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**Developing a New Model for Monitoring and Evaluating
Public Services Performance**

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Abstract

Public service is a matter of public interest, not only for the public administration, but also for the beneficiaries. People are increasingly interested in the quality of the public service and have become more and more demanding. The amount of information that is available on the internet creates higher expectations. In this context, using measurement and reporting methods and instruments is not optional anymore. Furthermore, the provision of public services is a matter of achieving a balance between costs, pleasing the beneficiary, increasing quality and benchmarking with similar services. Since Romania has become a member of the EU, and even earlier, since it has been a beneficiary of development funds, the issue has not been just the provision of public services, but that of using and creating measurement instruments and methods, and the question of achieving the performance point where a balance between costs and benefits is attained. The problem is that there is a lack of understanding the basics of reporting results and monitoring performance, there is no general instrument or model that allows any public institution to use it and benchmark the results, and the instruments available are either too complicated to understand or do not work for the entire range of public service. Thus, the present study aims at offering a general measurement instrument for the public service performance.

Keywords: public services, monitoring and reporting models, evaluation of public services.

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1. Introduction

The problem of performance in public administration and in public services is bivalent. Firstly, there is little understanding of the terms (public service, performance, monitoring and reporting instruments) and the utility of this process (monitoring and evaluating the performance of a public service). Secondly, there is no or in the best-case scenario little experience with the public service performance. Even when monitorization and evaluation of performance as a process is used, as a tool for better public administration, it rarely considers more than economical and some technical aspects of the public service provider`s performance. The following study brings a new model for monitoring and evaluating the performance of a public service through some universal criteria that are found in all public services.

2. Problem Statement

The issue of monitoring and evaluating the performance of public services of general interest is not new and has generated complex solutions relevant for this purpose in recent years.

The use of public service performance reporting platforms has paved the way for the operationalization of transparency and accountability of public authorities in the performance/provision of these services. Benchmarking allows the measurement and comparison of performance in order to provide information to public decision makers and to permanently improve performance. Performance indicators are the basis for comparing the overall performance of a specific organization or services. This is a technique that has been increasingly incorporated into the new public management, which has dominated the modernization activities of the public sector since the 1990s. Performance measurement and comparisons have been introduced as a quasi-competition in the public sector to stimulate innovation and lead to better performance of the services offered (European Commission, 2013).

In the OECD countries, starting with 2017, “The Serving Citizens Scorecards” is used for characterising the key aspects of public service systems in the member countries from the perspective of their accessibility, quality and sensitivity (access, quality and responsiveness). The indicators were established by OECD experts for each service area: health care, education and justice. The selected indicators aim to provide an overview of the issues relevant to each sector (OECD, 2019).

The focus on public utilities is the objective of the present research, since currently they are not distinctly subject to integrated performance reporting. Ensuring the development of quality services of general interest, accessible and bearable, in an environment that is constantly evolving and imposing new demands, is mandatory in order to evaluate the way in which public services are provided. In this respect, it is necessary in the context of this research, to make a clear delimitation of the concept of organizational performance of the public service provider from the concept of performance of the public service performed/provided. The organizational performance of public service providers is a complex multidimensional construct (Markic, 2014). It is a concept that can be approached

from multiple points of view and on different levels of analysis. In fact, defining and explaining the content of the performance concept depends on the purpose and interests pursued in analysing it. The specialized literature is vast and very innovative in explaining the concept, although it is very heterogeneous in terms of finding a consensus in defining it. A study conducted by Summermatter & Siegel presents, from the perspective of analysing the specialized literature, a vast investigation on how to explain this concept (Summermatter & Siegel).

While for the organizational performance there are multiple possibilities of definition, measurement and monitoring, the question arises to what extent is this relevant to the performance of the public services provided. In essence, the organizational performance level of the provider is represented by the synergy between efficiency-effectiveness-economy, a sine-qua-non condition of the performance of the service provided. However, how can the performance of a public service be characterized? In essence, the performance of a public service must aim to ensure the well-being and increase the quality of life of its beneficiaries. A logical and obvious way of explaining the concept starts from the definition, purpose and finality of the public service.

The European Parliament defines a public service of general interest as an economic activity of general interest defined, created and controlled by public authorities and subject to a special legal regime, regardless of whether it is actually carried out by a public or private body. Based on this definition, the three fundamental principles of public services are outlined:

1. equality or universality: the service must be available to all under the same conditions;
2. continuity: the service must be provided continuously and regularly (the obligation to provide);
3. adaptation: the service must be modified as needs change and, ultimately, it is no longer needed.

According to the Romanian legislation (Law 51/2006), public utilities must meet the following essential requirements: a) universality; b) qualitative and quantitative continuity, under contractual conditions; c) adaptability to user requirements and long-term management; d) equal and non-discriminatory accessibility to the public service, under contractual conditions; e) transparency and user protection. In economic terms, the concept of SGEI is closely linked to that of "public service obligations". The public service obligations mainly involve the provision of universal service, continuity and supportability of the service, as well as measures to protect the beneficiary. Simultaneously or not, two requirements must be met through public service obligations: universal coverage and uniform price. Universal coverage implies the obligation to provide the product or service at an "affordable price", while uniform prices oblige the operator to offer a certain product or service at the same price to all consumers, regardless of the variation in the supply costs for different groups (EACGP Sub-Group on State Aid, 2006).

The requirement of universality is an ideal wish, it implies the access of all citizens and businesses to accessible and high quality services of interest. From the

EU perspective, it is an essential principle for promoting social and territorial cohesion in the European Union and for reducing the obstacles caused by the lack of accessibility in the outermost regions (European Commission, 2004). In this context, we propose the definition of the universality requirement through accessibility and the quality of the service.

3. Research Questions/Aims of the research

1. How can performance of the public services of general interest be evaluated, beyond the performance of the operator/provider?
2. Can performance indicators that correspond to the essential requirements that the public services of general interest must meet be identified?
3. Can a model for quantifying the integrated performance of services of general interest that will allow the evaluation and monitoring of this performance be developed?

By taking into account the main characteristics of a public service, the following model responds to the above posed questions by creating composite indicators grouped into such main characteristics of every public service.

4. Research Methods

Through a rigorous analysis of the existing literature, considering the main models for monitorisation and evaluation of public services performance in use today and the main existing indicators that can be used within such a model, by including them in several performance criteria, the following chapter proposes a new performance monitorization and evaluation model.

5. Findings

Starting from the main essential characteristics of public services discussed above, the presented model creates the premises for monitoring and evaluating the performance of public services in a unitary approach. This model will allow the decision factor that uses it to monitor and evaluate the performance obtained by a certain operator but can also make comparative analyzes with providers of the same service at the level of synthetic indicators and with providers of other types of services through composite indicators. The common characteristics based on which this model is built are:

- Qualitative and quantitative continuity, under contractual conditions;
- Adaptability to user requirements and long-term management;
- Equal and non-discriminatory accessibility to the public service, under contractual conditions;
- Transparency and user protection.

Synthetic indicators, regardless of their nature and the composite indicators they form (one of the characteristics of the services provided above), must acquire an adimensional form, defined as the level of performance that can be used later in

constructing the composite indicator that defines the performance on a certain criterion. Thus, the physical indicator, expressed in: hours, km, kg, completed reports, degree of digitization, etc., must be transformed into a level of performance. For doing so, we define three methods for establishing the registered level of performance within the model.

1. Comparison of the indicator with a minimum target level and a maximum target level set by the decision maker or a national or local target and segmentation of the interval between the two values on a performance scale.
2. If more operators are introduced into the model, the obtained indicators can be compared with the sector average.
3. Creating a performance scale based on the interval between the minimum and the maximum admitted at European level or the minimum and maximum obtained based on European comparative analyzes.

As an example for the 3rd variant of establishing the level of performance for a specific indicator we use the following two accessibility indicator for public transport:

A study of the EU commission on 39 cities obtained the following minimum and maximum limits for two very important indicators (table 1):

Table 1. Minimum and maximum values obtained in 39 analyzed cities by the EU commission for 2 accesability indicators of public transport.

	<i>Large urban centers (≥ 500.000 inh.)</i>		<i>Medium-sized urban centers (200.000-500.000)</i>	
	Min	Max	Min	Max
<i>Population without acces to services (%)</i>	1.4	23.8	1.1	28.7
<i>Median number of departures</i>	7.4	33.1	4.0	34.8

Source: (European Comission -DG regional and Urban Policy), 2016)

The above presented limits may be used in determining a performance scale for the 2 indicators.

Although the synthetic indicators at the service level may differ, for each criterion separately, their significance remains unchanged, as for each service they define a certain level of performance for one of the 4 criteria. Their aggregation in the form of a single composite indicator for each criterion will allow for bechmarking analyses from the point of view of the performance obtained for each public service, regardless of its nature. One way to compose the composite indicators proposed as being generally accepted in the development of indicators for public services in the specialized literature is to use a weighted average of the underlying indicators that compose the composite indicator in the following form (Pidd, 2012):

$$P = w_1 * x_1 + w_2 * x_2 + w_3 * x_3 + \dots + w_n * x_n , \text{ where: (1)}$$

- P = the overall performance obtained for the respective criterion (eg quality, adaptability, continuity, etc.);
- $x_1, x_2 \dots x_n$ = specific indicators that fall within this criterion;
- $w_1, w_2 \dots w_n$ = the weight applied to each specific indicator according to its importance in generalizing the level of performance obtained for that criterion.

The main aspect to be followed in using this way of quantifying the general indicators that define the performance is the importance given by the users or the designers of the model of the subindicators that define the composite indicator.

Based on the reasoning above, for all the services that will be monitored, performance levels can be obtained for each of the essential characteristics of a service. These values, obtained for each criterion are comparable, by their nature but may be irrelevant, in many situations due to the different specificities of the services. For example, if we obtain a certain value of the general indicator "Service continuity" for the "public water supply service" and a similar value for the "local public transport service", it can be concluded that in terms of continuity the two services recorded approximately the same level of performance. The problem that arises in this reasoning is that due to the technical nature of the water supply service, it is possible that, in certain areas, the continuity of the service may not be physically able to record a level of performance as high as that of a public school transport service, which has completely other technical constraints.

To solve the aspect above, we can also use for the composite indicators that define the performance at criterion level within the model the overall performance obtained by a service, as each of the 4 criteria can be compared with a minimum level or a target level established for each criterion, for each sector of activity. Thus, in order to ensure a relevant comparability between the performance obtained by different non-homogeneous public services from the point of view of their activity, the positive or negative deviation will be compared with the minimum or target level established for each service.

For both specific and composite indicators, when using the average value of performance on public service types, the model used increases in relevance as more service providers upload data into the system and use it for monitoring and evaluating the obtained performance.

In this context, we propose the following table containing a set of performance indicators, for example, for two services of public utilities, different in terms of characteristics: the service of thermal energy supply in a centralized system and the public transport service of travelers, which can be used for developing such a model.

Table 2. Proposed performance indicators for two public utility services in the presented model

Essential requirements / Proposed indicators	Centralized district heating	Urban public transport
Continuity from the qualitative and quantitative point of view.	Number of users affected by scheduled and unscheduled interruptions (%)	Cancelled or irregular routes due to the operator's fault (%)
	The average duration of an interruption (h)	Routes cancelled for a period longer than 24 hours due to the operator's fault; (%)
		The number of passengers affected by the situations provided for in points 1 and 2. (No. of citizens)
		The daily degree of compliance with the transport program (%)
Adaptability to user requirements and long-term management	Greenhouse Gas Emissions	Greenhouse Gas Emissions
	Energy losses (%)	Km of public transport system per 100.000 population
	Demand Price Elasticity (Self Elasticity).	Penalties for non-compliance with environmental and quality conditions
Equal and non-discriminatory accessibility to the public service, under contractual conditions	Affordability	Number of annual PT trips per capita total annual number of transport trips divided by the total city population (trips/cap/year)
	Number of beneficiaries in total population in the area served (%)	Access to Public Transport Number of inhabitants with a transportation stop within 500 m/total population (%)
Transparency and user protection	Number of claims or amount of damages paid regarding the non-compliance by the supplier of the contractual clauses	Number of PT stops with real time info (%)
	Access to information (Linkert scale)	Access to information (Linkert scale)
		Number of traffic accidents caused by the fault of the own personnel or of the transport operator / authorized carrier number of cases at mil.veh.km.
Quality of service	Share of the number of complaints regarding the quality of the thermal energy in the total number of users. Number of complaints / Total number of users (%)	The weight of the number of complaints regarding the quality of the service in the total number of users. Number of complaints / Total number of users (%)
	Thermic comfort (Likert scale)	The traveller satisfaction index

Source: authors

6. Conclusions

The main advantages of using such a model is that it allows the user to have a comprehensive image of the performance of a service operator that considers more than just an operator focused performance. Another advantage of the model is that by creating performance levels for each criterion (main public service characteristics) benchmarking can be used between various services which are heterogeneous in nature.

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