ALGORITHM FOR INNOVATIVE DEVELOPMENT MANAGEMENT OF A PROJECT-ORIENTED ORGANIZATION

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Abstract

The purpose of the article is to develop an algorithm for innovative development management of project-oriented organization, which will ensure the coordination of organization's innovative strategies and the plans for its project and operational activities. The main content of the research is the analysis of Russian and foreign scientists and experts publications in the field of innovation, innovative development management and project management. The practical significance of the work lies in the possibility of applying the presented algorithm in the project-oriented organization in the market conditions, what will improve the efficiency of using its existing resources. The article is addressed to specialists in the field of management theory and practice in social and economic systems

Keywords

Project-oriented organization, innovative development, strategy, innovative project, management process, method, algorithm

Received 01.10.2018 © Author(s), 2019

Introduction. The result of a successful innovative activity of an organization is a quantitative and qualitative increase of its potential [1, 2]. The organization's potential is the main criterion of the expediency of its existence expediency. The choice of innovative strategies depends on its condition; therefore, an assessment of the organization's potential is a necessary step in the process of forming an innovative development strategy [3, 4]. The composition of an organization's innovative strategies is determined by the types of proposed innovations [5–7]. The implementation of innovative strategies ensures the achievement of innovative goals that represent the desired result of the innovative activity of the organization. Under the innovative development of an organization it is proposed

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to understand the quantitative and qualitative increase in its innovative potential as a result of the implementation of innovative activity.

Currently, there is a tendency of transition from functional to programoriented management and of the formation of project-oriented organizations that integrate their operations with the implementation of projects [8–10]. In this connection, the problem of the innovative development management of a project-oriented organization and its solution based on the development and practical implementation of methods, models and algorithms is relevant [2, 4, 6, 11, 12].

Methods. The theoretical and methodological basis of the research are the publications of Russian and foreign scientists and specialists in the field of innovation [1, 7], innovative development management [2–3], project management [5, 13].

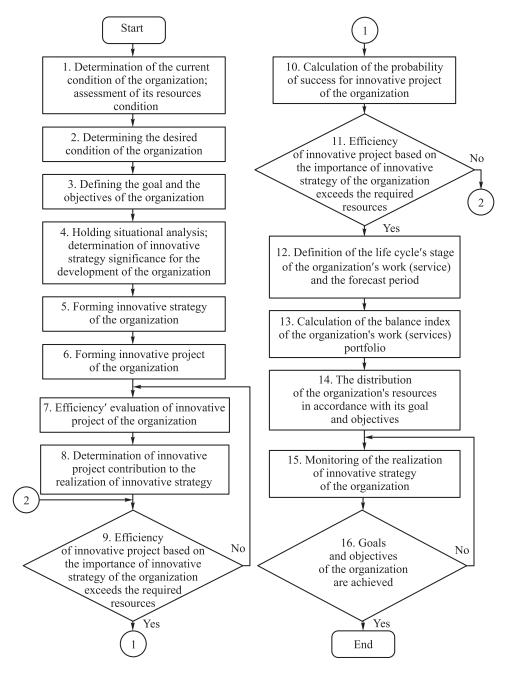
The methodological basis of the research is the application of methods of structural analysis and design, functional modeling and innovative development management. The general methodological basis of the research is a systematic approach.

Results. The flowchart of the algorithm for innovative development management of a project-oriented organization is shown in the figure.

Steps 1–3. At the step of analyzing the current condition of a project-oriented organization, it is determined the possible causes of the problems that necessitate changes, and the pace with which they should be solved. It is identified existing opportunities, then identify changes and prioritize them. In determining the current condition of a project-oriented organization, many external and internal influence factors of the organization are taken into account [11, 12]. It is necessary to distinguish between factors on which the organization can influence, and factors that cannot be influenced [1].

The problems are proposed to be defined as the differences in the current and desired project-oriented organization's conditions. If quantification is not possible, the differences should be described using qualitative assessments [4, 13]. Based on the description of the current and desired condition of an organization, it is determined the goals that can be set for a project-oriented organization as a whole, for its structural divisions, and also for specific performers. Objectives should have the following characteristics [1, 5, 13]: specific; measurable; attainable; relevant; time-bound.

Steps 4–9. Situational analysis can be carried out both for a projectoriented organization as a whole, and for certain types of its operating activities. In the future, its results will be used in the formation of innovative strategies of the organization, the composition of which is determined by the



The flowchart of the algorithm for innovative development management of a project-oriented organization

types of proposed innovations: the creation and development of new types of works (services) of a project-oriented organization, technology, methods of organizing operational activities, etc. To organize the implementation process of this strategies, goals and objectives are defined [1, 4]. It is proposed

to identify five groups of innovative strategies [14]: 1) marketable; 2) resource; 3) technological; 4) social; 5) managerial. By grouping the factors of external and internal environment of the project-oriented organization by the proposed groups of strategies, it is possible to determine the degree of their importance for the development of the organization.

Steps 10–12. The probability of success of an innovative project is influenced by many factors, which are proposed to be divided into three groups: 1) environmental factors; 2) stage of the life cycle of innovation; 3) the characteristics of innovative depending on the depth of the changes. The probability of success of an innovative project of a project-oriented organization is proposed to be defined as the product of the success probabilities for each group [14, 15].

The forecast period is defined as the maximum of a set that contains the durations of the planned dates for the implementation of innovative projects of a project-oriented organization that have the most significant impact on the effectiveness of its operating activities.

Step 13. The stable position of a project-oriented organization is ensured by the balance of its portfolio of works (services) [14, 16]. The calculation of the balance index of the portfolio of works (services) of an organization allows its management to identify negative trends in its structure in a timely manner and take appropriate corrective actions to change the balance in the portfolio of the works (services). The imbalance of the portfolio of works (services) serves as a signal of the need to adjust the portfolio of innovative projects of a projectoriented organization [6, 16].

Steps 14-16. Successful implementation of the innovative strategy of a project-oriented organization is possible with an optimal allocation of resources, ensuring both the project and operational activities of the organization.

As the main tasks of monitoring the implementation of an innovative strategy of a project-oriented organization, we can single out the control of compliance of actual indicators with the planned ones, warning of deviations and analysis of the causes of deviations [1, 13].

Conclusion. An algorithm for innovative development management of a project-oriented organization is developed, it ensures the coordination of innovative strategies of the organization and the plans for its project and operational activities. The implementation of the algorithm will improve the efficiency of using the resources which available to a project-oriented organization.

Acknowledgments

We express our gratitude and deep appreciation to S.G. Falko, Dr. Sc. (Econ.), Professor, for the valuable advice and comments on the article.

Translated by V. Vlasova

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Please cite this article as:

Omelchenko I.N., Lyakhovich D.G., Dobryakova K.V. Algorithm for Innovative Development Management of a Project-Oriented Organization. *Herald of the Bauman Moscow State Technical University*, *Series Instrument Engineering*, 2019, no. 1, pp. 129–134. DOI: 10.18698/0236-3933-2019-1-129-134

Издательство МГТУ им. Н.Э. Баумана 105005, Москва, 2-я Бауманская ул., д. 5, стр. 1 press@bmstu.ru www.baumanpress.ru

Подписано в печать 30.01.2019 Формат 70 × 108/16 Усл.-печ. л. 11,7

Отпечатано в типографии МГТУ им. Н.Э. Баумана 105005, Москва, 2-я Бауманская ул., д. 5, стр. 1 baumanprint@gmail.com