SELECTED ASPECTS OF MARKETING MANAGEMENT OF METALLURGICAL COMPANIES

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Abstract

The sphere of activity of metallurgy companies is such a specific area, it is necessary to use selected aspects in the entire process of strategic management of these companies. This article examines the success of these companies in business markets with regard to the specific features of these markets, the use of specific marketing tools and the new trends in this area. The article uses especially the secondary research methods, the analysis of current data coming from relevant sources over the last 15 years, and the findings from individual personal interviews with the representatives of metallurgical companies. In terms of the used methodology, a detailed analysis of chain indicators has been evaluated as the most suitable. The summarization of the conclusions from the individual analyzed areas took advantage of the method of synthesis.

Keywords: marketing analysis, metallurgy firms, strategic management

1. INTRODUCTION

“There are three kinds of companies: those who make things happen, those who watching things happen, and those who wonder what’s happened."

Philip Kotler [1]

Today’s ever increasing competitive environment forces companies to think about their future success in the market much more intensively than before. At present, companies can no more determine what they will produce and at what price. Customer requirements have become a key aspect. The world trade has currently been associated with phenomena such as globalization and internationalization. The consequences of this trend include the increasing importance of international economic relations. The process of international integration leads to a gradual specialization of the individual countries, based on the global division of labour and the availability of the individual factors influencing production and, as a result of that, business relations as well. The outcome is a steadily increasing share of trade on the value of final production (GDP). The technological development, the abolition of trade barriers, the changes that affect the development of behaviour of companies and many other innovations and trends strengthen the role of world trade. [2]

The aim of the article is to verify the theoretical and methodological foundations of the application of marketing management trends in metallurgical companies. The article mainly uses the secondary research methods, the analysis of current data coming from relevant sources over the last 15 years (years 1996-2011). The findings from the individual personal interviews with the representatives of metallurgical companies have significantly helped us during the preliminary analysis stage in which we were verifying the working hypothesis of the research in order to analyze the relevant data and to come to corresponding outputs and conclusions.
2. SELECTED BRANCH SPECIFIC FEATURES

In order to define the specific aspects of marketing management in metallurgical companies, we must first focus on the analysis of the actual development changes in the market environment and the trends, which have currently been taking place in the dynamic business market environment. More and more attention is given to (former) developing countries in the east, where all sectors of the economy, or at least a majority of them, show strong growth. The main characteristic features include the shortage of raw materials, low steel consumption per capita, low operating costs, aggressive development of GDP, and they are based on the increasing investments into fixed assets. [3]

Metallurgical sector in the European markets occupies a different position. Here, it is facing a number of unprecedented challenges, while the market indicators and forecasts show that it is necessary to make a number of fundamental changes. We are referring to the current worldwide trends of accelerated processes of globalization tendencies. The key role in this stage is, above all, played by the massive rise of electronics, IT technologies and Internet utilization, leading to the interconnection of virtually the whole world. This process has brought two major global changes: the world is getting smaller and smaller (reduction of transport costs, faster and cheaper global communications) and competitiveness is increasing (improving logistics processes enable companies to cover a much larger market more quickly and more cheaply). The best possible satisfaction of the customer needs has become a key aspect of the current development in all markets. This raises the need for application of such corporate marketing tools, which will evolve and vary depending on who their target customer is and which market they take place in. [4]

There has been a continuing trend in the steel industry to create large companies, whose successful counterparts are smaller, often regionally oriented companies, and a large part of steel producers, regardless of their size, significantly diversifies. A challenging position in the market brings entirely new approaches to influencing the use of steel in virtually all regions with steel production. However, the globalization of the steel trade, the internationalization of the steel industry, the unbalanced distribution of regional steel production and steel demand cause substantial problems reflected in excessive production capacity expressed in tens of millions of tons of steel production in some regions. Nevertheless, the outlook for most consumers of steel is relatively favourable. Apparent steel consumption in the EU increased by 7.2% in 2011. The world production in 2012 increased by 1.2%, which in absolute figures amounted to 1 548 million tons. The growth was driven especially by Asia and North America, while the European Union and South American production decreased. [5]

3. ANALYSIS OF SELECTED INDICATORS OF METALLURGY SECTOR

Only strong and competitive economy can overcome the economic crisis without destructive consequences. In our conditions, the essential element of strong economy is represented by healthy steel industry, while it can be said that a long-term survival strategy of steel industry in the Czech Republic rests on stabilization of the possibility to supply its products within the home country. There is a rule saying that steel industry can develop if the economy shows a constant GDP growth of at least 3%. The steel industry may therefore serve as a kind of indicator of the competitiveness and strength of the given economy. Compared to the world, the Czech Republic has a different utilization of produced steel. The highest volume of steel in the world goes into building industry, transportation and engineering. In our country, however, the first place in the consumption of steel is occupied by metal working industry and engineering industry, followed by automotive industry and only then the building industry. [5]

We will use the analysis of the indicators in the Czech Republic, such as GDP, revenues from sales of own products and services of industrial type (production of basic metals, metallurgical processing; foundry industry), the production of crude steel and the overall production of steel industry in order to more clearly document our partial conclusions. The annual indexes of the individual indicators in current prices showing
the increase or decrease of an indicator between two consecutive years have been selected for comparison of the chosen indicators. The outcomes of the analysis are shown using line and boxplot graphs.

Boxplot graphs work with numerical quartile statistics. A box in the graph determines the distribution of data and it is defined by the first and the third quartile. The line inside shows the second quartile (median). If the measured values of the individual cases are close to each other, the ends of the antenna leading upwards and downwards represent the maximum and minimum measured individual values. However, if there are significantly different individual cases during the measurement, these values will be presented in the graph separately as circles (outlying cases) or asterisks (extreme cases). In a group boxplot graph: [6]

- the lower one box is in comparison with another one, the more likely the given indicator will show similar increments (and vice versa);
- the lower the position of the box is in comparison with another one, the more likely the given indicator will show lower increments (and vice versa).

Minimum ($x_{\min}^*$) a maximum ($x_{\max}^*$) from outlying values: $x_{\max}^* = \max_{x \in X} \{x; x \leq x_{75} + 1,5* dk\}$

Outlying values - outliers ($x_0$): $x_0 \in (x_{25} - 3 * dk; x_{25} - 1,5 * dk) \cup (x_{75} + 1,5 * dk; x_{75} + 3 * dk)$

Extreme values ($x_{ex}$): $x_{ex} \in (-\infty; x_{25} - 3 * dk) \cup (x_{75} + 3 * dk; \infty)$

![Fig. 1 Annual increments in the CR (1996-2011)](image1)
Source: own data processing [5, 7]

![Fig. 2 Annual increments in the CR (2001-2011)](image2)
Source: own data processing [5, 7]
The line graphs clearly show that the increments of the indicators "crude steel production" and "overall steel industry production" are almost identical each year. The comparison of the indicators of GDP and sales revenue of own products and services of industrial type (production of basic metals, metallurgical processing; foundry industry) also show certain similarities in the individual years. The task of the line graphs was mainly to illustrate the trends. In the case of boxplot graphs, we were trying to find an answer to the question of how many % of the measured values appeared together in the individual boxes, or in the overall range of the boxes even with the "antennas". You can see that the individual boxes in both graphs overlap differently and therefore the overall production of the steel industry indicates greater resemblance to GDP than the sales revenues of own products and services of industrial type (production of basic metals, metallurgical processing; foundry industry) to GDP. However, both cases show strong conformity of each pair, always at least in 25% of the "middle" cases, according to the logic of arrangement of the individual increments.

Our analysis has therefore verified the claim that steel production is closely related to the value of GDP, and that steel industry is an indicator of the level of development of the given society.

4. RISK FACTORS OF THE DEVELOPMENT OF METALLURGY INDUSTRY

New risks keep emerging in world markets in connection with the dynamic development of metallurgy, the problematic economic situation, the long-term financial instability and other negative factors. These factors are mostly caused by the interferences of governments in the market economy. The most important ones include especially protectionism, subsidies and ecological focus of production. [8]

The recent decades have witnessed opening of the markets, removing trade barriers, but the distortion of competition by non-transparent subsidy policy and protectionism in various areas still persist. They still exist, for example, in different standards related to environment, direct financial support, tax exemptions, support in the form of loans, free land and infrastructure, subsidized energy, favouritism in the allocation of tenders and many other non-standard practices. [9] These factors undermine the competitiveness of other producers and ultimately cause the loss of thousands of jobs and billions of dollars of investments, invested into production and technologies. Metallurgical industry shows high energy demands and it is very sensitive to changes in
input raw material prices. They changed especially in 2008, followed by the fall in production, and in 2010, after the suppliers of iron ore have swapped from annual to quarterly contracts.

We can identify a number of negative factors in the world economy within the metallurgy sector:

- sudden deceleration of real demand;
- deceleration of economics in BRIC countries;
- huge decrease of worldwide financial strength of states, banks, industry and families;
- decreasing confidence index
- currency instability of Euro, Euro losing to US dollar;
- risk of stagflation;
- hard competition caused by overlapping roles of steel companies, service centres and wholesalers.

The world steel production will continue to grow in 2013, despite the gloomy economic forecasts. The Asian markets, primarily China and parts of South America, will continue to work as the stabilizing elements in global economic development. The year 2012 was characterized mainly by the efforts to stabilize the public finances in the USA and the developed economics in Europe. The emerging markets are expected to continue to grow much faster than the developed countries. [10]

Crisis communication is more commonly applied during the period of economic crisis; effective approach to crisis communication is typically characterized by an emphasis on prevention (early warning systems) and the pre-crisis communication, which aims at averting the imminent risk of communication crisis, even before its outbreak. The IT Services support key business processes and for this reason, it is necessary to ensure their availability with correspondence of business processes requirements. [11]

5. MODERN TRENDS IN MANAGEMENT OF METALLURGY COMPANIES

The tense economic situation forces metallurgical enterprises to change their attitude towards strategic planning from "what we are going to produce and at what price" to "how to satisfy our customers' needs." However, first of all we must identify these needs. New possibilities of utilization of marketing tools and efficient forms of business integration up to the modern methods of production cost savings are becoming critical for the future success of these enterprises.

According to a research conducted by the Institute for Strategic Change and a consulting company Accenture, the following factors were pinpointed as the key aspects of company development:

- global thinking - conversion within the sector (fusion), between sectors - production chains linking
- achieving competitive advantages - positive communication
- acceptance of changes - change is an opportunity not a threat, flexibility and innovation are essential
- anticipating opportunities - studying and forecasting of future trends
- creating a shared vision - all employees must be involved in the company vision and their particular tasks to fulfil the vision must be identified
- concern for customer satisfaction - identifying and meeting customer needs
- respecting values - act honestly and ethically
Because of ongoing globalization, however, they have less time to adjust to the new market reality and, in addition to that, a lot of companies are exposed to international competition, so they have to take part whether they want to or not.

The basic factors of management of metallurgy companies were summarized at the steel industry forum EUROMETAL by a board member of Voestalpine steel division, P. Ackerlauer: [5]

- Steel can’t be replaced by any material in terms of its functionality and the wide variety of applications
- Steel consumption in Europe will not reach its pre-crisis level of sales in the next few years
- The steel industry in Europe will survive in this area only with highly innovative products in high quality markets
- Europe does very little to prevent relocation of industrial production
- Europe must remain consistent in order to survive in the global competitive environment

European producers of steel are - on one hand - highly dependent on imports of raw materials and energies, on the other hand, they must meet high social and environmental standards. As a result of that, the production of ordinary commodities in Europe is no longer economically efficient. In the longer term, the relocation of industrial activities to emerging markets could lead to further de-industrialization and consequently to a lower standard of living.

The tense economic situation is forcing metallurgy enterprises to change their attitude towards strategic management and to exploit new opportunities of global marketing and management:

1) Market dynamics - Companies must cope with the growing requirements in terms of product or service range, shortening product life cycle, growing requirements regarding the complexity of the given product or service, but also with the requirements for shortening the delivery times. A major role is played by effective planning. Company production planning at operational level is an important part of business process modelling. [12]

2) Relational Marketing - the new role of suppliers and customers - The highest priority is a satisfied customer. You need to obtain as much information about the customer as you can and to communicate with him, you need to win the loyalty of your customers to their business partner, etc. There are tools serving this purpose, such as Customer Relationship Management (CRM) and Customer Value Management (CVM).

3) Innovation of supply - According to the requirements of the customers, the important factors include for example ecological focus of products (green product). Another option can be represented by a product of new level, which gives the company the necessary competitive advantage.

4) Strategies focused on gaining a competitive advantage – On an international scale, they include, for example, low price strategies and psychological aspects of supply.

5) Competing in the global market, new forms of communication and distribution - The new forms of communication include the Internet as an electronic medium of marketing and business offer. It also serves as an information source, or for virtual trading.

Thanks to globalization, companies have the following opportunities:

- extension of the relevant market area,
- the possibility to fill-in the niche market also internationally,
- gaining access to inaccessible markets (E-business - addressing customer on a global scale and significant cost reduction),
opportunities for the so-called BORN GLOBAL enterprises (international, born for globalization) producing innovative, state-of-the-art technologies and realizing sophisticated aggressive trade policy

opportunities for small and medium-size companies thanks to their flexibility and cost rationality,

CONCLUSION

In the nearest future, the steel industry must intensify the efforts focused on maintaining the continuity in the development of the production and sales channels and the methods applied for this purpose in order to learn the approaches that have already been implemented and will be promoted with more urgency in the future. They include adequate response of metallurgical company management to the processes of internationalization, globalization, creation of strategic alliances, mastering and practice of aggressive marketing tools and, of course, the whole complex of restructuring and modernisation of product and technological structure, including the rationalization of labour consumption. At present, companies must face the challenges of the market, including the increasing power of the global competitors, the low rate of economic growth, the international market developing in the direction of greater protectionism, the foreign companies using government grants to sell at lower prices or the rise of micro-markets requiring tailor-made marketing, etc. The most important of all the factors is the fact that the extent of recovery of the economy together with the increase of domestic steel consumption will be the crucial prerequisites for further development of steel industry in the Czech Republic.

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