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ANALYSIS AND IMPROVEMENT OF BUSINESS GOALS OF THE ROAD-TRAFFIC ORGANIZATION USING BALANCED SCORECARD (ON PRACTICAL EXAMPLE)

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SUMMARY

The Balanced Scorecard method retains measures of economical and management performance and supplements these measures with internal and external factors that drive future performances. An organization's balanced scorecard can be established according to its mission, vision, and strategy. The balanced scorecard includes a series of targets and measurements and instructs members about the causeand-effect relationship in the organization's strategy. In this paper authors have shown the use of BSC in road-traffic organization's goals and how these goals and organizations perspectives can be improved.

KEY WORDS: business goals, BSC approach, road-traffic organization's

ANALIZA I UNAPREĐENJE POSLOVNIH CILJEVA SAOBRAĆAJNE ORGANIZACIJE POMOĆU BALANSIRANE KARTE USPEHA (NA PRAKTIČNOM PRIMERU)

SAŽETAK

Metoda balansirane karte uspeha uspostavlja mere ekonomskog i upravljačkog učinka i dopunjuje ove mere unutrašnjim i eksternim faktorima koji pokreću buduće performanse. Balansirane karte uspeha organizacije može se uspostaviti u skladu sa njenom misijom, vizijom i strategijom. Balansirane karte uspeha uključuje niz ciljeva i merenja i daje uputstva članovima o uzročno-posledičnoj vezi u strategiji organizacije. U ovom radu autori su pokazali upotrebu BSC u ciljevima organizacije drumskog saobraćaja i kako se ti ciljevi i perspektive organizacije mogu poboljšati.

KLJUČNE REČI: poslovni ciljevi, BSC pristup, organizacije drumskoG saobraćaja

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INTRODUCTION

The BSC measures across four hierarchical perspectives and describes a series of causal relations between four perspectives that culminate in the achievement of financial objective. The lowest level in the hierarchy is the learning and growth perspective because actions taken there. Outcome measures of the learning and growth perspective become indicators of the outcomes of each of the three perspectives above it in the hierarchy. Employees with higher skills and knowledge are compensated with higher salaries and employee benefits. (Milkowich and Newman, 2002.) The employee skills could increase internal business process perspective. (Bryant and others, 2004.) Common outcome measures include employee satisfaction, employee retention, employee productivity and turnover. (Kaplan and Norton, 2004., Niven, 2003., Huckestein and Duboff, 1999.). In order to achieve BSC goals, most profit organisations need to redesign and/or continuously improve key business processes. Considering the limited resources of most companies, a key strategic issue is which processes to focus on first. The focus should be on those processes that are most importantly related to the company's business strategy. Comparisons of future process performance targets with what the company has previously achieved will reveal the degree of improvement that is required. The company should periodically report and analyse performance results, as well as make adjustments to their strategy based on that analysis. The BSC methodology creates an infrastructure in which top management can easily track and analyse their company's performance. This is easier if the company uses a BSC software solution. Most companies update their BSC's on an annual basis. However, as the business environment changes and BSC learning accumulates, companies tend to change some of their performance objectives, measures and targets. A fundamental aspect of the BSC methodology is making such adjustments in a timely manner to ensure the success of strategy execution. The company must take the investment and the decisions of financing on a basis of continuation. To take the wise optimum and the decision, a clear arrangement of the objectives is a need. The objectives are employed in the direction of a criterion of goal or decision for the decision implied in financial management. The economists believe that the maximum benefit of income is the single goal of any organization of businesses, because that will also lead to the optimum allocation of resources. Actions which increase the benefit of companies are undertaken and those which decrease the benefit are avoided. The conceptual framework of the BSC was introduced by Kaplan and Norton (1993., 1996., 2000., 2001., 2004., 2006., 2008.) for the purpose of designating, evaluating and measuring factors that drive an organization's performance. The Balanced Scorecard paradigm retains measures of financial performance and supplements these measures with factors that drive future financial performance. These intangible assets include such things as customer relationships, innovative products and services, high-quality responsive operating processes, skills and knowledge of the workforce, the information technology that supports the workforce, and the organizational climate that encourages innovation, problem-solving, and improvement. For-profit seeking corporations, the financial perspective provides clear long-run objectives. (Kaplan and Norton, 2004) The Financial Perspective covers the financial objectives of an organization and allows managers to track financial success and shareholder value. Profit-seeking organizations attempt to increase shareholder value. The financial perspective might include a maximization of funding from outside sources instead of profit, or

maintenance of fiscal stability. Financial perspective, defines financial strategic objectives and financial performance measures that provide evidence of whether or not the company's financial strategy is yielding increased profitability and decreased costs. The Customer Perspective covers the customer objectives such as customer satisfaction, market share goals as well as product and service attributes. Kaplan and Norton indicate that the core of any business strategy is the customer-value proposition which describes the unique mix of product, price, service, relationship, and image that a company offers. Accordingly, an organization must identify the customers it wishes to attract and the market segment in which it will compete. An organization differentiates its customer-value proposition. It selects from among operational excellence, customer intimacy, and product leadership. The Internal Process Perspective covers internal operational goals and outlines the key processes necessary to deliver the customer objectives. The Learning and Growth Perspective covers the intangible drivers of future success such as human capital, organisational capital and information capital including skills, training, organisational culture, leadership, systems and databases. According to Kaplan and Norton, in utilizing this approach an organization can frequently identify processes at which it must excel to meet its goals. (Kaplan and Norton, 1996., 2004.) The internal process perspective involves determination of internal processes that will best affect customers as well as process improvements that will affect financial objectives. Internal process metrics are then developed, which communicate the level of product quality through the monitoring of in-process metrics, as well as measuring productivity associated with the number of units produced or services provided. (Brown, 1996.) The learning and growth perspective involves determination of employee capabilities and skills, technology, and corporate climate needed to support a strategy. Strategic objectives and metrics of the Learning and Growth perspective help to identify gaps between current employee skill levels, culture, and supporting information systems and discover the optimum level of operation at which these components become high performing internal processes (Niven, 2003.).

BSC METHOD APLIED IN ORGANIZATIONS

About one half of total number of major companies operating in the US, Europe and Asia are using BSC. The widest use of the BSC approach can be found in the US, the UK, Northern Europe and Japan (Kaplan and Norton, 1993., 1996., 2000., 2001., 2004., 2006., 2008.). Only about 35 percent of the 5,000 largest firms used the BSC (Niven, 2003.), which is more than the numbers reported by (Marr, 2005.). Schniederjans and Karuppan (1995) found that about a half of all companies using BSC also use causal maps. No longer do managers have to work their way through piles of statistics, but can focus on monitoring some 15-20 key indicators instead. According to the above given data, it follows that there are numerous papers to be found in literature which describe BSC model application in profit organizations. Companies worldwide continue to adopt the BSC approach because it is indeed one of the few methodologies that is not only sound from a theoretical perspective, but meets the criteria of practitioners – it delivers results. The hard work designing and implementing scorecards is typically repaid in financial performance, customer satisfaction, operational efficiency and employee growth. These rewards correspond directly with the perspectives a company commits itself to in implementing the BSC. Kaplan and

Norton defined the BSC as a multi-dimensional framework for describing, implementing and managing strategy at all levels of an enterprise by linking objectives, initiatives and measures to an organization's strategy. The scorecard provides an enterprise view of an organization's overall performance by integrating financial measures with other key performance indicators around customer perspectives and internal business processes, and around organizational growth, learning and innovation. The BSC is not a static list of measures, but rather a framework for implementing and aligning complex programs of change, and indeed, for managing strategy-focused organizations. Effective enterprise-wide BSC must allow for the participants to effortlessly move from big-picture analyses to organization-level details to facilitate proactive decision-making. Multi-enterprise BSC gains must optimize performance at every level of the enterprise. The enterprise will accomplish better decision making through consistent and visual business performance management. In order to manage the complexities involved - a high-performance, web-enabled software enabler may need to be considered. An organization whose members have core abilities in quality awareness can improve its internal processes to increase administrative efficiency. If an organization's services and education are of good quality and has adequate operational facilities, customer requirements will be satisfied. When an organization's internal and external customers are satisfied with its performance, its profit growth will steady within the financial perspective. An adequate financial structure helps an organization achieve its mission and vision. Furthermore, the four perspectives establish orders as well as the employee suggestions and communication feedback from the vertical kind models. An organization's balanced scorecard can be established according to its mission, vision, and strategy. The balanced scorecard includes a series of targets and measurements and instructs members about the causeand-effect relationship in the organization's strategy. The process develops linkages within the balanced scorecard and on the strategic resource distribution platform. The balanced scorecard guided budget has numerous benefits such as scarce resource allocation, budget and organization linkages, identification of primary strategy strengths, renewed budgeting process, transfer of the organization's target from a department to the whole organization, and development of cooperative relationships within the organization. Once sufficient background information has been collected, the findings can be synthesized and confirmed through a one-on-one interview process with each executive team member. This activity will provide feedback on organizational competence advantage, critical success factors (CSF), core competency, and key performance indicators (KPI). The balanced scorecard is a formal management system that provides a realistic framework that links performance measures with strategy deployment. Further, it is an integrated results-oriented set of performance measure indicators, including financial and non-financial measures, which comprises current performance and drivers of future performance. The balanced scorecard should be a component of a strategic management system that links an organization's mission, core values, and vision with strategies, targets, and initiatives that are explicitly designed to inform and motivate continuous efforts toward improvement. The identification, communication, and evaluation of these performance measure indicators play an important role in strategic planning, translating strategy into action, and evaluating performance. The balanced scorecard must have clear measure indicators and authority units so that it can have complete performance measure indicators to measure the whole system; thus, an organization's internal units or individuals will clearly understand the organization's key positions. Organizational existence and desired target achievement, employee self-enrichment, the coherence of organizational core forces, and targets and performances help an organization achieve its missions and visions. Although, the balanced scorecard framework differs from that of other scholar models, the final targets are the same; mission and vision achievement and sustainable management. Goals for each perspective in this paper, have been created on the basis of the knowledge gained from examining manufacturing firms.

MANAGING BUSINESS GOALS IN ROAD-TRAFFIC ORGANIZATION BY BSC METHOD

In general, applying BSC programme - BSC Designer Pro- both development of each perspective and development of goals belonging to each perspective can be clearly noted. In this paper, by applying fuzzified BSC method, the Internal Processes Perspective is shown to be the most important, though the Financial Pespective could have been expected to be of the utmost importance, having in mind that profit organizations have been observed. The achieved result implies that it would be neccessary to form a special organizational unit (The Internal Processes Perspective) which deals with problems of research and development which are of the strategic importance for business operations. Goals defined on this perspective have similar development values. This perspective management team efforts should be focused on defining, implementation and monitoring of management measures that would enable this perspective goal improvement. Further follows a short overview of basic management measures to be undertaken for improving progress of business goals belonging to the Internal Processes Perspective. Measures to be undertaken for improving the business goal which is denoted as Lower the cost of producing services and products are: introducing new or more utile exploatation of already existing technologies from the costs point of view, reducing discrepancy costs through improving product quality, improving production workforce efficiency and effectiveness, etc. The remaining four goals of this perspective are of almost the same importance. Building long-term partnerships to ensure access to high-quality and reliable products is one of the basic requirements of contemporary Just in Time (JIT) business philosophy and it is incorporated into both standards - ISO 9001 and ISO 26000. In all parts of every organization, it is meant to build partnerships between suppliers and a manufacturing firm parts, i.e. processes of a manufacturing firm/firms and customers. Building reliable and long-term parnership can be achieved by applying different methods. Developing and implementation of innovative solutions are the base of a profit company developing course. Every successful innovation is a result of a coordinated action between technological and marketing innovation. In order to improve the goal of World-class centralization of the key function it is neccessary to enlarge the structure of a small business by introducing the function of research and development. In medium-sized firms, smaller organizational units are formed to deal either partially or fully with problems of research and development. The success in this goal attainment can be achieved by using competitive members of a virtual organization (global chains of supply) and/or by using innovations. Improving Optimize enabling science and technology is achieved by improving workforce motivation and know-how with the support of a management team in order to maximally use available technological and scientific potentials of a company.

According to the literature review and many other real examples strategy map of the road-traffic organization "Autoprevoz Čačak" is shown at the figure 1.

Figures 1. and 2. can help us to chose goals from each perspective of the organization "Autoprevoz Čačak" and see theirs performance in BSC software and measures as results (outputs) from that software. Results are shown at the figure 3. and 4. In table 1. are presented measures for improved and modified BSC goals as reasult of software.

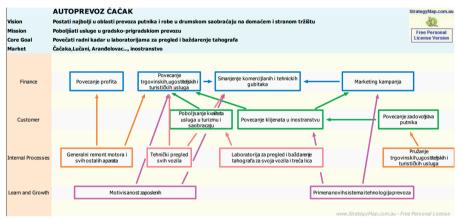


Figure 1. Strategy map of the road-traffic organization "Autoprevoz Čačak"

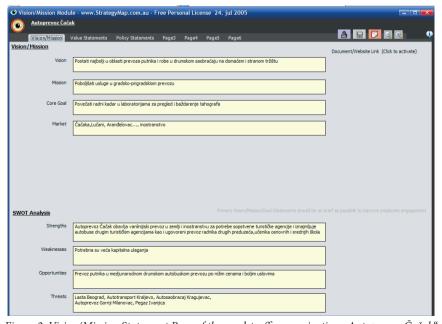


Figure 2. Vision/Mission Statement Page of the road-traffic organization "Autoprevoz Čačak"

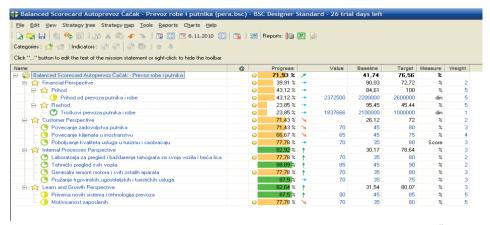


Figure 3. Improved and modified BSC goals of the road-traffic organization "Autoprevoz Čačak"

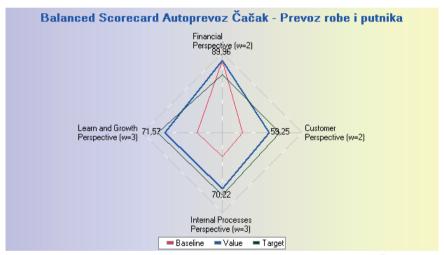


Figure 4. BSC perspectives of of the road-traffic organization "Autoprevoz Čačak"

Objectives	Measures			
Constant educati- on and best practice sharing	Number of new ide- as from internal and external sources	Presentation and com- munication, skills, to- ols, forums	Number of propositi- ons for internal trai- nings per employee	
Attract and retain best talent and high-quality employees	Top quality of talent pool	Percent of employees with access to and knowledge of advan- ced modeling tools	Employee culture survey for innovation and change	
Promote culture of change and employee career, skills and com- munication	Employee satisfaction and retention	Provide leadership support	Number of suggestions for products and capa- bilities	

Objectives	Measures				
Improve use of technology capacities	Number of projects delivered on time	Percent of projects advancing from stage to stage	Peer review of current scientific and technological capabilities		
Develop and implement innovative solutions	Percent of time available for productions	Cycle and process time	Process efficiency		
Lower the cost of pro- ducing services and products	Number of solutions evaluated	Marketing Perfor- mance	Technology gap analysis score		
Shared services	Number of incidents of warranty and field service repairs	Number of hours spent with customers	Rewards program		
Provide know-how, guidance and stability			Market share		
Grow and reverage cu- stomer base		Lead times, from order to delivery	Number and frequen- cu of customer		

Table 1. Measures for improved and modified BSC goals of the road-traffic organization "Autoprevoz Čačak"

The second place of the considered goals in taken by the Financial Perspective goals. The most important goal on this perspective is Maximizing free cash flow, which is achieved by better customer managing which further improves the cash flow efficiency, e.g. by applying up-to-date JIT methods, such as: zero-inventory, zero-errors, etc. Slightly less importance is allocated to the goal Improve Program Outcomes. Improvement of this goal can be made possible by undertaking the following management measures: a proper choice of a market and customers, a proper setting of a product market price, reducing neccessary costs through sales network, close cooperation with banks, etc. Remaining goals of this perspective all have almost the same importance which is less than the importance of the two previously considered goals. The third place is taken by Customer Perspective goals, which are of the almost the same development importance. The results imply that the management team of this perspective should focus thier attention to all marked goals of this perspective and undertake numerous and various management measures which enable improvement of the named goals of Customer Perspective. Goals set on the Learn and Growth Perspective have the least, but not negligible significance for improving effectiveness of a profit organization business operations. With the increased level of economy growth, the importance of this perspective can be expected to rise, as well as the goals defined on this perspective. The most important business goal is Constant education and best practice sharing, which is totally consistent with business concepts such as Total Quality Management (TQM), organizational learning and good production practices.

CONCLUSION

Changes occurring in business environment cause further changes in organization and management of profit companies. One of the ways to improve the effectiveness of management is the application of BSC method which enables an exact way of achieving progress of each identified goal on all organizational perspectives. Business golas priority which is

obtained in this way, can be considered less subjective (having in mind attitudes of a management team), i.e. more precise. Based on the gained solution, management teams focus their attention on and put their effort in improving the effectiveness of attaining those goals that have the greatest priority on the perspective which is given the biggest development value. In order to improve a process in the shortest possible period of time, it is necessary that management teams undertake certain activities directed toward highest priority goals, i.e. the goals that have the biggest influence on the process efficiency. It can be said that this problem solution is one of the most critical factors for successful establishment of a firms' BSC method.

REFERENCES

- 1. [1] Kaplan, R.S.., Norton, D.: "Putting the balanced scorecard to work", Harvard Business Review, Vol. 71, No 5, 1993., pp. 134 147.
- 2. [2] Kaplan, R.S., Norton D.P., "The Balanced Scorecard: translating strategy into action", Boston, MA: Harvard Business School Press, 1996.
- 3. [3] Kaplan, R.S., Norton D.P.: "Using the Balanced Scorecard as a strategic management system", Harvard Business Review, Vol. 74, No 1, 1996, pp. 75-85.
- 4. [4] Kaplan, R.S., Norton D.P.: "Strategic learning and the Balanced Scorecard", Strategy and Leadership, Vol. 24, No 5, 1996, pp 18-24.
- 5. [5] Kaplan, R.S., Norton D.P.: "Having trouble with your strategy? Then map it", Harvard Business Review, Vol. 78, No 5, 2000, pp 167-176.
- [6] Kaplan, R.S., Norton D.P.:" Transforming the Balanced Scorecard from performance measurement to strategic management: part I", Accounting Horizons, Vol. 15, No 1, 2001, pp 87-104.
- 7. [7] Kaplan, R.S., Norton D.P.:" Transforming the Balanced Scorecard from performance measurement to strategic management: part II", Accounting Horizons, Vol. 15, No 2, 2001, pp 147-160.
- 8. [8] Kaplan, R.S., "Strategic Performance Measurement and Management in Nonprofit Organizations, Nonprofit Management and Leadership", Spring, 2001.
- 9. [9] Kaplan, R.S., Norton, D., "Strategy maps: Converting Intangible Assets into Tangible Outcomes", Harvard Business School Press, USA: Massachusetts, 2004.
- 10. [10] Kaplan, R.S., Norton, D., "Alignment", Harvard Business Press, USA: Massachusetts, 2006.
- 11. [11] Kaplan, R.S., Norton, D., "The Execution Premium", Harvard Business Press, USA: Massachusetts, 2008.
- 12. [12] Brown, M. G., "Keeping score: Using the right metrics to drive world-class performance", New York: Productivity Press, 1996.
- 13. [13] Niven, P. R., "Balanced scorecard: Step-by-step for government and nonprofit agencies", Hoboken, NJ: John Wiley & Sons, Inc, 2003.
- 14. [14] Marr B.: "Business performance measurement: an overview of the current state of use in the USA", Measuring BusinessExcellence, Vol. 9, No 3, 2005, pp. 56-62.
- 15. [15] Schniederjans, M., Karuppan, C., "Designing a Quality Control System a Senior Organization: A Goal Programming Case Study", European J. of Operational Research, 81, 1995, pp. 249 –258.
- 16. [16] Milkovich, G. T., and J. M. Newman, 2002, Compensation, New York, NY, McGraw-Hill.
- 17. [17] Bryant, L., Jones, D. and Widener, S., 2004, Managing Value Creation within the Firm:
- 18. An Examination of Multiple Performance Measures, Journal of Management Accounting Research, Vol. 16, 107-131.
- 19. [18] Huckestein, D. and Duboff, R., 1999, Hilton Hotel: a comprehensive approach to delivering value for all stakeholders, Cornell Hotel and Restaurant Administration Quarterly, August, 28-38.