

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҒЫЛЫМ ЖӘНЕ ЖОҒАРЫ БІЛІМ МИНИСТРЛІГІ

«Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ» КЕАҚ

**Студенттер мен жас ғалымдардың
«GYLYM JÁNE BILIM - 2023»
XVIII Халықаралық ғылыми конференциясының
БАЯНДАМАЛАР ЖИНАҒЫ**

**СБОРНИК МАТЕРИАЛОВ
XVIII Международной научной конференции
студентов и молодых ученых
«GYLYM JÁNE BILIM - 2023»**

**PROCEEDINGS
of the XVIII International Scientific Conference
for students and young scholars
«GYLYM JÁNE BILIM - 2023»**

**2023
Астана**

УДК 001+37
ББК 72+74
G99

**«GYLYM JÁNE BILIM – 2023» студенттер мен жас ғалымдардың
XVIII Халықаралық ғылыми конференциясы = XVIII
Международная научная конференция студентов и молодых
ученых «GYLYM JÁNE BILIM – 2023» = The XVIII International
Scientific Conference for students and young scholars «GYLYM JÁNE
BILIM – 2023». – Астана: – 6865 б. - қазақша, орысша, ағылшынша.**

ISBN 978-601-337-871-8

Жинаққа студенттердің, магистранттардың, докторанттардың және жас ғалымдардың жаратылыстану-техникалық және гуманитарлық ғылымдардың өзекті мәселелері бойынша баяндамалары енгізілген.

The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

УДК 001+37
ББК 72+74

ISBN 978-601-337-871-8

**©Л.Н. Гумилев атындағы Еуразия
ұлттық университеті, 2023**

5. Трудовой кодекс Республики Казахстан от 23 ноября 2015 года № 414-V (с изменениями и дополнениями по состоянию на 18.11.2022 г.);
6. Трудовой кодекс Российской Федерации от 30 декабря 2001 года № 197-ФЗ (с изменениями и дополнениями по состоянию на 11.01.2023 г.)
7. Кодекс законов о труде Украины (утвержден законом Украинской Советской Социалистической Республики от 10 декабря 1971 г. № 322-VIII) (с изменениями и дополнениями по состоянию на 01.01.2023 г.);
8. «Corporate Culture Matters A Lot, Says New Study» Susan Adams Former Staff I'm a senior editor in charge of Forbes' education coverage. Nov 12, 2015 (<https://www.forbes.com/sites/susanadams/2015/11/12/corporate-culture-matters-says-new-study/?sh=481edba22b41>);
9. Распоряжение Премьер-Министра Республики Казахстан от 27 июня 2006 года N175-р «Об утверждении Плана по ускоренному переходу казахстанских предприятий на международные стандарты (утратило силу распоряжением Премьер-Министра Республики Казахстан от 23 июня 2008 года N 172-р.).

UDC 33.338

INDICATORS THAT REVEAL THE INNOVATIVE ACTIVITY OF THE ORGANIZATION BAIGON TEMIRLAN ERLANULY

Bibek A.

Eurasian National University named after L.N. Gumilyov
Astana

ABSTRACT.

In this article a literary review was conducted, the concepts of "innovation" and "innovative activity" proposed by different authors were studied. The classification of types of innovations is considered, key indicators of innovation activity of an industrial enterprise are identified, statistical data from an official state source regarding the concept of "innovation" are considered, in particular, the level of activity in the field of innovation, the costs of technological innovations by sources of financing. Relevant conclusions have been made.

METHODOLOGY.

The theoretical and methodological basis of this article is the works of domestic and foreign scientists in the field of management, economics, innovation management, strategic management. The methodological basis of the study includes methods of quantitative and qualitative analysis, statistical analysis.

INTRODUCTION

In the modern economy, the innovation component is an important factor in the sustainable development of enterprises in all industries and spheres of activity. To preserve the sustainability of the enterprise, it is necessary to systematically introduce various types of innovations: product, technological, organizational, marketing, social, environmental. The intensity of innovation (innovation activity) promotes the development of strategic abilities and, as a result, determines the commercial success of the enterprise in the market in the long term.

Considering the topic of innovative activity of organizations, first of all it is necessary to understand the concepts of "innovation", "innovative activity", "innovative development" and "innovative activity".

For the first time, the concept of "innovation" was formulated in the work of J. Schumpeter's "Theory of Economic Development" in 1911. Schumpeter understood innovation as the result of changing and obtaining new forms of organization management, new products and consumer properties.

In his work, J. Schumpeter formulated the main five typical changes in development:

- the introduction of products with new properties;
- changes in the organization of production and in its material and technical support;
- the use of new equipment, technological processes or new market support for production;
- the emergence of new markets;
- the use of new materials [1].

J. Schumpeter defined innovation as a combination of new production factors, which is motivated by an entrepreneurial spirit.

Table 1. Definitions of the term “innovation” and “innovative activity”

Definition	Source
"Innovation is a change in order to introduce and use new types of consumer goods, new production and transport facilities, markets and forms of organization in industry" [2].	Schumpeter I. Theory of economic development. Moscow: Progress, 1982
"Innovation is the final result of the introduction of innovations in order to change the object of management and obtain economic, social, scientific, technical and other effects" [3].	Fatkhutdinov R. A. Innovation management: textbook. 2nd ed. Moscow: CJSC "Business School "Intel-synthesis", 2008
"Innovation is the final result of the creation and development of a fundamentally new modified tool that meets specific social needs and gives a number of effects" [4].	Sokolov D. V., Titov A. B., Shabanova M. M. Prerequisites for the analysis and formation of innovation policy. St. Petersburg: GUEF, 1997
"Innovation is the final result of innovation in order to change the object of management and obtain scientific, technical, economic, social, environmental and other types of effect"[5].	Innovative management: a textbook / G. V. Ismagilova, O. G. Shchemerova, N. R. Kelchevskaya. – Yekaterinburg: UrFU, 2012. – 175 p.
"Innovation activity is a complex of scientific, technological, organizational, financial and commercial activities, which is primarily aimed at commercializing the accumulated knowledge of the enterprise, as well as the technologies and equipment available to the enterprise" [6].	Gershman M.A. Innovation management: studies. manual. - M.: Market DS, 2010. - 200 p.
"Innovation activity is an activity aimed at using and commercializing the results of scientific research and development to expand and update the nomenclature and improve the quality of products (goods, services), to improve the technology of their manufacture with subsequent implementation and effective implementation in domestic and foreign markets" [7].	Fundamentals of innovation management. Theory and practice: Textbook / L.S. Baryutin et al.; edited by A.K. Kazantsev, L.E. Mindeli. 2nd ed. reprint. and additional — M.: CJSC "Publishing House "Economics ", 2004. - 518 p.
<i>Note: complied by the author based on the sources</i>	

Thanks to successful innovation, the company provides itself with competitive advantages. At the same time, innovative activity requires significant costs, which are subject to a high degree of risk.

MAIN PART

Indicators of innovative activity of the enterprise. One of the most important principles of assessing innovation activity is complexity, it is a comprehensive assessment that gives the result of a multilateral study of a set of qualitative and quantitative indicators reflecting the activities of the enterprise.

A comprehensive assessment includes almost all the results of the company's commercial activities.

A comprehensive assessment is expressed as:

- in multivariance, where the results are compared with several comparison bases;
- in multi-aspect - social, technological is evaluated, economic, environmental, legal, technical aspect;
- in multi-criteria, the interests of both the enterprise and the positions of other participants in the process are considered.

Therefore, it can be argued that a comprehensive assessment makes it possible to implement a comprehensive qualitative and quantitative characteristic of the innovative activity of the enterprise, thereby acting as a key source of information for the justification and adoption of managerial decisions by the top management of the enterprise.

O. I. Imaikina in his work argues that innovative activity at an industrial enterprise must be carried out comprehensively, based on quantitative and qualitative indicators characterizing commercial activity.

The level of innovative activity of the enterprise at the same time, according to Mingalev Zh.A. and Platynyuk I.I., is determined by a huge number of indicators that are proposed to be considered through a set of subsystems provided in Table 2.

The presented subsystems will help to assess the provision of resources to the organization, as well as to assess their impact on the effectiveness of the innovative activity of the enterprise[8].

Table 2. Subsystems of innovative activity of the enterprise

Subsystems	Content
Financial	Financial stability and solvency of the enterprise, investments in R&D, intangible assets, as well as sources of financing
Material and technical	Progressiveness of equipment, application of information technology materials, equipment of laboratories and offices of the enterprise
Personnel	The share of employees working in the intellectual sphere of the total number of employees of the enterprise
Organizational and managerial	Organizational culture of the enterprise, forms of labor and management organization, organizational structure
Informational	All scientific and technical literature of the enterprise, information on innovations and innovative activities, information on inventions and patents, reports in the form of scientific and technical documentation, as well as regulations, etc.

Marketing	Availability of demand for goods or services, analysis of the level of competitiveness of the enterprise
<i>Note: complied by the author based on the source [9]</i>	

A comprehensive assessment of the innovation activity of an industrial enterprise enables top management to analyze innovation activity in the period under study, which will make it possible to respond in time to changes in the system.

The system for assessing the innovative activity of an enterprise is based on an international approach, founded in 1989 [10].

Cost indicators:

- R&D costs in sales volume, characterizing the knowledge intensity of the company's products;
- the cost of acquiring licenses, patents, know-how.
- time indicators reflecting the innovation process at the enterprise;
- the indicator of innovativeness is the time from the moment of awareness of the need, demand for a new product until it is sent to the market or to the consumer in large quantities);
- duration of new product development;
- duration of pre-production for the sale of new products;
- the duration of the production cycle of a new product.

Updatability indicators:

- the number of developments or implementations of innovations in the enterprise;
- indicators of the dynamics of updating the product portfolio;
- number of new technologies acquired;
- volume of exported innovative products;
- the volume of new services provided.

Structural indicators:

- the number and structure of employees engaged in R&D;
- the composition and number of creative initiative temporary brigades, groups.

The following table provides an information about the trends in the activity of enterprises in the field of innovation in the regions of the Republic of Kazakhstan. The initial data for compiling the table were official data from the website stat.gov.kz

Table 3. The level of activity in the field of innovation (%)

	2016	2017	2018	2019	2020	2021
Republic of Kazakhstan	6,0	6,7	8,3	10,1	8,4	5,4
Akmola region	2,9	3,3	3,3	4,7	3,8	2,2
Aktobe region	4,4	7,8	8,8	9,8	7,0	4,4
Almaty region	3,3	2,9	3,1	4,2	4,0	2,5
Atyrau region	5,1	5,2	5,5	9,8	9,5	4,6
West-Kazakhstan	1,0	1,4	3,0	3,4	4,0	2,0
Zhambyl region	5,6	4,9	5,8	5,1	5,7	4,1
Karagandy region	8,8	10,7	13,0	20,1	11,1	9,5
Kostanai region	4,5	6,8	11,4	15,3	9,9	4,3
Kyzylorda region	2,1	2,0	3,3	3,8	3,6	1,6
Mangistau region	2,3	2,9	2,2	3,2	2,8	1,3
Pavlodar region	3,1	3,0	4,9	6,8	4,5	2,6
North-Kazakhstan	8,8	8,2	7,9	8,6	10,7	8,1

Turkestan region	2,9	1,9	3,5	5,0	5,3	2,9
East-Kazakhstan	9,7	10,4	17,1	17,6	14,3	11,2
Nur-Sultan	16,3	19,0	18,8	21,2	20,3	12,0
Almaty	9,0	14,4	16,5	21,1	14,3	13,8
Shymkent	10,5	4,9	4,9	10,4	7,7	6,7
<i>Note: complied by the author based on the source [11]</i>						

The result of the assessment of the level of involvement of Kazakhstani enterprises in innovation leaves much to be desired. It is interesting how if there was a trend of growth in the level of innovation activity before 2019, then after that there is a significant decline. It can be assumed that this is due to the 2019 pandemic, when the economic situation worsened around the world.

Table 4. Costs of product and process innovations by funding sources

	2016	2017	2018	2019	2020
Total (million tenge)	1 528 645,9	899 681,8	856 449,5	535 918, 1	777 173,5
Including the:					
Republican budget	42 012,1	42 230,2	28 800,0	37 056,2	166 408,7
Local budget	1 851, 8	17 969,7	15 752,2	4 983,0	14 632,8
Own funds of enterprises	367 777,0	300 208,1	392 226,1	440 271.6	488 985,2
Foreign investments	514 020,7	7 053,4	45 633,7	3 796,8	11 931,0
Other funds	602 984,3	532 220,6	374 037,5	49 810,5	95 215,8
<i>Note – complied by the author based on the source [12]</i>					

As can be seen from Table 4, for 2020, the structure of funds is dominated by enterprises' own funds – 488985.2 million tenge, and by the republican budget – 166408.7 million tenge. It is important to note that the republican budget has significantly increased its spending on innovations compared to 2019.

The funds of local budgets, as well as foreign investors, are quite small, obviously the reasons may be a high level of uncertainty, low attractiveness for investors of the innovative projects presented. The attractiveness for investors is also reflected in the possibility of attracting domestic or foreign investors.

CONCLUSION

Innovative activity in modern conditions is becoming increasingly important, since it contributes to the formation of special competitive advantages.

Under the innovative activity of the enterprise we understand a complex characteristic of the process of generation, introduction and implementation of innovations at the enterprise, the basis of which is human capital, with the aim of qualitative and quantitative changes in the performance of the enterprise.

It is necessary to manage innovation activity on a new methodological basis, in order to identify priority areas of development and form practical recommendations.

The key indicators of innovative activity of an industrial enterprise are revealed:

- the number of personnel engaged in scientific research and development;
- R&D costs.

Statistical data from an official state source regarding the concept of "innovation" are considered, in particular, the level of activity in the field of innovation, the costs of technological innovations by sources of financing. Relevant conclusions were made. In general, judging by the

analysis done, based on the data of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, it can be concluded that there is a good trend of innovative development in the republic. The measures taken to form the infrastructure of innovative development shows some positive developments and potential directions.

REFERENCES

1. Kotler F. Fundamentals of marketing: Translated from English / F. Kotler -M.: Progress.- 2014. – 736 p.
2. Schumpeter I. Theory of economic development. Moscow: Progress, 1982
3. Fatkhutdinov R. A. Innovation management: textbook. 2nd ed. Moscow: CJSC "Business School "Intel-synthesis", 2008
4. Sokolov D. V., Titov A. B., Shabanova M. M. Prerequisites for the analysis and formation of innovation policy. St. Petersburg: GUEF, 1997
5. Innovative management: a textbook / G. V. Ismagilova, O. G. Shchemerova, N. R. Kelchevskaya. – Yekaterinburg: UrFU, 2012. – 175 p.
6. Gershman M.A. Innovation management: studies. manual. - M.: Market DS, 2010. - 200 p.
7. Fundamentals of innovation management. Theory and practice: Textbook / L.S. Baryutin et al.; edited by A.K. Kazantsev, L.E. Mindeli. 2nd ed. reprint. and additional — M.: CJSC "Publishing House "Economics ", 2004. - 518 p.
8. Mingaleva Zh.A. Platynyuk I. And The harmony of management assessment of the level of innovative development of the enterprise / creative economy, 2011, No. 4 pp. 53-58
9. Mingaleva Zh.A. Platynyuk I. And The harmony of management assessment of the level of innovative development of the enterprise / creative economy, 2011, No. 4 pp. 53-58
10. Sukhorukov A.V. Proceedings of the Saratov University. A new series. Series: Economics. Management. Right. 2013. Vol. 13. No. 3-2. pp. 426-431.
11. “The level of activity in the field of innovations” – Access mode: <https://stat.gov.kz/>
12. Nauka i innovacionnaya deyatel'nost' Kazahstana, 2016-2020. Statisticheskij sbornik. (Science and innovation activity of Kazakhstan, 2016-2020. Statistical collection.) [Electronic resource]. – Access mode: <https://stat.gov.kz/official/industry/23/statistic/6>

UDC 33.338

ИННОВАЦИОННЫЙ ПОДХОД В УПРАВЛЕНИИ ПЕРСОНАЛОМ

Дарханулы Досбол

Darkhanuly.dosbol@mail.ru

Студент ЕНУ им. Л.Н.Гумилева, Астана, Казахстан

Научный руководитель – Ш. Т. Сулейменова

В последние годы в повседневной жизни мы все чаще сталкиваемся с таким понятием как «инновации». Их главная цель в том, чтобы удовлетворять возникающие потребности людей, а также создание новых инноваций, которые могут облегчить ежедневную деятельность людей. Это напрямую связано с тем, что человек стал потребителем, и он на протяжении всей своей жизни находится в поисках всего нового. Нет конкретного и единого определения, чем же является «инновация». Некоторые ученые относят их к таким функциям, как генерирование и использование новых идей, продуктов, новых технологий. В этом смысле