

MARKET MECHANISMS OF PROVIDING STAFF OF INNOVATIVE PROJECTS AS A CONDITION OF ECONOMIC WELL-BEING OF COMPANIES AND COUNTRIES*

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Abstract: *Economic condition of country and enterprises depends on extent of innovative processes. Development and implementation of innovations is carried out in project form. For the success of innovative projects required high quality human resources. The achievement of innovative projects aims by 80% is determined by competent staff. An important objective is to provide innovative projects with human resources. Methods of providing might be different. Most adequate to the present period of economic development are considered to be market mechanisms in provision of project personnel. Their peculiarity lies in inviting project staff from external and internal labor markets. Proposed description of market mechanisms: an analysis of supply and demand of human resources in the labor markets, competitive assessment of candidates for projects, marketing of personnel, movement and career management of project staff on internal labor market.*

Keywords: *innovative project, human resources, availability of resources.*

A leading factor of economy progress of any country and the economic development of companies recognized as innovation. Developed countries and businesses have reached success through innovations. Today they are breaking into the world markets, produce competitive products as a result of implementation of various innovations and use of advanced technologies. Innovation, as a source of economic growth and welfare, involves the development and wide implementation of innovations in all spheres and sectors of the national economy with the aim of improving the competitiveness of all levels, from enterprises to the overall economy.

Innovations in most cases are initiated and implemented in the form of projects.

Project activity and project management contribute to the creation of innovative products and services in a timely manner, with a given set of resources and planned performance.

Project management in its essence is always linked to the creation of something new within the framework of strategic plans and planned values of the business. In addition, the project approach helps to manage better such settings, characterized by a high degree of innovation, as different types of risks, requests of stakeholder groups, derived values and benefits from innovative projects.

Successful implementation of innovative projects requires a lot of conditions and factors among which: the high level of research intensity of production, scientific and engineering knowledge complex gained in the methods, kits, material, technical, energy, labor factors of production, the ways of combining them to create and bring to market a new product or service [4].

The most important factors are the availability of human resources in innovative projects. Important are both quantitative and quality security, designed to meet the needs of the project in a certain amount of staff. The qualitative level of human resources refers to the high level of development of vocational competencies and capabilities system in participants of management teams and teams of innovation projects performers.

Professional competence is a set of interrelated knowledge, skills, abilities, personal qualities, motivation, required at the current time by specific project and specific organizations that determine the success of projects and efficiency of project activity [1].

Unlike competencies, potential, also composed of these elements, focused on future needs and projects, this is not yet implemented, but can be implemented in the future the set of human resources characteristics [1]. Potential plays an important role in innovative projects, as it is often due to the unpredictability and variability of innovative activity and parameters of innovative projects requires certain agility in the use of reserve capacities and resources. In innovative projects it is often difficult to say in advance exactly what quality of staff may be necessary in the development of the project. Therefore, the human resources potential should be ensured along with the development of professional competencies.

However, experience shows that innovative projects of many enterprises have a low level of availability of quality human resources.

The causes are different, for example, the lack of participation experience in innovation projects and of project management skills of the activity, the lack of effective technologies of personnel providing and formation of required qualities. In this situation, the leaders and specialists of enterprises often turn to scientific advice and faced with a deficit of deep theoretical developments on this issue. Indeed, the analysis conducted by the author of this work has shown that the answer to the question of how to ensure the quality of human resources of innovative projects submitted in scientific research superficial and fragmentary. In particular, the theory of project management is actively developing.

Many authors are dedicated their publications to this theme, such as: V. Bogdanov, Dragan Z. Milosevic, V. V. Ilyin, A. V. Polkovnikov, and M. F. Dubovik, etc. [2, 3, 6, 8].

However, the personnel provision of project with specific of innovativeness is not disclosed. Many scientists develop the theory of human resource management, for example, such authors: Odegov Y. G., Kibanov A. Y., Polovinko V. S., Shapiro S. A., and Shekshnya S. V. [5, 7, 9, 10, 11]. But in these works does not studied human resource management in conditions of project and innovation. Therefore, the task of developing the theory and practice of personnel providing for innovative projects is up to date.

To confirm the designated relevance and for the purpose of studying mechanisms of personnel providing for innovative projects the author of this paper conducted the study.

In a longitudinal study using the method of questionnaire survey was attended in 2011 – 123 enterprises (mass survey), in 2012-2015 – 47

enterprises and organizations of Omsk, applying at different levels the methodology for the development and implementation of projects (in-depth expert survey). These companies have experience of project management and can be considered as experts on the research issues.

As it was shown by our study, the goals of innovative projects, according to experts, on 80% is determined by the competent personnel. Therefore, an important task as experts recognized is the providing of innovation projects with human resources.

However, the majority of businesses expressed the view that the staff is not quite ready to work in innovative projects conditions. To the question "How your staff is ready to participate in innovative projects?" 10 % of the enterprises said that the staff shows a lack of willingness, 58 % said that the staff is not fully prepared; the remaining 32 % confirmed their readiness for this type of activity.

The main direction of provision of human resources quality level for innovative projects the experts recognized the training and development of professional competences. Especially training is required for those who are included in project management team – project managers, program managers, portfolio managers, specialists of project offices and project committees.

Preferred forms of personnel development in the field of project management, defined by experts, are presented in table 1. As can be seen, preferred form group includes many, ranging from University training, and ending with, gaining practical experience of project activity. But real businesses are used at the moment such forms of preparation as one-off seminars, trainings, workshops (58 %); own project experience (100 %); short-term training (16 %), consultations with specialists (19 %).

Among these areas of training and personnel development there are those that are focused on enrichment of capacity.

These are, for example, in-depth training in high school, short term training and consultations with professionals.

These directions lay the groundwork for future success and career in the field of project management. And there are destinations, which to a greater extent can reveal the competence, the maximum leverage them in the current mode. These include own project expertise, internships in enterprises, trainings and other active methods of competences development.

Table 1. Distribution of answers to the question: "What forms of training and development of specialists in management of innovative projects are preferable in your company?"

Preferable forms of training and development of specialists in management of innovative projects	The number of enterprises	
	units (PCs.)	%
In-depth training in high school with diploma (full-time bachelor, master)	39	83
Accelerated form of training in the University with diploma (short program)	29	96
Short-term certified training	32	53
One-off training events (seminars, trainings, webinars, workshops, etc.)	35	98
Internships at companies which use project management	31	100
Individual consultations with experts in project management	24	83
Own project experience of expert	39	96

Source: Author

Thus, the relevance of the problem of qualified providing of innovative projects teams with human resources is obvious and proven empirically. Were identified most preferred and most often used directions of personnel development to improve its quality. The enterprises can use different tools and methods to provide their projects with human resources with required competencies and potential.

Let's focus on market mechanisms of personnel providing for innovative projects.

Their peculiarity lies in the fact that in order to recruit the project personnel with external and internal labor markets, carefully analyzing demand and supply in these markets, studying the dominant needs in terms of personnel quality and forming of market model of professional competence and capacity.

All these market mechanisms can be applied to operating activity, but for project activity they are a priority. This is due to the fact that the projects are complexes of project works within specified time limits, they have a start and end date. The

staff involved in innovative projects, often to external or internal labor markets in search of new employment or in the process of deciding on a future career.

The project staff more than the operating personnel needs in high competitiveness in marketing for successful employment. Therefore, these market mechanisms are highly relevant to project activities.

Let us dwell on the description of some market mechanisms of personnel providing for innovative projects.

1. Analysis of the demand and supply of working force on external and internal labor markets. To meet the needs of the project in human resources and involving people to the project is very important the analysis of supply and demand. This analysis shows, on the one hand, the number of personnel in the enterprise and beyond, which may take up current and future vacancies, on the other hand, the number of proposals of working positions in the project structure, the number of opening role-playing vacancies for projects. The analysis shows the balance of these indicators, the displacement of supply and demand. According to the analysis decisions are made on the supply and demand regulation. For example, if the internal or external labor market has the lack of labor supply for the open role position in the project, should either be adjusted the position or to begin to develop skills of existing staff. On the contrary, attractive supply of labor can create additional roles in the innovative project.

2. Assessment of candidates' competitiveness for the projects. The competitiveness of human resources is one of the main tools of market positioning and involving to the project various staff. This is linked with the fact that due to competitive advantage of staff appear competencies and features of professional work, which create for the organization certain superiority over the staff of organizations-competitors in achieving its strategic objectives. If the human resources are competitive, the faster they will be involved in innovative project activity. Assessment of the competitiveness level is a mechanism of making decision to shut down project job vacancies.

3. The personnel marketing. Marketing of human resources in projects and overall enterprise refers to such variations as internal marketing. It aims at addressing the following tasks: building relationships with staff as an internal customer, the forming of customer focus of the company towards its staff, learning needs and interests of different groups of human resources to regulate the internal

labor market, creating conditions to meet the needs of staff as internal customer, building partnerships for interaction between different groups of staff, creation and promotion of brand of human resource management. All these tasks are important for innovative projects. From the standpoint of ensuring with human resources for these projects it is important with the help of marketing tools to approach the needs of projects and the needs of staff, create a positive image, both staff and projects for successful closure of project vacancies.

4. Competence based approach to providing with human resources. On internal and external labor markets the main criterion for evaluating the quality of human resources, along with competitive assessment, performs diagnostic and usage of personnel competency. It is the employee level of competences development creates the value for the project, which, in turn, affects the adoption of a decision to involve in the project those or other candidates.

5. Management of project staff movements and career on internal labor market. At the completion of the innovative project there is an actual task of moving released from the project staff in new projects and in operating activities of the enterprise or on the external labor market. If the employee after the completion of the project remains to work at the company, he gets on the intra-labor market and his status, job and role move should be planned. In addition, the employee may participate concurrently in several projects. In this case, it is also important to embed his career trajectory. Career management and movement are important, because temporary employment may reduce the employees' motivation to the project activities. On the contrary, the availability of informed career trajectories is a motivator for project staff. Providing projects with human resources must be a result of the staff movement in their career trajectories. The company in this case has the ability to pre-define the sources and movement of personnel to opening new project.

The results of the research conducted by the author at the enterprises of Russia (Omsk city), suggests that 53 % of surveyed firms use market mechanisms for the provision of project personnel, other companies are turning to non-market methods.

Moreover, 88 % of enterprises admitted the necessity of transition to market mechanisms.

Table 2 presents the results of expert assessments of usage and future need of different market mechanisms on the enterprises included in the sample.

Table 2. Expert assessments of usage and future needs of market mechanisms in the human resources provision of innovative projects (in % from number of the surveyed experts)

Market mechanisms of ensure projects with human resources	mechanisms:	
	currently in use	need in future
analysis of the demand and supply of labor on the external labor market	89	83
analysis of supply and demand of labor on the internal labor market	45	96
assessment of competitiveness of the candidates for projects	38	53
personnel marketing and use of key competencies of project staff	72	98
management of moves and career of project staff on internal labor market	74	100

Source: Author

As can be seen from table 2, in the current period is the most popular mechanism is the analysis of the demand and supply of labor on the external labor market. Other mechanisms are also used but to a lesser degree.

All businesses showed growth needs for all mechanisms in the near future. Especially experts attach great importance to such mechanisms as the analysis of demand and supply of labor on the domestic labor market, personnel marketing and competence based management of project staff, the management of project career in the intra-labor market.

That is, companies assume the transition from providing projects from external sources to ensure by using their own internal reserves. This is consistent with the trend of increasing importance of savings in the provision of specific reserve capacity: intellectual capital, intellectual resources, personnel, mobile and competitive in the intra-labor market.

These trends are particularly relevant to innovative high-tech projects, in which mass involvement of professionals from the external market is not appropriate because it takes a long time to adapt and involve new employees' potential to the specific conditions of innovation activities in projects.

CONCLUSION

Summing up, it should be noted, on the one hand, the importance of ensure innovative projects with qualified human resources, on the other hand, weak work and yet inadequate use of market mechanisms of such providing.

The need for market mechanisms exhibit many enterprises that implement projects. The author offers a description of these mechanisms.

They are all connected with the personnel providing of innovative projects through managing of demand and proposals on labor markets, movement and career path of project staff, marketing and analysis of needs in qualitative parameters of human resources in project. These mechanisms allow forming human resources of projects according to company strategy and project activities, which will inevitably lead to economic returns of innovations.

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