

Swot the Pest Analysis of the Company Bayer AG

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Abstract

Abstract: The paper will outline the basic SWOT and PEST analysis features of the Bayer-AG company from Leverkusen. In this paper, we will present the strengths and opportunities, as well as the weaknesses and threats of the mentioned company. The Bayer AG demonstrates its strength through its strong business relationship and focus on research and development for product improvement. All human resources and financial flow management are well utilized. The paper also deals with the political and technological environment in which the company is located and how it affects the business strategy.

Keywords: Bayer AG, SWOT, PEST analysis.

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INTRODUCTION

The aim of this paper is to present the SWOT and PEST analysis of the leading German pharmaceutical and chemical company Bayer AG based in Leverkusen. The idea behind the company's leadership is "science for a better life". The first product of Bayer AG is acetylsalicylic acid, which today is the main ingredient of the famous Aspirin product. Bayer is a globally recognized innovation company whose main production areas are human and veterinary pharmaceuticals, and agricultural and biotechnological products. The structure of the company consists of three departments: Pharmaceuticals, Consumer Health, Crop Science and a separate Animal Health department [1] According to Interbrand's survey conducted in 2015, the value of the Bayer brand amounts to more than 6.3 billion euros [2]. In this work we will use the SWOT analysis to look at Bayer's strengths as well as the weaknesses and threats it faces. In the PEST analysis, we will also show the political, economic, social and technological environment that affects the successes and failures of the company.

Model and explanation of SWOT and PEST analysis

The SWOT analysis appeared in the early 70s of the 20th century, and Ken Andrews is considered as its creator. For its applicability in all companies, it quickly became a popular instrument that is considered as an inevitable situational analysis method. The definition of SWOT analysis can be read from the very name that makes the acronyms of the English terms strengths, weaknesses, opportunities and threats.

SWOT analysis shows the image and abilities of the company in the conditions of its environment. The application of SWOT analysis is not limited to the valuation of an enterprise, but is used as a method for self-assessment of managers, teams, projects, functions or individual products [3]. In SWOT analysis we recognize internal and external elements. Internal elements consider strengths and weaknesses, while under external elements we mean opportunities and threats. The first step of the SWOT analysis is to identify the main strengths and weaknesses of companies ranked by relevance and identify the major opportunities and threats to the likelihood of their appearance. BY the strength of an enterprise it is understood what the company owns, and leads to the increase in its competitiveness such as: high efficiency, quality products, high competence of people and such. Disadvantages are everything that diminishes the competitiveness of the company such as poor organizational culture and organizational processes, non-existent or bad contacts with customers and suppliers and such. Opportunities and threats are conditioned by external factors such as political, economic, social and technological factors. Occasions are all situations that positively stimulate the demand for products or services offered by the company, while threats are all adverse situations that can jeopardize the achievement, goals and health of the company. The result of an effective SWOT analysis is the identification of strategies with which we will use forces to reduce weaknesses and increase opportunities to minimize threats [3].

In addition to the current situation, the SWOT analysis can give an overview of the future situation if it is regularly updated. Although highly applicable and easy to use, SWOT analysis achieves its limitations in some situations. The Strategist may consider some elements irrelevant which ultimately can lead to serious strategic overtones. Likewise, SWOT analysis is often subjective since it is based on the assessment of one person or one team. An effective strategist will use it as a reference for further planning and analysis, rather than as a final strategic planning tool.

PEST analysis is close to SWOT analysis. PEST analysis is a relatively young environmental analysis method. Using the PEST analysis, it is possible to supplement the estimate of the external factors described in the SWOT analysis. It implies a process of analyzing information obtained by studying political and legal (P), economic (E), sociocultural, ecological and media (S) and technological-scientific (T) factors of

the business environment. The aim of the analysis is to identify and point out factors that have a significant impact on the current and future state of the company. In addition, it is important to recognize the dynamics of interaction between these factors in order to identify opportunities and threats for the enterprise. PEST analysis is applicable to all levels of enterprise strategy. When analyzing, it is important to use different sources of information such as: expert opinions, professional journal and book data, consulting materials and online sources. In Table 1 & 2, examples are given for each of the factors of analysis. The PEST analysis can be expanded by a more detailed analysis that involves the elements of the PEST analysis, including local, national and global dimensions, called LONGPEST analysis. It is useful for global and multinational companies dealing with various activities in multiple markets [5].

SWOT analysis of Bayer AG

Table-1: The strengths, weaknesses, threats and capabilities of Bayer AG

Strengths	Weaknesses
<ul style="list-style-type: none"> • Global reach and strong business connection • Strong focus on research and development for product improvement • Dedicated and coordinated human resources • Consistent financial performance with strong cash flows 	<ul style="list-style-type: none"> • Enforcement in court proceedings and patent disputes
Opportunities	Threats
<ul style="list-style-type: none"> • Growing interest for health especially by elderly people • Potential Business Alliance with Governments 	<ul style="list-style-type: none"> • Unfair patent laws • Sharp regulation of environmental issues

Strengths

Global reach and strong business connection

Bayer AG is present in 301 companies operating in 78 countries that make a strong and integrated distribution system. The company has more than 150 years of existence within which it has gained a leading role in health care and agriculture. The structure consists of three main branches: Pharmaceuticals, Consumer Health and Crop Science. In addition, it focuses on further departments such as Animal Health, which develops products and solutions for the prevention and treatment of domestic animal diseases.

Strong focus on research and development for product improvement

Bayer's R & D department has already brought exceptional products such as Aspirin, Rennie, Poncho and many more and continues in that direction. If we look at the costs of the 2016 annual report, Bayer is investing in worldwide research, for example North America 1081 million, Middle Europe and East Africa 3285 million, and Latin America with 71 million euros. In 2016, EUR 4.7 billion was spent on research and development, which is 9.2% more than in 2015.

Dedicated and coordinated human resources

Strong human resources of 115,200 people worldwide are responsible for a healthy work environment and a continual employee training program. All of this affects the performance enhancement. 65% of the company's workforce is specialized in different areas of science and technology, which has a strong focus on innovation and technology advancement.

Consistent financial performance with strong cash flows

The fact that earnings per share amount to 5.44 euros, which is more than the official dividend amounting to 2.7 euro, with their operative amounting to 9.98 million euros can be considered as a healthy sign [6].

Weaknesses

Enforcement in court proceedings and patent disputes

As an example of the company's weakness can be taken usage of a Bayer drug Lipobaya. One of the more familiar court proceedings started in 2002 when the connection between taking Lipobaya and more than a hundred deaths was discovered. Then Bayer stopped selling that drug, and lawsuits came from all over the world. In some patients, the preparation has caused

muscle fatigue, resulting in kidney failure. Later it became known that the use of Cerivastatin in combination with other cholesterol lowering agents caused the destruction of muscle tissue. In 2001 it was withdrawn from the markets of Europe, America and Japan. Up to today's Bayer counts major losses due to court proceedings [7].

Opportunities

Growing interest for health especially by elderly people

Bayer and similar companies often use the media to warn of health problems of the older population such as cardiovascular diseases, ultimately bringing greater sensitivity and selling medicines for health problems they are warning [8].

Potential Business Alliance with Governments

In its document "Code of Conduct for Responsible Lobbying", Bayer sets out rules on its engagement in political issues to ensure transparency of any kind of cooperation with representatives of political institutions. According to their mission, "Bayer: Science For A Better Life" offers the promise that science will address the major challenges of the contemporary world, which also depends on the political framework within which it operates. For this reason, it is important to participate in political debates as well as expressing political attitudes. Public political advocacy takes place transparently (Code of Conduct),

open and consistent with the Corporate Compliance Policy. The five areas in which their work depends most on the political framework include: innovation, social acceptance of technology and products, sustainable health systems, energy policy and environmental protection, and chemical regulation [9].

Threats

Unfair patent laws

A major challenge for pharmaceutical companies such as Bayer that covers their research and development costs by producing patent medicines themselves are governments of third countries that support local pharmaceutical companies to develop cheap generic medicines followed by unfavorable patent laws. The current average patent cycle of most drugs approved by the FDA is around 10 years, and most pharmaceutical patents are applied during the pre-clinical phase, with the 20-year patent protection period being unsuccessful.

Sharp regulation of environmental issues

From recently, the FDA and other similar bodies apply new stricter drug testing rules resulting from increased human rights activism around the world, in particular against tested drugs for people from poorer countries. This affects the cost structure of companies such as Bayer [6].

PEST analysis of Bayer AG

Table-2:

Political	Economical
<ul style="list-style-type: none"> Different interests of government and political parties Price regulation 	<ul style="list-style-type: none"> Strong GDP growth in new markets expenditure growth for health care
Social	Technological
<ul style="list-style-type: none"> Increased social interest for health questions 	<ul style="list-style-type: none"> Strengthening technology through research and development Networking and openness to innovations

Political

Political-economic factors are important because they affect the legal framework of business. The current political situation greatly influences the development of the market in the form of new laws and the availability of markets for domestic and foreign investors. A stable political environment leads to a positive economic and social situation. Technological and scientific factors are at the same time a variable that is constantly changing and therefore it needs to be continuously monitored. The aim of the analysis is to identify and point to the critical factors that significantly affect the present and future of the enterprise. In addition to the categorization of the factors, the task of PEST analysis is to determine their mutuality impacts and interactions in order to better recognize the opportunities and threats for the enterprise [10].

Bayer AG has its headquarters in Leverkusen, a town in the south of the German federal state of North Rhine-Westphalia. North Rhine-Westphalia, often abbreviated only: NRW, is a province in the western part of Germany. North Rhine-Westphalia is the largest province of Germany, with its population and economic power, with around 18 million inhabitants, and is about 22% of the German gross-social product and covers an area of 34,080 km². North Rhine-Westphalia is located in the western part of Germany and borders with Belgium and the Netherlands. The capital city is Düsseldorf, and other important cities are Cologne, Essen, Dortmund, Duisburg, Bielefeld, Leverkusen, Bonn and Münster [11].

Different interests of government and political parties

Like every industry, the pharmaceutical is also subject to political change. Since Bayer is a

multinational company and cooperates with scientists, universities and governments all over the world, policy makers play a major role in business. Looking at the US example, it is evident that the last presidential elections have changed the political environment of the pharmaceutical industry. Some of the major reforms announced are ACA (Affordable Act Reform) and FDA (Food and Drug Administration) restructuring as well as pressure on drug pricing. US President Trump takes a stand for lowering drug prices, which will have a significant impact on manufacturers, and will impact their revenues, increase competition and reduce power. Although the economic situation in Germany was very stable, pharmaceutical industry hoped to create a big coalition through which would gain greater opportunities to promote their interests. However, the creation of a coalition by leaving the FDP has failed so that the pharmaceutical industry remained on the old models of action, with some of the negative phenomena presenting an undefined policy cooperation and the pharmaceutical industry in the field of education of new staff. On the other hand, a good financial situation of compulsory health insurance offers a chance for further growth in the pharmaceutical industry [12].

Price Regulation

Research and development costs fixed part of the cost of some products regardless of the proportion of patients and the number of countries on whose market the drug is located. For this reason, the costs of producing and marketing a product play a secondary role in forming the price of the drug. Although the costs of production, marketing and research have had a direct impact on the cost, they have to take into account the total amount of product costs so that they can be included in a product portfolio that is key to business. The decisive factor in price formation is that the total cost of the product due to high fixed costs lies above the relative marginal cost of the product. Solution is to allow the producer a regional and international price diversity in accordance with the payment capability to exploit the potential of all markets [13].

Economical

Strong GDP growth in new markets

Southeast European region whose economy is characterized by the following positive transformations: relatively low labor costs, favorable tax environment and tax incentives, and rising GDP in most of the economic sectors of the region can be used as an example. The trend of continuous increase in per capita income and a reduction in unemployment rates continues [12].

Expenditure growth for health care

In most countries there is an increase in per capita health expenditure. However, the future of the existing model of organization and financing of health

care is uncertain. The pharmaceutical industry is in the position of one of the leading high-tech industries in Europe, whose production in 2016 is estimated at 250 billion euros. That same year in the pharmaceutical industry employed 745,000 people, of which 115,000 highly qualified employees were employed in research and development activities. In 2016, 35 billion EUR was invested in research and development in the pharmaceutical industry in Europe. Over two-thirds of R & D investment in 2016 is realized in pharmaceutical companies in Switzerland, Germany, the United Kingdom and France [12].

Social

Increased social interest for health questions

New trends show increasing consumers' awareness and expectations about health. The influence of public promotion of activism for health care and the prevention of illness has also been strengthened, not to mention the enormous impact of social networks. With its three departments - Pharmaceuticals, Consumer Health and Crop Science Bayer, the idea of social excellence and health in line with the age and population of the world's population, whose growth is parallel to the need for new and more effective medicines and a sufficient and secure supply of food. Through innovation, they often provide solutions to these problems [14].

Technological

Strengthening technology through research and development

The basis of Bayer's success is to strengthen technology through research and development. In 2015, a total of 4.281 billion EUR was spent on research and development, equivalent to 9.1% of sales. The number of R & D staff around the world was around 14,700. With investment in R & D, Bayer encourages open-minded innovation based on new approaches and internal interdisciplinary collaboration [15].

Networking and openness to innovations

By networking, scientists at national and international levels additionally encourage cooperation with external partners. They collaborate with leading universities, public research institutes and partner companies in Asia and the United States to take advantage of the external innovation potential through open innovation access. Some of the co-operation is supported by public funding. It also encourages the development of new technologies and business models in research centers, investing in research and development projects. Strengthening innovation capability enables you to face the challenges of the modern age and achieve profitable corporate growth. In addition to investment in research and development, Bayer promotes open-minded innovation based on new approaches and internal interdisciplinary collaboration [14].

CONCLUSION

In this paper we have presented the SWOT and PEST analysis of Bayer AG. Bayer AG is a German pharmaceutical and biotechnology company whose main production areas are human and veterinary pharmacy and agricultural and biotechnological products. In its 150-year tradition, Bayer AG has met with various challenges that follow the great changes and needs of society globally. Older and more numerous people in the world need new and more effective medicines as well as a more comprehensive and reliable supply of food. Today, Bayer is considered one of the strongest and most recognizable world brands, as confirmed by the Interbrand analysis in 2015, which estimate the Bayer's value at 6.3 billion euros. The SWOT analysis has shown that one of Bayer's main strengths is the global spread of the company to 78 countries that make a strong and integrated distribution system. The company is structurally divided into three strong pillars: Pharmaceuticals, Consumer Health and Crop Science. In addition, it focuses on further veterinary pharmacy departments such as Animal Health. The success of its products, Bayer is basing on a strong research and development department from which world-famous products. In 2016 on research and development, was spent 4.7 billion EUR, and this figure increases year by year. In addition, the successes are a deserved and robust human resource of 115,200 people worldwide. Further development of the company offers favorable opportunities such as growing occupation for the health of older people in particular, and a potential business alliance with governments that is based on the idea of using science to address the major challenges of the modern world if political opportunities are favorable. However, the shadow on the global success of the company throws controversy in court disputes, most notably the one in 2002 when the link between taking a Bayer drug Lipobaya and more than a hundred deaths was discovered. He was soon withdrawn from the markets of Europe, America and Japan, and since then Bayer has been losing big losses. Bayer's great challenge for research and development costs covered by its patented pharmaceuticals is governments of third countries that support local pharmaceutical companies to produce cheap generic medicines. Big impact on Bayer's cost structure has a much sharper regulation of environmental issues and rules on drug testing.

PEST analysis has shown that Bayer, as the leading pharmaceutical industry, is highly susceptible to political changes globally. For example we can take the announced ACA reforms and restructure FDA work. Of course, we should also mention the current situation in Germany, which is, on the one hand, undefined policy

cooperation and the pharmaceutical industry, and on the other, the favorable financial situation of compulsory health insurance. Different regulation of product prices should also be included in political factors. A favorable economic factor is the strong growth of GDP in new markets as well as the growing growth in expenditures for most countries. Only in Europe in 2016, EUR 35 billion was invested in research and development of the pharmaceutical industry. The large growth in expenditures is closely related to the increased social interest in health that is being monitored, and according to Bayer's three departments are Pharmaceuticals, Consumer Health and Crop Science. Bayer's technological success factor is certainly to strengthen technology through research and development. In 2015, a total of € 4.281 billion was spent on research and development, equivalent to 9.1% of sales. With investment in R & D, Bayer encourages open-minded innovation based on new approaches and internal interdisciplinary collaboration, resulting in networking scientists at the national and international level.

REFERENCE AND SOURCES

1. <https://www.bayer.hr/hr/o-bayeru/profil-i-organization>
2. <http://interbrand.com/newsroom/best-german-brands-2015/>
3. Buble, M. (2005). *Strateški menadžment*.
4. Hruška, T. (2013). *Materijali za nastavu: Strateški menadžment*. Zagreb, Ekonomski fakultet Zagreb.
5. Hruska, J. (2013). *U.S. Patent Application No. 13/452,913*.
6. SWOT and PESTLE Bayer AG <https://www.swotandpestle.com/bayer/> (15.9.2018)
7. Lipobay skandal <https://www.tagesspiegel.de/wirtschaft/bayer-leidet-weiter-unter-lipobay-skandal/334038.html> (25.,8.2018)
8. <https://www.bayer.hr/hr/za-medije/vijesti/>
9. <https://www.bayer.hr/hr/o-Bayer/attitude-political/politically-our-paragraphs/>
10. Šarić, M., & Šprem, B. (2017). SWOT i PEST analiza Savezne Države Bavarske. *Zbornik radova Međimurskog veleučilišta u Čakovcu*, 8(1), 89-99.
11. <https://www.land.nrw/22.1.2019>.
12. Pharma-Daten. (2017). *Bundesverband der deutschen pharmazeutischen Industrie*.
13. <https://www.pharma-fakten.de/fakten-hintergruende/preisbildung/wie-preise-von-arzneimitteln-entstehen/> (19.9.2018).
14. <https://www.bayer.hr/hr/o-bayeru/politicki-stavovi/nasi-politicki-stavovi/>
15. [https://www.bayer.hr/hr/the Bayer/political-views/our-political-views](https://www.bayer.hr/hr/the-Bayer/political-views/our-political-views).