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Development Strategy Analysis of Fertilizer Company Using BCG Matriks Method

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Abstract. This study aims to analyse the strategy of a fertilizer company that produces urea-based fertilizer and organic fertilizer. A company should always have a certain development strategy by observing its growth rate and comparing it with other competitors. Boston Consulting Group (BCG) Matrix can recommend regarding the strategy needed for resource allocation and company development. Two competitors are chosen to decide this company position: the first one is a market leader with the best company growth rate and highest relative market share, and the second one is an equivalent to the company being studied in terms of its production and sales. The growth of 5.63% in fertilizer sales indicates a high market share growth rate. The relative market share of this fertilizer company compared to the first competitor and the second competitor is 0.117 and 0.476 respectively, meaning that it has a low market share as the number is smaller than 1. In BCG Matrix, this company is in the Question Marks position (quadrant II).

1. Introduction

In a company, a development strategy is needed to maximize its growth potential. Many skills, technology, and intellectual resource can be utilized accordingly to improve the company's capacity, so that business development can be focused on the implementation of a business plan, using equity funding, acquisition, technology divestment and product [1]. To find the right development strategy, Boston Consulting Group (BCG) Matrix is used as a method to analyze the company position among its competitors, so that the company does not implement the wrong strategy later [2]. The BCG matrix can be used to analyse both short term and long-term work performance. BCG matrix incorporates the use of static analysis and time adaptation [3]. The BCG matrix will give one out of four possible positions; each possesses distinct meaning and symbolled differently. The symbols are Question Marks, Stars, Cash Cows, and Dogs [4].

Question Marks, the symbol of quadrant 1, means the company is still in a growth phase, as can be seen from how market growth rate and low market share. The company needs to spend a large amount of capital to increase market share, to move to Stars position and finally to Cash Cows position[5]. Usually, this is the position of the newly-established company [6]. Stars, the symbol of quadrant II, is the position of a company that already has proper market growth rate and market share, but still not profitable enough. In this case, market share grows rapidly due to the company already has a good market growth rate. The next step is the company must increase its position carefully to reach the Cash Cow position and does not fall to the Question Mark position [7]. Cash Cows, the symbol of quadrant III, is the position of a company with a relatively high market share and low market growth rate. The



strategy that should be taken in this position is a harvesting strategy because in this position the company is very profitable. However, the company must take extra precautions to maintain its position and not fall to the Dog's position. This position is the most advantageous, yet also the most vulnerable. Usually, the company becomes carefree and not careful in this position [8]. Dogs, the symbol of quadrant IV, is the position of a company that has a low relative market share and low market growth rate. This is a position where a company is usually liquidated and divested. Therefore, the company must choose a wise decision because the choice is hard. The company must choose either to run the company properly or be divested. Usually, this position does not give any advantage and many companies choose to quit and abandon the company [9].

This study aims to decide the position of the corresponding company in the BCG matrix, to decide the best marketing strategy needed to increase the company's sales volume higher than its competitors. In this study, two competitors are chosen, the first competitor is the market leader having the best market growth rate and highest relative market share, and the second one is an equivalent to the company being studied in terms of its production and sales volume.

2. Method

This study is conducted in a company producing urea-based fertilizer and organic fertilizer. This study aims to calculate the market growth rate and the relative market share of this company using the BCG matrix method. The Market growth rate is the percentage increase of sales volume in the last two years,

$$\text{MGR} = \frac{\text{SVN} - \text{SVN}_1}{\text{SVN}_1} \times 100 \% \quad (1)$$

where MGR is the market growth rate, SVN is last year's sales volume, and SVN_1 is the last two-year sales volume [10].

The relative market share is calculated with formula,

$$\text{RMS} = \frac{\text{SVN}}{\text{SVCN}} \quad (2)$$

where RMS is relative market share, SVN is last year sales volume, SVCN is last year sales volume of a competitor. If the relative market share is lower than one, it means the relative market share is lower than its competitor. Based on market growth rate and relative market share, the company position in the BCG matrix is then decided [11].

3. Results and Discussions

3.1. Market growth rate

The market growth rate calculated using the BCG matrix method is 5.63%, a quite high number for market growth rate. This number is obtained from data of fertilizer sales volume in 2017 and 2018 as shown in figure 1.

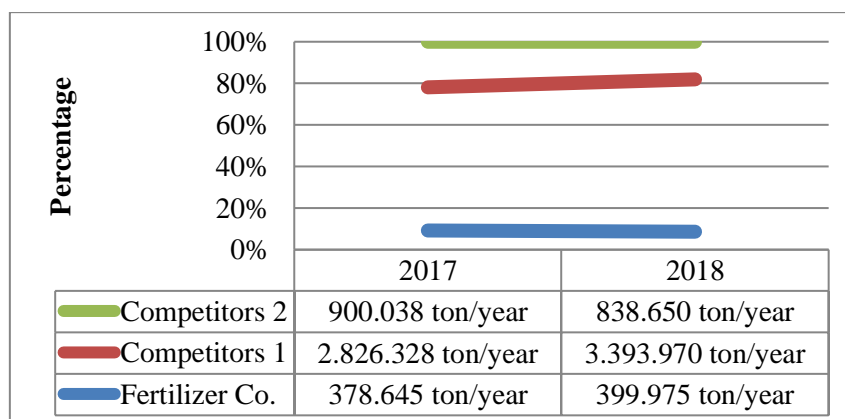


Figure 1. Fertilizer sales volume of the studied company, competitor 1, and competitor 2.

Relative market share indexes a firm’s or a brand’s market share against that of its leading competitor. Analysis of relative market share is conducted by comparing its sales volume of fertilizer compared to competitor 1 and competitor 2. The data used are the sales volume of the fertilizer company being studied and its first and second competitor in 2017 and 2018, as shown in figure 2.

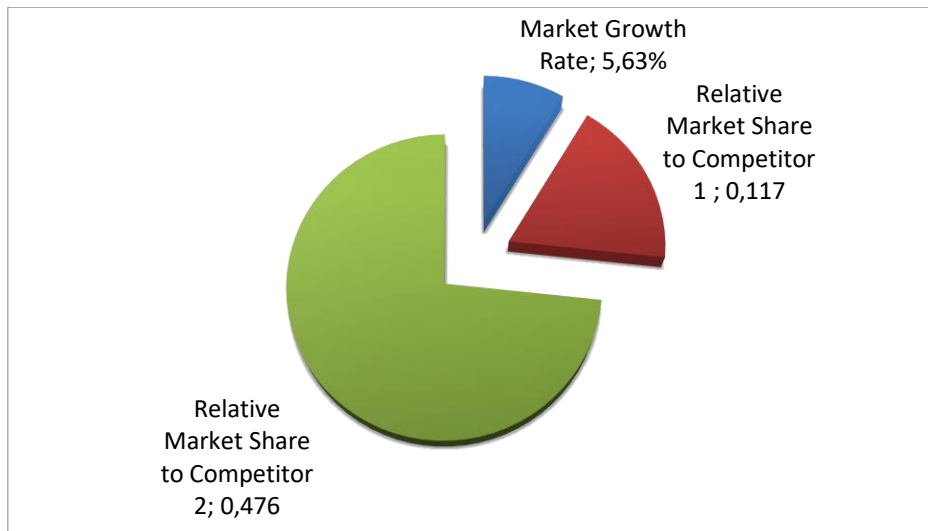


Figure 2. Relative market share of fertilizer company compared to competitor 1 and competitor 2.

Based on the BCG matrix calculation, the relative market share of the corresponding company is 0.117 when compared to competitor 1 and 0.476 when compared to competitor 2. This means the company has a small market share since the relative market share is smaller than 1.

3.2. *The position of the fertilizer company compared to competitor 1 based on BCG matrix*

The relative market share of the fertilizer company compared to competitor 1 (market leader) is 0.117. Therefore, the company’s position in the quadrant II, i.e. in Question Marks position, as shown in figure 3.

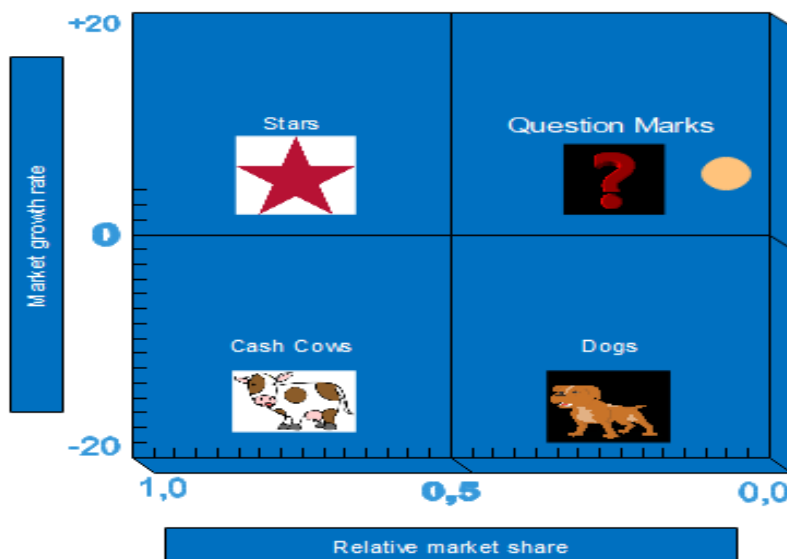


Figure 3. Position of fertilizer company compared to competitor 1 based on the BCG matrix.

This Question Marks position is the condition where the company has a high market growth rate, yet low relative market share. In other words, the company's problem is high cash needs and low cash earnings.

3.3. The Position of the fertilizer company regarding competitor 2 in BCG matrix

The relative market share of the company compared to Competitor 2 is 0.477. In this case, the position of the company is still in the quadrant II, i.e. Question Marks position, although the relative market share is slightly higher than when compared to Competitor 1. The result is shown in figure 4.

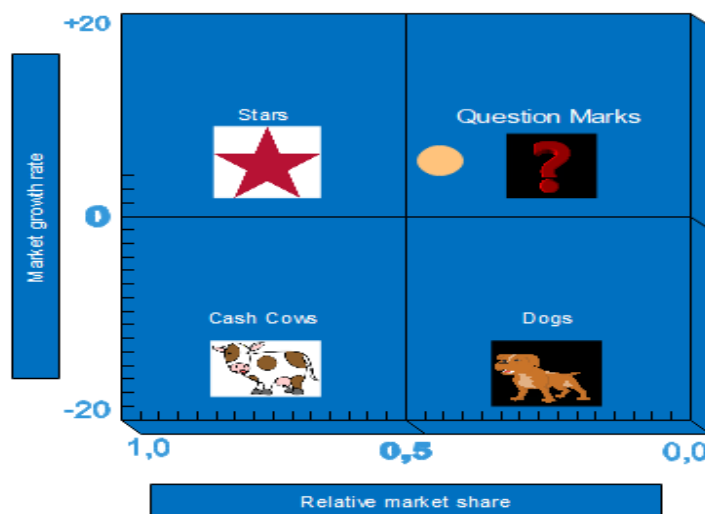


Figure 4. Position of fertilizer company compared to competitor 2 based on the BCG matrix.

3.4. Analysis of strategy based on the BCG matrix

The fertilizer company is in the quadrant II, i.e. in the Question Marks position where the market growth rate is quite high, but the relative market share is still low. Therefore, the company should make a precise marketing strategy to solve this problem. If taken correctly, the marketing strategy can help the company to gain maximum profit. A strategy that fits this problem is to build a strategy. Build strategy helps to build relative market share during the growth phase of a business unit in an industry. A business unit is the main unit that needs a large amount of cash. The cash is used to develop a product, induce market growth, and expand activities. The goals of this expenditure are to be the market leader in the short term and to increase market share in the long term.

For this company, some examples of build strategy may include

- 1) Develop new types of fertilizer, such as NPK fertilizer.
- 2) Increase the quality of fertilizer by improving its ingredients quality and its making process.
- 3) Maintain good customer service.
- 4) Expand marketing networks, both locally and internationally.
- 5) Promotes the product better by giving proper information on its website and its social media.
- 6) Improve investment in either fertilizer or business unit to help increase market share.

4. Conclusions

Based on the BCG Matrix, the corresponding fertilizer company is in the Question Marks position. This position means that the company has a high market growth rate and low market share. The growth rate of 5.63% in fertilizer sales is quite high. Meanwhile, the relative market share in comparison with the first and second competitors is 0.117 and 0.476 respectively, which means that it has a low market share as the number is smaller than one.

Due to the company is in the Question Marks position, the company has to make a new strategy that will either move its position higher to the star position or lower to the dog position. Strategies than being chosen are selling the company or strengthen the company divisions by performing intensive strategies, such as market penetration, market development, and product development. The strategy chosen may potentially waste liquid resources if the target can not be met[12]. Based on the BCG Matrix, the right strategy that should be taken by the company is the build strategy. This building strategy helps to build relative market share during the growth phase of a business unit in an industry.

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