

Original Research Paper

# Development of the Municipal Employee's Performance Efficiency and Effectiveness Indicators on the Basis of Functional and Process Approaches

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**Abstract:** One of the most difficult problems in evaluation of performance effectiveness of municipal employees is developing a list of relevant criteria and indicators. The purpose of this article is to develop schematic scientifically grounded criteria to evaluate the effectiveness of the professional performance of municipal employees. The article considers the model for the development of a system of performance efficiency and effectiveness of municipal employees, which is a combination of functional and process approaches in pace rating of municipal employees. Analysis of performance efficiency and effectiveness evaluation practice of municipal employees shows that there is no consistent approach in formation of the evaluation system. Nevertheless, we should note the common pattern, which is as follows: The techniques that involve the use of aggregate quantitative, qualitative and temporal indicators of managerial work are more frequently used in various evaluation practices. After analyzing the technologies and approaches, proposed by various authors with regard to formation of the performance efficiency and effectiveness system of municipal employees, the author of current article highlights the main features serving the basis for performance indicators; these are the number of completed scheduled and unscheduled works, the quality of accomplished assignments and compliance with deadlines. Performance indicators of the municipal employees include management *efficiency* indicators that characterize the ratio of management results and used resources, as well as *effectiveness* indicators, showing the success in achieving the goals. Presented functional-process model, which includes quantitative, qualitative and temporal indicators, can be applied at various stages of the municipal service carrier, whereas the results obtained can be taken into account when making personnel decisions in the municipal authorities.

**Keywords:** Functional-Process Model, Functional Approach, Process Approach, Municipal Service

## Introduction

Changing socio-economic conditions of the development bring forth new problems and objectives before the regional and municipal authorities (Buresh and Iskhakova, 2012). Regional and municipal governance structures have not only to reconsider conventional management methods but to improve continuously the efficiency and effectiveness of their activities (Speer, 2012).

Striving to solve complex problems, the major attention of the authorities is focused on improving the efficiency and effectiveness of local government bodies, improving the professionalism and accountability of municipal employees (Chlivickas, 2014; Danilina *et al.*, 2014). Improving the performance and the introduction of new management techniques have become the main motive of all major administrative reforms undertaken over the past 30 years in different countries (Simonazzi, 2012).

Local government efficiency and effectiveness are largely determined on professional performance of municipal management personnel, since the solution of issues of local importance lies primarily on the executive-administrative body of the municipal formation (Voronina, 2010).

Increasing demands towards the local government bodies, improvement of the efficiency and effectiveness of their activities in the context of limited resources, necessitates improvement of processes evaluation criteria and the results of municipal management (Raudeliūnienė and Meidutė-Kavaliauskienė, 2014).

Therefore, creating an objective and comprehensive system of criteria, which would reflect performance of official duties and the accomplishment of the objectives to be achieved, does not lose its relevance (Marchenko, 2009).

## Methodology

Labor content of municipal employees may be considered from the standpoint of functional and process approaches.

From the viewpoint of functional approach, professional activity of the municipal employees is close to implementing the functions of the municipal unit. As a

consequence, the content of the professional performance of municipal employees is determined by the local government authority to address the issues of local importance (LRF, 2003), as well as by the mandates for the implementation of state powers assigned to local government. Administrative functions, implemented in the course of working practice of head officers, include the following: Forecasting, planning, organization, coordination, motivation, monitoring, analysis and control.

From the standpoint of process approach, professional service activity of municipal employees may be considered as a kind of administrative work. Persons, engaged in administrative work, are usually classified on the following categories: Head officers, persons of professional occupations and supporting specialists (LRF, 2004).

According to the author, the most understandable and relevant to the administrative work features is a model of summarized indicators of efficiency and effectiveness of the professional performance of municipal employees, developed by a team of Northeastern State University (Samoilova *et al.*, 2012). This model is a combination of functional and process approaches to the work evaluation of the municipal employees.

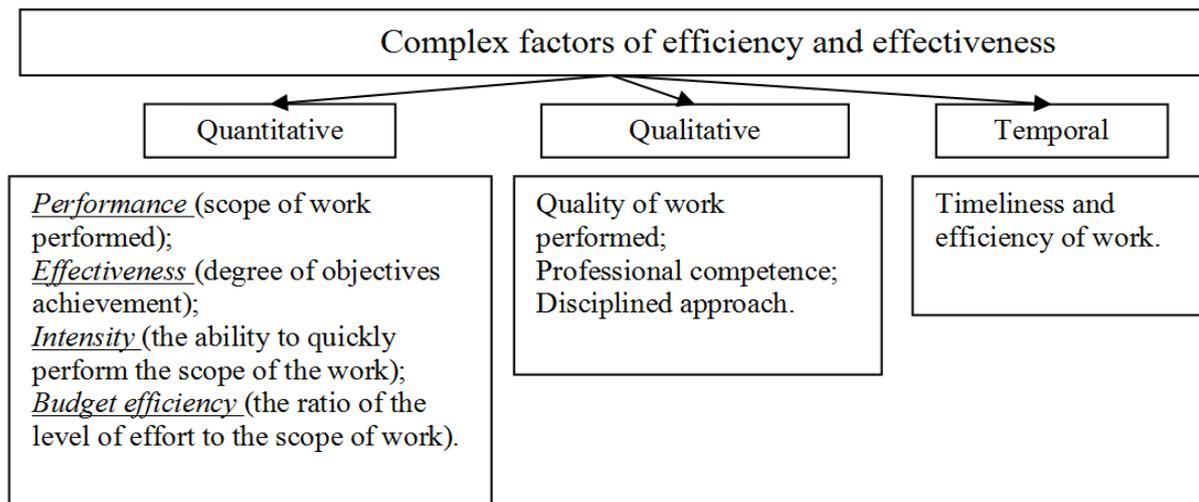


Fig. 1. Complex factors of professional performance efficiency and effectiveness of municipal employees

Table 1. Criteria of effectiveness of the municipal employees

Job categories	Chosen categories of the municipal employees depending on their effectiveness	General level of effectiveness (%)
Top and principle position	- Satisfying all requirements	over 60%
	- Unsatisfactory performance	less than 60%
Leading positions, Senior and junior positions	- Distinguished	81-100%
	- Good	71-80%
	- Normal	60-70%
	- Poor	less than 60%

According to this technique, performance efficiency and effectiveness indicators of the municipal employees are a set of qualitative and quantitative factors (Fig. 1), characterizing the result of their activity or the success of the progress towards achieving the goals.

Complex evaluation of the performance efficiency and effectiveness of municipal employees on the basis of quantitative indicators is calculated by the following formula:

$$Q_1 \sum_{i=1}^{K1} \frac{b_{1i} * P_i}{q} * 100 \quad (1)$$

Where:

- $b_{1i}$  = Evaluation score of the i-th quantitative criterion
- $K1$  = The number of quantitative criteria used in connection with the object
- $P_i$  = The weight coefficient of i-th quantitative criterion, expressed in fractions of a unit
- $q$  = A number of unified scale gradations

Reduction of indicators into rating scale is held based on 5-point grading scale:

- Insufficient level
- Allowable minimum of accomplished tasks, including missed work due to illness, vacation, etc
- Normal routine volume of tasks in accordance with the official regulations
- In addition to the basic tasks and various works, provided by the official regulations, additional tasks are performed
- The volume of work performed significantly exceeds the requirements, provided by the official regulations

Summarized evaluation of the performance of municipal employee on the basis of qualitative criteria is defined by the formula similar to (1):

$$Q_2 \sum_{i=1}^{K2} \frac{b_{2i} * P_i}{q} * 100 \quad (2)$$

Where:

- $b_{2i}$  = Evaluation score of the i-th quality criteria
- $k2$  = The total number of qualitative criteria
- $P_i$  = The weighting coefficient of i-th quality criterion, expressed in percent
- $q$  = A number of unified scale gradations

Summarized evaluation of the municipal employee's performance, based on a time criterion, is calculated in terms of percentage according to the following formula:

$$Q_3 \frac{b_3}{q} * 100 \quad (3)$$

Where:

- $b_3$  = A score of time criterion
- $q$  = A number of unified scale gradations

Calculation of summarized evaluation (E sum.) of the efficiency and effectiveness of municipal employee is defined as the weight-average total efficiency of his performance based on the qualitative, quantitative and temporal criteria:

$$E \text{ sum.} = C1 \times k1 + C2 \times k2 + C3 \times k3$$

Where:

- E sum = Summarized evaluation of the efficiency (effectiveness) of municipal employee in percentage form
- $C1$  = Evaluation based on quantitative criteria
- $C2$  = Evaluation based on qualitative criteria
- $C3$  = Evaluation based on temporal criteria
- $k1, k2$  and  $k3$  = Evaluation weights based on quantitative, qualitative and temporal criteria, respectively

Exactly this value can be taken as an efficiency indication of municipal employee within a period under review.

### Findings

Performance of the municipal employee is considered as follows:

- E sum.  $\geq 60\%$  - indicates high performance
- E sum.  $< 60\%$  - performance of the municipal employee is ineffective

The results obtained are categorized depending on performance of the municipal employees and presented in Table 1.

The evaluation results of the efficiency and effectiveness of the professional performance of municipal employee are recorded in the "Efficiency and effectiveness chart".

Testing of the proposed method can be carried out by conducting the experiment in a certain municipal unit. Upon successful completion of the experiment, this technique, which was based on functional and process evaluation of professional performance of the municipal employees, can be recommended for wider practice.

### Discussion

One of the most difficult problems in evaluation of performance efficiency of municipal employees is to develop a list of relevant criteria and indicators. An important issue is also the formalization of the performance indicators and division of the employees' performance results into outputs and outcomes (Klisch, 2007).

Performance evaluating methodology for municipal employees in terms of their quantitative, qualitative and temporal attributes manifestation degree are reflected in the writings of Samoilova *et al.* (2012).

At that, according to Stolyarova (2009) the quantitative evaluation of the municipal employees' effort should take into account the work complexity level, which is indicated by the following factors: Novelty of the works, scope of leadership, diversity and complexity of the work, independence in performing tasks and the scope of additional responsibility.

Katulsky (1997) proposes to use a comprehensive evaluation of effectiveness, which is built on the indicators of employee's professional and personal qualities, such as his knowledge, skills and abilities; actual results of his performance, as well as the form and content of the job functions actually performed by the employee.

As part of a training system development, as well as support and maintenance of the municipal governments, the Academy of National Economy under the Government of the Russian Federation has developed a set of methodological recommendations on the human resources issues for the municipal authorities. Authors of the methodology believe that the performance evaluation of the municipal employees should be carried out in a form of ongoing monitoring and based on three groups of factors: Professional behavior, labor effectiveness and personal qualities (Kokin *et al.*, 2007). However, it should be noted that the inclusion of personal qualities into the list of the evaluation criteria is somewhat contrary to the essence of the "efficiency" and "effectiveness" concepts.

More in-depth evaluation model, which includes the collection of qualitative and quantitative indicators, is offered by Voronina (2010). The author identifies the following factors that serve criteria for evaluating the effectiveness of municipal employees (Voronina, 2010): Scope of the work performed; measure of achievement of objectives; labor intensity; observance of labor discipline, timeliness and efficiency of implementation of instructions and orders within the deadlines, established by the law or official regulations.

Analysis of performance efficiency evaluation practice of municipal employees shows that there is no consistent approach in formation of the evaluation system. Nevertheless, we should note the common pattern, which is as follows: The techniques that involve the use of aggregate quantitative, qualitative and temporal indicators of managerial work are more frequently used in evaluation practices.

### Final Part

Presented functional-process model for evaluation of the efficiency and effectiveness of municipal employee performance seems to be complex approach, capable of

reflecting the degree of achievement of the local government objectives. All indicators taken into account, are measurable, really achievable, economically justified and limited in time; they allow one to carry out an objective and independent evaluation and to associate the performance results of the municipal employee with his official duties. Limiting factor when applying the proposed methodology in practice can be a lack of proper accounting of the works, completed by municipal employees, as well as subjectivity in evaluation of the work quality.

### Conclusion

Performance indicators of the municipal employees include management efficiency factors that characterize the ratio between management results and resources used and effectiveness indicators, showing the success in achieving the goals.

The proposed functional-process model, which includes quantitative, qualitative and temporal parameters, can be used in taking managerial decisions, related to labor motivation, formation of personnel reserve, assigning class rank to municipal employee, etc.

### Author's Contributions

All authors equally contributed in this work.

### Ethics

This article is original and contains unpublished material. The corresponding author confirms that all of the other authors have read and approved the manuscript and no ethical issues involved.

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