Abstract

One of the main components in a motor vehicle, without which the vehicle can not be started, nor be in operation, is the battery, or that in the academic literature is called, a starter battery or start - light - ignition battery (SLI), in Croatia usually called acumulator. The subject of this paper is the development of battery industry, while the paper focuses on the only company of this industry in Croatia, the company Munja, Inc.. The main goal of this paper is to analyze strengths, weaknesses, opportunities and threats of battery industry. To achieve this goal, the paper argues the possibilities and directions of development of battery industry and on this basis analyzes the strengths, weaknesses, opportunities and threats of company Munja, Inc.

JEL Classification: D41, L11, L21

Keywords: battery industry, competitiveness, Republic of Croatia, SWOT analysis

1. Introduction

Analysis of strengths, weaknesses, opportunities and threats, or SWOT analysis is a popular tool that can be useful for managers in developing strategies. SWOT is an acronym of the four factors, and these are strengths, weaknesses, opportunities and threats. Lack of SWOT analysis is that it is a subjective method, but it is nevertheless useful, because it is used as a good tool for identifying strengths and weaknesses of the economic entity and to identify opportunities and threats in the environment.

SWOT analysis assumes that each economic entity must take into account the internal and external opportunities while selecting the strategy. SWOT matrix sys-
tematically displayed internal strengths and weaknesses of the economic entity and the external opportunities and threats that are present in its environment.

Starter batteries and traction batteries are used in cars, tractors, trucks, boats, etc., and the same goes with the stationary batteries which energized stationary objects. Therefore, the use of these products indicates the market specifications, since that, usually, not the ultimate consumer is the one who is in the market relation with the manufacturer, but almost there is always someone among them that connects them. The aim of this paper is to argue the strengths, weaknesses, opportunities and threats of battery industry in the Republic of Croatia, and point to directions for the development of this industry.

This paper consists of the following parts. After the introduction there is an overview of battery market. Furthermore, a review of methodology is shown in third section. The fourth part of the paper provides an overview of the SWOT analysis of companies in the battery industry. The fifth part of the paper summarizes the SWOT analysis, and finally, the sixth part of the papershows concluding remarks.

2. Battery market overview

Battery producers followed the development of vehicle production (cars and commercial vehicles) in the world. Until World War II production was significantly “slower” in relation to the period after the war, and especially toward the end of the 20th and beginning of 21st century, when recording its enormous expansion.

Rapid development of the automotive industry increases the need for lead-acid batteries (all types of theese batteries are based on lead electrodes imersed into a sulfuric acid solution), and the development of telecommunications and IT industries stimulate more demand, development and production of various types of batteries. It is believed that the lead-acid batteries had one of the biggest global growth during the 20th century.

There is a limited number of vehicle manufacturers on the car producers market. Number of battery manufacturers, particularly accumulators, from a few dozen now moving at several thousand worldwide. The exact number of battery manufacturers is almost impossible to determine, because there are no accurate records and statistics, and it is very difficult, we would say impossible, to determine the exact number of produced and sold batteries (for some regions of the world where statistics exist is relatively easy, while in other regions, there are no basic data).
It is also significant that the process of globalization has led to the consolidation of companies – manufacturers of batteries and accumulators, in a way that large companies were taking over the smaller ones.

3. Methodology

The research problem is defined like an exploratory study and research techniques were used on past experience and analysis of selected cases (Marušić & Prebežec, 2004). The technique was selected on past experience, starting from the assumption that the usage of existing knowledge, experiences and ideas of people who are well informed about the battery market will gain insight into the issue of this paper. Rather than carry out a study on a large number of subjects, of which many of them does not have good insight into the battery market, we started conducting research on a sample of experts.

Based on the above approaches in-depth interviews were conducted with 12 respondents - managers familiar with the market in and out of the battery market in Croatia, particularly because, as we said, in Croatia there is no battery manufacturers. The interviews were conducted in the period from May 5th to June 30th 2012 year. In-depth interviews were conducted following the framework of this paper, but in conversation is used free discussion also, which led to some very interesting conclusions and information. Interlocutors are deliberately and intentionally chosen, because they are more familiar with the subject from other professionals, which allowed enactment conclusions about the nature of phenomena.

Besides the research techniques of past experiences we used analysis of selected cases also, where the subject of the analysis was company Munja, Inc..

4. SWOT analysis of enterprise from battery industry

4.1. Strengths of enterprise from battery industry

The major strenght of company Munja, Inc. is that on the “sight” does not have the new technology in the production of batteries that would dislodge it - replace the current lead-acid batteries for various purposes, nearly one billion cars in the world and 99.99% of the cars in Croatia with internal combustion engines will still require a battery for years in the present form or with modifications.

It is about the only Croatian manufacturer of accumulators, which is also a local manufacturer. This fact allows the company to offer customers low transport costs,
which significantly affect the final cost of the product. At the same time, due to localized businesses and a strong identification with the Croatian market, brand recognition is achieved, with the name Munja, Inc. - the company has a great tradition, of even 92 years, which further ensures familiarity with the market.

An important strength of the enterprise is flexibility also, which allow the company an adaption to small production batches, relatively small number of workers make small fixed costs of labor and economical production. The company constantly invests in human resources through education of staff and continually invests in production capacity, which is being upgraded and expanded at the same time.

None of the above would not have been possible without two very important items for every industry, and in particular battery industry: environmental protection and high quality standards.

The company management has recognized these two strategic forces, and by the highest standards of environmental protection and the implementation of ISO standards, provides a platform for further growth in the market.

4.2. Weaknesses of enterprise from battery industry

The major weakness of enterprise Munja, Inc. is that there is no OEM (original equipment of the manufacturer), company has no exclusive contract with any of the car manufacturers. Specifically, countries that have their own car industry generally have battery industry, and give priority to their own industry. Without first installing there are no large series in production, which means increase of production costs, and discontinuous production leads to a loss of quality in certain manufacturing processes. Absence of “great series” in production reduces capacity and has impact on quality, products, and to the increasing price of raw materials in its procurement. It also affects the continuity of production and utilization of less profitable product lines, but also leads to lower productivity, increasing production costs and energy consumption.

Local character of the company Munja, Inc. is also the weakness of the company, because it does not provide global familiarity and makes difficult access to the global market.

Compared to the competition, the production volume is small, which does not exploit economies of scale to a sufficient extent.
Croatia is also still relatively underdeveloped country, and the automotive industry is the industry associated with higher purchasing power, and the perception that is associated with Croatia as a tourist and agricultural land are also weaknesses of company Munja, Inc.

In addition, authorized dealers, distributors and service cars prefer original parts, and in that way give advantage their manufacturers, and to Munja, Inc. it is harder to reach to the customers when replacing the battery.

“Small series of production “ preventing the existence of supplies and impede rapid response and adjustment to the requirements of customers. There is also a weak self-consciousness of Croatian people and the reluctance of domestic product.

4.3. Opportunities of enterprise from battery industry

The major opportunity of company Munja, Inc. would be the possibility of entering the OEM, ie. the possibility of concluding an exclusive contract with car factory and battery installation in process of car production.

Entry of Croatia to the European Union in 2013, will allow sale in this market, which is becoming the “home market” and the opportunity to enter the OEM.

Using the projects of the European Union, particularly in the area of environmental protection would be possible to run some of the important projects related to environmental protection.

Introducing, gathering, processing and export of used batteries, which will be allowed upon the Croatian entry to the European Union, would reduce the price of the basic raw material for the production.

The Croatian market has significant capacity to increase the proportion of the number of batteries of Munja in battery sales in the Croatian market, the nearby Croatian market (ex-Yugoslavia), in which the company Munja, Inc. is traditionally present.

Building a facility to recycle old batteries - smelter. Construction of the smelter for recycling old batteries is a significant opportunity for the company, as the world gets 35% of raw materials by recycling. With these activities the company increases its social responsibility, has an opportunity in the direction of improving brand awareness and the potential use of EU funds to finance the construction of the smelter.
The introduction of industrial batteries program, since there is already a machinery for that, and put in function, would expand the supply of Munja, Inc. on the market. Introduction of calcium technology (Ca Technology) will modernize the production of batteries, and put the product even closer to the requirements of customers.

Opportunities of company Munja, Inc. also is coming from the new market trend. Usage of solar energy, ie. solar batteries are the new potential market. As a new market appears nautical tourism which will increase the demand for batteries for boats, as part of the needs and trends of nautical tourism. Important opportunities are related to the change in the exchange rate, ie. the rate may decline, which would strengthen price competitiveness of enterprises.

4.4. Threats of enterprise from battery industry

Republic of Croatia will soon be a part of European Union, also meaning a threat to Munja, Inc., increasing the number of competitors on Croatian market. In short period of time, Munja, Inc. will be encountered with very strong competition already experienced in winning new markets and with global character. At the same time, Munja, Inc. will have a possibility to expand on the markets of European Union, already filled with popular brands with long time tradition. Anticipation of slow growth will be very important in years 2013, 2014 and 2015, as well as insuring the existence on home market and growth on the markets abroad.

Entering the European Union, Croatia will lose the CEFTA markets, initiating tariffs on Croatian products that are already recognised and traditionally present on those markets. This means a huge threat to Munja, Inc. increasing the price of its products on already owned markets. Currency Politics that benefits importers is also a big threat to producing corporations. Increasing the value of energy generating products in Republic of Croatia increases the expense of production.

Also, a major threat is the fact that in Croatia, there are no mines of lead, as the main source of raw materials, as well as recycling plants for old batteries, and all the raw materials have to be imported from abroad, which increases the cost of the product and thus reduce the price competitiveness.

At the same time, Republic of Croatia has no industrial strategy, but its market is completely open to foreign competitors.
5. SWOT analysis summary of enterprise from battery industry

The work is largely focused on the development of Croatian battery industry and its only representative, company Munja, Inc.. The origins of this business company infancy correlate with the automotive industry in general. Business of any company can not be considered isolated from the environment. Therefore, the business of company Munja, Inc. observed with regard to the development in the last century, but compared to other battery manufacturers, the two former common state, but also the world’s battery manufacturers.

Few activities in human history in such a short time has played such an important role and so changed the world and the human environment, such as the automotive industry has made.

The age-old human desire to move, experienced fully proven discovery devices that will call the engine, and by the invention of internal combustion engines, in the last decades of the nineteenth century, begins the era of motoring and motor sports.

Without automotive industry development of road networks is unimaginable, and therefore part of the construction industry also, while the number and type of vehicles (both cars and trucks and motor machines) determines the level of development of a country and the standard of its population. Intensive development of the automotive industry “dragged” behind it developing parts for the car (auto components), as well as machines for the automotive industry.

Picture 1. Shows major findings of SWOT analysis of company Munja, Inc., with a starting point in the development of strategic marketing model of company development.
Picture 1. SWOT analysis of enterprise Munja, Inc.

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<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>➢ No new technology in the world as a substitute for lead acid</td>
<td>➢ Factory has no exclusive contract with the manufacturer of the car; it is not in the OEM market</td>
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<tr>
<td>➢ The only Croatian producer of batteries</td>
<td>➢ Lack of domestic carmakers</td>
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<tr>
<td>➢ Local manufacturer, low transport costs</td>
<td>➢ The local character of the company; difficult access to the global market</td>
</tr>
<tr>
<td>➢ Recognizable name</td>
<td>➢ The smaller volume of production compared to the competition</td>
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<td>➢ The long tradition</td>
<td>➢ Lower utilization of economies of scale</td>
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<tr>
<td>➢ Flexibility with the ability to produce small series</td>
<td>➢ Perception of Croatia as a tourist and agricultural land</td>
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<tr>
<td>➢ Investing in human resources</td>
<td>➢ Weak self-consciousness of Croatian people, reluctance of domestic product</td>
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<td>➢ Investment in productive capacity</td>
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<tr>
<td>➢ Monitoring the highest environmental standards</td>
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<td>➢ Recognized the importance of quality (ISO standards)</td>
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<tr>
<th>Opportunities</th>
<th>Threats</th>
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<tr>
<td>➢ Possibility of entering the OEM</td>
<td>➢ Entry of Croatia into the European Union</td>
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<tr>
<td>➢ Increase Croatian market share</td>
<td>➢ Loss of the CEFTA market</td>
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<td>➢ Increase in region</td>
<td>➢ In Croatia no mines of lead</td>
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<tr>
<td>➢ Use of Solar Energy</td>
<td>➢ Lack of industrial strategy in the Republic of Croatia</td>
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<tr>
<td>➢ Nautical tourism</td>
<td>➢ Exchange rate policy which favors importers</td>
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<tr>
<td>➢ Expansion of industrial applications: Traction and stationary program</td>
<td>➢ The growth of energy prices in Croatia</td>
</tr>
<tr>
<td>➢ Moving to Ca Technology</td>
<td>➢ „Expensiveness “of financial assets</td>
</tr>
<tr>
<td>➢ Weakening exchange rate of Kuna</td>
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<tr>
<td>➢ Opening of the EU market after accession in June, 2013.</td>
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<tr>
<td>➢ Usage of EU projects</td>
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<tr>
<td>➢ Construction of the smelter for recycling old batteries</td>
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Source: Authors work

6. Conclusion

For this paper was selected company Munja, Inc. since this is the only Croatian company, as a manufacturer, which operates on battery market, so there is the
justification for such approach. Limitations of the research resulting from the used methodology. The conclusions of the study are based on past experiences, and an analysis of selected cases in the form of company Munja, Inc.. Research methods on past experiences was used in order to study focuses on a small number of people whose experiences are helpful for the subject of paper.

Despite these limitations, the results of paper may be considered relevant, because the survey includes a business partners of company Munja, Inc., managers outside Croatia, also employed at other battery manufacturers in other countries.

It can be concluded that the battery industry has a great potential in this area, and that the company Munja Inc., has shown great stamina and ability to survive in the hardest conditions. As a proactive approach to the strengths, weaknesses, threats and opportunities in the development of the company, it can be expected that Munja, Inc. will achieve even greater progress in the future. However, for these are the required concrete action in the Republic of Croatia, primarily through future strategy of industrial production, and exchange rate policy.

REFERENCE


