DOI: 10.2507/31st.daaam.proceedings.xxx

STRATEGIC AND CULTURAL DIMENSION OF THE MANAGEMENT BY PROJECTS

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This Publication has to be referred as: Majstorovic, V[lado] & Majstorovic, A[na] (2020).Strategic and Cultural Dimension of the Management by Projects, Proceedings of the 31st DAAAM International Symposium, pp.xxxx-xxxx, B. Katalinic (Ed.), Published by DAAAM International, ISBN 978-3-902734-xx-x, ISSN 1726-9679, Vienna, Austria
DOI: 10.2507/31st.daaam.proceedings.xxx

Abstract

New approaches to management are emerging in response to overcoming the difficulties associated with the growing impact of the environment on the organization and the increasing speed of change in that environment. One of these approaches to management is a relatively new concept of management known as management by projects. In this context, the paper gives description of the concept management by projects and its connection with strategic management and the fundamental assumptions for its application. The first of these assumptions is a corresponding change in the organization. It includes the introduction of a project organization or appropriate organizational structure, the development of organizational and project culture and the introduction of teamwork that is of particular importance for management by projects. The key to the success of this concept is not only in the strategic but also in the cultural dimension of this approach.

Keywords: Strategic Management, Project Management, Organizational Culture, Project Culture and Teamwork

1. Introduction

The survival of an organization in the market depends on a number of factors, including its strategy on the one hand and projects on the other hand as a way of achieving strategic goals.
Today, more and more projects are used as a means of achieving strategic plans and an instrument for achieving a key competitive advantage [13]. In that way, the expansion of projects of different types leads to the formation of a network of projects that has influenced the development of new management models. As classical management has not developed a conceptually broad basis for network project management, model of management by projects has been developed that conceptually approximates the formulation and applied strategies [5].
The organizational consequence of expanding the concept of management by projects is a project-oriented organization that assumes the project organizational structure and culture of the organization adapted to the concept of management by projects. As strategic goals as elements of organizational culture connect strategy, projects and management by projects, this paper raises the question of what are the preconditions for the initiation of this concept.

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Therefore, the aim of this paper is to describe management by projects as a discipline complementary to strategic management with special emphasis on the strategic and cultural dimension of this management concept.

2. Strategy and Strategic Management

A strategy is a term derived from the Greek word *strategos*, meaning military leader. The military has used the word strategy for years and defines it as the science of planning and directing military operations. The term strategy has been taken over by managers from military terminology and is increasingly used to denote a wide range of operations within a company. The strategy is a programme of actions aimed at achieving a specific goal. Goals show what is to be achieved, and the strategy corresponds to how to achieve it. Thus, the first author to deal with strategy, Alfred D. Chandler, defined strategy as determining the basic long-term goals of the company, adapting directions for business activities, and determining the concepts and source of resources needed to achieve the set goals [1]. Heinz Weirich and Harold Koontz define strategy as determining the basic long-term goals of a company, adopting directions for actions, and allocating the resources necessary to achieve them. James B. Quinn defines a strategy as a blueprint or plan that integrates the main goals of policy and action into a single whole. We find a similar definition in William F. Glueck according to which the strategy is a unified, comprehensive and integrated plan that seeks to ensure the achievement of the fundamental goals of the company.
From the above definitions, it can be concluded that some authors, when defining the strategy, have in mind the endpoints (purpose, missions and goals) and the means for their realization (policies and plans). Others emphasize the means to achieve the endpoints of the strategic process more than the stated endpoints. A comprehensive definition of strategy has in mind the determination of the purpose (or mission) and basic long-term goals of the company and the adoption of directions of action and allocation of resources to achieve these goals [17].
Just as management in an organization can be divided into top, middle, and functional levels, a thesis has been developed that the general hierarchy of strategies in an enterprise or other organization contains three main levels [1]:

- level of the entire company - corporate strategy, emphasizes the level of the company as a whole. It covers global goals and identifies strategic business areas;
- level of a business unit or strategic business unit - business strategy, is characteristic of companies that have one or more organizational units that have their own business. They are organized as business units or as strategic business units. In such cases, an appropriate strategy is defined for each of these units. It should answer the question of how to compete in the selected market. Various models are used for this purpose, the most well-known being Porter's model of generic strategies and the product life cycle model [1];
- level of business functional area - functional strategy, is characterized by the fact that strategies at this level are focused on functional areas such as marketing, development, production, finance, human resources, etc.

Changes and the process of implementing the strategy - the changes are constant, faster, deeper and wider. They affect the execution of almost all processes in the business and any other organization. The particular emphasis is put on the impact that changes can cause in the processes of formulating and implementing strategies to achieve strategic goals of the organization. Therefore, in the process of setting a strategy, it is necessary to take into account the impact of current changes. Certain changes should be anticipated as risks and considered when implementing strategies and projects. Although we cannot predict change with certainty, one should seek a solution in acquiring the ability to cope with change. Mastering changes in the business in setting and implementing strategies of business and other organizations are becoming the subject of numerous theoretical discussions and a particular challenge for management now and in the future. The fact that the failure rate of the strategy ranges from 70-90% confirms that the ability to implement the strategy in conditions of constant change becomes more important than the ability to formulate a strategy [5]. However, in conditions of continuous changes, the process begins with strategic management that includes a task to analyse the environment, position the organization, determine its strategy and main projects that are intended to implement the strategy. Therefore, in the new context, the importance of management, and especially project-based management, is growing.
Strategic Management Management is defined as an organization's constant process of adapting to the environment, and the way it affects the environment according to the purpose and goals of the company. [8] In continuation, the paper brings a brief description of strategic management. The formulation of strategy is a key element of the strategic planning process. It includes other important components of strategic management such as implementation and control of strategy and feedback that forms the core of management. [12] Feedback is the information input for each previous step in the strategic management process that indicates to him whether the activities of the next step are going according to plan. The information thus obtained serve to take corrective actions. As no system can survive without management, therefore, the establishment of a feedback mechanism forms the core of management. Although the specific steps in formulating a strategy vary, the whole process can be built around key elements of the strategic planning process, including [17] orientation of the organization's top management purpose and main goals, external environment, internal environments, creating alternative strategies, evaluation and choices strategies.
The orientation of top leadership, purpose and goals. The orientation of top management is important for strategy formulation. Top management determines the purpose of the organization and clearly determines its geographical

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orientation. The purpose and main goals are the endpoints towards which the activities of the organization are directed. The next step involves defining the mission and vision.

Defining mission and vision. The definition of a mission is a general and short statement that clearly identifies the basic function of the organization or defines the purpose of its existence. As with the mission, the definition of vision is also a short statement that describes what the organization will look like in the future when it reaches its full potential.

Analysis of external and internal environment. Each organization works and operates in a given environment that indicates the totality of factors that affect its future development, but also have a significant impact on the choice of its strategy. Therefore, the purpose of the environmental analysis is to identify key factors influencing the current and future development of the organization. Identification of factors influencing the choice of strategy should primarily focus on the analysis of the external and internal environment. Successful performance of these analyses is a fundamental prerequisite both for understanding the position of the organization but also the ability to choose the appropriate strategy for successful operation in the environment.

Creating alternative strategies, evaluating and choosing a strategy. Strategic alternatives are created based on the analysis of the external and internal environment. Strategies need to be created in areas such as products and services, marketing, finance, organization, human resources, quality, public relations, etc. An organization can follow several different types of strategies. Evaluation of various strategies is required before a choice is made.

Defining strategic areas and goals. Defining strategic goals by key strategic areas is directly related to the results of the environmental analysis resulting from SWOT analysis and other related analyses, as well as the mission and vision. In addition to defined strategic goals by key strategic areas, it is necessary to define projects that are intended to achieve the set goals and, of course, key indicators of success.

3. Join project plan as part of the strategic process

Organizations use projects as a means to achieve goals, so the projects are the bearers of the strategy. The strategy in the context of project management should be the result of a strategic process driven by the top management of the organization. Thus, the strategic guidelines of the organization necessarily affect the goals of the project. Project goals must be complementary to the organization's strategy because the strategy is part of a process in which resources, methods and tools are defined to achieve the previously defined goals of the organization. The strategic process is dynamic and continuous. It includes the analysis, selection and implementation of strategies and projects. Changing any component of this model can result in taking a different strategic position [13]. Therefore, the activities of strategic formulation, implementation and evaluation must occur constantly [13]. After the management decides on a certain strategic alternative, the project is prepared and a joint project plan is prepared. Thus, the organization must prepare rapid and appropriate responses to business challenges and competition from its environment. These responses are defined by a joint project plan which should include the following [9] [13]:

- assessment of the contribution to the organizational strategy of each of the projects;
- deciding which projects will be implemented and which will not be based on their objectives;
- ranking the relative importance of individual projects;
- schedule for the implementation of individual projects;
- assessment of the capabilities, required resources and logistical requirements of each project.

The next phase is the harmonization of implementation possibilities after which unfavourable strategic alternatives are rejected and the launch of projects can start.

4. Management by Projects

Management by Projects is a discipline in the field of management complementary to strategic management. Project management ensures project selection, resource allocation and execution of projects that are in line with the organization's strategy. It is a new discipline that has for a primary task to implement the strategy. However, the key to long-term success is not only in strategies, projects, resources but also in the well-neglected cultural dimension of governance. When applying this management concept, it is necessary to set the entire business of the organization so that it takes place through the implementation of a series of projects, in which individual business processes and ventures are defined and organized as projects in terms of modern project management concept. In this way, the organization's business takes place through the implementation of a series of individual projects, which leads to the project orientation of the organization and the possibility of management by projects or project management [6]. In order to apply the concept of project management, the organization needs to be prepared for the application of this concept. In this preparation, it is especially important that in addition to adopting a strategy, organizing and defining projects and providing resources, to implement appropriate changes in the organization. This includes the introduction of project organization, the development of organizational and project culture and the introduction of teamwork, which is of particular importance for project management given the wide range of applications.

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Project organization. A project organization means an organizational structure for managing and executing a project within an existing organization, company or another system [4]. Each organization has a certain structure, i.e. composition, its schedule, the way of building internal connections and relationships. The importance of organizational structure is so great that it is often equated with the organization even though the organization is a much broader concept than organizational structure. The organizational structure, along with the internal economic relations and management system in the company, is considered the third and most important part of the organization. The organizational structure within the project implementation is a key factor for success. In the continuation of this paper, we will say more about the introduction of project and matrix organizational structure in the functioning of business organization because these two organizational forms are very suitable for applying the concept of management by projects.

Project organizational structure The project represents the so-called additional organizational structure because it requires some changes in the existing organizational structure necessary to create a particular project. It is a temporary gathering of the best available experts in the organization or company to create a well-defined project, at certain costs, for a certain time and the required quality. After completion of the project, the project team is disbanded and its members return to the previous organizational units. Due to the nature of temporality, the project organizational structure is on the one hand very flexible but on the other hand, it is insufficient to be the only structure within a particular organization or company. Therefore, it is necessary to emphasize that the project organizational structure mainly serves as a supplement to the existing organizational structure, regardless of whether it is a traditional, i.e. functional, divisional or some other classic organizational structure. Changes in the existing structure can be larger or smaller, so the project organizational structure can take different forms that depend on many factors such as project complexity, project execution time, available staff and other resources. Observed from the point of view of the continuity of activities, all tasks in the company can be classified into two basic groups [4]: continuous (routine) tasks and one-time (occasional) tasks. The first group refers to daily activities of the organization or company, and the second group refers to activities that the organization does not perform every day. Such activities are performed occasionally and when necessary. It is typical of tasks called projects. Concerning the organization, it is important to emphasize here that different organizational structures also correspond to the stated tasks. A functional or divisional organizational structure is appropriate for the successful performance of continuous tasks, and project organizational structure is required for one-time tasks, called projects. Thus, the project organizational structure here actually fits into an already existing organizational structure, functional or divisional. Thus, appropriate changes occur in the existing organizational structure. Given the extent of changes that occur in the organizational structure of the enterprise, it can occur in three forms of project organizational structure [7]: organization of project execution without structural changes in the existing organizational structure, individual project organizational structure and pure project organizational structure.

According to the first-mentioned form, the organization of project implementation is included in the existing organizational structure. These are projects that do not cause changes in the existing organizational structure, so it is possible that this form of structure is not visible as a special organizational form, but to be imperceptibly incorporated part of the existing organizational structure. Since these are smaller tasks, i.e. smaller projects, they are assigned to individual managers, i.e. execution coordinators.

Unlike the first invisible form, the second - individual form of the project organizational structure is visible, but up to the limit of the project manager, i.e. project manager who uses the necessary resources and people in the places where they are standard, for example in their functional services, i.e. departments. An individual project organizational structure with a built-in team for a possible project has a separately responsible project manager while temporarily taking the necessary resources from certain places within the existing organizational structure.

The third mentioned form of structure is a recognizable form of project organizational structure which we call a pure project organizational structure. It is special in that one or more organizational units are formed in the existing organization for the execution of the project or more of them. Such an organizational unit is not dependent on the existing organizational services and is trained to perform all tasks necessary for the implementation of the project. It is a self-sufficient organizational form for carrying out a project with its own human and material resources which is under the occasional control of the parent organization. The project manager independently coordinates all activities necessary for the execution of the project, and the general management of the company is responsible for it. Thus, in the existing organizational structure in addition to functional organizational units, project organizational units are formed in which members of the project team, managed by the project manager, gather. After the project is completed, the project team is disbanded, and the project associates return to their home organizational units in which they worked before engaging in the project.

In order to introduce the concept of project management, in addition to the introduction of an appropriate project organization it is necessary to develop and establish an appropriate organizational and project culture in order for each individual to contribute to successful economic management and every other organization in which he works and operates.

Matrix organizational structure. The project organizational structure and matrix organizational structure belong to the group of so-called additional organizational structures. This means that the existing organizational structure changes and adapts to the execution of a particular project. A matrix organizational structure was created in an attempt to combine the advantages of a functional organizational structure with those of a pure project. Since this organizational form encompasses two dimensions of the organization (functions and projects), the matrix structure is most often presented similarly to the matrix after which it was named. One axis shows the functional organizational units while the other shows the division by projects, products, etc. Thus, there is a division of responsibilities between functional and project

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management for project execution. Therefore, a matrix organizational structure is called an organizational structure with shared responsibility.

Tasks related to the implementation of the project are classified into special organizational units. For its implementation, a special organizational unit is formed and a project manager is appointed (or project managers if there are several projects), and staff from existing organizational units are made available to them. Thus, the staff engaged in the execution of projects becomes doubly responsible and subordinate, on the one hand to their head of the functional organizational unit, i.e. functional manager, and on the other hand to the project manager, i.e. project manager on which they are engaged. Upon completion of the project, members of the project team may engage in new projects, if any, or return to their home functional units. An example of a parent organizational structure is shown in Figure 1 [10]. The matrix organizational structure, as well as the project structure, has its advantages and disadvantages.

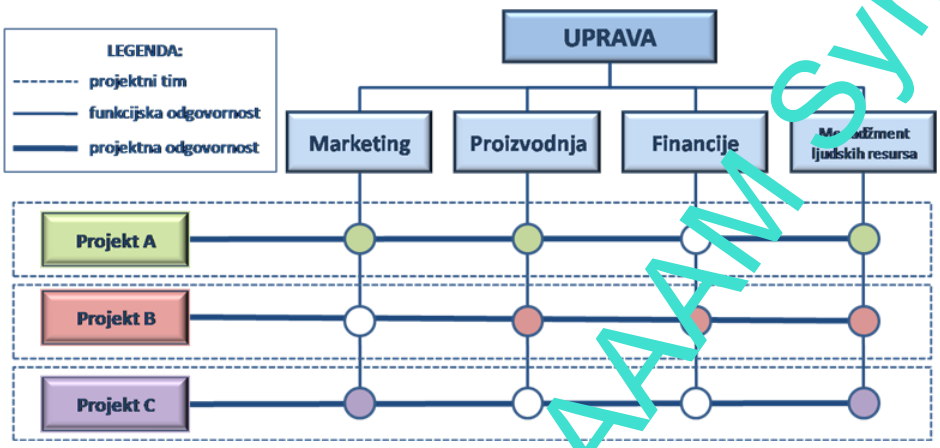

Fig 1. Matrix organizational structure

The particular advantages of the matrix organizational structure are reflected in the exceptional flexibility, orientation towards the result, the use of professional knowledge and experience gained in working on one project and its transfer to other projects in which they are participants. But problems with the dual responsibility of project team members are possible. Due to this double responsibility, certain misunderstandings can occur, which can affect the progress of the project. Understandably, there may be a conflict of interest, and therefore it is necessary to provide for additional coordination, i.e. managers who make decisions in such a situation. These are the so-called cross-over executives (senior executives). The Project Management Institute (PMI) in its standards defines a weak, balanced and strong matrix organizational structure between two extremes - functional and project organization. The differences are explained in Table 1. [14].

Project characteristics	Functional	Matrix			Project
		weak	balanced	strong	
Project manager authority	small or none	limited	weak to moderate	moderate to strong	strong to complete
Resource availability	small or none	limited	weak to moderate	moderate to strong	strong to complete
Who controls the project budget	functional manager	Functional manager	divided	project manager	project manager
Hiring a project manager	periodically	periodically	full time	full time	full time
Engaging administrative staff on the project	periodically	periodically	full time	full time	full time

Table 1. Influence of organizational structure on the project (according to PMI)

Organizational and project culture. Among the important factors of business and development of every economic and other organization is the organizational culture. In the literature, it is also known as corporate culture or company culture or organizational culture. There are many definitions of organizational culture. For this work, we will consider organizational culture as a way of life and work in an organization or company. A good knowledge of its elements is

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important for understanding organizational culture. According to Armstrogan, there are three important elements of organizational culture, namely: organizational values, organizational climate and managerial style [18].
There are some other views on elements of organizational structure. According to that in addition to visible manifestations such as access to users of products and services, logo, etc., the culture is made up of other less visible elements such as commitment, ethics, negotiation, conflict resolution, etc. [5]. Organizational values as an important element of organizational culture represent all that is good for the organization and what must or should happen. They are expressed as a purpose, mission or strategic goals [18]. Since organizations use projects as a means to achieve strategic goals, it can be logically concluded that a strategic focus on project culture is one of the elements of organizational culture that has a significant impact on the success of management by projects.
Once the strategy and projects that ensure its implementation are formulated, the project culture becomes a factor of change and a precondition for the application of approach of management by projects and a stronger encouragement of teamwork. Development and continuous improvement of teamwork has a special significance for project management. It is a process of working in a group to achieve a goal. Teamwork can be considered as a conceptual approach to organizing and carrying out different types of projects and other tasks. Teamwork brings many benefits to both the project and the team members. Different ideas and abilities in the team encourage other team members to be creative and learn faster. Teamwork is based on a set of values that encourage successful group behaviour such as the ability to listen and communicate successfully, tolerant response, support co-workers, and recognize the interests and achievements of others. A team is best defined as a small group of people of complementary knowledge and skills who are committed to a common purpose, common business goals, and a common approach for which they hold each other accountable [16]. Teamwork encourages and helps team success. A team should be distinguished from a working group. In a working group, members work together to share information, procedures, or views, helping each other, but not having a truly common purpose, business goals, or joint work performance. Individual goals and individual responsibility always remain in the focus of the working group [16]. Therefore, team building must be an ongoing process of helping a group of individuals, bound by a common sense of purpose, to collaborate both with each other and with all other stakeholders in the project. The development of effective project teams is one of the basic responsibilities of a project manager. They should create an environment conducive to teamwork that is of particular importance for project management given the wide application possibilities of teamwork.

5. Conclusion

Modern business conditions are characterized by the growing influence of the environment on business and long organizations and the increasing speed of change in the environment. Such a turbulent environment requires faster organizational changes and new approaches to management. One of these approaches to organizational management is a relatively new concept of management - project management (MLA). It is a new discipline which primary task is to implement the strategy. However, the key to long-term success is not only in a well-formulated strategy but also in a greater commitment to the cultural dimension of governance. In this context, the paper gives a brief description of the concept of project management and its connection with strategic management and the key assumptions for its application. In order to apply the concept of project management, the organization needs to be prepared for its implementation. In this preparation, it is especially important, in addition to adopting a strategy, organizing and defining projects, securing resources, to implement appropriate changes in the organization. This includes the introduction of project organization, the development of organizational and project culture and the introduction of teamwork, which is of particular importance for project management given the wide range of applications. In addition, the entire business of the organization should be set so that it takes place through the implementation of a series of projects, where individual business processes and ventures are defined and organized as projects in terms of a new concept of management - project management. In this way, the business of the organization takes place through the implementation of a number of individual projects, which leads to the project orientation of the organization and the possibility of project management.

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