

CONTROL OF STRATEGY REALIZATION IN METALLURGICAL PRODUCTION

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Abstract

Nowadays changes are becoming faster and more unpredictable. Enterprises have to react very quickly to challenges and opportunities of the business world. Therefore, the importance of a well thought-out strategy and quick, effective strategy realization has been highlighted in literature. A method for the control of strategy realization is presented in the paper. This method is based on the Balanced Scorecard approach, which is more popular and regularly used throughout the world. The implementation of the proposed method allows strategic goals to be very quickly implemented and realized. The suggested solution is dedicated to companies which perform metallurgical production. The process of receiving production orders is closely connected with strategy implementation. Thus, production orders are realized according to the new implemented strategy.

Keywords: strategy realization, key performance indicators (KPI's), metallurgical production

1. INTRODUCTION

Enterprises now operate in a market in conditions of very strong competition, which results in significant pressure on reducing process times, reducing costs and improving customer service. Companies are increasingly looking for opportunities to improve their competitiveness and increase their attractiveness. For this purpose, a number of new management methods can be introduced, which aim to improve the quality of decision making, streamline processes and reduce the time and cost of the process [1], [3], [6], [7], [9], [10], [11], [12], [15], [16], [17], [18], [19], [20], [22].

The development and use of emerging business opportunities depends on the ability of companies to respond quickly to changes in the environment and build effective strategies, supported by the use of solutions which can be quickly deployed and implemented. A major difficulty is the fact that the business environment is currently characterized by very high volatility and unpredictability. Companies must demonstrate a high level of adaptability, which means quick adjustment to a rapidly changing environment, inter alia, by matching the expectations of individual customers, changes in regulatory and economic [4]. Therefore, strategies also need to be changed frequently and regularly updated.

Currently, the decision-making system must take into account a variety of very important information. The most important includes: compliance of the decision with the overall strategy of the company, the impact of non-financial factors that cannot be measured by financial indicators, the impact of conditions of the enterprise and its environment in the decision-making process, the costs of obtaining information, the different probability of different events, the lack of availability of information about the full costs of different solutions and the impact of the characteristics of the decision-maker on decisions [21]. In such conditions, it is particularly important to improve the efficiency and effectiveness of strategy control in the enterprise.

A problem still present in metallurgical production enterprises is the lack of tools and solutions for rapid deployment of frequently changing strategy. This paper proposes a new solution to control the implementation of the strategy in enterprises engaged in metallurgical production. A system is presented that allows a degree of implementation of the strategy in this type of enterprise, based on the concept of the Balanced Scorecard.

2. THE BALANCED SCORECARD APPROACH

Maintenance and development on the market today provides businesses with well-developed and quickly and consistently implemented strategy by which they can gain a competitive advantage. One of the instruments increasingly being used both in Poland and around the world is the Balanced Scorecard (BSC).

The Balanced Scorecard concept as a management method appeared in the 1990's. As a result of major changes in companies, there was a new, important factor - information - which has come to play a very important role in the enterprise and provide for the survival of the organization in the market and the possibilities of its development [2]. To properly assess the performance of the company, integrated operational and financial measures that can comprehensively evaluate various aspects of the company should be used. The Balanced Scorecard is one such system.

The traditional methods of evaluation and control primarily analyze variations in financial results. By contrast, modern financial measures are supplemented by measures of satisfactory quality, performance, duration of the operating cycle, the production rate and the rate of sales [14]. The Balanced Scorecard is defined as a strategic system that is used to clarify the strategy and translate its operational activities. It allows the implementation of the strategy to be measured and controlled [5], [21]. BSC is a multidimensional structure, based on the concept of balancing short-term objectives with long-term objectives. It allows the performance of the company through the design objectives, initiatives and performance metrics to be analysed and evaluated.

The use of the Balanced Scorecard allows the measurement of strategic objectives in a number of perspectives. Traditionally, BSC contains four perspectives [8], [13], [2]:

- 1) Financial perspective,
- 2) Customer perspective,
- 3) Process perspective,
- 4) Growth and length perspective.

Nowadays it is suggested that an additional perspective is added due to the increased role of the Corporate Social Responsibility concept (CSR), such as an employee and environmental perspective.

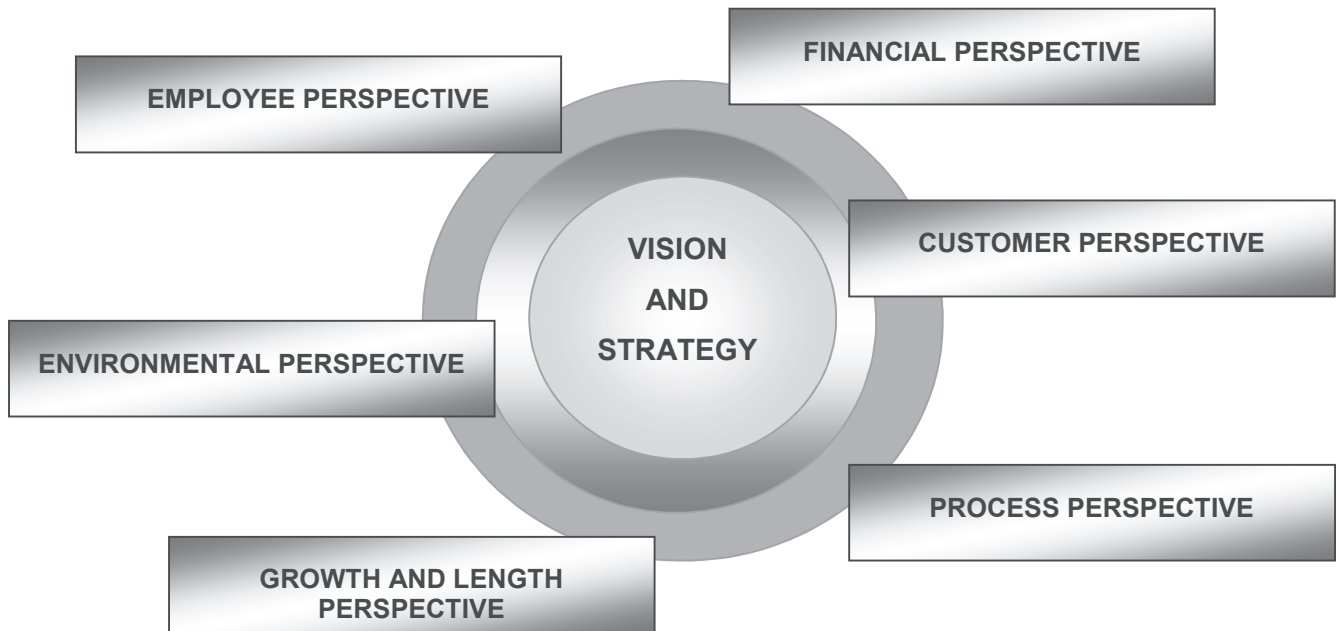


Fig. 1 Perspectives in the proposed solution

In each perspective various aspects of the company are measured and each of them provides the other information. Perspectives must be considered together due to the need to form a view of the implementation of strategy. Some companies modify the BSC, expanding it with additional perspectives including environmental perspective, partnering, employees, suppliers, society, etc., which greatly increases the possibility of its application.

Also, the number of objectives and strategic measures is a matter of convention. The experience of BSC implementations in enterprises, reported in literature, suggests that the number of strategic objectives should be shaped to a limit of 10-25. One of the strategic objectives can be assigned more than one measure. However, in such cases, it is proposed that they are given individual displays, and that the weighting synthetic measure is presented [21].

3. THE PROPOSED SYSTEM

In the paper, the system of control of strategy realization in metallurgical production is proposed. This system is based on the Balanced Scorecard approach. It is designed to provide effective strategy realization in conditions when the strategy is changed very often and its implementation must be continuously controlled.

For this aim, a strategy realization control system was designed which consists of eight stages, as illustrated in **Fig. 2**. This system includes two phases:

- design phase,
- control phase.

The purpose of the design phase is to prepare a strategy in a form which enables its implementation. First the enterprise vision is upgraded or areas where the company has not formulated a vision are identified. Next, the strategy is clarified, following which the strategy map is built. Then, strategic objectives in different

perspectives are created and structure of connection between them established. In the proposed solution, the use of seven perspectives is suggested, as shown in Fig. 1.

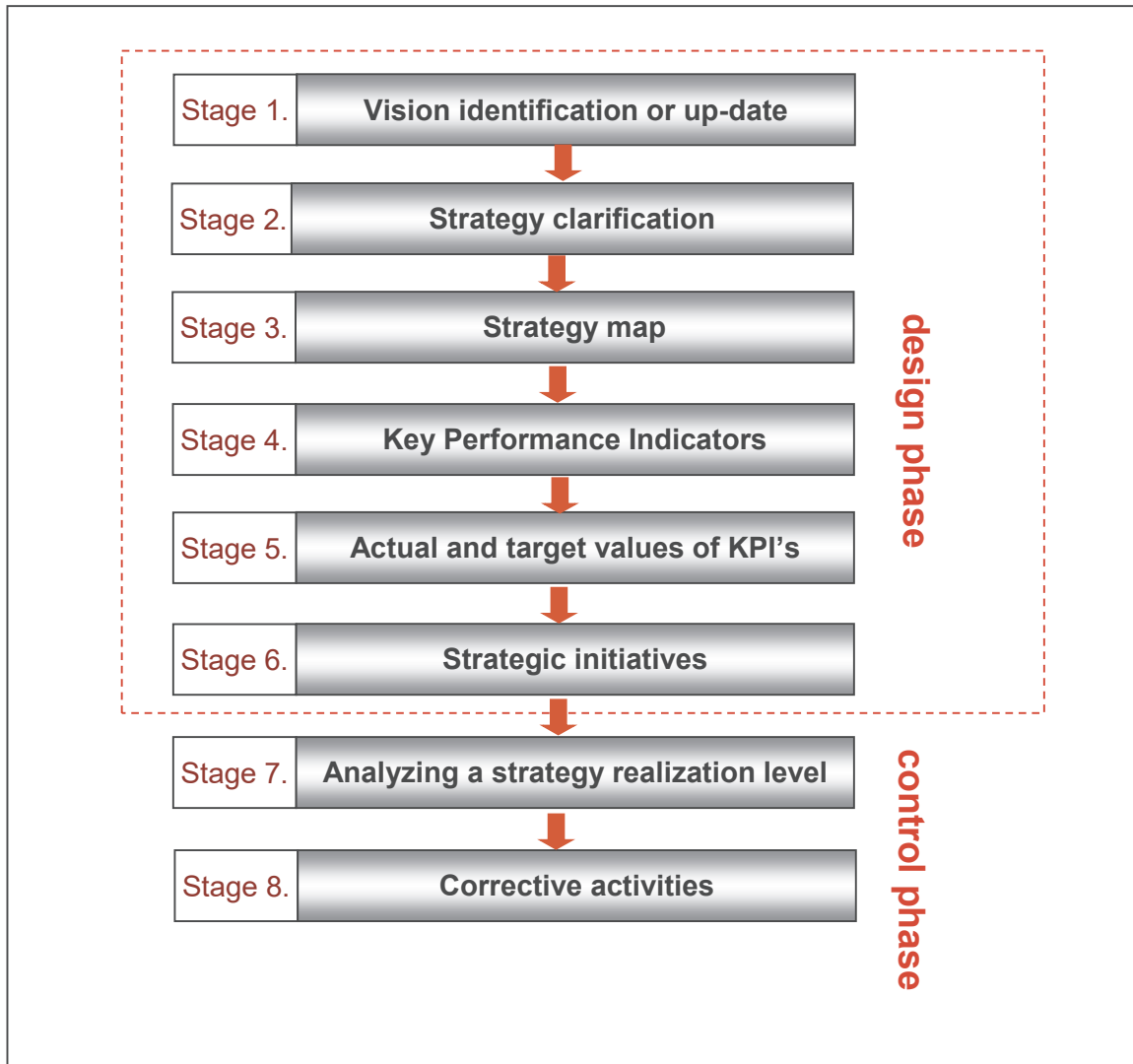


Fig. 2 Structure of the strategy realization control system

In the fourth step, a measurement system for strategic objectives is built. For each strategic goal, at least one indicator is designed. It should be underlined that financial and nonfinancial indicators are used in the proposed solution which allows special attention to be paid to the different aspects of metallurgical production.

In the fifth stage, the actual and target values for each Key Performance Indicator are identified. Finally, in the sixth step, strategic initiatives are planned which allow the determined strategic objectives to be realized.

The control phase is for the control of the level of strategy realization. Based on the comparison of actual values with target values, the level of strategy realization is determined. When the dynamics of the strategy realization indicate that it will not be possible to achieve enterprise goals in the planned time, corrective action is planned. Such actions are designed to accelerate the implementation of the strategy.

CONCLUSIONS

The presented solution is dedicated for enterprises which use metallurgical production. Its main goal is effective strategy implementation and realization. A control system of strategy realization is proposed which helps to control the level of strategy realization.

This system allows strategic planning with operational measures to be linked and facilitates the use of both financial and non-financial indicators, which enables key aspects of metallurgical production development to be controlled in a simple way. The implementation of the proposed solution guarantees that the effectiveness of strategy realization is increased in enterprises.

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