



FEATURES AND PROBLEMS OF INNOVATION MANAGEMENT AT THE MESO- AND MICRO LEVELS

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ABSTRACT

Efficient innovation management is an important task to improve the management system at all its levels. The main applied research problem of the article lies in the insufficient efficiency of innovation management at enterprises and in Russian regions. It is reflected in the retardation in the dynamics of innovation-driven development from the targets set by Russian Government. The article aims updating the features and problems of innovation management at the meso- and micro levels. The methodological basis of the research is the organization theory, the territory sustainable development theory, the modern efficiency theory, the innovative development concept. The article analyzes the features of the assets in innovative enterprise as a management object, identifies the problems of innovation management and identifies areas for improving the innovation management system at enterprises. The author mainly touches on the problems in Russian manufacturing sector; however, most of them are the same for other business areas, as well as for other developing countries. Further improvement of the innovative enterprise management system is seen in the diversification of funding sources, the intensification of indirect measures to support innovative growth, including tax instruments, innovation funds, infrastructure, etc.

Keywords: innovation, innovation management, innovation at enterprises, innovative enterprises assets, innovation management problems, innovation in regions, innovation in Russia

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1. INTRODUCTION

Economic advancement is based on improving various aspects of corporate activities, in particular: improving the economic activity organization forms, implementing new technologies, creating new and modified products, and more. All this is inextricably intertwined with such a concept as innovation which in modern conditions is the main driving force for the development of both an individual enterprise and the economy as a whole.

Developed countries actively stimulate the innovation process at enterprises, supporting it in the financial, legal and technological fields. At the same time, the emphasis on innovation policy implementation is shifting from the central government to the regions, forming not a centralized, but a territorial-sectoral model of innovation management. In developing countries, such as Russia, the strengthening of the regional-sectoral component is dictated by the very essence of innovation policy, which creates the basis for sustainable development of territories and industrial complexes through the effective use of their labor, scientific, technical and industrial potentials. In this regard, the relevance of improving the innovation management methods and tools at subnational levels has sharply increased. In its turn, the innovation management progress in developing countries is possible only if the basic, long-standing problems that have become traditional for many business units due to mentality, traditions and managerial culture prevailing in country, are resolved.

The purpose of the article is the actualization of the innovation management features and problems at the meso- and micro levels. The main scientific and practical problem of the article is the weakness and lack of effectiveness in the enterprise's innovation management process and in the regions currently, which is reflected in the lag in the innovative development dynamics from the targets set by Russian government. The author upholds the position of active development of methods and tools for innovation management evolution on regional platforms because of the large role that regions play in ensuring the innovative development of business entity.

2. MATERIALS AND RESEARCH METHODS

The article methodological basis is the general principles of modern economic science, in particular: the regional economy, the territory sustainable development theory, the efficiency theory, the modern innovative development concept. In methodological side, the research is based on general methods of economic analysis, including systematization, generalization, comparisons, expert assessments, as well as approaches used in the world practice of making managerial decisions.

The research is based on a conceptual framework developed by world science. Innovation is understood as the result of research-and-development activities presented in the form of a new or improved product (technology). Innovation management is an important part of management activity related to providing innovative manufacturing methods with necessary resources, improving all its elements and subsystems. Currently, innovation management at the meso- and micro levels implies the formation of management systems corresponding to these levels, i.e. management forms and methods, largely determined by the type and nature of ongoing innovations (Phelps, 2013; Saidi, & Siew, 2019).

Investigating the development of innovation management systems as an important scientific and practical task, the following areas of different researches should be noted in order to optimize the scientific task.

1. *Theoretical and methodological aspects of researches related to innovation management features in regions and enterprises.* Fundamental questions of intellectual capital accumulation are presented in the works by L. Edvinsson, K. E. Sveiby, E.

Brooking, R. Netty, J. Kendrick, F. Taylor (Taylor, 1911; Sveiby, 1997; Edvinsson, 2000; Sánchez, 2000; Brooking, 2001).

2. *Problems of innovative growth based on intellectual capital* that is formed and used at enterprises were studied in the works by E. Brooking, V. Goylo, E. Grove, E. Dyson, E. Lesser, T. Stewart, J. Schrider and others (Grove, 1995; Brooking, 2001; Stewart, 2007).
3. *History and practice of innovation management, personnel management* under development of innovative development, optimization of managerial influences results, social and labor relations in the innovation field. The works by R. Ackoff, G. Becker, E. Mayo, R. Kaplan, D. Norton, R. Solow, T. Schulz, J. Schumpeter and other distinguished scientists cover these and other issues related to the development of innovative activity at enterprises. (Becker, 1976; Ackoff, 1981; Schumpeter, 2008).

3. RESULTS

3.1. Peculiarity of innovative enterprise assets as a management object

The main unit for national innovation growth is innovative enterprise, i.e. economic entity directly developing and manufacturing new and modernized products using a special type of resources – intellectual property, knowledge capital. The functioning of such enterprises, regardless of their size and scope, determines the specifics of accumulation and use of capital which is represented by both high-tech materialized capital objects and intellectual assets, the owner of which is an individual.

The methods, tools and innovation management efficiency at the micro level are determined by the characteristics of assets used by innovative enterprises. Unlike traditional business entities, innovative enterprises deal not only with the material but also the non-material resource base. According to modern classification, the assets in innovative enterprise cover the human, client and organizational types of capital. They include such forms of assets as knowledge, unique professional experience, professionalism per se, business worthiness, customer loyalty and commitment, use of the latest software and information support for customer service, inventions, utility models, production secrets, service marks. In fact, the innovative enterprises assets are treated as a set of information and intellectual resources, in particular: a set of scientific and production, financial, marketing, organizational and managerial, personnel, information and technological, and other ideas, methods, tools, technologies, various forms of information derived from the employees' intellectual work (Krasova et al, 2017; Nedoluzhko, 2018). Thus, various forms of objectified knowledge that have commercial value become the main source of the competitive advantage's formation in enterprise, and, as a consequence, the growth of its capitalization.

The intellectual and informational component of innovative enterprise assets determines the uniqueness of their properties and attributes for each individual enterprise, for it is predominantly subjective. Expenses for acquiring innovative facilities represent economic rent for an object owner and rental payment for a consumer enterprise (for example, the knowledge and experience of a well-known professor or programmer), so it is very difficult to give an objective market assessment. In addition, the intangible value may increase over time, rather than decrease, which is characteristic of tangible assets.

The concepts of intangible, innovative assets as economic categories have appeared relatively recently, therefore, a solid foundation of scientific analysis regarding innovative enterprises has not yet been fully formed. In recent years, the world economic practice has adopted a number of notions, concepts and viewpoints; however, the issues of formation and management of innovative assets are still widely studied. According to some experts, the categories “intellectual capital”, “intellectual property”, “human capital”, “intangible assets”

are the core of global innovation development, influencing each other and ensuring mutual development (Sánchez, 2000; Brooking, 2001; Barreto & Alturas, 2018). Each of these categories is heterogeneous, deeply structured, complex, systemic, therefore it is advisable to use the terminological construction “intellectual-innovative assets”, which reflects, on the one hand, the intellectual form of the asset source, its inextricable connection with human capital, on the other hand, innovative nature of its use.

3.2. Problems of innovation management at Russian regional enterprises

Taking into consideration the scientific, methodological and applied difficulties, which both enterprise management and regional governments face in the process of improving innovation management, it must be conceded that most enterprises in the Russian regions are weakly susceptible to innovation. The problems of innovation management development at enterprises can be divided into problems of macro and micro levels. In modern Russia, the main macroeconomic factors of innovation retard are the following.

1. Lag in the growth of industrial production from the rate of national economy development as a whole, which is caused by national economy restructuring, starting in the 1990s.
2. Special structure of industrial production, focused mainly on mining, resource, export-oriented industries.
3. Large socio-economic differentiation of Russian regions, different levels in innovative growth opportunities at the meso- and micro levels. We can note here the relatively high internal production and transportation costs because of geographical and climatic characteristics of the country.
4. Dependence of Russian economy on the world market and the economic processes taking place in it.
5. Negative demographic trends that the country overcomes with great difficulty, in particular: skilled labor force outflows to developed countries, labor emigration from innovative industries to other areas of activity with less risk and higher level of capital turnover.

Among the problems that are clearly manifested at the meso- and micro levels, the following main ones can be distinguished.

1. *Differences in positions of owners, managers and firm staff.* Absence of an active innovative position of middle managers, expressed in the unwillingness to change the established technological process, often leads to incompetent, untimely or compromise decisions that give the inertia to innovative processes. We can note a rather low level of organizational and managerial culture at many enterprises, and official democracy lack, when the goals, tasks, priorities of enterprise, as well as the role of the team in the firm development are not completely clear to employees (Osipov & Krasova, 2017; Hojati, et al 2014).
2. *Prevalence of short-term benefits over long-term goals.* This problem is typical for many emerging markets with their high degree of uncertainty and entrepreneurial risk, which inhibits the innovation process and brings more pressing issues to the forefront.
3. *Sufficiently hard and authoritarian management style in firm collectives.* Obviously, in Russia, as in other developing countries with high levels of hidden unemployment, employers have the opportunity to manipulate the priming behavior of workers by restraining wage growth. Under the conditions of uncertainty and losing job fear, attempts to increase work efficiency often come down to the desire (need) to please the boss, which undermines the genuine innovative motivation of the collectives.

4. *Low mutual integration of science, education and real economy.* In some cases, for example, while implementing any programs and projects, there is an effective and close relationship between these three areas of innovation process. However, for their full integration in Russian regions, there is still no mechanism for coordinated interaction of all participants in innovation process, which reduces the potential of scientific and technological base for economic growth (Wen Mingming, 2017, Shashlo, 2018).

Of course, these problems do not exhaust the whole range of reasons for weak innovative activity at Russian enterprises; however, their presence already indicates the lack of ability to accelerate innovation-driven growth in the regions and the country as a whole due to the management technologies conservatism.

3.3. Directions for improving the innovation management system at Russian enterprises

If there are the problems hindering the country's innovative development, Russia needs organizational and economic coordinated mechanisms operating at various levels that motivate business units to search for and introduce new technologies into production process. To solve the problems and eliminate contradictions on a macroeconomic scale, it is necessary to improve state policy in the field of financing innovation, developing the legal framework, and strengthening the regional component in the state innovation policy. Formation of stimulating innovation policy in regions and at individual enterprises is also important: the policy should be clear, understandable, practically implemented and effective.

First of all, attention of regional and enterprise management should be focused on diversification of sources, intensification of indirect measures to support innovation-driven development – tax instruments, innovative funds, infrastructure, etc. The main goals here are to motivate businesses to self-finance innovation, to strengthen the relationship between production volumes and amount of investment to research and development.

Over the past decade, Russia has already gained experience in using various tax instruments to stimulate the innovative activity of enterprises: accelerated depreciation and increasing ratios for calculating costs (2011-2012), tax incentives for enterprises and organizations engaged in innovative activities (2013-2014), exemption from personal income tax and property tax for certain categories of scientists (2013-2017), etc. However, using only individual tax instruments shows the insufficiency of methods used today to stimulate innovation owing to the limited support and rising government costs. In addition, estimates of such instrument's effectiveness, obtained in the course of surveys from tax benefits and exemptions consumers, vary quite widely and are ambiguous (Gokhberg et al, 2014).

In order to organize the effective innovative development at all levels, in Russia today active discussions about creating special innovation funds take place. Such funds are not direct result of budget funds accumulation but present a special type of public-private partnership that focuses on the corporate sector activity in the field of breakthrough technology. The innovation fund as an institutional unit can potentially become the material basis of the innovative development management system at enterprises and organizations. The main function of innovation fund is money accumulation and distribution within the framework of implemented innovative projects with clearly defined results of scientific and technical activities. One of the fund sources can be profit deductions, which will be exempt from tax. If funds accumulate enough money, enterprises will be able to use them to finance any innovation project. Creating such innovation funds will help to overcome the main problem of enterprises – lack of working capital that is necessary to update the production capacities, to expand production based on breakthrough technologies. The creation of innovation funds in the regional level is most

relevant, because the most regional enterprises, especially small and medium-sized ones, are now unable to accumulate funds for active innovation growth.

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