CASE STUDY OF BALANCED SCORECARD USE IN AUTOMOTIVE INDUSTRY

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ANNA NAGYOVÁ, ANDREA SÜTŐOVÁ

ABSTRACT

Purpose: The aim of the paper is to apply Balanced Scorecard in the automotive company to ensure the alignment of objectives with the organization strategy and to balance the indicators into four perspectives.

Design/methodology: In this paper balanced scorecard was used as one of the performance measurement systems to develop suitable organization indicators, which are able to reflect achievement of strategic objectives.

Findings: The strategy map was created to represent the set of designed objectives and their causally linkages. Subsequently indicators were proposed for each perspective, which would most likely to support organization strategy. It is necessary to highlight that BSC can be use effective only when appropriate actions are taken with the frame of improvement based on PDCA cycle.

Practical implications: This paper highlights the necessity of setting the minimum number of indicators, which are able to reflect the real achievement of strategic objectives.

Keywords: Balanced Scorecard, strategy map, quality, metrics, performance management system
1 INTRODUCTION

The success of any organization is reflected by its performance which is in turn highly dependent on organization’s strategy. In today’s high competitive environment it is crucial to frame the right strategy, but without its right execution the desired outcome can not be achieved. Organizations monitor various performance metrics based on set and approved goals. The question is the extend to which these goals are aligned and linked with organization vision and strategy.

Many organizations’ operational and management control systems are built around financial measures and targets, which bear little relation to the company’s progress in achieving long term strategic objectives (Kaplan and Norton, 1996). Thus the emphasis of organizations on short term objectives leaves gap between the development of a strategy and its implementation. However, organization strategic value depends on its people, processes and innovation ability (Kaplan and Norton, 2002). If managers are pushed to a short term profit, investments into growth opportunities are limited, which can negatively influence long term performance of organization. There are several tools which can help organizations to manage their performance. One of these tools is Balanced scorecard which enables to integrate the strategic contribution of all relevant organizational value drivers for two key reasons (Murby and Gould, 2005):

- It helps to ensure consistency and alignment between the non-financial and the financial indicators.
- It helps to identify and measure the specific value drives that support performance.

Blanced scorecard has increased in popularity and occupies a prominent position among other management tools used by organizations. Recent global study by Bain & Company listed balanced scorecard fifth on its top ten most widely used management tools around the world, a list that includes closely-related strategic planning at number one (Rigby and Bilodeau, 2013).

The aim of the paper is to propose Balanced Scorecard use within the process of performance measurement in the automotive company. Currently organization uses Business Cocpit methodology, which divides indicators into three categories. The main aim was to create strategy map with objective, which are linked to organization strategy and subsequently to set and balance indicators within four perspectives to ensure clear reflection of the strategy.
2 DESCRIPTION OF BALANCED SCORECARD

Balanced Scorecard was first introduced in 1992 by Robert Kaplan and David Norton in the Harvard Business Review as a performance measurement framework, that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance (Kaplan and Norton, 1992). The authors pointed out that traditional financial measures (lagging indicators) can not provide an accurate picture of a company's performance in the innovative business environment, because they represent past events. Besides financial metrics, value drive measures (leading indicators) were included into Balanced scorecard representing customers, internal processes and growth and learning capabilities which provide forward-looking views (Ellen, 2013).

After the first Balanced Scorecard publication several companies adopted the concept which gave authors deeper and broader insights into its power and potential. The concept was further developed and went much beyond just a scorecard that is balanced. During following years, as it was adopted by thousands of private, public, and non-profit organization around the world, the concept was extended and broadened into a strategic management tool for describing, communicating and implementing strategy (Kaplan, 2010). Table 2 shows the characteristics of three evaluation stages of the Balanced Scorecard (Kaplan and Norton, 2006).

Table 1 – Balanced Scorecard generations

<table>
<thead>
<tr>
<th>1st Generation Balanced Measurement</th>
<th>2nd Generation Objectives and Strategy maps</th>
<th>3rd Generation Strategy management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four categories/quadrats of measurement</td>
<td>- Objectives not measures are significant</td>
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<tr>
<td>Focus on leading and lagging indicators</td>
<td>- Perspectives are layers through which linkages flow</td>
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<td></td>
<td>- Objectives are linked in cause and effect chains to create a “Strategy map”</td>
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<td></td>
<td>- Initiatives are launched to achieve the objectives</td>
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<td>- Themes link objectives across departments, Cascading</td>
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<td></td>
<td>- Tighter alignment with operation and execution</td>
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<td></td>
<td>- Focus on change (engaging people, teamwork)</td>
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<td></td>
<td>- Strategy management systems (software)</td>
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</table>

Balanced scorecard is not a tool for strategy formulation; rather it is a description and interpretation of the strategy, founded on assumed causal links between actions and their impacts. As a strategic management system, Balanced Scorecard consists of the following management processes Kaplan, 1996):
1) Translating vision into objectives,
2) Communicating vision, objectives and measures to all employees,
3) Business planning and target setting,
4) Feedback and learning in order to improve the business strategy.

2.1 Balanced Scorecard perspectives

The BSC model identifies four related perspectives or activities that are likely to be critical to most organizations and to all levels within organizations: investing in learning and growth capabilities, improving internal process efficiencies, providing customer value, and increasing financial success (Figge, 2002).

The financial perspective asks how the organization should appear to shareholders so that the company can succeed financially. This perspective indicates if the business is improving the bottom line, measuring items such as profitability and shareholder value. Financial objectives reflect economic consequences of actions already taken.

The customer perspective asks how an organization should appear to customers to achieve the organization’s vision. Customer objectives identify customer and market segments where the business would compete and what performance would be expected for these targeted segments. The scorecard focuses on customer concerns primarily in four categories: time, quality, performance and service, and cost (Caulde, 2008).

The internal business process perspective asks what business processes should the organization excel in to satisfy shareholders and customers (Caulde, 2008). This perspective measures the internal business processes, core competencies, and technologies that would satisfy customer needs.

The learning and growth perspective asks how the organization would sustain its ability to change and improve to achieve the organization’s vision. The learning and growth perspective identifies the organization’s infrastructure needed to support the other perspectives’ objectives. This perspective measures an organization’s ability to innovate, improve, and learn (Caulde, 2008).

There is no limitation on number of above mentioned perspectives and they can be adjusted according to specific conditions and requirements of organization (Ravi, 2002).

2.2 Strategy maps

Strategy maps are part of Balanced Scorecard management approach. Strategy map doesn’t contains measures, it contains objectives. This simplifies the selection of measures in the balanced scorecard and instills the discipline of „Objectives before Measures“ (Jones, 2011).
Strategy maps are communication tools used to tell how value is created for the organization. They show a logical, step-by-step connection between strategic objectives in the form of a cause-and-effect chain. Generally speaking, improving performance in the objectives found in the Learning & Growth perspective (the bottom row) enables the organization to improve its Internal Process perspective objectives, which in turn enables the organization to create desirable results in the Customer and Financial perspectives (Kaplan and Norton, 2000). It is crucial that the map represents a chain of assumed cause and effect links between and within each scorecard perspective. Building of strategy map involves the following steps (Rohm, 2013):

1) Clarifying mission and vision.
2) Clarifying strategic areas.
3) Specifying objectives in the scorecard areas necessary to achieve strategy.

Objectives are subsequently used to cascade strategy through departments and to individual employees to create an aligned strategy focused organization.

3 METHODOLOGY

In this case study was Balanced scorecard used in the automotive company to ensure the alignment of objectives with the organization strategy and to balance the indicators into four perspectives. The main goal was to set up the suitable number of indicators which are closely linked with the strategy of the organization.

Organization monitors various financial and non-financial indicators but the question is if these indicators are linked to strategic objectives.

The algorithm of BSC implementation consists of following actions:

1) **Clarifying the current strategy** – Organization strategy serves as a guideline for all managerial decisions. In this case, the current startegy was previously defined by management but it was necessary to understand its meanings. The strategy is focused on three aspects:
   - productivity;
   - quality;
   - people.

2) **Strategy mapping** – based on the strategy, objectives were designed according to the interaction of all 4 perspectives.

3) **Setting the metrics** – based on the objectives, specific indicators were designed.
4 RESULTS AND FINDINGS

Figure 1 shows the strategy map with the specified objectives, which were derived from the organization strategy. The created map shows a logical, step-by-step connection between objectives in the form of cause – effect chain. The set metrics related to objectives are balanced into four perspectives.

The organization can create a large number of different indicators but for the evaluation of the organization performance it is important to choose the strategic one. Following the sentence “Twenty is plenty”, that organization should choose minimum number of indicators, which reflect the state of organization and objectives achievement identified in strategic map. Based on objectives designed in the Strategy map, 10 indicators were proposed.

Financial perspective shows the effort of organization to increase profit and to reduce total costs. Customer perspective is oriented to increase customer satisfaction and market share. Aims identified in previous perspectives are influenced by results in process perspective, oriented to quality improvement and cycle time reduction. As it can be seen, one of the proposed indicators in this perspective is oriented to monitor nonconformities occurrence in processes. In this case, the automotive division sorts defects into three groups:

- **A defects** – unacceptable defects, which can influence function and safety of the vehicle.
- **B defects** – values, which are diverted from specifications and can affect customer satisfaction.
- **C defects** – defects, which do not influence function or safety, but have some abnormalities which are not easily recognized by customer. They occur frequently.

The fundamental element of proposed Strategy map is Learning and growth perspective. This perspective includes the most important factors, such as employee involvement, key competencies and knowledge sharing. Employees skills and their own experience are crucial aspects of any kind of management system. So, it is very important to invest into employee training and education, using different tools of idea management and create a culture of knowledge sharing. Each of the perspectives must be frequently monitored, checked and modified according to management needs and changes in environment.
Figure 1 – Strategy map
To complete implementation of BSC and make it successful, it is necessary to create model, which will help to monitor and evaluate organization performance through indicators. This model can be incorporated into the management system and recognized as a performance measurement model.

This model can be a useful tool for performance management only if appropriate actions are taken. Figure 2 shows, how this model, as a part of management system. Each strategic objective contains associated projects (initiatives) to complete and processes to excel. It also includes its appropriate measures and expected results. The P-D-C-A cycle is fundamental for continuous performance improvement.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Initiatives</th>
<th>Measures/Indicators</th>
<th>Target value</th>
<th>Real value</th>
<th>Comparison</th>
<th>Corrective, preventive actions</th>
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<tr>
<td>Financial</td>
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<td>Customer</td>
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<td>Internal Processes</td>
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<td>Learning and Growth</td>
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Figure 2 – Model of Balanced Scorecard

It is up to every organization how their model will look like. The most important element is, that after comparing expected and real values, the appropriate actions need to be taken. If management will hide the real situation and will not adopt actions, the BSC becomes formal and useless tool without any positive influence.

5 CONCLUSION

Using of Balanced Scorecard concept in the automotive company enables to design the objectives and to point out their linkage with organization’s strategic areas. The proposed leading and lagging indicators provide a more balanced view of the organization’s performance. Using BSC enables to improve organization’s performance and can be customized according to organization’s needs.
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ABOUT AUTHORS

Anna Nagyová, Ing., PhD. works at the Department of Safety and Quality Production, Faculty of Mechanical Engineering, Technical University of Kosice, Slovakia as a lecturer and also as internal auditor for QMS area. Her professional activities are focused on the implementation of management systems and project management. She is also involved to several national projects oriented mainly to quality production and management systems.

Andrea Sütőová, Ing., PhD. is a lecturer at the Department of Integrated Management, Faculty of Metallurgy, Technical University of Kosice, Slovakia, e-mail: andrea.sutoova@tuke.sk. Her professional activities are focused on the field of Quality management systems, Environmental management systems and Human resource management. She is also involved into several projects oriented mainly to quality management and education.