

EVALUATION OF THE STRATEGIC POSITION OF THE COMPANY OF THE METALLURGICAL INDUSTRY BY SWOT ANALYSIS

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Abstract

Strategy of steel company is usually identified with a broad program of setting and achieving organizational goals. A prerequisite for the maintenance of the enterprise in the market and shaping its development, it is initially to develop a reliable assessment of the strategic position which would allow for the preparation of such a strategy, which will fulfill the most important functions. The literature has identified a number of methods and procedures of strategic analysis that allow for detailed examination, evaluation and prediction of future states in all spheres of the enterprise's functioning and its environment. Both in the approach of activities, as well as approach of implementation of strategic analysis, main emphasis is on the task of the strategic analysis, namely the construction of the strategic plan. In the last stage of the analysis the evaluation of the strategic position of the company should be realized. For this evaluation the most useful appears to be a SWOT analysis as a concept of straightening, combining into a coherent completeness of the various methods and techniques used in strategic analysis. The aim of the paper is to determine the strategic position of the mill in one of the Polish steelworks by the SWOT analysis. The survey allowed for identification of the strongest features of the examined enterprise and the opportunities which should be taken into consideration in setting the strategic plans.

Keywords: SWOT analysis, strategic position, metallurgical industry

1. INTRODUCTION

The situation in the steel product market in Poland is rather poor, and it seems appropriate to look for possibilities of changes, also in the area of the enterprises' strategy. Unstable and unpredictable environment, changing customer preferences, increasing international competition, are forcing steel companies rapid evolution in parallel with high flexibility, making the sector conditioned by the customer's needs. Such far developed strategic decisions should translate, at the same time, into the elimination of interferences in the information transfer, elimination of ineffective time in the supply chain, and thereby into the reduction of the cost inflating effect [1]. Unfortunately, a large number of factors with a strong negative impact on the metallurgical sector in the area of macro-environment and the internal potential of the sector often limits its possibilities for development [2]. From the analysis of the data on product sales and interviews conducted in the analyzed company, as well as from the available information on the metallurgical market, it can be inferred that it would be right to make changes in this sphere.

Strategy of steel company is usually identified with a broad program of setting and achieving organizational goals. However, there are large discrepancies in a practical manner and form of strategy development by the enterprise, starting from complex economic programs, by determining of the general objectives of the restructuring of the company, ending with the creation of the strategy in relation to the changing circumstances of external and internal conditions. But apart from the competences and experience of the enterprises' management, a prerequisite for the maintenance of the enterprise in the market and shaping its development, it is initially to develop a reliable assessment of the strategic position which would allow for the preparation of such a strategy, which will fulfill the above functions.

In a market economy, therefore, important for the development and functioning of the enterprise in the market has its strategy [3]. In contemporary management concepts the strategy term also acquires a broader meaning and special significance, refers primarily to enterprises management and is a key value for its prosperity [4]. The strategy allows for evaluation of the place and the purposes of the enterprise, and its proper formulation determines the survival of the company in the market and possibilities of development [5].

The literature has identified a number of methods and procedures of strategic analysis that allow for detailed examination, evaluation and prediction of future states in all spheres of the enterprise's functioning and its environment. Both in the approach of activities, as well as approach of implementation of strategic analysis, main emphasis is on the task of the strategic analysis, namely the construction of the strategic plan. It is most often the sequence of separate stages, during which they must respond to specific questions in three areas: 1. expectations, purposes and place of organization, 2. the organization's resources, 3. external environment of organization. In the last stage of the analysis the evaluation of the strategic position of the company should be realized. For this evaluation the most useful appears to be a SWOT analysis as a concept of straightening, combining into a coherent completeness of the various methods and techniques used in strategic analysis.

The aim of the paper is to determine the strategic position of the mill in one of the Polish steelworks by the SWOT analysis. The survey allowed for identification of the strongest features of the examined enterprise and the opportunities which should be taken into consideration in setting the strategic plans.

2. MANAGEMENT IN METALLURGICAL ENTERPRISES

According to the World Steel Association [6] data, globally the use of existing production capacity in the steel industry is decreasing. In December 2015 it has fallen to the level of 64.6%. In the last the twelve months period it amounted to 69.7%. For comparison, in the year 2014, it was 73.4%. The decline per year amounted to 3%.

In the European Union countries the situation of the steel industry is poorly perspective. In the European Union steel production fell in 2015 by 1.8% and now stands at 166 million tonnes. In Poland, the last twelve months were accompanied by the increase in steel production of 6.4% and the amount of 9.106 million tonnes in 2015. It does not change the fact that the position of the domestic industry is still not stable, threatened by the global overcapacity in steel production with direct impact on the raw material prices and risk increase for Polish companies.

It should be emphasized that the metallurgical industry is one of the most important branches of Polish industry. Metallurgical products represent a significant position in the Polish trade turnover, however, in recent years the outflow of foreign investments in this sector has been reported [7].

Nowadays metallurgical enterprises are subject to the same principles of market economy as other businesses. One of their crucial elements is management. It is not a simple process for the companies in this industry because the conditions they operate in undergo major changes.

Competition between steel mills is a phenomenon in Poland formerly hardly known. Nevertheless, the mutual competition of domestic steel mills to foreign markets caused negative effects both in purchases of raw materials and sales of products; this reduces the effectiveness of steel mills.

To meet the demands of the market and the conditions prevailing in, the analysis of the steel market and the relevant strategic planning seems to be indispensable.

One of the methods which can be used to determine the strategy of metallurgical enterprises, is the SWOT analysis. This method has been successfully used for other industries, sometimes also by some metallurgical enterprises, but for this industry is not so popular. Often, in practice it is limited only to indication of particular groups of factors, but it is not quite helpful in defining the company's market position, or pointing out the strategy. Only the point analysis enables realization of such actions.

3. METHODOLOGY

The SWOT analysis is one of the most popular analytical methods which, through the analysis of internal and external business environment, allows identifying its strengths and weaknesses, opportunities and threats. This analysis is a tool to optimize the business management strategy or build a new strategic plan. The main objective of this study is to determine the current position of the test object, its prospects, and with the best strategies [7, 8]. The SWOT analysis can be carried out for a product, place, industry or person. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. The method is credited to A. Humphrey, who led a convention at Stanford Research Institute (now SRI International) in the 1960s and 1970s using data from Fortune 500 companies. The degree to which the internal environment of the company matches with the external environment is expressed by the concept of strategic fit [9]. Setting the objective should be done after the SWOT analysis has been performed. This would allow achievable goals or objectives to be set for the organization [10].

The results of the SWOT analysis contains for groups of statements [11]: strengths: characteristics of the business or project that give it an advantage over others; weaknesses: characteristics that place the team at a disadvantage relative to others; opportunities: elements that the project could exploit to its advantage; threats: elements in the environment that could cause trouble for the business or project.

The SWOT method allows the separation of the four potential strategic situations [12]:

- 1) SO - maxi-maxi strategy - strategies that use strengths to maximize opportunities. The company needs to distinguish and list the strengths that could aid in the maximization of each one of its listed opportunities. For example, possible strengths that could help a company penetrate a new market could include high-brand recognition, high-brand loyalty, large levels of research and development spending, and superior customer service.
- 2) WO - mini-maxi strategy - strategies that use strengths to minimize threats. To illustrate, consider a company that faces rising labor costs in its home country. Simultaneously, it has identified an attractive opportunity to outsource some of its operations to another country where the cost of labour is far cheaper. This outsourcing prospect reduces the company's threat of rising labour expenses.
- 3) ST - maxi-mini strategy - strategies that use strengths to minimize threats. For instance, a potential threat to a company could be the loss of market share to a new competitor entering the market. One way the company could protect its position involves developing a marketing campaign emphasizing its superior customer service or its competitor's inferior customer service.
- 4) WT - mini-mini strategy - strategies that minimize weaknesses and avoid threats. This section matches the company's threats and weaknesses in order for the company to recognize the potential situations that could harm its operations. Once these possible conditions are realized, the company can conceive of ways to protect its business. For example, a company can enter into a strategic alliance or merge with one of its competitors to protect its operations from a rival company. Moreover, the options to withdraw from a market or suspend operations are always present.

To determine the strategic position of the research company, the internal analysis, in which strengths and weaknesses have been pointed out, and the external analysis, which allowed determining the opportunities and threats in the environment of the research company, were done. Steps to assess the strategic position of the company were carried out in stages. The first step was to diagnose strengths and weaknesses and emerging opportunities and threats in case of the research company. The next action was to assign a weight in each group, when added, must score 1. The next step was to attribute the assessment of severity in a five-point Parker scale to each factor. The products of weight and evaluation and also weighted averages in each group were calculated.

4. RESEARCH OBJECT

The research steelwork is the largest and most modern heavy plates producer and steel structures in Poland. In the company the Quality Management System according to ISO 9001: 2008 for the production of plates, slabs, precast and steel structures was introduced. It is one of the larger companies in the region that, in the same time, is the largest employer of the city.

Plates are manufactured in a reversing four-high mill from continuously casted slabs coming from own steel melted in an electric arc converter and subjected to secondary metallurgy treatment in a ladle furnace and vacuum degasser. The plate mill is the biggest department of the research steelwork, in which it is possible to produce plates according to individual customer requirements. The last modernization of the mill took place in 2008, after which production capacity can reach more than 1 million tons per year. The rolling mill has a 70% Polish market share and 5% European market share [13].

5. RESULTS

Tables 1-4 present the classification of each group of factors having an influence on the strategic position of the research company.

The SWOT analysis allows determining the strategic position of the research company. The strategy that should be taken by this company is shown as the point in the coordinate system (**Figure 1**). To determine the coordinates of the point, the following calculation was made:

$$Y = | \text{strengths} | - | \text{weaknesses} | = 3.22 - 3.8 = -0.58 \text{ and } X = | \text{opportunities} | - | \text{threats} | = 3.75 - 3.35 = 0.4$$

Table 1 Classification of strengths of the research company [own study]

Element	Weight	Evaluation	Product
State of production machines	0.12	2	0.24
Used production technology	0.12	3	0.36
Products quality	0.12	3	0.36
Logistics supply chain	0.15	4	0.6
Experience and qualifications of personnel	0.15	4	0.6
Integrated management system	0.09	4	0.36
Excellent knowledge of industry	0.1	4	0.4
Regular customers	0.15	2	0.3
Weighted average			3.22

Table 2 Classification of weaknesses of the research company [own study]

Element	Weight	Evaluation	Product
Foreign capital of the company	0.1	5	0.5
High energy and logistics costs	0.15	3	0.45
High labor cost	0.15	4	0.6
Small investments in research and development	0.15	5	0.75
Small possibility of new product	0.15	4	0.6
Lack of advertising campaign	0.1	3	0.3
Bad internal communication	0.1	2	0.2
Bad motivation system	0.1	4	0.4
Weighted average			3.8

Table 3 Classification of opportunities of the research company [own study]

Element	Weight	Evaluation	Product
Market demand	0.15	4	0.6
New customers	0.15	2	0.3
Availability of information about best practices in human resources	0.05	3	0.15
New advanced production and information technologies	0.2	5	1
A large number of young, skilled people in the labour market	0.05	4	0.2
Growing economy	0.15	4	0.6
Decrease in fuel prices and transportation costs	0.15	4	0.6
EU funds	0.1	3	0.3
Weighted average			3.75

Table 4 Classification of threats of the research company [own study]

Element	Weight	Evaluation	Product
Big competition	0.25	5	1.25
Fluctuating prices of raw materials	0.15	3	0.45
Unemployment	0.05	2	0.1
Inflation	0.15	1	0.15
Restricted lows	0.1	2	0.2
Decrease in rate of Polish zloty	0.15	4	0.6
Political changes in Poland	0.15	4	0.6
Weighted average			3.35

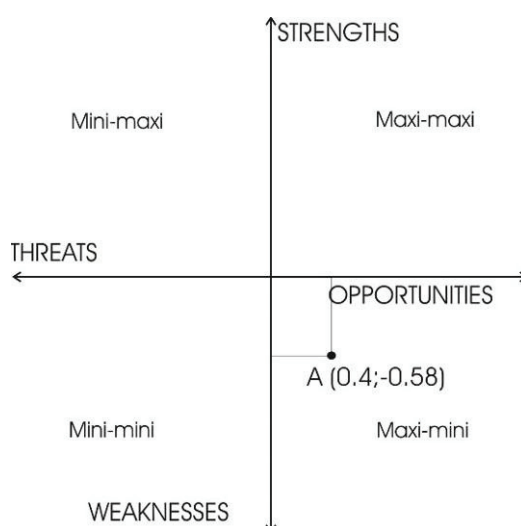


Figure 1 Strategic position of the research company [own study]

The SWOT analysis carried out in the paper let determine the strategic position of the research company. From Figure X and determined point A it results that the company was ranked in the sector maxi-mini strategy, it means conservative strategies. In the research company, weaknesses predominate over the strengths and the opportunities over the threats. The strategy of the company should aim o improve the condition of the machinery and technology. Regular customers are also very important because those customers can bring

profits for the company. However, it should be noted, that the majority of this strategy is not large, as evidenced by the coordinates of the point A (0.4;-0.58).

The most important strengths of the company were following experience and qualifications of personnel, as well as logistics supply chain. It is the human resources which has large influence on the success of the company.

Unfortunately there were also many weaknesses of the research metal company found. The most important weakness was small investments in research and development. The other important weaknesses were high labor cost and small possibility of new product. Unfortunately, in the last period there were no major investments in machinery or the purchase of new technology due to poor revenues of the company. Due to the nature of the industry it is not possible to develop new products.

The most important opportunities which should be used by the research company, were growing economy, decrease in fuel prices and transportation costs. Economic growth resulted in improvement of the demand for various products and in construction industries, which drives the increase in demand also for the products of the steel sector.

There are many threats on the market for the research company. First of all these are political changes in Poland and decrease in rate of Polish zloty caused probably by this changes. After the elections in October 2015, the Polish government has been completely changed and new laws of this government resulted in disturbance in contacts with foreign countries. And this is reflected in the large depreciation of the Polish zloty.

6. CONCLUSION

In the paper the SWOT analysis in the chosen metallurgical company was conducted. This analysis aimed to determine the strategic position of this company, and the same time to determinate the directions of future activities of the company. The strengths of the company and its opportunities were identified but also weaknesses and threats. From this analysis it results that the company was ranked in the sector maxi-mini strategy, it means conservative strategies. The results of this paper will be used by managers of the research company. They will be able to identify right actions of the company according to the indicated strategic position.

It should be pointed out that the point in the Cartesian coordinate system is very close to the middle of the coordinate. The company's situation is actually very difficult to define. The point located near the center of the Cartesian coordinate system may, in fact, in a short time, under the influence of changes in the number of factors involved, be displaced and at the same time the strategic situation of the company can also change. Therefore, this analysis in the near future (in 1-2 year) will be repeated to see if the directions of the actions in the research company were well defined and that the strategic position of the company in some way changed.

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