THE STRATEGIC DIAGNOSTIC OF THE AUTOMOTIVE INDUSTRY ENTERPRISES

Natalia STANISLAVSCAIA, student, Faculty of Exact, Economic and Environmental Sciences, Alecu Russo Balti State University Scientific Adviser: Maria OLEINIUC, PhD, Associate Professor

Rezumat: Atât pe arena mondială, cât și pe ceea națională, problema ecologizării are o importanță tot mai elocventă. Nivelul ecologic al țărilor este în strânsă legătură cu formele de producere aplicate în întreprinderi. După cum cunoaștem, nivelul ridicat al poluării aerului este cauzat de eliminarea gazelor naturale. Majoritatea concernelor mari care activează în industria automobilelor produc automobile care lucrează numai în bază de combustibili sau gaz natural. Autorul a utilizat metode științifice precum analiza și sinteza, inducția și deducția. În urma exercițiilor efectuate, autorul afirmă că metodele strategice aplicate în industria automobilelor include o prezentare generală și o vizualizare a diferențialului internațional care poate servi drept suport internațional la luarea deciziilor strategice de dezvoltare internațională a industriei analizate.

Cuvinte-cheie: *industria automobilelor, import, export, strategie, diagnosticare, analiză.*

1. Introduction

Outside the world arena, no matter how national it may be, the problem of ecology is acquiring more and more eloquent significance. The ecological level of countries is closely related to the forms of production used in enterprises. As we know, high levels of air pollution are due to the daily burning of fossil fuels and transport carbon emissions. Most large corporations in the automotive industry produce cars or natural gas. Article N_{2} 9 "Innovation and Industry Infrastructure" is based on the goals of sustainable development (ODD), the majority of companies in the automotive industry are reorienting their production. This reorientation is nothing more than an element of reengineering strategic enterprise management, and the main goal is to move from supplying cars with fuel and natural gas to electricity. One of the global companies that pays special attention to the production of new types of cars is the leading company Tesla. Some competing companies were just thinking of reorienting the production process, while Tesla was the first company that clearly declared itself on the market and showed by its example that it can be done efficiently.

The automobile market is a multibillion-dollar industry that covers almost all countries. The state of the new car market is one of the most objective indicators of

the level of development of the economy of individual states and the world economy as a whole.

The automotive industry has a significant impact on other sectors of the economy, as in the process of making a car, in addition to car assembly enterprises, a large number of industries from other industries are involved, and manufacturers of gasoline and oils, spare parts and components, maintenance centers, etc. work to ensure the operation of cars. In addition, cars are high-tech products, for the creation of which the latest achievements of science and technology are used. At the same time, the automotive industry not only uses existing scientific and technical developments, but also encourages the further development of science through targeted research.

2. Research Methods

In addition to the classical methods that are necessary for research, such as analysis and synthesis, induction and deduction, historical and local, in this study the author used some modern tools that are applied internationally: SWOT analysis, PESTLE analysis, BCG. method. Information support of the research is presented by statistical data "Auto statistics" [1].

3. Analysis and Interpretation of Results

The development of the automotive market has led to the emergence of classifications of cars according to various parameters: by class, by model, by body type, by the number of horsepower, etc. In addition, to analyze the development of the automotive market around the world, it is worth taking into account the classification of automotive markets.

The automotive market is usually divided into four segments: passenger cars, LCVs, trucks and buses (Figure 1).



Fig. 1. The Distribution of Global Automobile Production by Segment [1]

Paying attention to this figure, we can see that the ratio of world production of cars of different segments is uneven, which is associated with social needs. Passenger cars predominate with a significant advantage, occupying more than 70% of the market. Next are the LCV cars with a 25% market share. Trucks and buses account for 4.3% and 0.7% [1].

Since the market is dominated by passenger cars, I want to pay attention to the fact that they can be classified by body type (sedan, crossover, SUV), by size (A, B, C, D, E-class ("upper middle class": length - $4.8 \sim 5.0$ m, and width more than

1.8 m); F-class). In addition, passenger cars can be divided by price criteria: budget, mid-range and premium.

It is worth paying attention to the state of the automotive market in recent years regarding the dynamics of production and sales of cars around the world (Figure 2).





According to data published on the official website of statistics [1], production in the automotive market predominantly has a positive trend until 2019. The highest rates are in 2017-2018. A sharp decline is noticeable in 2020, which is associated with the global economic crisis, caused by the pandemic. The automotive markets of all countries suffered heavy losses. The automotive industry plays an important role in the economy, both of an individual country and the world as a whole. Accordingly, significant changes taking place in the world are reflected in the production and sales of cars.

The leading countries are: China, USA, Japan, Germany, India, France, etc. (Figure 3). They have occupied a leading position in the automotive market for a long time. This can be seen in more detail in Figure 3. These statistics are taken for the last 2020 [1].



Fig. 3. The Global Leaders [1]

And if we talk about the best-selling car brands (Figure 4), you can see in Figure 4 that in the first half of 2020, Toyota, having sold 3.45 million vehicles (-21.4%), reached 10.6% of the global market share.



Fig. 4. The Most Sold Car Brands for 2020 [1]

The automotive industry is constantly evolving because the Internet, IT, new technologies are the engine of social life. In order to gain their market share, market leaders have to create new segments and invest in development in order to be competitive. The Internet allows society to freely receive information about global events in the world, thus, in recent years, interest in rational consumption and environmental problems has grown. The topic of ecology has taken over many industries, from organic food to electric cars. Tesla is one of the brightest companies for the development and sale of electric cars.

Tesla is the leader in the electric car market, but many leaders of the automotive industry manage to catch up with Tesla, for example Volkswagen, and the Chinese electric car market is developing at a high speed: NIO, BYD. In 2020, Tesla produced 509.7 thousand cars and managed to sell 499 550 cars, follows from the automaker's report [3].

A more accurate position of Tesla in the global electric car market can be analyzed using the BCG matrix. The purpose of this matrix is to analyze the relevance of the company's products, depending on the growth of the market for this product and its share.



Fig. 5. BCG Matrix of automotive industry

Using the BCG matrix data (Figure 5), you can see that Tesla is in the "Stars" square. It is a leader in the fast-growing industry. The company should support and

strengthen this type of business, and therefore not reduce, and, possibly, increase investments.

Then you can pay attention to "Difficult children", here is the Chinese company NIO, which occupies a weak position in the market. This company requires a high level of investment in order to grow in line with the market and strengthen the product's position in the market.

It is important that "Cash cow" are the leaders in the automotive market, but the production of electric cars is a completely new direction that requires a lot of investment.

When a business line enters this cell of the BCG matrix, the company must decide whether there are now sufficient resources for the development of the product in this market (in this case: investments are directed to the development of know-ledge and key advantages of the product, to an intensive increase in market share).

And the last is the "Dog" cell. Here is one of the brightest sharks in the market - Ford. It is not for nothing that they occupy this place in the matrix, since electric cars bring little profit and are unpromising for the company.

Based on the results of the BCG matrix, it can be concluded that Tesla is the leading company in the electric car market. However, there are a number of special signs that slow down development. This can be explored in more detail using PEST analysis (Figure 6). Consider six important factors that can positively or negatively affect the development of a company and the industry in general.

Table 1

Influencing Factors	The degree of influence
Political	very strong influence
Economic	very strong influence
Sociological	very strong influence
Technological	very strong influence
Legal	very strong influence
Environmental	very strong influence

PESTLE Analysis of Tesla inc.

The strong political influence is an important factor. Tesla is dependent on the political relationship between the United States and China. Any changes in foreign government taxes, rules for permits for import and export, customs rules, tariffs – all this can contribute to the rapid growth of the company, or become a big obstacle. At the moment, the most favorable influence is exerted by the law on environmental protection.

In addition, the economic factor has a strong influence on the Tesla company. First, the economic growth in the energy sector, an important role is played by the increase in the cost of using cars due to the increase in the price of fuel.

This is why the demand for more fuel efficient cars is greater than before. If you look at the data in Chart 1, which shows the number of cars sold over the past five years, you can see a sharp drop in 2020. This is due to the global situation - the COVID-19 pandemic. The pandemic has disrupted stability not only in Tesla's company, it has affected all branches of global production.

The social factor is no less influential than political and economic events. Because the idea of a good future is of concern to every person, and ecology influences this. Electric vehicles are not only better for the environment, but they are also cheaper. If ecology has become not only a good idea, but also a fashionable movement, we can safely say that an electric car raises social status.

The technological factor is Tesla's strength, since this factor makes it possible to maintain advantages in the market: auto control, maps, remote control, etc.

The legal factor overlaps with what was said above. Enacted green laws, such as a carbon tax, are putting favorable pressure on the purchase of electric vehicles. But the franchise law in the United States protects car dealers, but creates problems for Tesla.

Some states have temporarily blocked Tesla sales directly to consumers. This has a detrimental effect on profits, since the presence of a representative office implies high costs and losses in profits.

The last factor I will analyze is the environment, which is currently the engine of Tesla's marketing strategy.

One of Tesla's main goals is to reduce greenhouse gas emissions by curbing the two main producers of greenhouse gases, that is, power generation and transportation. Thanks to sales to date, Tesla has been able to cut emissions by more than four metric tons.

Social interests, the economic crisis, the political situation in the world can lead to global changes in our life, and perhaps in tens of years the Tesla company's motto will become a reality: "We will not stop until there are only electric cars on the roads." [3].

For more accurate conclusions about the future of the company, and therefore ours, I want to demonstrate the results of the SWOT analysis (Figure 7).



Fig. 7. SWOT Analysis of Tesla inc.

It is important to remember the capabilities of the company. Tesla is now winning, as fuel prices are constantly rising. As well as IT, new technologies are the engines of a progressive future.

Do not forget about the threats, since with the growth of the adopted green laws, interest in the environment, the interest of other leaders of the automotive market has grown to take positions in the production of a new segment.

China is already on the heels of Tesla. Tesla is already losing in terms of production. Most importantly, Tesla needs to prove that their electric vehicles are safe.

4. Conclusions

In conclusion, I would like to note that the development of the automotive industry is an important indicator of the state of the economy. The automotive market is diverse. The countries with the most developed car markets are China, USA, Japan, Germany and India. Moreover, they are leaders in both the production and consumption of cars. Countries have held these positions for many years. 50% of the market is concentrated in the hands of five leading companies: Volkswagen Group, Toyota Group, Renault-Nissan Alliance, Hyundai-Kia, General Motors.

It is worth noting that the world is changing every day. These changes are influenced by both positive and negative events. For example, the 2020 pandemic does not yet provide a clear picture of the future, how it will turn out in a few years. We already notice in early 2021 a detrimental impact on various industries.

It is worth noting the changes in society for the better. We have become more prudent about our consumption, about our future. Tesla is one of the few companies that not only tries to find life on another planet, but also tries to change life for the better here with its production.

Based on the results of the various analysis methods outlined above, it can be noted that Tesla's electric vehicles are one of the big steps forward. People are interested in knowingly using an electric car. The great interest of countries and the laws they have adopted play an important role.

Bibliography:

- 1. Auto statistics. Disponibil: [Auto.versity/statistics/sales/]. Accesat: [26.03.2021]
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934. Online. Disponibil: [https://www.annualreports.com/ HostedData/ AnnualReports/PDF/NASDAQ_TSLA_2019.pdf]. Accesat: [26.03.2021]
- 3. Official website of the company Tesla. Disponibil: [https://www.tesla.com/]. Accesat: [26.03.2021]