Czech University of Life Sciences Prague Faculty of Economics and Management Department of Management



**Diploma thesis** 

Marketing strategy of pharmaceutical company

Tereza Kremlová

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# DECLARATION

I hereby declare that I have written the diploma thesis "Marketing strategy of pharmaceutical company" independently with use of quoted resources in bibliography.

In Prague, on November 22, 2012,

Tereza Kremlová

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I would like to thank my supervisor Richard Selby from Department of Management for his guidance, precious advices and for his time during consultations. My special thanks belong to the company Pfizer where I gained a lot of experience and information regarding the chosen topic.

# Marketingová strategie farmaceutické firmy Marketing strategy of pharmaceutical company

# Souhrn

Diplomová práce "Marketingová strategie farmaceutické firmy" se zabývá problematikou originálních (patentovaných) a generických léčiv ve farmaceutickém průmyslu, které čelí v současné době naprostá většina firem. Proces obdržení patentu čítá několik etap, kdy je produkt opakovaně testován a až následně je mu udělena patentová ochrana za předpokladu stoprocentně pozitivních výsledků. Toto výlučné právo je však časově omezeno a při jeho vypršení zaplavují trh výrazně levnější generické výrobky.

Tato problematika připravuje mezinárodní farmaceutické firmy o velké zisky, které se zkracují s postupným zvyšováním nabídky počtu generických léků. Tato diplomová práce se zabývá výše zmíněnou problematikou a faktory, které ovlivňují lékaře a lékárníky při předepisování léku a možnostmi, kterými mohou firmy tomuto procesu předejít. Právě tyto osoby totiž mohou nabídnout odpovídající generikum i když je na předpisu lék značkový.

Závěrem diplomová práce navrhuje marketingovou strategii, která na základě výzkumu a konzultace s osobami z farmaceutické praxe nabízí možná řešení, jak efektivně podpořit prodej originálních léčiv, a tedy nabídnout pacientům nadstandardní péči za přijatelnou cenu a maximální kvalitu, které je prioritou pro obě strany.

Klíčová slova: marketing, marketingový mix, farmaceutický průmysl, originální léky, neznačková (generická) léčiva, strategie

#### Summary

The diploma thesis "Marketing strategy of pharmaceutical company" examines the subject of original and generic drugs in the pharmaceutical industry which many firms face with. This process of patent acquisition has many stages and testing phases, when are verified the effectiveness, the quality of product and side effects and only if provided with maximally positive results, the drug can obtain the patent protection. Unfortunately, this right is time limited and when the patent expires, the generics flood the market with significantly cheaper products.

These issues represent the major problem for international pharmaceutical companies and in consequences their revenues declines as the number of generic drugs on the market increases. Moreover, this diploma thesis deals with factors influencing the doctors and pharmacists when prescribing the drug; because these persons have the right to offer a corresponding generic even if the doctor prescribed the branded drug; and with possibilities which can prevent this situation.

In conclusion, the diploma thesis proposes the marketing strategy based on the marketing research and discussion with persons working in the pharmaceutical industry. In addition, the proposed solution offers the marketing strategy for support of the sales of branded drugs together with extra service for patients and all this for reasonable price and still the maximal quality – the priority for both sides.

**Keywords:** marketing, marketing mix, pharmaceutical industry, original (branded) drugs, generic drugs, strategy

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# 1. Introduction

Presently, firms are experiencing a time of fierce market competition and if a given company strives to succeed, it must formulate the proper strategy that is both effective and practical. If we do not reach this goal there will not be a vital strategy and the business will not reach the needs of the customer and establish a long-term relationship with them.

This thesis focuses on the marketing strategy for a pharmaceutical company. There are few differences between companies of this nature; nevertheless one area that portrays ambiguity is the primary production of medicament for humans. In today's day in age, marketing is one of the main tools of the firm that when used effectively, can derive success and ultimately high profits. It is also very hard to compete with other brands which try to attack the market and attract consumers. However, it is important to note that the pharmaceutical industry faces less competition because of difficult entry barriers, the plethora of knowledge needed, as well as patents on products. One of the main issues within the pharmaceutical industry is without a doubt the generic substitution. The issue is better defined when the original drug holder's (the brand) patent expires, many other companies oversupply the pharmaceutical market with similar drugs that are better known as generics. This process has a direct effect on the original inventor and producer because these companies spent enormous amounts of money and time on developing the drug and subsequently attaining the patent. The majority of revenues are lost due to time limitations and entrance of generic products which are significantly less expensive. In turn, this prompts drug companies to implement a proper strategy to minimize their losses which is a very complicated process due to tough competition in the market and the pharmaceutical unregulated market in Czech Republic. In summary, the main topic of this diploma thesis is to find the most suitable solution (strategy) for the original inventor when the generics enter the marketplace.

# 2. Objective and methodology

#### 2.1 Objectives

Marketing can be considered the oldest form of trade existing among parties. The objective of this diploma thesis is to examine current trends and specifics in marketing strategy and planning in the pharmaceutical industry thus formulating the proper marketing strategy regarding these trends on the market. The pharmaceutical industry has certain particularities that make it different from other industries on a behavioural basis. This signifies that the strategy has to be based on the general principles of marketing with a slightly specific approach due to the demanding standards of quality within the industry.

The main objective is to create an efficient and useful marketing strategy which will preserve and support the drug sales after its patent expiration. The theoretical part of this thesis describes the selection of tools and techniques used over the strategy making process and serves as the guide for the practical part. The second section analyses not only the company's environment but the external environment as well which sets up the convenient strategy concerning the problem of the general substitution of the drugs.

All the used sources and information originates from the particular company within the pharmaceutical industry and the proposed solution was discussed with the people working in the mentioned firm and the health care business in the Czech Republic.

#### 2.2 Methodology

Therefore, to create and propose the marketing strategy for the significant pharmaceutical company on the Czech market, several steps have to done to.

Primarily, the theoretical part is based on the secondary sources including professional literature from the marketing, economy and pharmaceutical industry. Particularly the magazines, internet and documents focusing on the pharmaceutical industry have been used as well.

Secondly, the practical part comprises different marketing tools and analysis. Thus, the analysis of the pharmaceutical company and its competitive environment is performed

due to information from Pfizer website, consultation with its marketing manager and Pfizer's annual reports. The main techniques used in the practical part were SWOT analysis; representing strengths, weaknesses, threats and opportunities; and PEST analysis; political, economical, social and technical factor; to identify the main internal and external factors. This step is essential in case we want to precisely identify all possible advantages and drawbacks related to the product and company for the construction of the marketing strategy. The secondary data were obtained via questionnaire method. It is one of the most frequently used tools to find out opinions and observation from persons associating with the pharmaceutical industry for the subsequent analysis. For the evaluation of the questionnaire was used analysis, which enabled to divide the results into single parts (graphs) and distinguish the data more or less significant. Afterwards, all the data obtained from the primary and secondary analysis have served in the proposition and composition of the marketing strategy. This strategy is aimed on the clients who use Lyrica – a drug for the diabetic pain - and by the expiration of the patent on  $1^{st}$  October 2013, there will be generics version of this product flooding the market so the main task it to preserve the original branded product of Pfizer.

The proposed solution is based on the results and analysis of primary date and questionnaire research, the most appropriate method, for implementation of maximally convenient marketing strategy for the drug, which will lost its patent protection.

# **3. Theoretical foundation**

#### 3.1. Definition and meaning of marketing

Marketing is the crucial tool used by the majority of companies to help them with orientation on the market. The main aim is to identify the customer's needs and satisfactions thus create the value for them. This is the main task of top managers who have to find the proper strategy which will be effective, perspective, different, and feasible compared to the ever-present competition. This process includes researching, determining the price, promotion and distribution channels of products or services. At the end, we can associate the achieved success with the perfect knowledge of the marketing for the given industry.

There are multiple ways to define marketing and but from this short list everyone can find the most accurate definition for him

- "Marketing is the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large."(8, pg.2)
- "Marketing is a process of facilitating exchanges in which buyers exchange something of value (typically money) for something of equal value to them (goods or services)."(8, pg.2)
- "Marketing is all activities after manufacturing that promote and deliver the good or service to the customer." (8, pg.3)

# **3.2. Marketing strategy**

"Marketing strategy is a process that can allow an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage". (12, pg.3)

There are many companies operating within different industries but they all have one thing in common. This common aim is to give customers a reason to buy their product/service and this can be achieved only by a well prepared strategy based on the previous market research and marketing mix. Every firm has to have a plan to succeed in fulfilling the customer's needs and reach their own objectives hence; both the needs and objectives should be measurable. Marketing strategy is normally a long-term plan with the specific actions and detailed plans which should be fulfilled continuously every year. The length of the strategy varies according to the industry we are operating in.

The assumption for an effective marketing strategy is the analysis of the external (PEST analysis, competitor and target analysis) and internal environment (including marketing mix), obviously also comprised in the SWOT analysis.

Prof Russell (University of Birmingham, UK, 2011) draws attention to the following three definitions of Strategy:

- "The determination of the long-run goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals." A.Chandler
- "The search for a rent [profit] situation and the means to preserve it."
   Rumelt
- "Strategy is about being different." M. Porter

# 3.2.1 Pharmaceutical marketing strategy

As it was mentioned before, the marketing strategy is crucial for every industry which seeks to make a profit and this is no different for the pharmaceutical industry. However, these strategies are diverse due to many reasons like no plan is targeted "direct to consumer" (it is forbidden in majority of countries), but most likely to the doctor or the health care professionals who are in charge of prescriptions. Nowadays, there are pharmaceutical representatives, also widely known as medical representatives who are the main source of promotion to the physical persons and also the principal sale force. In the time of continuous development, these new strategies are needed and should be implemented regarding the business and customer trends. These trends should be proven by marketing analysis along with focus on changing client behaviour and business models. (16)

#### 3.3. Marketing mix

The most widely known tool is the marketing mix that is comprised of various elements which are used to satisfy customer's needs and company's objectives at the same time. Each of them – product, price, promotion and place – are examined separately, but afterwards are performed simultaneously to reach the convenient strategy.

Originally, we distinguish the four basic elements called 4Ps: Product, Price, Promotion and Place.

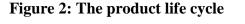


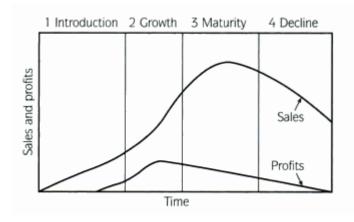
#### Figure 1: Marketing mix

Source: 13

Product: is understood as the tangible good or intangible service which satisfies the consumer's needs or wants. Tangible products are those having an independent existence. On the other hand, intangible products include services (financial or hotel industry etc.). Every product is associated with the product life-cycle comprised of a growth phase, maturity and very often the decline due to fall in sales. To avoid the decline or to postpone it as much as possible requires careful research on that particular stage of the life-cycle and then properly deal with the possible challenges.

When dealing with the strategy, the marketers have to consider product development strategies as well. They should know how to position the product, how to exploit the brand and the firm's resources and finally to complement it with the other elements of marketing mix. (9, pg. 44)





Source: (9, pg. 45)

Price: is the sum of money paid by the customer for the product. As mentioned above, the product life cycle is crucial for the adjustment of price strategy. Price indeed has a major effect on the marketing strategy, concerning the price elasticity. The main task of the marketer is to set a price, which will correspond to the product's value, because it a clue for customers. It should be also kept in mind that

price is influenced by the costs, variable and fixed, of the product and company's competitors as well. (9, pg. 55)

One of the characteristics of the pharmaceutical industry is the undesirability of drugs. Most of the customers (patients) would prefer to spend money on something else instead of medicine. Hence, it makes the pharmaceutical products less popular compare to other sectors and very often criticized harshly. (2, pg, 11, 12)

- Promotion: is a part of the marketing mix which raises the awareness about the company and its products. Promotion is definitely a key process through which we can make the product more visible on the market. There are multiple methods of promotion, for example advertising, sales promotion, personal selling, public relations etc. Promotion should be chosen properly, because it can easily damage or heighten the reputation of the company. Below are detailed descriptions of the various forms of promotion.
  - Advertising: represents any communication that is directly paid. This form
    of promotion is usually used to raise the awareness and to encourage the
    purchase. Marketers of advertisement campaign should take into
    consideration the following question: "Is the aim of the campaign to
    increase the awareness or to increase sales?", "What are the most
    appropriate media for organisations to use?", How frequently will a
    message need to be displayed?" (9, pg. 62).
  - Sales promotion: includes selling methods used by companies to encourage customers and distributors to make a purchase. Sales promotion which is aimed at customers is so called *consumer sales promotion* and on the other hand, sales promotion for distributors is named *trade sales promotion*. This kind of propagation is used to achieve the marketing objectives of the company, for example: "to gain customers and to convert them into regular users", "to widen the distribution of the product", "to reduce sales peaks and troughs and maintain economic production levels". (9, pg. 63) There are various ways of sales promotion as *Free samples* (obviously one of the most successful tools but can be costly), *Off-price labels* (mean price reduction

which is significantly less costly than the free samples), *Premium offer* (three type – free gifts, free send-away premium and send –liquidating premium) and *Branded offer* (two forms – free sample of non-competitive product of two products for the price of the one). (9, pg. 64)

- Place: basically means providing the product at the convenient place for the customers and we can substitute it by distribution. Nowadays we have two ways how to distribute the product :
  - *Direct selling:* refers to distribution realised by "field workers".
  - *Selling through intermediary:* represents the distribution through retail trade which sells it to final consumers.

When looking more concretely on the pharmaceutical industry, the distributional channel compromises wholesalers, retailers, hospitals and government installations and each element in this channel is influenced by the need and want of the customer (client). Thus, also the trade-relationship with the company (producer) and its policy, efficiency and quality of products is crucial. The majority of companies have a person who is in a charge of this trade-relationship and responsible for easy distribution and understandable policy. (2, pg.11)

# 3.4 The Internal environment

The internal environment normally refers to events which occur inside the company or organization and to the firm's resources and capabilities.

#### 3.4.1 The SWOT analysis

For the proper understanding of the key factors of internal and external environment it is necessary to be familiar with the SWOT analysis as it forms an important part of the strategic planning process. Internal environment is represented by Strengths and Weaknesses and vice versa external by Opportunities and Threats. The SWOT analysis should identify the company's core competences and allow the organization to achieve their objectives and goals.

- *Strengths:* provide information about the company's resources and capabilities which can lead us to our competitive advantage.
- *Weaknesses:* can be viewed as a disadvantage or as a missing strength for the company.
- *Opportunities:* refer to external chances which can reveal a potential growth or profit.
- *Threats:* can be the other side of the external environment which should be known to the company to be able to avoid them. (14)

# 3.4.2 Resources and capabilities

Resources and capabilities are very often overlooked during the company analysis although it is a crucial step as it can serve as the main source of sustainable competitive advantage and profitability. Basically, every well managed strategy should be based on specific resources and capabilities of the company and a facility of their use when targeting customers. However, it is very important to distinguish and assess resources (owned by a company) and capabilities (what a firm can do).



#### Figure 3: The links among resources, capabilities, and competitive advantage

Source: 17

As it is clearly visible in the figure 3 above, there are three kinds of resources which should be identified; tangible, intangible and human resources. Resources are not productive by themselves; they are deployed by organizational capabilities. The definition of capabilities is feasible by classifying and disaggregating the company's activities normally used by two approaches – a functional analysis and a value chain analysis.

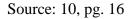
- A functional analysis: detects firm's capabilities in relation to main functional areas of the organization.
- A value chain analysis: divides firm's activities into a sequential chain to provide a more detailed identification of its activities.

#### 3.5 The External environment

Generally speaking, everything that occurs outside the company refers to the external environment; therefore these factors are pretty much less controllable than internal environment. This is mainly due to multiple forces influencing this macro environment, where we could consider PEST analysis (more detail below) and competitive environment in Five Forces analysis.



#### Figure 4: The environment of pharmaceutical marketing



# 3.5.1 The PEST analysis

Every company should consider its surroundings and environment before its own marketing process. One of the frequently used tools is PEST analysis which stands for Political, Economic, Socio-cultural and Technological forces.

• *Political factors:* noticeably affect business and its environment, like spending power of consumers and other businesses. There should also be consideration for the political stability of government and political trends

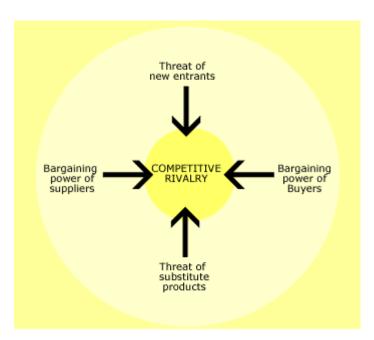
within and outside the country which has significant influence on the business as well. (10, pg. 20, 21)

- *Economic factors:* are reflected in the trading country in the short and longterm period, especially in the terms of international market planning. The current economic trends can have a huge impact on business as well. (Interest rates, inflation, GDP etc.) (14)
- *Socio-cultural factors:* differ across countries and importantly influence the business. Social and cultural forces are of special relevance to the pharmaceutical industry so the strategic planner should be familiar with all social trends concerning the industry. (10, pg.31)
- *Technological factors:* are consider as the main force of globalization and is crucial for the competitive advantage as well. The pharmaceutical industry thrives due to technology so it cannot be passed over without detailed scanning and identification of incipient technological developments. The marketing planner has to consider other aspects as well as the threats and opportunities of the external environment, potential growth, and identify as well the related business. (10, pg. 16,17)

#### **3.5.2** Porter's Five Forces analysis

In order to survive in the competitive environment, it is crucial to use a precise analysis to get the knowledge about the competition and to predict their behaviour. This global appraisal can be provided by Porter's Five Force. This is a framework developed in 1979 by Michael E. Porter which helps to analyse a competitive environment. Therefore the analysis is based upon five forces that determine the competitive advantage and potential attractiveness of the given market; named the threat of new entrants, the threat of substitutes, the bargaining power of supplier, and the bargaining power of buyers.

# **Figure 5: Porter's Five Forces**



#### Source: (15)

- Threats of new entrants: depend upon the height of barriers of entry, which can be capital requirements, access to distribution channels, legal and regulatory barriers, product differentiation (loyalty of customers and brand recognition) etc.
- Threats of substitutes: refer to existence of similar products outside the company's frontiers and therefore help to customers switch to alternative products (substitutes). We should be aware of the mixing up substitutes and the equal product, which are only different in price. Threats of substitutes cover prices of substitutes and their availability on the market, product differentiation level etc.
- Bargaining power of suppliers: in another way the market of inputs represents the power of suppliers in case there are only few of them, they can take over the control when there is not enough substitutes. (in simple terms, the supplier can refuse to work with the firm)
- Bargaining power of buyers: so called market of outputs is basically the reverse of the previous force and stands for the ability of buyer to put the pressure on the firm and the price sensitivity of buyers, e.g buyer information availability, buyer price sensitivity, size and concentration of customers relative to sellers etc.

# 3.6 BCG matrix

The BCG matrix was developed by Boston Consulting group in the 1970's and its aim was to observe the company and place it into four business unit (BU) categories. These four BU's are based on two axes, the horizontal one stands for the relative market share and the vertical axes represents the market growth rate. Each of the four units constitutes a possibility to place a product or service according to its utilization and they are as follow:

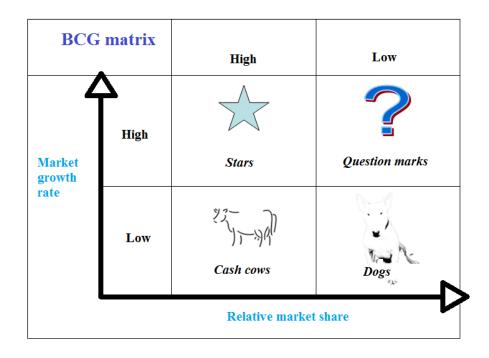
*"Stars"* – are in the upper left-hand corner of the matrix and represents a product or service with a high growth rate and high market share. This BU appears to be the most profitable for the company so there should be more protection placed here.

*"Dogs"* – are, adversely placed, in the lower right-hand quadrant and stands for the product or service with the lowest market share and market growth rate. Generally, these products/services face many difficulties and are more often than not, eliminated from the company portfolio.

*"Question marks"* – are units with low market share and a high growth rate which represents a big potential for the company and if carefully handled, they can became "Stars". In contrary, if the firm will not participate in gaining a larger market share, they can easily fall to the "Dogs" category.

*"Cash cows"* – are in the lower left-hand corner and attain the lowest potential growth, but have a high market share. In general, products placed in this BU are in the company's portfolio for a long time and possess stability and source of revenues but remains flat lined in terms of growth. (6, p.124 - 125)

# Figure 6: BCG Matrix



Source: own work

# **3.7 Identification of the goals and objectives**

Goals and objectives are essential to the strategic plan of the company as they define the results which should be achieved. The precise definition is highly important to follow them correctly.

- Goals: are composed by one or more objectives, which can be set over a short or a long period of time and normally they are not measurable.
- Objectives: are subordinated to goals and relate to concrete statements leading to the result of the plan (strategy). Therefore objectives should be specific, well defined, measurable, realistic, time-bound and achievable compare to goals.

# **3.8 Formulation of business model**

The right business model is like a well cooked meal, if we have prepared every ingredient, spent enough time by preparation, and followed the recipe, the result should be the success. Generally speaking, the strategic plan should be composed of the steps described above and should take in consideration the possibility of failure as well.

# 3.8.1 Critical issues

When preparing a marketing strategy, a marketer should be award of eventual critical issues and pitfalls that can occur. There are few tips which can be employed to avoid these situations or to deal with them:

- Be ready to change your plan if the actual one will not be effective as you have expected.
- Collaboration with another party to get an objective feedback which can discover new weaknesses.
- > Do not make any assumption about your customer and their wants and needs.
- Do not expect to realize your plan in a few days; it takes time to establish a working strategy.
- > Do not focus on one "competing article", but on improving your strategy overall.

#### **3.8.2** Controlling tools

"Great ambition is the passion of the great character. Those endowed with it may perform very good or very bad acts which depend on the principles that direct them". (Napoleon Bonaparte)

Essentially, there can be no plan or strategy without control. The main purpose of the control system is to monitor, measure and evaluate the strategy which is applied; its effectiveness and predicted success or failure in achieving the goals and objectives. These control systems are used to improve the performance because the behaviour of customer is unpredictable. Also, the implementation and the development of the strategy are costly so their control remains necessary in every organization. There are many different approaches that can be employed to measure the strategy effectiveness and to stress the weak sides which should be improved. These controlling tools can conduct adjusting of pricing or promotional strategy to consumer change or perception. (11, pg. 234)

# 4. Actual solution

# 4.1 Pfizer Inc.

Pfizer Inc. is an American biopharmaceutical company with the long tradition and history, founded in 1849 with the main headquarter in New York. Their portfolio includes a wide range of products for humans and animals healthcare worldwide. Company has a lot of diversified segments which offer vaccines, anti-infectives, anti-inflammatories, antiemetics, and parasiticides; consumer healthcare products, such as dietary supplements, pain management, respiratory, and personal care; nutrition products; and gelatine, liquid, soft gel, non-animal, and fish gelatine capsules. Pfizer Inc. belongs to the Healthcare sector, more precisely to the Drug Manufactures – Major Industry. This industry is in the group of the top industries due to its quality products.

"Pfizer has also developed an enhanced commercial operating structure. Pfizer has nine diverse health care businesses: Primary Care, Specialty Care, Oncology, Emerging Markets, Established Products, Consumer Healthcare, Nutrition, Animal Health and Capsugel. With this structure, we are able to rapidly capitalize on opportunities to advance our business by increasing support for successful new medicines, forging partnerships with key customers, entering into co-promotion and licensing agreements, investing in new technologies to add value to our core product offerings, and acquiring new products and services from outside the company." (19)

*"Pfizer Inc: Working Together for a Healthier World"* is the core slogan used by this company which tries to apply to global resources in order to improve the health of the life. To get the best results, Pfizer concerning as the leading pharmaceutical company collaborate with health care providers, government and local communities to spread access to health care all over the world.

Figure 7: Pfizer logo



Working together for a healthier world™

Source: 19

#### 4.1.1 Pfizer s.r.o. in the Czech Republic

Pfizer s.r.o. has started its successful activity in the Czech Republic since 1993 and nowadays is a member of the worldwide group Pfizer. Their portfolio range covers human; especially cardiovascular medicine, drugs to lower the level of cholesterol and the central nervous system, antibiotics and the pills for erection disorder; and veterinary drugs as well and apart from it Pfizer provides professional trainings in collaboration with Czech hospital institutions. Therefore Pfizer invest significantly in the pharmaceutical industry to develop and bring the most innovated medicine to the general public. (20)

# 4.2 Research and development (R&D)

Pfizer initiates in creating the first leading pharmaceutical R&D organization. The principal purpose is to facilitate an access to different cultures by finding and developing the newest and the most innovative medical solutions. This company also handles the scale, portfolio, talent and capabilities (disease area and technology expertise) to provide new levels of productivity and not only the primary focus. The new model allows by the combination of Research Units and Biotechnology Units across R&D to bring the highly effective ways to prevent the world's most challenging diseases. Furthermore, their investment in research and development climbed up to \$ 7 billion annually and cooperated with more than 250 partners within the pharmaceutical industry. Pfizer's policy strictly respects the safety of patients and everyone who is involved in the development process to keep the highest ethical standards. (19)

# 4.2.1 Phases of development

Pfizer aims to build the best biopharmaceutical R&D organization in the world by providing the newest and the most innovative means of science and industry. The process of developing a new medicine has to go through several phases and controlled trial to assure the safety and efficacy of the new drug. First of all, experimental trials are tested in the laboratory and in animal studies. Afterwards, if the tests were successful, the drug can move to clinical trials. This phase include volunteers who go through another trial. Every stage of development is under strict policy and all rules and standards set by government have to be met and so far every volunteer participating on trial is free to leave at any time. The concrete phases of clinical development are as follow:

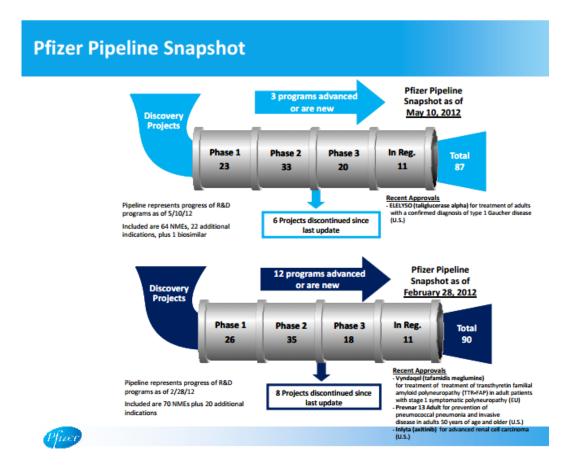
- Phase 1: this phase refers to the first stadium, when a new experimental medicine ("investigational new drug") is targeted to humans. The main aim is to assure the safety and tolerability of the new drug on the selected group of volunteers who take regularly a dosage of medicine. These people are all the time under medical supervision to see a possible reaction on the new drug. The dose of drug can be increased to monitor side effects.
- Phase 2: concentrates on the effectiveness of a new experimental drug regarding the treatment for which a medicine was developed. R&D team together with medicals focus on fixing an exact dosage and the most suitable serving. As in the previous phase, the phase 2 involves hundreds of volunteers to strengthen the effectiveness of a new experimental drug. These people are selected on the basis of medical conditions that a new drug are specified to treat.
- Phase 3: is related to previous investigation on safety, tolerability and effectiveness of an experimental medicine, but the scale of observed volunteers are vaster. The tested group of people is chosen on the basis of factors different country, symptoms. Trials taking place in this phase are often "double-blinded" which basically means that during the testing neither the investigator nor the participant know who take a new experimental drug compare to one getting a sugar pill or

another medicine. The crucial purpose of this phase is to get a foundation for the benefit-risk assessment and much more core information about the tested drug.

- Registration: is the next pace if the previous phases were successful. Essentially, an application for the health regulatory authority of a country has to be completed to receive an approval to enter on the market with the new drug. This improvement is under the auspices of the Food and Drug Administration (FDA), a New Drug Application (NDA) in the U.S.A. and on behalf of the Evaluation of Medicinal Products (EMEA), the Evaluation of Medical Products Application (MAA) in European countries. These organizations receive a complete report about the previous trial, their results in order to present the safety and effectiveness of the new drug. In case of confirmation, the new drug can enter the market and be sold to customers and patients.
- Recent Approvals: are drugs that have been lately approved by FDA in the U.S.A or by EMEA in Europe.
- Phase 4: in other words "post marketing studies" is the last phase where are assembled all additional information about the medicine, like the long-term risks, benefits and optimal use. The duration of these tests lasts over many years.(23)

The actual Pfizer product pipeline portfolio includes 87 new medicines in progress (this information is correct for 10 May 2012) by which the R&D organization tries to develop and find out a new enhancement. These experimental drugs provide a necessary commercial opportunity to serve as many people as possible with proper innovative medical solution to their disease like orphan or genetic diseases.

# **Figure 8: Pfizer Pipeline**



Source: 24

# 4.3 Automatic generic substitution

The concept of Automatic generic substitution (AGS) was proposed by the Department of Health (DH) in 2009. This term basically means that pharmacists are allowed to substitute another drug (generic) on the prescription respecting the same active ingredient. Therefore they can sell to patient a different product from another brand than the one originally prescribed by the doctor.

Many pharmaceutical companies try to protect against AGS, because when the patent of innovator drug expires (in which development they have invested enormous amount of time and money) generics flood the market with significantly lower price, which is unfortunately very attractive for many customers, but not for the company which has invented the original drug.

So what the principal difference between original drug and generics? Actually the only thing they have in common is the active ingredient, but otherwise they are not identical. Generally speaking, a generic medicine should be absolutely convenient and effective for the treatment and in many countries prescribing of generic medicine counts for majority of all prescriptions. This can cause allergic reaction to people, who are sensitive to some substances included in composition. Currently, there are many firms which try to defend themselves against AGS because of following slump pricing. (37)

#### 4.3.1 Generic drugs

Generic drugs represent a significant access to health treatment for millions of people all over the world. These drugs are basically identical (bioequivalent) to an original brand name drugs and have the same dosage form, effect, quality and performance characteristics.

Therefore, every generic drug has to be approved by FDA (U.S. Food and Drug Administration) or filled by Evaluation of Medical Products (EMEA) for Europe and meets the same high standards for patients and consumers as the innovator drug. Additionally, they have to successfully pass the same tests of quality standard as these of original products to be allowed for the marketing and practical use. According to Congressional

Budget Office "generic drugs save consumers an estimated \$8 to \$10 billion a year at retail pharmacies and even more billions are saved when hospitals use generics". (21)

Nowadays, there is not a generic drug equivalent to every brand-name drug and particularly due to patent protection which lasts twenty years and does not allowed anyone else to make or even sell the generic drug until the patent expires. As it was mentioned above, the development is highly costly and as the generic drug makers do not go through this process, their expense are substantially lower which enables them to sell the drugs less expensive than the brand-name drug. Anyway, to obtain an approval from FDA (or EMEA in Europe) a generic drug has to meet following conditions:

- "contain the same active ingredients as the innovator drug(inactive ingredients may vary),
- > be identical in strength, dosage form, and route of administration,
- have the same use indications,
- ➢ be bioequivalent,
- > meet the same batch requirements for identity, strength, purity, and quality,
- to be manufactured under the same strict standards of FDA's good manufacturing practice regulations required for innovator products." (21)

# 4.4 The Internal environment

Pharmaceutical industry creates and enormous group of companies, producers and developers of drugs and medicine, so called licensed medicine with patents. These companies are allowed to produce and make brand (original) drugs or generics medication. Both parties have to strictly respect laws and regulations regarding the research, developing, patenting, clinical trials and particularly the safety and effectiveness of the drugs. Companies invest enormous amounts of money in research and development which is the process leading to potential new drug in order to make a profit and grow.

Actually, the pharmaceutical industry belongs to one of the most risky one, because the sum and time spent on development is immense and only a few of drugs are accepted and approved (obtain a patent) for use and distribution. To precise a little bit the process, it can take up to ten years and around three drugs from twenty are approved by government appointed medical institution. Afterwards, the drug is introduced on the market and should bring in money, what unfortunately not every product does and it is pretty unpredictable as well. Times from times, the company develop a blockbuster, which is the "gold mine" and can cover investments in drug development process and assure the firm's profit for the following years. Pfizer has heavily invested in research and development in 2011, \$9 112 million which is about 20% more than in 2009 (\$7 824 million). (22)

#### 4.4.1 SWOT analysis

SWOT analysis is a broadly used tool by which manager can create a strategic overview about company's internal strengths and weaknesses and threats and opportunities from external environment.

#### Strengths:

- The leading pharmaceutical company with the long history and the fastest growing pharmaceutical company in the world.
- High investments in research and development to improve and facilitate the treatment of diseases.

- The sales revenues \$67,425,000 thousand in 2011 compare to \$49, 269,000 thousand in 2009, it means they went up by 36%.
- A global working network with 102 500 employees in all the continents over the world.
- > Wide portfolio range of products which are provided mostly on the prescription.

# Weaknesses:

- > Run out of patent for blockbusters Lipitor and Viagra.
- > Cooperation with other companies can harm their reputation.

# **Opportunities:**

- Innovation and the newest drug development in the cardiovascular treatments due to increased demand.
- Collaboration and agreements with other pharmaceutical firms to bring more sales and a new production.
- > Higher investment opportunities due to increasing revenues over last three years.
- Necessity of new drugs for the market.

# Threats:

- Losing of patent on their products.
- Missing of a new blockbuster.
- Prevalence of the generic drugs on the market leading to the decline in the sales of brand-drugs.

- Generic drugs count to 70% of prescription sales in the Czech Republic, Poland and Hungary.
- > Outside competition on the huge markets in China.
- > Negative feedback from customers.

# 4.4.2 Resources

Three groups of resources represent one of the most valuable properties of a company. Therefore to create an effective marketing strategy, these Pfizer's tangible (financial and physical), intangible (technology and reputation) and human resources have to be identified.

> Tangible:	- increasing revenues over last three years (\$67,425,000 thousand in
	2011 compare to \$49, 269,000 thousand in 2009)
	- easy to identify in financial reports (see in appendices)
	- seats are placed in majority of countries
	- the biggest biopharmaceutical research and development centre on the world
> Intangible:	- long history and reputation all over the world (founded in 1849)
	- one of the leading pharmaceutical company in the world
	- continuously working on the development of new drugs and investing huge amounts in the research
	- patents protecting Pfizer's unique developed products
	- a wide net of distributors, investors and suppliers
> Human:	- cooperation with the most reputable doctors scientists in the field

- 102 500 high skilled and qualified employees worldwide

- among 50 World's most attractive employers for 2011

## 4.5 The external environment - PEST analysis

The external environment is always hard to analyze and unfortunately it is one of the most significant source of uncertainty. The pharmaceutical industry is very competitive environment and Pfizer has to be prepared to make a stand against other firms. The best mean would be to set a PEST analysis.

# > Political factors:

- Different approval process in Europe and U.S.A.
- Government pressure on the developing companies.
- Subsidies to support the Research and Development.
- Existence of corruption within industry.

# **Economic factors:**

- Lasting economic crises which can negatively impact the spending on Research and Development.
- Increase in demand for medicines.
- Decrease in disposable income.
- Working force and manufacturing costs are much lower compare to other countries in the Europe and this fact attracts many FDI (=foreign direct investment).
- The company's expenditures on R&D are still much lower than in the rest of the European Union which allow them to safe much more of their sources.

### > Socio-cultural factors:

- Opportunity in aging population who needs more drugs.
- Other population diseases like an increasing obesity.
- Increasing claims of patient.
- The association of innovative pharmaceutical industry (AIFP) counts up to now around 30 pharmaceutical companies and their aim is to reduce the counterfeits and protect the rights of brand-drug Innovator Company.

### > Technological factors:

- Technological progress in science will enable more innovative means for developing drugs.
- New business opportunities.
- Central and Eastern Europe are becoming the centre for pharmaceutical research due to numerous universities focused on life sciences.

#### 4.5.1 Competitors

Most of the companies within Drug-Manufactures Major industry are driven by research and patent protection. This process requires high investments in technology, time and material, but if the new developed drug is successful and patented, it can be very profitable, especially within healthcare sector.

To make a clear vision about Pfizer and its surroundings, it is essential to identify its closest competitors within the pharmaceutical industry in the world and in the Czech Republic as well. In the following table is clearly seen the performance of every company – Pfizer, Merc & co. and Novartis.

#### **Figure 9: Direct competitors**

	PFE	MRK	NV
Market Cap:	181.81B	134.29B	142.63
Employees:	103,700	84,000	126,00
Qtrly Rev Growth (yoy):	-0.11	0.01	-0.0
Revenue (ttm):	64.86B	48.36B	58.43
Gross Margin (ttm):	0.80	0.66	0.6
EBITDA (ttm):	28.37B	18.05B	16.79
Operating Margin (ttm):	0.32	0.23	0.2
Net Income (ttm):	8.96B	6.72B	8.65
EPS (ttm):	1.34	2.18	3.5
P/E (ttm):	18.16	20.22	16.6
PEG (5 yr expected):	3.93	2.67	2.8
P/S (ttm):	2.76	2.76	2.4

Source: 28

### 4.5.1.1 Merck & Co. Inc.

Merck & Co.Inc, is the pharmaceutical company founded in 1891 and headquartered in Whitehouse Station, New Jersey. Their portfolio involves human health pharmaceutical products, e.g. cardiovascular treatments, diabetes and obesity, respiratory etc. Their medicines are available mainly through prescription - vaccines, biologic therapies and they are focused on animal health either. Hence, this company also discovers, develops and subsequently markets antibiotics to help, solve and preserve human and animal diseases. In addition, company produces foot care products including topical antifungal, foot and sneaker odour/wetness products and has its own sun care products line. Nowadays, their drugs and products are distributed to drug wholesalers and retailers, to hospitals, physicians and to veterinarians. Furthermore, they provide products to food chain and to mass outlet in the U.S.A. Recently; the company has joint ventured agreements with other pharmaceutical companies like Sanofi Pasteur S.A. and AstraZeneca LP. The principal values of the company include as well the highest degree of ethics and integrity, standing for keeping and respecting all the applicable laws and conditions internationally. Additionally, the company esteems the diverse asset of their employees who are innovative and provide them the respectful working place with equal opportunities. Their product portfolio in the Czech Republic includes two significant vaccines Silgard and RotaTeq, afterwards the drugs on prescription and medicine sold over the counter together with veterinary medicines.

Figure 10: Silgard - the injection suspension against papillomavirus and is bounded by prescription.



Source: 26

Figure 11: FigureRotaTeq - the vaccine against rotavirus.



Source: 26

# 4.5.1.2. Novartis

Novartis was founded in 1996 by merging two other well established healthcare companies – Ciba-Geigy and Sandoz. Nowadays the company's headquarter is in Basel, Switzerland and belongs to the leading pharmaceutical company. Through the time, they have developed many innovative medicines for patients all over the world. Their portfolio includes eye care products, generic drugs, health products, preventive vaccines and diagnostic tools and all of them have the leading position in their category. The following table illustrates the most successful products for the year 2011. Therefore, Novartis obtained a lot of awards compromising the prize for the most valuable corporate healthcare brand in Europe and the third in the world given by the European Brand Institute for intangible assets. Novartis's pharmaceutical division is respected and known all over the world due to their innovative medicine which helps to prevent and treat diseases worldwide. Their portfolio counts around 60 products actually marketed with primary intention on cardiovascular diseases, oncology, neuroscience, respiratory and integrated hospital care area. In addition, the product pipeline has up till now around 130 projects in different development stages which can become a new innovative drug.

	Full Year 2	2011 Product Sales	
Product	USD m	variance in USD	Therapeutic Area
<b>DIOVAN</b> Diovan	5,665	-6%	Cardiovascular and Metabolism
glivec wuterb gleevec matinb mesylate	4,659	+9%	Oncology
	2,050	+34%	Neuroscience and Ophthalmics
ZOMETA	1,487	-2%	Oncology

#### **Figure 12: Top Novartis Products**

#### Source: 27

## 4.5.1.3. AstraZeneca s.r.o.

AstraZeneca s.r.o. represents a significant competitor for Pfizer within the Czech pharmaceutical industry. The history of this company has started in 1988 by establishment of division ICI (Imperial Chemical Industry), which was registered in 1991 and the Zeneca (CZ) s.r.o. was set aside in 1993. Another Swedish firm Astra AB founded their subdivision in the Czech Republic in the same year, registered as Astra Pharmaceutical in 1995.

Both companies were merged in 1999 under the name AstraZeneca s.r.o., which turned to one of the most successful companies on the Czech market. Nowadays, they have around 130 employees and their investments to clinical tests and studies reach 100 million CZK per year.

Nowadays they are focused on the research and clinical studies anaesthesiology, cardiovascular diseases, oncology, infectious and respiratory diseases.

### 4.6 The current situation

As was written above, the main source of income for the company comes from the patented drug and if the sales are successful, it can even become a key blockbuster. One such a cholesterol lowering blockbuster - *Lipitor* - ran out of his patent in May 2012. Lipitor belonged to the best selling drug for years and by its expiration Pfizer lost in the last quarter 30% of their revenues compare to the same period in 2011. The best protection is the attack, so when the patent expires the brand drug maker tries to do everything to prevent or minimize the losses. The following drug which should run out of his patent is LYRICA®. Currently, LYRICA® is approved and provided in 120 countries all over the world and treats the diabetic nerve pain. "Three separate patents are at issue in this case: U.S. Patent No. 6,197,819 covers the active ingredient pregabalin and expires December 30, 2018; U.S. Patent No. 5,563,175 covers a method for using pregabalin to treat seizure disorders and expires October 8, 2013; U.S. Patent No. RE 41,920 covers methods for using pregabalin to treat pain and expires December 30, 2018." (22).This drug belongs to the key medicines, products with individual revenues exceeding \$1 billion in 2011, in

Pfizer's product portfolio and to the first approved treatment for fibromyalgia in the U.S. according to the Annual Pfizer review 2011.

# Figure 13: Lyrica



## Source: 31

"LYRICA is a prescription medicine approved by the US Food and Drug Administration (FDA) to treat fibromyalgia, diabetic nerve pain, and pain after shingles. LYRICA is also indicated to treat partial onset seizures in adults with epilepsy who take one or more drugs for seizure.

In clinical studies, LYRICA was proven effective in 2 difficult-to-treat nerve conditions—diabetic nerve pain and pain after shingles—and fibromyalgia. LYRICA was proven to provide significant relief from pain associated with these 3 conditions for patients who took LYRICA compared with those who took a placebo." (31)

Up till now, we can find two version of LYRICA sold on the Czech market, which are at the same time partially reimbursed from the health insurance. These two are LYRICA 150mg 56x150 mg, LYRICA 150 mg 14x150 mg. In the following chart are indicated the main information concerning this medicinal product.

# Figure 14: Lyrica summary of product

Name of the product	LYRICA 150mg
Route	Oral use
Pharmaceutical form	Capsule, hard
Package	4x14
Strength	150 mg
ATC group name	Pregabalin
Legal Status	Prescription – only medicinal product
Maximum ex-factory price(set by the law)	1 405,80 CZK
Rough price for the final consumer	1 969,69 CZK
Maximum reimbursement from the health insurance	1 777,86 CZK

Source: own table based on the information from www.sukl.eu

Obviously, as the brand drug seller looses the patent, generic drug makers flood the market with generic drug noticeably less expensive. The main reason why the generic companies can significantly cut down the price is because of cost savings they make by no research & development investments. Consequently, the principal mission of the pharmaceutical company is to create an appropriate strategy to reduce the revenues losses and support the sale before the patent expiration hit the company. Majority of the drug is only on the prescription what basically means that the main responsibility for the prescribed drug lies on the doctor who decide which medicine to recommend to patient and unfortunately for the original maker, the lower price and moreover the same treatment effects is the main reason to choose the cheaper variation. Every company tries to promote their drugs as the best possible treatment and they do not hesitate to use all marketing tools to reach their target and support the sales. The following table shows the difference

between Lipitor (original drug produced by Pfizer) which ran out of the patent in May 2012 and its generic version Zocor (produced by Merc).

		Zoccorptocol         Biological Construction         Marcine Marcine Structure         Version Endace Marcine Structure
Functions	Reduces cholesterol and high blood pressure associated with heart disease.	Reduces cholesterol and high blood pressure associated with heart disease and heart attacks.
Price	Expensive	Offered at a lower price
Effect	Plasma concentrations occur within 1-2 hours.	Plasma concentrations peaked at 4 hours.
Side Effects Prescription	Both have minimal side effects including upset stomach, gas, heartburn, change of taste, diarrhea, constipation, skin rash, headache, dizziness or blurred vision that may occur the first few days as your body adjusts to the medication. Required	Both have minimal side effects including upset stomach, gas, heartburn, change of taste, diarrhea, constipation, skin rash, headache, dizziness or blurred vision that may occur the first few days as your body adjusts to the medication. Required
_		•
Dosage	The recommended starting dose of Lipitor is 10 or 20 mg once daily.	The recommended usual starting dose is 10 mg once a day in the evening.
Usage	May be used in combination with a bile acid binding resin for additive effect.	Zocor is effective alone or when used concomitantly with bile-acid sequestrants.
Physical Properties	A white to off-white crystalline powder that is insoluble in aqueous solutions of pH 4 and below. Atorvastatin calcium is very slightly soluble in distilled water.	A white to off-white, nonhygroscopic, crystalline powder that is practically insoluble in water, and freely soluble in chloroform, methanol and ethanol.
Oral administration	10 mg, 20 mg, 40 mg, 80 mg	5 mg, 10 mg, 20 mg, 40 mg, 80 mg

# Figure 15: Lipitor vs Zocor

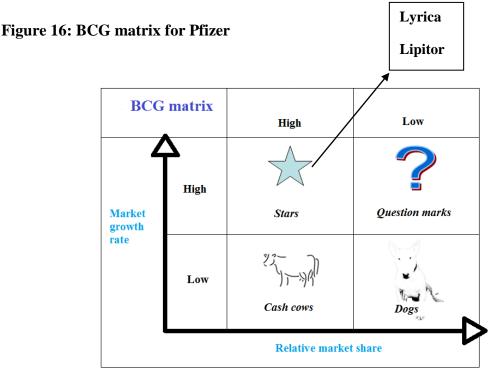
Manufacturer	Pfizer	Merck	
Generic Name	Atorvastatin calcium	Simvastatin	

Source: 29

# 4.7 BCG matrix

The BCG matrix is one of the main tools used in this business by many firms to determine whether or not there are more or less successful products within the portfolio, and to illustrate the actual situation of Pfizer's drugs.

Both Lyrica and Lipitor belong to 12 "Stars" of Pfizer's product portfolio exceeding revenues of \$1 billion in 2011 in their category. As clearly seen from the following description, Lipitor was for many years leading prescription drugs and even though it lost patent protection, it belongs to one of the most significant products. Another leading medicine is Lyrica which will lose its patent in October 2013 and that is why it is pressingly important to come up with a strategy which will support sales.



Source: own work

- Lipitor "Lipitor (atorvastatin) is prescribed to treat elevated LDL-cholesterol levels in the blood. In 2011, it was the most widely used branded prescription treatment for lowering cholesterol and the best-selling prescription pharmaceutical product of any kind in the world. Lipitor is proven to reduce the risk of heart attack, stroke and other cardiovascular events in patients with certain cardiovascular risk factors or with heart disease. Despite losing exclusivity in many markets, including the U.S. in 2011, Lipitor continues to be one of Pfizer's most important products." (32)
- Lyrica " Lyrica (pregabalin) is indicated for the management of fibromyalgia, neuropathic pain associated with diabetic peripheral neuropathy (diabetic nerve pain), post-herpetic neuralgia (pain after shingles) and as an adjunctive therapy for adults with partial onset seizures in the U.S., and for neuropathic pain, adjunctive treatment of epilepsy and general anxiety disorder in certain countries outside the U.S." (32)

# 4.8 Goals and objectives

These two terms are the essential steps which delimits the following acts.

- Goal: to propose the marketing strategy that will be based on marketing research and will support sales of Lyrica when the generics enter the market. This should be achieved by an innovative strategy and concrete actions which will take place six months before losing the patent protection. This effect should last the next five years so the main goal is also the long term duration.
- Objective: to create a strategy that will be employed half a year before the expiration of the patent and will keep the Lyrica's exclusive position in the market. Each step is precisely described and its implementation is drawn up in the calendar.

## 4.9 Marketing research

The foundation of the primary market field analysis is to collect required data and information which will serve to final evaluation. Afterwards, the secondary market analysis uses all available information on the market to create a marketing strategy. The proposed solution should support and preserve the original brand drug after the patent expiration and protect the company against the fierce generic competition.

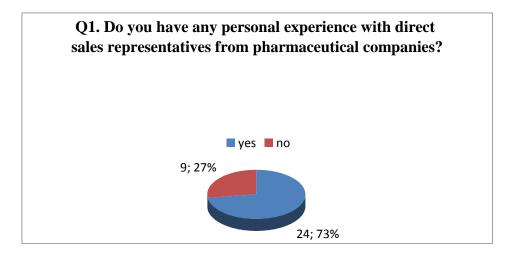
#### 4.9.1 Primary marketing research

The primary marketing analysis is established on the questionnaire, which will afterwards serve for the evaluation of obtained data. On the basis of executed information will be drawn up graphs corresponding to particular parts of the questionnaire. The main aim is to find out the opinions of the consumers (doctors, pharmacists) and alternatively their comments which could be crucial for the creation of the most effective marketing strategy to prevent the price decline after the generics attack the market. This promotion will be focused primarily on the *Lyrica* whose patent should run out in October 2013.

Questionnaire: "List of a research or survey questions asked to respondents, and designed to extract specific information. It serves four basic purposes: to collect the appropriate data, make data comparable and amenable to analysis, minimize bias in formulating and asking question, and to make questions engaging and varied."(30)

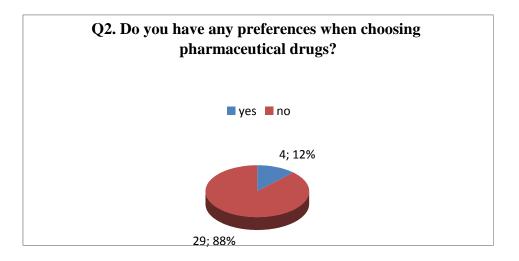
The following graphs are analyses based on the answers and feedbacks appraised from questionnaire fulfilled by 33 respondents from the pharmaceutical industry, particularly by doctors and pharmacists in the Czech Republic.

## Graph 1



Source: own work

Generally speaking, the majority of respondents have a personal experience with sales representatives, which means that they have an opportunity to speak with person responsible for the promotion and introduction of the new drugs and medicines, so far 24 answered yes. On the other side, there is still a gap of persons, who are not regularly in connection with sales representatives from pharmaceutical companies, exactly 27% persons. Therefore, this represents a significant possibility how to increase awareness about the company due to new highly-trained sales representatives.

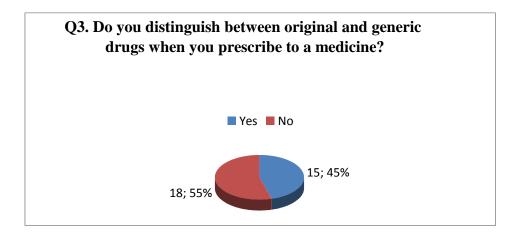


# Graph 2

Source: own work

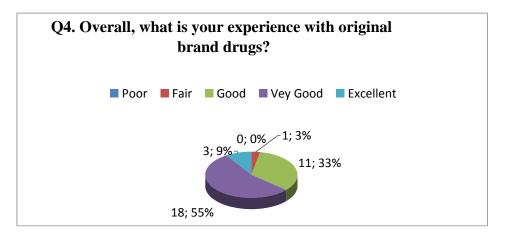
In most cases, doctors do not have any preferences when choosing the drug, which will be prescribed. Therefore, if generics already exist they do not differ between these two. This is a big "space" for marketing field and promotional strategy.

# Graph 3



Source: own work

Almost half of the interviewees distinguish between generics and original medicine; 15 persons; who mean that promotion and product recognition play the important role in the marketing strategy.

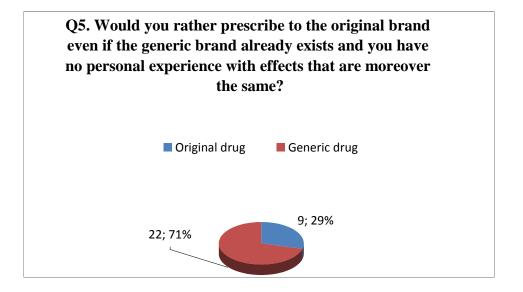


# Graph 4

Source: own work

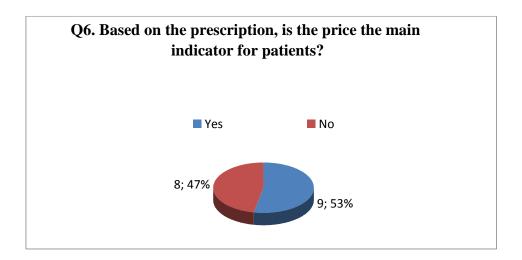
One more time, overall majority of respondents; 53%; declare a "very good" and "excellent" experience with brand drugs. It is an important finding which has to be taken in account when proposing the marketing strategy.

# **Graph 5**



Source: own work

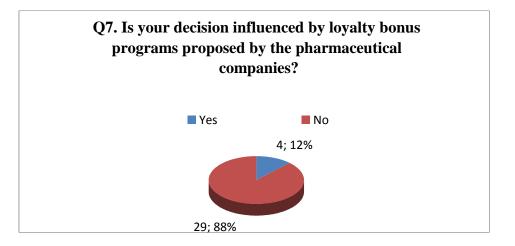
This graph shows that almost three quarters; 71%; of respondents prefer generics due to their lower price and moreover the same treatment effects. The number of respondents is reduced on 31, because pharmacists do not prescribe medicine.



# Graph 6

Source: own work

Regarding the price, in most of the cases it does play the crucial role. As mentioned above, alternative (generic) drugs offer significantly lower prices, because they do not have to invest in research and development which saves them a lot of financial sources. Pfizer will have to consider this aspect and probably go down with the price as well, but still keeping the price border above generics.

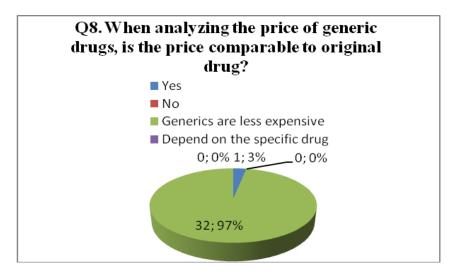


# Graph 7

Source: own work

Loyalty bonus programs do not represent an important issue for doctors and pharmacists who testify that cheaper alternatives are more prescribed if they already exist.

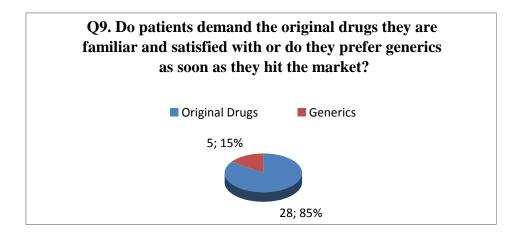
# Graph 8



# Source: Own work

It is no surprise that generic drugs are much cheaper compare to brand medicine; assumed by 97% of respondents. It has to be mentioned that price reflect lower cost of generics firms and as well its possible different side effects in treatment.

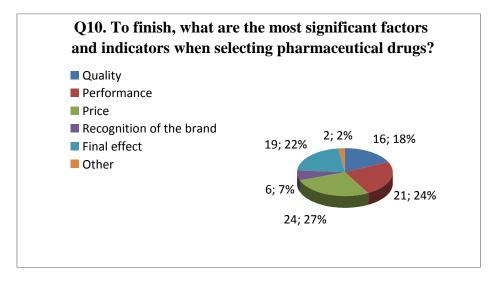
# Graph 9



# Source: own work

This question is a crucial detection in the questionnaire and confirms that majority of patients; 85% of respondents; do prefer original drug they are to and familiar with, which is an important factor for creating a promotional strategy.

## Graph 10



#### Source: own work

To sum up this questionnaire, respondents were asked to vote for the most significant factors influencing their choice when prescribing and selecting the drug. The biggest group put on the front place performance, price and final effect. These factors have to be highlighted when proposing the plan for the pharmaceutical company which face to generic attack on the market.

#### 4.9.2 Secondary marketing research

Secondary data sources are based basically on the primary research data and information provided by the company and their reports. The survey was primary focused on doctors and people working in the pharmaceutical industry as the strategy concerns the prescription drug that can be obtained only by a licensed prescriber. Consequently, the marketing promotion would not be targeted to consumers, but rather to doctors and pharmacists as the intermediary and the person who has the main role in deciding about drug which will be prescribed to the patient.

The actual situation is still influenced by the economic crisis, which put pressure on the firms, competition and prices. In addition, the pharmaceutical market is deeply affected by the number of generic competitors, unfortunately for the company that developed their drugs and invest a huge amount in the research. On the contrary, there are the generic firms who simply "copy" the original drug when the patent protection expires. That is the reason for employing the appropriate marketing strategy to support sales and preserve the original drug.

## 5. Results

#### 5.1 The proposed solution

Pfizer Inc. belongs to the one of the most stable firms in the pharmaceutical market and based on the survey preformed on the frame of consumers (doctors and pharmacists), the decision was made to create and implement a newer and slightly more aggressive marketing strategy. This strategy should significantly help reduce sales losses after the patent expiration of **Lyrica** in October 2013. Pfizer will have to worry about its generic competitors, which normally is one generic company that receives an ANDA (Additional New Drug Application) approving a position of exclusivity for the first six months after the patent expiration. After that period, other generic firms can easily obtain an ANDA and put pressure on the price which could fall by 80% compared to the brand product. Pfizer should try to protect and preserve the reputation and brand name of the product and its treatment effects. Hence, the main aim will be the maintenance and support sales of Lyrica while keeping the market share.

Normally, as far as the firm has no patent protection over the drug, they abandon its marketing and promotion because the cost would be higher than sales when the generics appears on the market. This situation can change when talking about blockbuster which represents a significant amount of revenues, the marketing strategy to preserve a minimum level of sales now becomes an important issue.

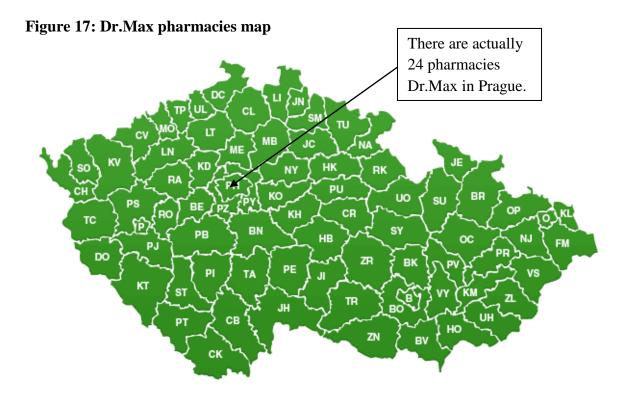
The chosen marketing strategy has to respect the specifics of the pharmaceutical industry, results of the questionnaire and the customer's needs. In a nut shell, different marketing attitudes and methods of marketing opportunities have to be considered. For example, direct marketing will symbolize the crucial role in the marketing strategy because the personal contact with clients (pharmacies, doctors) is highly important in this industry. So far, the golden rule "do not keep all your eggs in one basket" will be taken into consideration to prevent the catastrophic effects if the certain marketing method will not work.

# 5.2 The proposition of the strategic plan

To preserve the company before the patent expiration date and to support the future sales of *Lyrica* even if the generics enter the market, the proposed marketing strategy will be as followed:

Pharmacies will be offered to grant <u>a special price</u> for their clients and will counsel with them about Lyrica's effects for diabetics and the possibility to have a fidelity card. In return, the distributor will offer a special promotion 100+20 free which represents one fifth of *Lyrica's* drug for free, in the case pharmacies will agree on this promotion. In the Czech Republic, there are a low number of significant chains of pharmacies that could cooperate with Pfizer and call attention to Lyrica. To be more precise, the promotion will be offered to the two biggest representatives. The first one, which represents one fifth of the market, is Dr. Max (owned by Penta group) and the second one is BENU pharmacies.

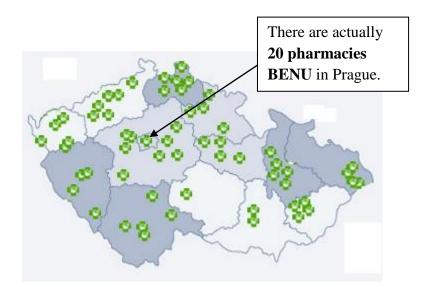
**Dr.Max**: comes under the company "*Česká lékárna a.s.*" and does business with 210 pharmacies across the Czech Republic which represents 20% of the market. They are located especially in the big shopping malls; nevertheless they have started to focus on private pharmacies close to strategically chosen places to attract more solvency clients. Since 2004, the owner of these pharmacies is the investment group Penta who has recently bought pharmacies Lloyds (up till now the third place on the Czech market with 55 pharmacies especially situated in the hospitals) and the medicine distributor Gehe Pharma (the fourth place on the Czech market with 17% of the market share). Their aim is to spread the net of Dr. Max drugstores up to 300 and enlarge their product portfolio. This integration by applying the Dr. Max business model should bring the most accessible pharmacies with the lowest prices available to everyone. The collaboration with such an enormous group could significantly support the Lyrica sales and raise the awareness of the product. In the beginning, this strategy will not be applied in the outer area, but mostly in Prague and its surroundings. If the result will be positive then expansion to other regions will be taken into serious consideration. (35)



Source: www.drmax.cz

**BENU:** represents the second largest pharmaceutical chain in the Czech Republic, called Pharmaland until March 2012. At the moment, this group owned by Dutch investors is numbered at 127. These pharmacies follow the trends of new technology and offer to their clients the most modern technology available concerning their health, healthy life style, prevention, and treatment. Due to its market position, BENU proposes a great opportunity how to attract a large population and raise awareness about Lyrica. Likewise in the previous case, this marketing promotion will be applied preferably in Prague and if the result is positive, it will be spread out into others locations. (36)

#### Figure 18: BENU's pharmacies map



Source: www.benu.cz

On the other hand, there are some risks to avoid. First of all the generic firms, which offer their products and drugs significantly cheaper (even less 50-60%), will try to take control over the original brand and unfortunately the big firms that lost their patents cannot do the same. In connection in an extreme case, this can lead to parallel trade. Parallel trade basically means the importer looks for cheaper goods and services on the world market which are substitutes. Afterwards, these products are bought and imported for significantly lower prices than in the local market. This effect was also noticed on the Czech market and due to our relatively cheap drugs most of them are imported (parallel trade). Subsequently, there is not enough reserve for the local market and there is even a shortage for Czech customers and patients in the pharmacies.

- An exclusive care for customers which means that in the case of usage of Lyrica there would be a special programme providing those in compliance with their treatment. There will not be any obligation to be involved in this programme, but it would be advantageous to the patients. This service should function among the patient, the doctor, and the pharmacist from the point when a patient will receive his prescription for Lyrica. A pharmacist will be informed and will regularly inform the patient about finishing of the drug, about its expiration and news in the treatment. Therefore, this exclusive service would significantly differentiate Pfizer from its competitors and could justify the higher price.
- Free gift with every purchase of prescribed drug Lyrica. This gift will be in the form of supplementary product THERMACARE® produced by Wyeth; company bought by Pfizer in 2009; to raise public awareness of another product in Pfizer's portfolio. In addition, this step could potentially increase the sales of these products as well. THERMACARE® is an over the counter drug sold in two versions, firstly for the backache in the form a self-heating wrap which significantly eases the muscular back pain caused by sprains, strain and over effort. The second form of THERMACARE® self-heating wrap grants the "relief of minor muscular and joint aches and pains associated with overextension, strains, sprains and arthritis".(33)



Figure 19: THERMACARE®

Source: 34

Raise the public awareness about Lyrica 6-5 months before an expiration, to be ahead of the game before the first generic alternative enters the market. There will be placed special billboards in the selected surgeries and pharmacies, which will not exactly point out Lyrica, because as it is the prescribed medicine, the direct form of advertisement is forbidden. Instead of it there will be a poster attracting by the question: "Do you look for relief from your chronic diabetic pain? Ask you druggist/doctor for the further information". The biggest advantage is the 180 day period after the expiration, when there is only one generic with normally a 10-15% lower price than the original branded drug. In this case, Pfizer could fight the price and cut down its price of Lyrica by 5-10% in the form of promotion on the quantity of bought medicine.

Most of the strategic actions are linked together and it holds for this case as well. The marketing promotion in the pharmacies and ordinations is organized six months before the patent expiration, precisely from April 2013. This period should be sufficient to inform not only customers, but especially doctors and pharmacists about Lyrica, which belongs to Pfizer's key medicine. Thus, doctors and pharmacies will have an opportunity to inform their patients and clients about an exclusive care service.

A special seminar proposed by Pfizer to doctors to mention the neuropathic pain, the history of Lyrica, its effects and success in treatment. Subsequently, the doctors will be informed about the loyalty program and a reduction system for a long time period.

This seminar would give a thorough understanding of the neuropathic pain caused by nerve damage, generally addressing patients who suffer from diabetes. Afterwards, the seminar will provide information about epilepsy and generalised anxiety disorder. There will be included an example of patient who has been using this medicine and due to it has significantly increase the quality of his life. At this point, experts in medicine will give doctors and the professional public the latest news about these problems, progress in treatment, and most importantly information about Lyrica. Lyrica is the essential medicine used in the medical treatment concerning the previous issues and has been studied in 22 different studies. The seminar will take in place in Prague due to the fact that there is a seat of the company and the space necessary for the organization of this action. Furthermore, Prague is in the centre of the Czech Republic and making it easily accessible for people to organize transport because the date will be announced in advance. There will be a possibility to stay for the dinner, which will follow the seminar. The preliminary day would be a Friday afternoon, as almost everyone works during the week so the working public will have the opportunity to attend.

Cooperation with a generic firm, which can bring another contributing factor to both companies. In short, Pfizer can offer its original product to the generic firm and this will save the costs from the generics firms and Pfizer can still keep its market share.

Another form of cooperation could be made on the same base, but with the pharmacy chains mentioned above –Dr.Max and BENU. In this case, Pfizer would be in charge of production of the drug and subsequently, pharmacies would exclusively sell this product under their private label. This would motivate drug stores to sell and offer this alternative to their patients for considerably lower prices and at the same time, Pfizer would still keep the production and sales of Lyrica. This will be sold in another package, with another name, and at a cheaper price, but still under the auspices of Pfizer.

Even if it can appear to be a "suicide", this step can bring benefits to both sides. Pfizer will still manufacture Lyrica even if the final product will be sold in the package of a generic firm. Thus, Pfizer will gain a smaller portion from sales, but will not lose the revenues completely. At the same time, patients who are used to their product and are familiar with it will find the same form of the drug, exactly the same ingredients, and the equal treatment effects for a considerably lower price. Most importantly, there will be no loser with this strategy in the case that it will work. The final solution should definitely lead to a win-win result.

Reduction of prescription limits, at this point in time the only person who has the ability to prescribe Lyrica is a specialist. This is due to make up of the medicine as

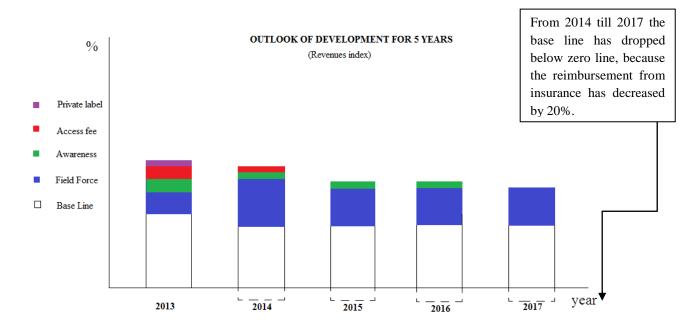
it helps to relieve diabetic nerve pain and neuropathy. If a possibility existed for patients to obtain the prescription from general practitioners (GP), the scale of users and prescribers would be significantly larger thus increasing the market share of Lyrica. To legalize this permission, certain institutions have to be contacted and the entire process will take a few months. Therefore, there much more sales representatives will be necessary (Field Force), who will visit GP and explain this possibility.

Bring down the price to the nearly the same level as generics. This strategy does not seem to be secure, but at the same time there are many patients who appreciate the brand and they are familiar with its case. This has to be taken in the account for the above reason alone. Subsequently, there are always customers who stay loyal with their brand, who like the package, form and are used to it. For example, if the colour of the generic pill will be orange instead of white, people will request the original white one, because this detail can play important role. Finally, if the package, the doze, and the composition of branded drug will remain the same, there should be no reason to switch for the competitor's product.

## **5.3 Outlook of development**

Every marketing strategy has to be demonstrated graphically to show an expected development when the proposed solution will be implemented. The chosen period was 5 years and figures are assumed on the index scale.

## Figure 20: Outlook of development



Source: own work

	2013	2014	2015	2016	2017
Base Line	100	100	100	100	100
Field Force	10	15	14	14	14
Awareness	5	2	1	1	0
Access fee	5	1	0	0	0
Private label	2	0	0	0	0
TOTAL	122	118	115	115	114

The whole graph above is based on the estimation of development when the marketing strategy for Lyrica will be employed. Base line is expressed in index representing 100%, the actual position of Lyrica on the market. The following items are

given in percentage from the revenues and show the assumed effect of the steps proposed in the marketing strategy. Overall, the costs should not have exceeded 25% of the revenues.

**Field Force (FF)** – represents the sales representatives of Pfizer who will promote Lyrica programme in the pharmacies chain and will inform doctors about the possibility to prescribe the medicine even as a GP. Thereafter, the service of exclusive care for customers will be introduced as well and for all these action will be necessary to increase the present number of FF. Finally these steps should go up to 15% from existing 10 %.

**Awareness** – includes the campaign in pharmacies and a free gift (THERMACARE) which will be offered to the clients with prescriptions in the pharmacies. This step should increase the awareness especially in the first years.

**Access fee** - means the reduction of prescription limitation from specialists to general practitioners which should also raise the user pool.

**Private label** – represent the cooperation with generic firms and pharmacies to whom will be offered an exclusivity to sell Lyrica. Drug will be provided and manufactured by Pfizer, but sold in the package of private label of a generic company or at pharmacies BENU or Dr.Max.

## 5.4 The forecast

The applicable marketing strategy has to plan in advance their every step and every issue. Included in this strategy there has to be a projection for a certain period of time, otherwise the strategy can burn out because of insufficient preparation, which is the "cornerstone" of the marketing strategy.

## Figure 21: The marketing strategy calendar 2013

## April

Mon	Tue	Wed	Thu	Fri	Sat	Sun
(1)	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

#### June

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Ist April 2013 will officially start the promotion in the selected pharmacies Dr.Max and BENU in Prague and its surroundings. Druggist will be trained to provide information and counselling about Diabetes and the special offer of Lyrica.
  - The pharmacies promotion will continue (the poster will be placed) together with an exclusive customer care which will be proposed to loyal customers by druggist in selected pharmacies and by GP or specialists in their surgeries.
  - Ist June 2013 is when the first seminar is offered concerning the problem of Diabetic nerve pain and possible treatments and minimization of risks (by Lyrica).

# July

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

# August

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

# September

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
(	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30						

- July and August are the main vacation periods so marketing activity will take a break, but the preparation for the promotion starting in September will still continue.
- July and August are the main vacation periods so marketing activity will take a break, but the preparation for the promotion starting in September will still continue.
- Ist September 2013 will be the announcement of a new price of Lyrica, which will be offered for a special price -30% compared to the actual price. Subsequently, based on the response from the patients, the additional changes will take place.
- 16<sup>th</sup> September the second seminar with the same problematic base will take place.

# 5.5 The implementation

Implementation is another core step of the whole marketing strategy and does not have to be underestimated. Up to this point there are several factors which have to be followed.

#### **Facts**

One of the most important steps in the implementation is to summarize recent information and facts about the strategy itself - to whom, where, when and how is the strategy addressed. Particularly to patients, doctors, and pharmacies chains in the Czech Republic. The first promotion will be applied six months before expiration of the patent for *Lyrica*, exactly in April 2013.

#### <u>Needs</u>

Another essential step to reach the goal would be to identified needs. First of all, the sales representatives (Field Force) who will promote and offer the promotion to clients (doctors) and in the pharmacies have to perfect their communication abilities. The money invested in the whole marketing strategy project must be allocated in the correct way. The employees should be interested in the success of the plan, otherwise it can burn out.

#### **Pitfalls**

There are several mistakes to watch out for. As it already mentioned above, every step of the strategy should be planned and there should always be someone responsible for that particular phase. Afterwards, there should be regular meetings to talk about the progress of the strategy, a response from clients, and eventually make some changes to fudge the faults.

# Periodic review of the strategy

To ensure the right development of the strategy, there should be certain periodic reviews and controls to find out whether the selected marketing strategy is appropriate and effective. This step is highly important as it serves as a great feedback of the work being done and it enables the discovery of potential problems which can be changed before they appear enormous. Thus, there are many people involved in the preparation of the strategy and the time and money devoted to every plan has to be utilised in the right way.

# 6. Conclusion

In the 21<sup>st</sup> century, the importance of a marketing strategy is often underestimated, despite the huge effect that it can have on the company. The development of advertisement, marketing, and promotion leads to the necessity of having a high-quality and effective marketing strategy because this is the only tool which can ensure the success in the current highly competitive environment. Nowadays, the market is flooded by different forms of promotions and every company tries to develop a new innovative way to attract the mass of customers. This means that it is essential for Pfizer to do not undervalue this part of promotion and to protect and preserve the sales of Lyrica. The main goal is to be different and to highlight the competitive advantage. The pharmaceutical industry and market has certain particularities and this is why the strategy has to be continuously updated and controlled reflecting goals and objectives that are mentioned above.

To ensure achievement of this goal, company has to take maximal advantage of its tangible, intangible, and human resources. Human Resource especially should be highly qualified with a well trained staff. Accordingly, the strategy is created and proposed with utilization of all the possible tools and approaches which are crucial for planning. These tools are as follows; analysis of external and internal environment, definition of goals and objectives and the primary marketing research (questionnaire).

The proposed strategy was adapted to the pharmaceutical market which has given specifics that have to be regarded as the limitation in the form of promotion. An example of this is how direct advertising cannot be used in the pharmacies if the drug is only on prescription. Subsequently, the legislative restrictions concerning the drug registration, patent protection, generic competition and prescription limits. Throughout planning phase, the strategy was based on the answer from respondents (questionnaire) and consultation with persons working in Pfizer and in the pharmaceutical industry to ensure the practical employment of the proposed marketing strategy is carried out.

To sum up, this thesis should provide a practical solution to Pfizer who is facing the fierce competition from their generic rivals every day. Its application should facilitate and support the sales of original drugs and increase the sales and efficiency of the pharmaceutical company.

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# 8. Appendices

# **Appendix 1: Questionnaire**

# **<u>Questionnaire:</u>** Marketing research for a new product concept

Your feedback is highly appreciated. This survey will take you no more than 5 minutes.

# Q1. Do you have any personal experience with direct sales representatives from pharmaceutical companies?

□ Yes

□ No

# Q2. Do you have any preferences when choosing pharmaceutical drugs?

□ Yes, I try to stay loyal to my favourite brand.

 $\square$  No, it depends what is new on the healthcare market.

# Q3. Do you distinguish between original and generic drugs when you prescribe to a medicine?

□ Yes

 $\square$  No

# Q4. Overall, what is your experience with original brand drugs?

 $\square$  Poor

 $\square$  Fair

 $\square \ Good$ 

 $\Box$  Very Good

 $\square$  Excellent

Q5. Would you rather prescribe to the original brand even if the generic brand already exists and you have no personal experience with effects that are moreover the same?

□ I always prescribe to the original brand product as long as I see the treatment is effective.

 $\Box$  I prefer generic drugs because the price is significantly lower and the treatment is the same.

Q6. Based on the prescription, is the price the main indicator for patients?

 $\Box$  Yes

 $\square$  No

Q7. Is your decision influenced by loyalty bonus programs proposed by the pharmaceutical companies?

 $\Box$  Yes

□ No

Q8. When analyzing the price of generic drugs, is the price comparable to original drug?

 $\Box$  Yes

 $\square$  No

□ Generics are less expensive

□ Depend on the specific drug

# Q9. Do patients demand the original drugs they are familiar and satisfied with or do they prefer generics as soon as they hit the market?

□ Original drugs

□ Generics

# Q10. To finish, what are the most significant factors and indicators when selecting pharmaceutical drugs?

 $\Box$  Quality

- □ Performance
- $\square$  Price
- $\square$  Recognition of the brand
- $\Box$  Final effect
- $\Box$  Other

# **Appendix 2: Pfizer Income Statement**

#### Income Statement

iew: Annual Data   Quarterly Data			I numbers in thousand
Period Ending	Dec 30, 2011	Dec 30, 2010	Dec 30, 2009
Total Revenue	67,425,000	67,057,000	49,269,000
Cost of Revenue	15,085,000	15,838,000	8,459,000
Gross Profit	52,340,000	51,219,000	40,810,000
Operating Expenses			
Research Development	9,112,000	9,392,000	7,824,000
Selling General and Administrative	21,947,000	23,816,000	15,037,000
Non Recurring	2,934,000	3,326,000	4,398,000
Others	5,585,000	5,403,000	2,877,000
Total Operating Expenses	39,578,000	41,937,000	30,136,000
Operating Income or Loss	12,762,000	9,282,000	10,674,000
Income from Continuing Operations			
Total Other Income/Expenses Net	-	-	-
Earnings Before Interest And Taxes	12,762,000	9,282,000	10,674,000
Interest Expense	-	-	-
Income Before Tax	12,762,000	9,282,000	10,674,000
Income Tax Expense	4,023,000	1,071,000	2,145,000
Minority Interest	(42,000)	(31,000)	(8,000)
Net Income From Continuing Ops	8,739,000	8,211,000	8,529,000
Non-recurring Events			
Discontinued Operations	1,312,000	77,000	114,000
Extraordinary Items	-	-	-
Effect Of Accounting Changes	-	-	-
Other Items	-	-	-
Net Income	10,009,000	8,257,000	8,635,000
Preferred Stock And Other Adjustments	-	-	-
Net Income Applicable To Common Shares	10,009,000	8,257,000	8,635,000

Currency in USD.