



THE COMPETENCES OF CROSS-ORGANIZATIONAL MANAGERS OF PROJECT TEAMS IN SUPPLY CHAINS - THE RESULTS OF EMPIRICAL RESEARCH

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Abstract

The article aims at presenting competences of the cross-organizational project teams managers in supply chains, that is such teams whose members are employees of at least two companies in the supply chain. This article presents the results of the survey carried out in 56 entities which are the links of the supply chains located in Polish. Among the studied entities, 11 cases of cross-organizational project teams were identified and the authors concentrated on this group of companies in the article, which is reflected in the second part of the paper.

Keywords: Project teams, cross-organizational project, project manager, competences

1. INTRODUCTION

The success of supply chains is primarily dependent on the ability to integrate and coordinate the activities of the network participants, in particular the flow processes of product, information and financial resources from the acquisition of raw materials, to the places of consumption, which (as is stressed in the literature of the subject) contributes to the creation of a competitive edge of a supply chain and its customers. The interoperability of the various actors in the supply chain is based primarily on the variety of standardized processes, but more and more often also on projects. The research conducted by the authors show that the tool for merging and joining operations of supply chain entities is setting up and the maintaining the operation of cross-functional and above all cross-organizational project teams therein.

The success of the project depends on several key factors for success. One of them is a competent manager (leader) of the project team [1-3]. The project can be well thought, the people committed to its execution can be high class specialists with experience in the implementation of other projects, but if the efforts of all participants and the coordination of resources are not effectively managed, the project may exceed the budget, go beyond the planned schedule, do not provide the expected quality in the execution of tasks. An unambiguous definition of the project manager does not exist in the literature. The literature review also causes difficulty in extracting the universal obligations and the expected competencies of a project manager, also there are not any studies demonstrating the role and characteristics of the project leader in the supply chain. Therefore, the aim of the article is to present the competences of managers managing cross-organizational project teams in supply chains.

2. LITERATURE REVIEW

The question of the integration of the individual links in the supply chains in relevant literature is widely discussed and the theoretical papers are abundant with the structured lists of integration tools, developed on the basis of various criteria for their classification. In most cases, their common feature are joint activities of various actors in the supply chain, understood as the range of expansion of the organization boundaries in order to spread them over the partner. One of the tools that allow to merge and join the operations of supply chain is setting up and the maintaining the operation of project teams therein whose business relate to at least two companies in the supply chain. In the literature it is stressed that the most effective internal integration tool



in the company is setting up cross-functional teams [4-6] in order to build bonds between people representing different organizational units. Sometimes it happens, that team members are the representatives of suppliers or customers, then the cross-organizational team becomes a tool for the external integration, and thus the team work can promote both the development of vertical and horizontal links in the supply chain. Setting up the cross-organizational project teams in a supply chain is the higher level of integration Thanks to this solution, in addition to the integration of the individual functional areas within the supply chain, the transfer and the diffusion of knowledge are ensured to the places where there are actually carried out individual tasks of the project. In addition, this option allows a more accurate selection of the project team members from in terms of their knowledge and competences - there is a range of specialists from many, not a single organization. Importantly, individual organizations (links) of a supply chain will more easily accept decisions/ solutions developed within the project team in which their representative participates (due to the representation of their interests). [7]

As is has been already emphasized in the introduction, the success of the project teams depends on the competence and commitment of the project manager. It should be noted that unlike line managers, performing their tasks in a functional organizational structure, the project manager faces other challenges. They include, in the first place, providing leadership, often without any documented formal power and in the heterarchical environment. The position of the project manager has a temporary nature, without a precise assignment of duties, powers and responsibilities that change dynamically and which smoothly adapt to the developing situation and needs - the person appointed to the role of a leader in the implementation of the project has only generally specified area of activity, within which he organizes his duties independently [8]. This causes difficulties at the attempt of identification of group of characteristics and skills necessary for a project manager. The analysis of literature does not give a definite answer to the question which competences of the project manager determine the success of the project. The results of the analysis are presented by the authors in **Table 1**, with an attempt to identify the main categories of necessary competences of the project team leader.

Table 1 The competences of a project manager

| Category of competence | Soft competence | | Hard competence | |
|------------------------|---|---|--|--|
| | Social and managerial competences | | Specialized competences | |
| | Personal | Business | Project management processes | Technical |
| Competences | Flexibility, leadership, team building, conflict resolution, creativity, negotiation, emotional intelligence, reliability, delegation, conceptual thinking, ability to communicate, verbal and written skills, attitude, ability to deal with ambiguity and change, dynamics, problem solving, trustworthiness. | HRM skills, strategic alignment, communication management, risk management, project order management, customer relationship, quality management, customer satisfaction, finance, understanding the corporate culture. | Project integration management, project scope management, project time management, project cost management, planning, organizing, a strong orientation towards the objective, the ability to perceive the project as a whole | General technical overview, technical challenges, technical vocabulary, and search for innovative technical solution, the expertise and the use of the procedures, techniques and tools related to the subject (the industry) of a given project, experience in the industry |
| References | [9-14], [18] | [9], [14-16], [18] | [9], [15] | [9], [15], [17] |

The selection of the most relevant competences with regard to the success of the project was the basis of several studies, which need to be referred to at this point. El-Sabaa [9] conducted a self-assessment questionnaire, identifying the features and skills of successful project managers. 126 respondents indicated that the most important group of competences are personal characteristics (85.3 % of responses). The second

one were the conceptual and organizational skills (79.6 % of responses) concerning project management, the least important (50.46 % of responses) were technical skills. In turn, the focus of research of Stevenson and Starkweather [13] was to identify and evaluate those competences that IT managers and executives value in their search for successful project managers. The results indicated that executives valued six critical core competencies: leadership, the ability to communicate at multiple levels, verbal and written skills, attitude and ability to deal with ambiguity and change, that is, the competences belonging to the group of soft skills. Similar test results were obtained by Belzer [18] - he specifies the following soft skills as critical this successful project management: understanding the corporate culture, dynamics, leadership, problem solving and decision making, team building, flexibility, creativity and trustworthiness. Also Skulmowski and Hartman [12] and Muller and Turner [19] indicate soft skills of a manager as the success factor of a project.

3. RESEARCH METHODOLOGY AND GENERAL CHARACTERISTICS OF THE STUDIED COMPANIES

The collection of research material was conducted between 2016-2018 using a research tool in the form of a questionnaire, consisting of two parts. The main focus of the research was to identify the structural layout of the project teams in the supply chain in order to discover which kind of integration they serve.

As for the general structure of the questionnaire is concerned, its first part concentrated on the general aspects of the operation of project teams in the analyzed companies. The second one - the activities of a project team members composed of employees of various organizations (links) of the supply chain within which the company being researched operates (so-called inter-organizational teams, cross-organizational project teams). One of the research areas in this section concerned the competence of managers (leaders) of these teams. Detailed results in this respect will be presented in the next part of the paper.

Questionnaires were sent to 56 selected companies by e-mail or given directly to members of project teams. Thus, research entities were deliberately chosen enterprises - the links of supply chains; the criterion of their selection was initially obtained information available in the public data on the company that within the structure of the enterprise occur project teams. The analysis of the results was performed using an Excel spreadsheet. In this group of entities large enterprises predominated, i.e. with more than 250 employees (28 entities), of manufacturing profile of activity - 28 entities and without the participation of foreign capital (36 entities).

In the group characterized herein above 11 entities were identified, in which cross-organizational project teams are appointed, consisting of members - employees of suppliers and/or recipients. The basic data on the surveyed entities in which cross-organizational project teams are established are presented in **Figure 1**.

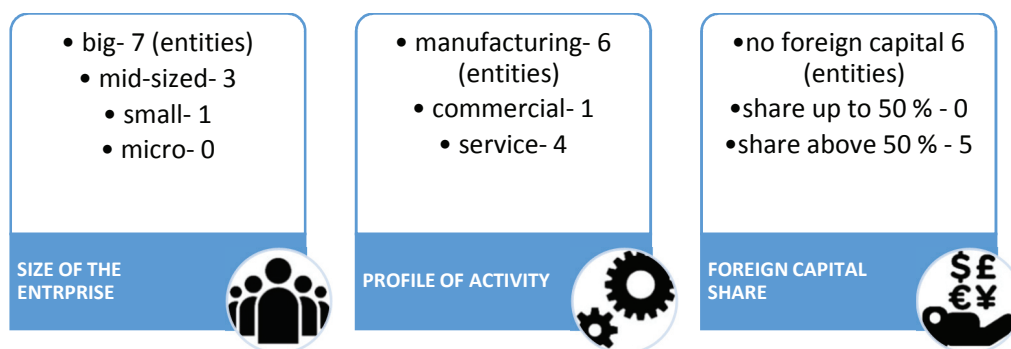


Figure 1 Characteristics of the researched entities in which exist cross-organizational project teams

It is worth emphasizing that the selected companies represent various industries, including automotive, construction, IT, FMCG, furniture, TSL and biotechnology. In addition, it should be noted that among the



analyzed entities, in addition to companies with the Polish capital, there are also companies with German, American, and combined French-American capital.

4. THE RESULTS OF THE RESEARCH IN THE FIELD OF PROJECT TEAM MANAGERS COMPETENCES

In the cases in which the project team includes the participation of employees of various supply chain organizations, the teams usually consist of minimum of 4 people and operate between 6 and 12 months. In 7 out of 11 cases the team is interdisciplinary, namely bringing together members of suppliers or recipients of various specializations (the representatives of various fields, such as marketing, information technology, finance and accounting). The responses obtained for this group of entities also show that team managers:

- are usually also directors of permanently separate organizational unit within the structure of the company, for example, a department, a faculty or a unit
- in terms of the location of the team in the organizational hierarchy of the entity, they usually report directly to the CEO (6 responses) or the Director of the Division/Department(4 responses).

In the area concerning the competences of the discussed project teams managers, the respondents made 48 choices for the defined 13 responses. The most common answers concerned the following competences:

- the division of responsibilities between participants of the team - 7 responses,
- current supervision of the execution of the project - 7 responses
- determination of the main objectives of the project (task) - 6 responses.

In turn, the smallest number of responses refers to the competencies regarding the selection of participants (members) of the team (2 responses), and determining the salaries (1 response). In none of the cases the competence regarding rewarding or granting bonuses to team members was selected. A detailed list of quantities of competences presents **Figure 2**.

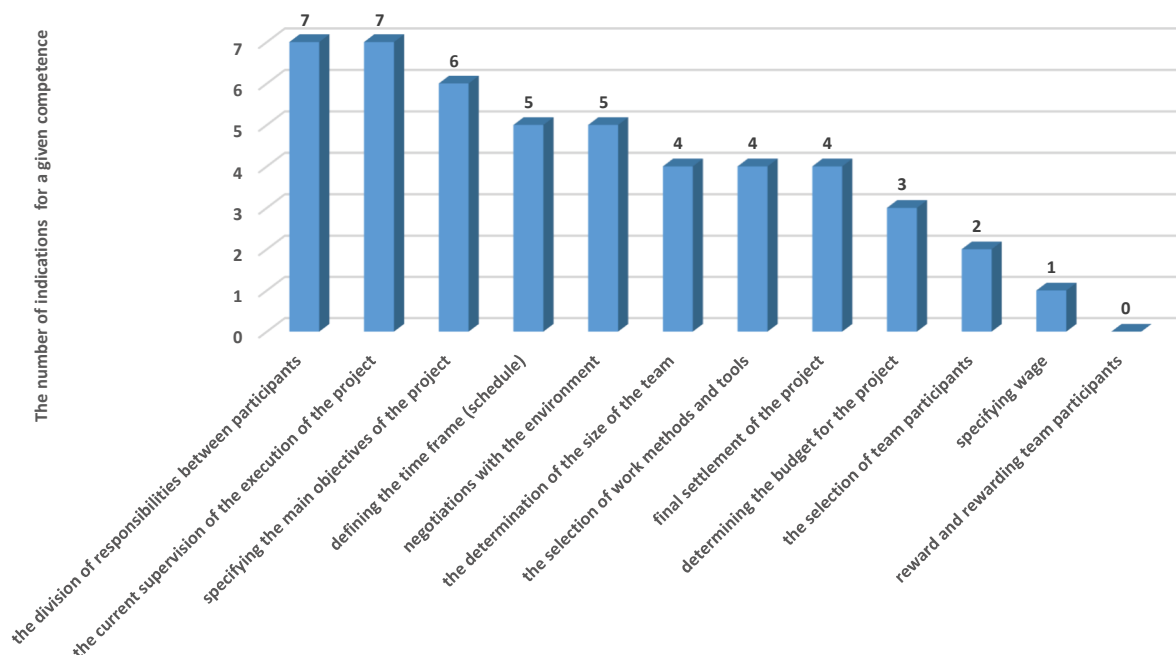


Figure 2 The number of responses within the competence of the cross-organizational project teams managers (the total number of responses= 48 *).

* There was a possibility to choose more than one answer.



It is worth to emphasize here that the competences proposed in the questionnaire can be divided into two thematic groups:

- 1) the social and managerial competences are: the division of responsibilities between participants, the current supervision of the execution of the project, specifying the main objectives of the project, negotiations with the environment, the determination of the size of the team, the selection of team participants, specifying wage, reward and rewarding team participants.
- 2) specialized competences, which include: the selection of work methods and tools, defining the time frame (schedule), determining the budget for the project, final settlement of the project.

Having aggregated the responses for competences in each group, it is possible to notice that the greater number of them refers to social and managerial ones (32 responses). However, given the uneven number of competences in each group, the more authoritative point of reference will be the analysis in terms of the intensity of the presence of the indications in the group, calculated as the relation of the number of indications (A) to the number of competences (B) (**Table 2**).

Table 2 The analysis of selection intensity for individual groups of the competences of cross-organizational project team managers

| Groups of competences | Social and managerial competences | Specialized Competences |
|--------------------------------------|-----------------------------------|-------------------------|
| A. The number of responses | 32 | 16 |
| B. The number of competencies | 9 | 4 |
| C. Intensity indicator $C = (A / B)$ | 3.56 | 4.00 |

Intensity indices calculated for the collected data indicate that higher intensity is characteristic for the group of specialist competencies, where on average 4 responses fall into one competence category. In the case of social and managerial competencies, this indicator is lower and amounts to 3.56. This proves that in the studied group of cross-organizational project teams the specialized competencies are relatively more important from the point of view of managing the discussed project groups.

5. CONCLUSION

The literature review presented in the article shows the importance of the appointment of the cross-organizational project teams in supply chains within the context of its integration. Thanks to this solution, in addition to the integration of the individual functional areas within the supply chain, the transfer and the diffusion of knowledge to the places where there are actually carried out individual tasks of the project, are ensured. The article emphasized the important role of the project manager in the context of the success of such enterprises as the project. The analysis of literature referring to the desirable characteristics of a team leader, leads to the conclusion that there is no universal set of competences that characterizes an effective project manager. However, there are certain groups that according to the authors belong to social and managerial competences (soft competences) and specialized ones (hard competences). English literature based on empirical studies, with regard to the success of the project, points to the particular importance of competences with a special emphasis on the personal characteristics of the project manager. From the studies carried out by the authors it can be concluded, in turn, that in Poland hard competences are mostly appreciated.

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