

# **ECONOMIC EVALUATION OF THE INTELLECTUAL AND INNOVATIVE ACTIVITY OF ENTERPRISES**

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Despite a fairly large number of studies on the methodology and methodology for assessing the intellectual and innovative activity of organizations, in this area a number of problems, especially in the field of industrial production, remain unresolved. First of all, this concerns the conceptual apparatus.

There are various approaches to the definition of the concept under consideration, about the continuing and clarifying which, we can offer the following: the intellectual and innovative activity of enterprises is a dynamic characteristic of innovation activity, reflecting the ratio of the rate of change of the resulting indicators of the organization in various aspects and the rate of change in the costs of various resources for intellectual and intellectual. Thus, this definition allows us to assess both the intensity and effectiveness of the use of intellectual and innovative potential. Considering the methodology for assessing the intellectual and innovative activity of an enterprise, we note the following. In practice, a quantitative assessment of intellectual and innovative activity the activity of enterprises and organizations is carried out on the basis of three main approaches: functional, the result of ivy and factor-resultive.

*The functional approach* is distinguished by the main feature that within its framework, to assess the intellectual and innovative activity of the organization, not the characteristics of the final results of its intellectual and innovative activities are used, but indicators of the intensity of the organization's implementation of certain types or components of such activities, in particular:

- realization enterprise or scientific organization of individual types and stages of R&D;
- acquisition of embodied new technologies (various types of new technological equipment and tooling);
- acquisition of non-real new technologies (various types of intellectual property);
- training and retraining of personnel; implementation of elements of the marketing complex for new types of products.

Evaluation of each of the listed activities within the framework of the functional approach is carried out using natural and cost (cost) indicators. The result-based approach is based on obtaining an assessment of the intellectual and innovative activity of the organization using indicators that characterize various aspects of the final results of its innovation activity. Depending on the nature of such aspects, this approach is divided into three more specific approaches: dynamic, the effect of the forming and mixed, that is, the *dinamichno-effect* it's formative.

*The factor-resistive* approach to assessing the intellectual *and* innovative activity of the organization is distinguished by the fact that within its framework such an assessment is carried out on the basis of combining the factor and result characteristics of intellectual and innovative activity. Innovation activity within the framework of this approach in the general case usually uses a set of criteria such as:

- the amount of expenses of the organization for the implementation of research and development, the acquisition of intellectual property and the financing of inter-firm research projects;
- indicators of the composition and number of staff, temporary teams, units and inter-firm associations engaged in R&D;

- the volume of new technologies acquired by the organization within the framework of technological transfer systems;
- the scale and quality level of the material base of the research activities of the organization, etc.

As criteria for assessing the result characteristics of innovation activity, within the framework of this approach, both indicators of the usual result approach and a number of specific indicators are used, in particular:

- indicators of the duration of individual stages of innovative developments; indicators of the dynamics of renewal of the company's product portfolio;
- the volume of new technologies transferred by the organization within the framework of technological transfer systems;
- volumes of new products exported by the organization;
- the number of new technologies and types of products introduced during the period.

As the main tools for assessing the relationship between the factor and result characteristics of the intellectual and innovative activity of the organization, it is usually customary to use various methods of statistical analysis, in particular, methods of rank statistics, correlation regression and variance analysis. Thus, the factor-result of the ivny approach after a certain modification, taking into account the specifics of industrial production, can be applied in the field of study:

$$T_{ii} = [(T_t \times T_p \times T_r) / (T_w \times T_s \times T_i)] 100\%,$$

where:  $T_{ii}$  is the rate of change in the intellectual and innovative activity of an industrial enterprise, %;  $T_t$  is the rate of change in the turnover of an industrial enterprise, %;  $T_p$  is the rate of change in the profit of an industrial enterprise, %;  $T_r$  is the rate of change in the profitability of the turnover of an industrial enterprise, %;  $T_w$  - the rate of change in the number of employees engaged in intellectual and innovative activities, %;  $T_s$  - the rate of change in the cost intensity of trade turnover (the ratio of the amount of costs for intellectual and innovative activity to the volume

of trade turnover), %;  $T_i$  is the rate of change in the costs of innovation activity engaged in intellectual and innovative activities, %.

Both intellectual and innovative activity of enterprises and organizations is considered sufficient if the value of the indicator is more than 100%.

The advantage of this approach is the complexity and consideration of not only costs, but also the results of intellectual and innovative activities of industrial enterprises.

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