

Features of Innovation and Project Management

Galyna Liakhovych[†], Olga Guk^{††}, Ganna Mokhonko^{†††}, Oksana Vakun^{††††}, Ulyana Lyakhovych^{†††††}

[†] West Ukrainian National University, Ukraine

^{††} National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Kiev, Ukraine

^{†††} National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Kiev, Ukraine

^{††††} West Ukrainian National University, Ukraine

^{†††††} National Anti-Corruption Bureau of Ukraine, Ukraine

Abstract

The main purpose of the article is to study the features of innovation and project management. The rapid growth of scientific and technological progress in our time is leading to such profound changes that a passive, slow response to the development of science and technology leads to a growing backlog. That is why the main direction of efficient production should be a constant striving to improve product quality, timely replacement of the assortment, minimization of inventories, and ensuring the flexibility and mobility of technological processes. Based on the results of the study, the main features of innovation and project management were characterized.

Keywords:

Innovation, project management, project

1. Introduction

Project management is one of the most difficult areas of innovation activity, since the content and scope of work, the composition of performers change at different stages of project implementation, which requires a change in the structure of the project. One of the main conditions for the effective management of an innovative project is the definition and consideration of the features of the project life cycle. Project management integrates the methodology and technology of managing human, material and financial resources, requires the ability to coordinate the interests of many participants, the ability to solve production problems in a new way, and find optimal solutions in conditions of uncertainty and risk.

Even with the effective management of an innovation project, the leadership of domestic organizations fragmentarily (mostly situationally) pays attention to the distribution of functions between the project participants, the comparison of the interests of the participants in the innovation project and the degree of satisfaction of these

interests, as well as taking into account the specifics of the project life cycle.

An innovative project is an object of innovative activity. Summarizing the definition of scientists in the field of innovation management, we conclude that the concept of "innovation" is interpreted by the vast majority of authors from two positions: innovation as a certain process aimed at achieving a result, and innovation as a result. An analysis of literary sources made it possible to formulate the conclusion that the definition of innovation must: 1) be characterized by a fundamentally qualitative novelty; 2) contain groups of objects to which it may apply; 3) have a practical focus, be implemented (i.e. able to meet market demand) and have a link to achieve a certain effect (be cost-effective); 4) contain the concept of the final result.

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2. Methodology

The theoretical and methodological basis of the study is a systematic approach to the study of fundamental provisions about the features of innovation and project management. In the process of studying the problems of the food system, a number of general scientific and special research methods were used.

3. Research Results and Discussions

The global transformations of the second half of the 20th - early 21st centuries have qualitatively changed the world, which in theoretical terms was reflected in the new global development paradigm, which began to dominate in all areas of scientific research, and especially in economics. The universal imperatives of the global success of national economies are the intellectualization of all types of social activity, combined with the ability of economic agents to constantly innovate. The effective development of national economies, industries, large corporations and small and medium-sized businesses in modern conditions is ensured primarily by their ability to develop and implement innovative strategies.

Management of the innovation process at the level of a single enterprise is a set of measures and actions to organize the transition from one stage to another, ultimately obtaining a new product that is in demand on the market, which allows achieving results at the micro and macro levels through planning, forming an innovative one. policy, availability of an innovation strategy, organization of innovation management, availability of innovation potential, monitoring of opportunities for the implementation of all elements and stages of the innovation process, organization of interaction with the innovation infrastructure, forecasting the level of innovation development, control and how competently the management will be, depends on the final result.

Management of innovative processes has its own characteristics compared to traditional activities. First of all, this is due to the presence of research and design work. Another feature is its riskiness. At any stage of the creation of new consumer products and models of equipment, unexpected, previously unknown problems may appear that can lead to violation of deadlines, overspending of resources, failure to achieve planned goals, failure to obtain final results and the likelihood that the innovation process at any of the stages can stop. The success of the full cycle of the innovation process and obtaining a specific result at the enterprise depends on the availability of innovation potential and its effective management.

The ability to create and use innovation (innovativeness) is today recognized as the most

important factor in the formation of a competitive advantage of an enterprise. The acceleration of innovation processes has contributed to the emergence of a new category of enterprises for which innovation is the subject of their core business, which entails a strengthening of their competitive position. For such enterprises, innovation can be seen as a factor that outpaces changes in the environment. In addition, the growing role of innovation necessitates the restructuring of many companies, the main element of which is a change in the strategy of action with a simultaneous focus on the growth of innovative potential. In the newest conditions of the functioning of a modern company, the development of the company on an innovative basis becomes especially important [1-5].

Innovative activity involves the development and implementation of new products, goods, technologies, organizational and managerial innovations through the development and use of the innovative potential of the enterprise. That is, development on an innovative basis allows enterprises to keep pace with the times.

Innovative development based on the continuous search and use of new ways and areas for realizing the potential of an enterprise in a changing environment within the chosen mission and the adopted system of motivating employees to carry out innovative activities. Innovative development is associated with the modification of existing and the formation of new sales markets. According to this view, the management of the development of an enterprise on an innovative basis acquires a strategic character, and, consequently, its effectiveness depends on the development and implementation of optimal strategies.

The main dynamics of innovatively active enterprises in Ukraine is shown in Figure 1.

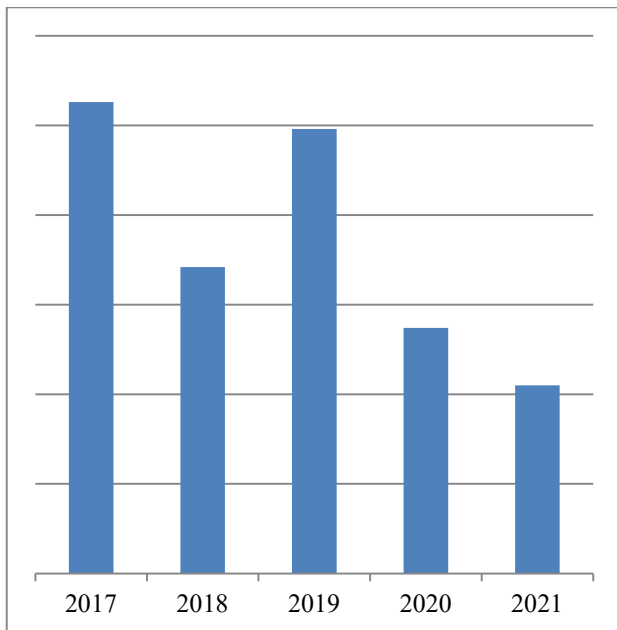


Fig.1. The main dynamics of innovatively active enterprises in Ukraine

Management of the development of an enterprise on an innovative basis covers strategic and operational aspects and should be aimed, on the one hand, at the creation or prompt attraction of such innovations that ensure the preservation and strengthening of the market position of the enterprise in the long term, and on the other hand, at a systematic and purposeful activity to improve existing technologies, techniques and ways of doing work, thanks to which the life of innovations is extended.

Innovative activity is one of the main components of the process of ensuring the successful functioning of enterprises. Therefore, modern economic conditions require intensive innovation activity, effective organization of research and development, innovation, reduction of innovation risks, strategic management in the innovation activity of each enterprise.

In modern conditions, the main way to increase the competitiveness of industrial goods, maintain high rates of development and profitability for enterprises is the introduction of innovations. However, innovations are a source of development only if they are actively and effectively used, as well as creating a favorable environment for their implementation. Therefore, the strategic management of the innovative development of corporate enterprises is of

particular importance, orienting production activities to the needs of consumers, allowing more flexible response and timely changes, achieving competitive advantages in the long term. Thus, the strategy of innovative development of an enterprise can be defined as a set of actions and methods of conducting innovative activities, which provides competitive advantages through the development and implementation of innovations [6-10].

For the implementation of innovation, a high level of education and intellectual activity, a pronounced sense of dignity, initiative, independence and independence of views, inherent creative inspiration, high efficiency, interest in obtaining results, the ability to perform labor functions at the level of international standards are important. The more creative tasks and intellectual functions in the work, the more noticeably the role of non-material incentives in the process of innovation activity increases. The activity of the mental, creative component of the labor activity of employees is influenced by both conditionally constant (psychological type of personality, natural inclination to physical, mental or spiritual labor, intellectual potential, etc.), and variable factors (physical and psychological, interests, surrounding, working conditions and ergonomics) [11-15].

The development and implementation of innovations requires investment resources necessary to finance research and development work, start and implement the production of innovative products, its implementation and improvement. Effective innovative activity is possible only if the optimal volume of investment resources is attracted. The conditions for attracting investments depend on the state of the investment climate of the country, region, enterprise.

The key problems of innovation and project management are presented in Figure 2.

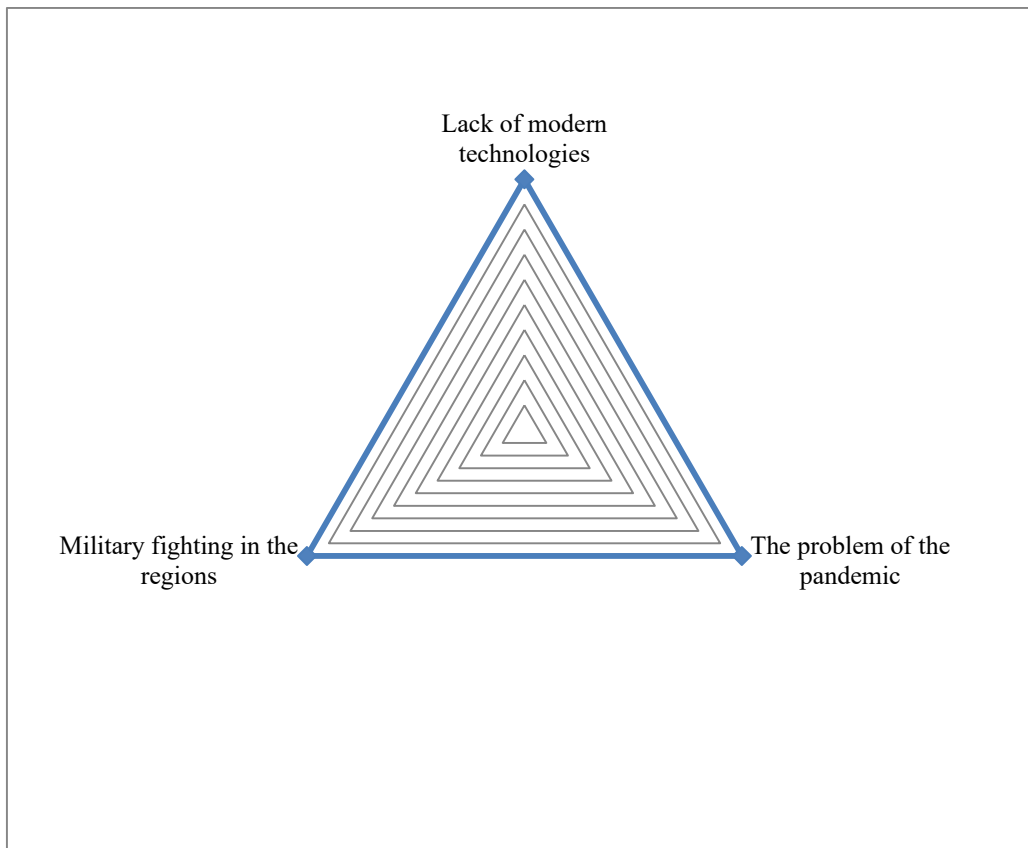


Fig.2. The key problems of innovation and project management

Thus, a feature of innovation management is to ensure high-quality decision-making under conditions of uncertainty and risk. However, the successful implementation of this task is often hindered by the creation of the necessary organizational structure, which is especially important for large enterprises. Therefore, it is advisable for the latter to pay attention to the flexibility and adaptability of small firms to changing conditions. In such cases, the effectiveness of innovation management can be significantly improved by creating special units or structural units on a permanent or temporary basis, such as, for example, an internal venture. Adaptation of the organizational structure of a large enterprise to the specifics of innovation activity will help to increase its efficiency and effectiveness.

4. Conclusions

Thus, summing up, we can say that innovation is the result of a special activity that leads to the renewal or improvement of any products or technological processes, based on the birth and application of new knowledge. By an innovative idea, we mean a new original idea that has a certain target orientation and potential socially useful value, the main features of which are compliance with the modern direction of development of the relevant business sector and demand in the economy. The process of movement of ideas in a company using an idea management system can be represented as a closed cycle: the birth of ideas, the formation of ideas, the development of ideas, the managerial evaluation of ideas, the selection of business ideas for practical implementation. It should be noted that the most important condition for the successful implementation of idea management systems,

including those implemented on the basis of specialized software products, is their binding to motivation systems, which ensures the interest, first of all, of company employees in the manifestation of creative activity. One of the solutions to the problem is the introduction of talent management tools in the activities of innovative companies. The task of managing ideas is beginning to play an increasingly important role in the corporate management system, and the search for ways to solve it is becoming the most important condition for ensuring the competitiveness of modern enterprises. Innovation management is a process of constant renewal of various aspects of the activities of a modern organization, which includes not only technical developments, but also any changes for the better, aimed at modernizing the domestic production sector and the state economy as a whole.

References

- [1] Kryshchanovych, M., Kryshchanovych, S., Chubinska, N., Khromova, Y., & Sylkin, O. The System of Public Administration in Educational Institutions in Rural Regions in the Context of the Development of Educational Culture. *Revista Brasileira De Educaçao Do Campo*, 7, 2022, e14140. <https://doi.org/10.20873/uftrbec.e14140>
- [2] Kryshchanovych, M., Antonova, L., Pohrishchuk, B., Mironova, Y., Storozhev R., Information System of Anti-Crisis Management in the Context of Ensuring National Security. *IJCSNS International Journal of Computer Science and Network Security*, VOL.21 No.12, 2021, pp. 719-725 <https://doi.org/10.22937/IJCSNS.2021.21.12.98>
- [3] Sylkin, O., Kryshchanovych, M., Bekh, Y., & Riabeka, O. Methodology of forming model for assessing the level financial security . *Management Theory and Studies for Rural Business and Infrastructure Development*, 42(3), 2020, 391–398. <https://doi.org/10.15544/mts.2020.39>
- [4] Sylkin, O., Buhel, Y., Dombrovska, N., Martusenko, I., & Karaim, M. The Impact of the Crisis on the Socio-Economic System in a Post-Pandemic Society. *Postmodern Openings*, 12(1), 2021, 368-379. <https://doi.org/10.18662/po/12.1/266>
- [5] Sylkin, O., Bosak, I., Homolska, V., Okhrimenko, I., & Andrushkiv, R. Intensification of Management of Economic Security of the Enterprise in the Post-Pandemic Space. *Postmodern Openings*, 12(1Sup1), 2021, 302-312. <https://doi.org/10.18662/po/12.1Sup1/286>
- [6] Frolova, L., Zhadko, K., Ilyash, O., Yermak, S., & Nosova, T. Model for opportunities assessment to increase the enterprise innovation activity. *Business: Theory and Practice*, 22(1), 2021, 1-11. <https://doi.org/10.3846/btp.2021.13273>
- [7] Fedulova, I. Innovative adaptive potential of the enterprise. *Formation of Market Relations in Ukraine*, 10, 2008. 59–64.
- [8] Wendra, W., Sule, E. T., Joeliaty, J., & Azis, Y. Exploring dynamic capabilities, intellectual capital and innovation performance relationship: evidence from the garment manufacturing. *Business: Theory and Practice*, 20, 2019, 123-136. <https://doi.org/10.3846/btp.2019.12>
- [9] Agostini L, Nosella A, Filippini R. Does intellectual capital allow improving innovation performance? A quantitative analysis in the sme context. *Journal of Intellectual Capital* 2017, (2): 400-418. <http://doi.org/10.1108/JIC-05-2016-0056>
- [10] Alcaide-Marzal J, Tortajada-Esparza E. Innovation assessment in traditional industries. A proposal of aesthetic innovation indicators. *Scientometrics* 2007, (1): 33-57. <http://doi.org/10.1007/s11192-007-1708-x>
- [11] Anderson N, Potočnik K, Zhou J. Innovation and creativity in organizations: a state-of-the-science re-view, prospective commentary, and guiding framework. *Journal of Management* 40 (5): 2014, 1297-1333. <http://doi.org/10.1177/0149206314527128>
- [12] Ansari R, Barati A, Sharabiani A. The role of dynamic capability in intellectual capital and innovative performance. *International Journal of Innovation and Learning* 2016, (1): 47-67. <http://doi.org/10.1504/IJIL.2016.076671>
- [13] Azis Y, Kartini D, Bernik M, Harsanto B. Managing innovation in creative industries for increasing competitiveness: case study of companies at Bandung – Indonesia. *International Journal of Innovative Research in Science, Engineering and Technology* 2014, (3): 11. <http://doi.org/10.15680/IJRSET.2014.0311064>
- [14] Babelytė-Labanauskė K, Nedzinskas Š. Dynamic capabilities and their impact on research organizations' R&D and innovation performance. *Journal of Modelling in Management* 12 2017, (4): 603-630. <http://doi.org/10.1108/jm2-05-2015-0025>
- [15] Buenechea-Elberdin M. Structured literature review about intellectual capital and innovation. *Journal of Intellectual Capital* 2017, (2): 262-285. <http://doi.org/10.1108/jic-07-2016-0069>