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Competitive Force Model for Indopipe Industry with Analysis of Customer Requirements

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Abstract. The pipeline industry is one of the manufacturing industries that support national development infrastructure. Increased efficiency and expanded brand market share with optimizing the opportunities available on the market is one of the efforts in increasing competitive advantage. The design of this study used interviews and data collection through questionnaires. The analytical unit is the engineering expertise of the Indopipe company at all manager levels. The result of this analysis is the determination of competitive strength strategies with Porter Five Forces in the pipe industry based on criteria of quality, cost, delivery, safety, and morale. The results of the analysis of the study show that strategies to address the threat of new entrants are a priority for managers in this industry. In addition, by improving the quality of pipe products and making this product brand as a market leader, it is the main strategy in increasing competitiveness.

1. Introduction

The company's strategic decision making that has a good impact on the company is greatly supported by good strategic management implications for the company [1]. Analysis of strategic management consists of an internal environment including the strengths and weaknesses of the company and the external environment including opportunities and threats for the company [2]. In order to help plan strategies for developing an early warning system to avoid threats or develop strategies that can turn threats into benefits for the company [3]. Therefore, to be able to survive in the market in developing its business, a company or industry depends on five porter powers. A company will have a competitive advantage if the company is in a favorable condition of the five competitive forces, namely the entry of new entrants, the threat of substitute products, the bargaining power of buyers, the bargaining power of suppliers, and the threat of rival companies existing competitors [4]. Ideally a company can have all the competitive strength factors, but the company must work as much as possible to be able to maximize the five Porter's strengths [5].

Competition between similar companies is very sharp, new competitors can enter the industry relatively easily, and suppliers and customers can increase their bargaining power [6]. In order to win business competition, every company must have a competitive strategy [7]. The ultimate goal of a competitive strategy is to increase environmental strength in the interests of the company [2]. Competitive strategies are often also referred to as business strategies, focus on increasing the competitive position of company products and services in certain industries or market segments [8]. The

competitive strategy is an effort to find a competitive position in an industry, the fundamental arena in which competition takes place [9]. The competitive strategy aims to foster a position that is profitable and strong in fighting the forces that determine competition in the industry [2]. Therefore, the competitive strategy is not only a response to the environment but also an effort to shape the environment in accordance with the wishes of the company [10]. The purpose of this study is to analyze what strategies are being implemented by the Indopipe Company, the competitive climate of the pipeline industry in Indonesia, and alternative strategies that can be developed by the current Indopipe company using the Five Forces Porter model.

2. Method

This type of research is included in descriptive qualitative research. This study uses descriptive qualitative research because it is in accordance with the objectives of the study to find out and get the depth of information related to the topic. The subject in this study is the Indopipe Company in Surabaya and the object of the research was an indicator of the 5 strengths of Porter's competition. Data collection techniques were carried out by semi-structured observation and interviews. The validity test of the data is done using the triangulation test. The source triangulation carried out in this study was interviews with different sources. In this research stage, checking the intended information is directly obtained by collecting information in the field, and will be compared with information directly from the company itself. Furthermore, based on the analysis of Porter's five forces model, a test is conducted to determine the priority strategies in the analysis with Analytical Hierarchy Process (AHP). The survey of Porter's priority five forces model is conducted on 8 decision-making managers at Indopipe. Furthermore, data analysis techniques are carried out by: 1) Examining all data from various sources; 2) Conduct an assessment for each of the five porter powers to find out which external factors are most influential; 3) Conducting content analysis of the results of the interviews that will be used as the basis of the analysis of five porter powers; 4) Compile the company's marketing strategy; 5) Prepare conclusions and evaluations of the research that has been done.

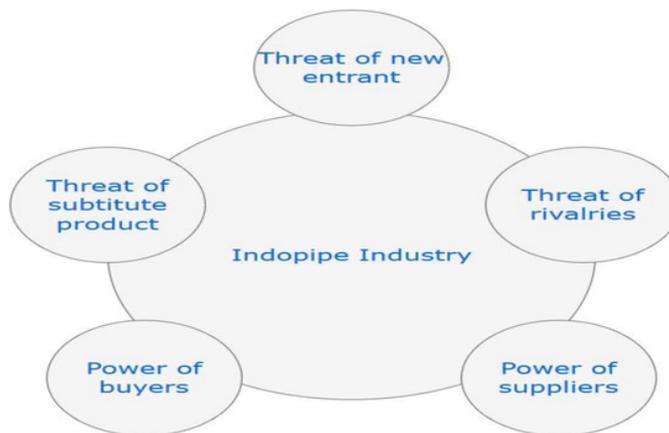


Figure 1. Competitive Five Force Model

3. Results and Discussion

Five Force Model Porter Analysis is used to analyse the company's external environment based on the threat of rivalries, the threat of new entrants, threat of substitute product, bargaining power of buyers, and bargaining power of suppliers.

Table 1. Analysis of Five Forces Model Porter

No.	Indicator	Analysis	Conclusion
I. Analysis of the threat of Rivalries			
1.	number of competitors	the number of competitors in the area of Surabaya and Sidoarjo is around 3-4 companies	low competition
2.	increasing number of competitors	annual increase of competitors around 1 company	Low competition
3.	annual industrial growth each year	industrial growth increased in line with increasing market demand, where market demand increased 15% and industrial growth also increased by 20%	High competition
4.	the impact of industrial growth on inflation	Industrial growth had an impact on inflation because inflation had an impact on purchasing power, so that the original sales of 15 tons to 11 tons	moderate competition
5.	product differentiation with competitors	the pipe industry in general has product differentiation reaching 3 products	High competition
6.	differentiation of raw materials	the majority of companies use the different raw materials	High competition
7.	production cost	non-fixed production costs with increases ranging from 3-5%	moderate competition
II. Analysis of The threat of new entrants			
1.	Capital requirements	capital requirements to open a plumbing business are very expensive. the average capital for machines is at least 100 million with land capital, where the overall capital reaches an average of 500 million	7 Low threat
2.	How to meet capital requirements	sufficient capital needs through outside shareholders and sponsors. 0-10% of paid up capital, 10-15% medium, and 15-20% high	High threat
3.	Customer loyalty level	The level of loyalty depends on the needs and services provided to customers. Indopipe companies have customers above 60%.	Middle threat
4.	3 The formation of customer loyalty	Customer loyalty is formed from the service and good performance of the company. So far the company has been committed to always meeting and satisfying customer needs	3 Middle threat
5.	Access to distributiin channels	access to distribution channels using shipping fleets owned by the company itself and more than competitors	7 Middle threat
6.	Cost requirements to distribution	the costs used are relative, depending on tonnage and distribution distance	Middle threat
7.	3 Government policy	industrial growth is inseparable from government policy, because the government has facilitated the licensing and conditioning of the industrial sector to grow	High threat
8.	The impact of government policy	government policy has a considerable impact	High threat
III. Analysis of The threat of substitute products			
1.	the level of need for a substitute product	the level of need for substitute products is not too high, where people only need up to 10%	Low threat
2.	ease of getting a substitute product	ease of obtaining a substitute product of around 30%	Middle threat
IV. Analysis of The Bargaining power of buyers			
1.	level of buyer dominance	buyers are dominated by construction projects.	bargaining power of buyers is high
2.	the dominance of buyers every year	1 the dominance of the buyer is not constant depending on the number of requests.	bargaining power of buyers is low

3.	the impact of product switching costs	the magnitude of the impact of product transition costs depends on the value that exists in the transition. transition costs <5 million are low, 5-10 million are moderate, and 10-20 million are high.	bargainin ⁴ power of buyers is high
4.	reserve fund for product switching costs	reserve fund <5 million low, 5-10 million medium, and 10-20 million high. The company has a large reserve fund for product switching costs.	bargaining power of buyers is high
5.	level of clarity of product information	there is a sales person who informs the product to the customer.	bargaining power of buyers is high
6.	official permission from product information	product information does not have official permissions.	bargaining power of buyers is low
7.	growth in buyer market share each period	the market share growth is around 5-10%.	⁴ bargaining power of buyers is high
8.	buyers' market share every year	the buyer's market share is not constant depending on purchasing power.	bargaining power of buyers is high
V. Analysis of The bargaining Power of Supplier			
1.	level of supplier dominance	suppliers are not dominated by only one supplier.	bargaining power of suppliers is low
2.	alternative supplier	the company has 1 high supplier, 2-4 medium suppliers, 4 high suppliers. Indopipe has 7-1 ¹ suppliers.	bargaining power of suppliers is low
3.	product supplier quality level	supplier product quality is good because the company has standards that must be met by suppliers.	bargaining power of suppliers is low
4.	Supplier product quality is always constant	Supplier product quality is not always constant because quality follows the purchase price.	bargaining power of suppliers is low
5.	supplier market competition level	competing suppliers prices by raising prices according to market conditions.	bargaining power of suppliers is middle
6.	supplier market competition is always neutral	supplier market competition is relative.	bargaining power of suppliers is middle
7.	the amount of the cost of switching to another supplier	switching costs depend on which supplier is used.	bargaining power of suppliers is high
8.	supplier turnover costs every year	supplier switching costs are not always constant each year	¹⁰ bargaining power of suppliers is high

The results of the Porter Five Force analysis show that the competitive climate of the pipe industry in Indonesia is quite low. It is known from the number of competitors in the Sidoarjo and Surabaya regions that currently only about 3-4 companies are engaged in the same field, namely the pipe industry. Furthermore, the increase in the number of the pipeline industry is also evidenced by the increase in competitors which produce around 1 to 2 companies each year. The increase in the number of the pipe industry has resulted in quite competitive competition with a marked market demand that has also increased by 10-15%. Higher competition can also be seen from the increasing number of companies that have product differentiation from other competitors. In this case, the Company has product differentiation on mixed products that can reduce production costs but still pay attention to the quality that exists, so that the company can provide benefits to consumers by providing cheaper and yet quality products [11]. For the main raw materials themselves, most of the companies do not have differentiation, so that competition in existing raw materials tends to be low. Indopipe's strategy in overcoming increasingly fierce competition among competitors is to expand demand or strengthen the level of product differentiation by improving and maintaining product quality.

In addition, the Company must also do good marketing, and receive advice from customers without changing existing quality standards. Customer loyalty is one factor that can affect the low threat of new

entrants. In this case plastic companies have customers that are above 60% of total customers, so the threat of new entrants is not too high, because with customer loyalty it is expected that customers will continue to make purchases in the same company so that they will not switch to new competitors. However, to build customer loyalty is not easy because companies must have performance and provide maximum service to customers. This can be done by providing quality products, affordable prices and various forms of convenience provided to customers such as ease of ordering, ease of delivery, and ease of payment to make customers trust the company [12]. In addition, government policies will also pose a threat to the entry of new entrants, because government policies have contributed to the growth of industries such as the pipe industry. The government has a policy to facilitate licensing for industrial establishments and the government also provides support for industrial development in Indonesia, one of which is the pipe industry. This ease in industrial licensing will facilitate the entry of new entrants who can be a threat to the company.

In the threat of substitute products, Indopipe is not too worried because the level of customer needs for substitute products is not too high, which is around 10%, but in obtaining a replacement product it is still easy to find so it can be a threat. which need to be considered by the company. Buyers in this company are dominated by construction projects, where the dominance of buyers every year is not constant depending on the number of buyer requests. In increasing bargaining power, company buyers also provide clear information about the products they have. Pipeline companies have a sales team to offer and provide information about the company's products to customers, customers can ask directly about information that is clearly needed. The growth of buyers' market share can also increase the bargaining power of buyers, where market share growth has so far reached 10% per period, only the buyer's market share is not constant and depends on people's purchasing power. Adequacy of raw material requirements in the company is not dominated by one supplier. Indopipe has 7-10 suppliers, because if one supplier is in trouble, the company can use other suppliers and the production process can continue smoothly. The quality of products from suppliers is not always constant, this is because following the purchase price, the lower of selling price, the lower of quality [11]. However, the Company has suppliers that have quality raw materials, because the company already has standards that must be met by suppliers to be able to maintain the quality of the pipe products.

Table 2. Priority of Five Forces Model Porter

Porter 5 Forces	T. of New Entrants	B. Power of Suppliers	B. Power of Buyers	T. of Substitute Products	Threat of Rivalries	Priority Vector
Threat of New Entrants	0,40	0,44	0,43	0,36	0,36	0,40
Bargaining Power of Suppliers	0,15	0,16	0,23	0,21	0,13	0,18
Bargaining Power of Buyers	0,13	0,10	0,14	0,17	0,20	0,15
Threat of Substitute Products	0,15	0,11	0,11	0,14	0,16	0,13
Threat of Rivalries	0,17	0,18	0,10	0,13	0,15	0,14
<i>SUM</i>	1,00	1,00	1,00	1,00	1,00	1,00

In table 2, based on the results of data analysis, prioritizing five forces porter models shows that the threat of new entrants has the highest weight, which means that this threat for managers of Indopipe is considered as one of the most important problems that requires the right strategy to overcome the threat [13]. Furthermore, bargaining power of buyers occupies the second priority, it can be explained that this is an important factor in determining the strategy in the pipeline industry competition [14]. The threat of product substitute, the threat of rivalries and the bargaining power of suppliers sequentially occupy a priority level based on Indopipe managers' perceptions.

4. Conclusion

The current strategy implemented by Indopipe based on a five force model analysis is to increase product differentiation; cheaper prices than competitors; better delivery system; easier payment system. The climate of industrial competition tends to increase due to the number of companies in the industry similar types in Sidoarjo and Surabaya as many as 3-4 companies, where there is an increase in competitors per year between 1-2 industries both small and large scale accompanied by market demand which also continues to increase by 10-15%. An alternative strategy that can be developed by Indopipe is the addition of capital to develop the business; add machine production tools; training program for employees to develop abilities and skills. The priority of the five forces porter model based on Indopipe's manager's perception is threat of new entrants. There needs to be an evaluation of the strategy that has been determined by the company so that it can excel in business competition

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