Methodological and Analytical Provision of Region Monitoring

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Abstract:

The article reflects methodological and applied aspects of the quality and completeness of information provided to the monitoring taking into account the level of spatial aggregation.

The authors suggest an algorithm on forming informational blocks of monitoring on the region level which allows to implement the functions of the given analytical tool.

Furthermore, the article provides the reasons for integrating information within the united methodological and legal area of Russian public statistics in order to form the representative database for regional monitoring and analysis.

Keywords: Methodology, informational resources, algorithm, tooling, monitoring, region, structure, analysis, estimation.

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1. Introduction

The modern world society is transferring to the post-industrial development stage whose basic constituents are high level of human capital development, intellectual, scientific, innovative and informational resources. The last ones, as the practice shows, are an integrated informational base of management.

The realities in the economic sphere of Russia predetermined the rationale for revising some characteristics and a number of priority directions of country development on the whole and regionally. As a result, it has created the need for paying a special attention to methods of collecting, analyzing and assessing information for working out prospective directions of the country development under modern macroeconomic conditions. Due to this fact the management has an increased need for modern information in different aspects of region activities. The need for assessing the condition and the dynamics of processes on the regional level to take management decisions requires creating advanced informational infrastructure which allows to hold a system analysis of a range of socio-economic processes in all spheres. Monitoring is a compulsory condition to hold this analysis.

2. Theoretical grounds for the research

For implementing May 2012 Orders of RF president, there is currently the arrangement and the realization of regions monitoring on different spheres and kinds of activities, which reflects informatively the condition, dynamics, interrelations and specifics of their development.

Monitoring as an independent scientific-practical field has been flourishing over the recent years. As a result, there is a few number of scientific works devoted to this issue. Furthermore, scientists do not have agreement of opinion on methodology of its arrangement, and the set of general techniques of its implementation has not been defined (Mikhailova *et al.*, 2017).

The analytical survey of the study findings has revealed that there are only separate aspects of monitoring considered in scientific literature, and this tool is defined as an area of economic analysis. However, the authors believe this definition narrows down its goal and the sphere of the activity. As a result, there is no system approach to organizing and holding the monitoring of different directions of social development (Shekhovtsov and Shchemlev, 2017; Baldacchino *et al.*, 2017).

The authors believe the monitoring system to be a tool of constant statistical observation over controlled indicators of territorial development, of defining the deviation rates of actual results from expected ones and identifying their reasons. The findings are the ground for analyzing the dynamics of development taking into account the temporal factors and features of a given region. Accordingly, this tool of analyzing and assessing information is the basis of working out and optimizing

management system of the country and regions. In practice, monitoring tests the area and is a tool of coordinating and optimizing the activity of territorial entities by fulfilling a range of functions:

- system observation over the directions of regional socio-economic development due to the formed information system of statistic indicators and/or standards;
- defining the deviation rate of actual data concerning events and processes of social life from this figure in other regions;
- revealing the issues in managing the territories on the received deviations of established development parameters;
- working out immediate managerial decisions on normalizing the activity within the context of strategic and tactical targets.

Therefore, monitoring is a specifically formed and ongoing system of collecting, analyzing and assessing information about the condition and the dynamics of separate objects or processes on the level of the specific territory.

3. Results

When forming the informational system of monitoring it is necessary to take into account that the subject of this system, as a rule, has a complicated multifaceted design and its structure represents the dimension in three perspectives: state and local authorities, who are responsible for setting goals and objectives of monitoring, its arrangement, collecting, systemizing and analyzing information; employees of specialist companies collecting and analyzing the specific kinds of information; information users, governing bodies, business structures, non-commercial organizations, households.

Informational provision of the specific kind of monitoring is formed depending on goals and objectives taking into account the level of territorial aggregation and features of economic activity, economic areas and settlement level. Consequently, the main goal of monitoring is to provide state authorities with information reflecting the condition of the most meaningful parameters of the regional social system. The scholars believe that the development of methodological monitoring aspects to be of high priority now, when there emerges the need of the complex approach to forming the informational system of monitoring to receive information about the mutual influence of important areas of activities ensuring the increase in the living standards. The practice shows that most of the problems in regional development appears due to the absence of the systematic approach to governance. In addition, it results in insufficiently high performance of using their socioeconomic potential.

Therefore, working out the systematic approach to the conception of monitoring regional management and mechanisms of its realization is relevant. It allows ensuring sustainable and balanced development of separate industrial, social and

other types of systems as well as the system of the special economy on the whole. To achieve the established goal within monitoring the authors suggest the algorithm of the following actions:

- to define the features of managing the specific territory and to identify interconnections of monitoring with functions of managing the system of regional development on the whole and its local entities;
- to design informational system of monitoring the governance of the most important spheres of regional activities;
- to justify methodological tooling and to form the blocks of informational system of monitoring;
- to justify the technique of analyzing and assessing parameters of studied processes taking into account the features of the specific territory.

The informational system designed for a specific kind of monitoring allows to implement a number of functions on the level of the specific territory: organizational, diagnostic, controlling, analytical and communicative ones.

The practice shows that a necessary addition to the informational basis of decision making based on monitoring is developing the monitoring data bank that collects and grouped the information about issues in the context of informational blocks of the presented above algorithm.

Most of modern researchers believe the system of managing economic and social complexes on all levels of territorial aggregation to be based on totally new economic, organizational and informational approaches ensuring the efficient regulation of legal and economic relationships. Furthermore, the application of systematic approach to analysis, informational transparency of functioning territorial system and identifying the directions on raising the efficiency taking into account the features of development are of great significance.

The accumulated experience on this direction of the activity shows one of the most important stages of forming informational monitoring system is to justify the choice of the optimal scope of statistic indicators implemented on the base of the goal of the specific analysis. The assessment of the results of regional development is held taking into account the implementation of the strategy of developing territories within the frame of the declared goal of monitoring. Moreover, informational blocks of monitoring should encompass different aspects of social development that allows to receive the complete informational picture of the condition of the studied processes.

As the national practice shows it is more appropriate to use the method of 'balanced score card'. The general approach to assessing the level of territorial development allows to form a hierarchical structure of indicators in the complicated interrelations, and to design aggregated indicators of territorial development level on its base. It

corresponds to the conceptions of the systematic approach as a part of methodology of scientific cognition.

Consequently, in informational terms monitoring system represents a group of informational blocks of indicators interconnected logically with each other, based on unified methodological approaches and aimed at realizing the established goal of the research. Modern monitoring systems are a complex hierarchical structure with a plenty of separate indicators in which, depending on the established goal, one includes criteria reflecting social, economic, city-planning, ecological, demographic, labour, socio-political and a number of other development directions. The consolidate element of informational monitoring system is an integrated criterion reflecting living standards, for instance GRP per capita. On the top level of this structured system the group of aggregated criteria is distinguished including (Polyakova and Ivaschenko, 2015):

- aggregated assessment of economic and social parameters of territorial development;
- indicators reflecting objective economic conditions of developing the specific territory and also variables reflecting social characteristics of non-production sphere.

The low level of informational monitoring system includes a total of separate indicators whose choice depends on a number of factors, goals and tasks of monitoring. It is predetermined by the fact that these indicators allow to receive general assessment of socio-economic structure of a territorial entity taking into account the spatial aggregation including separate parameters of social development mentioned above. In addition to the above, the authors think it is necessary to include parameters reflecting living and labour conditions in monitoring (Polyakova and Ivaschenko, 2015).

Therefore, the internal form of the informational system is the structure representing a widely used method of interconnecting statistic indicators which allows to use structural variations reflecting different sides and features of studied informational system when analyzing.

Scholars and practitioners recognize the need for forming flexible and optimal informational systems reflecting different aspects of territorial development and also identifying an integral indicator of its socio-economic condition. However, as researchers of this issue note, currently there is no unified approach to forming this kind of informational system to hold monitoring.

In practice different variants of this kind of informational system including a great range of indicators have been suggested and tested. The experience in their application has shown that the hierarchical approach is the most efficient when forming a range of statistic indicators to realize monitoring goals.

4. Conclusion and recommendations

Based on the analysis of literature sources the authors believe the monitoring system of different aspects of social and economic spheres to contain information flows as the ground for solving the following issues:

- defining the reliability and completeness of information concerning a problematic situation;
- ranging issues of the studied sphere of regional activity and its economic entities;
- structuring the issues of managing the studied sphere of the activity of territorial entity;
- final diagnostics of the issues of the studied activity of territorial entity.

Thus, monitoring different aspects of socio-economic activity of territorial entities allows to hold the overall analysis of identified issues to a whole new level as a condition to trace and sort out the problematic zones. It results in raising the quality and taking immediate optimal management decisions on optimizing the functioning of territorial systems on the whole and in their local settlements.

Hence, when forming informational system of monitoring on different aspects of functioning socio-economic spheres of territorial entities it is desirable to apply the mentioned organizational and methodical approach to their design and realization. The authors have tested generalized conclusions when designing complex informational systems of monitoring the most important spheres of socio-economic development on different levels of territorial aggregation.

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