

# Ways of Determining Innovative Potential in a Joint Stock Company

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**Abstract-** The article describes the scientific and theoretical aspects of determining the innovative potential of a joint-stock company. The coefficients of modernization and intensification of innovation law in the joint-stock company "Dori Darmon" were also analyzed. At the same time, the analysis of the efficiency of business activity of innovations and the coefficients of financial efficiency of innovations was also carried out. The existing problems of identifying innovative potential in a joint-stock company are identified and scientific proposals and practical recommendations aimed at their elimination are developed.

**Keywords:** Innovative potential, financial efficiency, modernization, intensification, the efficiency of innovation business activity.

## I. INTRODUCTION

In the conditions of modernization of the economy, innovative activity is the main factor in increasing the possibility of economic growth of joint-stock companies. The regularly developing possibilities of the innovation process in joint-stock companies are significantly changing all aspects of social life, radically renewing economic relations in joint-stock companies.

Objectives 51 and 52 of the Development Strategy of New Uzbekistan, the creation of an innovative economy, through the systematic formation of real integrated relations between science and production, is determined to include the Republic of Uzbekistan in the top 50 countries by 2030 in the global innovation index[1].

For these purposes, the total cost of technological renewal based on the production of innovative products with high added value in the districts and cities of the Republic, which are being transformed into innovative regions, is 165.9 billion. 195 projects totaling soums have been planned.

Naturally, these large and strategically important innovative projects will positively strengthen Uzbekistan's position in the global innovation index. This, in turn, requires financial resources related to the financing of large-scale innovations, and the financing of innovative projects at the expense of these financial resources requires first of all the research of the economic nature and importance of innovations based on the conditions of modern economic reforms.

If we pay attention to the retrospective foundations of scientific views specific to innovations, we can see that the development of innovations and theoretical views specific to them rests on two bases. The first is the cyclical development concept of the economy. In this case, the dynamic description of the development of the individual society, unlimited needs, and constant change and renewal are the driving force of economic development. We can see that the development of society took place through the organization of innovative activities and effective financing in all aspects of its socioeconomic life.

Secondly, innovations have a cyclical nature related to the implementation of certain innovations. In particular, the economic growth rate depends on the life cycle of innovative development and goods. Innovation processes do not end with bringing new goods and services to the market. Because all goods and services have a life cycle, and this cycle has a cyclical nature. The maximum satisfaction of consumer needs and their fading will continue with the emergence of the need for new products. This situation confirms the continuity of innovation processes related to technological renewal. That is why, today, determining the innovative potential of a joint-stock company is one of the most important issues.

## II. LITERATURE REVIEW

According to the world experience [2], one of the important factors in increasing the competitiveness of the country's economy in modern conditions is the formation of a strong system of knowledge transfer and the creation of a production chain of innovative goods with high added value by putting it into practice. The above-mentioned factors of sustainable development in the future embody the elements of the integrated system of innovative activity, and their effective organization requires the research of the content of the elements of the innovative system and the laws of internal communication.

The first systematic etymological interpretation of the concept of innovation was given by Joseph Schumpeter, according to whom innovation embodies the following 5 aspects: 1. Use of new techniques, and technological

processes; 2. Creating a new product and bringing it to the market; 3. Use of semi-finished products; 4. Changing the technological and organizational structure of production; 5. Development of new market segments [3].

From these theoretical interpretations, we can see that innovation is a process related not only to the creation of innovation, but also to its realization, and the innovation process also shows a system of incentives based on some utility for the subject.

In modern literature, the category of innovation includes the ground of development [4], a process based on a systematic paradigm [5], the transfer of developed or systematized ideas [6], a complex solution to a bank of problems [7], developed knowledge, the product of intellectual labor [8], commercialization, popularization and we can see that the trends of technological development of discoveries combined with diffusion processes are given definitions such as [9].

Russian economists V.N. Kruglov and S.A. Paukov systematized the innovation category as a process, change, activity, system, result, process, and result complex as a result of the synthesis of scientific views.

From the above definitions, we can see that there is a colorful economic nature of the category of innovation, which requires considering the dialectical relationship between its management as a process based on a systematic paradigm and financial provision and the material basis of this process. In particular, the director of the Open Innovation Center of the Business School of the University of California, G. According to Chesbrough [10], technology imitation is a specific form of open innovation, and its paradigm as a systematic process is related to the search for relevant ideas, external knowledge, and technologies.

Naturally, although the material basis of innovations is some kind of knowledge, economist S. Thornhill argues that it is appropriate to view knowledge as a resource [11] rather than as an innovation. Therefore, knowledge is not innovation by itself, but it becomes an innovation only by systematizing this knowledge, commercializing it, and having some kind of socio-economic benefit. In the practice of developed countries, most countries prefer to implement a national venture industry. But from our point of view, the application of the foreign model in our country may not lead to the results we expect. The reason is that our country is not ready to take some of the existing risks of investing in innovative projects.

In global practice, the tax system plays an important role in stimulating the innovative activity of enterprises. One of our local scientists Giyasov S.A. in his research [12], tax incentives are a mechanism used to regulate a certain economic activity or pave the way for its development. The Tax Code of the Republic of Uzbekistan establishes tax incentives for the development of certain types of activities:

- individuals engaged in these types of activities to start a commercial business as a result of scientific work and develop it has the privilege of deferring tax payments;
- a mechanism for reducing the tax burden on taxes from commercial activities carried out based on a scientific idea is used;
- a “tax holiday” will be implemented about the financial results of innovative projects;
- exemption from dividend tax for owners participating in joint-stock companies based on a certain share;
- tax benefits, i.e. reduction of certain tax rates, for subjects engaged in scientific work;
- in the provision of intellectual investments, there is a system of benefits about the benefits obtained from it;
- there is a mechanism for not spending the profit obtained based on scientific developments for charitable purposes.

Politicians, government representatives, and large entrepreneurs are usually involved in the management of innovative activities. In the US, the state program for the development of innovative activities has been adopted, and several achievements have been made. Gurbanova M., one of our local scientists. N. According to [13], there are three models of conducting scientific and innovative activities in countries with large business networks:

- 1) the USA, England, and France are considered to be countries with great achievements in connecting science and its production;
- 2) Germany, Sweden, and Switzerland are countries that can create a favorable environment for innovative research;
- 3) Japan and South Korea are among the countries that have favorable mechanisms for the commercialization of various scientific ideas in terms of production or service innovation infrastructure demand, leadership in the implementation of scientific ideas, assimilation, and scientific development.

In some economically developed countries, various forms of funds have been established to finance innovative

activities:

- Support of scientific research of large companies;
- World Space Agency;
- National Institute of Health Promotion;
- Industrial and production research centers;
- Academy of Sciences;
- American Country Association for the Advancement of Science.

### III. RESEARCH METHODOLOGY

Our research was carried out using the following formulas through the systems of indicators of the joint-stock company's innovative potential and efficiency.

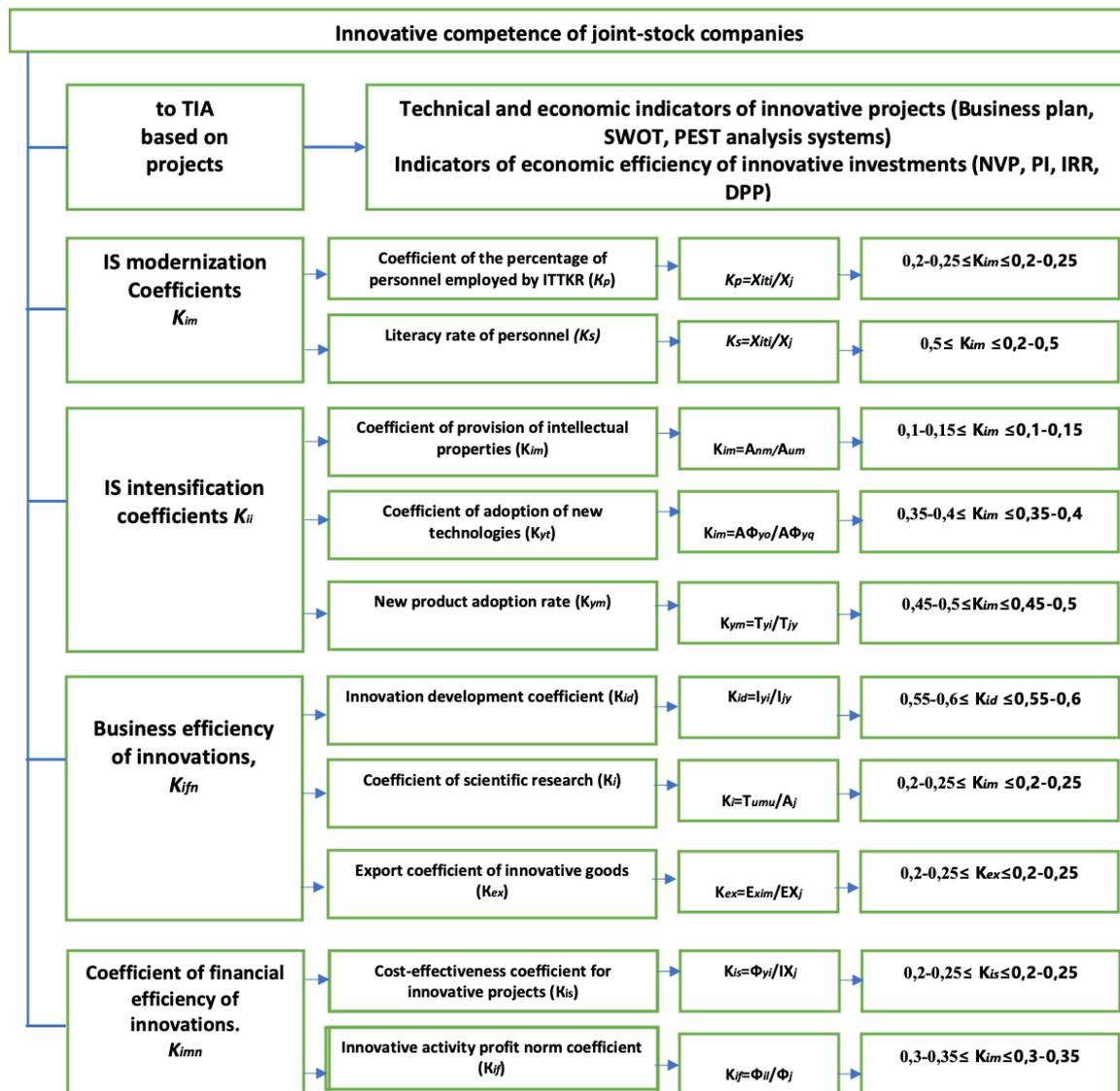


Figure 1. The system of indicators of the joint-stock company's innovative potential and efficiency of its use<sup>1</sup>

<sup>1</sup> Formed by the author based on Internet sources.

#### IV. ANALYSIS AND RESULTS

In the research work, the system of indicators of innovative potential in the joint-stock company “Dori Darmon” was analyzed.

Table 1: System of indicators of innovative potential in “Dori Darmon” joint stock company<sup>2</sup>

No	Indicators	Formula	2017	2018	2019	2020
<b>Modernization coefficient of innovative potential</b>						
1.1	the percentage of <i>personnel</i> employed by ITTKR ( $K_{\Pi}$ )	$K_p = X_{it}/X_j$	0.02	0.02	0.04	0.05
1.2	Literacy coefficient of personnel ( $K_s$ )	$K_s = X_{om}/X_j$	0.51	0.64	0.57	0.59
	$K_{im}$	$K_{im} = (K_p + K_s)/2$	0.265	0.33	0.305	0.32
<b>Intensification coefficient of innovative potential</b>						
2.1	Coefficient of <i>provision</i> of intellectual property ( $K_{im}$ )	$K_{im} = A_{nm}/A_{um}$	0.001	0.001	0,002	0.001
2.2	<i>assimilation</i> of new technologies ( $K_{yt}$ )	$K_{yt} = AF_{no'}/AF_{yq}$	0.017	0	0.01	0.01
2.3	Coefficient of adoption of new products ( $K_{ym}$ )	$K_{ym} = T_{yl}/T_{jy}$	0.02	0.001	0.01	0.021
	$K_{ii}$	$K_{ii} = (K_{im} + K_{yt} + K_{ym})/3$	0.013	0.001	0.007	0.011
<b>Coefficient of business activity efficiency of innovations</b>						
3.1	Coefficient of innovative development ( $K_{id}$ )	$K_{id} = I_{yl}/I_j$	0.21	0.19	0.28	0.24
3.2	Coefficient of scientific research ( $K_i$ )	$K_i = T_{it}/A_j$	0.09	0.12	0.15	0.11
3.3	Export coefficient of innovative goods ( $K_{ex}$ )	$K_{ex} = EX_{im}/EX_j$	0.14	0.17	0.15	0.26
	$K_{ifn}$	$K_{ifn} = (K_{id} + K_i + K_{ex})/3$	0.147	0.160	0.193	0.203
<b>Coefficient of financial efficiency of innovations</b>						
3.3	Cost-effectiveness <i>coefficient</i> for innovative projects ( $K_{is}$ )	$K_{is} = F_{it}/IX_j$	0.017	0.15	0.21	0.27
3.4	Innovative activity profit norm coefficient ( $K_{if}$ )	$K_{if} = F_{it}/F_j$	0.053	0.047	0.062	0.19
	$K_{imn}$	$K_{imn} = (K_{is} + K_{if})/2$	0.035	0.0985	0.136	0.23

The data of Table 1 shows that the coefficient of modernization of innovative potential in "Dori Darmon" JSC was 0.265 in 2017, and this indicator increased to 0.32 by 2020. In this, a high weight mainly falls on the personnel policy on improving the literacy of personnel (employees). But in the general context, when compared to the average indicators of joint-stock companies, the percentage of employees engaged in scientific research and experimental design work (ITTKI) had a low indicator. A decrease was observed in this coefficient, which confirms the almost non-existence of intellectual properties in the joint-stock company. The coefficient of adoption of new products increased to 0.21 in 2020 and had the opportunity to accelerate the policy of sales due to the adoption of new drugs. Therefore, it can be concluded from these indicators that joint-stock companies are provided at the expense of paying more attention to external sources in the introduction of innovative projects.

In 2017-20, a positive change was observed in the efficiency coefficient of business activity of innovations. In particular, in 2017, this coefficient was 0.147, and by 2020 it reached 0.203. This increase mainly corresponded to the coefficient of export of innovative goods (0.26 in 2020). Also, in recent years, the joint-stock company's investment policy focused on the adoption of new innovative projects (0.24).

The coefficient of financial efficiency of innovations was 0.035 in 2017, and by 2020 this aggregated coefficient was 0.23. In the growth of this aggregate coefficient, the coefficient of profitability of expenditure on innovative projects (0.27) served as the main influencing factor.

From the data in Figure 2, we can see that the integrated indicator of innovative activity efficiency  $I_{if}$  provided a rapid growth rate, reaching 0.091 in 2017 and 0.217 by 2020.

<sup>2</sup> It was formed based on the annual financial reports of "The Dori Darmon" joint stock company.

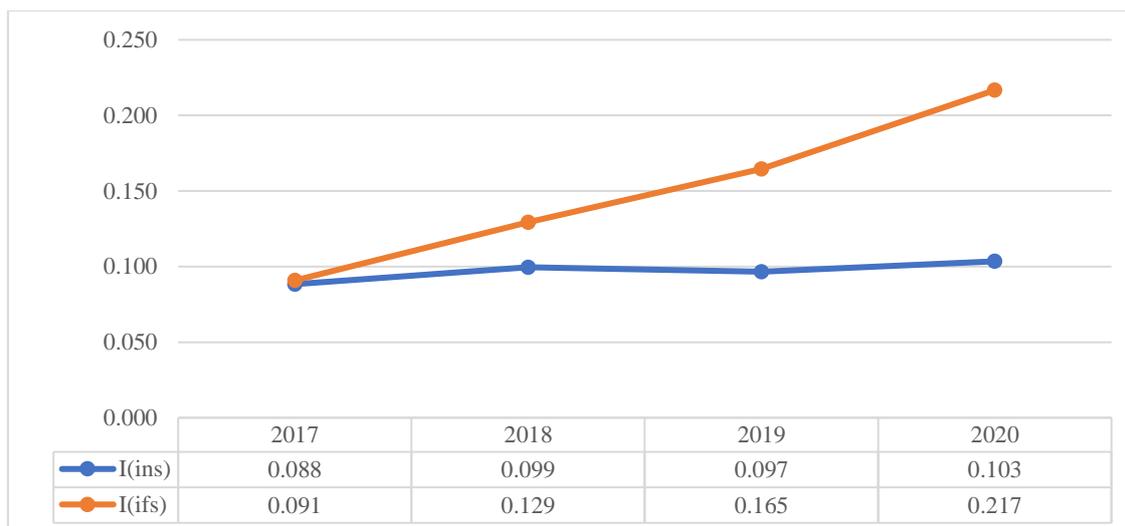


Figure 2. Dynamics of integrated indicators of innovation potential and efficiency of innovative activity in "Dori-Darmon" joint-stock company<sup>3</sup>

Although it is a lower-than-average indicator compared to joint-stock companies, the use of existing investment potential is at a relatively low level of the integral indicator (I(ifs)) (0.088 in 2017; 0.103 in 2020) and the high efficiency of innovative activity indicates that in the future, reforms aimed at increasing investment potential use indicators will be carried out economically. confirms its feasibility. Because, at a low rate of capacity utilization, innovative activity has high multiplicative efficiency.

## V. CONCLUSIONS AND SUGGESTIONS

As a result of the dissertation research conducted by the author, the following conclusions were formed:

1. As a result of summarizing the scientific views on the innovative potential of joint-stock companies, it was recommended to separate its structural components into the following elements: first, the internal capabilities accumulated as a result of effective entrepreneurial activity in each enterprise, which form the basis of the innovative potential. The second element of this component is "functional according to ITTKI" and the third element is formed in an integral connection with the components of internal capabilities, such as "organizational and accumulated experience". The accumulated experience in innovative activity requires, first of all, that this activity is systematically implemented and based on a holistic organizational system that incorporates a system of mutual distribution of powers by functional sections.

2. It is desirable to make management decisions aimed at the correct organization of innovative activities based on the assessment of the internal innovative potential of each joint-stock company and the system of integrated indicators of the effectiveness of innovative activities.

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