



Methodological Aspects of Monitoring Implementation in Public Sector Organizations

Boris A. Tkhorikov*

Belgorod State University, Russia, 308015, Belgorod, Pobedy st., 85, Russia

Olga A. Lomovceva

Belgorod State University, Russia, 308015, Belgorod, Pobedy st., 85, Russia

Mariia N. Dakhova

Belgorod State University, Russia, 308015, Belgorod, Pobedy st., 85, Russia

Oleg N. Polukhin

Belgorod State University, Russia, 308015, Belgorod, Pobedy st., 85, Russia

Olga A. Gerasimenko

Belgorod State University, Russia, 308015, Belgorod, Pobedy st., 85, Russia

Abstract

In this paper the monitoring implementation is considered in systemic and process approaches, in these approaches monitoring is integrated into controlling and planning functions, respectively. The shortcomings of this integration were identified. The process approach is currently used in public administration, but the monitoring quality cannot be described as high. It was proved that for indicative management integration with organizing function is required. This statement is based on monitoring place in the overall indicative management system and its methodological basis, including the concept of monitoring, object and subject of research, its goals and functions. The target, structural and functional focus of monitoring in relation to the public sector organizations indicative management was identified.

Keywords: Indicative management; Public sector organizations; Monitoring; Public administration.



CC BY: [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/)

1. Introduction

Peculiarities of public sector organizations (that provide public goods and services) management are stipulated by the necessity of mutual agreement of organizational targets and efficiency, national-level targets and strategies, and Russian state and society development priorities. Moreover the public sector organizations are built-into the economic sphere of society, and services rendered by these organizations have multiple quality and quantity characteristics, thereby the risks of using market and state regulations are increased, it leads to social asymmetries, inefficient costs increase, and reduces economic entities' motivation.

2. Methodology

The research is based on principles of dialectical logic, systematic and institutional approach to analyzing the economic phenomena and processes; on analysis and generalization of indicative management theoretical and empirical findings throughout the world. The substantiated, and widely used scientific approaches, such as selection, distribution, comparison, generalization, problem and hypothetical knowledge, forecasting, graphical description, were used to get a new scientific knowledge.

3. Results and Discussions

Attempts to strike a balance between the interests of the state and social and commercial goals of individual public sector organizations, using an indicative approach, have been made in Russia over the past 15 years. They have an institutional support complemented by new legislation and regulations, and embrace a set of planning and policy decisions of authorities and public administrations at different levels. In this regard "May" Decrees of the President of the Russian Federation issued in 2012 are important. These Decrees contain more than 200 instructions to the Government of the Russian Federation for the period 2012-2018, and enshrine the key performance parameters and indicators for different industries. These parameters and indicators became imperatives at micro, meso and macro levels of national economy. Taking into consideration an initiating reconciliation (similar to balance method of planning in the former USSR), indicators' values, achievable only through coordinated transformations of related sectors, were assigned. The main performers are constituent entities of the Russian Federation that develop and approve road maps for appropriate actions in economic and social fields. This logic is similar to classic

*Corresponding Author

indicative planning in Western Europe, Asia and the USA at the early XX century (Risin, 2007). However, modern indicative management theory and practice is in an early stage of the development and comprehension, poorly institutionalized, and does not have methodological tools refined to operational level, require systematization, generalizations and practical guidelines. One of the major challenges facing the management system is to organize monitoring implementation and indicators' adjustment.

Consider the major issues of monitoring in indicative management practice. The main strategic goals and objectives of the state policy, including goals and objectives of social policy, have been enshrined in 44 national programs. These programs were categorized under five blocks: "New Quality of Life", "Innovative Development and Modernization of the Economy", "Ensuring National Security", "Balanced Regional Development" and "Efficient State". Limitation and sufficiency of indicators' quantity, possibility of covering the largest possible number of processes and phenomena are basic requirements for indicator system. Indicators' compositional analysis showed that national programs comprise more than 2000 indicators, however, not all of them have planned values, there were not actual values of some indicators for the time of reporting, achieved indicators' values substantially exceed the planned values, and some indicators' values do not have any dynamic changes over time. Moreover, the adjustments in national programs' indicators are often made irrespective of funding and without taking into consideration monitoring data, objective and reliable assessment of results, i.e. the monitoring role is neglected.

There has also been noted that the cross-effect influence of one national program's substantive activities on other national programs (and vice versa) is not or poorly estimated. Used monitoring methods do not provide information support for social partnership management of indicative management entities, or for achieving their individual goals and interests, or for coordinating (if necessary) intersectoral and interdepartmental interaction that is required to achieve the unique result. Thus monitoring processes' inferior methodological provision on the broad outlines of indicative management has negative impact on overall effectiveness of management.

The term "Monitoring" began to be actively used in management since the second half of the XX century. One of its first definitions was proposed by the Russian economist A. Nikonov: "...monitoring is a set of techniques for reform-related socio-economic processes tracking, analyzing, assessing, and forecasting, and also information collecting, processing, and making recommendations for development of reform...". This definition is relevant as it reflects the substantive part of monitoring in management: tracking, analyzing, and forecasting of various processes states. The review of N. Burmistrov, R. Eremin, G. Kutergina, I. Risin, A. Sokolov, L. Jin Wang papers shows that monitoring organizing, its interaction with management functions, and monitoring goals (objectives) are still debatable (Wasson, 2015).

Monitoring procedures match subjects' target characteristics with actual ones, examine their conformity with concrete benchmarks to provide informational support for managerial decision-making processes. Consequently, monitoring provides a set of actions (recording the necessary characteristics of state and dynamics of management entities, based on observation; analysis, diagnostics, assessment, and forecasting to identify trends, opportunities or threats) to deliver timely, appropriate, sufficient and reliable information to management entities. Monitoring is a connecting link between goals' conceptual representations and the specific objectives.

In scientific literature monitoring is considered in terms of process approach or in terms of systemic approach that affects its perception in management system and key tasks.

Process approach considers management as a continuous series of consistent, interrelated managerial functions. Monitoring of social and economic systems is often considered as part of controlling of management entities' key parameters (indicators), i.e. monitoring is put at the end of the cycle. Observation, data collection (processing) and data analysis are identified as elements of the monitoring.

Monitoring provides continuing observation of management entity, records the entity's given characteristics, prepares evaluation templates, and on a near-real-time basis identifies effects of the various external and internal environment factors. Individual phenomena (processes) selected by management entities could be observed, assessed, and forecasted through monitoring.

Main goal of monitoring in process approach is to compare the management entity's actual state with specified indicators (their planned values), and existing deviations with critical level, for preventive measures timely implementation and maintaining entity's stable functioning. Monitoring is more integrated with controlling function and its priority objectives:

- 1) examination of the actual state and dynamics of management entity, including its structural elements and activities;
- 2) supervision and evaluation of socio-economic processes.

The process approach is currently used in public administration, and the quality of monitoring cannot be described as high. It is indicated by unsuccessful attempts of national programs' monitoring implementation. An accurate tracking of large number of indicators is extremely difficult, not least because of the Federal Service for State Statistics of Russia (Rosstat) and sector statistics data does not cover this number of parameters. The Accounts Chamber of the Russian Federation in order to improve the monitoring quality favors a sharp reduction in the indicators number, leaving only: indicators for which the official statistics exists, indicators that characterize precisely the relevant industry activities; indicators that reflect changes in organizations, rather than indicators used only for further indicators' calculations.

Systemic approach, as K. Aldarov and T. Sorokina noted, considers organization as an interrelated set of elements, thus significantly expanding the content of monitoring (Tahavieva and Nigmatullina, 2017). Monitoring objectives are supplemented by planning, regulating and forecasting, and together with accounting, controlling and analysis formed a set of management functions.

It transpires from A. Bondarev, O. Urbanaev, Y. Shishakova, A. Shishkin claims that in systemic approach monitoring main goal is entity's development operational management, since monitoring involves planning function of management and is highly integrated with it. Key monitoring objectives are: 1) identification of the factors that determine social and economic systems' negative trends, problem and growth areas; 2) development of management entities' forecasts and scenarios considering anticipated impacts and risks; 3) justification for activities aimed at safeguarding against potential threats, overcoming the negative and encouragement of promising trends of management entities development.

Considered options of monitoring integration with controlling or planning functions are not consistent with public sector organizations' indicative management approach, as final indicator values are mainly controlled, while in indicative management system planning is mainly based on agreed strategic goals of stakeholders. Stakeholders take current performance of public sector organizations as conditions for promising activities, which do not always correspond with prior development course.

Understanding the nature of monitoring provides basis for situating monitoring in management system. In this case, it appears that monitoring causes a closed management cycle. In this cycle monitoring is not just a part of activities (function) aimed on goals achievement, but it takes an independent significance in nested structure of management functions (Tab.1). It is a kind of function on function. Indicative management has its own specificity in issue of actor's organizational freedom to choose the means and methods for achieving target indicators' specified values. It provides continuous observation of interim operating results, and sufficient time for rapid adjustments in case of critical variances forecasting

Table-1. Comparison of Public Sector Organizations' Management Functions Content in Different Conceptual Management Approaches

Management functions	Neoclassical theory of management	Indicative management
Planning	<ul style="list-style-type: none"> -organization focused on its own goals; - intuitive goal setting based on market trend predictions; - earmark resources for competition; - permanent search for new funding sources 	<ul style="list-style-type: none"> - organization's activity focused on public sector goals; - goal-setting of current operating activities based on consensus forecast of external environment development; - minimization of competition resources cost; - guaranteed access to public funding sources in compliance with specific terms and conditions; - goal-achieving measures development, and regulatory methods for goal-achieving suggestion
Organizing	<ul style="list-style-type: none"> - organizational structure designed for current expenditures minimization; - allocation of tasks, responsibilities, resources, and distribution of authority mainly between insiders, and provision of their joint operations - closed organization departments coordination of actions creation; - focus on maintenance of entrenched operating principles; - predominance of interpersonal relations in business processes creation and implementation 	<p><i>Organizing</i></p> <ul style="list-style-type: none"> - organizational structure design for most effective implementation of target indicators' values; - tasks allocation on individual management entity's current performance basis
		<p><i>Motivating</i></p> <ul style="list-style-type: none"> - focus on achieving synergetic effect from interaction with stakeholders
		<p><i>Monitoring</i></p> <ul style="list-style-type: none"> - database creation for the purposes of controlling and forecasting development, operational managerial decision-making provision
		<p><i>Coordination</i></p> <ul style="list-style-type: none"> - building interaction with organization departments by automated control system; - minimization of interpersonal relations by uniform (objective) performance indicators specifying
Motivating	<ul style="list-style-type: none"> - focus on internal environment of organization, including personnel's efforts intensification and encouraging personnel's efficient working for meeting the organization goals 	-
Controlling	<ul style="list-style-type: none"> - established standard-based ex post assessment of achieved and target results; - unilateral realignment of goals in cases of significant discrepancies from initial plan. 	<p><i>Regulating</i></p> <ul style="list-style-type: none"> - current assessment of activity and its operative adjustment based on ongoing monitoring results - application of regulatory methods in case of discrepancies - agreed goals realignment in case of significant discrepancies from indicators target values of the majority of management entities, or in case of gaining a temporary grant support from stakeholders - individual entity's development program preparation, and regulatory intervention implementation at micro level when required

Flexibility and dynamism of indicative management make it possible to move from the "control" basis of monitoring, focused on retrospective information use, to the "organizational" one, which ensure, according to V. Shlejnikov, timely operational managerial decision-making in case of indicators' discrepancy from specified values risk. Thus, for certain indicators it is possible to define trends that predict their future values, and predetermine the

system's state to enter the system into more stable state rather than using the "lagging characteristics" (Sirotkina N. V., Chernikova, A. A., & Popov, A. V., 2008). Collecting a sufficient amount of indicators leads to reduction of general managerial uncertainty. In this case, the uncertainty of individual system operating parameters is retained, but the overall uncertainty of public sector organizations operating decreases.

Thus, in indicative management the position of monitoring changes from objective passive position to subjective active one. In traditional management (for example in systemic and process approaches) monitoring does not involve management entity's intervention, as it is specially arranged systematic supervision of entity aimed at its estimation. In indicative management monitoring is considered as data support of managerial decision making, including optimizing conditions that determine entity's operation and development. For purposes of public sector organizations, monitoring has an active nature as the database creation for the purposes of management is supposed. It is also confirmed by existing positive and negative trends in public sector organizations activity. It is insufficient just to spot and to classify a trend. During monitoring it is possible to develop a picture of public sector organizations actual state and dynamics using the aggregate information. This data is essential to make managerial decisions that enable to limit or to fully neutralize negative influences and to reinforce the positive ones (Sirotkina N. V., 2010; Wasson, 2015).

Monitoring integration with organizing function results in operating efficiency improvement via implementation time of preventive measures reduction. Several groups of typical causes of significant discrepancies from indicators target values can be distinguished for public sector organizations at both organization and department levels. The development of protocol templates for management activities in case of adverse factors is important. For these purposes factors and reasons should be formalized and accepted by public sector organizations management. Frequently public sector organizations' management conceals internal problems or does not take notice of them, despite the fact that these problems are obvious, objective, and can be eliminated with due regard. When indicators values change or entity's activity deviates from strategic goals, the indicators will prevent public sector organization's declination from the target developmental trajectory by imputed management agents that are able to offer recommendations or make decisions independently within predetermined competence automatically, according to U. Ekkerson, they also response on changes in routine actions (Osipova, 2014). In this case monitoring can act partly as controlling. Management entity can identify the best option from existing templates and change the local states of public sector organizations to achieve overall balance by using different indicators values sets.

The proposed approach consider public sector organizations monitoring as an element of organizing function nested structure, and present its goal and structural-functional orientation:

- monitoring is focused on public sector organizations' current state continuous diagnostics and possible trends identification, database preparation for the purposes of managerial decision making, ensuring the operating efficiency, reliability of used reporting, compliance with applicable legislation, and other requirements specified by monitoring entity;

- monitoring goals are implemented at public sector organization's level, separate directions of its activity (e.g. purchasing, public services rendering, staff training, etc.) or organization departments.

In view of the above and some ideas contained in A. Bryakina, M. Osipova, O. Butorina, N. Sirotkina papers related to indicative management principles for manufacturing enterprise, the content of monitoring groups and content of monitoring implementation principles in public sector organizations indicative management system were defined (Helfert and Helfert, 2001; Morozova, 2011; Sorokina, 2011; UU, 2007).

Monitoring is a continuing regulated activity of public sector management entities for collecting and analyzing standardized information on their state, current performance and long-term results evaluation in terms of target indicators, and for supporting management decision on their adjustment.

Monitoring goal is to provide a complex assessment of specified results attainability through quantitative (or qualitative) characteristics of corresponding indicators, and information preparation for managerial decision making.

Object of monitoring is internal social and economic processes of public sector organizations.

Subject of monitoring is performance parameters of public sector organizations brought into determined indicators and their target values.

The above principles necessitate and require the mandatory implementation of following basic procedures: isolation and examination of public sector organization, building an information parametric model of the public sector organization, its identification, planning and forecasting changes of public sector organization state, information presentation in user-friendly way.

In accordance with described views on the essence of monitoring in indicative management system, the appropriate set of monitoring functions and subfunctions covering all cycle is proposed.

4. Conclusions

1. In conclusion, it should be noted that for nonprofit and public sector organizations traditional performance assessment system (statistical approach) is used. This system is based on retrospective measurement of resources consumption, cost of services rendered, profitability indicators or other specialized indicators of sector statistics.

2. This practice is effective in a short-term time frame, is limited by static structure of counterparties' condition, and excludes the possibility of information asymmetry and manifestation of reflection. External environment influence on management entities is characterized by a high level of complexity, dynamism and uncertainty, which reduces the effectiveness of taken decisions, that used to be optimal, and leads to more complicated new management decision making process.

3. This problem can be overcome through quality, timely diagnosis and effectiveness evaluation of internal and external processes that can be attained by public sector organizations' monitoring methodology proposed by authors. Monitoring is not a substitute for entire management system, but provides a basis for conclusions and informed decision-making. Monitoring in indicative management practice establishes standards that are operationalized according to indicators, determines the evaluation activities criteria, collects, accumulates, systemizes and analyzes data on public sector organizations state, causes of the observed changes and their determinants.

References

- Helfert, E. A. and Helfert, E. A. (2001). *Financial analysis: tools and techniques, a guide for managers*. McGraw-Hill: New York.
- Morozova, N. I. (2011). Indikativnoe planirovanie: teoreticheskij i prakticheskij opyt razvityh stran indicative planning, theoretical and practical experience of developed countries. upravlenie ehkonomicheskimi sistemami: ehlektron. nauch. zhurn. 4: Available: <http://www.uecs.ru/uecs-28-282011/item/402-2011-04-25-08-47-52>
- Osipova, M. Y. (2014). Butorina OV Teoreticheskie osnovy indikativnogo upravleniya ekonomicheskim pazvitiem theoretical bases of indicative management of economic development. bulletin of the perm national research polytechnical university. *Social And Economic Sciences*, (3): 24.
- Risin, I. E. (2007). Principy monitoringa social'no-ehkonomicheskogo razvitiya regiona Principles for monitoring the socio-economic development of the region. aktual'nye problemy razvitiya territorij i sistem regional'nogo i municipal'nogo upravleniya (In Russian). 3: 29-32.
- Sirotkina, N. V. (2010). Perspektivy ispol'zovaniya indikativnogo upravleniya pri prognozirovanii parametrov razvitiya integrirovannyh formirovanij prospects of using indicative management in forecasting the parameters of integrated formation development. *Social'naya Politika I Sociologiya*, 10: 190-19.
- Sirotkina, N. V., Chernikova, A. A., & Popov, A. V. (2008). Sistema indikatorov upravleniya system of management indicators. *Innovatsionny Vestnik Region*, (1): 30-32.
- Sorokina, T. V. (2011). Monitoring kachestva byudzhetnogo processa v regione (na primere Irkutskoj oblasti monitoring of the quality of the budget process in the region by the example of the Irkutsk region. izvestiya Irkutskoj gosudarstvennoj ehkonomicheskoy akademii. 3: 31-35.
- Tahavieva, F. R. and Nigmatullina, I. A. (2017). Speech-communicative function in the structure of predictive competence of young schoolchildren with musculoskeletal disorders. *Astra Salvensis*, 10: 315-22.
- UU, J. (2007). Paneli indikatorov kak instrument upravleniya, kljuchevye pokazateli jeffektivnosti, monitoring dejatel'nosti, oценка rezul'tatov panel indicators as a management tool, key performance ators, monitoring activities, assessment of the results. M. Al'pina Biznes Buks.
- Wasson, C. S. (2015). *System engineering analysis, design, and development, concepts, principles, and practices*. John Wiley & Sons.