



The Role of the Team in Project Implementation

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Abstract. This paper intends to debate the importance of a team in successful project management. We discuss selected methodologies and pay special attention to the decision-making process in teams using traditional and agile approaches. The methods used in this article are the analysis and synthesis of the literature, as well as the results of carried out researches. To fulfill the aim of this study, we briefly characterize traditional and agile methodologies of project management, describe the team building process and define the desired competences of the team members. We also explore the differences in the decision-making process resulting from the methodology of project management selected. Additionally, we also analyze the result of research on the role of a team in the project management process. Regardless of the methodology adopted, it is crucial to not only consider the candidates' knowledge or experience while selecting project team members, but also their personality traits and interpersonal skills (social skills). However, it should be pointed out that given the specific nature of the agile methodologies, the social skills of team members are incredibly important, perhaps even more important than professional competences. In the case of traditional methodologies, teams of highly qualified specialists able to make quick and independent decisions are more efficient. In agile methodologies, the decision-making power of the project team is much greater. As the decisions are often made collectively, the executive managers' trust in the project team is of vital importance.

Keywords: project, project team, project management methodology, group decisions

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1. INTRODUCTION

Project management is a relatively new domain, both as a field of study and practice. Systematization of problems on this subject took place in the second half of the 20th century. Since then, an enormous degree of interest in the issues related to such projects may be observed. From the 1960s until the end of 2018, in the four major international scientific databases (Scopus, Web of Science, Ebsco and Wiley-Blackwell), the phrase

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“project management” appeared over 7,100 times in titles and over 22,000 times in the abstracts of publications and was used as a key phrase in 90,000 papers (Konieczna, 2019, p. 27). Nowadays, the knowledge of principles, methods and techniques of project management has become an essential component of expertise, not only for management specialists or managers in large organizations, but also for small entrepreneurs (Bukłaha *et al.*, 2012, p. 15).

The importance of the human factor in the achievement of business objectives is undeniable. Over 100 years ago H. Ford said: “You can take my factories, burn up my buildings, but give me my people and I’ll build the business right back again.” Another business tycoon, A. Carnegie, claimed that: “Take away my people, but leave my factories and soon grass will grow on the factory floors.....Take away my factories, but leave my people and soon we will have a new and better factory” (Kucia, 2015).

The nature of project management means that the selection of team members has become even more important than in the case of a group of people that undertake permanent, repetitive activities in traditional structures. It translates into higher level of requirements for project team members as well as the project manager. The decision-making process is of great importance for the project management. Apart from individual decisions made by project managers, collective decisions made by project teams are equally important.

The aim of this study is to show the role of a project team in project management. Special attention has been paid to the decision-making process – in the context of traditional and agile methodologies – within the project team. The methods used in this article are the analysis and synthesis of the literature as well as the results of carried out researches.

2. PROJECT SPECIFICITY – A THEORETICAL INTRODUCTION

There are many different definitions of a project in the literature, however, all sources indicate certain features which distinguish them from operational activities taking place within an enterprise.

A project is defined as a specific undertaking or activity resulting in the achievement of a goal or creation of a product or service. As it is closely connected with forward thinking, it is characterized by a high degree of risk and uncertainty (Stabryła, 2006, p. 29). A project is a new and uncommon concept, different from the standard activities carried out within the enterprise (Pawlak, 2006, p. 17). It is a sequence of tasks undertaken in order to achieve unique objectives within a set time frame (Mingus, 2002, p. 107). More precisely, a project is defined as a one-time multitask assignment with specified start and completion dates, clearly defined scope of work and budget as well as a temporary team which is dissolved once the task is completed (Lewis, 2006, p. 15). It is a kind of undertaking that involves a number of activities with defined deadlines, specific objectives and constraints, clearly defined responsibilities and duties for each team member, budget and action plan (Frączkowski, 2003, p. 11). It is a sequence of defined and interconnected activities which, if successfully completed, deliver the expected business value and justify the realization of the project (Wysocki, 2018, p. 41).

According to the definition found in the PMBoK Guide (*A Guide...*, 2009), a project is a time-bound set of activities undertaken in a logical sequence in order to produce a particular unique product or service (Chatfield & Johnson, 2016, p. 469). In the Prince2 project management methodology, a project is defined as a temporary organization set up in order to deliver one or more business products according to the agreed Business Case. A Business Case means a set of guidelines which specify whether the execution of the project is justifiable and cost effective (*PRINCE2...*, 2017, p. 8).

Based on the above-mentioned definitions, the following key features of every project may be highlighted. A project is:

- purposive – projects are planned and intended; each project has a clearly defined purpose; the outcome of a project may be a product or a service;
- temporary, periodic – each project is time-bound and requires the completion of a task within the set deadline; it has a specified start and completion dates;
- one-time, unique – one-off activities, which cannot be repeated in the exact same way;
- distinct from other activities – it is not related to the current, routine functioning of the company, it exists beyond the organizational and functional divisions of a company;
- specifically organized – it requires changes to the current company structure as well as commitment of various specialists and resources;
- complex – it can be divided into subtasks;
- constrained – among others by time, budget and scope.

The constrained nature of a project arises from what is described in the literature as a triangle model. The project objectives may be described by means of three elements: time-time constraints; cost-specified budget; scope-required workload. According to the triangle model, the project is successful if it is completed on time, within the specified budget and if it meets the predefined quality requirements (Bartoszczuk, 2015, p. 7). From a theoretical viewpoint, efficient project management comes down to the monitoring and analysis of changes to these three elements. In practice, however, time, scope and budget are not the only factors which constrain a project.

Despite the different nature of various projects, it is possible to identify common factors that determine the chances of successful project realization (Haffer, 2013, p. 109). These are usually allocated to two groups: internal or external factors. The external factors result from the competitive environment and the macro environment, whereas internal factors are directly related to the project, project manager, and project team, as well as the organization in which the project is being implemented.

3. PROJECT MANAGEMENT METHODOLOGIES

Project management methodologies are, to put it simply, the sets of rules for project management that include recommendations on the course of action to be taken and refer to a wide range of issues and processes of project management (Trocki, 2017, p. 25). Methodologies are guides to documentation types and powers necessary to implement

particular project stages. They provide guidance in two ways. Firstly, they provide junior project managers with a ready-to-use framework. Secondly, they make it easier for the organizations to standardize procedures and terminology (Kerzner, 2005, p. 26). Project management methodologies constitute a source of best practices serving as standards and procedures describing activities and to be undertaken by a project manager and other people involved in the project in order to complete it successfully. (Wyrozębski, 2014, p. 205). The methodologies, developed by the consensus of communities of project management specialists, approved by a competent authority and suitably documented are defined as standards of project management.

The achievements of project management allow the creation of a hierarchy of methodologies. Traditional methodologies have the broadest range of applications. They can be used by different types of organizations operating in various branches of the economy. The following methodologies are a group of industry or problem methodologies. The former are adapted to the unique aspects of a project or are developed by professional associations in specific industries (for example, IT or construction projects). The latter relate to problem-specific issues related to project management, e.g. project structure planning methodology, risk management or project management planning. The most heavily guarded are corporate methodologies, developed and applied in organizations where projects are the basis of functioning (e.g. *NASA Space Flight Program and Project Management*), or *IBM Worldwide Project Management Method*. Proprietary project management methodologies are also worth mentioning. They were developed by the authors of significant monographs and manuals in the field of project management e.g. MLPP (Lent's Project Management Method) developed by B. Lent, the BFPM methodology (*Business Focused Project Management*) by D. Comminos and E. Frigenti, or *STEP Project Management* methodology developed by A.B. Badiru in the USA (Kozioł-Nadolna, 2014, p. 154; Trocki, 2017, pp. 28–33).

In the contemporary economic reality, changes in the approach to project management may be observed. An evolution is in progress from traditional management based on traditional methodologies to management based on agile methodologies. The division of project management methodologies into traditional and agile is a division that currently predominates in the literature.

Traditional methodologies, are characterized by the fact that they have the widest range of applications and are intended to be used in various fields and project management situations. They are usually developed as project management standards by institutions that deal with the development and dissemination of model project management methods. They are usually easily available and inexpensive. A characteristic feature of traditional methodologies is that the entire scope of the project and the requirements are determined at the very beginning and do not change during the project implementation. The aim of the project is clear and well-defined as all details and the budget are set at the initial stage. The deadlines for individual tasks are precisely defined and the contract provisions protect the ordering party against the contractor's default. Each stage of the project is precisely documented and approved.

In traditional methodologies it is crucial that a subsequent stage is not initiated before the previous stage is completed, and that distinct teams are involved at particular stages. (Niegorska, 2019). Traditional methodologies work well in large

and complex projects involving many people, and in environments where changes are relatively slow and defined by procedures and regulations. Traditional methodologies are most often employed in companies with a stable structure, low dynamics of changes and well-documented operating processes. They enable the preparation of reliable project documentation in a foreseeable time period that will serve as a good basis for further cooperation (*Kaskadowa czy zwinna...*, 2020). The disadvantages of traditional methodologies include the unfeasibility of making changes in the project plan, the need for detailed plans, an excessive level of project formalization, the risk of high costs and project prolongation, and a lack of focus on the actual needs of the client and the delivered value (Kopczyński, 2014, p. 253).

The best known traditional project management methodologies include: PMBoK: *Project Management Body of Knowledge* – methodology developed by Project Management Institute, Prince2: *Project In Controlled Environments* – methodology developed by a British government agency – the Office of Government Commerce/AXELOS, IPMA ICB: *IPMA Competency Baseline* – methodology based on competence guidelines, PCM: *Project Cycle Management*, methodology designed for the development and European projects, Ten Step – created by PMI on the basis of the Project Management Body of Knowledge methodology.

Agile project management methodologies are relatively new compared to traditional methodologies. They were created in the late 1990s as a solution to problems arising in IT projects whose specificity, complexity and susceptibility to uncontrollable changes resulted in a low successful completion rate (Wyrozębski, 2015, p. 209). The genesis of agile methodologies was the observation that detailed planning according to traditional methodologies does not properly account for possible changes in customer requirements, final product design, or changes in the project environment. For this reason, it was postulated that increasing the effectiveness and efficiency of projects requires the development of management methods adapted to the new conditions and circumstances of project implementation. It was suggested that traditional methods were rarely able to meet the new requirements. A milestone in the development of an agile approach to project management was the adaptation of a common position uniting their creators and supporters in 2001. They signed the so-called Manifesto for Agile Software Development, in other words the Agile Manifesto, which was also referred as the *Manifesto for Agile*.

In an agile approach, it is important to focus on dynamic planning, continuous delivery of value to the client, actual measurement of work progress and the value of produced elements (Coplien & Harrison, 2005, p. 401). Agile methodologies are best applied in projects with a high degree of uncertainty and when it is not possible to accurately plan the whole project in a timely manner (Strojny & Szmigiel, 2015, p. 254). The most well-known agile methodologies in use today include Agile Project Management (APMG), SCRUM, Kanban, Lean, and Cynefin.

It is increasingly common among project management practitioners to talk about hybrids, i.e. a combination of the classical and agile approaches to project management. A combination of the classical approach and SCRUM methodology is used most often, the whole project is planned and supervised in a traditional way and the individual

stages are executed in an agile fashion (O'Sheedy, 2012, pp. 144–145; Liebert, 2017, p. 281). The Prince2 Agile methodology is an example of such hybrid.

Applying the methodology alone is not enough to minimize the risk of project failure, as people are the most important resource in the project (Spolsky, 2005, p. 160). Therefore, one of the manager's most important tasks is to select, train, and develop the people who are most likely to help achieve the project's goals.

4. THE ESSENCE OF THE PROJECT TEAM

The project team consists of employees representing various functions and whose common goal is to solve a complex problem. The team operates within a specific time frame and is then resolved (Batt & Doellgast, 2005, p. 138). Formally, among the people forming the project team one can distinguish project managers people who perform activities related to the project and external employees (independent contractors) (Trocki, 2017, p. 126).

The optimal selection of people is a tremendous challenge for the project team leader due to the high complexity of the whole process (Twardochleb, 2014, p. 223). Project management is often faced with unique problems since human relationships can be more complex and complicated than current, repetitive activities within a company. This is due to the specific nature of projects. The uniqueness and complexity of projects generally result in higher demands on team members. The limited project implementation time makes employee training of little importance. When managing a project team, it is most important to attract and retain the members, not develop them (Chrościcki, 2001, pp. 31–32; Trocki *et al.*, 2009, p. 94). The difficulty in creating the ideal project team is that project teams operate in a broader context and require more support from project managers than in the case of managing operational activities within the enterprise (Szymańska, 2012, pp. 130–131, 138).

In practice, there are various ways to complete a project team (*A Guide...*, 2017, pp. 240–255):

- *pre-assignment* – the top-down assignment of people to a project for various reasons;
- *negotiation* – in case human resources are limited as people participate in several projects, the managers of these projects must come to an agreement;
- *acquisition* – when there is a shortage of people with rare and high competences (external recruitment);
- *building a virtual team* – due to the long distances between the cooperating units, this mode of operation is possible thanks to information technology.

The dynamic changes in the scope of tasks performed in the project formula require a team to be composed of people with unique, unparalleled and, above all, complementary competences (Klemens & Szewczuk-Stępień, 2018, p. 47). A competence is a body of knowledge, personal attitudes, skills and relevant experience needed for the effective performance of a given function (*Wytyczne kompetencji IPMA...*, 2009, p. 26).

General requirements for project team members can be found in the literature. Keeling mentions the subordination to the project manager, individual substantive skills

and integration with other members, i.e. teamwork skills (Keeling, 2000, pp. 108–109). According to Meredith and Mantel, the desirable characteristics of a project team member are high-level technical skills, awareness of organizational principles, problem-solving orientation, focus on results and high self-esteem (Meredith & Mantel, 2000, pp. 97–98).

The desired competences include competences in the subject matter (i.e. knowledge and experience) and social competences. This includes the ability to work in a team, resistance to stress, accountability for the assigned tasks, ability to solve problems, creativity, independence and communication skills.

Of course, a team built of members with both substantive and social competences is ideal. It is a mature team, in which work is effective and pleasant. Finding the right people with all the above-mentioned skills might be impossible. Therefore, it is crucial that the selection of the team members is not done randomly.

A team with high substantive and low social skills is a group of professionals who unfortunately might not be able to collaborate. Working in such a team causes frustration and, despite having the necessary knowledge or experience, the project may not be realized within the assumed scope. Teams with low substantive competences and high social skills achieve better results. Such a team, despite its substantive deficiencies, provides support in difficult and crisis situations (Szymańska, 2012, p. 133).

The theoretical team building model includes three stages. The first one is planning the tasks, i.e. analyzing and defining requirements. The second stage is the formation of a team, i.e. selection of team members. The third stage is the development of a team (Dziurzańska, 2009, p. 127). The first stage of team building is the planning stage. It defines the scope, time and budget of the project. On this basis, the profiles of requirements and qualifications of the employees needed are created. At this stage it is determined how many employees should be hired, when and for how long, what should be their qualifications and skills, and what will be the cost of employment (Trocki *et al.*, 2009, p. 102). After creating the requirements and qualification profiles, it is possible to start assembling the team. Evidently, knowledge and experience related to the implementation of the project should not be the only criteria for joining the team as the candidate should also have specific personality traits. Thus, it is necessary to analyze the future team not only in terms of the required and owned substantive competence, but also in terms of motivation, attitude of project participants, their ability to act and the contribution of each person to the success of the team. Disregarding these aspects can lead to frustration, an unhealthy atmosphere and competition, tension, a reluctance to share ideas, low motivation to work or poor commitment (Brzezińska & Paszkowska-Rogacz, 2009, p. 81). It is relatively easy to verify hard competences (education, training, courses, experience on a given position). The verification of social competences is much more difficult as they are only revealed in the process of teamwork (Twardochleb, 2014, p. 226).

One of the most popular methods of the proper selection of team members, whether in terms of hard, soft or social competences, is the so-called Team Role Theory. It was created by a British scientist, Meredith Belbin. Belbin assumed that not only education and skills, but also personality type (and therefore preferred team roles and communication style) have a great influence on the effectiveness of teams.

A team is not only a group of people working in the same space or department. A team is a group of people chosen based on what they can contribute to the team, and who can share their knowledge and skills as needed (*Podstawy budowania...*, 2020). Belbin created a list of 9 team roles. He believed that if a project is to succeed, there should be people representing each of these roles in each project group. However, it should be kept in mind that a person can have personality traits and exhibit behaviors corresponding to 2–3 team roles, but one of them is usually dominant.

The third stage of team building is the actual process of the team formation, i.e. the development process of an already existing group. It is a complex and long-term process. When people work as a team, some changes in personal relations take place. Team members behave differently at the beginning of their acquaintance, and differently during the course of the project. The changes in these relations cause changes in the functioning of the whole team. The best known model of team formation process is the team development model by Tuckman (Tuckman, 1965, pp. 384–399). According to this model, teams go through the following stages (Krok, 2008, p. 22; Dziurzańska, 2009, p. 124; Gudek, 2013):

- *forming* – at this stage the level of emotion is high, everything is new and exciting, nobody knows what their role in the team will be, after getting the first information about the project, the team members remain independent and reserved in contacts with other people;
- *storming* – requires more openness to cooperation in order to exchange different views, ideas and positions; the roles are assigned to particular team members (organizational, technical or interpersonal); personalities are revealed; limitations usually appear in the organizational structure, preferences and expectations; attempts to evaluate management methods or decisions are noticeable;
- *norming* – this is the moment when people in a team start to trust each other, the confidence of individual team members increases, the bonds between co-workers are strengthened, differences of opinion are respected, the search for constructive solutions begins, team members correct their behaviors and habits so that the implementation of the project can proceed; the set goals seem less distant and everyone starts to cooperate in order to achieve them;
- *performing* – at this stage, the team functions smoothly and the members take turns in managing the work; the tasks are delegated so that everyone has a chance to develop and demonstrate their full potential; the set goals and tasks are implemented effectively and according to plan, there is an effective solution for every problem that arises the team members are not fully aware of interdependencies that affect their cooperation;
- *adjourning* – in this phase, the team members experience the feeling of anxiety and sadness about the impending termination of the project and the consequent separation of team members.

Decisions in a project can be made individually (usually by a project manager), but very often they are group decisions. Individual decisions usually concern simple, current, routine (programmatic), and urgent matters that do not entail high costs. Otherwise, the decisions are made collectively. The decision is consulted with a project

team, steering committee, or other body before it is made (Wawak, 2017). It is worth noting that groups often take risks that an individual person would not. The group decision making has many advantages but there are also some drawbacks. The pros and cons of group decision making are presented in Table 1.

Table 1. *Advantages and disadvantages of group decision making*

Advantages of group decision making	Disadvantages of group decision making
<p>greater knowledge of the group A group knows more than each of the participants individually, so more information is available; each of the participants has different experiences and different educational background</p>	<p>emphasis on consensus When rushed, group decisions can lead to bad solutions. The pressure to find a quick solution, not necessarily the best one, causes haste and a team often ends up with the first solution that is found</p>
<p>more variants of solutions More points of view mean more creativity; a problem can be analyzed from different perspectives and be better understood; more suitable solutions can be found; ideas put forward by one person are developed by the whole team</p>	<p>domination of individuals A group may be dominated by one person in the group. It can happen that people who have more power or self-confidence will force their opinions/positions</p>
<p>synergy effect In other words, the snowball effect; when making team decisions, the creativity of the group often drives itself</p>	<p>dilution of responsibility Doubts arise: if we make group decisions, who bears responsibility - the project manager, the whole team, or the person who came up with the idea? The so-called group thinking syndrome may appear. It is a situation when nobody in the group feels responsible for the decision. As a result, mistakes are made</p>
<p>higher degree of acceptance of the final decision A group accepts the result it has developed faster. The project team that made the decision will usually respect it. There is no need to convince the team to respect the decision</p>	<p>longer time and higher costs The decision-making process is longer, so it is more expensive. This is the price we pay for the benefits we get</p>
<p>better understanding of decisions Everyone who participated in the decision-making process understands where the decision came from and why it was made</p>	<p>limited knowledge sharing by team members If employees are not fully involved in the project, they can only provide the knowledge they need to share, and keep some of the knowledge for themselves. This can lead to sub-optimal decisions</p>

Table 1 cont.

Advantages of group decision making	Disadvantages of group decision making
<p>better predictability of situations A group is better able to predict certain situations, and changes in its environment</p>	<p>conflict of interest may arise This situation causes conflicts within the group and prevents it from making the right decision</p>

Source: own elaboration based on (Wawak, 2017)

There are five key principles that characterize the work mechanism in project teams (Hesselbein *et al.*, 2004, p. 87). First of all, there is no universal model of a good team that can be used in any situation. Secondly, good teamwork should not only bring positive effects in economic terms but also in an interpersonal dimension. Thirdly, it should be kept in mind that project teams require appropriate support from project managers. Fourthly, the members of a good team should cooperate, not compete with each other. Lastly, it should be remembered that creating a good project team is a serious investment, often in terms of both time and money.

5. PROJECT TEAMS IN TRADITIONAL AND AGILE METHODOLOGIES

An important element distinguishing agile from traditional methodologies is the approach to the project team and work organization. In universal methodologies representing the traditional approach to project management, the teams often rely on specialists in narrow fields. Therefore, high substantive competences are required of team members, especially knowledge and experience. The project manager focuses primarily on the budget, schedule and scope of the project (Strojny & Szmigiel, 2015, p. 225).

The application of agile methodologies requires a different approach to management on the part of a project manager as well as the whole project team. Good communication, which is the foundation of the agile approach, requires a strong emphasis on personal elements and understanding of organizational roles (Coplien & Harrison, 2004, p. 401).

Emphasizing the principle of the permanent cooperation of all team members, as well as increasing the freedom of work, affects both the organizational structure of the team and the way the project is managed (Mierzwińska, 2013, p. 218). Agile methodologies are based on small, self-disciplined, and self-organized teams. The team works closely with clients and involves them in the process of creating the final value (Strojny & Szmigiel, 2015, p. 255). Therefore, the importance of choosing the right people for the project in terms of personality traits is more appreciated and emphasized in agile methodologies. Of course, the relevant substantive competencies, such as knowledge and experience, are very important, but social skills become truly invaluable.

The decision-making process in a project using traditional and agile methodologies is different. In traditional, classical methodologies, teams of highly qualified specialists are more effective, they make decisions as quickly and precisely as possible and most

of these decisions are made single-handedly. In the case of agile methodologists, on the other hand, there is a greater decision-making power of the project team and group decisions are made more often. In agile methodologies, therefore, it is extremely important for the management to trust the project team.

A comparison of the assumptions underlying the traditional and agile approaches to project team is presented in Table 2 below.

Table 2. *Project team in traditional and agile methodologies*

Project team in traditional methodologies	Project team in agile methodologies
work performed by the specialists in a narrow field	small, self-disciplining and self-organizing teams working closely with the clients
high substantive competencies of team members required (knowledge and experience)	high substantive competences of team members are required but the selection of team members based on personality traits is crucial too
project manager is focused on the budget, schedule, and project scope	increased independence of a project team, joint decision making
management places a strong emphasis on planning and controlling the implementation of the plan	strong emphasis on personal elements and understanding of organizational roles, readiness to work in a team
it is easier to support the work of a team thanks to well-defined project goals and needs as well as good project documentation	high level of communication and interaction within the team, the principle of permanent cooperation of all team members
relying on the superiors' decisions and individual decisions made by managers	willingness to take responsibility for one's own work and team performance, greater decision-making power of a project team

Source: own elaboration based on (Strojny & Szmigiel, 2015, p. 225; Mierzwińska, 2013, p. 218; Kopczyński, 2014, p. 106; Coplien & Harrison, 2004, p. 401)

One of the criteria for selecting a project management methodology (traditional or agile) that should be taken into account is the project team. In the case of a weak team, it is suggested to choose a traditional methodology. The substantive and social deficiencies of the team can be compensated by team supervisors. By definition, such changes should not occur in teams working on projects using agile methodologies. In an agile project, the team should be experienced, its members should know each other for a long time, they should have the ability to estimate the parameters of tasks and have good communication skills (Krupa, 2016).

Traditional management methodologies put a strong emphasis on planning and control of the plan execution. It seems that in traditional projects it is easier to support the team with well-defined project goals and needs as well as good project documentation. The decisions are usually made by a single person, typically by a manager. Such a team requires high professional competences but that does not mean that social competences can be ignored. On the other hand, agile teams work

closely with the clients and the high level of communication and interaction within the team is required for successful cooperation. For those reasons, specific personality traits of team members are of great importance in such teams.

6. PROJECT TEAMS IN SCIENTIFIC RESEARCH

Elton Mayo and Douglas McGregor, representatives of the Human Relations movement, are considered to be the pioneers of research on factors which are of greater importance to employees than material and technological factors. Their research has shown that mutual relationships as well as a friendly atmosphere and teamwork had a significant impact on productivity and job satisfaction. (Bogdanienko, 2013, pp. 17–18). The importance of team composition in a project's success was proven in research (Kopczyński, 2014, pp. 107–108) conducted in Poland on a sample of 184 companies. One of the objectives of this study was to identify the factors that determine the effectiveness of project management. The results showed that the key factors impacting the effectiveness of project management are social issues, especially project team composition (42.4%), project team organization (31.6%), as well as the project manager's competences (20.3%) and team motivation (18.6%). Communication within the project team is an equally important factor (20.3%).

Similar results were obtained in a study carried out as part of the research project entitled *Efficiency of project management in enterprises operating in Poland* (Haffer, 2013, pp. 110–115). Again, the results clearly indicate that the success of a project, regardless of its nature and specificity, is determined to a great extent by intra-organizational factors, primarily those related to the project manager and project team. According to the cited research, the most important measures of effective project implementation in an enterprise are customer satisfaction and the efficiency of project management processes, which in turn depend on a carefully assembled project team.

The above conclusions are also confirmed by studies carried out in cooperation between VitalSmarts and The Concours Group. The aim of this project was to develop a formal system of surveys to identify errors in project implementation leading to interruptions or outcomes inconsistent with the expectations. The analysis covered more than 2,200 projects with budgets ranging from tens of thousands to billions of dollars. The results are presented in the report (*Silence Fails...*, 2006).

According to the authors of the report, one of the most critical factors in project implementation is the selection of a project team. If team members do not have the knowledge required to carry out a project or are unwilling or unable to engage in the implementation process (which is the case in about 80% of the projects surveyed), 82% of such projects end up with budget overruns, delays, and poor quality of final product. The report also reveals that ignoring the priorities of tasks by team members during project execution is a major problem. This resulted in budget overruns in 78% of surveyed companies and missed delivery dates in 87%. It also weakened morale in two-thirds of teams and made it impossible to meet the sponsor's expectations in as many as 80% cases. A poorly selected project team tend to obscure the actual status of their project. Research has also shown that a project leader as well as team members often fail to signal problems and wait for someone else to do it or ask about something

which leads to budget overruns (78% of cases), missed deadlines (86% of cases) and failed expectations regarding product functionality or quality (74%) (Galant-Pater, 2012, p. 321).

The findings cited above clearly indicate that a project team is one of the most essential components in project management. Regardless of how well a project's baseline plan is developed and what methodology is employed, its successful implementation depends heavily on the project team.

7. CONCLUSION

In recent years, project management has significantly evolved from the traditional approach, one based on predictability and classical planning (cascade methodologies), to embrace agile management with a focus on creativity and rapid customer-oriented action. Regardless of the approach taken, the role of the team in project implementation is significant.

The analysis of the literature and the results of scientific research are as follows:

- 1) In project management, where there is time pressure, specific budget and project scope, a properly selected team determines the success of a project.
- 2) When selecting a project team members, not only hard and professional competences should be taken into account, but also interpersonal skills.
- 3) Social competences are more important in projects carried out using agile methodologies than in traditionally managed projects.
- 4) Traditional teams require specialists with a narrow skills, substantive knowledge and experience. However, that does not mean social competences can be ignored.
- 5) Running a project with agile methodologies requires constant, close cooperation between team members. The members of the project team are more involved in the decision-making processes and pay more attention to motivation and human relations. Therefore, what is needed here are high social competences for effective communication and interaction.
- 6) The decision-making process in projects using universal and agile methodologies differ.
- 7) In the case of traditional cascade methodologies, where the main emphasis is put on managing the plan, groups of specialists who make decisions as quickly and precisely as possible should be formed. Those are usually one-person decisions.
- 8) In the case of agile methodologies, we are dealing with "change management". Interdisciplinary teams that make creative decisions over a slightly longer period of time, but without the emphasis on a quick decision, will perform best in this instance.

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