

Sustainable Innovative Development of a Regional Enterprise: Strategic and Operational Potential

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Abstract: Innovations are a priori recognized as the main driver of economic growth of both the economy of a region, a country, and an individual enterprise. Research on sustainable innovative development both abroad and in our country is performed based on statistical observations of the innovation development of only a certain territory (region, country). However, it is the regional enterprises (especially industrial), as fractals of the regional economy, that determine the level of sustainable innovation development. The assessment of sustainable innovation development of an enterprise is being studied by scientists, but there is no single, generally accepted assessment methodology. This paper reveals, on the basis of the analysis, that the sustainable innovative development of a regional enterprise is reduced to a certain adaptive response, which is not supposed to be assessed; the author's definition of sustainable innovation development is proposed as achieving a balanced innovative state, which consists in the formation and rational, active use of the innovation potential of an enterprise, which allows to support the innovation process to achieve the set goals and to solve problems and does not lead to a loss of economic development stability. It is clarified that innovation potential means the totality of the enterprise resources, the territory required for innovation. A new functional structure of innovation potential is proposed: material, production, human, financial, marketing, intellectual, patent and digital potentials. Moreover, it is proposed to divide the innovation potential into strategic (focused on achieving strategic goals, as a rule, non-financial) and operational (focused on achieving operational goals, usually financial).


1 INTRODUCTION


Innovations are a priori recognized as the main driver of economic growth of an enterprise. Indicators of innovation activity are currently decisive in the competitive struggle (maintaining competitiveness) and the achievement of sustainable economic growth, and in the indicators of success ratings (the importance of economic entities, regions, countries). The direct interest of enterprises in innovation (the level of profitability and capitalization directly depends on the level of development of science-intensive and high-tech industries, (Branscomb et al., 1998) remains only at the level of wishes and implementation of innovative processes, although it would seem that the need to maintain competitiveness

requires this. An interesting conclusion was made in one of the scientific works (Frenkel et al., 2015), it turns out that classical competition cannot support the creation of new technologies or innovative ways, and it is business that must activate either its own scientific research or initiate it. Realizing the importance of innovation and innovative development, business creates new “architectural” structures - “co-existing” innovation systems (integration of regional and sectoral enterprises) (Meuer et al., 2015) and forms, at least, regional innovation structures and regional innovation patterns (Isaksen et al., 2017).

At present, sustainable innovative development is of particular importance, i.e. stable, systematic innovative development, not leading, among other

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things, to an innovation crisis (either lack of innovation, or “excess”, inability to implement scientific developments). To assess sustainable innovation development, enterprises need to use new approaches based on the concepts of “sustainability”, “balance”, and “adequacy”. Such techniques have not yet been developed.

For the innovative development of an enterprise, it is important to have an innovation potential (a well-known indicator, often used); the structure of indicators of innovation potential, as a rule, is “functional”, and reflects the elements of the economic potential of the enterprise (production innovation potential, financial innovation potential, etc). Unfortunately, most of the methods for assessing the innovation potential lack indicators of its use, apparently this is assumed by itself, but this is not the case. The presence of innovation potential does not solve the problems of innovation development; it is necessary to highlight the concepts of “formation” and “use” of innovation potential. The Fridag-Schmidt dynamic management system, involving the assessment of strategic (development) and operational (use) capacities, can be useful in this case (Fridag et al., 2007).

Thus, the assessment of sustainable innovation development of an enterprise is currently in demand, but requires taking into account the availability and use of innovation potential.

The authors of the paper consider the innovation activity of a regional enterprise as an object of research. The subject of the research is the process of innovation, identifying innovation strategic and operational potential.

The purpose of the study is to analyze the assessment methods and indicators of the innovative development of a regional enterprise, to propose a new structure of indicators for assessing the sustainable innovative development of an enterprise based on an assessment of its innovation potential, and to distinguish between the concepts of innovative strategic and operational potentials.

Study objectives:

- to analyze the definitions of “sustainable innovation development of an enterprise”;
- to formulate the author's definition of the concept of “sustainable innovation development of an enterprise”;
- to conduct a comparative analysis of definitions and methods for assessing innovation potential;
- to propose a new functional structure of innovation potential;
- to propose new types of innovation potential.

2 RESEARCH METHODS

In the research process, the provisions of the theory of economic management of an enterprise, the theory of innovative management, the concept of sustainable development, the scientific foundations of strategic planning and management, a balanced scorecard, set out in the works of famous Russian and foreign scientists, methods of statistical observation and analysis, methods, mechanisms and tools of economic management of enterprises, methodology and tools for assessing the effectiveness of activities and balanced management were used. All this made it possible to substantiate the obtained results and conclusions.

3 RESULTS OF RESEARCH

- The analysis of the definitions of “sustainable innovative development of an enterprise” was performed;
- the author's definition of the “sustainable innovation development of an enterprise” concept is proposed, based on the assessment of the formation and use of innovation potential;
- a comparative analysis of definitions and methods for assessing innovation potential is was performed;
- a new functional structure of innovation potential was proposed;
- it was proposed to separate the innovation strategic and operational potentials.

4 DISCUSSION OF RESEARCH RESULTS

Sustainable innovation development. The innovation development of an enterprise is closely related to the peculiarities of the territory of presence, therefore, the study of all aspects of the enterprise activities regardless of the state and characteristics of the development of the regional economy are doomed to failure. The assessment of the innovation development of a regional enterprise is carried out according to various methods (statistical compilations, author's methods are proposed by various scientists), but they all rely on a “basic” definition of the essence of innovation development (as an object is always considered a region, a country), which consists in the process

implementation. The dominance of the “process approach” in the assessment of innovative development determines the groups and a set of indicators that essentially characterize the process in which the result is “separated” in time from costs (for example, today “costs for innovation”, and today the “result of innovations” financed before that), in which the performance indicator - the production of innovative products exists outside of any connection with innovations (production, marketing, financial and others). There is no single best practice methodology in this regard: it explores the use of a diverse set of methodological approaches and makes recommendations for the development of innovation databases at the regional level (Nauwelaers et al., 2005).

No less important is the study of sustainable innovation development of the enterprise; the adjective “sustainable” essentially defines a certain “anti-crisis status” of such development (although innovation is always a high risk and a high probability of a crisis situation). Sustainable innovation development of the enterprise is studied by many scientists. For example, in the work (Yashin et al., 2016), a detailed comparative analysis of methods for assessing the sustainable development of an enterprise was carried out (more than fifty sources were analyzed) and its own, based on a set of a large number of indicators, was clarified, the content of the definition of the concept of “sustainability of the innovative development of an enterprise”: the ability of the economic system of an enterprise to establish and maintain the necessary rates and parameters of innovative and general development in a dynamically changing macro and microenvironment for a certain period of time” with which we can agree.

Let us note that the regional sustainable development (as a set of economic entities located on a certain territory) largely depends on the sustainability level of the innovation development of enterprises. Apparently, therefore, many economic concepts and guidelines for sustainable development of regions are inextricably linked with the development of regional enterprises.

Thus, sustainable innovation development of an enterprise is a well-studied category, but the essence of sustainability is mainly reduced to some kind of adaptive response not to be assessed. It is possible only to assess the innovation activity of the enterprise (the activity of innovative processes).

Let us clarify the content of the concept of “sustainable innovative development of an enterprise”: in our opinion, this is the achievement of a balanced innovative state (Merzlikina, 2020),

consisting in the formation and rational, active use of the innovation potential of the enterprise, which allows to support the innovation process to achieve the set goals and to solve problems and not leading to the loss of stability of economic development.

The innovation potential of the enterprise. Readiness for sustainable innovative development can be assessed using the definition of innovation potential (Zueva, 2016). Currently, the generally accepted content of the definition of “innovation potential” has not yet emerged. Sometimes, instead of the concept of “innovation potential”, “scientific and technical potential” is used, although these concepts are different. As a rule, all researchers rely on the concept of “innovation potential”, presented by M. Porter (considered National innovation potential) and K. Freeman (innovation potential that contributes to the economic growth of the national system).

A detailed analysis of the definitions in (Yakovleva E.A.). Let us consider some in details. Under the innovation potential of an enterprise and a region, various scientists understand: the ability of an enterprise to get its own innovative product (Kultin et al., 2018), as the degree of the enterprise readiness for innovation transformations”, and not to a less specific category of “enterprise capabilities” (Krymov et al., 2017). It is important that in most of the definitions of innovation potential, even used in the resource approach, the importance of using the potential, assessment of the efficiency of innovation potential is determined. It should be noted that the efficiency of innovation and the efficiency of the use of innovation potential are not equivalent concepts, which requires its reflection in the structure and indicators of innovation potential.

The assessment of innovation potential in the world is performed according to several indices: international innovation, global innovation, Bloomberg Agency Index, Potential Innovation Index, PII (Innovation Capacity Index, ICI) (Kultin et al., 2018) and similar indices in our country (Gokhberg et al., 2020). The composition of index indicators to a certain extent characterizes the structure of innovation potential, and it is usually the region that is considered as an object of observation. The list of indicators, used in the indices varies, but the structure and benchmarks correspond to the well-known European Innovation Index (The European Commission, 2017) (EIS), which includes four types of indicators, ten dimensions and 27 indicators characterizing the “Conditions” (human resources, young scientists and their scientific activity), “Investments (financing and support of innovations)”, “Innovation activity” (small and

medium-sized innovative business), “Patent activity”, “Types of innovations”, “Export” of innovations. Statistical observations are performed by country; this is the complexity of the assessment and comparative analysis of the innovative capacities of enterprises - the inaccessibility of the entire completeness of economic information on individual enterprises (with the exception of certain large, but not typical enterprises) for the implementation of the necessary analytical procedures.

When assessing the innovation potential of an enterprise, its structure is usually specified, for example, a complex of intellectual, scientific and technical, personnel, material, information, organizational, financial and other types of resources (Zueva, 2016), a synthesis of several types of resources of an intellectual, financial, managerial, technical nature. (Ustinova et al., 2017). In a generalized form, the structure of innovation potential that is most often used is presented in (Novikov et al., 2009). In our opinion, the proposed structure of innovation potential essentially copies the structure of economic potential, which could be considered necessary, but the innovation potential should have its own specific structure based on its goal-setting and the need to solve the corresponding problems.

The intellectual component of the innovation potential is highlighted (some foreign scientists define the innovation potential as knowledge capital (Carayannis et al., 2015) (Carayannis, 2013), it is proposed to highlight the innovation potential (generation and development of knowledge) and “absorption potential” (the ability to absorb new technologies” (Meissner, 2012), which requires clarification of indicators for assessing innovation potential.

Thus, the concept of innovation potential has many interpretations, similar in meaning, but differing in “details”. The structure of the innovation potential of an enterprise is mainly represented by functional constituent elements: innovative production, innovative financial potential etc. In our opinion, the functional structure of innovation potential should include: material, production, human, financial, marketing, intellectual, patent, digital potential, thereby reflecting the availability and use of all the resources necessary for innovation.

We consider it necessary to highlight the importance of additions in the characteristics - it is important not only to assess the availability of innovation potential, but also to assess its use. Formation and maintenance of innovative potential is a strategic task, at the same time it is necessary to use the existing potential; this point of view on innovation

potential supposes a balance of management actions, a kind of “ambidextric” use of the enterprise resources for the formation, maintenance of potential and its use.

Innovation potential: strategic and operational potential.

Since in the author's definition of the concept of sustainable innovative development is characterized by the achievement of a certain balanced innovative state, let us turn to the balanced system of indicators (D. Norton, R. Kaplan) and its interpretation. H. Fridag and V. Schmidt proposed a dynamic management model (combining operational actions and... identifying creative capacities through strategic actions) (Fridag, 2007), dividing strategic potentials and operational potentials. In their opinion, when creating a balanced system of indicators (assessment of management efficiency), forming an enterprise development strategy, after specifying goals and strategic guidelines, it is important to identify and assess capacities (opportunities, abilities) that will help achieve the goals. H. Friedag and V. Schmidt recognize intellectual capital as the most important for the development of the enterprise, meaning by it a set of “spiritual” (apparently intangible) and material capacities (this is human potential, enterprise employees, their competencies, level of education, capacities of technology, equipment (technical, technological capacities), tool (tool potential), material potential (apparently resource), communication potential (participation of affiliates), organizational potential, and even the environment is recognized by them as a business potential. The listed types of capacities can be called functional varieties; it is important that they are, as it were, a dispersion of the main resources of innovative development. But, in our opinion, it is important to select strategic and operational innovation potentials. Traditionally, everything operational is associated with solving problems and achieving “close” goals, and strategic with solving problems and achieving “distant” goals; but time guidelines are not suitable in this case. The operational innovation potential (and the corresponding instrumental support) will make it possible to assess the effectiveness of the use of today's potential (all available resources, primarily financial) and the achievement of operational goals (usually financial). Strategic innovation potential should involve the formation of new capacities (primarily scientific), ensure the achievement of strategic goals (usually non-financial). Let us choose, for example, from the abundance of indicators for assessing the innovation potential of typical representatives of strategic and operational potential:

the indicator of the availability and competence of the company research personnel is an indicator of the strategic potential; the volume of innovative products is an indicator of operational potential.

In our opinion, the structure of innovation potential should include fundamentally: strategic potential and operational potential, the former should reflect the presence/absence of strategic resources (material, production, financial, marketing, intellectual, patent, digital) necessary to achieve strategic goals and operational potential should reflect the use/non-use of available resources today (material, production, financial, marketing, intellectual, patent, digital). Thus, strategic and operational actions and results can be divided in time and space.

5 CONCLUSION

The main results presented in the paper are as follows:

- the analysis of the definitions of “sustainable innovative development of a regional enterprise” is performed, it is revealed that sustainable innovative development is reduced to a certain adaptive response, not to be assessed;
- the author's definition of the concept of “sustainable innovation development of an enterprise” is proposed; achieving a balanced innovative state, which consists in the formation and rational, active use of the innovation potential of an enterprise, which allows to support the innovation process to achieve the goals and to solve problems and does not lead to a loss of economic development stability;
- a comparative analysis of definitions and methods for assessing innovation potential is carried out, it is revealed that innovation potential means the totality of the enterprise resources, the territory necessary for innovation;
- a new functional structure of innovation potential is proposed: material, production, human, financial, marketing, intellectual, patent and digital potentials;
- it is proposed to separate the innovation strategic and operational potentials; strategic innovation potential is focused on achieving strategic goals (as a rule, non-financial), operational is focused on achieving operational goals (usually financial).

Further authors research involves the formation of instrumental support for the assessment and management of sustainable innovation development of the enterprise.

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