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ABSTRACT

This article deals with the problem of applying advanced methods for managing the activities of oil and gas enterprises in Uzbekistan. The main problems faced by oil and gas companies in Uzbekistan are described, and innovative management methods are proposed that can help solve these problems. The article also describes examples of successful implementation of innovative methods for managing the activities of oil and gas enterprises in other countries. The main innovative approaches to management are considered, their advantages and disadvantages are analyzed, and ways of their implementation in the oil and gas industry of Uzbekistan are proposed.

Keywords: oil and gas enterprises, activity management, innovations, oil and gas industry, advanced methods, management, management models, management methodology, enterprise activity, oil and gas complex, oil and gas industry.

Introduction

The development of the oil and gas industry in Uzbekistan is taking place in parallel with significant organizational and economic transformations, which create fertile ground for the development of production, as well as the widespread use of innovative technologies. The need to implement innovative processes in the oil and gas industry is associated, first of all, with the main problem of the economy - the rational use of limited resources to meet the growing needs of society. At the same time, an equally important prerequisite for innovative development is that today, in the context of globalization and a fundamental change in the world market conditions, competition is intensifying, and it is innovation that is the most effective means of competition, as it leads to the creation of new needs, to cost reduction. products, to increase volumes and improve production efficiency, which, in turn, affects the attraction of investments. Recognizing the effectiveness and high importance of innovation, it should be noted that the transition to the accelerated development of innovation requires the creation of a new organizational and economic mechanism. In other words, competition alone is not enough to launch the innovation process, competition is only the cause, the source of innovation processes, and more conditions are needed to promote their development. Such conditions, first of all, are organizational structures, specific forms and methods of management, as well as legal norms, with the help of which innovative projects will be implemented. In this regard, the issues of studying the organization and management of innovative processes, the formation of a mechanism for the introduction of innovative



technologies, which receive much attention in the scientific economic literature, become relevant. At the same time, the changes taking place today in the world economy, an even greater demand for innovations, determine the improvement of the mechanism for introducing innovative technologies into the economy, in particular, the mechanisms for increasing innovative activity.

The period of development of market relations in the Republic of Uzbekistan posed a number of problems for enterprises, the main of which are the development of organizational and legal forms of management, the reform of the enterprise management system and the introduction of organizational models that are optimal for maximizing profits and increasing capital, as well as solving social problems. New forms of integration of business entities and the formation of corporate structures made it possible to take a fresh look at the role of the mechanism of financial and economic management and identify new priorities for its functioning. The efficiency of the country's economy largely depends on solving the problems of sustainable development of corporations that form the organizational basis of economic life. As studies of recent years show, the vast majority of investors consider the practice of the company's management bodies as a factor even more important than the financial results of their activities.

LITERATURE ANALYSIS ON THE TOPIC

The founder of the theory of innovation is J. Schumpeter, who in his work "The Theory of Economic Development", published in 1912, considered innovation (new combinations) as a means of entrepreneurship for profit [20].

One of the first researchers of innovation problems in Russia was N.D. Kondratiev. He is famous for the fact that for the first time in his work "Large cycles of the conjuncture" he introduced the concept of "long wave" in relation to innovations that characterize the impact of radical innovations on world industrial development. He attributed such innovations: the invention of steam engines, the idea of building a railway, the electric power industry and the automotive industry. [14] Currently, there is no generally accepted definition of innovation in the scientific literature. Analysis of the above definitions of the term "innovation" allows us to state that three points of view are widespread. First, innovation is identified with innovation, novelty. The second point of view, innovation is seen as a process of creating new products, technologies, innovation as a process of introduction into production of new products, elements, approaches that are qualitatively different from the previous counterpart.

F. Pikson believes that innovation is a set of technical, industrial and commercial activities that lead to the emergence of new and improved processes and equipment on the market. Russian scientist V.P. Vlasov notes that "innovation" means the commercialization of the results of creative work, including in the humanitarian fields of knowledge, sold on the market for goods and services. In the world economic literature, "innovation" is interpreted as the transformation of potential scientific and technological progress (STP) into a real one, embodied in new products and technologies. In accordance with international standards, innovation is defined as the end result of innovative activity, embodied in the form of a new or improved product introduced to the market, a new or improved technological process used in practice, or a new



approach to social services. The subjects of the innovation process are divided into innovators, early recipients, early majority and laggards. Innovators are generators of scientific and technical knowledge. These may be individual inventors or research organizations. They are interested in receiving a part of the income from the use of inventions. Entrepreneurs who are the first to master the innovation and seek to obtain additional profit by promoting innovation to the market as soon as possible act as early recipients. They were called "pioneer organizations". The early majority are firms that are the first to introduce an innovation in production, which provides them with additional profit.

According to I.G. Ushachev, I.S. Sandu V.G. Savenko, the effectiveness of innovation activity depends on the opportunities for the formation and development of innovation potential in the country as a whole, in each region, industry, sub-sector, enterprise.

RESEARCH METHODOLOGY

The study is based on a general scientific methodology that involves the use of a systematic approach to solving problems. In the course of the study, various methods were used: observation, system analysis, economic and statistical analysis, expert assessments, monographic, etc. Analysis and results of the study from the standpoint of modern management theory are practically any processes and phenomena occurring in the state, the economy as a whole or a separate enterprise, carried out under the influence of the functioning of a certain type of mechanism. In the economic literature, there are several approaches to the interpretation of the concept of "management mechanism", the study of which made it possible to determine the essence and main aspects of the mechanism for managing innovation activity. The mechanism for managing innovation and introducing innovative technologies is an integral part of the economic mechanism, which should be understood as a set of specific forms and methods of management, organizational structures, legal norms, through which the actions of economic laws are implemented, a continuous process of reproduction is maintained, and macroeconomic balance is achieved at various levels. and in various macroeconomic systems. The mechanism of the system for introducing innovative technologies is a system that includes two subsystems: organizational and economic mechanism. The organizational mechanism for managing the system of introducing innovative technologies consists of such elements as innovative marketing, administrative methods of state regulation of the national innovation system, and innovation clusters. The economic mechanism of the system for introducing innovative technologies is a set of methods and forms of influence on the economic interests of commodity producers in order to increase the efficiency of the technologies being introduced. These methods of influence include: strategic planning; financing of subjects of innovative activity; lending; insurance of economic risks in the innovation sphere; pricing; relationships of business entities with suppliers and consumers; taxation; customs and tariff regulation of technology export-import. It should be noted that the organizational and economic mechanism operates in a certain regulatory and legal sphere, with the help of which the economic laws operating in specific conditions are implemented, and the process of reproduction in the national innovation system is ensured.



Innovation potential is the accumulated level of knowledge in combination with the material and organizational conditions that ensure the use of this knowledge for the scientific, technical and economic development of the enterprise. This definition has at least two components: resources and the result of their use. This directly follows the next, continuously connected with the previous category of "innovation capital", which is a realizable innovative potential that provides profit or other innovative effect.

All scientific, technological, organizational, financial and commercial activities that actually lead to the implementation of innovations can be defined as innovation activities, including research, development and implementation of new products and processes, new methods of product distribution, as well as changes in organizational practices and enterprise structure.

The innovative capital of enterprises included in the system of Uzbekneftegaz JSC is an innovative system of the country's oil and gas complex and has the same advantages and disadvantages as the National Innovation System as a whole.

The key element in the mechanism for the implementation of innovative projects is the infrastructure of the innovation process, which is based on technology transfer centers, innovation and technology centers, technology parks and high-tech territories, R&D support funds, start-up and venture financing funds, centers for training specialized personnel for information support of innovation and others

The Government of Uzbekistan has introduced both financial - grants, tax incentives, venture financing, and non-financial instruments to stimulate innovation - technology transfer centers, technology parks, the annual Innovation Fair. Their value is difficult to overestimate. For example, the annual republican fair of innovative ideas and projects, aimed at creating conditions for improving the technological level and competitiveness of domestic production, stimulating the development and implementation of research, development and technological projects in production, provides great opportunities for developing contacts between developers of innovative technologies with manufacturing companies. The results of fairs of innovative ideas, technologies and projects testify to a significant economic effect. In general, within the framework of the I-IX fairs, about 4,200 innovative ideas and technologies were presented, more than 4,000 contracts were concluded for a total of 144 billion 100 million soums. As noted, the republic pays special attention to stimulating innovation, the main forms of which are tax incentives, concessional lending, state grants, etc. A good example of comprehensive support and stimulation of active entrepreneurship, the accelerated development of science and innovation is the adoption of the Decree of the President of the Republic of Uzbekistan dated January 22, 2018 No. UP-5308, according to which, for a period up to January 1, 2023, from paying all types of taxes and mandatory payments, with the exception of unified social payment, the following are exempted: emerging venture funds that co-finance high-tech entrepreneurial start-up projects; high-tech start-up projects co-financed from venture funds; research institutions, innovation centers, design bureaus on income received from the sale (transfer for use) of their own new technologies to entrepreneurs; organizations for the transfer of new technologies to domestic entrepreneurship in terms of income from this activity [6]. In addition, in order to create conditions for the further effective introduction of innovations in industries and sectors of the economy, research organizations



are exempted until January 1, 2022 from customs duties (excluding customs clearance fees) for imported scientific equipment, components, consumables, reagents, software according to the lists approved in the prescribed manner. Research organizations, in terms of their core activities, are also exempt from all types of taxes and mandatory contributions, with the exception of contributions to the off-budget Pension Fund under the Ministry of Finance of the Republic of Uzbekistan, with the targeted use of the released funds for material incentives for their employees.

In this article, attention is focused on the factors that stop the innovative activity of enterprises in the industry:

- its functioning is aimed at solving specific problems that are not subordinate to the general goal of innovative development;

- there is no unified targeted innovation policy, formalized in the form of a program document for the medium and long term. The existing programs of enterprises provide for modernization, an increase in the technical level of production and require the production of competitive products oriented towards export and replacement of imported products. However, these programs do not include accompanying measures to stimulate the development of local scientific potential, training and retraining of personnel, the creation of support structures and the introduction of innovations in production; - Lack of financial resources.

In total, 86 innovations have been introduced in the oil and gas industry in recent years, of which 70 are their own and 18 are implemented with the participation of other organizations (research institutes). In the reporting year, the most active was the Bukhara Mechanical Plant, which introduced 32 technological (product) innovations on its own, which is more than 36% of the total number of implemented activities, the Urgenchtransgaz branch (7 events) and IGIRNIGM JSC (6 events).

Only IGIRNIGM JSC and NEFTEGAZTAJIKOT JSC were engaged in fundamental research, which is only 8% of the R&D volume. Design work on the construction was carried out only by UzLITIneftgaz JSC (86.8% of the R&D volume).

Mostly, client funds were the source of funding for research and development costs carried out in-house.

During the analyzed years, about 70% of the number of people employed in scientific research are specialists-researchers, and the rest are technical, support and other personnel. Among specialists-researchers, about 90% have higher education.

To develop measures to improve the efficiency of using innovative potential, a model scheme should be used to increase the efficiency of its use in fuel and energy companies, including in the oil and gas industry of Uzbekistan. At the same time, the main attention at the level of the oil and gas industry, as can be seen from the above diagram, should be given to:

- formation of the market of innovative capital - the formation of a list of necessary for the industry, demanded, innovative developments and control over the timely development and implementation of innovative developments;

-creation of a legal framework - development of regulations for the systematic attestation of scientific and scientific-industrial personnel and, on this basis, activation of the process of rejuvenation of scientific personnel;



- stimulating the introduction of innovative developments - the transition from cost management to managing the results of innovative activities, increasing funding for innovative research, improving the system for stimulating the creation and implementation of innovative developments.

Industrial and innovative capital and innovative capital of enterprises in a number of cases remain unclaimed, mainly due to imperfect competition. Therefore, it is necessary to develop a special industrial strategic program for the development of competition and the creation of conditions for expanding the capacity of the market for industrial and innovative capital. First of all, it should cover the creation of the necessary regulatory and legal framework for innovation activity, include the solution of topical issues of stimulating production in matters of commercialization and the introduction of new equipment and technologies, the production of modern high-tech competitive products, and the development of exports.

Increasing the capacity of the market for innovative capital is of paramount importance in the process of forming a system of innovative interaction between science and production. At the same time, it is associated with the optimal combination of investment in the development of new technologies for this production of other enterprises with capital investment in the development and implementation of their own innovations. It is necessary to implement measures for the development of science-intensive industries, modernization, technical and technological re-equipment of production. Scientific institutions, as the results of the annual fairs of innovative ideas, technologies and projects show, have sufficient potential to offer modern innovative developments in various fields of engineering and technology.

In this regard, a transition to modern forms and mechanisms of financing science and supporting innovation is necessary, which should include the implementation of the following measures for the purpose of innovative development.

First, a gradual increase in the volume of budgetary financing of expenditures on research and innovation support, taking into account the introduction of criteria for their effective use.

Secondly, the concentration of funds on the financing of especially important fundamental and applied research conducted by research teams.

Thirdly, in the field of industrial higher education, it is necessary to ensure the concentration of grant resources for the implementation of educational programs within the priority areas of science, engineering and technology necessary for industry, to provide grant funding to individuals (researchers) in new important areas of science development and registration of patents for R&D results.

Mechanisms of direct partnership with private capital should be included in the conditions of low innovation activity, along with instruments of indirect incentives.

It is necessary to develop fiscal instruments that provide significant benefits in the implementation of R&D, financing the initial stages of innovative projects. An important step could be long-term financing on a repayable basis at a low interest rate, insurance of investment projects. Thus, the industry, through the appropriate institution, will share with the entrepreneur and private investor the risks inherent in innovative projects.

It is important to develop international cooperation in using the strategy of "borrowing" innovative technologies through institutional strengthening, the creation of a joint venture.



And another very important aspect of ensuring the innovative development of oil and gas enterprises is to reduce the tax burden in order to create financial resources that ensure the creation and implementation of innovative developments. This is especially important for the extractive enterprises of the oil and gas industry in Uzbekistan.

CONCLUSIONS AND OFFERS

Many more examples of the positive impact of existing mechanisms for introducing innovations can be cited, but with large positive shifts in the organization and management of innovation processes, the development of innovation infrastructure, some gaps are also found. For example, a full-fledged innovation infrastructure should consist of such elements as a service system for innovative firms that carry out project examination, consulting, engineering, audit, advertising and other services, as well as various forms of entrepreneurship training in the scientific and technical field (educational institutions, special courses, departments, seminars, symposiums, etc.). Many of the above exist in our country, but their activities are defective and inefficient. This is due, first of all, to the lack of effective tools for financing scientific research, including incentives for enterprises in the real sector of the economy to participate in the implementation of scientific, applied and innovative projects and developments. The lack of effective mechanisms for interaction between the state and the business sector of the economy are common reasons that hinder innovation. Based on the above, the innovation policy in the oil and gas industry of the republic should be based on:

- strategic planning of the main directions of industrial development of scientific and technological achievements with the subsequent formation of a model of innovative development of industries;

- expanding opportunities for access to investment flows directed to the development and implementation of innovative ideas and technologies in the agricultural sector;

- increasing the level of development of the infrastructure of the innovation process, including the system of information and consulting support for producers, as well as training;

- further development of research potential based on the creation of a system of comprehensive support for the innovation activities of research institutions;

- improvement of the regulatory and legal framework that ensures the attraction of investments (including foreign ones) in the development and implementation of innovative ideas and technologies.

In general, the system for organizing and stimulating innovation in the oil and gas industry of our country should be aimed at public and private partnerships and include the following forms: tax and customs incentives, subsidies, loans, venture financing, contracts and orders in the field of research and development. - design work, information support, integration of science, education and business.

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