2nd International conference on Quality of Life
June 2017
Center for Quality, Faculty of Engineering, University of Kragujevac

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IMPACT OF DEVELOPMENT OF INFORMATION TECHNOLOGIES ON THE QUALITY OF LIFE IN SERBIA

Abstract: *Information technologies have become an integral part of modern society.They are integrated into all spheres of human life. Economy, culture, society, education are just some of the many areas of application of information technology. The quality of life of every individual and society as a whole, has improved considerably in the development and application of information technologies.In this paper it will be presented the impact of rapid development of information technology on the quality of life in Serbia.*
Key words: *information technologies, quality of life, economy, culture, society, education*

1. INTRODUCTION

Methods of measuring performance, which are suitable for the process of organization, must include evaluation of product quality, capability and capacity of the production process, the possibility of utilization of equipment and personnel, and must support the production techniques such as Total Quality Management and Just in time to emphasize the process more than outcome. One of the models that are most used to measure the success of process organization is Balanced Scorecard - BSC for their rationality and profitability, it follows the optimal number of key features of which is a selection derived from vision and strategy. Today, the BSC system or methodology that mission, vision and strategy of the organization translates into a comprehensive set of measures that provide a framework for the implementation of the strategy and used to transform the organization's strategic objectives in the performance indicators. BSC is a framework for the integration of measurements derived from the strategy. BSC is more than a system of measurement, it can be used as an organizational framework of its business processes. Many of the costs of quality are hidden and difficult to identify by formal measurement systems. Identifying and improving these costs will significantly reduce the costs of doing business.The traditional view would be to conclude that if a company wants to reduce defects and by this reduce the cost of poor quality, the cost of good quality would

have to be increased, meaning higher investments in any kind of checking, testing, evaluation, training of operators, etc. Following the Six Sigma philosophy, however, of building quality into process, service and products and doing things right the first time, the increase of the cost of good quality, while striving for zero defect performance, can be smoothed if processes get better.

In practice, the first approach of including the environmental performances into conventional BSC model (four perspectives: finance, users, internal processes, learning and development) is the most present, and less by adding the perspective which includes these objectives, because for the majority of organisations these issues are not relevant in terms of strategy. Thus, there are many supporters of the following concept: it adding new perspective depends on strategic importance of these elements.

2. SUCCESS MEASUREMENT ADVICE

The research journal of the Faculty of General Dental Practice (UK) published article [1] about managing broken appointments for a dental practice. This article [1] addressed a problem of broken appointments – FTA that stands for Failure to Attend is also in use. Authors of the research started with the fact that broken appointments in a dental practice lead to inefficiency and as a result lead to financial loss. Their research showed that there are some simple ways to improve the

performance of FTA KPIs and decrease the number of broken appointments. Any business where the cost of a failed appointment is significant should consider implementing the findings of this research:

- If it is possible in your business, it might be a good idea to profile your customers to find out what groups have the highest risk of failure to attend and introduce additional measures to decrease FTAs for this group.
- Another interesting fact is that introducing simple recall methods allowed improvements to the FTA KPIs. Authors of the research tried to introduce recall letters and appointments cards and as a result, for the control group of patients the rate of failed appointments wassignificantly reduced.
- Obviously, the type of recall method depends on your business. Other businesses widely use SMS notifications.

Even official services provided by governmental organizations send recall notifications by email and SMS. As mentioned before, this lesson is useful for any business that deals with clients directly and where the cost of broken appointment is high. The benefits of BSC approach and KPI to measure and control broken appointments for the dental practice [2,3,4] :

- **Target business**: any business with client's appointments that involve the high cost of broken appointment.
- **Strategic objective:** reduce the number of broken appointments
- **Financial perspective**: improve financial efficiency; prevent financial loss
- **Description:** one of the main reasons for service inefficiency is failure of the client to attend a scheduled service. The goal is to improve financial efficiency by decreasing the number of broken appointments.
- **Initiatives:** 1. introduce simple recall measures, such as recall letters, e-mails, recall cards and recall phone calls, or SMS 2. do a/b testing for recall initiatives 3. do clients' profiling from the viewpoint of broken appointments.
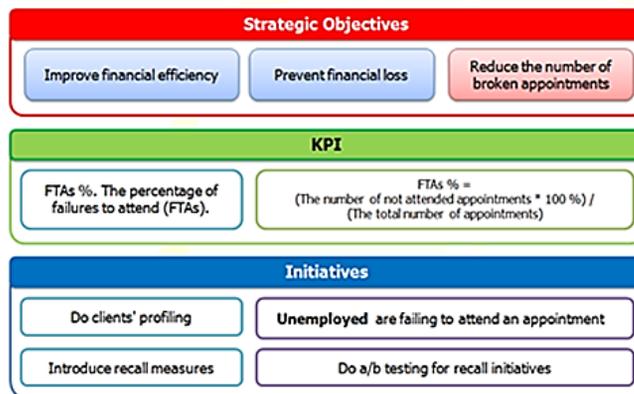
Picture 1. Managing the cost of broken appointments with FTA KPI

3. REVIEW OF 7 METHOD IN IT

The 7-S framework was introduced in 1980; later in 1982 the model was shown to the general public in the bestseller "In Search of Excellence" by Tom Peters and Robert Waterman. Ten years later in 1992. David Norton and Robert Kaplan published an article in the Harvard Business Review introducing their Balanced scorecard. Those who use the Balanced Scorecard should master the 7-S model as well. At a minimum, the 7-S will be another useful business checklist. Here is what Robert Kaplan one of the authors of the Balanced scorecard concept says: I belive that the BSC is not only fully consistent with the 7-S framework, but that it can also enhance it in use.

International corporations were taught how to play this game over many years and now they have mastered this skill. The ultimate goal of the organization structure is to divide the

tasks and resources in some way to make everything work properly. The strategy answers the question what should the company do to achieve success by taking into account competitors and limited resources. Systems bring the life into any business. How is the customer treated, how does the marketing work, how does the delivery operate ? All this is supported by BSC systems.

Some top managers want to work with strategy only. But during the last few year's we saw a lot of examples where companies win not because of their strategy, but because of their BSC system. With skills 7-S framework refers to the "dominating attributes or capabilities" of the company.

There are several interesting aspects:
• if the skill/capability is not explicitly marked, then it tends to get lost during strategy or structure shift

• the new skill can appear only when the old skill is revised and removed/modified together with its supporting structure and systems
• an action plan and KPIs do not form a part of the 7-S framework. But it is obvious that no strategy can be executed without suggesting and working on some action-oriented initiatives.

The 7-S model makes us think about "soft" parts of the business, such as shared values, skills, staff, style. These aspects are intangible, hard to measure, but sometimes they affect the business even more than "hard" parts like strategy and systems. In the 7-S framework there are no specific recommendations about "measurement" and "action" parts, but it was clearly expressed that all the Ss, especially "soft" ones, can be observed and measured.
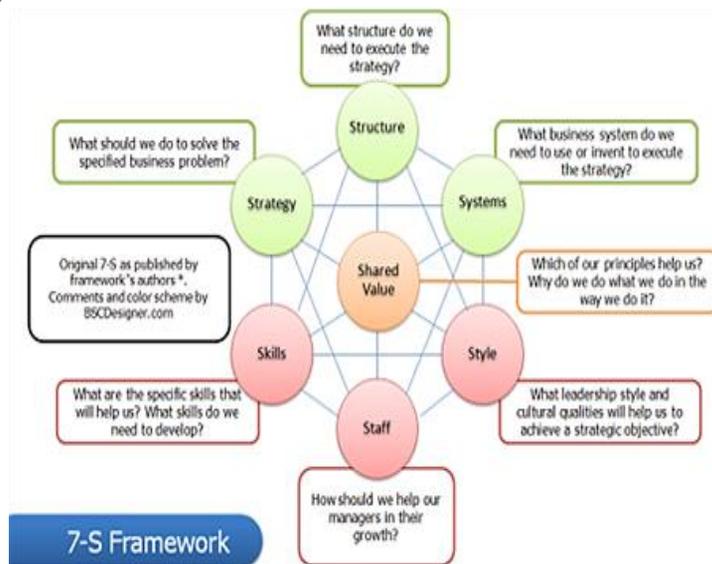
Picture 2. 7-S framework in IT company

4. CONNECTIONS AND ROLES OF IT IN QUALITY OF LIFE

Balanced scorecard can help improve company's performance without paralyzing company's resources due to unnecessary bureaucracy. To facilitate Balanced scorecard in boosting business performance, we first have to understand how the system works from the inside. The typical mistake is to think that Balanced scorecard is about Key Performance Indicators (KPIs) or dashboard. Dashboard and

KPIs are part of the Balanced scorecard, but just having these parts won't improve business performance.

The first question we have to answer is, "What are our strategic plans ?" or in simple words, "What do we want from our business ?" It would be better to begin with the mission and vision of our company. Then involve our team to figure out current business priorities and objectives. The results of this analysis are clearly formulated business objectives. We need to check out "Vision and Goals vs.

Strategy Map and Objectives" to learn the difference between "goals" and "objectives." The next step is to create our strategy map. Key rules about developing strategy maps for Balanced scorecard:

- it should be small,
- it should show how we are going to achieve our business goals,
- critical milestones should be on this strategy map.

Picture 3. Developed business objectives in BSC strategy map

To what extent were our strategic objectives achieved ? What is our progress ? To answer these questions we will need KPI. These measures will help us to understand where we are and if we are on the right track. It is not sufficient to just have measures, as metrics should be targeted on some specific value. Where do these values come from ? We might take it from the experience of our company, or we might use benchmarking values, which analyse industry-standard values for these respective KPIs. Each KPI and business goal should be aligned with a specific action plan, which should describe in detail what initiatives and activities will help us to change our current state.
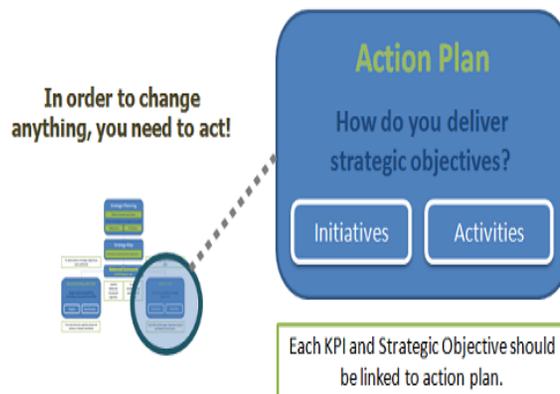
Picture 4. Developed action plan

P. Pravdić, S. Gavrilović

Now we have a good plan to make our Balanced scorecard project successful :

- start with strategic plan
- create a strategy map
- assign KPIs to business objectives from strategy map
- align business objectives with action plan.

There are two more steps that are not included in the list, but they are crucial to a successful Balanced scorecard.

1. Involve our people ! From the very beginning, involve people that will work on our strategic objectives, KPIs, initiatives and activities. Most likely, they know more in their specific business area, so collaboration when we define strategic goals, KPIs and a action plan is critical.
2. Update Balanced scorecard regularly ! Let's face the problem head on; it is hard to formulate correct business goals and KPIs from scratch. You will make some mistakes, and our business will change. Plan regular updates of our Balanced scorecard to ensure successful implementation of this powerful business method in our company.

5. CONCLUSION

The objective of any measurement system should be to motivate all managers and employees to implement successfully the business units strategy. Those companies that can translate their strategy into measurement system will be able to execute their strategy because they communicate their objectives and their targets. The communication makes managers and employees focus on the critical drivers enabling them to align investments, initiatives and actions accomplishing strategic goals.

Historically, the measurement system for any business has been financial. Accounting was considered to be the language of business innovations in measuring the financial performance of the industrial age companies played a vital role in their successful growth. And financial innovations, such as the Return on Investment (ROI) metric, and operating and cash budgets, were critical to the success of these corporations. Balanced scorecard designs can be implemented as a methodology, a software tool, a spreadsheet, or a full blown enterprise application shared across one, many or all departments within a firm. Using strategy maps, strategic objectives, strategic initiatives, and cause-and-effect they illustrate the power of strategic planning whereby individual departments and operational performance metrics are linked to an overall plan for achieving shareholder value. Scorecards allow a visual way to show adherence to a specific strategy and allow selective access to monitoring the progress over time.

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