

THE NEED OF PROJECT CAPABILITIES IN PROJECT BASED ORGANIZATIONS

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Abstract

Whereas in functional organizations projects are used to drive special business activities, in project based organizations the project is the main business activity. They are characterized by a flexible and innovative form of executing projects in a dynamic and uncertain environment. In this paper an overview is given about the special characteristics of project based organizations and their success factors. From this the need for project capabilities is derived, as they are the source to reach the success factors. The close connection between success factors of project based organizations and the establishment of project capabilities is therefore developed. Then the question of how project capabilities can be build is addressed. Especially explanatory and exploitative learning methods are examined for this. The paper draws special attention to theoretical frameworks for capability building. A thorough understanding of this topic shows the necessity of building capabilities and future specialized research for practical work.

Keywords: Project-based organization, Project capabilities, Project success factors

JEL Classification: O22, M12, L2

1. Introduction

Project based organizations have become a more and more implemented organizational form in order to face the dynamic environment, especially in complex product markets. This organizational form has strong advantages compared to functional organizations. They show a better way of coping with team coherence, team spirit and communication, which is often a problem of projects in functional organizations. At the same time project based organizations reach a higher degree of project performance (Hobday, 2000). This is due to their main advantage of autonomy and differentiation (Melkonian and Picq, 2011).

Nevertheless project performance is often only considered on a short-term basis, with traditional performance measurement methods for single project success. These measures include for example the well-recognized “iron triangle” which focuses on the factors time, cost and quality (Atkinson, 1999). This approach does not take into consideration that project based organizations are established to benefit from their unique structure, which actually builds a special strategic approach. Thiry and Picq (2007) point out that project based organizations are shifting more to a strategic perspective in which it becomes more important to take the relations between projects and its stakeholders into considerations in order to create value. This shows that a broader understanding of project success is necessary in order to motivate all members of the project based organization to focus on the long-term success of the company in total.

For this, some kind of general setting is necessary to account for a coherent approach to manage various projects. Consequently this will lead to a more standardized approach which possibly is a harm for projects as they are applied on purpose to be innovative and a flexible form to respond to changing needs of clients and environmental factors. Moreover it is argued that a more standardized approach can be useful to enhance project efficiency. It is therefore necessary to manage these two aspects by developing long-term project capabilities (Melkonian and Picq, 2011). As some projects or facets in projects are often repeatedly applied, this is a good starting point for capability building and establishment (Schüßler, Wessel and Gersch, 2012).

The aim of this research paper is to approach the question of how project based organizations can build useful project capabilities to link their main strengths, as flexibility through autonomous work, to some extend of standardization to work efficiently and build a long-term competitive advantage. The need for project capabilities is derived from an extended understanding of project success. In this research paper especially the existing approaches of capability building through exploratory and exploitative learning are examined.

As a first step, the characteristics of project based organizations are stated and the building of project capabilities as a main project success factor is emphasized. After this changing definitions of project success are examined, which already give indications that success factors for organizations vary with the characteristics of organizational forms. For the analysis of building project capabilities, the double-loop framework of Brady and Davies

(2004) and the study of Melkonian and Picq (2011) are used to exemplify the process of project capability development.

2. Project capabilities in PBO

2.1 The Project Based Organization

To gain a general understanding of the need for project capabilities in project based organizations it is important to understand the characteristics and value creating processes of project based organizations first. Then the success factors can be deducted and subsequently the development and establishment of capabilities.

For a project based organization the project is “the primary unit for production, organization, innovation and competition” (Hobday, 2000, p. 874). So all projects contribute to the success of the company and add value. (Turner et. al, 2000). Furthermore (Hobday, 2000, p. 874) states, that the project is not just a single activity which stands for itself but a “primary business mechanism for coordinating and integrating all the main business functions of the firm”. Often complex and high value goods are produced by companies organized by a project based structure and each project has a direct link to mostly external clients. The structures and business processes are highly dependent on the changing projects and can be adapted easily. Therefore project based organizations are especially suitable for innovative and uncertain environments, where it is necessary to respond quickly to changes in requirements of clients (Hobday, 2000).

Hobday (2000) differentiates in his study very carefully the different types of project based organizations and works out the advantages of project based organizations. He distinguishes six types of organizations with a different degree of project based structures, ranging from the pure functional organization to a pure project based organization, with no functional organization structure. In this paper the perspective of Thiry and Deguire (2007) is followed who include the project-led organization in their definition of project based organizations, as the pure project based organization only appears very seldom in practice. Moreover, more and more functional companies integrate the concept of project management into their general organizational structure, as this will lead to higher customer satisfaction, because of effective integration of all departments in the company and the use of scarce resources (Ajmal and Koskinen, 2008), making the project-led organization an interesting and

more common organizational form to investigate. The “project-led organization” still features some functional support such as coordination between projects, but mainly the needs of projects are addressed (Hobday, 2000).

By comparing projects run in functional organizations and projects performed in project based organizations, Hobday (2000) finds that the project performance of project based organizations is in general higher. This is due to various aspects. Yet the most important aspects to note are especially the strong involvement and responsibility of the project manager in the team work and the lean and flexible way different tools can be applied during the project. In the project based organization the project manager as well as each team member could respond quickly to evolving problems and adapt the project process as required. Experience and trust are mentioned to be the most important facts that drive an active way of communicating with all project stakeholders and keeping the motivation of all project members up. In this way also the monitoring of costs were seen as an effective method in order to reach the projects goals, whereas this was negatively perceived by project members of the functional organization (Hobday, 2000).

In the above stated comparison of the two cases the project based organization reached the project goals of time, cost and quality more easily than the functional organization. Single project performance can therefore be seen as a major strength of this kind of organization and to which a special attention of organizations is aimed at.

However, also difficulties and problems were found especially with regard to the management and learning between and across projects. Weaknesses in the organizational form of project based organizations were found at the coordination of resources and capabilities, especially for the execution of routine tasks. Each project was treated equally important, which often lead to a high use of resources for a rather unimportant project.

Furthermore, despite the high motivation of the team members during the project, there was high pressure of performing and no time to reflect on finished projects (Hobday, 2000). This shows that a further study of the success factors of project based organizations is necessary, when the perspective is moved from a single project to multi projects. It is important to focus on all stakeholders as well as the integration of projects into a solid structure of the firm (Thiry and Deguire, 2007). Therefore the next section focuses on performance criteria in project based organizations.

2.2 Project Performance and Success Factors

The long-term success of an organization depends strongly on the project success (Shenhar, et al., 2001). Most of the time project success is still evaluated by meeting cost, time and quality objectives which results in short term perspectives of improving mainly operational execution of projects. Shenhar, et al. (2001, p. 703) note that “projects must be perceived as powerful strategic weapons, initiated to create economic value”. In this sense projects have an impact on the direction of the strategy and are directly linked to the strategic management of an organization (Shenhar, et al., 2001). This also corresponds especially to project based organizations. From this viewpoint they create a framework for project success, which takes four perspectives with different time horizons into consideration: project efficiency, impact on the customer, business success, and preparing for the future.

Particularly the dimension “preparing for the future” is of interest in the context of the necessity of building project capabilities. The importance of this dimension evolved during the study of Shenhar, et al. (2001), as many examined companies stated the high value of long-term benefits in order to create new business opportunities. Examples of this dimension include “gaining the required experience to enable the organization to compete subsequently in additional, more complex bids”, “establish strong ties with the customer and become his primary source of development in this line of work” and “gather substantial reputation” (Shenhar, et al., 2001, p. 711).

Also the study of Bryde (2005) highlights important factors that can be related to project based organization in order to be successful and work against their main weaknesses as indicated in the first section. In addition to Shenhar, et al. (2001) long-term perspective, Bryde (2005) focuses to a great extent on the importance of psychosocial-oriented and internal stakeholder focused project success. This means that meeting the internal stakeholder needs are strongly influencing the success of the project, as motivation will increase among the project members. Also here the connection to the long-term goal “preparing for the future” can be seen. Therefore project success definition must be aligned with the organization itself and the project teams, by aligning and harmonizing project objectives. He mentions success factors like project team member satisfaction and increase in organizational capabilities for managing future projects. These broader success factors should encourage

project managers to go further than the short-term tactical optimization of projects (Bryde, 2005). These factors already show the necessity and importance of building strong project capabilities and implementing a system in which these capabilities are monitored and actually applied. Also an interaction between team building and capability building can be noticed.

The findings relate closely to the necessity of establishing project capabilities and give insight into what kind of capabilities are important for project and the organizations success in general. Project based organizations already meet most of the standard success criteria and also focus on measuring their success as seen in the study of Hobday (2000). But as Thiry and Deguire (2007) conclude, there are still many open questions of how project based organizations can develop a relation between project and general management, this again strengthens the need for examining project capabilities, which is the main focus of the next section.

2.3 Project Capabilities in project based organizations

The study of success factors of projects and especially projects in project based organizations emphasizes the need to establish strong project capabilities so that the organization has the chance to build a strong organization with competitive advantages in order to be successful on a long-term basis. Project capabilities are therefore often defined as the ability to execute multiple individual projects to gain sustained performance (Brady and Davies, 2000). Melkonian and Picq (2011) establish a framework for building project capabilities that builds among the understanding of project capabilities as the connection between the more stable and lasting aspects, in organizations that normally are flexible and renewing their routines constantly. They build on the findings of Brady and Davies (2004) who explain the development of project management by the interaction of exploratory and exploitative learning.

In this approach Brady and Davies (2004) emphasize that initially an organization needs to enable special project teams to exploring new ways of working within the project team which they refer to as project-led learning. By this existing norms and procedures are questioned and new ways of handling projects are explored. When successful new procedures have been found, they can be applied also to other projects and tested. From this point the successful routines and practices are selected to feed them into the project business organization, which

will change the structures according to the new needs. It is a bottom-up process to build project capabilities. At the same time business-led learning is applied by the selection of simple and standardized new routines and practices. The project business organizations searches for repetitive tasks that will enhance the overall efficiency. By refocusing the strategy a top-down approach is applied.

Melkonian and Picq (2011) use this approach to further identify specific levels of analysis that need to be addressed for capability building. Firstly they emphasize an individual level of analysis. Here the focus lies in the definition and recognition of individual talents in order to combine different strength to gather collective competences in a project team. It is the task of the organization to account for existing and supporting systems. The next level of analysis is the collective level, which addresses the between project phase as the learning between several projects and project teams. At last the organizational level needs to be analyzed in order to explain the evolution and implementation of new routines. There should be a mixture of exploratory and exploitative learning. Whereas the exploitative learning assures the functioning in general of the proceedings and the exploratory learning accounts for keeping the flexibility of the project endeavors (Li and Huang, 2013).

The interaction between the levels of analysis as stated by Melonian and Picq (2011) is of high relevance to the functionality of this approach. The knowledge in an organization is fragmented, as every member of the organization holds a piece of it. The learning is reinforced through the interaction as the fragmented knowledge can be combined by the interaction of exploitative and exploratory learning (Li and Huang, 2013).

Consequently another point of focus lies in the requirements necessary for interactional learning. Firstly, managers need to actually be aware of this learning. The approach must be anchored in the strategy of the organization in order to be able to drive every member in the organization into the same direction by motivation. The motivation of each member can be enhanced by a shared understanding of goals and values of the company that should demonstrate the importance of exploitative and exploratory learning (Li and Huang, 2013). Bryde (2005) suggests that this is possible by conveying a feeling of importance to all the team members, improving trainings for project managers and taking their objectives and goals into consideration. Therefore it is the task of the management to incorporate success indicators also with regard to each individual, like personal growth, reward and recognition,

for team members and project managers.

3. Conclusion

Consequently we learn from this research paper, that project capabilities are necessary to build an organization that is capable of dealing with multiple projects in a flexible but efficient way. For building project capabilities success factors are identified that demonstrate the importance of a long-term based view on success and project member satisfaction and motivation. From this understanding the following step in building capabilities is to establish structures and processes in the organization that will encourage learning processes through which capabilities are build up.

The learning processes include the interaction between exploratory and exploitative learning in order to constantly move the organization by finding better and innovative ways of working on projects. In the research paper the establishment of three different levels of analysis (“individual level, collective level, and organizational level”) was emphasized in order to build long lasting project capabilities. These give important insight into the way project capabilities are build and give a suggestion of which processes need to be addressed and established in project based organizations. Though for practical use of this approach each of these levels needs to be examined in greater detail so that tactics for each level can be established. The most important requirement for the application of this approach is nevertheless to provide a suitable environment for all members to motivate the participation of the learning processes.

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