SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

TRECEREA LA MANAGEMENTUL PERFORMANŢEI ÎN SECTORUL UTILITĂŢILOR PUBLICE MUNICIPALE: O SCURTĂ ISTORIE RECENTĂ A BENCHMARKINGULUI ÎN ROMÂNIA

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Abstract

The use of benchmarking tools for measuring performance in public service delivery (public services audits) correlates with an increased strategic planning capability of municipal governments and a more judicious resource allocation. However, this process is still in an incipient stage in Romania and it is not necessarily internalized by the neither the agencies providing public services (be that public authorities themselves or private service providers), nor by an educated public utility services consumer, but rather it appears as an external, artificial procedure imposed by national legislation or by EU – related targets, where the case.

Keywords: public utilities, performance management, benchmarking, minimum standards, key performance indicators.

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Rezumat

Utilizarea instrumentelor de tip benchmarking pentru măsurarea performanţei în furnizarea de servicii publice (audituri) se corelează cu o capacitate de planificare strategică crescută a guvernelor locale şi cu o alocare mai judicioasă a resurselor. Totuşi, acest proces este încă într-un stadiu incipient în România şi nu este în mod necesar internalizat nici de către furnizorii de servicii publice (fie acestea autorităţi publice locale sau furnizori privaţi), nici de către consumatorii de servicii, ci apare mai degrabă ca un proces extern, artificial, impus prin legislaţia national sau prin raportare la o serie de ţinte europene, acolo unde acest lucru se aplică.

Cuvinte cheie: servicii de utilităţi publice, managementul performanţei, benchmarking, standarde minime, indicatori de performanţă

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A
BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

1. MODELS AND CHALLENGES IN INTERNALIZING THE BENCHMARKING INSTRUMENT

Use of benchmarking tools for measuring performance in public service delivery (public services audits) correlates with an increased strategic planning capability of municipal governments and a more judicious resource allocation.

Ideally, at the heart of public sector reforms should lie the philosophy of value for (public) money, while the public managers must have incentives to improve the efficiency and effectiveness of their organization; in the private sector, such incentives are obvious and they mostly relate to competition/competitiveness on the market and ultimately profit (Cowper and Samuels, 1996). At the same time, the vast majority of public sector services do not operate in a competitive environment (are either natural monopoles or non-competitive markets) and therefore do not experience any intrinsic pressure to improve.

Still, as revealed by the current challenges that the public sector reform encounters in most of EU member states – such as increasing difficulties in financing the public sector, mounting pressures caused by the globalization of most aspects of social and economic life, a natural response to these has been the assimilation of new methods for improving the performance – and benchmarking is part of this strategy (Dahlberg and Statskontoret, 1996).

As the specific literature notes down, there are several classifications of the benchmarking model, based on the type of approach, methods involved and outcomes envisaged for the process. One of the most frequent classifications uses three types of benchmarking:

- Result oriented: leading to overcome performance gaps, improvement and target setting, as well as creating a basis for performance monitoring;

- Process oriented: setting up best practices for the process (in terms of quality, time and cost) and identifies organizational enablers like technology, systems and structures facilitating the process;

- Customer oriented: this type of benchmarking is actually a satisfaction measurement, revealing gaps in perception of customers and agency management and provides basis for improvement leading to higher consumer satisfaction.

However, any of the three classic benchmarking models involves the property of the either the process, the results or the consumer satisfaction outcomes by a distinct agency, voluntarily engaging in this process for any of the reasons mentioned above. Yet, when analyzing the path of institutionalizing

TUDOSE (IORGA) Elena
SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A
BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

FAMP

CCASP

benchmarking for the public utility sector in Romania we can understand first that this process is to some extent an artificial and non-voluntarily one, as it relies most on legislation and imposed standards rather than on a genuine need identified by the public sector to perform better in public service delivery.

2. PATHS TO BENCHMARKING FOR PUBLIC UTILITY SERVICES – ROMANIAN CASE

The broader concept of performance management in relationship to public administration and the decentralization process has been explicitly introduced for the first time in in Romania in 2006, through two main pieces of legislation:

- Law 195/2006 on decentralization;

- Law 273/2006 on local public finances.

Initially, benchmarking, as foeseen by the two pieces of legislation, was focused on the minimal threshold that public services delivered by local governments should not fall under, namely the minimum quality standards and minimum cost standards – normative costs used for determined the quantum of financial resources allocated to local budgets for providing a certain public utility services (currently available in education, social services).

Most prominent achievements in developing tools for strategic planning for local public administration in Romania were included in the National Strategy for Accelerating the Development of Public Utilities Services (Government Decision no. 246/2006). This Strategy introduces for the first time the concept of key performance indicators for monitoring/evaluating the quality of public services delivered by LPAs.

The Strategy provisioned the introduction of urban audit used by Eurostat for providing information and comparable measurement on the different aspects on the quality of urban life in European cities.

Following the adoption of the Strategy, the Government (through the Ministry for Regional Development and Public Administration) has supervised the efforts of developing standardized tools (log-frames) for collecting information from over 3,300 LPAs on quality and cost parameters for local public services, as well as for monitoring implementation of local development strategies. In this context, under the direct supervision of the Ministry, a set of survey instruments have been developed for:

1. Monitoring implementation of local strategies, with a particular focus on general interest services/investments

2. Assessing the quality and costs of general interest services provided by LPAs (water & sewage, sanitation, public lighting, central heating, local public transportation)

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

3. Both quantitative instruments include pre-defined KPIs that have been developed in consultation with LPAs/sectoral experts in the fields of reference for the targeted sectors.

4. The reporting system is based on a web platform with unique user account for each LPA who is responsible for providing requested data.

Although developed in 2012, the system is still in process of operationalization at the level of LPAs. The reporting is voluntary for the time-being, although the Government is considering mandatory reporting provisions to be stipulated in the legislation.

The module on local public strategies on general interest services includes aspects related to investments objectives, planned financial resources (with a separate evidence for local budgets, state budget transfers, private investments, EU funded projects, loans) and timeline for implementation for a period of 4 years for 6 public services:

1. Transportation: including data on urban infrastructure, dispatchers, equipment, transport terminals

2. Heating: including data on thermal power units, transport and distribution of thermic energy, individual metering systems

3. Sanitation: including data on (selective) waste collection capacities, waste disposal, recycling

4. Water: including data on water intake, water treatment, water transport and distribution

5. Sewage: including data on collecting, transport and evacuation of wastewaters and meteoric waters, treatment & evacuation of muds and other waste

6. Public lighting: including data on infrastructure for transport and distribution of public lighting

The need to further focus on the strategic planning as a key area for improving the quality of the governance at both central and local level is stipulated also by the Strategy for Consolidating Public Administration 2014 - 2020, prepared by the Ministry for Regional Development and Public Administration. However, principles of performance management are still not entirely functional, as the budgeting process is not performance based, but rather inertial, historically based on yearly expenditures and certain central agencies still keep the prerogative of establishing the standard prices especially for public utility services in the fields of energy, transport

TUDOSE (IORGA) Elena
SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

FAMP

CCASP

3. RATIONALE FOR USING THE BENCHMARKING INSTRUMENT FOR THE MUNICIPAL PUBLIC UTILITY SECTOR

Datasets collected provide a wide spectrum for horizontal performance assessment in public service delivery performance between municipalities and dynamic self – assessments of performance for a municipality for a given time interval (e.g. a mandate of LPA). Selected KPIs have a large applicability/degree of comparability among different states (some of them deriving from EU Directives requirements), but also provide a solid background for allowing the respective agency (public authority) to undertake decisions with regards to the management of a particular public service based on objective evidences rather than arbitrary circumstances.

Such an approach – pertaining to the results oriented benchmarking model – would definitely mark a turning point in the management of the public utilities services that is performed today at the level of Romanian Municipalities.

4. APPLIED RESEARCH: MODEL KPIS FOR ASSESSING PERFORMANCE OF PUBLIC UTILITY SERVICES

Hereby below are presented some samples of KPIs that can be used for different municipal public utility services in the results – oriented benchmarking approach (author's model).

TABLE 1. Public Transportation

Definition of KPI	Measurement unit	Formula for calculating KPI	Requirement/condition
Ga – population access to public transportation	%	Ga = Ct/N, where: Ct = total capacity of public transportation means N = total no. of inhabitants; de unde sunt formulele	ACCESSIBILITY
Ga1 – degree of access of population to the public transportation system	-	Ga1 = St/Lt, where: St = no. of stations for public transportation means Lt = length of streets	ACCESSIBILITY
Vm – average age of local transportation means	years	Vmt = ΣNmt*Vmt/Nmt, where: Nmt = number of transportation means; Vmt = average age of each mean of public transportation	QUALITY OF SERVICE
Fc – frequency of circulation of transportation means on a given route	%	Fc = Nc/Gc, where Nc = number of routes Gc = number of routes included in circulation graphs	UNIFORMITY

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

Gacc – degree of accessibility of local public transportation	%	$Ns = Nmt^*/ Nmt$, where: Nmt * = no. of transportation means accessible for persons with special needs/total no. of transportation means	ACCESSIBILITY

TABLE 2. Water supply

Definition of the KPI	Measurement unit	Formula for calculating the KPI	Dimension of the service measured
Ga – level of population access to water supply system	%	$Ga = (Na+Nb+Nc)/Nt$, where: Na = no. of inhabitants with access to public water supply system through common connecting pipe Nb = no. of inhabitants with access to public water supply system through individual connecting pipe; Nc = no. of inhabitants with access to public water supply system through street pumps; Nt = total no of inhabitants.	ACCESIBILITY
Gpotab – Degree of conformity with water potability requirements 98/83/CE	%	$Gpotab = Npc/Npa$, where: Npc = no. of compliant samples; Npa = total number of samples analyzed.	QUALITY
Pg – loss of potable water in the public transport and distribution system („un-billed water")	%	$Pg = (Qp-Qf)/Qp$, where: Qp = quantity of potable water produced (entering the transport and distribution system) in m3/year; Qf = quantity of potable water billed, in m3/year;	EFFICIENCY
Gsatisf – consumer satisfaction	%	$Gsatisf = Nrecl/(Na+Nb+Nc)$, where Nrecl = total number of complaints registered annually; numărul total de reclamaţii înregistrate anual; Na = no. of inhabitants with access to public water supply system through common connecting pipe Nb = no. of inhabitants with access to public water supply system through individual connecting pipe; Nc = no. of inhabitants with access to public water supply system through street pumps	QUALITY
Gcont – meter level	%	$Gcont = Nbc/Nb$, where: Nbc = total number of metered connecting pipes; Nb = total number of connecting pipes.	EFFECTIVENESS

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

FAMP

CCASP

Pa – price of potable water (VAT excluded)	lei/m3	Price in local currency	AFFORDABILITY

TABLE 3. Sanitation/Waste management

Definition of the KPI	Measurement unit	Formula for calculating the KPI	Dimension of the service measured
Ga – level of population access to sanitation service	%	Ga = Na/Nt, where: Na = no. of inhabitants/households with individual contracts for sanitation services; Nt = total no. of inhabitants/households	ACCESSIBILITY
Gss – level of municipal street sanitation	% or km	Gss = Nss/Ns, where: Nss = number of streets where waste is collected by the sanitation service Ns = total no. of streets in the municipality (alternatively measured as length)	ACCESSIBILITY
Gc – level of collection of municipal waste	%	Gc = Qc/Qt, where: Qc = quantity of collected municipal waste (in tones); Qt = total estimated quantity of generated municipal waste	QUALITY
Gselect – level of selective collection of waste, per category: paper, plastic, glass, metal	%	Gselect = Qselect/Qc, where: Qselect = quantity of municipal waste collected separately, per category (tones) Qc = overall quantity of municipal waste collected	QUALITY
Grecl – level of recycling of municipal waste collected separately, per category	%	Grecl = Qrecl/Qselect, where: Qrecl = quantity of recycled waste (tones) Qselect = quantity of municipal waste collected separately (per category);	EFFECTIVENESS
Gdepozit – level of storage of municipal waste collected	%	Gdepozit = Qde/Qdc, where: Qde = quantity of municipal waste effectively stored (tones) Qdc = quantity of municipal waste to be stored according to contracts with the LPA	EFFICIENCY
Gsatisf - citizen satisfaction towards the sanitation service	%	Gsatisf = Nrecl/Nt, where: Nrecl = total no. of complaints registered in 1 year Nt = total no. of inhabitants with individual contracts	QUALITY
Csalub – average sanitation cost per capita	Lei/loc	Csalub = Ctot/Nt, where: Ctot = total cost for sanitation, as per contract price per year Nt = total no. of inhabitants	AFFORDABILITY

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

TABLE 4. Public Lighting

Definition of the KPI	Measurement unit	Formula for calculating the KPI	Dimension of the service measured
Ga – level of access of population to public lighting	%	Ga = Li + Lai/Lt + Lat , where: Li = length of streets equipped with public lighting, in km; Lai = length of alleys equipped with public lighting, in km; Lt = total length of streets, in km Lat = total length of alleys, in km;	ACCESSIBILITY
Gp – continuity of service	%	Gp = ΣDp/T, where: Dp = duration of service provision, in no. of days; T = 365 days	QUALITY
Dîn – average duration of service failure	hours	Dîn = ΣNd/Nîn, where: Nd = no. of hours of service failure per each unscheduled episode Nîn = total number of episodes of service interruption per year, in hours	QUALITY
Gfunct – level of functionality of the public lighting service	lamps	Gfunct = Cln/Clt, where: Cln = number of out-of-order street lamps; Clt = total number of street lamps;	EFFICIENCY
Gsatisf - level of citizen satisfaction	%	Gsatisf = Nrecl/Nt, where: Nrecl = total no. of complaints registered in 1 year; Nt = total no. of inhabitants	QUALITY
Cilum – average cost of public lighting per capita	Lei/loc	Cilum = Ctot/Nt, where Ctot = total cost of public lighting as per contract per year; Nt = total no. of inhabitants	AFFORDABILITY

TABLE 5. Heating

Definition of the KPI	Measurement unit	Formula for calculating the KPI	Dimension of the service measured
Ga – level of access of population to the central heating system	%	Ga = Na/Nt, where: Na = total no. of inhabitants/households connected to the centralized heating system Nt = total no. of inhabitants/households	ACCESSIBILITY
Ga1 – level of access of population to alternative heating solutions (individual central heating systems)	%	Ga1 = Ngc/Ng, where: Ngc = no. of households with individual heating systems; Nt = total no of households	EFFECTIVENESS

TUDOSE (IORGA) Elena

SHIFTING TO PERFORMANCE MANAGEMENT IN MUNICIPAL PUBLIC UTILITY SERVICES: A BRIEF RECENT HISTORY OF BENCHMARKING IN ROMANIA

Dterm – duration of service provision	hours/24 h months/year	2.1 Dterm = Hterm/24, where: Hterm = no. of hours of centralized heating provision 2.1 Dterm = Lterm/12, where: Lterm = no. of months during which heating is provided to households	QUALITY
Gutiliz = level of usage of the heating pipe system	No. of users/km of pipe system	Gutiliz = Nutiliz/km pipe system where: Nutiliz = total no. of households connected to the central heating system	EFFICIENCY
Gp = loss of thermal energy in the centralized system	%	Gp = Qp/Qf, where: Qp = quantity of energy produced in the centralized heating system in one year Qc = quantity of energy billed in one year	EFFECTIVENESS
Gpol = level of pollution of the centralized heating system	tCO2/MWh	Gpol = QCO2/QC, where QCO2 = quantity of CO2 emissions; QC = quantity of heating provided	QUALITY
Gsatisf - level of citizen satisfaction	%	Gsatisf = Nrecl/Nt, where Nrecl = total no. of complaints registered in 1 year Nt = total no. of centralized heating system users	QUALITY
Price of giga-calory	lei/gcal		AFFORDABILITY
Gsub = level of subsidy of the price per gigacalory	%	Gsub = Gcalcons/Gcalprod, where Gcalcon = price paid by consumer per giga-calory Gcalplat = price of production per giga-calory	AFFORDABILITY

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