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Development of a Management System of the Competitiveness of the Region's Economy

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Abstract— The conceptual model of management of competitiveness of economy of the region presented in the form of hierarchical three-level structure on the one hand it allows to consider it within a uniform closed circle, and on the another one it lets consider in detail at the level of the region, an industrial cluster and the independent economic entities is offered.

Keywords— competitiveness; region; management system; conceptual model.

INTRODUCTION

The concept of management of competitiveness of the region's economy suggests the need to create an integrated system which can be presented in the form of a conceptual model. In modern economic conditions the formation and implementation of an integrated management system of competitiveness of the region's economy is the main task of effective management at the regional level taking into account the projected long-term and current changes in the external and internal environment. In the conditions of increasing competition, the issues of development of adaptable of management systems of competitiveness of the region's economy are becoming the main source of the creation of new and the consolidation of existing competitive advantages.

The development of a conceptual model of an integrated management system of competitiveness of the region's economy is a complex task that requires the use of modern scientific methodology to justify its development. We should understand it as a system of interrelated requirements, approaches, principles, methods and tools.

Russian economists in their well-known works touched upon various aspects of the formation of management systems for the competitiveness of objects at meso levels, where they proposed the algorithm for the formation of an effective management system for objects and the concept of a regional competitiveness management system. It is based on the following strategic directions of region's competitiveness: the control of a regional economy; an investment and innovation activity; activity of the competitive environment; human potential development [3, 6, 13, 15, 16].

The works of well-known Russian scientists and foreign researchers are devoted to the issues of formation and functioning of management systems of competitiveness of objects at the micro level [2, 4, 12, 17, 18, 19, 20, 21]. However, it should be noted that the development of competitiveness management systems are considered mainly at the level of the organization, goods and services in many sources. A brief analysis of the works of management of object's competitiveness shows that the problem at the regional level remains unresolved and it requires further study.

MATERIALS AND METHODS

First of all the developed conceptual model of the regional economy of competitiveness management system should ensure the qualitative and effective adoption of strategic management decisions aimed at increasing the competitiveness of the regional economy. Consequently, a qualitatively new level of management of the competitiveness of the region's economy can be achieved only with the use of a system based on the cluster approach and the reindustrialization of industrial production.

The management system consists of the following four components: methodology, structure, process and management techniques. The management methodology includes: scientific approaches to management, competition laws, economic laws and principles of management, management functions and technology, management practice [1, 5, 7, 8, 9, 10, 11, 14].

In addition, the system must have a number of properties reflecting the nature and complexity of the system: the relationship with the environment; the methodology of goal-setting; parameters of the functioning and development of the system.

RESULTS

Thus, the system can be interpreted as a set of interrelated elements which are characterized by a number of common features: a set of constituent elements; the presence of links between them; the presence of the structure and its hierarchy; the relative independence and manageability.



The second important concept of the management system is its structure, which is a set of elements related to each other by stable connections and relationships. It forms a system. In turn, these elements consist of parts (in our case it is the subsystems of a region, the cluster and the economic entity), which at a certain level of consideration have all the system features. Therefore, we can talk about the structure of the whole element (in our case, it is the system of the competitiveness management of the region's economy), and the structure of its constituent parts.

We note that the crucial point in the development of the conceptual model of the integrated management system of competitiveness of the region's economy is the management structure. It is here we have a significant part of the success to plan a general line of action for achieving the goals, it is the creation of a model of a competitive economy of the region, which has a long-term potential for economic growth.

Since the formed structure is a system, it is necessary to use a systematic approach to its development which means that each of its subsystems cannot be excluded from the analysis. The general interaction of subsystems and elements forms all the features of the system. In addition, the development of an innovative economy, the emergence of new forms of management of economic entities and the deepening of their specialization of the economy subjects of the region requires from the perspective of not only systemic, but also integrated approaches to study the competitiveness management of the economy of the region.

All of the above causes an objective need to form regional systems of competitiveness management aimed at ensuring the dynamics of socio-economic development of the region both now and in the long term. Therefore, to effectively manage the competitiveness of the region's economy we should analyze the laws and factors that determine its formation and development, a systematic and comprehensive consideration of all its aspects.

To ensure effective management of the competitiveness of the region's economy we need management and regulatory actions by regional governments in order to create appropriate conditions, including the formation of a competitive environment, a developed financial and credit system, a favorable tax policy, creation of various forms of publicprivate partnership, development of interregional and international relations and other elements of infrastructure.

Thus, there is a need to create a system of competitiveness management of the region's economy which integrates the competitiveness of enterprises, clusters and the region into a single whole. Such a system should be comprehensive, covering all hierarchical levels of competitiveness (product, enterprise, cluster, and region).

The development a conceptual model of the integrated management system of competitiveness of the region's economy requires going by system-wide principles that reflect the relevant requirements for the construction and operation of management systems. Nowadays we know general principles of management. The most significant characteristics, defining quality of development are: scientific validity, purposefulness,

integrity, adaptability, alternative, possibility of structuring and decomposition, continuity of development, complexity, perspectivity, stability.

In addition, there are other general principles for the development of management systems such as:

the application of modern methods of the analysis of actions of economic laws and laws of an organization;

the fulfillment of the requirements of the use of scientific approaches to the management of;

the orientation on quantitative methods of assessment, control and strategic management;

the integration of a system;

the unity of combination of industrial, cluster and territorial management.

These principles suggest a combination of industrial, cluster and territorial management of a single system. Principles are the leading criteria of the conceptual model of formation of the system and the structure of management of competitiveness of the region's economy. Industrial and cluster principle is based on the problems of features and opportunities for the development of each specific industrial and regional cluster, and the territorial principle realizes the economic opportunities by territorial competitive advantages.

The integrated management system of competitiveness of the region's economy determines the multiplicity of principles of formation of its conceptual management model. The management system should not be considered out of the control object.

The system-wide principles are based on two properties. The first property is the providing a given purpose of functioning of the developed conceptual model of the system and the second one is the stability of its functioning in conditions of external and internal environments.

It should be noted that the development of a conceptual model of the competitiveness management system of the region's economy is quite a difficult task. The complexity is not only in a large number of subsystems and their elements, but also in establishing links between them, which determine the efficiency of the developed model of the system. Therefore, systematic and integrated scientific approaches require the definition of the goals and objectives of the system as a whole, and its subsystems to take into account all existing links.

The goals and sub-goals at all levels of management of the competitiveness of the region's economy are interconnected and they are dynamic. At the same time the implementation of some affects the implementation of other goals and qualitatively increases their level.

Having analyzed a structured system of goals (Fig. 1) we should note that the creation of favorable investment, innovation, information and infrastructure conditions contributes to an effective and dynamic development of competitiveness of territorial and sectoral clusters.



The general goal of the integrated management system of competitiveness of the region's economy is to ensure its continuous competitive development to the level of world leaders and to achieve sustainable economic growth of improving quality of life of the population that meets international standards

The main goal of the subsystem of competitiveness management at the regional level is to achieve the level of competitiveness ensuring the region's access to the world economic space

The main goal of the competitiveness management subsystem at the cluster level is to achieve the leading competitive positions among the clusters of the same space of activity

The main goal of the subsystem of competitiveness management at the level of an economic entity is to achieve the level of competitiveness of products meeting to the requirements of the world market

Sub-goals are the main directions of achieving the main goal. It is:

- the improvement of the investment climate and investment attractiveness of the region;
- -the formation and development of regional innovation and information systems;
- the expansion of sales markets of regional producers both in the national and world space;
- the development of labor markets and professional development of employees;
- the development of small business in the region;
- the development of industrial and social infrastructure;
- the improving the quality of strategic decisions of the authorities through the use of tools of a competitive economy

Sub-goals are the main conditions to achieve the main goal. It is:

- the ensuring the territorial localization of enterprises in order to minimize transport and transaction costs;
- the ensuring free exchange of technologies, capital, knowledge between enterprises of the cluster, strengthening the institutional environment;
- the increasing the level of interaction between enterprises to obtain a greater synergetic effect;
- the improving the quality of decision-making through the use of tools of the new economy;
- the establishment of partnership relations between the members of the cluster;
- the ensuring of collaborative innovation, progressive innovation, the introduction of benchmarking;
- the ensuring sustainable growth of competitiveness of cluster enterprises;
- the increasing of the producer-labor

Sub-goals are the main directions to achieve the main goal. It is:

- the improvement of supporting processes to improve competitiveness in the production of goods (improving the quality of management,
- improvement of relations with the external environment, strategic marketing, improvement of investment and innovation);
- the improvement of processes to improve the quality of goods and services to their consumers (improving the quality of goods, reducing their cost, improving the quality of service).

Fig. 1 - "Tree of goals" of the integrated management system of competitiveness of the region's economy



DISCUSSIONS

Therefore, the development of the competitiveness management system of the region's economy should be based on a system of goals. A "tree of goals" is a productive way to develop it.

The development of the "tree of goals" of the integrated management system of competitiveness of the region's economy had the following sequence:

- 1. The wording of the general goal of the management system.
- 2. The decomposition by logical analysis of the general goal (the first order goals).
- 3. The transformation of the first order goals into subgoals, reflecting the sources of achieving them (the second order goals).

The basis of the structuring goals is the information found out in a concept of competitiveness improvement of the region's economy on the basis of the cluster approach.

Taking into account the basic provisions of the requirements of structuring goals and we have developed a "tree of goals" in relation to the integrated management system of competitiveness of the region's economy (Fig. 1).

Fig. 1 shows that general purpose of integrated management system of competitiveness of the region's economy can be decomposed on the main objectives of the three subsystems and further into sub-objectives.

The totality of the main goals, goals at the first and second levels of the "tree of goals" is a designer which includes all the initiatives of the regional economic competitiveness management authorities, territorial and sectoral clusters and their constituent entities of various organizational and legal forms. The third level of the "tree of goals" describes the transition from the main goals of the subsystem to their subgoals which can be further decomposed into tasks implemented in specific programs and projects at each of the three hierarchical levels.

CONCLUSIONS

At the level of territorial and sectoral clusters in the subsystem of their competitiveness it is necessary to solve the problem of creating competitive advantages due to additional reserves of synergetic effects resulting from the rational interaction of economic entities.

In this regard, the subsystem of management of competitiveness of an economic entity should direct the main goals to the production of competitive products meeting the requirements of not only domestic consumers, but also consumers of world markets.

Thus, the implementation of the main goals of the relevant levels require the solution of forecast tasks, in particular, forecasting the increase of competitiveness at the level of territorial and sectoral clusters, economic entities and the region as a whole. Our structured system of goals, represented by the "tree of goals" (Fig. 1) characterizes the system of management of competitiveness of the region's economy with

a set of targeted actions to ensure their subsequent achievement.

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