

Viacheslav CHUSHENKO

Cherkasy State Technological University, Cherkasy, Ukraine
djul_82@mail.ru

Approaches how to Define the Concept and Structure of the Innovative Potential in the Region

ABSTRACT

The main goal of this article is the study of approaches how to define the concept of innovative potential in the region and determination of its structure. The main approaches how to define the basic scientific concepts of innovative potential in the region have been systematized. The analysis concerning the use of systematic approach how to define the concept of innovation potential and the principles of its structure has been carried out.

Key words: *innovation potential, system approach, essential concept, structural components, resource component, effective component.*

Introduction. The need for modernization of the Ukrainian economy based on the use of innovative potential actualizes the question of the formation of the scientific basis of the study of innovative potential category. There is no single common approach how to define this concept at the moment. The subject is open for research.

Analysis of Recent Research. The study of this subject was engaged by domestic and foreign scientists, such as: Antonenko I.V., Bendikov M.A., Frolov I.E., Grygoriev L., Zubarevich N., Urozhaeva Y., Dmytrenko E.D., Savchuk A.V., Titov A.V., Chukhrai N., Patora P., Shutenko, V.O., Horodyskii T.I., and others.

Material and Methods. In the framework of proposed by the government course for Ukrainian's economy modernization, the most important task of the regional authorities is the development of innovative potential, increasing its level and value in the region. The implementation of this task requires the presentation of innovative potential as the control object. This requires the development of a theoretical definition of the concept and foundation of its structure. The innovative potential should be presented in a structured manner and should include a number of components. The analysis of the literature on this issue shows that at present is there no generally accepted approach how to define the concept and structure of the innovative potential in the region. Since this problem is new (theoretical studies concerning it conducted relatively recently) so most authors limit as theoretical definitions of a general nature or detailed consideration of the important but separate structural components.

The first approach reflects the definition of innovation activity proposed by M.A. Bendikov and I.E. Frolov (Bendikov & Frolov, 2007, p. 104-105). By innovation activity, the authors understand the activities as to recreation of applied (search) and required part of the basic research, project and research- design works, marketing actions on inclusion of the results in the economic and civil turnover for the purpose of creating and implementing innovative product. The innovation activity, in the opinion of the authors, provides the implementation of complex scientific, technological, organizational, financial and commercial measures and together they lead to innovation. Innovative potential is presented by set of interrelated and interdependent conditions and resources that give the possibility to reproduce innovation activity at different levels of the economic system.

Such studies are useful because they extend the ideas about innovation potential, forming the system. They require further development, the transition to the level of structural, methodological and methodical developments. This approach is observed in some authors. So A.V. Titov concretizing the concept of innovation potential in the region, proposes to include in its structure a set of parameters that are considered in the framework of two directions. They include:

- 1) available opportunities and resources for practical use that created in the innovations region;
- 2) available resources are necessary for further innovation activity (creation of innovation) in the region (Titov, 2008, p. 46).

To the options offered in the first direction, the author considers innovation as the amount of new products, technologies, technical and informational tools that allow implementing social, economic and technological development of the region and material-technical, labour, financial, informational and organizational resources that are necessary for the implementation of innovations in the sphere of practical use.

The options offered in the framework of the second direction, include the necessary for further innovation activity (creation of innovations) scientific and technical, investment, labour, information and organizational resources.

In the opinion of Shutenko, V.O., Gorodyskyi T.I. the innovative potential of the region is the ability of the region to use available resources and infrastructure, to create innovative product and introduce it to the market (Shutenko, & Gorodyskii, 2001, p. 350).

Dmytrenko E.D., Drobush N.V. (Dmitrenko, & Drobush, 2011, p. 12) defines innovation potential as a set of scientific-technological, financial, economic, industrial, social, educational and cultural opportunities of the country (field, region, company and so on) that are necessary to ensure innovative development of the economy. They argue that innovation potential is the main body of the general potential of the state or of the company and defines its real potential implementation of innovative development. They consider information, personnel, technological, scientific and research components to the main components of the innovation potential.

In the opinion of I.V. Antonenko that in the structure of the innovation potential of the region the following components are included (Antonenko, 2009, p. 19):

1. The resource component includes component parts that have different functions: material, technical, logistical, informational, financial, labor and other resources.
2. The internal component characterizes the possibility of purposeful implementation of innovation activity. It determines the system ability on the principles of commercial effectiveness to attract resources for initialization, creation and distribution of different kind of innovation.
3. The effective component reflects the end result of available opportunities.

Author's interpretation of the leading components of the innovation potential, the study and examination of the internal structure of each component are in following.

Considering the proposed structure of the resource component, the author notes the importance of each type of resources:

- - material and technical resources are the substantial basis of the resource component, and determine the technical and technological base of potential, which will affect the scale and tempo of innovation activity;
- - information resource includes databases, models, algorithms, programs, projects, etc. With the development of society reserves of information resource is constantly increasing and are the driving force of the innovation potential;
- - financial resources are characterized by a set of sources and stocks of financial capability, which increases the system's ability to participate in material well-being creation and rendering of services;
- - human resource is a collection of different people's skills, knowledge and abilities that belong to them and used by them in life. The specified component has a direct impact on the resource, internal and especially effective component of innovation capacity.

Evaluating the internal component of the innovation potential the author believes that it provides the capacity and efficiency of the functioning of the previous discussed elements (Savchuk, 2003, p. 15). It can be described as the organization of the creation processes and introduction of new innovation product, providing interconnection of an innovator as with science and market, that consuming the finished product, as well as the tools for managing of the innovation process.

The effective component of innovation potential, in the opinion of the author, that it is the result of quantitative and qualitative changes. It encloses the potential possibility of output to a new level of functioning and innovative potential and system in general.

In some publications considering the innovative potential of the region the authors does not research this category in system; they focus on inclusion in its structure and detailed examination of the individual, very important components.

We have identified the following existing in Ukraine prerequisites to implement this strategy:

- availability of scientific personnel, which are able to go in the commercial sector for the operation of fundamental discoveries; availability of sustainable groups with systematic experience in development of complex engineering products and bringing them up to the required quality level;
- participation of Ukrainian scientists in the international scientific and technical cooperation, that enhancing the accessibility to the results of advanced research;
- emergence of companies with significant financial capacity, that are interested in diversifying their activity and gaining a monopoly on the global markets of new goods and services.

The researchers of the problems of regional development L. Grygoriev, N. Zubarevich, Y. Urozhaeva highlight such aspect of the development of the innovative potential as social networking in the region, that representing informal rules and mechanisms (Grigor'ev, Zubarevich, & Urozhaeva, 2008, p. 26). Regions are a complex social system, in which the relationships and communication between companies, individuals and groups in society are interweaved and based on general culture and history, education, special regional values. In general, these relationships represent a system of informal institutions - rules. The social networks can create a favorable environment for business and economic growth. For example, long-term personal contacts with competitors and suppliers in a particular area allow assessing more accurately the potential reliability of partners.

In countries with transition economy the process of establishing of informal relationships is particularly relevant, since it includes a third, very important side - state legislative and executive power. This process allows reducing the mutual risks and creating a mutually beneficial partnership that is necessary in terms of the opacity of the game rules and the lack of effective mechanisms to solve the contention and clear system of checks and counterbalances. The informal relations does not mean corruption and bribery of officials of the regional administration, a widely spread in all countries the mechanisms of projects coordination, their discussion with potential supporters and blocking groups. In developed countries, these mechanisms are sometimes formalized and usually operate with civil society; they are mostly informal in Ukraine (Grigor'ev, Zubarevich, & Urozhaeva, 2008, p. 88).

Researching the problem of formation of innovative potential in the region some authors consider that its structure should not be limited by inclusion of such components as material, financial, labour, organizational, informational potentials. These authors mean that the social and psychological component should be included in the structure of the innovation potential (Titov, 2008, P.10). Researching the problem of innovative development of regions, we have identified such phenomenon as the susceptibility of the economic system to innovative development. We consider the factors which allow ensuring the development of innovative processes and defining the relevant and propitious methods for motivation for each component (Fig. 1).

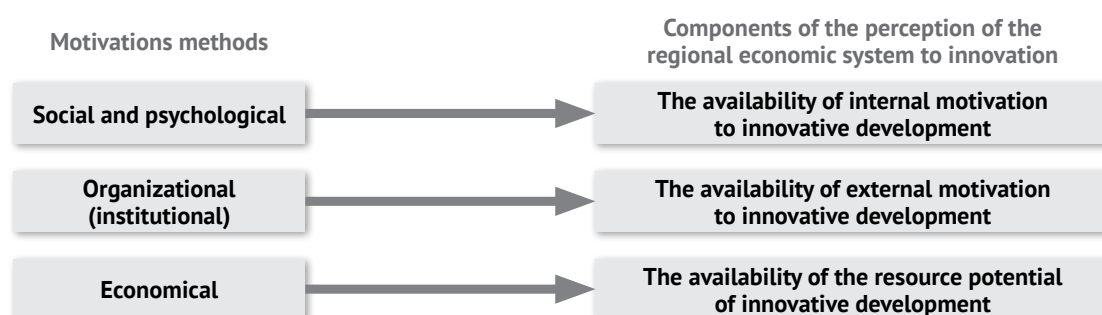


Fig. 1. Relation of the Perception Components of the Regional Economic System Towards Innovation and Motivation Methods.

There is fruitful development that is useful for development theory of innovative potential:

- the involvement of necessary resources on a commercial basis; to implement through the use of strategies of proactive commercialization of fundamental discoveries. It can be interpreted as a mechanism (tool), realization model of innovative potential;
- the selection of such development aspect of the innovative potential of social networking in the region, which representing informal rules and mechanisms;
- the development of the phenomenon of the components of the economic system susceptibility to innovative development.
- two recent developments are social and psychological aspects of the study of innovation activity.
- Conclusions. The conducted analysis of approaches to the study of innovative potential in the region allowed us to identify:
- the lack of a systematic approach to the definition of innovative potential in the region and the principles of its structure, that allows numerous totality concerning the definition of innovative potential to classify in terms of such basic components as goal setting, providing the components, system of the mechanisms and instruments of their interaction. The resource approach has been adopted to the definition of this category, within the investment potential include those or other resources;
- positive attempt to allocate the resource component with the whole set of types of resources, including human from the structure of the innovation potential resources. This confirms the above-mentioned point of view of some authors about introduction the social-psychological component to the structure of the innovation potential.
- selection of two components “internal” and „effective” in the structure of the innovation potential. These components define a systematic vision of the structure of the innovation potential. In our opinion that internal component, should provide the capacity and efficiency of the functioning of the previous discussed elements and acts as prerequisites for the development of mechanisms and tools for the operation of the reproduction system of innovation potential. Effective component as a result of quantitative and qualitative changes carries the potential possibilities to a new level of functioning, innovative potential of first system in general. This work contains certain prerequisites of output on the system level of study of innovative potential. So we can conclude that we need to continue the theoretical study of this problem using the concepts, mechanisms and tools of a systematic approach for successful practical solutions of problems of development of innovative potential in the region.

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