

The Balanced Scorecard Method as Background for e-Government in Regional Government

Robertina Zdjelar

Koprivnica-Krizevci County

Nemčićeva 5, 48000 Koprivnica, Croatia

robertina.zdjelar@kckzz.hr

Abstract. *E-Government means a technological and organizational development of public government [19][20]. Some of e-services from e-Government strategy have been implemented in The Republic of Croatia since now, but not at all levels of governance.*

According to incidence of counties, as a specific level of public governance, there are services which can be digitalised. The assumptions for implementation this possibility of digitalised service usage are analyzing of business processes, reorganize them if it is necessary, measure the efficiency of strategic goals fulfilment. When the model of business process is accepted in practice it is the right moment for implementing e-Government in counties.

Number of concepts for improvement performances of business system which could be implemented to all instances of public sector have been increased in last decade in Croatia, so it is also possible to implement Balanced Scorecard Method (BSC) in public government in Croatia, even if it doesn't greatly happen yet.

BSC method is almost for twenty years known method. It didn't implemented so much as other paradigms of measuring quality of business systems did, for example ISO 9001 [21][22][24][25][26]. In this article I will try to present some reasons for that.

Keywords. BSC, county, management in regional government, e-Government

1 Introduction

E-Government is a top subject in the publicity in Croatia. It's presented as a need, as a concept and areas of social life in which it could be used [12] [19]. So in 2009. the Government Strategy was defined, accepted and published [20].

The main goal mentioned in Strategy is defining the frame and goals of current and new activities of e-Government, with an accent on citizens satisfaction, rationalisation of administrative procedures, preparation and giving modern electronically services which could provide better quality of life and give a kind of friendly approach of the state government in contact with citizens. Conditions for orientation toward citizens and for Croatian e-Government will be satisfied with successful implementation of Strategy [19] [20]. Implementation of BSC gives to us the answer to the question whether the Strategy successfully is implemented.

Concepts and technological model are developed for the implementation of e-Government. We could read information on Croatian Government portal about the effects which are fulfilled and which should be achieved with implementation of e-Government services. Public services which are implemented in practice really help in everyday life, the progress is obvious if we compare situation before seven or five years with situation today.

All these services are implemented at the top level of state governance. Some other levels of public governance such counties, cities and municipals are not directly involves in process of implementation of e-Government services. They are just users of e-Government like citizens.

As I said before in this article there are a lot of actions which have to be done as preconditions before implementation of counties e-services for citizens. The implementation of e-service is one of counties development strategy goals.

During last sixteen years of work experience in regional government in everyday job I can see that there is necessity for implementation a kind of method for measuring business efficiency. One practical reason for that is possibility to collect objective indicators of business efficiency, measuring them and analyzing the results. Another reason is law which regulates the obligation of measuring efficiency of public financial investments in different areas of business and social life.

Possibility for implementation of any kind of measuring efficiency in regional government comes from environment (theory, conferences, foreign country governance experience and business), but it still isn't accepted in practice. A lot of activities have been done for implementing strategic planning of development, making business and managing to regional government in the period of the last ten years. That context of business systems observations in generally and also in business system of county, obligatory requests development system for monitoring realisation of business goals (strategic and operational) and also measuring the impacts which are fulfilled.

Application of strategic planning and strategic management [3] in business is implicit today, but there is a question about staff ability to understand and implement these concepts in practice.

As I mentioned, the law in Croatia implements a different systems of efficiency control (finance control, fiscal responsibility, program oriented budget planning), but neither of these systems don't have wideness as BSC method.

Authors Dobrović, Tomičić, Vrčec [18] wrote about assumptions which have to be fulfilled for successful implementation of BSC method into business system. They also mention key facts from American practice where the strategic planning and measuring the efficiency are obligation that is regulated by law for all public agencies and ministries. It is just recommended in Croatia by Ministry of Finance.

Founders of BSC method Norton i Kaplan have written many books about it [5] [6]. Many other authors [7] [10] [11] [12] [13] have written about this topic also, so in this article I will describe the BSC method generally and I will concentrate on actual situation in public management and its ability for implementing BSC in Croatian regional government practice as a background for implementing e-Government.

In this article term "county" means a business system, not a geographical territory.

2 BSC method in regional government

Authors Mauher and Obersnel [15] wrote interesting article about BSC method in local government, precisely in the City of Rijeka. The main question is how to measure efficiency of business activities for fulfilment of strategic goals of business system by using modern ICT and by using e-Government services.

Bolivar, et. al. wrote about experience of implementing the balanced scorecard in public sector agencies [17].

BSC consists of four perspectives for observing the business system – finance, relationship with customers in profit organizations and citizens in non-profit and public organizations, and also in regional government, internal process, and as fourth learn, growth and development.

There are relationships between BSC perspectives for system observation.

Budget is a counties instrument of finance possibilities and all counties activities are oriented to welfare of citizens.

Satisfaction of citizens or precisely all tax payers must be the base for any activity.

Internal processes have influence on spending money and satisfying citizen needs. If we want to improve the quality of performing internal process it is necessary to educate the lead officers and to motivate them for applying new knowledge in their everyday job.

Learning, growth and development have influence on efficiently and faster running internal processes, which have to be improved so it will be possible to serve citizens and their requests promptly.

Išoraitė wrote about BSC method and she compared the Scorecard for Government and For-profit organizations [27]. The author also described in details distinction between appliance of BSC in for-profit and non-profit organizations. In accordance with that in this article I will present an example of BSC strategy map in Koprivnica Krizevci County based on main strategy document of County [28].

2.1 Finance

The finance perspective has different meaning in profit organizations than in non-profit and public organizations, and also in regional government [27].

Finance perspective is a limitation factor if we talk about spending money. Regional government has to spend public money rationally in relation with planned annual budget and two years projections. The preparation of annual financial plans is a process of making decisions which programs, capital and other projects and activities have to be done, why and which parameters would be measured for prove the efficiency of investments.

If we talk about earning public money with taxes and other incomes, there is a goal to increase it like in profit organization. There is no difference in general.

If we want to measure efficiency of regional government it is necessary to start with counties strategic business plan. The mission, vision of county and goals of different business and social areas are set in this document, so we have fulfilled the first condition for implementing BSC.

All counties management levels have responsibility for efficient fulfilment of counties basic functions. Success of fulfilment is measured by satisfaction of general and special public needs.

The private sector, measures its efficiency by profit, and public sector measures its efficiency by satisfaction of citizen needs and with volume and quality of services in relation to available resources (financial, human resource, technical).

Main tool for financing public needs is a Budget.

County creates its Annual Budget in accordance with policy defined by Strategy of regional development. These politics include goals for assurance of public needs (education, health, social policy, support business, small and medium entrepreneurship). Budget is public document with plan of incomes and receipts and opposite expenditures, and they are the framework of annual public activities.

Furthermore, Budget is finance, business, political, law and social oriented document. Financial aspect of Budget means that it is review of incomes and expenditures. Law aspect of Budget describes the relationship between subjects involved in process of preparation. Political aspect of Budget is based on fact that it is utility for implementation of political goals. Social aspect of Budget is the tool for balancing of investments to different social activities (culture, association of citizens, libraries).

Participants of Budget planning and preparation process are: regional governing bodies, county prefect, and public service institutions (hospitals and other health institutions, social care institutions, schools and other). The control of execution and spending public money does the County assembly and publicity.

In accordance with actual law Budget is planned by economic, organisational, functional, program classification and by source of money.

Program classification is the most important in context of this article because it contains the request for measuring the effect of planned programs, projects and actions. This is the first formal step and law request for measuring parameters in practice of county and other local government units.

2.2 Relationship with citizens and enterprises

Reform of regional government has consequence for implementation of effective and efficient regional and local governance. It means that the main goal of this reform is to establish government which could satisfy public and citizens needs in quality manner, in time, and within available budget.

This perspective is the most important for observing if we talk about implementation of e-Government. As I mentioned before in this article the implementation of e-Government puts communication between governance and citizens to higher level.

2.3 Internal process

Internal business process is also very important in context of e-Government. Internal processes are the subject of numerous methods like Total Quality Management – TQM or for example Business Process Reengineering – BPR. BPR is often referenced in articles about e-Government [14] [18].

These methods are used for analyzing, changing and improving of business processes. The way of executing of business processes has impact on efficiency of business, so the BSC method uses them as one of four perspective for measuring the organisational efficiency. The main idea is measuring the impact of internal business processes to improve business results. In the context of e-Government it means that regional government does the job promptly.

2.4 Learning, growth and development

Previous consideration of internal business process is directly connected with learning, growth and development perspective of counties business system.

Learning has influence to perform business process at all levels (strategic, tactical and operational). For example, on operational level county officers have learned computer skills. About fifty officers, after the course and passing seven ECDL certification exams, use computer in every day job and they are capable to manage all IT tasks by themselves. This course has been organised in 2008. After that it was easier to explain them any necessity of change in information system, applications and communication systems. They have learned to do reports by using computer promptly and they have been capable to ask and define better their requests. The communication between IT staff and all other officers was better. So they are ready to use available e-Government services as users like citizens.

County has accepted the document Strategy of human resource development, but this document doesn't contain education and specialisation of county officers than it consists of strategic goals for improving staff capacities on county as a geographic territory. This approach to learning and improving staff skills wouldn't be good in long time period. County staff has to improve its skills (computer, foreign languages, quality control methods, methods for measuring the efficiency of business, etc.) like it does staff in business in private sector, there are no differences.

Staff is important element of performing business process so it has to be motivated to do job in accordance with schedule, and to do it promptly, to be creative and innovative. Computer can't solve problem and replace the role of staff in context of solving problem which are caused by undefined business process. A possible kind of motivation is to give possibility for education and for the practice of

new skills. This is potential which can drive the business system forward.

3 What can be improved by BSC

BSC method gives the possibility to:

- improve conscience about practical opportunities which give us strategic management [1][2][7] and project management [8] (plan, do, check, act);

- implement value system for measuring parameters which are relevant for business efficiency. An interesting, simple and very practical thought was given by P. Drucker, he said: "Everyone need to learn to ask two questions: What information do I need to do my job – from whom, when, how? and: What information do I owe others so they can do their job, in what form, and when?" [4]. If there is any officer who doesn't know the answers on these questions, he generates problems like double evidence of data and this automatically causes double expanses, inconsistency and redundancy in system, and after all causes confusion between business processes. System like this can't function good even if it has implemented the best ICT and software system. So where is the problem – the problem is in organization and management. Why? Management never has enough time to analyse business processes, and nobody asks them to do this. If we want to implement e-Government to all levels of public government, it is necessary to solve this problem. One of the possible ways out is to make decision for implementation of Business Process Reengineering (BPR) [9] and after that BSC

- establishes continuity of control and monitoring critical factor success and prompt action when they are out of tolerance;

- establishes and develops system of education and improve professional skills based on experience, scores and achievements, so continuous and systematic evidence create information base for education and improvement in the system

- own business system compare with similar business systems and examples of good practice, so it could be possible to exchange experience and avoid any unwanted effects and enhance positive effects of measuring efficiency.

4 Assumptions for BSC implementation in regional government in Croatia

Almost two decades are passed since BSC method was recognised in profit organisation in the world. Its authors Norton and Kaplan [5] [6] continually speak and organize camps all over the world to talk about experience of using BSC method.

BSC is special method for measuring business efficiency which observes not only the financial than another tree perspective for measuring business efficiency. This property differentiate BSC from other methods like classical financial method of measuring efficiency. Take care only about finance parameters as parameters of efficiency is old approach to analyse business, but it is still in use in regional government. This is also an important factor that warns for necessity of educating county staff. I am trying to find out the reasons for this situation. What was done wrong or didn't done at all in last decade? Why BSC wasn't accepted and used more in regional governments practice? Some possible reasons are recognised, for example:

- law basis is only guideline which is accepted and implemented in regional government; in this way was implemented Risk management (RM) in regional government but mostly in financial aspect; this subject is regulated by Act of system of internal financial controls in public sector («Official Gazette» number 141/06) and Regulation act about implementation of finance management and control in public sector («Official Gazette» number 130/11), but it is obvious that in the other hand some paradigm of quality assurance like ISO 9001 standard [21] [22] [24] [25] [26], are implemented even they are not obligated by law.

- strategic goals and strategic documents as preconditions for BSC – the question is how and who prepares that – does managers of county have clear parameters on the desk and who has prepared possible strategy options and facts which prove that the right strategy was chosen, so that could be possible to measure the effect of chosen option

- one of the most important precondition during process of defining strategy is that leaders have experience and are capable to think as manager in process of translating strategy into action [5]. The situation in our regional government could be a potential topic of research and it will be useful to find out the answers to the following questions:

- does every lead officer in regional government have basic knowledge about management tools, methods and technics [8], which is sufficient for understanding why the BSC is useful?

- does every lead officer know the most important critical factors of success for the area she or he coordinates and manages (measure, start value, target value and action how can he get from start to target value)? – This is one of the preconditions for implementing any type of software and any other e-Government digitalized services. [10]

- how much do the lead officers take care about realisation of strategic goals in frames of budget and defined time schedule?

- do lead officers organize the coordination meetings with their staff or in some other way organise the operational activities for reaching strategic goals?

It depends on research results if it would be taken adequate actions. If the results of research will be negative, the possible solution of problem is the education of lead officers, implementation of control and monitoring of organization, and after that to implement BSC method.

Even the writing project for EU contribution is special topic, it could be said that a small number of written and proposed projects are also a consequence of problems mentioned before. The way we can solve this problem is the same as I mentioned before – education and improvement of skills of lead officers.

5 The example of BSC strategic map in the Koprivnica Krizevci County

In this article will be presented an example of BSC strategic map in Koprivnica Krizevci County in accordance with County development strategy 2011.-2013 [28].

The SWOT analysis of County was made and accepted in 2011. Through analyse strengths, weaknesses, opportunities and treats were determined. There are four strategic objectives determined, as it is visible on Fig. 1.

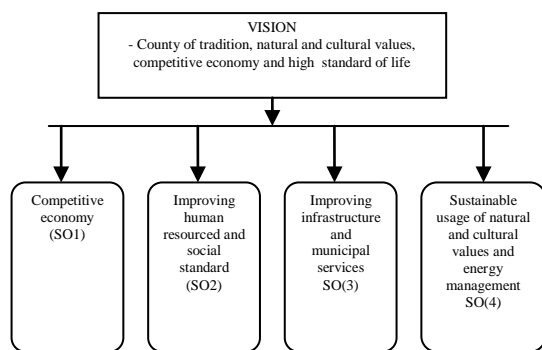


Figure 1. Counties vision and strategic objectives

Each of strategic objectives are divided into priorities and appropriate measures. For example for strategic objective SO1 Competitive economy priorities are:

- P1 modernisation and development of production industry
- P2 support to development competitive agricultural production and improvement of rural development
- P3 support for development to small and medium entrepreneurship (SME)
- P4 ICT in business and society
- P5 Acceptance of standards and norms
- P6 Development of tourism including rural tourism

Priorities will be achieved by measures, so P4 includes 1-4-1 Development of e-regional and local government and 1-4-2 Improving usage of IT in communication and business.

These two measures are defined in details as follows:

1-4-1 Development of e-regional and local government [28]:

Purpose of measure is to digitalize all services of regional and local government. **Objective of measure** is to establish and connect government systems which can provide an Internet services to citizens and other users of government services. **Content of measure** is customize procedures for digitalizing business process, continual supply of ICT equipment for regional and local government departments, staff education and ECDL certification, networking and publishing content and services of government. **Expected result** is minimizing administrative barrier in usage of e-regional and local government services, minimizing number of administrative procedures and duration of them. **The effects** are qualified staff and users of e-Government services, successful application of ICT technology, increased number and level of e-services. **Leader** is County and cities and municipalities. **Users** are counties/cities/municipalities staff, citizens of county and enterprises. **Indicator** is number of implemented e-services. **Financial budget** is about 5.000.000,00 kunas, 50% county, cities and municipalities, and 50% other sources.

Period 2011. till 2013.

1-4-2 Improving usage of IT in communication and business

Purpose of measure is development of qualitative ICT infrastructure. **Objective of measure** is to improve efficiency, concurrency, marketing, customization of economy by incentives and intensive usage of ICT in business and communication. **Content of measure** is development of information, education and training, specially for SME, application of consulting services in supply of equipment and usage of ICT. **Expected result** digitalized document management system and business process in general. **The effects** are successful application of ICT in business process as a tool for acceleration of development. **Leader** PORA development agency, HGK, HOC **Users** SME. **Indicator** increased number of entrepreneurs which use ICT by 30%. **Financial budget** is about 1.500.000,00 kunas, 50% state budget and 50% other sources. **Period** 2011. till 2013.

The example of BSC strategy map is presented on Fig. 2. Table 1., 2., 3., 4. presents strategic lines and performance indicators by BSC perspectives.

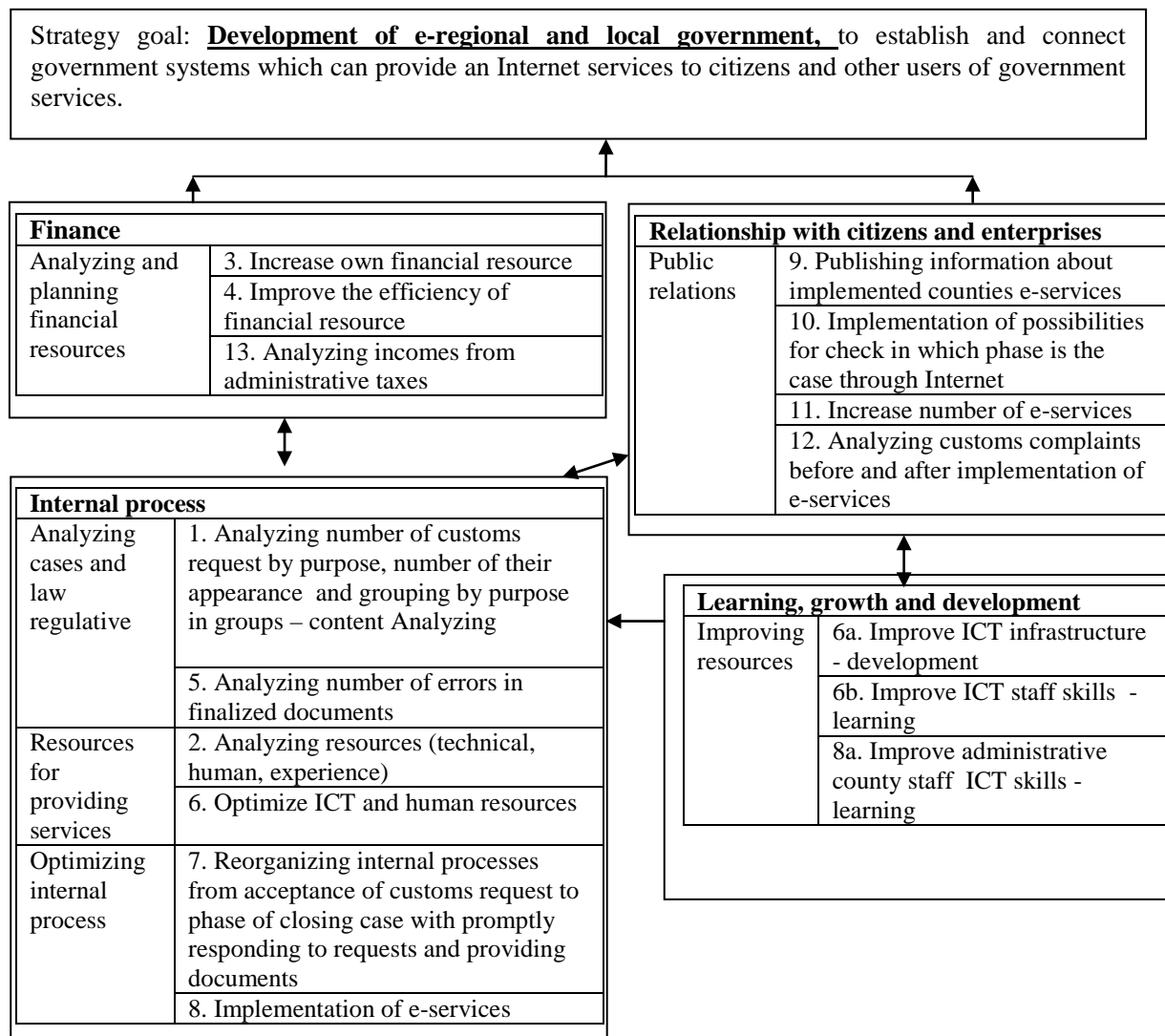


Figure 2.: BSC strategic map for planning, implementing and monitoring of e-service of Department of physical planning, construction and environment protection (building permit; location permit; permit for legalization of illegal objects; situation report).

Table 1. Strategic lines and performance indicator for performance Finance

Strategic objective	Measure (Action)	Performance driver	Performance indicator
Analyzing and planning financial resources	Increase own financial resource	Financial independence	<ul style="list-style-type: none"> current incomes in Kunas available budget for project in Kunas
	Improve the efficiency of financial resource	- Well done procedure of ICT equipment procurement based on detailed specification of procurement object - Well done education of ICT and administrative staff	<ul style="list-style-type: none"> number of satisfied specified request of quality of procurement object and amount of procurement in Kunas
	Analyzing incomes from administrative taxes	Analyze Taxes paid to State Budget and to County Budget	<ul style="list-style-type: none"> incomes in Kunas

Table 2. Strategic lines and performance indicator for performance Relationship with citizens and enterprises

Strategic objective	Measure (Action)	Performance driver	Performance indicator
Public relations	Publishing information about implemented counties e-services	Informing citizens of Koprivnica Krizevci County about new e-services	<ul style="list-style-type: none"> • Number of publication • Number of radio and TV news casting in local electronic media
	Implementation of possibilities for check in which phase is the case through Internet	Informing citizens of Koprivnica Krizevci County about new possibilities	
	Increase number of e-services	Analyze of possibly to implement new e-services	<ul style="list-style-type: none"> • Number of services • Number of e-services
	Analyzing customs complaints before and after implementation of e-services	Quality control – number and types of complaints	<ul style="list-style-type: none"> • Number of complaints before implementation of e-services/100 services • Number of complaints after implementation of e-services/100 services • Number of reasons for complaints

Table 3. Strategic lines and performance indicator for performance Internal process

Strategic objective	Measure (Action)	Performance driver	Performance indicator
Analyzing cases and law regulative	Analyzing number of customs request by purpose, number of their appearance and grouping by purpose in groups – content analyzing	Continuity of analyzing requests	<ul style="list-style-type: none"> • Total number of requests in last 3 years annually • Number of types of requests • Groups of requests and number of required templates
	Analyzing number of errors in finalized documents	Continuity of Quality control	<ul style="list-style-type: none"> • Number of errors in finalized documents/ Total number of documents
Resources for providing services	Analyzing resources (technical, human, experience)	Analyzing resources	<ul style="list-style-type: none"> • Number of available ICT resources • Capacities of ICT resources in accordance with possible number of request annually • Number of administrative and ICT staff
	Optimize ICT and human resources	Optimization of resources, determining of human resource and specification of ICT resources	<ul style="list-style-type: none"> • Detailed specification of necessary resources that have to be obtained and installed • Number of administrative staff in accordance with optimized business processes
Optimizing internal processes	Reorganizing internal processes from acceptance of customs request to phase of closing case with promptly responding to requests and providing documents	Reducing unnecessary steps in procedures of solving cases and measuring the time from request to closing the case	<ul style="list-style-type: none"> • Number of steps in procedures of solving cases • Number of days from request to closing the case
	Implementation of e-services	Putting e-services in use	<ul style="list-style-type: none"> • Number of days for implementation • Evidence of unplanned situations

Table 4. Strategic lines and performance indicator for performance Learning, growth and development

Strategic objective	Measure (Action)	Performance driver	Performance indicator
Improving resources	Improve ICT infrastructure – development	Investment in ICT equipment and software; procurement procedure	<ul style="list-style-type: none"> • Number of necessary equipment • Hours out of services • Guarantee period • Amount of procurement
	Improve ICT staff skills - learning	Continuity of investment in ICT staff skills	<ul style="list-style-type: none"> • Number of educated and certificated ICT personal • Number of ICT specialists for development and maintenance of the system
	Improve administrative county staff ICT skills – learning	Continuity of investment in administrative county staff ICT skills	<ul style="list-style-type: none"> • Number of educated and certificated administrative county staff

There are many possibilities for implementing e-Government services for example annual vehicle tax which can technically be implemented as e-bill but the law regulative is not justified for that. There is also the possibility of e-banking payment of administrative taxes, but there is no solution for e-stamp duty, so the citizens have to come and pay it in the County. Another problem is citizens sign of request document. It is technically possible to sign request by e-signature which is provided by Financial Agency (FINA), but this service isn't accepted by citizens, jet.

As we can see from example the emphasize is on citizens satisfaction, not on income. The main goal is to provide e-service to citizens in short time, without errors, unnecessary steps in procedures and without citizen complaints.

Implementing BSC strategy map with all actions included and monitoring all defined indicators has to be coordinated by lead officers.

If the local government can do e-Government services in that way it will be example of flexible, efficient and effective regional and local government which fulfil its strategy goals.

6 Conclusion

A lot of articles told about measuring efficiency and effectiveness of business system in theory, but only few of them talk about real experience.

Most of articles are concentrated on business profit systems, but there is a lot of interest to talk about measuring efficiency in public, non profit organizations, governance body on different levels. For these categories of business system which are not strictly profit oriented, even they take care of their incomes, for long time there was opinion that it isn't possible to measure efficiency. Kaplan and Norton and others set theory that non profit organization can measure efficiency on the same

way as profit, but they must look at citizens satisfaction and look at budget as constrain factor.

This article is dedicated to problems of not recognizing the BSC in practice of regional government.

BSC is possible to use in context to improve the performance of business system, for implementing advanced management system, as a basis for implementation of e-Government services and for measuring effects of using it in regional government. [16][19].

The assumptions for development of modern business system in regional government are:

- relationship with citizens and business partners by using regional e-Government portal
- connectivity of business functions or implementing project oriented organization as model of business technology because of better resource managing
- implementation of innovation in business system
- human resources are not expense; they are source and potential for implementation of innovations
- replacing traditional only financial oriented model of measuring business efficiency and implementing BSC as newer model for measuring efficiency,
- raise cognition of modern management concept and implementation of it in regional government through continuous education and workshops.

It is also necessary to accept a law obligation for measuring the business efficiency at all levels of public government. Until these days, it is implemented act which regulates fiscal responsibility, control and management in public government.

BSC could give a broader and more complete view of business efficiency in public government and about spending of public money. This is main scope on which is concentrated implementation of strategic documents like Strategy of regional

development of the County. There are some software tools [23] on market which are created for e-municipal, e-city, e-county but they are not based on logic of BSC method.

As it was told in this article the first step forward has to be education and informing of lead officers about available possibilities of developing modern business system in regional government, and after that it will be possible to set precise (clearly) requests for implementing regional e-Government services system.

Without motivated, educated and informed lead officers and well organized business system there is no mainstay for regional e-Government system.

References

- [1] Bryson J.M.: Strategic Planning for Public and Non profit Organizations, Revised edition, Jossey-Bass Publishers, San Francisco, USA 1995.
- [2] Bruce, A., Langdon, K.: Strategic thinking, Dorling Kindersley Publishing, Inc, New York, USA, 2000.
- [3] Buble, M.: Poslovno vođenje, M.E.P, Zagreb, Croatia, 2011.
- [4] Drucker, F.P.: Managing the Non-Profit Organization, HarperCollins Publisher, New York, USA, 1992.
- [5] Kaplan, R.S., Norton D.P.: Translating strategy into action The Balanced Scorecard, Harvard College, USA, 1996.
- [6] Kaplan, R.S., Norton, D.P.: The strategy focused organization – How Balanced Scorecard companies thrive in the new business environment, Harvard Business School Press, Boston, Massachusetts, USA, 2001.
- [7] Olve N-G., Roy J., Wetter, M.: A practical guide to using the Balanced Scorecard, Wiley & Sons, Chichester, West Sussex, England, 2001.
- [8] PMI: A Guide To The Project Management Body of Knowledge, PA,USA, 1996.
- [9] Vukšić Bosilj, V., Kovačić, A.: Upravljanje poslovnim procesima, Sinergija-nakladništvo d.o.o., Zagreb, Croatia, 2004.
- [10] Huang, H-C.: Designing a knowledge-based system for strategic planning: A balanced scorecard perspective, Expert, Systems with Applications 36: 209–218, available on www.sciencedirect.com, 2009
- [11] Jovanović, J.: Management of the organization based on Balanced Scorecard, International Journal for Quality research Vol.5, No. 4, 2011,
- [12] Kliček, B., Plantak Vukovac, D.: Information Society and eGovernment Developments in Croatia, Informatica 31 (2007) 367-372, 2007.
- [13] Lončarević, M. The Balanced Scorecard as a tool for organizational success of Croatian enterprises, Ekonomski pregled, Vol.57 No.1-2 February 2006.
- [14] Weerakkody, V., Janssen, M., Dwivedi, Y. K.: Transformational change and business process reengineering (BPR): Lessons from the British and Dutch public sector, Government Information Quarterly 28: 320–328, 2011
- [15] Mauher, M.; Obersnel, V.: Intelligent City Balanced Scorecards for the City of Rijeka, Mipro 2007: 15-23, Opatija, Croatia, 2007.
- [16] Rudzkiene, V., Martinaityte, E.: E.Government Project Implementation Efficiency Measurement Methodological Issues, 6th International Scientific Conference BUSINESS AND MANAGEMENT 2010 Selected papers, 956-964 Vilnius, Lithuania, 2010.
- [17] Bolivar, R., et. al.: Implementing the balanced scorecard in public sector agencies: An experience in municipal sport services, Academia, Revista Latinoamericana de Administración, 45, 2010, 116-139, <http://revistaacademia.uniandes.edu.co/index.php/Cladea/article/viewFile/375/438>, downloaded: June, 1st 2012.
- [18] Dobrovič, Ž., Tomičić, M., Vrček, N. Towards an effective e-Government: Implementation of a Balanced Scorecard in the public sector, http://www.egov.lt/uploads/file/Dobrovic_Tomimic_Vrcek.pdf, downloaded: March 18th 2012
- [19] Government of the Republic of Croatia: <http://www.e-hrvatska.hr/>, downloaded: April 12th 2012.
- [20] Government of the Republic of Croatia: Strategija razvoja elektroničke uprave u Republici Hrvatskoj za razdoblje od 2009. do 2012. godine, <http://www.e-hrvatska.hr/hr/Dokumenti/e-Uprava/Strategija->

- [razvoja-elektronicke-uprave-u-Republici-Hrvatskoj-za-razdoblje-od-2009.-do-2012.-godine#document-preview](#), downloaded: March, 11th 2012.
- [21] ISO 9001: 2008 Dubrovačko-neretvanska županija
http://www.edubrovnik.org/CRS_certifikat.php, downloaded: April, 11th 2012.
- [22] ISO 9001: 2008 Istarska županija
<http://www.istra-istria.hr/index.php?id=243>
downloaded: April, 11th 2012.
- [23] MICRO project d.o.o.
http://www.microgrupa.com/e_rjesenja.html,
downloaded: April, 11th 2012.
- [24] ISO 9001:2008 Osiječko-baranjska županija
<http://www.obz.hr/hr/index.php?tekst=973>
downloaded: April, 11th 2012.
- [25] ISO 9001:2008 Varaždinska županija
<http://www.varazdinska-zupanija.hr/index.php/novosti/iz-zupanije/2676-potvren-sustav-za-upravljanje-kvalitetom-u-varadinskoj-upaniji.html>,
- [26] ISO 9001:2008 Zagrebačka županija
<http://www.zagrebacka-zupanija.hr/iso>,
downloaded: April, 11th 2012.
- [27] Išoraité, M.: The Balanced Scorecard method: From theory to practice, Intellectual economics, No. 1(3), p.18 – 28., 2008.,
<http://www3.mruni.eu/~int.economics/3nr/Isoraite.pdf> downloaded: June, 2nd 2012.
- [28] Koprivnica Križevci County: County development strategy 2011.-2013., Koprivnica, 2011., www.kckzz.hr, downloaded: April 12th 2012.