

IMPROVEMENT OF THE INNOVATION MANAGEMENT SYSTEM IN THE PHARMACEUTICAL INDUSTRY OF THE REPUBLIC OF UZBEKISTAN

Ortikboy OTAMURATOV,
Academy of Public Administration under the President of the Republic of
Uzbekistan, 2-year graduate student
E-mail: mralgoritmus@gmail.com

Abstract: *At the present time, the pharmaceutical industry's competitiveness and the next stage of development is determined by implementation of innovative developments and successful introduction of new technologies into this area which is created by local research institutions and scientists. This article discusses scientific and practical information on improvement of innovation management processes and implementation of innovation in the pharmaceutical industry.*

Аннотация: *В настоящее время конкурентоспособность фармацевтической промышленности и следующий этап ее развития определяются внедрением инновационных разработок и успешным внедрением новых технологий в эту область, которые создаются местными научно-исследовательскими учреждениями и учеными. В данной статье обсуждается научно-практическая информация о совершенствовании процессов управления инновациями и внедрении инноваций в фармацевтической отрасли.*

Аннотация: *Бугунги кунда мамлакатимиз фармацевтика соҳаси ҳолати ва кейинги ривожланиш босқичида унинг рақобатбардошлиги, бу соҳада маҳаллий илмий тадқиқот институтлари олимлари томонидан яратилган инновацион ишланмалар ва янги технологияларни амалиётга муваффақиятли жорий этилиши билан боғлиқ. Ушбу мақолада фармацевтика соҳасида яратилган инновацияларни амалиётга жорий этилишини бошқаришни такомиллаштириш тўғрисида илмий ва амалий маълумотлар келтирилган.*

Keywords: *pharmaceutical industry, management of innovations, classification of innovations, research and development in pharmaceutical industry, pharmaceutical industry competitiveness.*

Introduction

The pharmaceutical industry of the Republic of Uzbekistan, which is one of the most important elements of the healthcare system, is on the verge of radical changes. Most of all, these changes should be related to the formation of an innovative component, the development of import substitution and the growth of labor productivity. In this regard, the issue of improving the state regulation of the pharmaceutical industry is becoming more urgent. To protect the industry from competing imports, which create a threat to domestic producers, it is possible through government intervention and stimulation of the innovative component in the pharmaceutical industry. This knowledge-intensive industry, viewed from the point of view of all the main parameters, should become one of the most highly developed

sectors of the economy. After all, the domestic pharmaceutical industry contributes to the development of society and the improvement of its health.

At present, the preservation and strengthening of public health is one of the priorities of the state in the field of domestic policy. The solution of this problem in our country is connected with the task of effective development of the pharmaceutical products market. In the current conditions of market relations, this market, although it is one of the most stable developing segments of the country's economy, there are important and urgent problems that require in-depth study and a fairly prompt solution. This refers to the need to study the state of the market and its base - the pharmaceutical industry, which is able, under favorable conditions, to effectively address a significant part of the population's needs for medicines.

In this connection, an important problem is the restructuring and modernization of the pharmaceutical industry of the Republic of Uzbekistan in accordance with international standards, the formation and development of an innovative economy based on scientific and technological progress and the growing needs of society. Practical implementation of these issues is inextricably linked with government support of the pharmaceutical industry. In solving the problem, the task of supporting scientific developments in the field of pharmacy and medical technology, as well as the formation of investment resources for the progressive development of the market of quality innovative medicines, is of special importance.

New economic conditions in Uzbekistan led to the introduction of the terminology of the market economy into scientific circulation, including in the field of innovation. In the relevant domestic and foreign literature devoted to the study of problems of innovation, different views on the nature and content of innovation, innovation, innovation processes are traced. It is important to note that in economic literature there is no single understanding of the essence of innovation. Different scientists, both foreign and domestic, interpret these concepts depending on the object and subject of their research. In our dissertation research, the object is the pharmaceutical industry, which has a huge social importance, in this regard, the study will give preference to such interpretations of innovations, where there is an aspect of social effectiveness and significance. Under innovation, we will consider the final result of the introduction of a new idea, contributing to meeting the existing need in the market in order to obtain an economic, social, ecological, technical and other type of effect. The main thing is to innovate, to turn innovation into the form of innovation, that is, to complete innovation activity and get positive not only economic but also social result, which for the pharmaceutical industry acquires special significance, since it is socially significant and touches upon issues of socioeconomic and biological security of the country.

Literature review

Directly the problems of innovation planning and management of innovation processes were studied by such foreign scientists R. Adam, E. Rogers, A. King, B. Schneider, L. Anderson, L. Brigitte, H. Barnet and others. Innovation management was reflected in the works of R. Bazzel, SV. Valdaït wa, V.M. Vlasova, E.I. Krylova, V.B. Sirotkin, U. Sharp and others.

The subject of innovation management in various fields of activity was devoted to their research by foreign scientists: I.T. Balabanov, N.P. Form, Tsc. Dosy, P.F. Drucker, P.N. Zavlin, A.K. Kazantsev, G.A. Krayukhin, D. Medovnikov, M.S. Mintairov, B. Perkin, I. Pinnings, E.V. Popov, AA Rummyantsev, B. Santo, B. Twiss, R. A. Fatkhutdinov, J. Haur, P.K. Yankovsky, I. Schumpeter, A.G. Fonotov, D. Fore, Yu.V. Yakovets, etc.

At the same time, there are still not so many domestic fundamental research on the problem of innovation in the pharmaceutical industry, so practice needs to develop a system of measures to support innovation in the market of medicines.

The subject of the study is the pharmaceutical industry

The subject of the study is the theoretical and methodological problems of innovation management in the pharmaceutical industry.

The aim of the study is to improve the innovation management system in the market of medicines.

Realization of the set goal implies the solution of the following tasks

- clarify the concept and formulate the main types of classification of innovations in relation to the sectoral section of the economy;
- identify the features of innovation in a rapidly changing competitive environment;
- analyze the state and development trends of the world market of food innovations in the pharmaceutical industry;
- identify problems in the local market for innovative medicines;
- to improve the concept of development of the pharmaceutical industry;
- within the framework of the proposed concept, to develop elements of a strategy for the development of pharmaceutical clusters;
- to offer criteria for evaluating the company's innovative potential for introducing basic or improving innovations;
- develop methodological recommendations for calculating the value of an innovative product;
- Propose and justify methodological recommendations for assessing the social and economic effectiveness of innovations in the pharmaceutical industry.

Theoretical and methodological basis of the research

The theoretical basis of the research was the normative legal acts of the Republic of Uzbekistan, the materials of international scientific and practical conferences on the development of the medical support system. The theoretical basis of the study was the work of domestic and foreign scientists who substantiated the conceptual provisions in the field of general management theory, as well as in the field of innovation management. The methodological basis of the study is: a systematic approach, the principles of logical and comparative analysis, methods of comparison, grouping and generalization, analogies and quantitative analysis, analytical and prognostic methods. The information basis of the thesis was statistical data of the State Committee of the Republic of Uzbekistan on Statistics, materials of legislative and executive and regional authorities. As an empirical base in the study, the results of the American information and analytical company IMS Health, specializing in the research of the world pharmaceutical market, reports of the

marketing agency DSM Group, developing analytical databases on the pharmaceutical market, statistical data of JSC "UzFarmSanoat", as well as other Internet resources Specializing in the production of specialized periodicals.

Classification of innovations

It is important to note that in economic literature there is no single understanding of the essence of innovation. Different scientists, both foreign and domestic, interpret these concepts depending on the object and subject of their research. In our dissertation research, the object is the pharmaceutical industry, which has a huge social importance, in this regard, the study will give preference to such interpretations of innovations, where there is an aspect of social effectiveness and significance. Under innovation, we will consider the final result of the introduction of a new idea, contributing to the satisfaction of the existing demand in the market for the purpose of obtaining economic social, ecological, technical and other type of effect. The main thing is to innovate, to turn innovation into the form of innovation, that is, to complete innovation activity and get positive not only economic but also social result, which for the pharmaceutical industry acquires special significance, since it is socially significant and touches upon issues of socioeconomic and biological security of the country.

To develop an innovation strategy, it is necessary to know the classification of innovations. The theory and practice testify to its diversity. Depending on the goals and objectives of the research, various classifications are used. As a rule, in publications devoted to innovations, each author brings his own classification of innovations. Summarizing various points of view, it is possible to classify innovations according to different criteria, which is reflected in Figure 1.

Classification criteria	Prevalence	Single		Diffuse	
	Place in production cycle	Raw		Binding	
	Subject and sphere annexes	Technological		Goods	
	Areas of development	Industrial		Financial	
	Continuity	Substituting		Abolishing	
	Coverage of the expected market share	Local		Systemic	
	Innovative potential	Radical		Modified	
	Content	Technical		Organizational	
	Degree of novelty	Absolute		Relative	
	Scientific and technical significance	Basic		Pseudo innovative	
	Expansion level	World		Public	
	Cause emergence	Reactive		Strategic	
	Features of innovative of the process	In-house		Inter organizational	
	Nature of the needs	Focused on existing needs		Focused on new needs	
	Attitude to spheres of activity	Manufacturing		Technological	
	Entrance and exit	Changes in the choice of resources		Changes in the product lines and services	

Figure 1. Multicriterial classification of innovations

For the pharmaceutical industry, product innovations are of particular importance, since it is the medicines themselves that are a vital product for the population of the country, but product innovations are also important for enterprises. They allow the firm to maximize profits through an increase in relative to the cost price of the actual sale of a unit of a new product, as well as new modifications and upgrades of the previous product. Product innovations allow you to maximize the profit of the firm and through increased sales.

To achieve this, three types of strategy are possible: when a firm develops, develops and offers in the existing commodity market highly effective, attractive products (medicines) that switch from the company's competitors to the demand of customers for this type of product; When creating a new product, finding a "niche" in the market, satisfying the existing demand in the previously unfilled market segment; When the buyer is offered a fundamentally new product and at the same time creates a new market, on which there are no competitors yet.

Conclusion

When entering the emerging pharmaceutical markets, it is necessary to develop a flexible strategy adapted to the specific characteristics of local markets. At the initial stage it is necessary to get acquainted with the details of the development of the country's healthcare system, the available infrastructure, the main features of the national mentality, the economic situation, state regulation of the industry.

There are 5 critical factors that determine the company's success in the developing pharmaceutical market:

1. A differentiated approach to the marketing of products, which is necessary for the market and which could potentially interest consumers.
2. Availability of access to the most recent, accurate and reliable research data information necessary for understanding emerging markets.
3. An effective inventory management strategy developed in accordance with the needs of the local market.
4. Development and implementation of commercial models, with which you can increase the profitability of the company's business in developing pharmaceutical markets and reduce the time of return on investment.
5. Understanding the features of pricing and determining the margin, which achieves the maximum possible market value of the company's products in a given market.

References

1. Global Competitiveness in the Pharmaceutical Industry: The Effect of National Regulatory, Economic, and Market Factors. Haworth Press, 1999; 188 pp.
2. Helms, Robert B. Competitive Strategies in the Pharmaceutical Industry. AEI Press, 1996; 400 pp.
3. Parvis, Ethan N. (Ed.). The Pharmaceutical Industry: Access and Outlook . Nova Science Publishers, Inc., 2002; 193 pp.
4. Schweitzer, Stuart O. Pharmaceutical Economics and Policy. Oxford University Press, 1997; 256 pp.

5. Smith, Mickey C. *Studies in Pharmaceutical Economics*. Haworth Press, 1996; 586 pp.

6. *The Pharmaceutical Industry: The Future of Pharmaceuticals — Opportunities, Risks & Areas to Watch*. Aspatore Books, 2003; 240 pp.

7. Takuji Hara. *Innovation in the Pharmaceutical Industry: The Process of Drug Discovery and Development*, 2003

8. Tony Grundy, Laura Brown. *Project Management for the Pharmaceutical Industry*, 2004

9. Andre Jungmittag. *Changing Innovation in the Pharmaceutical Industry: Globalization and New Ways of Drug Development*, 2003

10. Oliver Gassman. *Leading Pharmaceutical Innovation: Trends and Drivers for Growth in the Pharmaceutical Industry*, 2004