

A Control System for Strategy Implementation: A Case of a National Standardization Body

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ABSTRACT

Effective control of strategy implementation in today's dynamically changing operating environment is becoming increasingly important to ensure sustained success of organizations. The aim of this paper is to analyze the importance of implementing an effective control system for strategy implementation. To ensure a comprehensive analysis of the characteristics of a control system in an organization, the authors perform an evaluation of a control system model for strategy implementation in a national standardization body. Research methods such as analysis of the relevant scientific literature, as well as logical analysis is performed. Based on both the theoretical research and analysis of the organization the authors identify the importance and main aspects of an effective control system for strategy implementation.

Keywords: strategic management, control system, sustained success, quality management, standardization.

1. INTRODUCTION

Organizations develop strategies to gain a competitive advantage, attract customers and improve the operations, products and services of the organization. The need for strategy development and implementation in all organizations is still emphasized, despite the rapid and often unforeseen changes not only in the external but also in the internal operating environment [12]. In order to ensure the implementation of strategic plans the strategy development stage should be followed by actions that ensure the implementation of planned activities, traceability of the results achieved and monitoring of the organization's operational environment and conditions affecting the achievement of the planned results [22]. Therefore it is necessary to introduce control mechanisms that allow to evaluate the degree of implementation of the strategy and to timely identify deviations from the planned results.

The implementation of the strategy can be compared to the PDCA cycle, thus the strategy development phase should be followed by its implementation, the comparison of the results achieved with the set objectives, as well as the improvement of the strategy and its implementation measures to ensure the adaptation to changes in the external and internal environment of the organization. Therefore, in order to achieve the objectives set in the strategy, an effective control mechanism – a control system – is needed to ensure a continuous monitoring of the implementation of the strategy, identification of the necessary adjustments and improvements and ongoing feedback on the effectiveness of the strategic management process. To ensure the implementation of the strategy, it is complemented by a strategic management process that promotes continuous monitoring of the internal and external environmental factors of the organization, as well as the planning of the organization's activities and

resources to achieve its strategic objectives, contributing to the organisation's ability to achieve sustained success [19], [25].

The scientific aim of the research activities is to evaluate the theoretical aspects of the strategic management and control system in order to analyze the characteristics of a control system for strategy implementation and to evaluate the control system model of a national standardization body.

The methodology is based on comparison and analysis of literature and views published by various authors about strategic management and characteristics of a control system for strategy implementation, at the same time defining the activities to be carried out within the framework of the research.

The basic information on the strategic management is given in Section 2. In Section 3 the authors introduce the basic information on the role of the control system for strategy implementation, while in Section 4 the authors describe the results of the evaluation of the control system model for its implementation in the national standardization body. In Section 5 the authors offer their conclusions.

2. STRATEGIC MANAGEMENT AND ACHIEVING SUSTAINED SUCCESS

Strategic management can be defined as an effective and efficient use of existing production resources (natural resources, human resources, capital, infrastructure, raw materials, etc.) with the aim of maintaining long-term operation of the organization, gaining a competitive advantage and increasing the profit of the organization. The process of strategic management includes planning, organization, coordination, application and control of the organization's future activities [22]. The foundation of the strategy is the organization's vision of its future position as well as its mission and values. In order to ensure coherence of the activities with the set guidelines, the strategic directions and action plans should be based on the vision and values of the organization therefore improving the organization's ability to achieve the set objectives and leading the organization to fulfilling the planned financial results [5], [22].

Taking into account the constantly changing operating environment of organizations, the analysis of their context and the changing needs of the parties involved should be performed regularly to ensure the implementation of the required processes and the acquisition of resources necessary for the effective operation of the organization [16]. In order to ensure the traceability of changes and to facilitate their implementation, there is a need for continuous monitoring of requirements as well as identification of actions to be implemented in case of change, including employee involvement, clear task definition, tools for monitoring and controlling the implementation of the strategy [21], [3]. To ensure this, the integration of existing functions and processes is needed, contributing to the full progress of the strategic objectives at all levels of the organization [14].

After examining the literature on strategic management, the main activities of the strategic management process towards sustained success were reviewed (see Table 1).

Table 1. The main activities of the strategic management process – supporting research [created by authors]

Activity	Purpose	Key references
Effective management of human resources	To ensure the effectiveness of activities by involving specialists with appropriate knowledge, access to information, and analytical skills to make the right decisions	Rostoka et al. (2019); Radomska (2014); Mjakuškina et al. (2016).
Meeting the needs and desires of the stakeholders	To meet the long-term needs and expectations of the parties involved continuously	LVS EN ISO 9004:2018; Latham (2014); Yang et al. (2011).
Holistic approach of improving the performance of the organization	To discover ever more effective ways to create useful products and services	Lentjušenkova et al. (2016).
Innovation in the functions and processes of the organization	To ensure that all the activities of the organization are consistent with strategic guidelines and development trends	Latham (2014).
Quality management	To establish an appropriate environment and culture in the organization, a foundation for innovation and development, as well as continuous identification of the stakeholders' needs which are directly related to the organization's sustainable development	Rebelo et al. (2016); Jasiulewicz-Kaczmarek (2014); Todorut (2012).
Responsibility of top management	To ensure that the organization's activities include planning, implementation, monitoring, evaluation, improvement and innovation at all levels, in the context of intense global competition	Hyväri (2016).
Leadership	To ensure the development of a strategic plan, as well as assigning executive and supervisory responsibilities to responsible persons, while ensuring a constant review of strategic directions in line with changes in the organization's operating environment	Slavik et al. (2015); Dogan (2015).
Involvement of the participants in the processes of strategy development, communication and implementation	To contribute to the organization's consideration of different ideas, experiences and attitudes and ensuring a common understanding of the organization's activities and orientation towards the achievement of the set objectives	Wittek-Crabb (2012); Baumgartner et al. (2017); Engert et al. (2016).

From the analysis of the texts the authors conclude that the process of strategic management consists of continuous activities – analysis, decision-making and implementation – that are necessary for the implementation of the strategy, thus achieving sustained success is also due to the organization's ability to follow sustainability principles in its operations. In order to implement the principles of sustainable development in strategic management, a review of the strategic management process is necessary, assessing its participants, the methods used and the content of the strategy, including the organization's operational guidelines, key values and objectives.

3. A CONTROL SYSTEM FOR STRATEGY IMPLEMENTATION

The increasing complexity and dynamics of the business environment is evolving the importance of risk management as it is becoming increasingly important in planning and evaluating the performance of an organization. It is used to mitigate the undesirable effects of risks and to benefit optimally in situations where risk-taking is desirable [8]. A risk-based approach is therefore considered a best practice technique that ensures the establishment of priorities and the allocation of necessary resources that can ensure the effective mitigation of risks affecting the organization's performance [27].

In order to monitor the organization's operational aspects, as well as to assess whether those aspects on which the strategy is based remain valid, a continuous monitoring should be performed to

avoid exceptional deviations from the strategy implementation plan [23]. The evaluation of the strategy should facilitate the review of the expected results, assessment criteria, objectives and values, as well as the identification of alternative strategies thereby ensuring dynamic adaptation to change [5]. Internal control mechanisms provide an important contribution to increasing the value of the organization, the sustainability of management activities and the reliability of the organization's performance reports [28]. Since sustainability concepts are not changing as such, it is important to emphasize that their use is expanding in areas that are not previously affected [10]. Controls are based on the identification of risks and measures required to mitigate and monitor their likelihood of occurrence, as well as to regularly evaluate the performance of the organization against predefined criteria [28].

Control systems are considered to be strategy implementation tools needed to manage change in the organization in response to changes in its environment, while providing feedback on the effectiveness of the strategic management process. These are the objective setting, measurement and feedback systems used by managers to assess whether the organization is achieving the desired direction and implementing the strategy successfully [23]. This emphasizes the importance of the development of managers' competences to ensure the comprehensive analysis of the business environment since control of strategy implementation includes reviewing and monitoring the strategic directions and planned activities, while evaluating the overall topicality of the strategy and additional circumstances affecting

the performance of the organization [29], [23]. If deviations from the planned results are observed, it is necessary to change the strategy, its implementation activities and control mechanisms [23].

To ensure the effectiveness of the strategic management process, the control system should provide a regular analysis of the internal and external environment to identify timely changes that are essential to achieving the organization's objectives. Various methods of strategic management and analysis of the organization, such as analysis of strengths and weaknesses, opportunities and threats, can be used to identify these conditions [6]. Based on the identified factors that influence the operation of the organization, changes in the strategy, organization processes and functions can be introduced while maintaining the continuity of the organization's activities and the pursuit of planned results [5].

Since the evaluation of measurable indicators relevant to the organization is essential for operational planning and monitoring of achievement of planned results, in addition to the traditional performance measurement and monitoring functions of the organization, the control system should define the boundaries of the organization's operations in line with strategic directions, provide the basis for defining and evaluating the key performance indicators of the organization, and promote the identification of deviations from the strategic objectives previously set [5], [23]. In order to facilitate the achievement of the outcomes of the strategy, the organization's management and employees should be continuously informed of the level of implementation of the strategy and the actions to be taken [5]. As an element of the control system in assessing and ensuring the performance of an organization in accordance with the applicable requirements, as well as identifying good practice examples and improvement opportunities internal audit is often used to provide information on the organization's compliance to the requirements, while also gaining assurance of the employee awareness of the organization's context and processes [28].

According to the requirements of ISO 9001, an organization shall periodically perform a management review, focusing on the organization's operational issues, such as changes in external and internal factors, customer satisfaction and feedback from stakeholders, process performance and degree of achievement of quality objectives [15]. Thus, based on an organization's performance analysis, the management review could provide the basis for continuous improvement of the organization's performance and contribute to the effectiveness of strategic management. By identifying deviations from the set requirements and strategic objectives, it is necessary to implement actions that eliminate the causes of deviations, as well as to make decisions about necessary changes in the strategy, organizational activities or the control system. Therefore a correlation can be drawn with the quality management principles and the requirements of ISO 9001, which require a response to the identified non-conformities, the assessment of the need for action to eliminate the causes, as well as the evaluation of the effectiveness of the implemented corrective actions [5]. Consequently, strategy implementation control measures can therefore be aligned with the PDCA cycle common in quality management, adjusting its stages to the strategic management process (see Figure 1).

A control system for strategy implementation therefore should include mechanisms for the analysis of the context of the organization, setting measurable objectives and implementing instruments for monitoring the achievement of the defined results, as well as implementing actions for improving the performance of the organization and ensuring adaptation to the

changes of the environment by changing the strategy and the control mechanisms for its implementation.

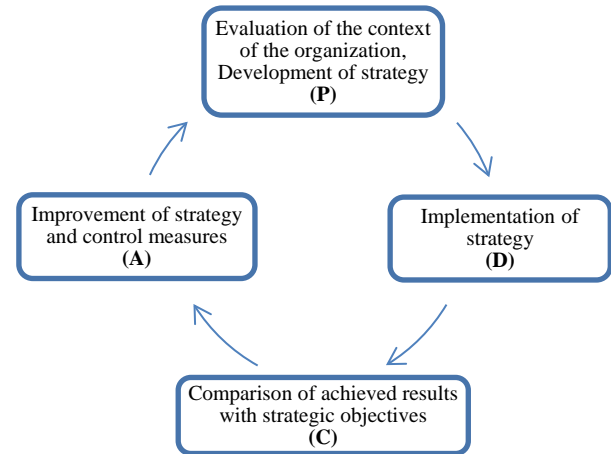


Figure 1. The cycle of stages for strategy implementation
[created by authors]

After analysing the information from the control system study in the context of strategic management, the authors can conclude that control systems are among the main strategy implementation tools needed to manage change in the organization in response to the environmental changes in order to provide feedback on the effectiveness of the strategic management process. Thus, there is a need to develop a mechanism for monitoring the performance of the organization and its influencing factors.

4. EVALUATION OF THE CONTROL SYSTEM MODEL FOR STRATEGY IMPLEMENTATION IN A NATIONAL STANDARDIZATION BODY

Standardization plays an important role in the international conformity assessment system by providing uniform conditions, promoting a common understanding of the criteria to be assessed, and contributing to the reliability of results [7]. Moreover, in the view of changing market needs and scientific developments, continuous improvement of standards and standardization processes is being implemented [20]. That indicates that the actions of national standardization bodies should also be focused on continually improving their processes, products and services. The organization in question is the Latvian national standardization body – “Latvian standard” Ltd (LVS). It is a state-owned corporation with 100% holding in the Ministry of Economics of the Republic of Latvia. LVS implements the state policy in the field of standardization, contributing to the quality infrastructure in Latvia, and it operates for the common good of society by providing standardization products and services to businesses and society. LVS is a member of European and international standardization bodies – CEN, CENELEC, ISO, IEC and has a sales contract with ETSI. The core business processes of LVS are the development of standards and their dissemination.

LVS has implemented a certified quality management system according to ISO 9001:2015 therefore control mechanisms applicable to achievement of quality objectives are already implemented. Considering that both the quality system and the implementation of the strategy are based on the understanding of the stakeholder needs and expectations, risk-based thinking, as well as the analysis of external and internal environmental factors, it is possible to link these control mechanisms and integrate them into organizational processes to ensure the

achievement of both strategic and quality objectives. The control system model for strategy implementation of LVS is visualized in Figure 2.

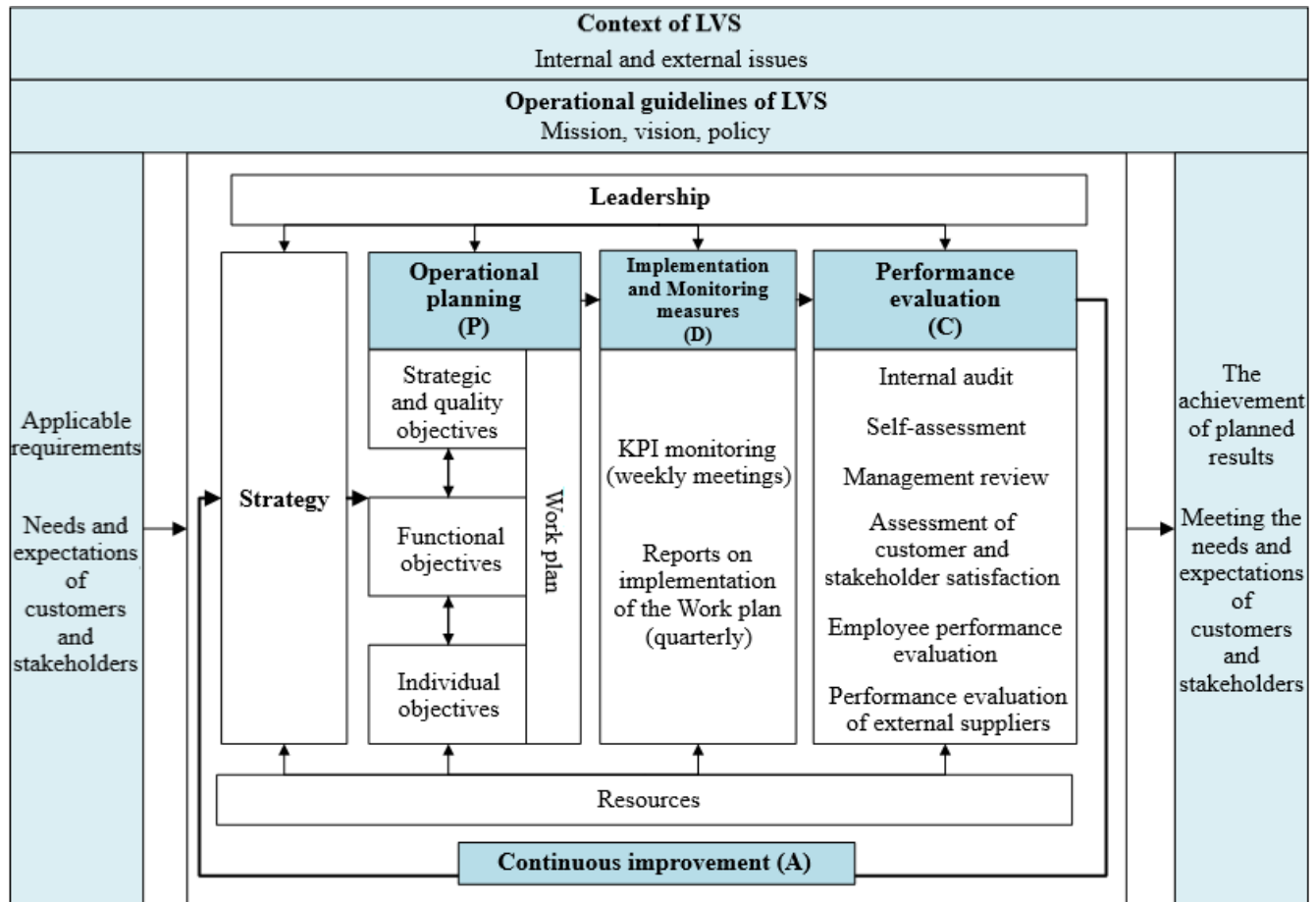


Figure 2. Control system model for strategy implementation in “Latvian Standard” Ltd [created by authors]

The model of the control system was developed based on the PDCA cycle, the interaction of the organizational elements of the structures covered by ISO 9001:2015 and ISO 9004:2018 and adapted to the specificity of LVS. It includes a number of interrelated blocks that reflect organizational aspects and processes relevant to strategic management. When evaluating the control system model of LVS, the specifics of the activities of LVS should be taken into account, emphasizing the importance of achieving the planned results and satisfaction of the parties involved, as well as the theoretical considerations for monitoring the implementation of the strategy and the necessary elements of the control system. Given that LVS is a national standardization body, the control system for strategy implementation should also include the measures required by membership requirements of European and international standardization organizations. The activities of LVS should be based on the context of the organization, therefore there is a need for continuous improvement of processes for continuous monitoring, review and evaluation of internal and external conditions to ensure that the organization is able to respond to changes in its operating environment in a timely manner. The in-depth review of internal and external conditions has so far taken place in the quality system management reporting meetings, but a more regular flow of information will ensure that timely reactions to the identified changes are performed. In order to ensure a continuous understanding of these changes, an effective flow of information

is needed not only with external stakeholders, but also between employees.

The role of the top management of LVS is essential to ensure operational efficiency and employee motivation. Top management’s responsibility should include regular review of the strategy and operational guidelines of LVS, identification of necessary changes and decision-making on their implementation. The initiative to introduce a control system should come from top management to define the most appropriate solutions for planning and evaluating performance by appointing responsible employees for the implementation of these activities. Top management should ensure that the employees of LVS are aware of the organization’s operational guidelines and promote an organizational culture based on them. Top management should also be able to gain employee motivation to engage in LVS process improvement activities and, if necessary, seek solutions to possible resistance resulting from changes in existing operations.

By defining the tasks to be performed according to the strategic directions and quality objectives at several control levels, it will be possible to ensure a more effective control of the implementation of the strategic plan, as well as a common understanding of the progress of LVS in the implementation of the strategy. According to the specifics of the activities of LVS and applicable requirements, the following performance evaluation measures should be maintained:

- Internal audit – in addition to the existing requirements, the employees' understanding of the strategy of LVS and their performance in its implementation, as well as the newly introduced control mechanisms for monitoring performance indicators should also be assessed;
- Self-assessment – the self-assessment required by CEN-CENELEC should be carried out at specified intervals and regular monitoring of the implementation of the planned improvement measures should be performed. The self-assessment should provide the basis for determining good practices and opportunities for improvement;
- Customer and stakeholder satisfaction assessment – it is possible to expand the range of customer survey respondents by launching customer satisfaction assessment activities not only for regular but also one time customers. It is also necessary to maintain regular communication with the Ministry of Economics and the National Standardization Council to ensure that LVS is aware of their expectations and to promote cooperation in the development of national standardization processes;
- Employee performance evaluation – regular evaluation of employee performance is required to identify skills to be developed and assign tasks for future periods. The evaluation system would thus enable direct managers to define the results to be achieved, measure the performance, identify the competence to be developed, and objectively plan and develop more appropriate employee training and development programs.
- Measuring the performance of external suppliers – to ensure that external products and services that affect the operation of LVS and the satisfaction of the parties involved meet the requirements of LVS, a clear identification of the requirements to be set and an explanation of the operational guidelines to external suppliers is needed. Attracting external suppliers whose performance and innovations coincide with the vision of improving the performance of LVS and facilitating continuous improvement should be pursued.
- Management review – the procedure for organizing the existing management review process should be continued by involving all LVS employees to ensure awareness of the performance of LVS and their contribution to strategy implementation and the improvement of the quality system. It is possible to increase the number of management review meetings by addressing the current issues of the strategic management and quality management system efficiency.

Taking into account the specificity of the strategic management process and the actions and knowledge required to achieve strategic objectives, timely resource planning and attraction is required:

- People – when planning the activities to be implemented, it is necessary to carry out evaluation of the existing human resources capacity, taking into account the changing workload and the competence necessary for the efficient execution of processes;
- Infrastructure – given the crucial importance of an advanced information technology infrastructure and its efficient use in optimizing the internal processes of the standardization system, there is a need for continuous identification of necessary changes in the software and technical support. When innovations are introduced, their impact should be continuously monitored and evaluated, taking into account internal and external circumstances, associated risks and environmental impacts. With the introduction of new technologies, primary planning activities should include identification of the needs and expectations of the stakeholders. Considering the copyright protection of

standardization documents and the processing of personal data in standardization processes, consideration should be given to integrating the requirements of ISO/IEC 27001 into the existing quality system to improve information security management;

- Process environment – conditions for the motivation of the employees to achieve the set strategic and quality objectives should be ensured. Increasing employee mobility and promoting an environment where the employees are informed about the progress of LVS in achieving the set results should also be considered. It is recommended to put visualization tools at workplaces, such as the meeting room, to illustrate the current information and development progress. In order to develop LVS as a sustainable organization, it is necessary to consider the implementation of activities that would reduce the impact of LVS on the environment, and to promote a working culture in which the employees pay attention to issues related to the possibilities of reducing the consumption of natural resources;
- Organizational knowledge – taking into account the specificity of LVS, it is necessary to maintain the existing knowledge transfer and preservation measures, supplementing them with a clear definition of what results need to be achieved. Taking into account the aspiration to increase employee mobility, in addition to face-to-face training, it is recommended to develop training materials and courses in the electronic environment.

On the basis of the research, it could be observed that in order to implement the elements of the control system in the activities of LVS, there is a need for quality system improvement measures that are oriented towards increasing the ability of LVS to achieve sustained success, as well as integration of the strategic objectives at all levels and activities of LVS. Also, it is necessary to create awareness among the employees of LVS about continuous improvement as a tool for long-term success, a source of learning and an opportunity to implement the necessary changes for development and work organization. A culture must be introduced where learning integrates both employee competence and overall organizational competence, thus moving towards achieving the strategic objectives and enhancing the reputation of LVS as an institution capable of providing professional services. Thus, it is possible to predict that effective implementation of the elements included in the control system model will ensure continuous improvement of the operations of LVS, fulfilment of applicable requirements, achievement of the set objectives, as well as increase of satisfaction of customers and stakeholders.

5. CONCLUSIONS

The strategic management process consists of continuous activities that are necessary for the implementation of the strategy, thus achieving sustained success is also due to the organization's ability to follow sustainability principles in its operations. Control systems are among the main strategy implementation tools needed to manage change in the organization in response to the environmental changes in order to provide feedback on the effectiveness of the strategic management process. By maintaining an effective strategic management process, the organization can achieve sustained success and ensure satisfaction of customers and stakeholders. Achieving sustained success in an organization is closely linked to quality assurance and management: meeting the requirements set for the organization, fulfilling the needs and expectations of the parties involved, as well as ensuring continuous improvement. Therefore, it is important for the organization to

include the basic principles of quality management to maintain a functioning control system and to apply the tools of evaluation and improvement of the organization. The control system model for strategy implementation in "Latvian Standard" Ltd covers the main factors influencing the actions of a national standardization body. The existing means of performance evaluation and promotion of improvement acts as an essential basis for the implementation of measures for strategy implementation, therefore an integration of these measures are necessary to ensure the achievement of planned results and sustained success.

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