

The systems-activity concept of innovation – the imperative for sustainable social programming of a solidarity society

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Abstract. Historically, scientific and technological progress has determined the emergence and continuous development of forms of its social organization, objectively forming the images of solidarity society corresponding to these forms. It is argued that the main social phenomenon accompanying scientific and technological progress is innovation, and it is hypothesized that this concept can be based on the ontological concept of innovation. On the basis of well-known methods of ontological research, the method of dialectic-systemic construction of innovation as a system of unitary social activity which generates new opportunities of social development leading to growth of social quality of the solidarity society is proposed. The system-activity concept of innovation is substantiated and its invariant conceptual structure, which is defined as the unity of two innovative structures: the phenomenon of innovation and the manifestation of innovation, which determine the organization and management of innovation, is constructed. The proposed concept of innovation can only be the imperative of sustainable social programming of a solidarity society, which provides a method of dialectical-systemological construction of innovation that allows detailing the original invariant conceptual structure for each specific image of a solidarity society due to a particular stage of scientific and technological progress.

1 Introduction

The problem of sustainable social formation of a solidarity society has been brought up to date in today's world. For example, in 2018 the ARENA Centre for European Studies at the University of Oslo published a working paper entitled "European Solidarity in Times of Crisis: Towards Differentiated Integration". Then, in 2019, the European academic journal *European Societies* devoted its entire volume 21, issue 5, under the general title *Crisis and Solidarities in Europe*, with a detailed analysis in an editorial by Sebastian Koos [1]. This problem has manifested itself not only in Europe, but also in all continents of the world. Thus, the scientific paper [2] presents the results of research on social solidarity in the United States and India. Extensive empirical research from the Norwegian School of Economics has also focused on this topic [3]. The issue has also been addressed in Africa

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[4] and Australia [5]. The intensification of processes of desolidarization of society in the post-Soviet space [6] was of particular concern to the international academic community. A different perspective on this issue is offered by Turarbekava [7]. It should be noted that all these publications are characterized by a variety of conclusions, which is due to the different explanatory points of view of the researchers. At the same time, all the authors agree on one thing: the processes of solidarization emerge immediately after the processes of desolidarization of society, which arise as a result of significant structural changes in the way society is organized, caused by the action of certain external or internal factors. Most authors refer natural disasters, humanitarian catastrophes, pandemics to external factors, combining them with the common name of environmental crises, and economic, financial, political and other social crises to internal ones. It is clear that both environmental and social crises themselves arise as a result of preceding structural changes associated with the introduction of innovations in the course of scientific and technological progress (STP). It is assumed herein, that the STP is a major factor in the successive changes in the forms of organization of society and the need for the continuous formation of new images of a solidarity society corresponding to these new forms of organization. Back at the beginning of the last century, the famous Austrian political economist Joseph A. Schumpeter identified innovation as the main factor of social development [8], thus the study aims to justify a new concept of innovation, focused on the problem of sustainable formation of a solidarity society in the course of the STP.

2 Materials and Methods

The analysis carried out leads to the conclusion that it is necessary to build an ontological concept of sustainable social programming of a solidarity society, relying exclusively on scientific methods of ontological research [9]. It should be noted that the importance of the scientific ontological method in social sciences is increasing in the course of STP [10, 11]. It is accepted as a well-founded hypothesis that a new scientific ontological concept of innovation, whose rationale and conceptual modelling should be undertaken in the context of sustainable programming in the STP of the solidarity society, should form the basis for the construction of an ontological concept of sustainable social programming of the solidarity society. Building such a scientific conception of innovation is the aim of this study. Three research tasks were carried out to achieve the goal. Firstly, an analysis of existing approaches to the formulation of the concept of innovation has been carried out, on the basis of which a new scientific ontological concept of innovation is reasonably formulated. Secondly, an analysis of ontological research methods has been conducted and a method of dialectical-systemological construction of the subject structure of real social phenomenon has been proposed, obtained by modifying in a systemological sense the well-known method of dialectical-phenomenological construction [12, 13]. Thirdly, a conceptual model of innovation is constructed, reflecting in its substantive structure the processes of desolidarization and solidarization of society in the course of the STP. In the first task, well-known methods of conceptual analysis and methods of constructing concept definitions were applied [14]. The second task was carried out using known evaluation methods, the use of which was based on known classifications of research methods and criteria for assessing their scientific validity [15]. The conceptual modelling of innovation is carried out using the proposed method of dialectical-systemological construction of the essence of a real social phenomenon.

3 Results

In solving the first problem, the following results were obtained.

First, the existing concepts of innovation in retrospective (types) and sectoral contexts (classes) as well as in the context of a specific sectoral component (types) are systematized. A classification system for innovation concepts is proposed (Table 1).

Table 1. System of classification of the concepts of innovation.

Level	Characteristics of the taxons of innovation concepts		
	Number in the level	Name	Value
Type	1	Product	Introduction to the economic circulation of a new product
	2	Raw material	Application for the production of a new material product
	3	Production	Creation of a new production
	4	Market	Creation of a new market
	5	Organizational and managerial	Creation of a new organization and enterprise management
Class	1	Socio-humanitarian	Carried out in the socio-humanitarian sphere
	2	Spiritual	Carried out in the spiritual sphere
	3	Economic	Implemented in the economic sphere
	4	Political	Carried out in the political sphere
Species	1	Organizational and constructive	A new combination of social life factors
	2	Process	The process of creating and introducing innovations into the life of society
	3	Project	A temporary enterprise for the creation and implementation of a new product in the life of society.
	4	Activity	Activities aimed at creating and introducing into economic circulation a new product or service

Source: Compiled by the authors

Secondly, the system-activity concept of social innovation is formulated: social innovation is 1) a social activity manufacturing a product 2) which is either a new factor or creates new conditions for society's life activity, 3) which contains new possibilities for society's development and 4) the resulting development of society's life activity quality, 5) moreover, the development of the society is realized by updating the form of organization by using new possibilities, which leads to renewal of society's image. This development of society may be designated as innovative development. As a result of solving the second problem, the method of ontological dialectical-systemological construction of the subject structure of social phenomenon is obtained. As a result of the third task, a system-activity conceptual model of social innovation was developed, which is presented in Figure 1.

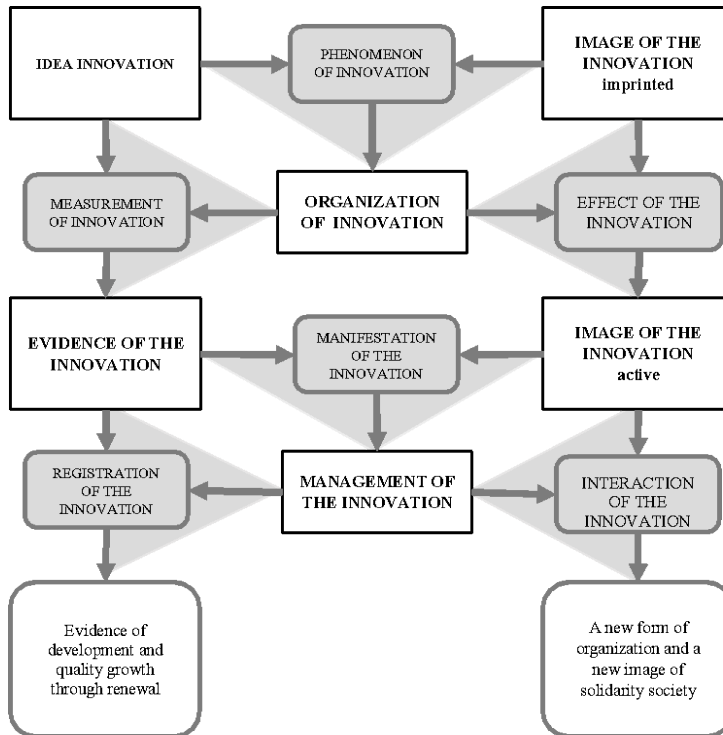


Fig. 1. Conceptual model of innovation. *Source:* Compiled by the authors

The conceptual model of innovation together with the method of dialectical-systemological construction form the methodological basis for the development of a scientific methodology for a general theory of social programming of a solidarity society.

4 Discussion

The social activity of producing one product to be an innovation establishes that this product shall:

- either be a new social factor or create a new social condition for society;
- as a new social factor or condition carrying with it new opportunities for the development of society, which can be realised through its consumption or use;
- ensure that society develops in such a way as to lead to an increase in the quality of life of society;
- the quality of society and its development can only be increased through the ongoing renewal of society's real-life activities. Innovative societal development requires innovative social entrepreneurship.

The basis for this (see Fig. 1) is the idea and the imprinted image of innovation. The social entrepreneur ensures their antinomic correspondence and synthesis, i.e. the phenomenon of social innovation as a real innovative organization. This phenomenon of innovation is ensured by its measurement and action. The first one establishes the fact of social innovation, and the second one transforms the captured image of social innovation into its acting image as a new form of organization for the implementation of social

innovation. The main action here is the implementation of the social innovation. The social entrepreneur who realizes social innovation in its phenomenon can be called an innovator. This implementation of a social innovation requires a consumer or user. The decision to introduce or use the social innovation is made by the subject of the activity. The subject of this activity must also be a social entrepreneur; he or she can be called an innovator. Then, in order to implement social innovation, it is already up to the innovator and innovators to ensure the antinomian correspondence and synthesis of the fact and the acting image of social innovation into real management, i.e. to ensure the manifestation of innovation. This manifestation of innovation is ensured by its registration and interaction. The first one synthesizes in antinomic correspondence the fact of social innovation and the real management of innovation activity in the facts of development and growth of quality by means of renovation. The second synthesizes, in antinomian correspondence, the real management of social innovation and its current image into a new image of innovative activity as a new form of its organization and the corresponding new image of a solidarity society. It should be noted that modern products are so advanced that they carry virtually unlimited possibilities for the innovative development of society, which confirms the need for the systems-activity concept of innovation proposed here

5 Conclusion

The system-activity concept and ontological dialectical-systemological conceptual model of social innovation presented herein does not oppose existing concepts of social innovation, but provides the possibility of their dialectical-systemological explanation as different explanatory perspectives on innovation arising in the course of STP, it dialectical-systemological links the idea of social innovation with a new image of solidarity society conditioned by its implementation in the life of society. The method of dialectical-systemological construction constructs the conceptual subject structure of social innovation in the form of a structural invariant, which should be understood as the beginning of dialectical-systemological construction of the subject structure of social innovation. It should be noted that the ontological dialectical-systemological conceptual model of social innovation, as an initial structural invariant, together with the proposed method of dialectical-systemological construction enables the ontological construction of a solidarity society at all stages of STP. All this makes it possible to define the system-action concept of social innovation as an imperative for sustainable social programming of a solidarity society.

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