

**IMPROVING METHODS FOR THE ASSESSMENT OF THE INNOVATIVE POTENTIAL
OF THE ORGANIZATION ON THE EXAMPLE
OF OJSC «BEREZOVSKY CHEESE-MAKING PLANT»**

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The essence of the innovative capacity has been determined. The proposed method of the integrated assessment of the innovation is based on two modules: scientific-technical and industrial-financial, which includes a number of indicators that characterize the innovative condition of the organization. Also, the innovative capacity has been analyzed on the example of OJSC "Berezovsky Cheese-making Plant" in accordance with this method.

To implement the efficient management of the innovation activity it is necessary to diagnose a level of the innovative capacity of the organization and to estimate its dynamics for further development.

The purpose of assessing the innovative capacity is the ability to select and implement the innovation strategy of the organization, which allows strengthening its position on the market. The assessment of the level of the innovative capacity of the organization will:

1. Adequately assess the possibility and readiness of the organization to innovate.
2. Analyze and predict the development trends of the organization to identify its strengths and weaknesses.
3. Prepare the recommendations on the formation of the innovative strategy of the organization and the mechanisms of its implementation.

The comparative analysis of the methods proposed in the economic literature indicates their diversity, both methodical basis of research systems, and on the innovation potential assessment method. Some scientists and specialists prefer tenths, mostly expert methods for assessment factors; others use to this purpose statistical and quantitative data.

Before moving to the assessment of the innovative capacity of the organization, it is necessary to determine the nature and the significance of the category of the innovative potential.

The innovative capacity of the organization is the degree of its readiness to fulfil the task to ensure the achievement of the objectives of innovation, in other words the degree of readiness for the implementation of the innovation project or a programme of the innovative transformation and introducing the innovations.

Having examined the existing methods, we group together the indicators expressing the innovative potential, in two modules: scientific and technological, which provides the progress and development of the organization and production and financial reflecting the financial resources and the effectiveness of innovation. The list of indicators ensures the necessary and sufficient information on the innovative capacity of the state of the organization (Table 1).

Table 1 – Indicators assessment of the innovative capacity organization

Component indicator	Symbol
Scientific and technical module (NT):	
1.1 Number of patents and other intangible assets (licenses, know-how, trademarks, technical designs and models), including applications filed for patents, pcs.	NT1
1.2 Number of products or technologies that protected by patents received in the last three years, pcs.	NT2
1.3 The number of employees with an academic degree (doctors, PhDs), pers.	NT3
1.4 Number of employees engaged in research and development.	NT4
1.5 The budget of the R&D organization, mln.	NT5
1.6 The volume of external funds raised for R & D, million rubles.	NT6
1.7 The volume of orders in the R&D received from other organizations (universities, research institutes), pcs. and a million rubles.	NT7
1.8 Funding for research and development at the expense of own funds used by the company for R&D as a percentage of revenue, excluding the budget	NT8
Industrial and financial module (PF):	
2.1 Number of implemented innovations	PF1
2.2 The volume of shipped innovative products (works, services), million rubles.	PF2
2.3 The total amount of costs (capital and operational) innovation, million rubles.	PF3
2.4 Number of acquired patents, technologies and other intellectual property objects in the last 3 years, the pieces in mln.	PF4
2.5 The volume of exports of innovative products (works, services)	PF5
2.6 The amount of of expenses for equipment, tools and tooling operation life is under 5 years old as a percentage in the total amount of capital expenditures	PF6

Further, for clarity and more precise understanding of the level of the innovative potential of the organization a graph based on the considered indicators is constructed. The graph shows the level of the innovation potential of each component which also helps to identify problem areas in the development of the organization and allows the development of the corrective action on the specific indicators in order to increase the overall level of the innovation capacity of the organization.

According to the developed method, we will define the innovation potential of the organization on the example of JSC "Berezovsky cheese-making plant" and identify its strengths and weaknesses, and then be able to give a number of recommendations to improve its innovative capacity.

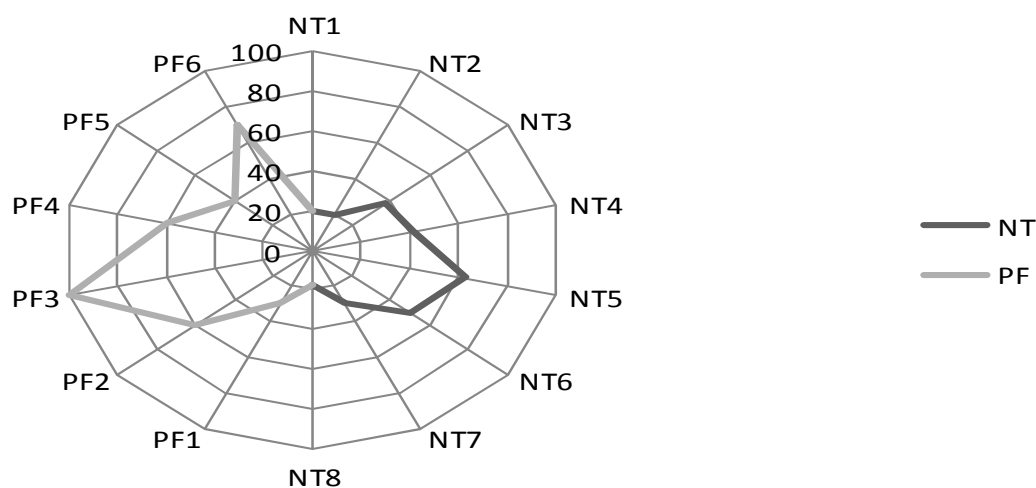


Fig. 1. The analysis of the innovative potential JSC "Berezovsky cheese-making Plant" for the 2013–2015 year

As shown in Figure 1, which is dominated by the production and financial indicators of the module, thus the priorities in JSC "Berezovsky cheese-making Plant" is to improve business processes, aimed at saving resources, modification of the product line, the introduction of new and innovative techniques and technologies. The internal infrastructure innovation consists of a small number of researchers. The company begins to produce innovations, however, it's early to speak about an active innovation, since there is no involvement of a wide range of specialists and the contribution of a larger share of own funds in the innovation.

Next, you must determine the integral estimate of the innovation potential because it allows us to reduce the set of indicators to a single heterogeneous generalizing indicator that in its turn allows you to compare the innovative potentials of different organizations. In order to assess the innovation potential of the organization we are encouraged to use the integral index, which is defined by the formula (1):

$$IP = NT + PF, \quad (1)$$

where IP is the innovative potential of the organization.

$$NT = \sqrt{\sum_{i=1}^8 NT_i^2}, \quad (2)$$

where NT is a scientific and technological module.

$$PF = \sqrt{\sum_{i=1}^6 PF_i^2}, \quad (3)$$

where PF is a production and financial module.

According to the interpretation of the estimation of the innovation potential of the region's organizations we are encouraged to develop a matrix that expresses the 4 quadrants solutions. Each quadrant is interpreted by the value of scientific and technological, production and financial modules. We offer the following description of the quadrants in Figure 2.

Economics

Quadrant 4 "Researchers" Region organizations which have a Research and development (R&D) infrastructure, but have a weak industrial base	Quadrant 3 "Winner" Region Organizations with the best values of innovation potential indicators
Quadrant 1 is "Lost" Organization region with an extremely low production and financial and innovation potential	Quadrant 2 "Manufacturers" Region Organization receptive to innovation, but they do not have the infrastructure of R&D

Fig. 2. Grouping and placement organizations in the quadrants of innovation potential the matrix organizations

Source: own development.

The organizations that are placed in the quadrant of the "Winner" have aimed their resources at the innovation. The priority areas of the innovation are the development of process innovations, the introduction of new or improved method of production, the establishment on this basis of new products, as well as the search for and the development of new activities. The internal infrastructure of the innovation activities is represented by a large number of employees engaged in research and development. The implementation of the innovative activity is one of the main priority activities.

By counting an integral assessment of the innovation potential and defining its location in the considered matrix, we can say that the JSC "Berezovsky cheese-making plant" is in the quadrant "manufacturers". Therefore the organization positively accepts the innovation and has the capabilities to implement them, but is not ready to develop and put into practice their own innovation and scientific development on a large scale. This organization needs to improve the qualification of its employees and to attract a larger number of staff with advanced degrees for creating the research sector, it should also increase the production of the innovative products and strive to find its niche on the international market, due to which the organization will have the additional funds for the acquisition and development of new technologies.

Thus, the author has developed a system of the organization of the innovation potential estimation, which has some features:

The calculation of the proposed to take place within the human, financial, scientific, technical, industrial, technological, organizational and managerial capabilities. Such system approach to the evaluation of innovation potential allows estimating the impact of factors on the innovative capacity of the organization, not only from different sides, but also to identify the most important key reasons that decisively influence the state of the system.

The proposed method covers a relatively small number of the indicators, which facilitates the calculations, but at the same time, provides a complete coverage of the elements of the innovative potential organization.

The share of expert scores is reduced to a minimum in the overall composition of the indicators and does not provide for the use of essential factors of significance that eliminates the subjectivity of the result.

The result of this approach not only provides an integrated assessment of the innovative potential, but also allows you to identify the specific elements that require the management actions to improve the innovative potential.

We believe that the proposed method will improve the organization of the innovative potential assessment procedure to identify the opportunities to increase its level as well as to develop and to analyze alternative options for the further strategic development of the organization. The advantage of using this method is determined by the fact that it interprets the innovative potential not only as a sum of its component indicators, but also as an integrated complex, located in an objective relationship.

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