ASSESSMENT METHODS OF USE OF INNOVATIONS IN BUSINESS SUBJECTS

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Abstract: This article presents ideas about methods of evaluation of the use of innovations in small business entities and scientific proposals and practical recommendations aimed at their improvement and effective use of innovations in the development of small business entities.

Key words: Small business, market economy, development of entrepreneurship, use of innovations.

Introduction

In the Republic of Uzbekistan, special attention is paid to strengthening macroeconomic stability and maintaining high economic growth rates. In particular, special attention is paid to the comprehensive and balanced socio-economic development of regions, districts and cities by stimulating the development of small business entities. In particular, the "Uzbekistan - 2030" strategy sets important tasks to "... increase the gross domestic product to $ 160 billion and per capita income to $ 4 thousand, increase the share of technological products produced in industry from 25% to 32%, establish centers that will promote science and innovation in the field, new approaches, and the implementation of modern technological measures". The implementation of these tasks requires the acceleration of work to ensure the sustainable development of small business entities in the economy and increase its efficiency.

Innovative activity involves obtaining a certain result, which should be evaluated in terms of its usefulness for society and impact on the environment. The effectiveness of innovation development is a complex economic category that reflects the impact of the results of scientific and technical and production activities on the process, ensuring economic and social efficiency, reducing the environmental burden. When assessing the effectiveness of innovation development, we consider it appropriate to use a system of indicators corresponding to the criteria and types of effectiveness: technological, economic, social and environmental.

Technological efficiency includes the level of resource utilization. Economic efficiency refers to the level of implementation of production relations. In market conditions, it is the main one among others. Economic efficiency is expressed in obtaining a certain result, in excess of the income received from production over the costs spent on it. Social efficiency implies improving living conditions, the level of social development. Ecological efficiency is understood as preserving the environment while increasing production productivity and providing the population with environmentally safe food products[1].

Research methodology.

Economic-statistical methods, systematic analysis, group comparison, comparison, selective observation methods, multifactor econometric analysis, forecasting and other methods were used in the research.

Analysis and discussion of results (main part).

For technological efficiency - the value of the development, the level of novelty and compliance with the world standard. The following system of indicators can be used to evaluate innovative products: [2] (1- picture).

[1] Kropyvko M.F. Organizational forms of introducing innovations in agro-industrial production using the potential of agricultural science / M.F. Kropyvko, T.S. Orlova // Economy of APC, 2007. - No. 7. - pp. 11-18.

[2] Володин С.А. Инновационный провайдинг на наукоемком аграрном рынке: теоретико-методологические аспекты / С.А. Володин // Экономика АПК. – 2006. – № 8. – С. 9

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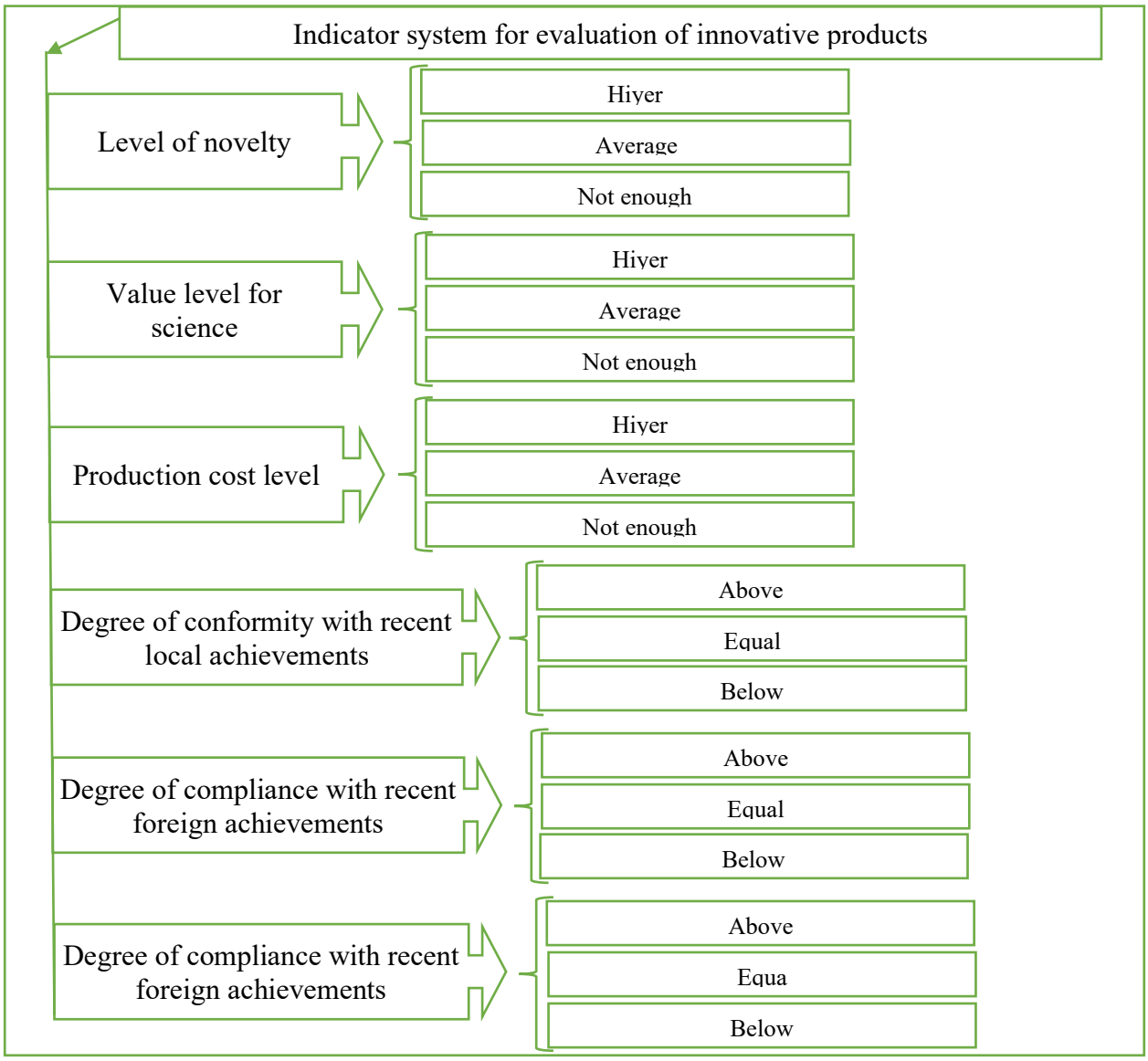

1- picture. Indicator system for evaluation of innovative products

Technological efficiency is characterized by a set of natural and cost indicators (yield, material and energy intensity, product quality, labor productivity, etc.) reflecting the level of use of land, labor and material resources in the production process, as well as indicators of increasing the efficiency of elements of agricultural and livestock systems. In agriculture, in particular, they include the following indicators:

- increase in crop productivity; increase in poultry (animal) productivity;
- reduction in the energy intensity of agricultural and livestock production;
- growth in gross agricultural output in relative terms (per 1 ha of agricultural land, per 1 worker);
- increase in the production of certain types of livestock products in terms of prices per unit of additional resources spent.

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Technological efficiency indicators are the basis for determining economic efficiency, it shows the efficiency of resource use, the level of resource saving, labor productivity, energy and capital capacity of products. With the help of indicators of economic efficiency, the degree of influence of scientific and technical progress on the improvement of the economic mechanism, the growth of economic indicators and the acceleration of industrial intensification is determined. The system of economic performance indicators includes:

- growth in gross product in real terms, gross income, profit, calculated per unit of area or per head of livestock, average annual worker;
- reduction in production and commercial costs of products (by type);
- increase in production profitability (by type of product);
- increase in overall profitability. Production profitability increases with increased productivity, reduced selling prices, and reduced unit costs of products.

Social efficiency indicators include wage levels, mechanization levels, improvements in the living standards of workers and their families, demographic changes, etc. Environmental efficiency is determined by soil fertility, reduction of environmental pollution, land area change, waste-free production, and other indicators.

Economic justification of innovative activity is carried out at all stages of its development and begins with the birth of the idea. Pre-project assessment of the proposed idea is associated with the parameters and prices of the initial development. At the final stages, a comparative assessment of the development is carried out with the most advanced base - domestic and foreign analogues.

The most important point of economic forecasting in the evaluation of innovations is associated with the stage of production implementation, before its start, a full examination of the project should be carried out. During this period, all the expected benefits and disadvantages of the project should be identified and evaluated, and a full conclusion should be drawn with the participation of all specialists. After a full examination, active advertising of the innovative project should interest consumers and investors in its implementation and ensure appropriate demand in the innovative market.

At the stages of developing an innovative project, detailed economic calculations are carried out on the basis of scientific and technical documentation, a business plan or feasibility study of the innovative project is drawn up, and the planned amount of profit is determined. Efficiency calculations should be carried out based on the conditions under which production is operating normally and the agrotechnical, zootechnical, technical-operational and economic indicators inherent to it are achieved.

Developing a methodology for analyzing innovative activity means determining a whole set of methods for its implementation. It also includes the preparation of tools for collecting and processing information. These tools include interview plans, questionnaires, tests, instructions for collecting data, etc. In general, the method is an important tool of scientific knowledge, an important force of science, a means of its development and enrichment with new results. To study the innovative activity of enterprises, a combination of the following methods is necessary:

- observation;
- analysis of documents obtained from enterprises and official sources;
- survey (interview, conversation, questionnaire).

Observation - represents a purposeful and organized perception of reality. It is based on some specific research goal or objectives and is characterized by the features of planning, orderliness, and controllability. There are 3 types of observation:

- simple or open observation, in which the researcher is outside the team or processes;
- observation, which is carried out from the inside in order to describe the process as objectively as possible;

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- embedded observation, which is characterized by the fact that the observer himself is included as a participant in this group.

The analysis of documents includes the collection of strategic and operational reports, regulatory documents, managers' reports on investigated problems, conducting a survey among all levels of managers and enterprise specialists..

Among the survey methods, interviews and questionnaires are the most widespread. Surveys of all types are a widespread and effective method of collecting information. They cover the state of social consciousness in its various and complex forms in relation to the problem under study. Most surveys are aimed at revealing the opinion of the population under study on certain issues, clarifying people's attitude to certain problems, events, phenomena, and their assessments. Thus, the survey allows you to record the state of public consciousness and collect systematic data.

The basis of many methods is a questionnaire used to collect the necessary data. A questionnaire is a set of questions, each of which is logically related to the main task. The structure of the questions in the questionnaire corresponds to the research objectives and helps to obtain data that tests the hypotheses.

A questionnaire has a large audience and is intended for the use of quantitative methods of processing more data. When developing questionnaire questions, determining their location, text, and the sequence of the application form, the following requirements should be taken into account:

- the questionnaire must correspond to the research objectives;
- it must take into account the level of culture and psychology of the interlocutors.

Interviews, like questionnaires, are a type of survey designed for a smaller audience, for a more detailed development of the survey program, for a more detailed, qualitative analysis of the problem. Interviews can be used as a control study to verify data obtained by other methods, in particular, using a questionnaire, as the main method of collecting material from a limited sample, as exploratory research to clarify problems, and to develop a general survey methodology.

The following forms of conducting an interview can be conditionally distinguished: free conversation, "question-and-answer", "peer-review" (several expert organizers participate). An interview often allows you to find out information that is difficult to obtain in a questionnaire.

It should also be noted that an interview should be used at the very beginning of the study, when the researcher is not sufficiently familiar with the situation, and a questionnaire should be used at the final stage, when a general model is formed and when it is necessary to clarify its details. Thus, an interview is a search tool, and a questionnaire is a means of verification. The process of studying the innovative activities of enterprises includes several stages.

Pilot research is the initial stage of in-depth and large-scale research, when researchers do not have a clear idea of the problem and the object of research and cannot put forward any scientific hypotheses. This is a pilot study, the purpose of which is to make necessary corrections and changes, obtain additional information, clarify problems, objectives and hypotheses based on the example of examining a small set of main research objects. Such a research plan includes studying literary sources on the problem under study, interviewing respondents, conducting observation as a final stage, etc.

Small business entities are participating in the pilot study. Students are conducting interviews. Small business entity managers and specialists are participating as respondents, they answer questions and fill out questionnaires. After the interview, a lot of time is spent adding some comments to the questions.

When developing instructions for interviewees who participated in the main study, the need for their further qualified training was taken into account, several questions were added and removed, and their essence was formulated more clearly.

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The reliability of the questionnaire data depends on factors such as mass distribution, the ability to correctly select respondents, their motivation, the correspondence of the questionnaire questions to the goals and objectives of the study, compliance with the rules for compiling the questionnaire, the accuracy of the questionnaire. instructions for filling out and returning the questionnaire, the clarity and comprehensibility of the text of questions and answers, the completeness and balance of the list of proposed answers, and the use of various types of questions.

All factors are taken into account to increase the reliability of the results obtained. An important point that can affect reliability is that many students may participate in data collection, who may interpret questions and answers in different ways and give poor-quality results. This potential bias was pre-screened, followed by interviewer training and briefing..

Great attention is paid to the quality of filling out the questionnaires. Interviewers are divided into four teams, and foremen are personally responsible for the quality of filling out the questionnaires. The second level of control is carried out by the researchers, the third occurs when entering data into the database. Each questionnaire is certified by the signatures of the interviewer and the foreman, indicating the place and time of the survey and the questionnaire. The reliability of the questionnaire data is confirmed by the fact that it covers the main practical aspects necessary for understanding the research problem..

At the next stage, they use personal contacts, primary data, and economic analysis methods. Field research is intended to collect primary data using mass surveys, interviews, and observations, that is, to apply advanced tools of the selected methods in practice and obtain material for subsequent conclusions and recommendations. This stage takes a lot of time. The time spent is determined by the sample, the complexity of the tools, the number of data collectors, as well as the productivity and quality of their work. Throughout the entire time spent in the settlements, the state of innovative activity and innovative receptivity of people is monitored, and their opinions expressed outside the conversation with the researcher are recorded.

Conclusion

The processing of the collected primary data is carried out using a computer and includes a set of procedures for repairing the sample determined by the need for selection, entering data into the computer and organizing the entered data, and, in accordance with the software package used, controlling the quality of the entered data and correcting the identified errors, and specifying the system of quantitative indicators, on the basis of which the subsequent analysis of the data is carried out.

References

1. Turgunpulatovich, A.O., & Sirojiddin o'g'li, N. N. (2022). DEFINITION OF INVESTMENT STRATEGY FOR SUSTAINABLE DEVELOPMENT OF REGIONAL ECONOMIES. ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW ISSN: 2319-2836 Impact Factor: 7.603, 11(09), 19-29.

4.Turgunpulatovich, A.O. (2022). Formation of financing technology and communication relations in increasing the competitiveness of small business entities. International journal of social science & interdisciplinary research ISSN: 2277-3630 Impact factor: 7.429, 11, 49-58.

5.Turgunpulatovich, A.O. (2022). The concept of shaping the competitiveness of small businesses and its essence. International journal of social science & interdisciplinary research ISSN: 2277-3630 Impact factor: 7.429, 11, 171-178.

6.Turgunpulatovich, A.O. (2022). The concept of forming the competitiveness of small business entities and its essence. Asia pacific journal of marketing & management review ISSN: 2319-2836 Impact Factor: 7.603, 11(07), 46-55.

ISSN 2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research., under Volume: 14 Issue: 10 in October-2025
https://www.gejournal.net/index.php/IJSSIR

7.Turgunpulatovich, A.O. (2022). Modern trends in the formation of international competitiveness of the national economy. International journal of social science & interdisciplinary research ISSN: 2277-3630 Impact factor: 7.429, 11, 69-79.

8.Oybek, A., & Lazizbek, A. (2021). The Main Features of Light Industry in the Economy of Uzbekistan. Academicia Globe, 2(07), 127-132.

9.Oybek, A., & Lazizbek, A. (2021). Ensuring Economic Security Is Sustainable Is An Important Factor In Development. Academicia Globe, 2(07), 115-120.

10.Ахмедов, О.Т., & Адашев, А. Ў. ҚУРИЛИШ СОҲАСИНИ РИВОЖЛАНТИРИШДА ИНВЕСТИЦИЯЛАШ ЖАРАЁНЛАРИ ТАҲЛИЛИ.

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