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PERFORMANCE MEASUREMENT IN LOCAL GOVERNMENT UNITS IN THE FUNCTION OF PUBLIC SERVICE **IMPROVEMENT**

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Abstract: In today's turbulent environment, local self-government administrations are under pressure of various, often conflicting needs, demands and interests that affect their effective operations. Accordingly, an innovative model of local self-government effectiveness measurement has been applied in this research which effectively includes a broad spectrum of organizational goals. Measuring effectiveness of local self-government and municipal management structures provides a clearer insight in to how well developed is local self-government in order to identify key factors affecting its (non) efficiency and business (non)effectiveness. Interdependence of the balanced scorecard model (BSC) development and effectiveness of local self-government is the subject of this paper. Effectiveness of local self-government has been observed on the basis of five segments or five perspectives of the balanced scorecard model. BSC modeling allows for successful development and implementation of a strategy that is causally linked to effectiveness of local self-government and improving public services. The results of the research have confirmed that a greater degree of development of the balanced scorecard model has the potential to increase effectiveness of municipal management structures, and with that development and competitiveness of the local community and improving public services, as shown in this paper.

Key words: Local self-government, balanced scorecard model, improvement of effectiveness, public services

JEL Classification: D73, M1

INTRODUCTION

Traditional business performance measurement systems focused primarily on financial indicators have become insufficient today to get a complete picture of the functioning of the organization. In the past twenty years, significant reform activities have been carried out in the public sector of many countries in order to improve business performance and efficient service delivery. The reforms are an expression of the government's efforts to continuously improve public sector organizations to work better and more transparently. At that time, in a large number of countries, there was a problem of measuring the effectiveness of the work of the organizations themselves.

The modern environment, in which the intangible resources of the organization have the greatest value, and the most intellectual capital, has caused the emergence of modern management concepts such as the concept of knowledge management (KM), total quality management (TQM), customer relationship management (CRM), the concept economic value added (EVA), Balanced scorecard (BSC), etc.

Many local governments around the world have turned to efficiency management methodology to help quantify results, improve services, and communicate more effectively with the community and stakeholders.

Given that in Bosnia and Herzegovina there is no single method or generally accepted concept for measuring the efficiency and effectiveness of local government management, the application of this concept (BSC) in the research part presents an analysis of the effectiveness of local governments in Bosnia and Herzegovina through economic indicators of local economic development. public revenues, physical and other resources.

Strategic planning and strategic management give public organizations and institutions a specific purpose and direction that contributes to the creation and implementation of an effective development policy of government officials. Unlike strategy formulation, strategy implementation is often seen as a craft rather than a science. Significant difficulties usually arise during the later processes of strategy implementation where one of the causes is also found in unrealistic planning when formulating the strategy itself. There are many factors that affect the success of the implementation of the strategy and that the implementation is a key challenge for the improvement of public services and thus the effectiveness of local self-government. Some of these factors are inadequate system for monitoring the implementation of the strategy, underdeveloped e-government system, mismatch of competencies of employees and business processes, insufficient communication and anticipation of the needs of service users, etc.

It is the Balanced scorecard that helps organizations formulate and implement strategies more efficiently in the context of improving public services. In today's dynamic environment, the application of the Balanced scorecard is necessary because it has been recognized by many cities in the world (Charlotte, San Diego, Brisbane, Rijeka, etc.). The application of the Balanced scorecard concept aims to establish a balanced set of measures that provides municipal management with information to achieve goals and monitor the satisfaction of service users. The Balanced Scorecard provides a framework for translating vision and strategy into operational sizes and measures to more easily track the quality and quantity of customer service.

LITERATURE PREVIEW

The performance measurement system in the field of public administration has received increasing attention for both the academic community and practitioners in the last two decades. The system of measuring performance, improving the efficiency of local self-government and applying the Balanced scorecard concept is the subject of many researches in the world Boyine, 1988, Lovell, 1994, Kloot L. and Martin J., 2000, Niven Paul R. 2003, Mik Wisniewski 2004, Tommaso Agasisti, Deborah Agostino & Mara Soncin 2019 (Šašić, 2020, p. 33).

In addition to the importance of application for companies, Norton and Kaplan emphasize the importance of BSC for the public sector in their works. These papers emphasize the importance of the existence of cause-and-effect relationships between the four perspectives in a way that learning and growth lead to improved internal business processes, which in turn leads to improved customer satisfaction and ultimately affects the financial performance of the organization (Kaplan, Robert S., & Norton, David P., 2006, p. 75).

Pollalis and other authors presenting the application of the BSC methodology in the U.S. Department of Defense, suggested that the customer perspective be placed at the top of the BSC causal link (Pollalis, Y.A., Gartenberg, M., & Edmunds, B., 2004, p. 37). Niven Paul R., (2003) researched the effectiveness of BSC implementation in the local community and also stressed that the client / citizen perspective should be at the top due to the mission of local self-government. Niven points out that the application of BSC in the local community demonstrates responsibility and generates results, enables efficient use of limited resources and emphasizes the efficiency of strategy implementation. There is a large body of research on the effectiveness of local community management (Niven, 2006, p. 124). Charnes I. (1989) investigated the efficiency of 28 cities in China between 1983 and 1994 and stressed the importance of rationalizing local government costs and relieving citizens. (Guo Tengyun, 2011, p. 750) Umashev & Willett (2008) highlight a multidimensional approach to the BSC model that is also considered an excellent tool for measuring the efficiency of local government systems based on performance indicators identified through four BSC perspectives (Umashev, C. and Willett. R, 2008, p. 380). Chow (2010) and Rautiainen (2014) point out that based on institutional pressure, public sector organizations are forced to mimic different private sector models and theories within their organizations. Customer (citizen) orientation is common for the implementation of BSC in public organizations. Research to date has shown that the use of BSC has risen sharply in recent years, especially in local governments in Sweden, Denmark, Canada, Australia, Spain, the Czech Republic and other countries. In addition to local governments, BSC is also used in hospitals, colleges, courts, and schools (Hellström, M., Jönsson, P. & Ramberg, U., 2009, p. 19).

Tommaso Agasisti, Deborah Agostino & Mara Soncin conducted a survey in 2019 to identify three samples (formal compliance, shared vision and technical oligarchy) of the implementation of the Performance Measure System (PMS) in local governments (Tommaso Agasisti, Deborah Agostino, Mara Soncin, 2020, p. 1125).

In Bosnia and Herzegovina, the performance measurement system is still not sufficiently developed, which is the recommendation of the European Commission in the context of public administration reforms and EU accession (Šašić Đ., 2019, p. 11).

For example, local governments in BiH often do not have a clearly defined strategy, but the BSC relies on a mission, to focus on efficiency within available resources.

ANALYSIS OF THE IMPACT OF THE BSC MODEL ON THE IMPROVEMENT OF LOCAL GOVERNMENT SERVICES

Based on the above, the following hypotheses are set:

- H1. Continuous education and training contribute to increasing the competencies of managers and employees in local self-government
- H2. Improving internal processes in local self-government units is related to the competencies of managers and all employees
 - H3. The quality of internal processes causes better service delivery

The interdependence of the development of the BSC concept and the improvement of local government services is the core of the research of this paper.

The effectiveness of local self-government was observed through five perspectives of the BSC model. The basic perspectives, as the theoretical basis of the BSC managerial concept, can be presented as follows:

- 1. Perspective of learning and growth of the organization,
- 2. Perspective of business processes of the organization,
- 3. Perspective of the organization's clients,
- 4. Financial perspective of the organization i
- 5. Perspective of strategic integral operation of BSC concept.

The results of the research show that those local governments that have developed perspectives of this model are more effective than those local governments that have partially developed individual perspectives or do not have any of the perspectives developed at all. Business on the principle of the BSC model enables the successful development and implementation of the strategy. The effectiveness of local self-government is analyzed through the introduction of new and improvement of existing services, promotion of innovations, shortening of processes and procedures, quality improvement, sensitivity to customer / citizen requirements, and other relevant indicators. The research was conducted in 53 local self-government units in Bosnia and Herzegovina. For the purposes of this paper, the focus of the interpretation of research results will be the perspectives of internal processes and the perspectives of citizens (clients).

Development of the perspective of internal processes

The development of the perspective of internal processes in local self-government units was measured through the analysis of responses to claims about strategy implementation, development and implementation of e-government, efficiency of procedures and processes, implementation of ISO standards, scope and quality of services, service innovation (system 24, One-Stop-Shop Counter, monitoring the implementation of the document online via etc.), the possibilities of introducing the New Public Management, the efficiency of time management (time management) by the municipal leadership and the effectiveness of the existing internal organization and job systematization.

The knowledge and competencies of management and employees directly affect the quality of internal processes of each organization. Improving internal processes is important for several reasons. By continuously improving internal processes, it is possible to reduce business costs through the efficiency and productivity of employees, because the quality of internal processes can have a positive impact on the perception of clients (citizens) and strengthen the key values of the organization.

The next table shows the results of average values and deviations from the above statements related to the analysis of the development of the perspective of internal processes in local government units. When asked or stated that the improvement of internal processes in local self-government units is related to the competencies of managers and all employees, 79.22% of respondents strongly agree, 11.28% agree to some extent, while 10% have no opinion. There is no statistically significant difference in responses at the level of 0.05 (Chi-Square = 1.639, df = 4, p = .651) between local governments according to the division into micro, small, medium and large.

Table 1. Results of the analysis of average values of the perspective of internal processes

Perspective of internal processes	N	Min	Max	Average	St. Dev.
B1. Improving internal processes in local self-government units is related to the competencies of managers and all employees	50	3	5	4.44	.541
B2. The existing internal organization and systematization of jobs in your municipality is effective	50	1	5	3.22	1.055
B3. Are there capacities in local self-government units to apply modern management concepts? (New Public Management)	50	2	5	3.40	.857
B4. The ability to introduce new human resource management practices in local self-government and their development affects the improvement of internal processes	49	2	5	4.04	.735
B5. Improving internal processes implies the quality of delivered services	50	1	5	4.24	.843
B6. Implementation of quality management system (according to ISO 9001: 2015) contributes to more efficient achievement of goals in terms of improving the quality of services provided	50	1	5	3.76	.981
B7. Improving the favorable business environment in local self-government units also depends on the competencies of the municipal management	49	2	5	4.41	.762
B8. The promotion of local economic development is effective	50	1	5	3.38	.967

Source: Author's research

The research results show in the next table that there is a significant positive correlation between the effectiveness of the existing internal organization and systematization of jobs and the improvement of internal processes in local self-government units is (rs = 0.483, sig. = 0.000).

Also, local governments in which the municipal management dedicates its activities to monitoring operational activities in the organization have a medium-strong connection with the improvement of internal processes (rs = 0.535, sig. =. 000). Based on the test results, we came to the conclusion that refers to the second hypothesis, ie that the improvement of internal processes in local self-government units is related to the competencies of managers and all employees (Z = -0.771, p <0.05)

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	Development of learning and growth perspective	N	Mean Rank	Sum of Ranks
Perspective of	Undeveloped	33	21.26	701.58
internal processes	Developed	20	67.25	1345.00

Table 2. Results of research on the correlation of internal process perspective variables

Source: Author's research

Table 3. Effectiveness of municipal management in the perspective of internal processes in relation to development / underdevelopment in the perspectives of learning and growth

	Perspective of internal processes
Mann-Whitney U	168.000
Wilcoxon W	234.000
Z	-3.576
Asymp. Sig. (2-tailed)	.000

Source: Author's research

The results of the Man-Whitney test show how effective the municipal leadership is (LGU) in the perspective of internal processes is statistically significantly higher when it comes to local governments that have a developed perspective of learning and growth compared to those local governments that have an underdeveloped perspective of learning and growth (Z = -3,576, sig. = 0,000). Based on the previously calculated correlation coefficients and presented analyzes that indicate the degree of quantitative agreement that the improvement of internal processes in local self-government units is related to the competencies of managers and all employees, it can be concluded that a valid confirmation of the second auxiliary hypothesis.

Development of citizens' perspective

The analysis of the development of the perspective of relations with service users (citizens' perspective) was measured through the analysis of the quality of existing services and compliance with user requirements, participation of external stakeholders in decision-making, possibility of outsourcing, development of public-private partnerships, ownership system for monitoring the level of realized proposals / complaints of citizens, participation of citizens, non-governmental organizations and employers in public hearings, and whether the local self-government is continuously conducting a survey on the satisfaction of users of municipal services.

Table 4. Results of the analysis of average values of citizens' perspective

Citizens' perspective	N	Min	Max	Average	St. Dev.
C1. The quality of existing services is in line with customer requirements	51	2	5	3.67	.739
C2. The constitutional organization and normative framework prevent more effective action of local self-government	51	1	5	3.39	1.115

C3. Service users are regularly involved in decision-making processes	51	1	5	2.96	.916
C4. Transfer of competencies in performing certain activities through the concept of outsourcing and PPP is represented in our municipality	51	1	5	2.80	1.000

Source: Author's research

In Table 4 the results of average values and deviations from the stated statements related to the analysis of the development of citizens' perspectives are presented. When asked whether the quality of existing services is in line with customer requirements, 9.04% of respondents strongly agree, 50.09% agree to some extent, while 30.20% neither agree nor disagree, while 5, 7% disagree. There is no statistically significant difference in responses at the level of 0.05 (Chi-Square = 7.635, df = 4, p = .651) between local governments according to the previous division into micro, small, medium and large. Regarding the answers by category of constitutional-territorial organization from which local governments come, there is also no significant statistical difference. The average rating of the response to this statement is 3.67 with a standard deviation of 0.739, which indicates that the quality of certain services is not in line with user requirements. Through the results of the research so far, we conclude that there are several factors that affect this assessment (insufficiently developed e-government system, existing internal organization and systematization of jobs, non-evaluation of innovation and creativity in the work of employees, etc.).

One of the principles of the quality management system according to ISO 9001 implies the inclusion and fulfillment of customer requirements. Consequently, the question was raised as to whether service users were regularly involved in decision-making processes. Only 3.8% of respondents strongly agree that service users are regularly involved in decision-making processes, while 24.5% somewhat agree.

The low participation of service users in decision-making processes aimed at improving existing and introducing new services indicates the inefficiency of the organization on the one hand, and the lethargy of service users due to lack of initiative and activism on the other hand. The obtained results clearly show that municipalities do not have detailed strategies for monitoring customer satisfaction and consideration of their proposals, especially in relation to local communities and their communication with municipalities.

The average rating of responses to this statement is 2.96 with a standard deviation of 0.916, which indicates that in most municipalities (71.8%) service users are not involved in decision-making processes.

In order to analyze why some municipalities are more effective in their work than others, it was also analyzed whether the constitutional organization and normative framework prevent more effective action. The average mean value of the answers to this question is 3.39, where 17% of municipalities believe that the existing constitutional organization does not prevent effective action. Many municipalities neither agree nor disagree with this statement because, for example, when starting a business and the ease of doing business criteria prescribed by the World Bank, the effectiveness of municipalities depends on the solution of higher levels of government and the work of certain public companies and institutions. (connection of electricity and other

utilities, tax and court decisions). By introducing One-Stop-shop counter operations and assigning "mentors" to investors, developed local governments have successfully improved the effectiveness of business ease. The trend in the world is to transfer certain tasks of local self-government to other legal entities in order to rationalize business costs and improve efficiency in work. According to the Law on the Principles of Local Self-Government, municipalities and cities have a large number of competencies that affect their development differently. Due to limited tax autonomy and the existing fiscal federalism in BiH, small local governments face a deficit of public revenues necessary to cover public expenditures defined in the law of the same name. Consequently, one of the solutions is certainly the strengthening of partnerships between public and private entities by assigning certain tasks and activities of local self-government to legal entities from the private sector (the so-called "outsourcing" concept). Also, by strengthening the public-private partnership, it is possible to achieve the desired effects in the form of business rationalization and meeting the needs of citizens.

Tabela 5. Is there a developed system for monitoring the satisfaction of service users in your local self-government (percentage of realized proposals / complaints of citizens)

		Frequency	Percent	Cumulative Percent
	Yes	28	52.8	54.9
	No	13	24.5	80.4
Valid	Planned to introduce	10	18.9	100.0
valiu	Total	51	96.2	
	Missing System	2	3.8	
	Total	53	100.0	

Source: Author's research

In order to analyze and improve the efficiency and accountability of local authorities, it is necessary to continuously monitor the satisfaction of citizens with local services. In this regard, the table above shows the results on the development of a system for monitoring the satisfaction of service users. The results show that in 54.9% of municipalities there is a developed system for monitoring the satisfaction of service users (percentage of realized proposals / complaints of citizens) while in 45.1% of local governments it is not developed.

Using Spearman's correlation coefficient, the correlations between the statements related to the auxiliary hypotheses H1 and H2 were calculated. The research results show that there is a strong correlation (rs = 0.723, sig. = 0.000) between the claim of continuous education and training contribute to increasing the competencies of managers and employees in LGUs as an independent variable (A8), and claims of improving internal processes in LGUs related to managers' competencies. all employees as dependent variables (B1).

Table 6. Analysis of the interdependence of education, competencies of managers and employees with by improving internal processes

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	.707	.087	6.925	.000
Ordinal by Ordinal	Spearman Correlation	.723	.088	7.241	.000

Source: Author's research

To assess the development of the perspective of internal processes in local self-government units, average values and Spearman's correlation coefficient between questions from questionnaires B1-B7 were calculated. Questions for the analysis of the development of perspectives of the BSC model in the paper are defined in accordance with the objectives of the research and the set hypotheses.

Table 7. Development of the perspective of internal processes in the LGUs on the observed sample

	Development of perspective	N	Mean Rank	Sum of Ranks
Improving internal processes in local self-government units is related to	1.00	37	22.73	841.00
the competencies of managers and all employees	2.00	14	34.64	485.00

Source: Author's research

Table 8. The results of the correlation between the development of the perspective of internal processes and the perspective of citizens

B5-C1		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	.760	.069	8.109	.000
Ordinal by Ordinal	Spearman Correlation	.736	.070	7.532	.000
N of Valid Cases		50			

Source: Author's research

The third auxiliary hypothesis (H3) assumed that the improvement of internal processes implies the quality of delivered services. In order to determine the impact of under development and development of internal processes on the quality of local services, is gaining knowledge of whether there is a quantitative agreement of variations between the observed variables and, if so, the degree of such agreement, a correlation analysis was performed. The analysis of the correlation between the development of the perspective of internal processes and the perspective of citizens measured through the quality of delivered services and their participation in decision-making, found that there is a positive relationship between variables, which is statistically significant at a significance level of 5% (rs = 0.736, sig . = 0.000). This finding indicates a causal link between the development of the perspective of internal processes and the perspective of citizens (Table 9).

Using the Mann-Whitney test, we tested the auxiliary hypothesis H3 based on the factors of local self-government development and the perspective of citizens (perspective of the BSC model) and came to the conclusion that the null hypothesis was rejected (sig. = .001).

Table 9: Effectiveness of municipal management in the perspective of citizens in relation to development / underdevelopment in the perspective of internal processes

	Development of the perspective of internal processes	N	Mean Rank	Sum of Ranks
The quality of internal	Undeveloped	33	52.84	1743.42
processes implies better	Developed	19	101.78	1933.82
service delivery	Total	52		

Α	The quality of internal processes implies better service delivery
Mann-Whitney U	904.500
Wilcoxon W	1743.420
Z	-1.583
Asymp. Sig. (2-tailed)	.013

a. Grouping Variable: Perspective of internal processes

Source: Author's research

Namely, there is a significant difference for the answers to the question / claim that the quality of internal processes causes better service delivery, based on the above criteria for the development of the BSC management concept (Z = -1.583, sig. <0.05). More developed local governments have a higher degree of agreement than underdeveloped ones, and the effectiveness of municipal leadership measured through the perspective of citizens is statistically significantly higher. The average mean value of the response to this statement in developed LGUs is 4.75, while in underdeveloped 3.44.

CONCLUSION

Modern business, both private and public, brings new demands and challenges to public administration organizations, as well as local self-government, which are not always easy to achieve. In such a time, the application of modern management concepts, ie the New Public Management, has a key role in the efficiency and effectiveness of the operations of public administration organizations. In transition countries, and especially those that are candidates for accession to the European Union, such as Bosnia and Herzegovina, the most demanding criterion is public administration reform. These reforms include improving organizational and functional efficiency and effectiveness, reorganization of public administration from the state level to local self-government.

Local governments are under pressure from numerous, often conflicting needs, requirements and interests that determine their actions, so this research applied an innovative model for measuring the effectiveness of local government that includes a wide range of organizational goals. Measuring the effectiveness of top management

(municipal leadership) in the context of improving public services, was analyzed using the Balanced scorecard model.

In the last three decades, the Balanced Scorecard has achieved great success and has been used in both the private and public sector in terms of measuring the effectiveness of top management and improvement of service delivery. Translating vision and strategy into a set of goals using the Balanced scorecard model forces top management to create clear, measurable and achievable goals. Precisely in this there is an additional reason for the application of the new proposed BSC model in the research of the impact of the development of the BSC model on the improvement of public services of local self-government. It follows that the top management of local self-government as a social and economic system must continuously monitor and reconcile different interests in order to fulfill the mission and achieve business efficiency.

In Bosnia and Herzegovina, today municipalities are in the process of transition, ie at a turning point from a bureaucratic to user approach where the primary goal must be to implement the reform process, reorganize local government and more efficiently measure the effectiveness of municipal leadership and all employees to meet the needs of its users.

The results show that the improvement of internal processes in local self-government units is related to the competencies of managers and all employees, as stated in the second auxiliary hypothesis. The correlation between these variables is very strong, which suggests that through learning and training of employees can significantly significantly improve the improvement of internal processes of local government. The research found that local governments, in which the municipal leadership dedicates its activities to creating new ideas and redefining business strategy, have a strong positive correlation and greater effects on the improvement of internal processes. Also, local governments in which the municipal leadership dedicates its activities to monitoring the operational activities of the organization have a medium-strong connection with the improvement of internal processes. We can conclude that the effectiveness of municipal leadership in the perspective of internal processes is statistically significantly higher when it comes to local governments that have a developed perspective of learning and growth compared to those local governments that have an underdeveloped perspective of learning and growth.

The effectiveness of municipal management (LGU) in the perspective of citizens (customer relations) is statistically significantly higher when it comes to local governments that have a developed perspective of internal processes compared to those local governments that have an underdeveloped perspective of internal processes. When it comes to the size of local self-government, the effectiveness of municipal management is most pronounced in local self-government units that have over 100 employees. In general, looking at all the results according to the perspectives of the BSC model, the perspective of citizens is the least developed, which was emphasized in the Report of the European Commission for the last year and in the report of the World Bank (Doing Bussines).

There are differences between local governments with developed and underdeveloped BSC management concept. These differences indicate that the development of perspectives of the BSC concept is a significant predictor of the effectiveness of municipal leadership in terms of implementing the strategy and the effectiveness of local

government operations. More developed local governments, ie those with developed perspectives of learning and growth, internal processes and relations with citizens, have a higher degree of strategy implementation, so the effectiveness of municipal leadership, measured through the perspective of strategic integral action of BSC concept, is statistically significantly higher. Local governments with less than 50 employees have the lowest level of strategy implementation and effectiveness where one of the main reasons is the lack of financial resources and the existing distribution of revenues from indirect taxes. The results of the statistical analysis showed that the proposed measure of the degree of development of the BSC model determines the level of effectiveness of municipal management (top management), ie the effectiveness of local self-government makes sense. Thus, a higher degree of development of the BSC management model implies a higher degree of effectiveness of local self-government, ie better provision of public services, which confirms the third hypothesis.

When considering the overall results of the research, it should be borne in mind that the effectiveness of top management, ie local self-government, is influenced by numerous factors and that the application of modern management concepts in local self-government in Bosnia and Herzegovina (New Public Management) is still insufficiently researched. Based on the obtained research results and conclusions, the position was confirmed that the application of these concepts depends on improving the effectiveness of local governments in performing all processes in terms of learning and growth perspectives, innovation, internal processes, relations with citizens, strategy implementation, financial operations and local economic development.

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