STOCHASTIC ASPECTS OF CONTINUOUS IMPROVEMENT OF THE BUSINESS RESULTS PERFORMANCE OF THE PUBLIC ADMINISTRATION

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ABSTRACT

Effective operation of a system is expressed as an aspiration to achieve excellence in business results, recognized as total elimination of prevented difference between desired values and actual values of the realized system performance, requiring identification of both environmental and internal factors, as well as an explicit expression of the form and the extent of their impact on business processes. It is heavily laden by stochastic manifestation of their values and complexity of the influence. Optimal business management is determined by the structure and the concept of the system operation, and it is expressed and measured by the extent to which a business result meets user requirements. Realization of business objectives is contained in the performance of an output vector, being a resultant of actions of the business system, in terms of separate task stages in public administration management, and also in the operation of the system as a whole. Elimination of unwanted results involves interdependence, conditioning, frequency and probability distribution of their occurrence, and also coordination of, and cooperation between, numerous resources required to achieve the desired level of operational efficiency. Testing the reagibility of realized level of customer (dis)satisfaction with the performance of administrative services, as a dependent variable, in terms of level and intensity, manifested forms of used protocols and adequacy of service provider engagement, as an input

of the variable, and their expression by means of an appropriate statistical function represents the aim of research, i.e. improvement of business efficiency by means of exact results. The aforementioned procedures facilitate anticipation and correction of business results, and despite the stochastic process performance variations which are analyzed and monitored, their behavior is predicted, controlled and rationally directed towards a desired business result. The design of experiment is based on time disproportion in discovering the causes of realized level of subjective perception of satisfaction when satisfying the demand in terms of administrative services, and in the context of frequency of demandand the form of service requested. By overcoming and eliminating dissatisfaction with the performance of services, business efficiency of administrative process results is being significantly and permanently improved and the degree of employees' satisfaction is intensified; the same is with the service users, whose final result minimizes differentiality of realized and targeted performances, and simultaneously the global optimum of the social-economic system.

The conclusion in terms of the existence of intensive connections between the observed phenomena reveals the causes of the achieved level of output performance and facilitates its indirect correction by dosing the structure and intensity of the input vector.

1. INTRODUCTION

Public Company is a legal entity that performs activities from the domain of general public interest and includes energy industry, utility services, management of public goods, education, medical treatment and health care, public administration with administrative services and others. It is a well-known fact that the activities of such companies are often the source of dissatisfaction and frustration among the service users, and also the objective inability of a service provider to influence the degree of user satisfaction.

Respecting the requests, as well as the measurement of customer satisfaction with the administrative services of public company, represent a marginal interest of directors and managers, and stems from the monopolistic market position, inertia and complexity of the processes within the administrative system, inter

correlation of numerous qualitative and quantitative factors in terms of business results, existence of non-propulsive procedures, misuse of social-human and social-political generally accepted system of evaluation and tolerance, especially in terms of administrative officers from the public company.

Additional aggravating circumstance is contained within a mental-emotional resistance of human resources, as the carriers of substantive initiative in business systems, and improving public company business efficiency.

The capacity of the management to recognize, through a comprehensive analysis, all relevant factors and interpolate them, by applying adequate metrics, in the process of continual improvement of the system performance, and thus in the system performance of the output vector, significantly contributes to a rise inthe level of satisfaction of the users and those employed in the system.

2. REVIEW OF LITERATURE

Contemporary tendencies in public administration are related to the growth of administrative organizations, as well as to the computerization, professionalization and diversification of organizations. Significant benefits in operating efficiency and service performance relate to the computerization of the process, while other elements are symbolically represented on the territory of Bosnia and Herzegovina and Republika Srpska. Quality of service in the public sector is usually measured and expressed by the number, severity and frequency of failures formulated as poor quality services in the domain of individual users and their personal preferences and subjective expectations.

The establishment of errors and omissions in the work of the public sector should go towards identifying them. "Investigating medical errors in Bosnia and Herzegovina is not an easy task, especially due to the fact that there is no database that would uniquely and comprehensively enable the monitoring of criminal offenses against the health of people whose perpetrator is a doctor or other healthcare professional." (Mešić, 2018)

The usual process of examining public service user satisfaction on the territory of Bosnia and Herzegovina and Republika Srpska is performed by a pulse methodology, whose "ultimate goal is… to increase the accountability and quality of services at the local level and provide a detailed insight into the flow of their provision based on the feedback mechanism between the first and the last stages of the political process." (Ahmetović et al., 2014)

The problem of the education system is related to the structure of the educational profile whereby "most young people do not have a lower secondary education level and leave the education and training system early. The transition from the education system to the labor market is not easy... and there is increasing concern about the rise of unemployed young people with the highest level of education. (Obadić, 2017)

Realization of public sector services is aggravated due to the pervasive problem of corruption. Often corruption involves small bribes which are not perceived as a problem by entrepreneurs, but rather as an accepted part of doing business. In this way, petty corruption acts as an insurance payment compensation for institutional failure, as bribes can ensure that entrepreneurial activity is not directly constrained by institutional inefficiencies. Petty corruption is often liked to nepotism rather than money, and entrepreneurs can turn to informal networks to circumvent or speed up complex bureaucratic procedures and to obtain preferential deals (Williams & Yang, 2017).

3. ASPECTS AND EXPRESSION OF PERFORMANCES OD SERVICE QUALITY OF THE ADMINISTRATIVE PROCESS RESULTS

The quality of a business result represents "the degree to which a set of inherent characteristics of products, processes and systems satisfies the requests of users and all interest parties" (ISO 9001:2008). Charter on public services, which are related to administrative services as well, is based on the idea that there should be an instrument which defines core rights and principles in providing services to the users. Such principles include:

– service continuity;
– quality;
– secure supply;
– equal access;
– affordable prices;
– social, cultural and environmental acceptability (DEI, 1997-1999).

The quality represents a user perception about the level of product performances which puts an emphasis on users, and not providers, which in turn is additionally exacerbated by a monopolistic position of the provider, as well as by the ignorant attitude and system inertia in the procedure of cause appreciation, and correction and elimination of the source of customers' dissatisfaction.

Service performances are often not well defined, do not possess quantitative character and clear metric, hence the level of quality is based simply on a subjective individual's perception, whether individuals are users or serviceproviders. Additionally, it is reasonable to assume that causes of insufficient satisfaction derive from inadequate knowledge and/or interest in possible improvements, both in terms of employees and users of administrative services.

Quality management encompasses a set of activities which facilitate the prevention and lack of need for correction, where the service quality represents a multidimensional variable and includes "determination, reliability, accessibility, serviceability and communication skills". (Bergman &Klefsjo, 1994)

Exactness in measuring and reporting on the quality in the field of administrative service activities and the results of public company operations in relation to the provision of administrative services is possible by forming communication channels between the provider and the user of a particular service, which would enable focusing on determining aspects of the improvement of business efficiency. The basic request applies to the collection of useful information which can be expressed in an objective manner, which are understandable and usable in the context of problem solving.

4. ADAPTATION OF QUALITATIVE METRICS AND ASPECTS OF REPORTING ON THE DEGREE OF USER SATISFACTION IN TERMS OF THE EFFECTS OF ADMINISTRATIVE PROCESSES

Stochastic processes of the realized level of user satisfaction in terms of the work of administrative officers are tested by means of inferential statistical methods. Inferential approach to statistical analysis implies making conclusions and judgements based on incomplete information. The key issue of probabilistic judgements is related to the method of choice and sample size used for the analysis of population from which the sample originates, which is determined by the "planned reliability and preciseness of the obtained results, and the variability of the change tested" (Šošić, 1998).

Useful and usable information for expressing the causality of subjective perception of the realized level of service quality, as a dependent variable dimension, can be very simply and cost-effectively obtained by interviewing users of administrative services. Questionnaire is formed in a manner that it contains questions whose answers adequately elucidate the problem being solved, which is achieved by a concise approach to the process of defining questions, offering

clear and comprehensive answers in the context of covered area of elementary events. Testing of the degree of satisfaction of service users with the performance of administrative systems can be expressed and analyzed on the example of the work of administrative services on the territory of Gradiška municipality. Testing is performed by means of the questionnaire which has the following form:

Please take a few minutes and truthfully answer the following questions

1. Age:

2. Place of residence:
a. city center
b. wide city area
c. suburbs
d. rural area (village)

3. Education level:
a. elementary school
b. high school
c. college
d. university
e. MA or PhD

4. Employment status:
a. employed
b. unemployed
c. retired

5. Have you requested administrative services of the public administration bodies:
a. very often (several times a year)
b. often (annually)
c. occasionally (not every year)
d. rarely or never (do not remember when)

6. If yes, which services:
a. document notarization
b. identification documents (IDs)
c. certain individual rights (e.g. aid, subvention, medical treatment or health services outside standard procedure)
d. none of the above
e. If the answer includes more statements, please indicate which:_____

7. Are you satisfied with the services:
a. yes, completely
b. mostly yes
c. partially
d. unsatisfied

8. The cause of your dissatisfaction:
a. objectively complicated procedure
b. long lasting procedure
c. inhospitable administrative officers
d. unskillfulness of administrative officers
e. I am fully satisfied with the services administrative officers provide

If the answer includes more statements, please indicate which:_____

Thank you for your time and truthfulness!

Figure 1. The form of the questionnaire for testing the degree of satisfaction of administrative service users on the territory of Gradiška municipality.

The questionnaire was carried out on two independent samples which include two groups of examinees. For the first sample administrative officers were chosen, and for the second residents of the Gradiška municipality who are not administrative officers were chosen. The reason for the aforementioned approach is objectification and comparison of the satisfaction degree depending on the involvement of examinees in the mentioned processes.

In the first group 30 examinees were questioned and 55 in the second group; the questionnaire results can be demonstrated by the following linear overview (Landika et al., 2018):

Table 1. Aggregated questionnaire results – distribution of the frequency of examinees' answers per questions (multiple answers to the question no. 6 for group I are b and c; for group II two are b and c, while the other two are a and d; multiple answers to the question no. 8 for group I are a and b; for group II five are a and c, while two are c and d)

Question	Answer / Group	Up to 25	25-35	35-45	45-55	55-65	65 and more	Total
1	I	1	2	13	3	11	0	30
	II	12	8	16	7	3	9	55
2	Answer / Group	A	b	C	d	-	-	Total
	I	7	12	5	6	-	-	30
	II	5	23	17	10	-	-	55
3	Answer / Group	A	b	C	d	e	-	Total
	I	3	5	9	12	1	-	30
	II	11	15	16	12	1	-	55
4	Answer / Group	A	b	C	-	-	-	Total
	I	30	-	-	-	-	-	30
	II	27	19	9	-	-	-	55
5	Answer / Group	A	b	C	D	-	-	Total
	I	5	12	7	6	-	-	30
	II	11	24	16	4	-	-	55
6	Answer / Group	A	b	C	D	E	-	Total
	I	3	17	2	6	2	-	30
	II	6	41	1	3	4	-	55
7	Answer / Group	A	b	C	D	-	-	Total
	I	12	16	2	0	-	-	30
	II	5	11	16	23	-	-	55
8	Answer / Group	A	b	C	D	E	f	Total
	I	12	9	-	-	7	2	30
	II	9	3	16	17	3	7	55

The subjectivity of the perception of the quality level of the performance of service provided derives from the research results where the degree of examinees' involvement in the process of provision of administrative service has an intense and direct influence on the perception of the degree ofuser satisfaction with the

services. The structure of answers to the question number 7 from the question-naire can be demonstrated by the following illustration:

The degree of satisfaction with administrative services - administrative service officers
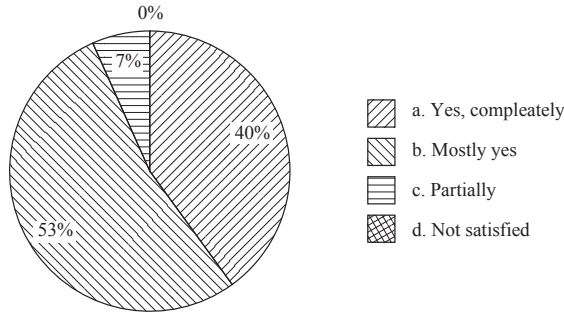

Figure 2. The structure of examinees in relation to the quality perception of administrative services among the examinees who are involved in the process of administrative service provision

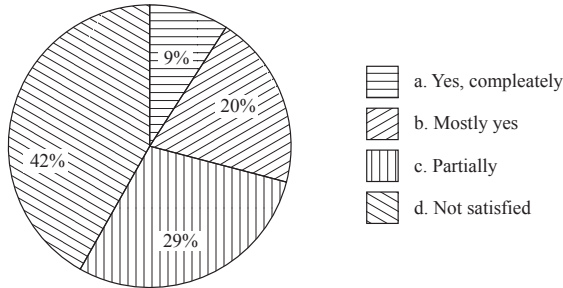**The degree of satisfaction with administrative services - Gradiška municipality residents**

Figure 3. The structure of examinees in relation to the quality perception of administrative services among the examinees who are not involved in the process of administrative service provision

Comparing the form of the structural circle in Figure 2 and Figure 3, a significant difference of the structure of quality perception of administrative services is evident, depending on the degree of examinees' involvement in the process of administrative service provision. It is clearly evident that the biggest share percentage in the "Group I" have the examinees who are "mostly satisfied" with the quality of administrative services, namely 53%, while 93% out of the total number of examinees are "completely satisfied" or "mostly satisfied" with the quality of administrative services, in terms of examinees involved in the admin-

istrative processes. For the examinees not involved in the process of the admin-
istrative service provision ("Group II"), the same percentage amounts to 9 and
20%, hence only 29% of the examinees are "completely satisfied" or "mostly
satisfied" with the quality of administrative services. Since the aforementioned
indicators significantly differ, it can be concluded that the degree of involvement
in administrative processes represents a key factor of the perception of quality
level of administrative services, thus indicating that administrative service offic-
ers do not have an objective opinion about the degree of business efficiency of
their own business outputs.

5. CORRECTION OF ADMINISTRATIVE PRACTICES AND PROCEDURES FROM ASPECT OF STOCHASTIC SENSIBILITY OF THE PERCEPTIONF OF USER SATISFACTION

Spearman's rank correlation coefficient is used for the measurement of degree
and direction of connectivity of two phenomena expressed by ranked variable
pairs. If statistical variables are numeric, it is necessary to convert them to ranked
variables.

The basis of Spearman's rank correlation coefficient are pairs of ranked variable
modalities $[r(x_i); r(y_i)]$; i = 1, 2, ... , n. The modalities of each ranked variable are
from the set of the first n natural numbers. The coefficient of linear correlation
is calculated by the usage of ranked variable modality pairs, and it is called the
Spearman's rank correlation coefficient where the following formulation is used:

$$rS = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n^3 - n}, \text{ where } d_i = r(x_i) - r(y_i); -1 \leq r_s \leq 1.$$

If in each pair all ranks are equal, their difference is equal to zero, and the coef-
ficient value is 1. Then there is an ideal (complete, perfect) positive rank cor-
relation. When the modality sequence of one ranked variable is inverse from the
sequence of other variable part of the pair, rank correlation coefficient is -1, thus
the rank correlation is perfect and of the negative direction. The largest rank dis-
crepancy is when the rank correlation coefficient is equal to zero. Other rank cor-
relation coefficient values are interpreted analogically as well as the coefficient
values of the simple linear correlation (Pearson coefficient). When calculating
Spearman's rank correlation coefficient it is assumed that there are no connected
ranks or that their number is insignificant in relation to the number of pairs of
values for which the coefficient is being calculated.

The hypothesis on statistical significance of the Spearman's rank correlation co-
efficient belongs to a nonparametric test, where the testing of hypothesis about

the assumed rank correlation coefficient values is related to the procedure of determining crucial value, by means of which the limits of acceptance (or non-acceptance) of statistical hypothesis are determined, which can be illustrated by the following overview:

Table 2. The procedure of determining crucial values and (non)acceptance limits of statistical hypothesis based on a chosen level of significance $(1 - \gamma)$.

Test type	The hypothesis form	Acceptance area H_0	Rejection area H_0
Two-way	$H_0: \rho_S = 0;\ H_A: \rho_S \neq 0$	$r_{S;\gamma/2} > |r_S|$	$r_{S;\gamma/2} < |r_S|$
One-way (on positive rank correlation)	$H_0: \rho_S = 0;\ H_A: \rho_S > 0$	$r_S < r_{S,\gamma}$	$r_S > r_{S,\gamma}$
One-way (on negative rank correlation)	$H_0: \rho_S = 0;\ H_A: \rho < 0$	$r_S > -r_{S,\gamma}$	$r_S < -r_{S,\gamma}$

Test value represents the sampling realization of the rank correlation coefficient r_s, and table value is read for the values of sampling distribution of the rank correlation coefficient for a given risk of error γ and sample size n.

The procedure in terms of making conclusions on the test outcome is performed by the comparison of read crucial (table) value and test value, as mentioned in the previous table or by the comparison of empirical and theoretical level of trust.

If the sample contains more than 30 elements, hypothesis testing can be approximated by the Student t – test, where the table value is read along with the risk of error γ and n – 2 degree of freedom, while the test value (Landika, 2015):

$$t = r_S \cdot \sqrt{\frac{n-2}{1-r_S^2}}$$

6. EVALUATION OF STOCHASTIC CORRECTION OF THE BUSINESS EFFICIENCY LEVEL

On the one hand, managerial information contained in the indicator value of the quantitative consolidation of subjective perception variations in terms of the source of dissatisfaction with the services provided, and on the other hand the variation of frequency of requesting services by the users and the variation of the service type facilitate an objective approach to the dosing of business system inputs in order to achieve a desired performance level of business results.

Testing of statistical significance of the rank correlation coefficient is carried out on two independent samples whose purpose is to prove a non objective valoriza-

tion of the realized level of service quality by the workers involved in the process of administrative service provision, and by doing so raising awareness about the significance of their role in the perception of performance of quality service.

6.1. The degree of quantitative consolidation of variations of perception of (dis)satisfaction level of administrative service users in terms of the frequency ofthe need for the use of administrative services

Spearman's rank correlation coefficient by means of which the degree of quantitative consolidation of variations of perception of (dis)satisfaction level of administrative service users in terms of the frequency of need for the use of administrative services is expressed:

– For administrative officers it has a value: rS=1-6i=1ndi2n3-n = 0,99764
– For non-administrative officers (municipality residents) it has a value: rS=1-6i=1ndi2n3-n = – 0,987978

In both cases, the rank correlation coefficient indicates a high level of quantitative consolidation of variations of perception of dissatisfaction source of administrative service users in terms of the frequency of the need for the use of administrative services, while the rank correlation coefficient is of the opposite direction in terms of administrative and non-administrative officers.

The rank correlation coefficient is determined based on incomplete information, thus it is justified to test its statistical significance. Testing of statistical significance is conducted in the following manner:

a. The hypothesis of the statistical test has the following form: $H_0 : \rho_s = 0$; $H_A : \rho_s \neq 0$;
b. Table value is determined with the reliability percentage of 99%, the risk of error $\gamma = 0,01$ respectively, by using the Student t probability distribution, where table value for the first sample has a value: $t_{0,005;28} = 2,7633$; while for the second sample table value is: $t_{0,005;53} = 2,6778$;
c. The test value is determined by using the following form: $t = r_S \cdot \sqrt{\dfrac{n-2}{1-r_S^2}}$;

   where the test size for the first sample has a value: $t^I = 77,28093$; while for

   the second sample the test value is: $t^{II} = 46,52549$;
d. In both samples, the table value is smaller than the test value, hence for both cases the null hypothesis is rejected with the reliability of 99%. With the reliability of 99% it can be concluded that the degree of quantitative consolidation of variations of perception of (dis)satisfaction source in

terms of the frequency of the need for the use of administrative services has a statistical significance.

6.2. The degree of quantitative consolidation of variations of perception of dissatisfaction source of administrative service users in terms of the type of administrative services

Spearman's rank correlation coefficient by means of which the degree of quantitative consolidation of variations of perception of dissatisfaction intensity of administrative service users in terms of the type of administrative services:

- For administrative officers it has a value: rS=1-6i=1ndi2n3-n = 0,984983
- For non-administrative officers (municipality residents) it has a value: rS=1-6i=1ndi2n3-n = –0,997727

In both cases, the rank correlation coefficient indicates a high level of quantitative consolidation of variations of perception of dissatisfaction source of administrative service users in terms of the type of service requested, where the direction of quantitative consolidation is the same for administrative officers and non-administrative officers.

The rank correlation coefficient is determined based on incomplete information, thus it is justified to test its statistical significance. The testing of statistical significance is conducted in the following manner:

a. The hypothesis of the statistical test has the following form: $H_o : \rho_s = 0$; $H_A : \rho_s \neq 0$;
b. Table value is determined with the reliability percentage of 99%, the risk of error $\gamma = 0,01$ respectively, by using the Student t probability distribution, where table value for the first sample has a value: $t_{0,005;28} = 2,7633$; while for the second sample table value is: $t_{0,005;53} = 2,6778$;

c. The test value is determined by using the following form: $t = r_S \cdot \sqrt{\dfrac{n-2}{1-r_S^2}}$;

  where the test size for the first sample has a value: $t^I = 30,18856$; while for

  the second sample the test value is: $t^{II} = 107,7973$;
d. In both samples, the table value is smaller than the test value, hence for both cases the null hypothesis is rejected with the reliability of 99%. With the reliability of 99% it can be concluded that the degree of quantitative consolidation of variations of perception of (dis)satisfaction source in relation to the use of administrative services and in terms of the type of administrative services has a statistical significance.

7. CONCLUSION

By analyzing the obtained results of the performed research, within which instruments of descriptive and interferential statistical analysis were used, the results can be summarized in the following managerial guidelines.

Descriptive statistical analysis tools which were used encompass *table* overview of the distribution of answers obtained in relation to the conducted interview procedure and *graphic* overview of the distribution of perception of the level of user satisfaction with the administrative service performance in comparison to the degree of involvement in the production process of the same. The test results point out to a high level of causality among stated phenomena, where even 93% of examinees, involved in the production process of administrative services, realized level rank as of high level of satisfaction, while only 29% of examinees, not involved in the production process of administrative services, have the same perception about the level of realized administrative service performances.

The above stated leads to the conclusion that it is necessary to reinvestigate the causes of dissatisfaction and educate staff to adjust working procedures, within the prescribed procedures, to the users' needs and requests. Additionally, another question is raised, namely to which extent the perception of examinees in terms of the quality level is an adequate indicator of the real level, since there is a possibility that the realized service quality is of a different level of performance in relation to different service users.

Inferential statistical analysis tools that were used include *Spearman's rank correlation coefficient* and *statistical inference on the level of its significance*. An objective approach to the analysis of quality of process results requires adjustment of metrics, adequate stochastic modeling, and adjustment of quality aspect of administrative service performances by the usage of ranked variables.

The stated approach facilitates the collection of useful managerial information on the intensity of quantitative consolidation of variations of (dis)satisfaction level of service users and the frequency of their demand. Managerial information derive from the structure of answers to the questions number 7 and 5 of the questionnaire, where after an adequate transformation of statistical variables into ranked variables, the obtained rank correlation coefficient for the first group of examinees is 0,997664; while its value for the second group of examinees is -0,987978; which leads to the conclusion that among the observed phenomena there is an intensive correlation, but of the opposite direction, among different groups of examinees. Obtained values of the rank correlation coefficient are tested at the significance level of 99%, hence the modeled information can be used with a high level of trust.

Useful managerial information also derive from the values of the Spearman's rank correlation coefficient which is used for testing the intensity of quantitative consolidation of variations of the (dis)satisfaction source of service performances in terms of the type of administrative service. Managerial information derive from the structure of answers to the questions number 6 and 8 of the questionnaire, where after an adequate transformation of statistical variables into ranked variables, the obtained rank correlation coefficient for the first group of examinees is 0,984983; while its value for the second group of examinees is – 0,997727; which leads to the conclusion that among the observed phenomena there is an intensive correlation, but of an opposite direction, among different groups of examinees. Obtained values of the rank correlation coefficient are tested at the significance level of 99%, hence the modeled information can be used with a high level of trust.

Indications derived from the opposite direction of correlation of the phenomena observed among examinees are determined by the involvement of examinees in the production process of administrative services, which can lead to the conclusion that the administrative officers have incorrect perception of the level of business efficiency or that they behave unprofessionally while providing services. It is possible and necessary to investigate additionally the stated assumptions. However, they are irrelevant from the aspect of research conducted.

Apart from the analysis conducted, together with the adequate adaptation, it is possible to analyze numerous business processes, especially in the function of raising the level of business efficiency in terms of provision of service and processes whose results are of qualitative characters. The effects of implementation of the results of analysis and research go far beyond the modest costs of their collection, and they are related to the collection and processing of statistical material, which is efficient especially when adequate computer programs, such as SPSS, are used.

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СТОХАСТИЧКИ АСПЕКТИ СТАЛНОГ УНАПРИЈЕЂЕЊА ПЕРФОРМАНСИ ПОСЛОВНИХ РЕЗУЛТАТА ЈАВНЕ УПРАВЕ

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САЖЕТАК

Ефикасно функционисање система изражава се као тежња за постизањем изврсности у пословним резултатима, односнокао потпуно уклањање разлике између жељених вриједности и стварних вриједности остварених перформанси система, које захтијева идентификацију спољашњих и унутрашњих фактора, али и експлицитни израз облика и обима њиховог утицаја на пословне процесе; веома је оптерећен стохастичким испољавањем њихових вриједности и сложености утицаја.

Оптимално пословно управљање одређују структура и концепт рада система, а оно се изражава и мјери обимом којим пословни резултат задовољава потребе корисника. Реализација пословних циљева је садржана у извођењу излазног вектора, који је резултат активности пословног система, у смислу одвојених фаза задатака у управљању јавном управом, као и у раду система у цјелини. Елиминација нежељених резултата укључује разматрање међузависности, условљавање, учесталост и дистрибуцију вјероватноће њихове појаве, као и координацију и сарадњу између бројних ресурса потребних за постизање жељеног нивоа оперативне ефикасности.

Циљ истраживања је тестирање осјетљивости постигнутог нивоа (не)задовољствакорисника извршавањем административних услуга, као зависневаријабле, у смислу нивоа и интензитета, манифестованих облика кориштених протокола и адекватности ангажовања даваоца услуга, као улазневаријабле, као и њихово изражавање одговарајућом статистичком функцијом, односно побољшање ефикасности пословања помоћу тачних резултата. Горе наведени поступци омогућавају предвиђање и корекцију пословних резултата, и упркос стохастичким варијацијама перформанси процеса које се анализирају и прате, њихово понашање се предвиђа, контролише и рационално усмјерава ка жељеном пословном резултату.

Дизајн експеримента је заснован на временској диспропорцији у откривању узрока оствареног нивоа субјективне перцепције задовољства приликом задовољавања потражње у смислу административних услуга, а у контексту учесталости потражње и облика тражене услуге. Превазилажењем и елиминацијом незадовољства извршавањем услуга значајно се и трајно побољшава ефикасност пословања административних процеса и повећава степен задовољства запослених; исто се односи и на кориснике услуга, чији је крајњи резултат минимализација разлике између реализованих и циљаних перформанси, а истовремено и глобалног оптимумасоцијалног и економског система.

Закључак у погледу постојања интензивних веза између посматраних појава открива узроке постигнутог нивоа резултирајућих перформанси и олакшава њихову индиректну корекцију дозирањем структуре и интензитета улазног вектора.

Кључне ријечи:

пословна изврсност, ефикасни рад, нежељени резултат, стохастичка манифестација, дистрибуција вероватноће, побољшање перформанси.