meatballs, chicken nuggets, chicken sausages, and meat, or other processed fish products that are different from CV X.

4. Suppliers
The company purchases raw materials, equipment, and supplies through suppliers. The selection of companies to make purchases at a number of these suppliers so that the price of raw materials obtained is not too expensive. The company also has alternative suppliers of raw materials, so when the price or quality at one supplier is not appropriate, the company uses another supplier.

Product Development Strategy Formulation
A. Identification of Internal and External Factors of the Company
The initial stage of product development strategy formulation is to identify the company's internal and external factors. The internal environment consists of the strengths and weaknesses of the company. Company strength factors are products without preservatives, product variants vary, companies have achievements and awards, and companies which run HACCP. The weaknesses of the company are that the location of direct sales is less strategic, all business decisions still depend on the owner, administration and finance have not been well managed, and business funding is still on loan.

The external environment consists of opportunities and threats. Opportunities owned by the company are the GEMARIKAN program, the development of communication technology, production, and marketing to the vast market opportunities for processed fishery products, the opportunity to get help from the CTF, and fish suppliers in large quantities. Factors that pose a threat to the company are fuel price increases, the number of substitute products, fluctuations in the rupiah exchange rate, competition with similar companies, and changes in consumer tastes.

B. IFE and EFE Matrix Analysis
1. Internal Factor Evaluation (IFE) Matrix
Based on the calculation of the IFE matrix analysis in Table 3, the greatest value obtained from the main strength factor of 0.541 in the variant of processing products varies and the weakest strength factor is the product without preservatives of
0.430, while the main weakness factor is that all business decisions still depend on the owner with a value of 0.250.

**TABLE III. MATRIX IFE CV X.**

<table>
<thead>
<tr>
<th>Defining Factors</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products without preservatives</td>
<td>0.123</td>
<td>3.50</td>
<td>0.430</td>
</tr>
<tr>
<td>Variants of processing products</td>
<td>0.149</td>
<td>3.63</td>
<td>0.541</td>
</tr>
<tr>
<td>The company has achievements and awards</td>
<td>0.123</td>
<td>3.63</td>
<td>0.445</td>
</tr>
<tr>
<td>The company runs HACCP</td>
<td>0.149</td>
<td>3.25</td>
<td>0.485</td>
</tr>
<tr>
<td>Weakness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Direct sales are less strategic</td>
<td>0.123</td>
<td>3.13</td>
<td>0.384</td>
</tr>
<tr>
<td>All business decisions still depend on the owner</td>
<td>0.123</td>
<td>3.13</td>
<td>0.384</td>
</tr>
<tr>
<td>Administration and finance have not been managed well</td>
<td>0.105</td>
<td>3.13</td>
<td>0.329</td>
</tr>
<tr>
<td>Business capital is still a loan</td>
<td>0.105</td>
<td>2.38</td>
<td>0.250</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.000</td>
<td>3.247</td>
<td></td>
</tr>
</tbody>
</table>

The weighting value obtained from the product of the weight with the rating is above the range of 2.5 that is equal to 3.247. This shows that the company’s internal condition is strong and has been able to use its strengths to anticipate existing weaknesses.

2. Matrix of External Factor Evaluation (EFE)

Based on the results of the EFE matrix calculation, it can be seen that the GEMARIKAN program is the biggest opportunity to make maximum sales with a score of 0.360, while the biggest threat faced by the company today is the increase in fuel prices with a weight of 0.393. The total score obtained on this EFE matrix is above 2.5, which is 3.018. This shows the company has been able to overcome the threats that may arise by utilizing the opportunities that exist (Table 4).

**TABLE IV. MATRIX EFE CV X.**

<table>
<thead>
<tr>
<th>Defining Factors</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a program GEMARIKAN</td>
<td>0.107</td>
<td>3.38</td>
<td>0.360</td>
</tr>
<tr>
<td>The development of communication technology, production, and marketing</td>
<td>0.079</td>
<td>3.00</td>
<td>0.236</td>
</tr>
<tr>
<td>Broad market opportunities for processed fishery products</td>
<td>0.101</td>
<td>3.25</td>
<td>0.329</td>
</tr>
<tr>
<td>Opportunity to get support from KKP</td>
<td>0.084</td>
<td>3.00</td>
<td>0.253</td>
</tr>
<tr>
<td>Threat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are fish suppliers in large quantities</td>
<td>0.096</td>
<td>2.38</td>
<td>0.227</td>
</tr>
</tbody>
</table>

C. Strategy Matrix Analysis

Based on the analysis results, the total score obtained from the IFE matrix was 3.247 and the total score from the EFE matrix was 3.018. The two total scores are entered into the quadrant of the strategy matrix to determine the company's position, then the results of the strategy matrix are presented in Figure 2.

The company's position is in the position of an aggressive strategy (quadrant I). Rangkuti (2006) quadrant I is a quadrant that has a favorable situation. The company has opportunities and strengths so that they can take advantage of existing opportunities. The strategy applied in this condition is a strategy that supports aggressive growth policies so the strategy that must be implemented is the SO strategy.

D. Meaning of Strategy

Strategy analysis is a matching phase that is focused on producing feasible alternative strategies by combining established internal and external factors using the IFE and EFE matrices. Based on the results of the analysis of the strategy matrix adopted by the company is the merging of the strength factor with the opportunity factor (S-O strategy).

Strategy S-O (Strengths-Opportunities)

1. Increase dissemination of the GEMARIKAN program to all areas of the company's distribution (S1, S3, O1, O3, and O4)

The company can work with local ministries or agencies to socialize the GEMARIKAN program to all of the company’s distribution areas, namely Jakarta, Bogor, Depok, Tangerang, and Bekasi. This strategy can be done by the company as one way to increase the number of company sales.
2. Increase the level of mastery of information technology, production, and marketing (S2 and O2.03)
Increased mastery of information technology can make it easier for companies to find out the information needed by companies such as prices, trends, the supply of raw materials, etc. so that companies can control all the company's needs well. Improved production technology can make it easier for companies to produce more products and minimize the risk of contamination. Improved marketing technology is also useful for conducting marketing activities widely without limitation of time and place.

3. Maintaining product quality and making product packaging more attractive (S2, S3, S5, and O3)
The product quality must be able to be maintained by the company because the company has implemented HACCP as a quality guarantee, and does not add preservatives in its products. If the company cannot maintain quality, consumers will be disappointed and will not buy the product again. Packaging has become an important marketing tool because if it is carefully designed, packaging can cause consumer buying interest and create promotional value for producers. Currently, CV X only packages its products with clear plastic and is labeled. The company must renew its packaging so that it can have competitiveness with other competing products so as to increase sales. According to market arguments, rapid capital market growth is efficient, diversification can create business value [10,11]

4. Increase the promotion to reach consumers (S1, O2.03)
The form of promotion carried out by the company so far is only by attending exhibitions and fairs, for that the company must strengthen its promotion to continue in competing with other companies. CV X can increase promotion by using social media as a promotional media. Another effort is for example by distributing product samples to introduce products or variants directly to the target.

IV. CONCLUSION
Based on the results of research conducted at CV X, Bogor Regency, it can be concluded that the results of the matrix calculation of the CV X strategy occupy a position in quadrant I which means that the company has opportunities and strengths so that it can take advantage of the opportunities that exist. The biggest strength of the company is the variety of products, while the biggest opportunity faced by the company is the FIND program. The strategy applied in this condition is the S-O strategy. Based on the meaning of the strategy produced four alternative strategies namely increasing the socialization of the FIND program to all areas of the company's distribution, increasing the level of mastery of information technology, production, and marketing, maintaining product quality, making product packaging more attractive, and increasing promotions.

ACKNOWLEDGMENT
The researcher says thanks to Universitas Komputer Indonesia, lecturers, and friends for discussion and sharing information, and all of the related parties for the guidance and the advice.

REFERENCES