



## Development Strategy of Smoked Fish Product in Increasing Business Income in North Semarang District

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### Article Info

Article History :  
Received June 2020  
Accepted July 2020  
Published December 2020

Keywords:  
Smoked fish, Strategy,  
B/C Ratio, Paid Period,  
SWOT.

### Abstract

Bandarharjo, North Semarang District has great potential to advance industrialization. The problem of this research was the decline of smoked fish product in Bandarharjo, North Semarang city. The purpose of this study was to describe the amount of costs and incomes in order to create business development strategies to overcome the obstacles faced by smoked fish entrepreneurs and increase smoked fish business income in Bandarharjo. This study used a quantitative approach. The population in this study was 25 smoked fish entrepreneurs in Bandarharjo. Data collection techniques were using interviews, documentation and questionnaires. The analysis technique used was descriptive percentage, net B / C ratio, payback period and SWOT analysis. The results of B / C ratio showed that the Period values was around 1.15, and Payback values was around 0.64. The SWOT strategy results in terms of EI strength are adequate capital, a strategic location for fumigation operations, easily accessible and can build business with relevant agencies. Then the weaknesses are business research and development has not been done, the management information system and the financial reporting system have not been running well. Opportunities offered are economic growth in Semarang significantly increased as well as the development and training of Micro Small and Medium Enterprises (MSMEs) by the government. Then the threat received is an increase in the price of raw materials.

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## INTRODUCTION

The In Indonesia, the development of Small Medium Enterprises (SMEs) has not experienced a maximum increase. This is due to the lack of attention from the government and society. The government attention towards SMEs began to increase since the issuance of Presidential Instruction No. 6 of 2007 concerning to the Policy to Accelerate the Development of Real Sector and Empowerment of Micro Small and Medium Enterprises.

North Semarang District is a coastal area that has abundant marine products, so that most of the population earns their main livelihood as fishermen. Aside from being fishermen, some residents also cultivate their land as fish ponds. The famous centers of processed seafood products in North Semarang District are Smoked Fish, Presto Milkfish, Fish Skin Chips, Fish Crackers, and other processed fish.

Smoked fish is the most dominant product compared to the others because it has a lot of demand. One reason is that those who are able to win the buyers hearts are those who plan the process of selling their goods carefully and using the basics of good marketing (Afridal, 2017). Up to this time, the number of smoked fish/fish grill SMEs in Bandarharjo sub-district of North Semarang district is listed amount 25 active members. In running their business, SMEs always face various factors dealing with obtaining income, as Anoraga (2002: 250) stated that the problem factors faced by SMEs in running their businesses are marketing problems, partnership factors, and human resource factors. Meanwhile, J.B.Say (Mulyadi, 2008: 5) assumed that increase in production will always be accompanied by an increase in income. SMEs especially in Indonesia face two main problems in the financial aspect and star-cup capital as well as long-term financial and capital access. (James and Akrasanee in Tambunan and Asruni, 2012; Tambunan, 2002).

### Problem Formulation

Based on the background of study, the problems are formulated as follows:

1. How are the internal factors which have strengths and weaknesses for smoked fish

businesses in increasing business income in North Semarang District?

2. How are the external factors which become opportunities and threats for smoked fish businesses in increasing business income in North Semarang District?
3. How are the development strategies for smoked fish products in increasing business income in North Semarang District?
4. How is the impact of smoked fish product development strategy in increasing business income in North Semarang District?

### Research Objectives

The objectives of this study are: analyzing internal factors which have strengths and weaknesses for smoked fish business, analyzing external factors which become opportunities and threats for smoked fish business, analyzing development strategies for smoked fish products and analyzing the impact of development strategies for smoked fish products in increasing business income in North Semarang District.

## METHODS

The research method used in this study was descriptive qualitative which aimed to describe the development strategy for smoked fish products in increasing business income in North Semarang District. Sources of data in the study were selected using a purposive sampling technique. The sample criteria used in this study was members who have an initial capital less than Rp. 6,000,000.

The population in this study was all members of smoked fish business cluster, amounting to 25 SME members in Bandaharjo sub-district, North Semarang District. Population is a region of generalization consisting of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and drawing conclusions (Sugiyono, 2010: 117). Data collection techniques were done through questionnaire, observation, interview and documentation.

The data obtained was then used for descriptive analysis, costs and benefits analysis, SWOT analysis and drawing conclusions.

**Table 1.** SWOT Matrix

EFAS	IFAS	STRENGTH (S) Determine 5-10 internal strength factors	WEAKNESS (W) Determine 5-10 internal weakness factors
	OPPORTUNITIES (O)	SO STRATEGY Create strategies that use power to take advantage of opportunities	WO STRATEGY Create strategies that minimize weaknesses to take advantage of opportunities
TFAS	THREATS (T)	ST STRATEGY Create strategies that use power to overcome threats	WT STRATEGY Create strategies that minimize weaknesses and avoid threats

Source:Rangkuti 2014

**Data Analysis Method**

**Analysis of Internal and External Factors**

SWOT analysis was used to find out what strategies will be used. The benefit of SWOT analysis is to increase organizational knowledge and understanding (Rahardi, 2008). The matrix below can produce 4 alternative possible cells, namely: Strength Opportunities Strategy, Strength Threats Strategy, Weakness Opportunities Strategy, and Weakness Threats Strategy.

Internal and external environmental analysis can identify the following strengths, weaknesses, opportunities and threats:

- a. Internal Factors that make Strength and Weakness of Smoked Fish Business in Bandarharjo Sub-district

The analysis of the internal environment produced six strengths and five weaknesses, which each of them must be addressed properly in order to take advantage of opportunities and overcome threats. In the analysis of internal environment, namely the trends of online sales were very helpful for entrepreneurs in selling or marketing their products. Because the lack of media mastery has an impact on marketing. (Fadilah Andi, et al 2018). The summary of strengths and weaknesses from internal factors can be seen in Table 2.

**RESULTS AND DISCUSSION**

**Formulation of Smoked Fish Business Development Strategy in North Semarang District**

**Table 2.** The Analysis Results of Internal Factors of the Smoked Fish Business in Bandarharjo Sub-district

Indicator	Strength	Weakness
Marketing	Marketing is carried out in a modern way	-
Management	The management system is implemented by the business owner properly Establish good cooperation with relevant agencies	-
Finance	Adequate capital	Financial accounting system is not optimal Relatively high business costs
Operation	Strategic fumigation operational locations and easy to reach Adequate business support facilities	-
Research and development	-	Research and development have not been conducted Research is not optimal
Information Systems	-	Management information system has not been running well

Source: Primary data processed in 2020

b. External Factors that make Opportunities and Threats for Smoked Fish Business in Bandarharjo Sub-district, North Semarang District

The results of external factors analysis showed that there were five opportunities that could be exploited and six threats that had to be

overcome by smoked fish businessmen in Bandarharjo Sub-district. A number of opportunities and threats obtained from the analysis include economic, social, cultural and technological aspects. Opportunities and threats are summarized in the following table.

**Table 3.** The Analysis Results of External Factors of Smoked Fish Business in Bandarharjo Sub-district

Indicator	Opportunity	Threat
Economy	The economic growth of Semarang City is increasing	The price of raw materials fluctuates and tends to increase
Social	The increase in consumption and raw materials The population is increasing	-
Culture	The habits of Semarang City society in consuming fish or processed seafood	Financial accounting system is not optimal Relatively high business costs
Technology	-	The development of information and communication technology is very fast
Politics, Government	SMEs training and coaching from the government	Society assessment towards the existence of SMEs
Competition of similar companies	-	Market price competition
New competitor	-	There are no barriers to entry for new competitors
Strong big traders	-	Wholesalers or product collectors are very strong

Source: Primary data processed in 2020

**Strategy for Smoked Fish Business Development in Bandarharjo Sub-District, North Semarang District**

**1) SWOT Analysis**

SWOT stands for Strengths, Weaknesses, Opportunities and Threats (Grant, 2007). SWOT analysis organizes the main strengths, weaknesses, opportunities and threats into an organized list and is usually presented in a simple grid. The formulation of each strategy refers to the position results obtained from the IE matrix, namely keep and maintain with a general strategy for market penetration and product development. Strategy formulation is the development of a long-term plan for effective management of environmental opportunities and threats, seen from the strengths and weaknesses of the company. The strategies formulated become more specific depending on the management functional activities (Hunger and Wheelen, 2003).

**2) Analysis of IFE (Internal Factor Evaluation) Matrix**

Weighting on the strength and weakness indicators carried out by the paired comparison method. IFE (Internal Factor Evaluation) matrix calculation results showed the total weighted value of internal strategic factors was 2,417. This indicates that the internal position of smoked fish business in Bandarharjo Sub-district is above average in utilizing its strengths and overcoming its internal weaknesses.

**3) Analysis of EFE (External Factor Evaluation) Matrix**

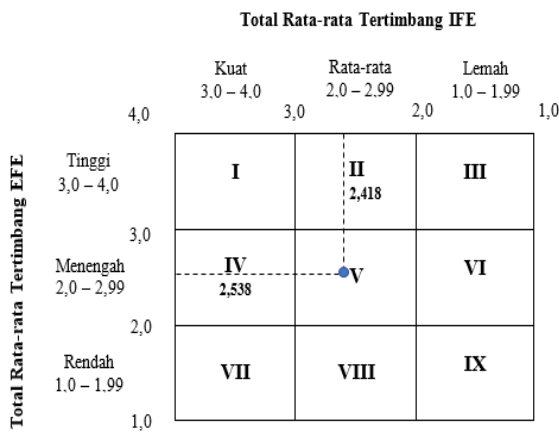
The external conditions faced by the smoked fish business in Bandarharjo Sub-district are illustrated by the results of EFE (External Factor Evaluation) matrix analysis.

The total weighted value of EFE matrix for smoked fish business in Bandarharjo Sub-district is 2,538. This means that the external position of smoked fish business in Bandarharjo is still above

average in utilizing opportunities and avoiding external threats.

**4) Analysis of IE (Internal - External) Matrix**

The results of the IFE and EFE matrices in the form of a total weighted value are mapped into the IE matrix. The total weighted value of IFE is mapped on the X axis, while the total weighted value of EFE is mapped on the Y axis. Based on the results of the mapping, the position of smoked fish business cells in Bandarharjo Sub-district can be determined in order to direct to the next strategy that must be implemented.



**Figure 1.** Mapping Results of IE Matrix Analysis

The mapping results of the IFE and EFE weighted value can be seen in the IE matrix of smoked fish business in Bandarharjo Sub-district. The IFE total weighted was 2,418 (average) and the EFE total weighted was 2,581 (medium), which placed smoked fish business in Bandarharjo Sub-district in cell V. These results indicate that

smoked fish business is in the keep and maintain condition. In this cell, a common strategy used is market penetration and product development (Rusdarti, 2015). Market penetration is an effort to increase market share of a product or service through a more vigorous marketing effort (David, 2006: 233). A very tight competition in the smoked fish business in Bandarharjo Sub-district become more aggressive in penetrating the market. Meanwhile, the product development strategy refers to a strategy to increase sales by improving or modifying existing products or services (David, 2006: 233).

**5) SWOT Matrix Analysis**

This SWOT matrix can produce four possible alternative cell strategies. The S-O strategy requires companies to be able to utilize opportunities through their internal strength. The W-O strategy requires companies to minimize weaknesses in order to exploit opportunities. The S-T strategy is used to optimize strength in avoiding threats and WT strategy is used to minimize weaknesses and avoid threats (Rangkuti, 2006). Matching internal key factors (strengths and weaknesses) and external key factors (opportunities and threats) is an effective strategy to produce a more viable strategy (David, 2009: 327). The formulation of each strategy refers to the position results obtained in the IE matrix, namely keep and maintain using a general strategy for market penetration and product development.

**Table 4.** Determination of the Strategy produced by the SWOT matrix

	Strengths	Weaknesses
IFAS	Marketing is carried out in a modern way The management system is implemented by the business owner properly Adequate capital The operational location is not optimal Adequate business support facilities Establishing business with related institutions	Cooperative research is not optimal Research and development have not been conducted Management information system has not been running well Financial accounting system is not optimal Relatively high business costs
EFAS		

Opportunities	SO Strategy	WO Strategy
Economic growth in Semarang City is increasing	Develop a promotion strategy that can increase sales	Developing the employees ability to be more optimal in every job they do
Increase on consumption and raw materials	Managing the fumigation area into a smoked fish craftsman tourism area and culinary tourism by offering food from processed smoked fish to become a special cuisine and can increase the selling value	Establish good cooperation among business members of the smoked fish in managing the smoked fish business
The population is increasing SMEs Coaching and training given by the government		
Threats	ST Strategy	WT Strategy
The price of raw materials fluctuates and tends to increase	Improve the management systems for controlling raw material inventories to avoid price competition	Improve managerial ability of business owners
The development of information and communication technology is very fast	Establish good cooperation with suppliers of raw materials in order to get its good quality	Maintain continuity of raw materials in increasing production by adding other types of fish that can be processed become smoked fish products.
Market price competition		
There are no barriers to entry for new competitors		
Wholesalers or product collectors are very strong		
Community assessment towards the existence of SMEs		

Source: Primary data processed in 2020

Strategy formulation is the development of a long-term plan for effective management of environmental opportunities and threats, seen from the strengths and weaknesses of the company. The strategies formulated are more specific depending on the functional activities of management (Hunger and Wheelen, 2003). Discussion of alternative strategies produced by the SWOT matrix presented in table 4

**Economic Feasibility**

**1) Calculation of Benefit Cost Ratio**

An industrial economy is said to have economic benefits and feasible to carry out if the BCR value > 1. If the BCR value <1 then the business will bring economic losses. Based on the calculation results, it was known that the average value of BCR was 1.15 which means that each milkfish fumigation businesses is feasible to run.

**Table 5.** Calculation of Benefit Cost Ratio

Business Owner Name	Benefit Cost Ratio
Suyatmi	1.17
Istiada	1.15
Artinah	1.14
Wartinah	1.17
Sulistiyowati	1.14

Sa'at	1.20
Sukini	1.12
Jamilatun	1.19
Sunardi	1.20
Nafiin	1.15
Maryati	1.19
Sumarmi	1.12
Siti Solekah	1.11
Subowo	1.14
Paiman	1.12
Solekah	1.20
Heru Sulistiyono	1.12
Sukhaimi	1.12
Sukarno	1.14
Makmur	1.12
Edy Pramono	1.12
Wartiah	1.14
Rustiyono	1.20
Kumeidi	1.12
Kandar	1.12

Source: Primary data processed in 2020

**2) Calculation of Payback Period**

Table 6 showed the economic feasibility results of the smoked fish business using the payback period analysis. For determining decision making, the maximum payback period is

compared to the investment payback period. If the payback period is shorter than the maximum payback period required, the investment will be carried out. However, if the payback period is longer than the maximum payback period, the investment is rejected or is not feasible. The payback period is set for 1 year. Economic feasibility using payback period showed that 25 business units are feasible to carry out because the average value of the investment payback period is 0.64 years.

**Table 6.** Calculation of Payback Period

Business Owner Name	Payback Period
Suyatmi	1.17
Istiada	1.15
Artinah	1.14
Wartinah	1.17
Sulistyowati	1.14
Sa'at	1.20
Sukini	1.12
Jamilatun	1.19
Sunardi	1.20
Nafiin	1.15
Maryati	1.19
Sumarmi	1.12
Siti Solekah	1.11
Subowo	1.14
Paiman	1.12
Solekah	1.20
Heru Sulistiyono	1.12
Sukhaimi	1.12
Sukarno	1.14
Makmur	1.12
Edy Pramono	1.12
Wartiah	1.14
Rustiyono	1.20
Kumeidi	1.12
Kandar	1.12

Source: Primary data processed in 2020

**CONCLUSION**

The conclusions that can be drawn based on the results of the study about the development strategy of smoked fish business products in Bandarharjo Sub-District, North Semarang District.

Strengths owned by smoked fish business in Bandarharjo Sub-District successively from the largest are marketing carried out in a modern way,

business owners implement good management system, adequate capital, strategic location of fumigation operations and easily accessible, adequate business supporting facilities, and establish good cooperation with relevant agencies. While five things that indicate weaknesses include cooperative research that has not been optimal, research and development has not been carried out, management information systems have not been running well, financial accounting systems have not been optimal and business costs are relatively high.

Opportunities faced by the smoked fish business in Bandarharjo Sub-District, North Semarang District include economic growth in Semarang City, increase on consumption and raw materials, habits of Semarang City society in consuming fish or processed seafood, increasing population, MSMEs coaching and training given by the government. On the other hand, threats from the external environment include the fluctuating price of raw materials and tend to increase, the development of information and communication technology is very fast, market competition, there are no barriers to entry for new competitors, wholesalers or product collectors are very strong and the society's assessment towards the existence MSMEs.

The suitable strategy applied by smoked fish business in Bandarharjo Sub-district, North Semarang District in order to develop their products according to IE matrix analysis is a market penetration strategy or product market share and product development. (Anwar, 2007). The implementation of this strategy is using SWOT matrix, namely developing promotional strategies that can increase sales, manage the fish fumigation area into smoked fish artisans and culinary tourism areas, develop employees' abilities to be more optimal in every job they do, establish good cooperation among smoked fish business members in managing the business, improve the management system of raw material inventory control to avoid price competition, establish good cooperation with suppliers of raw materials in order to get its good quality, improve managerial ability of business owner, maintaining continuity of raw materials in increasing production by adding other kinds of fish that can be processed to be smoked fish products.

The results of the B / C ratio showed that the value of the B / C ratio is around the period value of 1.15 which means that each smoked fish business is still feasible to run. Whereas, the average value of the Payback Period is 0.64, which means that economic feasibility by using payback period are feasible to be carried out for all 25 business units.

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