

Balanced Development of Innovative, Socio-economic and Rehabilitation Processes

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Abstract—The article describes the process of forming a balanced interaction between the social, market-oriented, innovative, industrial and rehabilitative environment when direct, inverse, cyclic types of links between these environments define the processes of governance and regulation of socio-economic and rehabilitation systems. The authors implemented a systematic approach to the interaction between innovation, socio-economic, and rehabilitation processes.

Keywords—a systematic approach; the market environment; socio-economic; innovative and rehabilitation processes; balance

I. INTRODUCTION

Development of economic entities is carried out in modern conditions defined by the lack of economic stability.

Decrease in cost efficiency of production increases social tension of society. In these conditions, the issues of the balanced economic development of business subjects are based on management of parameters defining their internal structure, are of particular importance.

Ensuring the sustainable and balanced development of the Russian economy is inseparably linked with effective realization of different types of innovations. Activation of innovative activity contributes to growth and the further development of economy, its complex modernization, becoming the important instrument of realization of competitive advantages [1].

In Russian reality, development of economy in innovative way primarily requires to carry out the most serious scientific research on theoretical and methodical questions of formation of post-industrial society. Also, furthers steps comprise the formation of scientific fundamentals of innovative policy of the state, effort on strengthening of innovations in all the branches and hierarchical levels of the national economy [2].

Currently, the research of innovative processes in economic systems is the subject of close attention of domestic and foreign scientists [2].

At the same time, the questions connected with development of mechanisms of the balanced innovative development of economic systems on macro-, meso- and micro-level, including formation of the adaptation potential of economic systems steady against changes of innovative character and a research of internal cycles of innovative systems did not receive detailed consideration in scientific works [3].

The important instrument of realization of this direction is formation of the balanced interaction of the social, market, innovative, production and rehabilitation environment.

II. OBJECTIVES AND METHODS

The main functions of the social environment include the analysis, solution of social, and community problems. In terms of social issues, they include the problem of political, economic and spiritual development of society [4].

Despite the presence of a sufficiently high innovative potential, the Russian economy is characterized by a low level of development. Researchers and developers applied project methods of R & D management, development of venture forms of financing and insurance of innovative risks, etc. This has a negative impact on the competitiveness of products and does not contribute to the strengthening of the positions of economic entities in the markets of high-tech goods and intellectual services [5].

The purpose of the publication is to analyze the scientific literature, regulatory framework and research results on the development of innovative processes in economic systems of different levels, in order to form a model of a balanced development of economic cycles, which determines the balance between innovations, social, economic and rehabilitation processes. The study used the following methods: a systematic approach, analysis of official statistics, the method of analysis of documents, dialectical, abstract-

logical, structural-level, methods of search for innovative ways of development, the method of project management.

III. RESULTS AND DISCUSSION

Among the social problems there can be attributed the processes of factors formation, such as the need and the possibility of organizing the social environment resulting in the development of human society. Factor determines the need for the formation of the structure of public demand (D) ("Fig. 1"), that opens up opportunities for the consumption of innovative product created in the innovation environment, as well as the continuous consumption of clean water and air, created in a rehabilitation environment. Here, innovative and rehabilitative environment is formed under the influence of the existing social factor, and the possibility of creating these products in a favorable intellectual and physical development of the person [6].

Among the main features of the market environment, metabolic processes are included, as well as the processes of regulation and management of innovation and rehabilitation flows. Exchange of financial resources to the material (commodity) and back provides a process of social life, his spiritual and intellectual development, necessary for the formation of innovation and rehabilitative environment [7]. The process of stock market regulation directs financial flows to support cost-effective business entities, and vice versa, this restricts the flow by decreasing the stock price of a company. Thus, in order to provide economic support, innovative active producers manufacture the product in demand in the course of social development. The process of managing innovation streams is dependent on the current values of the parameters of effective demand. In the case of reducing the level of public demand for the product manufactured, the financial flow is directed at reducing the negative impact of factors that have caused this decline [8]. Here, the innovative processes are connected that improve the quality of the final product or completely alter its price list, in accordance with the fundamental structure of the correction of social preference.

The main functions of the innovation environment include support for innovative companies whose products correspond to the current level of social development. Filling the market environment with the required volume of innovative product ensures the normal development of social structures forming the necessary level of social stability. The main functions of the rehabilitation environment include the restoration of old and creation of new resource properties to ensure social and productive activities. The functions of the restoration of old properties include recycling processes of waste products of production and social life. The functions of the creation of the new features include scientific discoveries to create new materials, innovative features that form the new trends and rehabilitation activities. These functions can also be considered recovery processes previously destroyed flora and fauna involved in the provision of the life of society.

"Fig. 1" displays a systematic approach to the formation of the economic cycle, when a set of direct, inverse and

circular references defines the organization, operation and functionality of the economic system. Vertically oriented subjects of management define innovation and rehabilitation structure of the social system. It consists of the subject, determining the direction of social development or community (O), the entity that defines the ways of functioning of the market environment (M), and the production entity (P) in the operation of which created an innovative product (IP), rehabilitation subject (Re), during the operation, which creates an environmentally friendly external environment O_2 (Re).

Vertically oriented subjects of economic systems are interconnected by direct links in the form of dark arrows, defining the processes of formation of metabolic products of these subjects. For the subject of social development as a public waste W (O) are the products of human activity. For the subject, defining development of the market environment as waste material W (M) performs such a group of legal entities, the level of economic efficiency of economic activities, which are far below the level of other subjects, and suggests the imminent bankruptcy. For the subject of industrial development as waste production activities W (P) are the products that pollute the environment because of economic activity.

Food social and productive livelihoods further undergo a process of chemical and physical rehabilitation or treatment, because of which the elements are environmentally safe an environment as clean air and water. Economically inefficient enterprises in the process of economic rehabilitation will shift to other economic activities, the level of economic efficiency development, which exceeds the previous figures. Further results of the chemical recovery in the form of eco-friendly products O_2 (Re) are involved in the production process and product innovation have a central role in the processes of life society. In this system, these processes of resource are supported by invoking feedback for effective development of social and production relations.

The main task of the production of the subject (P) is the creation innovative product, the properties (S) and quality level (k) which fully complies with the current social needs in the form of public demand. The cost of the product (C) correlates to the small loop market and industrial environments, the process whose execution (cycle) may be a long time before until the power demand drops the final product or deteriorates its quality characteristics. Properties of the final product (S) linked into a coherent whole public, production and market environment, which form a large loop that determines ultimately range of useful properties of an innovative product. Thus, the resulting vector of useful properties determines the effectiveness of future economic development.

Social subject (O) is a kind of indicator of the achieved level of quality and public demand for innovative products. In the case of the reduction of these characteristics in terms of market and social interaction, social media reduced sales or sales of the final product (IP). In these circumstances, cash flow (\$) in the direction of the market environment and weakening of the economic system there is a need for quality

correction (k) or changing the properties of (S) product innovation [9]. This is done by connect to the process of intellectual development of the subject innovation (In), the structure of which, as a legal entity formed design (software) and development direction. These structures are intend to form the new properties of the final product; the quality level is adjust in the course of iterative procedures in full respectively-dance with the course of social development. Thus created innovation project being implement in a production environment, where it begins production of a new product, the unique properties which fully meet the current needs of society. Further, the process of interaction between production and market environments develops by the logic of the internal cycle based on the first processes of production and sales; as long as there is not going to happen the next degradation of quality or reductions of public demand that require immediate attention innovation structures tour.

ecologically safe environment. Light arrows with a black frame also shows the flow of environmentally perfect product rehabilitated O_2 (Re), directed towards the implementation of the processes of society and intended to meet the needs of production lines in a clean environment and human resources involved in the creation of an innovative product. Dark gray arrows indicate input and output flows of the production of the subject (R) business. Input stream determines resource provision (R) production process [10]. Output stream determines the required amount of product innovation (R), the current demand of social development. Light gray arrows depict the intellectual currents (IR), which are generated by innovative of economic activity as a feedback, responsive to the change in public demand. Innovative flow directed to support the production of a new product converts the current public demand for innovative solutions, the introduction of which into the process will result in compliance with social needs and manufacturing capabilities.

IV. CONCLUSION

Innovative flow to support the rehabilitation of production of the product in the form of environmentally friendly external environment, ultimately intended for the organization of eco-friendly production activities under the conditions where human waste rehabilitated under natural conditions. Then, one of the ultimate goals of social and productive system is a closed technological cycle, when the creation of an innovative product carried out without prejudice to the environmental parameters. In these circumstances, the rehabilitation activities aimed only at the disposal of waste products of the human body in their (products) unregulated excess of the natural environment [10].

The definition of a new strategic vector of innovative development is the process of creating increased values of the function of economic efficiency. The system of balanced innovative development will be effective only if the economic efficiency of all its subsystems will overcome the negative consequences and return the parameters of economic development to the pre-crisis level during the current life cycle [11]. The period of depression in the life cycle of an economic entity is consider economically feasible only if the amount of attracted investment resources necessary for the formation of the strategy of innovative development is compensate because of the implementation of innovative products demanded by society [12].

The experience of world economic development clearly shows that effective economic transformation is possible only with the active use of innovation and improvement of the system of management of innovative development of economic systems. This position of science, supported by many years of practice, is entirely relevant to the Russian economy.

Development and implementation of innovations of various types are the basis for the effective functioning of the economic entity; determine the structure, content and nature of its life cycle. The process of continuous introduction of

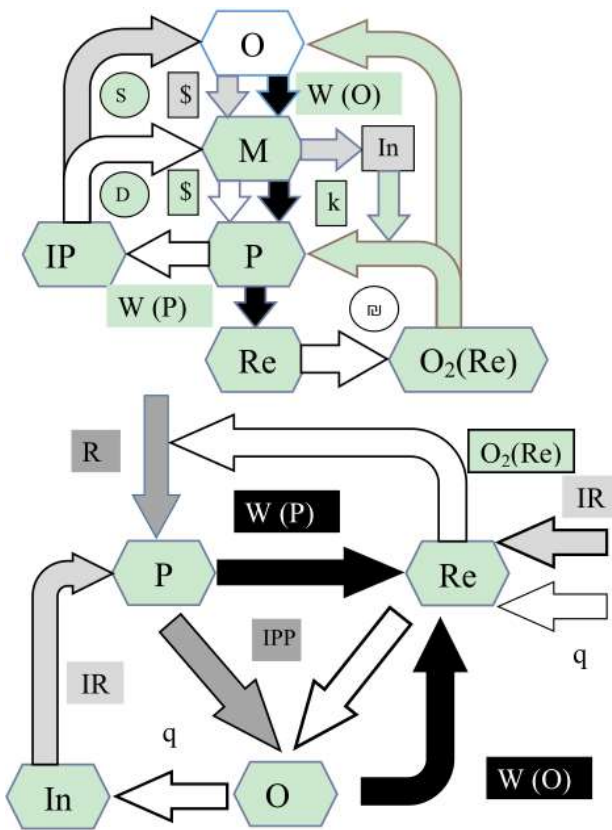


Fig. 1. Formation of the economic cycle from the point of a systematic approach, which determines the balance between innovative, social, economic and rehabilitation processes.

In the lower part of "Fig. 1" is a schematic of resource flows, defining processes of functioning of the economic system. Dark arrows indicate the flow of the products of social W (O) of industrial and W (P) of life, directed to rehabilitation entity that converts contaminated waste and resource in an environmentally friendly and safe product O_2 (Re). The open arrows indicate the flow of highly qualified human resources (q), intended for conducting innovative and rehabilitation activities formed social subject (O) due to the consumption of an innovative product in the conditions of

innovations in all spheres of life of economic systems determines the maximum efficiency of innovative processes in the conditions of shortage of investment resources and the limited budget of subjects of the Russian Federation, on condition of balance of innovative and investment activity.

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