

**METHODICAL ASPECTS OF APPLYING STRATEGY MAP IN AN ORGANIZATION**

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**Abstract.** One of important aspects of strategic management is the instrumental aspect included in a rich set of methods and techniques used at particular stages of strategic management process. The object of interest in this study is the development of views and the implementation of strategy as an element of strategic management and instruments in the form of methods and techniques. The commonly used method in strategy implementation and measuring progress is Balanced Scorecard (BSC). The method was created as a result of implementing the project “Measuring performance in the Organization of the future” of 1990, completed by a team under the supervision of David Norton (Kaplan, Norton 2002). The developed method was used first of all to evaluate performance by decomposition of a strategy into four perspectives and identification of measures of achievement. In the middle of 1990s the method was improved by enriching it, first of all, with a strategy map, in which the process of transition of intangible assets into tangible financial effects is reflected (Kaplan, Norton 2001). Strategy map enables illustration of cause and effect relationship between processes in all four perspectives and performance indicators at the level of organization. The purpose of the study being prepared is to present methodical conditions of using strategy maps in the strategy implementation process in organizations of different nature.

**Keywords:** management, strategy, implementation, strategy map.


**JEL Classification:** D53.

1. **Introduction**

Strategic management is regarded to be the youngest concept in the management science although it has over forty years. This concept is still evolving, which is reflected in different ways of presentation of the process, models and approaches. One of important criteria of characteristics of strategic management process is looking through two perspectives that have developed on the ground of management sciences: mechanistic perspective and organic perspective. It had an impact on presentation of both the strategy...
formulation process and its implementation. When analyzing this achievements it can be noticed that in the initial period of interest in the strategy it was usually focused on the process of formulating functioning principles development direction in the long run, which was reflected in the development of principles and techniques of strategic planning. Along with further development of environment and organization growing attention was also paid to the problem of strategy implementation. An important aspect of strategic management is instrumental aspect included in a rich set of methods and techniques used in particular stages of strategic management process. In strategy implementation the commonly applied method is Balanced Scorecard (BSC). The method was created as a result of implementation of the project “Measuring Performance in the Organization of the Future” of 1990, completed by a team under the supervision of David Norton (Kaplan, Norton 2002). In mid 1990s the method was improved by enriching it, first of all, with a strategy map, in which the process of transition of intangible assets into tangible financial effects is reflected (Kaplan, Norton 2001). Both BSC and strategy map have an interdisciplinary nature, which enables their use in organizations following different values and focused on different goals. Therefore it requires adaptation of original methods versions to the specific nature of particular organisations. The purpose of the study being prepared is to present methodical conditions of using strategy maps in the strategy implementation process in organizations of different nature.

2. Strategy implementation in organic approach

The concepts of strategic management were created as economic orientations, research approaches and strategic behaviours1. As part of these concepts different definitions of strategic management were adopted2. In the present study the basis for presentation of the scope and instruments of strategy implementation3 will be the use of two approaches that have been formed in the course of strategic management development, namely the mechanistic approach and the organic approach.

The terms “mechanistic” and “organic” refer to two metaphors: an organization as “a machine” and an organization as “an organism” (Morgan 1999). As part of these

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1 One of proposals relating to putting in order strategic management concepts is classification of schools of strategic thinking suggested by J. C. Mathe. It is based on two paradigms: of strategic rationality and strategic behaviours. This classification is widely discussed in the book of G. Gierszewska, M. Romanowska, * Analiza strategiczna przedsiębiorstw* (Strategic analysis of a company). PWE, Warsaw, 1994.

2 Ricky, W. Griffin defines strategic management as: “management process focused on formulation and implementation of a strategy that are favourable for higher degree of compliance of organization with its environment and achieving strategic goals”, which means that this process refers to all management functions.

K. Obłój believes that the essence of strategic management consists in pursuit to create new models and open new options of actions, their testing in the light of criteria both instrumental (e.g. efficiency) and autotelic. Strategic management is above all creation of context in which the process of standardization and structuralization of actions within tactical management takes place.

3 Since we treat strategic management as the process of defining and redefining strategy as a reaction to changes in the environment or anticipating these changes and even causing them and coupled with it strategy implementation process.
approaches paradigms of strategic management were formulated which constituted the basis for shaping strategic management models and the set of methods of strategic analysis, strategy design and its implementation.

Within mechanistic approach the strategy is treated as a certain pattern of organization’s development whose components are: types of conducted operations, organizational structure, criteria and the decision-making process as well as the principles of cooperation with the environment. The strategy within this approach is conscious and reasonable action plan, which is implemented by, among others, organizational structure.

Within mechanistic approach the following paradigms of strategic management were formulated (Jeżak 2004):
- paradigm SCP (Structure – Conduct – Performance),
- paradigm SSP (Strategy – Structure – Performance) (causal model – integrating the strategy, structure and processes of conduct along with results),
- paradigm RBV (Resource – Based – View) strategy as a combination of products and markets but also a bundle of specific resources.

Strategic management models created on the basis of these paradigms are of descriptive nature, with different intensity indicating the sources of the company success: environment (e.g. the concept of M. E. Porter) and internal assets (resource school of strategic thinking). These models expressly stress two stages following one after another: strategy formulation and strategy implementation. To emphasize the role of strategic analysis as the central stage of strategic planning in some perspectives, it is treated as a separate stage and then within strategic planning we have strategic analysis and strategy design. The organic approach based on analogy of the organization with an organism treats an organization as a whole being continuously created and changed. The processes occurring in the organisation are of dynamic and multidimensional nature. As compared to mechanistic approach it differs with regard to viewpoint of the strategy and a manner of its implementation. It emphasizes the need for continuous organization adaptability and temporary and spatial coordination of its activities (Jeżak 2004).

On the ground of organic approach was developed a paradigm OESP (Organization – Environment – Strategy – Performance) (Farjoun 2002). Strategic management is treated here as – a process of continuous improvement or maintenance of the company’s performance by formulation and conduct of respective strategies. Therefore, strategy implementation can be treated as a process of maintaining harmony with the changing environment through introducing organizational changes connected with the prepared strategy. Using the term of introduction of organizational changes we mean organizational change management.

According to the assumptions of the organic approach, strategic management is not a sequence process, in which separated stages are implemented in a specified strict sequence. These stages overlap, it is difficult to separate them. The organic approach as compared to mechanistic approach treats strategy as a less linear category and static emphasizing the need for continuous adaptability of the company and coordination of
their activities (Ghemawat 1991). The strategy is defined “as planned and actual coordination of the major company goals and organization’s activities in time and space, enabling its continuous adaptation to changes in the environment (Lisiński 2008).

An interesting analysis of organic approach and its impact on strategic management and thereby strategy implementation was conducted by M. Lisiński (Lisiński 2008). The Author particularizes elements of OESP paradigm proposed by M. Farjoun (see Fig. 1).

**Organization** is treated as a bundle of resources of tangible and intangible nature, also relations that take place between them and also methods of operation, operations and ways of their performance are included. Therefore, organization of a company is shown in a dynamic perspective, which means that the resources are considered elements of an open system and cooperate with elements of environment by exchanging information and communication.

**Environment** of the organisation is perceived in a complex and dynamic way. It considers current (real) and potential participants (stakeholders), which are institutions and particular persons or groups. Characteristics of these entities refers to the past and the present state and changes in this condition in the future. Environment understood and interpreted in this way affects the scope and way of research conduct concerning formulation and strategy implementation.
**Strategy** as it has already been mentioned, consists in coordination of major goals and activities of the company in time and space. Therefore it is an instrument integrating the remaining components of the model and at the same time balancing the impact of various factors, providing sustainable development of the company.

**Company performance** is perceived as capability of continuous adjusting of the company to the environment. They are therefore expressed by means of standard (e.g. growth, profitability, survival) as well as non-standard indicators. Performance refers to dynamic and long term effectiveness and indicators relate to the quality of using available resources as well as generating new ones.

Connections between particular components of the model are of feedback nature and are supplemented with relations taking place inside each component.

To recapitulate, it can be said that as compared to the mechanist approach the organic approach is a more dynamic viewpoint with regard to the process of formulation and strategy implementation and less standardized.

Implementation, similarly to strategy, is defined in many perspectives and aspects, it is a commonly used term in many scientific domains and disciplines. It can be understood as putting into life, conducting (Wielki Słownik angielsko – polski 2002).

The term of implementation is used in the Polish literature interchangeably with the term of application. It means putting into practice theoretical solutions and various kinds of projects, realization of ideas and intentions. In our case this solution, idea, conception is strategy that has been drawn up within the framework of the previous stage of strategic management.

On the grounds of management A. Stabryła defines implementation as implementation in practical operations of theoretical models or utility projects containing various kinds of innovations and improvement (Stabryła 2002).

In a broader meaning that takes into consideration relations with diagnosis and strategic control, implementation means a continuous process of organization, motivation and strategy application (Banaszyk, Urbanowska-Sojkin, Witczak 2004). This process includes the whole preparation - implementation works that are associated with operations of the organization: improvement in organizational structure, rationalization of operating process, human capital management, creating reputation, etc.

Strategy implementation in the narrow sense, means undertaking activities directed to its instantiation and leading to its implementation. Therefore we will deal with supporting activities creating conditions which positively influence strategy implementation and leadership and motivating actions relating to human resources of an organization.

In the process of strategic management the place of implementation is indicated in various ways. In the system of the cycle of organized actions; plan – execution – control of implementation role of operational nature is attributed. On the other hand, in the case
of treating strategic management as a process consisting of two basic phases; strategic planning and implementation, the latter has a strategic dimension and means effective putting the strategy to life namely execution of assumptions of strategic plan, adjustment of organizational structure and information – decision-making processes.

The course of implementation is determined by many factors, among which we can pay special attention to:
- special character of operations of the organization,
- financial condition,
- character of selected strategy (development or restriction),
- the range of changes in comparison to previous strategy,
- character of intangible resources of the organization.

In the previously discussed OESP paradigm strategy implementation is perceived as actions aimed at achievement of goals contained in the strategy as well as tasks and attitudes and organization preparation to implement necessary changes contained in the strategy. A peculiar attribute of the approach presented above to strategy implementation is increase in the effectiveness of strategy implementation through common participation and commitment of employees as a result of delegation of rights and duties in such a way so as to strengthen organizational possibilities of the company to introduce changes.

3. Strategy map as a tool supporting Balanced Scorecard

The commonly used method in strategy implementation and measuring progress is Balanced Scorecard (BSC). The method was created as a result of the project implementation “Measuring performance in the Organization of the future” of 1990, completed by a team under the supervision of David Norton (Kaplan, Norton 2002). The developed method was used first of all to evaluate performance by decomposition of a strategy into four perspectives and identification of measures of achievement. In the mid 1990s the method was improved, enriching it, first of all, with a strategy map, in which the process of transformation of intangible assets into tangible financial effects is reflected (Kaplan, Norton 2001).

Balanced Scorecard is a research tool in which interaction is observed between (Fig. 2) (Kaplan, Norton 2002):
- preparing vision and strategy,
- explanation of goals and strategic measures and their integration with management system,
- determining strategic goals, planning and building strategic initiatives,
- improvement in monitoring systems of the strategy implementation and of learning of an organization.
The concept of Balanced Scorecard is based on the assumption of the need for acceptance of a set of strongly correlated changes. That means that the system should specify actions supporting achieving agreed goals. Perspectives characteristics:

- **Learning and growth perspective** in the model of Balanced Scorecard analyzes the strategy and actions taken in order to develop skills and competences necessary to support the three remaining perspectives (Fletcher, Smith 2004). Indicators included in this perspective should mainly include the leading indicators motivating to take current actions that will bring benefits in the future to the company. These indicators may also focus on technical systems of knowledge management, including the use and the extent of IT system in the organization.

- **Internal-Business-Process Perspective** focuses on effectiveness of activities of an organization with regard to creating values for customers. Internal-business processes are factors which play a role in relations between an organization and the customers. In most organizations internal-business processes are complex and often include external factors, such as quality of supply chain and operational processes forming value for customers. Indicators used in this perspective should
be directly connected to the strategy and should not focus on activities related
to business processes which may be necessary, but are not of strategic nature.
Efficiency indicators included in this perspective include only actions necessary to
create value for customers and may significantly vary in particular organizations.
As a result, an organization preparing a balanced scorecard must clearly define
which internal-business processes are critical to provide customers with value and
may distinguish it as compared to competitors (Kaplan 1992).

- **Customer perspective** in balanced scorecard includes indicators related to the
  needs and points of view of customers. Taking into account the customer pers-
  spective is based on the assumption that the customer is the most significant factor
  in creating value for shareholders. All organizations must maintain relationships
  with customers by delivering goods and providing services that are valued by the
  customers. Each strategy developed by an organization should be adjusted to the
  needs of customers in order for the organization to maintain a competitive position
  and shares on the market. Indicators classified into customer perspective are to de-
  termine the ways in which customers perceive the company and its offer (Fletcher,
  Smith). Just like the strategy must conform to customer perspectives, specified
  indicators used in this perspective must be adapted to the strategy. Traditional in-
  dicators of customers’ satisfaction such as re-ordering or the number of complaints
  may not indicate progress in implementation of strategic goals of the company.

- **Financial perspective** of balanced scorecard is used to make measurable assess-
  ments related to value for shareholders. This measurable assessment is often made
  on the basis of traditional financial units of measure, such as return on investment
  or net profit margin. Financial indicators put emphasis on position of the company
  from the perspective of shareholders, they are of retrospective nature – they assess
  performance of the company in the previous settlement period. Additionally, indi-
  cators in the financial perspective do not enable the company to determine whether
  financial performance can be maintained in the future or assess the effect of non-
  financial factors on strategy implementation. Despite the defects of financial indica-
  tors referring to the assessment of strategy implementation they are an important
  element of balanced scorecard because they are the primary factor putting the
  strategy into motion. Financial indicators provide the managers with information
  on strategy effectiveness with regard to value creation.

As a supporting tool the authors of BSC developed a strategy map which enables il-
 lustration of cause-and-effect relationship between the processes in all four perspectives
and performance indicators at the organizational level. Strategy map and performance
indicators at the organizational level constitute the basis for different departments when
preparing their individual effectiveness indicators. Figure 3 presents a sample strategy
map illustrating relations between selected intangible resources and the strategy and
performance of an organization.
The presented diagram of creation of value for the shareholders in business organizations can be used in organizations of different nature e.g. public administration, non profit organizations and other. However, this requires considering the specific nature of these organizations functioning and goals that are formulated in this type of organizations. This applies particularly to financial perspective on how success in these organizations is to be defined. In this type of organizations also an important role is played by improvement in human resources, effectiveness of internal-business-processes and satisfying the expectations of customers and stakeholders. On the other hand success is understood and described differently, which usually has social dimension. A common feature is aiming at efficient and effective achievement of intended goals.

### 4. Methodology of using strategy map

A strategy map is a tool integrating the developed strategy with operating activities of various organizational units operating in an organization. A specific feature of strategy map is that it describes in a clear manner the process of creating values in organization by indicating a number of cause and effect relationships between four perspectives.
(learning and growth, internal-business-processes, customer, financial) and goals adopted within these perspectives.

On the other hand, Niven determines strategy map as a one-page graphic presentation of what persons managing an organization should implement under different perspectives so that the process of strategy implementation was effective (Niven 2005). Putting on the strategy map cause-and-effect relationships between strategic goals within particular perspectives is the basis to develop management process with strategy of organizations. Also strategy map may be compared to the system of early warning for strategy implementation, through signalling problems in achieving particular goals.

Construction of a strategy map covers selection of perspectives and definition of goals within each of them. The aforementioned four perspectives proposed by the authors of the concept should be rather treated as the starting point than procedural requirement. Particular importance is thus gained by the methodology of preparing strategy map.

The term “methodology” can be understood as: “a set of principles, ways of performing a given work or achieving a specific purpose; detailed standards of procedure proper of a given science” (Kopalinski 1989), “set of directives indicating the ways of action (methods principles, practical indication) leading to the goal” (Martyniak 1976). On the basis of presented definitions we can speak of the process and the instrumental nature of the methodology (Szeloch 1992). The process nature is defined by procedure while instrumental nature determines the used methods and techniques within methodology.

The notion of methodology can be considered in a broad and narrow sense. Within the broadly understood methodology the following is contained: characteristics of study area, base plan of research, scheme of the research process, research indication, instruction of research study (Starbryła 1987).

In the narrow sense the methodology is of special nature and may refer to proceedings over research plan development or the list of research tasks. Methodology may also be treated as conditions of a specified research process and description of this process (separation of phases and stages). The plan of research is a description of expected and possible intentions that are presented in a thematic system, namely arrangement of research tasks4.

Taking into account the presented above definition of methodology, in particular its process nature the following phases in the process of strategy map development are suggested (Fig. 4).

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4 The term „research task“ may have the nature of a product or nature of operation.
Perspectives selection

The basic version (classic) suggests four perspectives:
- learning and growth,
- internal-business-processes,
- customer,
- financial.

The four presented perspectives are typical of economic organizations and often in such a system are used for description of a strategy selected by a business organization.

Assuming the possibility of wider use of a strategy map in organizations of different nature it should be assumed that (Kaplan, Norton 2011):
- the primary purpose of an organization is creating a long-term shareholder value (in the business sector) or stakeholder value (in the public sector and NGOs),
- the value of an organization is created by a value offer acceptable for recipients contained in the delivered products or services. Selection of proposals of values for the customers should be a central element of the strategy,
- internal-business-processes form and deliver a proposal of values for the customers. The effectiveness of internal-business-processes is a factor in consequences leading to improvement in results in the customer and financial perspective,
- intangible assets are the primary source of creating sustainable value in the above described perspectives. Goals contained in learning and growth perspective describe how selected intangible assets contribute to supporting the strategy.

The presented diagram of creation of value for the shareholders in business organizations can be used in organizations of different nature e.g. public administration, non profit organizations and other. However, this requires considering the specific nature of these organizations functioning and goals that are formulated in this type of organizations. This applies particularly to financial perspective how success in these organizations is to be defined. In this type of organizations also an important role is played by improvement in human resources, effectiveness of internal-business-processes and
satisfying the expectations of customers and stakeholders. On the other hand success is understood and described differently, and usually has a social dimension. A common feature is aiming at efficient and effective achievement of intended goals.

In this type of organizations perspectives may be defined as follows:
- learning and growth,
- internal-business-processes,
- customer,
- social impact,
- mission.

A well prepared strategy map should express the content of the strategy through a relatively small amount of goals and measures.

**Defining goals for different perspectives**

The proposal of a strategy map was developed and implemented to the theory and practice in response to deficiencies of traditional approach to evaluation of organizations functioning based on conventional systems of accounting. This traditional approach did not take account of changes in the business environment consisting in the fact that an increasing part of value is created by intangible assets.

For this reason it gains significant meaning to identify goals to be achieved in particular perspectives in such a way so that they constitute a consistent set used to implement the adopted strategy and mission. The table below presents a sample set of goals for a public organization (Table 1).

**Table 1.** Example of goals within the adopted perspectives of the strategy map (Source: own study on the basis of Kaplan, Norton 2008)

<table>
<thead>
<tr>
<th>Social impact perspective</th>
<th>Economic development enabling implementation of social goals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Growth in the number of attractive work places</td>
</tr>
<tr>
<td></td>
<td>Improvement in inhabitants’ quality of life</td>
</tr>
<tr>
<td></td>
<td>Growth in wealth of inhabitants and reduction in social</td>
</tr>
<tr>
<td></td>
<td>inequality</td>
</tr>
<tr>
<td>Customer perspective</td>
<td>Competitive and high quality services</td>
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<td></td>
<td>Positive image</td>
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<td></td>
<td>Favourable place to run business operations</td>
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<tr>
<td></td>
<td>Attractive places of spending free time</td>
</tr>
<tr>
<td>Internal-business-</td>
<td>Efficient and effective administrative service of business</td>
</tr>
<tr>
<td>processes perspective</td>
<td>entities</td>
</tr>
<tr>
<td></td>
<td>Use of IT technology and the Internet in contacts with</td>
</tr>
<tr>
<td></td>
<td>stakeholders</td>
</tr>
<tr>
<td></td>
<td>Professionally operating information system</td>
</tr>
<tr>
<td>Growth perspective</td>
<td>High level of inhabitants competence, public administration</td>
</tr>
<tr>
<td></td>
<td>employees, business organization</td>
</tr>
<tr>
<td></td>
<td>Innovative programmes and methods of teaching at schools</td>
</tr>
<tr>
<td></td>
<td>Implementation of modern information and IT technologies</td>
</tr>
</tbody>
</table>
To increase transparency each goal may have two or three sentence descriptions (characteristics) for explanation what exactly is understood as by each purpose and why it is important from the point of view future of operation of an organization.

**Configuration of a strategy map**

Configuration of a strategy map concept is a stage consisting in selecting elements within each perspective which will be used to achieve the set goals and, as a consequence, successful implementation of the prepared and the adopted strategy.

In the learning and growth perspective the authors of a strategy map suggest three categories of resources of intangible character that should be used in strategy implementation: human capital, information capital, organisational capital. Depending on the character of an organization different elements of intangible assets will play different roles.

On the one hand, the employees, the members have and control the main source of competitive advantage. Their knowledge, skills, competencies enable building uniqueness i.e. concept of operations difficult to be copied by competition. On the other hand they need organization infrastructure to release their knowledge so that it could be used for the good of the organization. At the same time it is concerned with ensuring conditions for continuous expansion, multiplication of the possessed knowledge. A proper structure of these three elements is the basis for proper implementation of key internal-business-processes.

In the internal-business-processes perspective those processes should be indicated that are used to manufacture products or provide services typical of a particular organization. Products or services and the way of their provision constitute a proposal of values for recipients. For this reason, it is necessary to identify key processes and improve them so that proposal of values for the customers was competitive as compared to other organizations. Basic internal-business-processes can be included in four categories (Kaplan, Norton 2011):

− operational management,
− customers management,
− innovative processes,
− adjusting and social processes.

Within these four categories there are subprocesses typical of the sector in which the organization operates. Here, similarly, processes should be selected which have key impact on providing values to the customers as well as the possibility of achieving the set goals.

In the perspective of the customer the task of managers consists in identification of target groups of customers to whom products or services will be delivered. Determination of the structure of activities with regard to recipients that will be intended to: growth in customer satisfaction, keeping the present customers, gaining new customers, increase in the share in the market. The structure and scope of activities in this perspective are
determined by the kind of strategy that has been developed and selected at the stage of strategic planning.

Financial perspective describes measurable results obtained as a result of implementation of the adopted strategy at using traditional financial terms. In the case of business organizations these can be: shareholder value, return on investment (ROI), increase in revenue, individual cost, profitability, economic value added (EVA). In the case of organizations operating beyond the business sphere these areas can be: long-term value for stakeholders, implementation of mission, effectiveness of the possessed resources management. Selection of elements describing this perspective depends on the adopted competition strategy in the case of business organizations or the selected growth strategy in the case of public organizations.

5. Conclusions

A strategy map presents the way in which the strategy connects resources of an organization with internal processes of value creation. Goals presented in particular perspectives are combined by means of cause-and-effect relationships. Construction of the strategy map explains the logic of decision-making concerning creating value for external and internal stakeholders. It is thus an extremely useful instrument increasing the possibility of effective strategy implementation. Every organization however, should develop its own, unique method of description of particular perspectives taking into account its special character of operation. The use of a strategy map should not be fashion but rather one of important implementation concept of the prepared strategy.

References


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