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Financial Management of Innovative Activity

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ABSTRACT

Increasing investment activity is a key problem for Russia. Despite many state's efforts, investment activity is low. The aim of the article is to propose an innovation management method based on a systems approach. The main objective of the research is to find an effective approach to optimizing state efforts to enhance financial management of innovative activity. The research methodology is based on the analysis of the enterprise closed innovation system. Economic and mathematical methods are used to represent the management function as an operator equation of the first kind. This allows to create a control algorithm to maximize the effectiveness. The methods of computational diagnostics and tomographic economics are used for the element-by-element analysis of the subsystems of the innovation system. The information base for the study was publications concerning the theory of management and business management. The possibility of applying computational diagnostic methods to optimize the financial management of innovation activity was proved by separating the controlling and controlled subsystems of the enterprise innovation system and observing all laws of production. A form of control functional was obtained on the sets of observable characteristics of the controlling and controlled subsystems while optimizing the results of innovative activity due to the feedback channel. The results of the study may be of practical interest for innovative projects in order to transfer the enterprise to innovative development, in particular, in relation to the restructuring of organizational structures and institutional support in the digital economy format.

Keywords: financial management; financial flows; innovation system; innovative activity; management function; tomographic economics; management and development of the enterprise; digital economy

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INTRODUCTION

Digital transformation provides an increasing intellectualization of production. Strengthening innovative activity requires changes in enterprise management. Developing new areas of management, primarily innovation, raises the question of its effective and sustainable integration with other areas of management. Financial management belongs to the most important of these.

An impact focus on the innovative activity of an organization (enterprise) from the perspective of financial flows — financial management — can both significantly strengthen innovations and make them difficult in case of inadequately selected aims and measures in relation to the production and implementation of innovations.

Getting acquainted with modern developments on resolving this issue, as well as the prospects for their development and the practical conclusions that follow from this, can help Russian enterprises optimize their efforts to find and maintain a balance between the innovative and financial components of their operations.

FINANCIAL AND LEGAL SUPPORT OF INNOVATION MANAGEMENT

American experience in the legal support of renovations of manufacturing and innovation is of interest. In particular, American Manufacturing and Innovation Act of 2013 includes the following targets:

- to continue renovation of equipment;
- to improve the quality of work with data and information, to develop computer technology, including new paradigms such as quantum computers, simulation technology;
- to develop advanced software to achieve a better fit between modeling of complex systems and their implementation;
- to accelerate the creation of an infrastructure of advanced technologies (to improve coordination of the federal technology transfer system);

- to prepare the industry for future advanced computing technologies;
- to increase the manufacturing competitiveness in the United States and domestic production;
- to support the digital economy by developing next-generation communication systems;
- to stimulate US leadership in advanced manufacturing research, innovation and technology; to accelerate the development of advanced manufacturing personnel.

To achieve these targets, it is necessary to create a network of innovation centers in the manufacturing industry and provide financial assistance for their creation and support.

To solve the above problem is extremely important for modern Russia, where enterprises still do not show much interest in innovations. Their level of innovative activity is significantly inferior to the indicators of the countries leading in this field.

Various adverse circumstances of a conjunctural, cyclical and structural nature contribute to this passivity.

According to the Strategy for Russia's Innovative Development 2020 (approved by the order of the Government of the Russian Federation of December 8, 2011 No. 2227-r), the 2008–2009 global economic crisis led to a reduction in private business spending on innovation and slowed Russia's innovative development.

At the meeting of the Presidium of the Presidential Council for economic modernisation and innovative development of Russia on July 18, 2017, the Prime Minister of the Russian Federation D.A. Medvedev focused on the barriers impeding innovation in Russia, in particular, the implementation of the National Technological Initiative (NTI), conceived as a “driver of Russia's innovation system.”

The first barrier was called “the current legal regulation, conservative by nature”. This thesis should be read as the recognition that certain norms block the effective implementation of new technologies by excessive re-

quirements at all stages of their development and commercialization. The task set by the Presidium of the Council is to create a normative space, “as innovation-friendly as possible”.

The second barrier is the excessive diversity of federal normative legal acts (hereinafter referred to as the NLA) in the field of innovation. However, there is no algorithmic combination of the norms of various branches of law (in particular, civil, labor, tax, budget, administrative). There is a discrepancy between the needs of scientific, technical and innovative activities and the limits for state educational and scientific organizations to use budget funds.

Fiscal measures in relation to innovation are also unsuccessful. Attempts to activate them by reforming the administration of VAT have little effect on financial flows for manufacturing and implementing innovations. Practical difficulties in reimbursing and (or) deducting the “input” VAT both during the implementation of the investment program (which is formally provided for by the current legislation, but faces a number of difficulties in practice), and after the launch the problem remains. As a result, significant funds with VAT are “frozen” for up to several years.

Besides, financing innovation is hindered by the overly complex administration of obtaining financial resources. For example, obtaining the right to an innovative tax credit (hereinafter — ITC) for federal taxes includes:

- proceedings in the application of the interested parties (organization) by one department of the authorized body;
- multi-stage approval of the decision by other departments of the authorized body;
- legal examination of the submitted documents and further approval, etc.

The list of documents for the ITC includes 12 items. If the ITC is provided with tax credited to various budgets (for example, to the federal and regional budgets), the procedure for obtaining the credit should be followed twice.

These unfavorable factors for innovations often explain the low demand in the Russian economy, its inefficient structure in the form of purchasing off the shelf equipment abroad to the detriment of own new developments. However, despite these factors, innovative activity is growing in many countries of the world. It is no accident that the country's leadership issues a challenge not only to create favorable conditions for the effective development of innovative activity in Russia, to join the efforts of the state, business and civil society for the rapid growth of the national economy, but also to achieve the “Russian economic miracle” through a qualitative change in the structure and management system of economic assets¹.

This message urges a critical review of the impossibility to activate domestic innovations without changing their fiscal environment and mobilizing additional state financial resources. Modern research help identify other, including financial, efforts of organizations to increase innovation activity, and raise the question of the special management of this process by domestic economic entities. At the same time, the regulatory legal framework and the previously mentioned incentive measures will help them shape the direction of innovative development. A systems approach allows an effective solution to this problem faced by domestic business.

SYSTEMS APPROACH AS A THEORETICAL BASIS FOR SOLVING THE PROBLEM OF FINANCIAL INNOVATION MANAGEMENT

As the management paradigm prevailing in the XXI century, the systems approach dictates a holistic view of the reality studied by the social, humanitarian and natural sciences. It involves the use of various combinations of approaches, methodologies, models

¹ The Programme for the Development of the Digital Economy of the Russian Federation until 2035. URL: <http://spkurdyumov.ru/uploads/2017/05/strategy.pdf> (accessed on 21.05.2019).

and methods to study diverse topics through systems thinking, including a convergent approach. The study of managerial, economic and other problems based on this paradigm requires an appeal to the theories of complex systems, chaos, computational complexity and the concept of self-learning [1].

The application of the systems approach to the management of an economic organization is closely connected with the Penrose's concept, whose foundations are formulated in her work "The theory of the growth of the firm", 1959 [2]. The author considered the enterprise as an indivisible fund of physical and human resources, which can only be used effectively together. Applying them separately and/or outside the enterprise would not bring the same profit and would not create competitive advantages.

The theory by E. Penrose gained wide popularity and received further development, considering other laws and patterns of reproduction of the enterprise, the orderliness of their organization, awareness, proportionality, composition and others.

However, applying just the systems approach was not sufficient to study the management of innovative activities due to its experimental nature. Experts emphasized this feature of innovation activity. Jeff Bezos², the richest man on the planet, compared (2017) producing and developing innovations with an experiment, whose result cannot be predicted. Experiments are prone to failures [3]3.

However, this fact does not deny the legitimacy of questioning innovation manage-

ment in an economic organization. The above contradiction might be removed by managing the commercialization of research and development results, as well as other scientific and technical achievements in through a new or improved product (process, including its organizational or marketing form) used in practice, as a separate element of economic activity⁴. (Formation laws of such an element through the general management of organizations are analyzed in works by domestic and foreign researchers [4–7]).

Innovation management can provide the enterprise with various strategic competitive advantages in various functional areas. An important niche in the market, establishment, good relations with the state and other stakeholders, high social effects, a favorable impact on macroeconomic parameters and others are among them⁵. In the financial sector, such advantages include optimizing the costs of innovative activities, breaking even, profitability, ensuring excess profit, increasing the value of the company, strengthening its financial stability, and others.

Besides various functional aspects, when managing innovations, it is important to consider time differences to achieve and keep the effects, as well as their relative nature. The effects of innovation are especially significant when comparing the enterprise with its competitors in a given market segment.

Thus, innovation management can be regarded as a conceptual activity for developing and targeting implementation of production forms (labor organization and others) where qualitatively new types of equipment and technologies, means of production, intellectual property are invented, designed, created and brought to market (patents, licenses, etc.), as well as other products of intellectual en-

² Jeff Bezos (one of the most influential high-tech entrepreneurs, the founder and CEO of the largest online store Amazon.com, the founder and owner of the space exploration company Blue Origin, the owner of *The Washington Post* publishing house) surpassed Bill Gates in 2017 and became the richest person in the world. On January 9, 2018 his net worth was valued at 105 billion dollars.

³ In the scientific method, an experiment is an investigation of a certain phenomenon under conditions controlled by an observer. It differs from an observation by active interaction with the studied object. Usually, an experiment serves to test a hypothesis, to establish causal relationships between phenomena.

⁴ GOST R 54147–2010: Strategic and innovation management. Terms and definitions. URL: <http://docs.cntd.ru/document/1200086161> (accessed on 10.02.2019).

⁵ Top Trends in the Gartner Hype Cycle for Emerging Technologies, 2017. URL: <https://www.gartner.com/smarterwithgartner/top-trends-in-the-gartner-hype-cycle-for-emerging-technologies-2017/> (accessed on 10.01.2018).

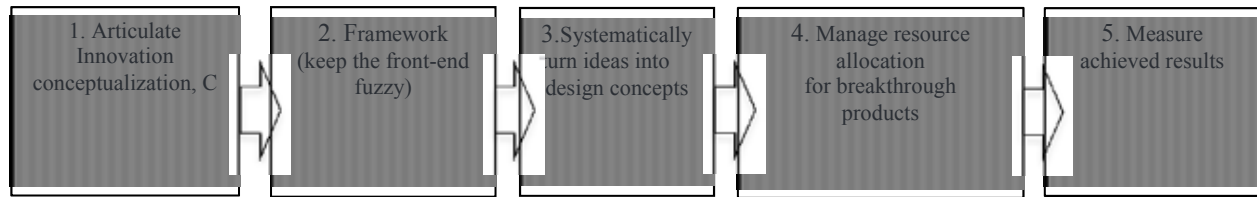


Fig. 1. Process of innovative activity in the aspect of its conceptualization

Source: compiled by the authors based on the research by M. Broekhof, V. Godillot [8].

deavor. (The enterprise development concept is represented by various analytical databases, in particular, by the “Gartner Hype Cycle”)⁶.

In this case, the scheme of innovative activity as a controlled process, with the measure achieved results (MAR) being the market effect of commercialization, looks similar to the one shown in Fig. 1.

Moreover, in the financial aspect, conceptualization can be represented, first of all, by target values, such as sum of profits (*target profit*), indicators of long-term financial stability (*in the long run financial stability*) and/or others.

ECONOMIC AND MATHEMATICAL APPARATUS FOR INNOVATION MANAGEMENT. COMPUTATIONAL DIAGNOSTICS

The economic and mathematical apparatus helps managing innovation in financial terms. In particular, it includes means of computational diagnostics. developed in the 60s of the XX century for the first time [9], they are now widely used in various fields of scientific knowledge to solve inverse problems like [10]:

$$Ax = Y, \quad (1)$$

where

X — is the control action,

Y — is the product of impact by X ,

A — is an integral operator that “turns” the impact by X into a measured controlled variable Y .

Equation (1) relates to operator equations of the first kind. Solving these equations is considered incorrect, since in the end, the recorded value of Y is determined by an a priori unknown operator A . Y acts as an adjustable value with the measured value indicated by $MAR(\dots)$, and A is determined by the properties of the object.

The specifics of the task suggests that to solve this type of equations, one should use algorithms (regularization methods) that allow obtaining an approximate solution. This, in turn, requires developed mathematical tools for measurements and a large amount of a priori information about their object.

The development of the apparatus of computational diagnostics and its application to solve economic problems in the last decades of the XX — beginning of the XXI centuries contributed to these conditions in many respects.

For example, A.A. Kuklin et al. (2015) used economic diagnostics, creating a new area of research — economic tomography [11]. At the same time, the authors developed and substantiated the theoretical and methodological tools to recognize emerging threats at the early stages, which allowed businesses to survive the crisis with less loss. For that, the researchers classified the past socio-economic crises, developed a system of computational experiments and mathematically processed the trajectories of changes in the main indicators in relation to element-by-element scanning considering the influence of various factors.

Thus, the authors determined the kind and form of the equation operator (1), which allowed to comprehensively assess the “crisis”

⁶ Top Trends in the Gartner Hype Cycle for Emerging Technologies, 2017. URL: <https://www.gartner.com/smarterwith-gartner/top-trends-in-the-gartner-hype-cycle-for-emerging-technologies-2017/> (accessed on 10.01.2018).

state of Russian regions and to justify opportunities to manage them.

Later, already in this century, having analyzed the practice of using economic and mathematical methods and models to increase the efficiency of innovation management, domestic researchers S. N. Larin and E. V. Zhilyakova (2013) [12] compiled a generalized economic and mathematical model of innovative activity of the enterprise. They considered various parameters of the impact by the internal and external environment of the enterprise, the market, competitors and state regulation. At the same time, they considered innovative activity both as an economic resource and as an object of management. The question of managing this facility remained open.

Using the mathematical apparatus, well known in management science for solving problems of financial and other types of innovation management, is possible if unstructured or poorly structured innovative activities are transferred to the level allowing to develop appropriate economic and mathematical models, including optimization models. At this level, it is convenient to consider that the input control signal x is determined only by an idea or a strategy (articulate an innovation conceptualization / strategy, see 1 in Fig. 1). The proposed application of computational diagnostics methods to optimize the innovation management by separating the controlling and controlled subsystems of the enterprise's innovation system and observing all laws of organization of production may be of practical interest in preparing enterprises for advanced computing technologies and supporting the digital economy, in particular, regarding organizational restructuring and institutional support.

ENTERPRISE INNOVATION MANAGEMENT AS A SYSTEM

Working with innovations at the enterprise mentioned above, including its financial component, are of particular importance for

both theory and practice. In the first case, we are talking about innovation management as a special object of research, which can be represented as a holistic closed-loop system. A closed control system is a system where the control action x is formed based on the enterprise development concept. During its transformation, the system is based on a comparison of the expected and the actual results of innovative activity [13].

Fig. 2 presents a general structural diagram of the innovation management system.

In Fig. 2, the properties of operator A are defined by the characteristics of two innovation management subsystems of the enterprise (controlling and controlled) operating within the framework of the general system for managing its economic (including financial) activity. In such a system, the feedback signal (Δx) is determined by comparing the output value Y with the setting (set value) Y_0 .

A special monitoring mechanism (device, system) is needed to receive the signal. It will help to determine the difference between the set and measured values of the controlled variable (MAR) to generate a feedback signal Δx .

However, this mechanism is not default, but requires special efforts to be developed and implemented. This is especially important in highly dynamic, and sometimes fundamentally changing conditions in the modern era of digital transformation. The question how to get value Y_0 , quickly compare it with the actual one and adjust to innovation management, becomes vital, and therefore, the priority for the functioning and strengthening of modern business. Thus, the innovation management subsystems of the enterprise require a special analysis.

INNOVATION MANAGEMENT SUBSYSTEMS OF THE ENTERPRISE

The innovation management subsystems of the enterprise are an organic component of the entire management system that regulates the reproduction and development of the en-

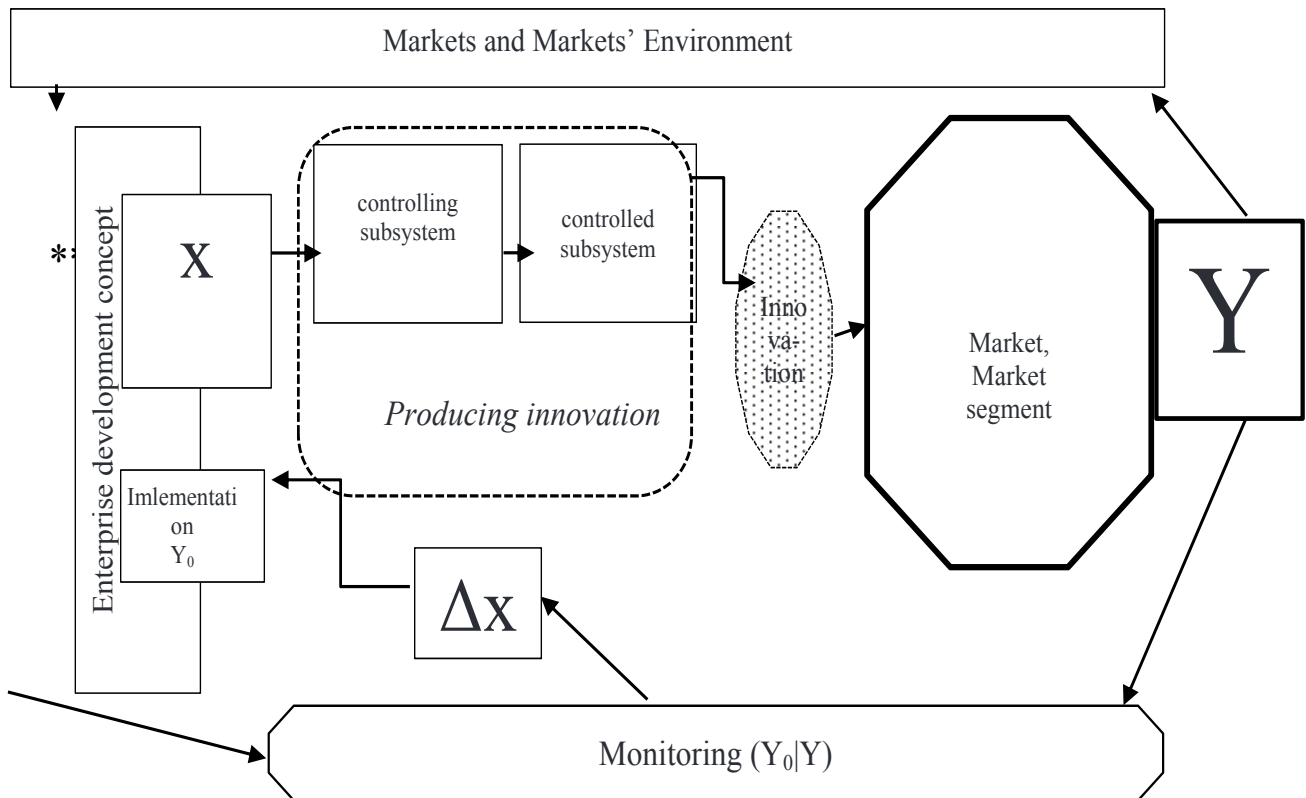


Fig. 2. Block diagram of the enterprise innovation activity management system

Source: developed by the authors.

Controlling subsystem functions	Controlled subsystem functions
Enterprise development	Corporate targets
Self protection	Organization structure
Profitability	Motivation system
Regulatory support of the internal structure of the enterprise	Labor productivity
Resource support of the enterprise (material, financial, intellectual)	Intellectual and professional development
Professionalism — self-certification	Socio-psychological climate
Positioning in the external environment — PR	Relationship with the external environment
Social Responsibility Concept	Technical and technological support, work with sources
Organization of production	Synergistic effects

Fig. 3. Functional diagram of organizational management

Source: developed by the authors.

terprise as a whole. This system is subdivided into the controlling and controlled subsystems, whose functionality is represented below (Fig. 3).

Thus, the functional scheme of the enterprise innovation management system can be presented in a similar format and includes two modules: a controlling subsystem with a set of f_i functions and a controlled subsystem with a set of ξ_j functions. Based on this, an equation for managing innovation activity is as follows:

$$Y = F [(f_1, f_2 \dots f_i)(\xi_1, \xi_2 \dots \xi_j)], \quad (2)$$

where:

Y — is the management result;

f and ξ are the values of the functions describing the controlling actions and the response of the controlled subsystem, respectively, for the values of the time necessary to consider the results i and $j = 1, 2 \dots$;

F is the additive functional — a function defined by the set of f and ξ functions (whose values are usually represented by real numbers).

Then the equation of target Y_0 will be as follows:

$$Y_0 = F_0 [(f_1^0, f_2^0 \dots f_i^0)(\xi_1^0, \xi_2^0 \dots \xi_j^0)], \quad (3)$$

Comparing Y with Y_0 , including in the context of their functional components in the form of elements of equations (2) and (3), allows to analyze the causes of discrepancies in the actual and expected control results, to clarify the state of operator A and to improve the control action (feedback signal) for better Y result.

Functional f and ξ can change both in a substantive way and in time. The target setting can change, as well as its effects of a long, medium, and short-term nature. Formally, this can complicate the calculations, but it will not change their essence.

Such attempts are widely undertaken in modern literature. For example, to improve

the innovation process at the enterprise, Zak Goldberg (2017) [14] proposed considering the “support triangle” with the following parties:

1) *payroll system*, included in the enterprise’s HR system and implying that the employees are paid on time and in full;

2) *Customer Relationship Management Software* (CRM) — information base of the customer status (reflection);

3) *outsourcing application* — the so-called “concept of outside assistance”, according to which outsourcing should be widely used during the start of the innovation process until hiring freelancers.

To confirm the effectiveness parameters of innovation management (the number and nature of the functions of equation (2)), C. Juma [15] suggested considering the so-called “enemies to innovation”, i.e. the conflict between innovators and defenders of the status quo at the enterprise. Their action was fraught with industrial conflicts, inhibition of innovation, emasculating the content of the latter and/or reducing their effectiveness.

In the era of digital transformation and the ever closer integration of various fields of activity and public life in increasing innovative activity of business, the role of public institutions increased notably. Their prompt response to the successes of the commercial sector in the field of innovation, the dissemination of more complete information among them about the state and dynamics of the needs of citizens, as well as the development of public demand for innovations, turned out to be very significant today. This affects the improvement of resource exploitation by enterprises, their concentration in the most promising areas of activity and increasing the effectiveness of operations.

The use of the above tools is also advisable when referring to special functional areas of innovation management and, above all, financial. Focusing on the impact of financial flow management on innovative activity helps specify the above equations (1) and (2), and,

accordingly, improve the setting parameters (Y_0), optimizing the organization's efforts to achieve the maximum effect.

In this case, one should consider the specifics of the ratio of financial and innovative activities, as well as the organization of their management. They root back to the survival imperatives and expanded reproduction in these areas, as well as the response. The differences between them determine the formation of a complex system of relationships between these areas. This system concerns the relationship between target setting in financial and innovative management, the efforts undertaken in two areas to achieve the objectives and conditions that are formed in them for this purpose.

A special treatment to the problems of financial management of innovative activity allows addressing the financial sector on ensuring the innovative effect (Y^{Fin}) and focus:

$$Y^{\text{Fin}} = F^{\text{Fin}} [(f_1^{\text{Fin}}, f_2^{\text{Fin}} \dots f_i^{\text{Fin}})(\xi_1^{\text{Fin}}, \xi_2^{\text{Fin}} \dots \xi_j^{\text{Fin}})], \quad (4)$$

and

$$Y_{0}^{\text{Fin}} = F_{0}^{\text{Fin}} [(f_1^{\text{Fin } 0}, f_2^{\text{Fin } 0} \dots f_i^{\text{Fin } 0})(\xi_1^{\text{Fin } 0}, \xi_2^{\text{Fin } 0} \dots \xi_j^{\text{Fin } 0})], \quad (5)$$

where the index ($^{\text{Fin}}$) is used to indicate the impact of financial management on innovation and its reactions to it.

(Considering equation (1), the definition of this contribution also helps clarify the state of operator A and provides possibilities for optimizing control action X).

On the practical level, the solution to this problem is not trivial due to the variability of the managerial efforts of the financial and innovative components, intensified in conditions of high uncertainty of the innovative context and the inability to interpret it accurately [16].

This does not allow us to unambiguously evaluate their interaction, which allows both its harmonization and mismatch [17]. The ability to calculate positive or negative re-

sults helps correlate them with the efforts to prevent (or overcome) in case of conflict interaction and evaluate them in terms of the overall management of the organization.

Judging by international experience, this issue is becoming increasingly relevant today and finds its solution in ways to identify potential conflicts between financial and innovative entities regarding the mutual obligations and competencies (tension-based framework) that arise between them [18].

This, in turn, presupposes the correct definition of the roles and competencies of their participants, their ability to coordinate their actions with each other, as well as full consideration of the impact of innovations on the position of different stakeholders of innovation activity.

From the position of financial management, the definition and target setting for innovators to achieve certain financial targets requires special analysis and careful criteria selection for their adequate financial assessment in terms of meeting the project budget, innovation costs, pricing for a new product / process / ..., the profitability of the corresponding project and/or other indicators.

When developing the financial content of innovations, there is a need to promptly provide innovators with the necessary information about the state of the financial environment for their activities, to determine the state of sources of such information and the mechanisms for its receipt, and, if necessary, to determine measures to improve it; to model the interaction between financiers and innovators, in particular, to assess possible discrepancies between the formal procedures for financial evaluation of innovative activity and its actual state; and so on [19].

In terms of financial management tools, more and more attention today is paid to the importance of mobilizing new funds for subjects of innovative activity and diversification of the portfolio they form.

In the case of venture financing, for example, project activities, depending on its sector affiliation, it is advisable to turn to various crowdfunding or other funding, mobilizing quasi-currency sources based on digital technologies, and their combination within the framework of the innovative capital model [20].

Today, the mobilization of new, non-financial in nature means of influencing innovative activity is very promising. For example, through 2022, 75% of organizations with frontline decision-making teams reflecting a diverse and inclusive culture will exceed their financial targets⁷. [21]

However, the development of this toolkit implies its balanced application, considering the insufficient knowledge of the behavior of the subject. In this regard, it seems appropriate to begin its implementation with testing and/or experimentation. In the latter case, when analyzing the additional financing of innovations (with investment value E), it is possible to build various models for determining the probability of commercialization $p(f, \xi, E)$ in this financial content (i.e., to clarify and improve the properties of operator A).

CONCLUSIONS

Based on the facts above, we can conclude that modern theory and practice of innovation management have sufficient material to systematically evaluate it as a whole, and individual functional areas, in particular.

In a qualitative aspect, these estimates go back to the concepts of the company (resource, strategic, and some others) formulated in the second half of the XX century and widely developed at the beginning of the XXI century. Their development and integration with the mathematical apparatus, in particular, in computational diagnostics, offers an

opportunity of a quantitative assessment of managerial efforts.

In terms of practice, the approach based on computational diagnostics offers great opportunities for managing innovations in individual functional areas. Among them the financial sector is of particular importance, where innovation is oriented towards achieving certain value targets and therefore, the use of various monetary instruments. An important step to solve this problem is to analyze financial management from the perspective of identifying the controlling and controlled subsystems, building an appropriate model to verify them in the context of individual enterprises, their groups and larger associations. The latter is of particular interest for managing innovations at the meso- and macrolevels and serves as an independent direction for subsequent research in the framework of the studied problems.

FUTURE DEVELOPMENT PROSPECTS

The importance and relevance of this research is also evidenced by the modern experience of regulating innovation activity abroad (USA, Germany, Canada, East Asia, China and the Baltic countries). It shows that the directions of the state's influence on the innovative activity of business entities are quite uniform: the system of organizational, financial, legal, information and other mechanisms is traditionally used. At the same time, their combinations and results differ significantly. In fact, each country implements its own innovation policy, in which, in particular, the place and role of financial instruments is considered differently. Given the differences in the national characteristics of the subjects of innovative activity, this ultimately leads to building many national innovation systems that differ from each other in key parameters for the development of scientific, technical and other types of environment, and the

⁷ Strategic Predictions for 2019 and Beyond. URL: <https://www.gartner.com/smarterwithgartner/gartner-top-strategic-predictions-for-2019-and-beyond/> (accessed on 15.05.2019).

corresponding sectors, countries and regions [22–23]8. Thus, the approach proposed in this article also allows us to optimize government efforts to enhance innovation and can be used in Russia and other countries. The

latter also offers great opportunities for international comparisons, which help better understand the national/sectoral features of the controlled and controlling subsystems (operator A), improve the conceptualization of the management impact and increase the efficiency of financial innovation management.

⁸ Foreign experience in supporting innovation. Review of current literature. URL: <http://www.spsl.nsc.ru/FullText/dor/2015-48.pdf> (accessed on 10.01.2018).

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Shestak V.P. — abstract; keywords; management of innovative activity of the enterprise as a system; subsystem management of innovative activity of the enterprise.

Moreva E.L. — introduction, financial and legal support of management of innovative activity; management of innovative activity of the enterprise as a system; subsystem management of innovative activity of the enterprise; conclusions

Tyutyunnik I.G. — financial and legal support of management of innovative activity, system approach as a theoretical basis for solving the problem of financial management of innovative activity.

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