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THE ROLE OF STAKEHOLDERS IN THE MANAGEMENT OF EU PROJECTS IMPLEMENTED IN PUBLIC UNIVERSITIES

Waldemar SZCZEPANIAK

Czestochowa University of Technology, Faculty of Management, Czestochowa;
waldemar.szczepaniak@wz.pcz.pl, ORCID: 0000-0003-2608-1534

Purpose: Main objective of the study was to develop a map of impact of particular groups of stakeholders on the process of implementing projects co-financed by the European Union in public universities.
Design/methodology/approach: The study uses methods of literature sources analysis and quantitative research with the use of questionnaire distributed among managers of EU projects implemented in public technical universities in the previous financial perspective.
Findings: Based on conducted research, the impact of identified groups of stakeholders on the process of implementation of EU project was assessed.
Research limitations/implications: Identification of the impact of groups of stakeholders on the process of implementation of EU project should enable necessary management actions to be taken at universities that increase their absorption capacity.
Practical implications: Project implementation unit, in particular the team of contractors with the project leader at the forefront, by shaping positive relations with environment, may affect the pace and efficiency of project implementation. By acquiring support of main project stakeholders, likelihood of successful completion of the project is increased. This, in turn, reduces uncertainty and risk associated with implementation of the project and costs incurred to minimize it.
Originality/value: Original map of the impact of individual stakeholder groups on implementing projects co-financed by the European Union in public universities.

Keywords: stakeholders, EU projects, projects management, public universities.

Category of the paper: Research paper.

1. Introduction

Public universities are an example of organizations willingly reaching for EU funds and thanks to them implementing many development projects. These measures not only support extension of university's infrastructure, but also enable greater support of students, PhD students and university personnel. From January 1, 2014, universities can apply for funds

in the current EU financial perspective, which will enable projects to be completed by December 31, 2023, when the period of eligibility of costs will end. This is why it is so important to address the issue of linking EU project management with strategic development of public universities, so that the current financial perspectives are well used, and European universities could compete in the future for financial resources on equal bases with the best world universities.

Implementation of each project is to a large extent determined by various factors (internal and external) that create the environment of the project (Trocki, and Grucza, 2013). People or groups of people who have interest in successful completion of the project have the strongest influence on the project. The so-called project's stakeholders (Jałocha, 2014) are mainly final recipients, suppliers, partners, but above all, those who commission and/or finance a given project. Stakeholders will also be people directly or indirectly involved in implementation of the project, including management of the entity implementing the project and members of project team. These stakeholders belong to internal and closer external project environment. State institutions or local community (Miedziński, 2012) who represent farther external environment may also be interested in successful completion of the project, especially in the case of projects co-financed from foreign funds e.g. from the EU (Sperry, and Jetter, 2019).

In order to develop a map of impact of particular groups of stakeholders on the process of implementing projects co-financed by the European Union in public universities, a quantitative survey using a questionnaire was carried out. The study was conducted among managers of EU projects implemented in public technical universities in Poland in the previous financial perspective.

2. Analysis of stakeholders in projects

Knowing stakeholders, their interests and possibilities of influencing the project plays an important role in its effective implementation (Driessen, Kok, and Hillebrand, 2013; Eskerod, Huemann, and Savage, 2015; Pokharel, 2011; De Oliveira, and Rabechini, 2019). Stakeholder analysis is a basic element of project's environmental research and aims not only to determine actual impact of individual people on the project, but also to learn likely reactions to actions taken during its implementation (Aaltonen, 2011; Eskerod, and Larsen, 2018; Płoska, 2014). As part of the stakeholder analysis, three main stages can be distinguished (Grucza, and Trocki, 2009; Wang, and Aenis, 2019):

1. identification of stakeholders,
2. developing their characteristics,
3. stakeholder assessment.

The first stage of stakeholder analysis is aimed at identifying relatively homogeneous individuals and groups that are different from each other and that (Grucza, and Trocki, 2009; Trzeciak, and Spałek, 2015):

- may affect the project,
- may be the subject of project's impact,
- may support implementation of the project,
- may hinder implementation of the project,
- do not belong to any of above-mentioned groups, but they will participate in implementation of the undertaking.

Potential stakeholders can be identified based on two fundamental criteria (Dylewski et al., 2009, p. 69):

- subjective - defining the status of stakeholders - it is possible to distinguish individual people, organizational units, social groups,
- organizational - reflecting role in the project - role of contractor, project manager (PM), commissioner (financing party), client (final beneficiary) and partner can be distinguished.

The list of people and interest groups created in this way reflects all potential stakeholders who will interact with the project at various stages of its implementation. It is therefore important to collect detailed information about each of these groups.

In the second stage of stakeholder analysis, a detailed description of each of identified interest groups is prepared. The basic set of information should mainly include identification data, including contact details, quantitative and qualitative characteristics, description of identified strengths and weaknesses. In addition, at this stage, it is necessary to specify what interests a person (group) has in relation to the project being implemented (Grucza, and Trocki, 2009).

Final stage of stakeholder analysis is to determine the impact and stakeholder attitude in relation to a given project. At stakeholder assessment stage, we should also be able to identify reactions to likely situations that may occur during project implementation. This stage should also include activities aimed at (Offenbeek, and Vos, 2016; Grucza, and Trocki, 2009):

- grouping of stakeholders based on their roles and type of impact on the project,
- defining characteristics of stakeholders based on social and organizational criteria (it is important to determine their status and level of organization),
- identifying expectations regarding the project and mutual links between individual stakeholders,
- assessing opportunities, resources and skills of stakeholders, including both strengths and weaknesses.

Stakeholders can be assessed on the basis of various criteria, the two most important of which are impact and commitment. Basic group consists of stakeholders with a high impact, who are actively involved in project implementation, primarily contracting (financing) entity, management of entity realising the project and project manager. Second important group of relevant stakeholders, from the point of view of implementation of the project goals, is formed by individuals and groups that do not actively participate in the project implementation process, but have a strong impact, for example project control institutions (Grucza, and Trocki, 2009). Figure 1 shows the most important project stakeholders taking into account mutual relations between them during the project implementation.

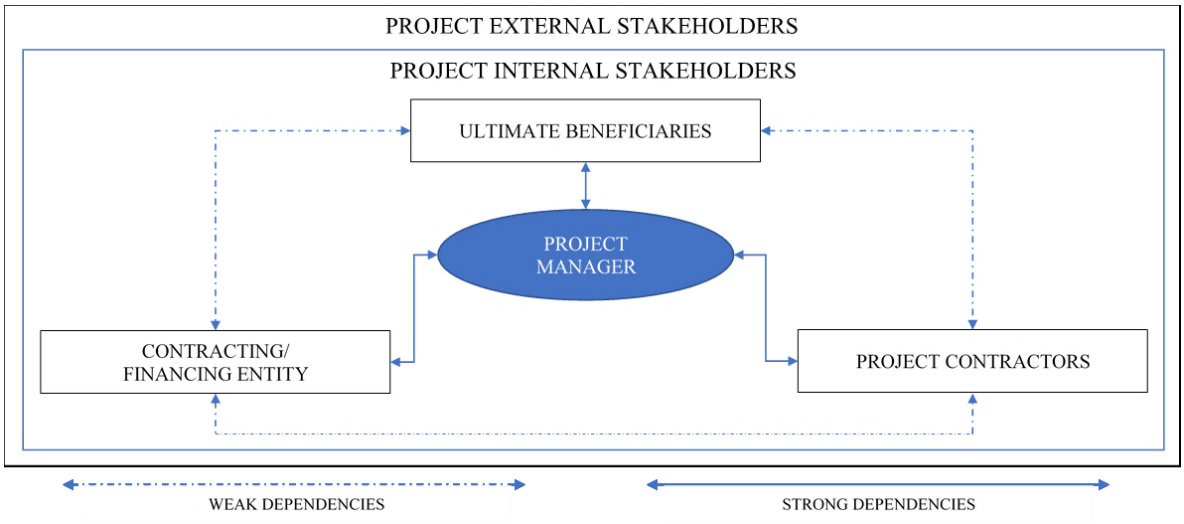

Figure 1. Project stakeholders. Adapted from: Trocki, M., and Grucza, B. (2015). Podstawy zarządzania projektami europejskimi. In M. Trocki (Ed.), Zarządzanie projektem europejskim (p. 116), Warsaw: PWE.

Final beneficiaries in the project are people, groups of people or institutions that are direct recipients of project's results. It is the fulfilment of the project that first of all satisfies their needs. In order to enable these needs to be met, certain measures are necessary, hence the second group of stakeholders are units or institutions that finance or co-finance implementation of the project. Identified needs along with allocated funds will not yet enable them to be met, so a further group of stakeholders is needed to carry out the project. The group is made up of project's contractors, including project manager. Thanks to their work and commitment, it is possible to achieve project's goals. In addition to internal stakeholder group, project environment is also created by external stakeholders. These are individuals, institutions and groups that do not engage directly in implementation of the project, but represent a specific relationship with it (Grucza, 2015; Podgórska, and Spałek, 2018).

Additional solution within analysis of interest groups may be creation of a specific hierarchy, by dividing stakeholders into main, secondary and other stakeholders (Dylewski et al., 2009, p. 70). Main stakeholders of the project are those individuals and groups whose interests form basic objectives of the project. These will be primarily financing entities

(commissioning the project), potential final beneficiaries, people engaged in project implementation. Group of secondary stakeholders is involved in project implementation, representing a project support group. Other stakeholders are individuals and groups that do not play significant role at the initial stage of project implementation. However, they may move up the hierarchy in subsequent phases of project life cycle, as their involvement increases (Grucza, 2015). Therefore, use of stakeholder analysis should not be limited only to conceptual and initiating phase of project. As the work progresses, it should be updated, which can be a useful tool in project management and in monitoring its implementation (Dylewski et al., 2009; Missonier, and Loufrani-Fedida, 2014). Results of stakeholder analysis can be presented by developing a stakeholder map. Organization occupies a central place on the map, while identified stakeholders are placed at a distance corresponding to strength of their potential impact (Bęben, Marcinkowski, and Papis, 2014).

Interdependencies between organization and its stakeholders are dynamic. Not only the mutual relations and impacts change, but also individual stakeholders (Jabłoński, 2013). In the case of universities, it is common for students to change their role as acquirers of knowledge to partners, employees or donors after graduation. Therefore, it is important to keep those stakeholders who have a positive influence on the organization in a closer or distant environment ((Aragonés-Beltrán, García-Melón, and Montesinos-Valera, 2017; Jabłoński, 2011). This is a non-operational and strategic activity. Organization's approach to key stakeholders, representing the highest value, allows organization to make informed decisions and achieve financial and social results (Jabłoński, 2012).

3. Methods and research results

In the process of preparation of a map of impact of particular groups of stakeholders on implementation of EU projects in a public technical university, these groups were identified as part of conducted unstructured (free) interviews with selected EU project managers. Interest groups that have the strongest influence on implementation of EU projects include: Intermediate institution, Auditing institutions, Rector of the university, Steering Committee, Project contractors and Final beneficiaries of EU assistance.

Then, as part of the survey, EU project managers were asked to assess the impact of indicated stakeholder groups on the implementation of EU project in the scale "very high", "high", "moderate", "weak", and "no impact". Based on the data collected in the National Information System SIMIK 07-13, the author identified 659 projects funded from the EU under the Operational Programs of financial perspective for 2007-2013 and implemented by public technical universities individually or as part of a consortium, where the university played a leading role. These projects represented examined population. Target-random selection of

respondents was used to conduct the survey. 20% of the projects were drawn at random from each of the eighteen public technical universities. Systematic sampling has been adopted as a sampling scheme. Sample obtained in this way is the effect of choosing every k-th unit from the community. In this study k = 5. An invitation to complete the questionnaire made available on the webankieta.pl platform was sent to 132 EU project managers. The survey was completed by 85 respondents, which gave maneuverability at the level of 65%. Received answers are summarized in Table 1.

Table 1.
Assessment of the impact of stakeholders on implementation of EU projects

Specification	Assessment of force of impact									
	very high		high		moderate		weak		no impact	
	L*	U** (w %)	L*	U** (w %)	L*	U** (w %)	L*	U** (w %)	L*	U** (w %)
Intermediate institution	30	35.3	40	47.1	9	10.6	4	4.7	2	2.4
Auditing institutions	28	32.9	30	35.3	19	22.4	5	5.9	3	3.5
Rector of the university	7	8.2	24	28.2	28	32.9	19	22.4	7	8.2
Steering Committee	12	14.1	30	35.3	12	14.1	7	8.2	24	28.2
Project manager (PM)	63	74.1	21	24.7	1	1.2	0	0.0	0	0.0
Project contractors	33	38.8	29	34.1	22	25.9	1	1.2	0	0.0
Final beneficiaries of EU assistance	23	27.1	24	28.2	18	21.2	15	17.7	5	5.9

Note: * Number, ** Share.

Source: own elaboration based on research, n = 85.

EU project managers indicated the Intermediate institution (II) as a significant group of EU project stakeholders. Over 47% of respondents rated its impact on the project as high, while over 35% as very high. Only 2.4% of respondents did not notice the impact of II on implementation of the EU project. Strong impact of II is due to extensive rights, mainly in the scope of accepting changes introduced in the project.

Second group of identified stakeholders of EU projects in public technical universities were Institutions auditing project implementation and achievement of intended goals. Respondents recognized this group as having a strong impact on implementation of EU projects. Vast majority of EU project managers (68.2% of the surveyed) assessed the impact of auditing institutions as high or very high. Lack of influence of this group of stakeholders on the implementation of EU projects was indicated only by 3.5% of respondents. Auditing institutions because of the right to recognize part or, in extreme cases, all costs as ineligible have a very strong impact on implementation of EU projects.

One of main stakeholders of EU projects in a public technical university is the rector of university, who most often acts as a party to the contract for co-financing concluded with the Intermediate institution. Surveyed managers most often pointed to the moderate influence of the rector of university on implementation of EU projects (32.9% of respondents). 28.2% of respondents indicated the rector of university as a party with high impact force on implementation of EU projects, while only 8.2% said it is very high. The results should not be surprising. It is natural that rector of university appoints project manager to make binding decisions at operational level, leaving only influence on strategic decisions.

Another group of stakeholders, which appeared only in some of EU projects, mainly those high-budget ones, was the Steering Committee. Steering Committee is usually composed of representatives of university authorities, partner institutions, if they exist, but also there may be people not directly related to the beneficiary, e.g. in the case of research projects, they may be outstanding representatives of the world of science. As emphasized earlier, this interest group is not the only one in all EU projects, hence a relatively high percentage of responses indicating no impact on implementation of the project (28.2% of respondents). The largest group of respondents (35.3%) pointed to strong impact of Steering Committee on implementation of EU projects. 14.1% of respondents indicated a very strong impact of the Steering Committee. Same percentage of surveyed managers assessed this strength as moderate.

Greatest subjectivity can be attributed to EU project managers' assessment of their impact on implementation of EU projects. Results obtained should not be surprising, as the project manager has main responsibility for its successful implementation. Over 74% of respondents rated the impact of PM as very high, including responses indicating a strong impact constituted almost 99% of obtained responses.

Implementation of each project requires involvement of a certain group of contractors. Its size depends of course on the size and complexity of the project. Largest group of surveyed EU project managers (38.8% of respondents) assessed impact of contractors of the project as very large. A response indicating a strong impact was chosen by 34.1%. It should be emphasized that all respondents perceive the impact of this interest group on project implementation process, with only 1.2% determining the strength of this impact as small. Project contractors play an important role in creation of products and results of project, deciding to a large extent on their quality.

The last group of identified project stakeholders were final beneficiaries of the assistance. Over half (55.3%) of respondents assessed the impact of beneficiaries of final aid as being large or very large. Only 5.9% of managers surveyed indicated that this interest group had no impact on the implementation of EU projects. Activities undertaken within the project should be used to meet requirements set by beneficiaries of final assistance.

In order to summarize obtained results, answers received were assigned appropriate ranks, i.e. answers "very high" 4 points, answers "high" 3 points, answers "moderate" 2 points, answers "weak" 2 points, and "no impact" 1 point, and the impact of individual interest groups

on implementation of EU project was estimated. Table 2 presents basic descriptive statistics characterizing the impact of indicated interest groups on the implementation of EU projects in public technical universities.

According to respondents, project manager (average = 3.7294, median = 4, mode = 4, standard deviation = 0.4728) has the strongest impact on implementation of EU projects in public technical universities. Project contractors and intermediary institutions (average above 3.08, median = 3, standard deviation in the range <0.8313, 0.9825>) also have a very strong influence on implementation of EU projects. Other stakeholder groups influenced the project implementation process to a lesser extent.

Table 2.
Descriptive statistics of the impact of stakeholders on implementation of EU projects

Specification	Average	Median	Mode	Standard deviation
Intermediate institution	3.0824	3	3	0.9285
Auditing institutions	2.8824	3	3	1.0512
Rector of the university	2.0588	2	2	1.0840
Steering Committee	1.9882	2	3	1.4679
Project manager (PM)	3.7294	4	4	0.4728
Project contractors	3.1059	3	4	0.8313
Final beneficiaries of EU assistance	2.5294	3	3	1.2304

Note: Source: own elaboration.

To sum up, the analysis of interest groups in the form of a map of stakeholders is presented in Figure 2. In the centre of the map there is the EU project carried out in a public technical university, while individual stakeholders are placed in its surroundings. The greater distance from the centre, the stronger impact of a given interest group on implementation of EU projects.

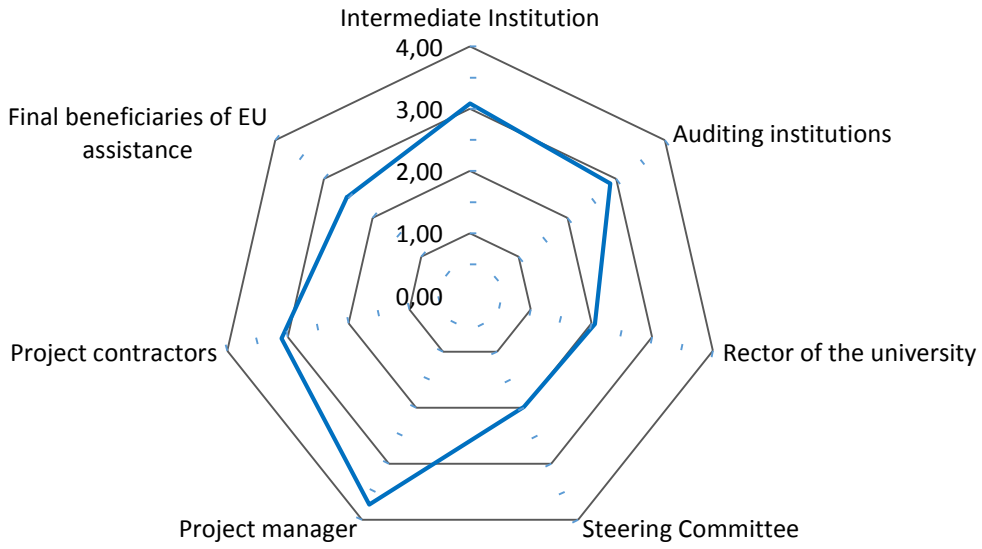

Figure 2. Map of stakeholders in a process of managing EU projects in public technical university. Source: own elaboration.

In the process of creating a stakeholder map, it is important to determine expectations of each party. Table 3 presents expectations of main groups of stakeholders in the process of managing EU projects at a public university.

Table 3.
Expectations of main interest groups in the implementation of EU projects at a public university

Stakeholders	Examples of expectations
Intermediate institution	▪ project implementation in accordance with co-financing agreement, adopted budget and schedule, ▪ achieving assumed goals and indicators.
Auditing institutions	▪ project implementation in accordance with applicable legal regulations and guidelines, ▪ preservation of full eligibility of costs incurred by universities in the project, ▪ satisfying conditions set out in the contract for co-financing.
Rector of the university	▪ achieving university goals related to implemented project, ▪ efficient and timely implementation of the project, ▪ full eligibility of costs, ▪ increase in the prestige of university.
Steering Committee	▪ successful implementation of the project.
Project manager (PM)	▪ efficient implementation of the project, ▪ support from the university authorities and administrative employees, ▪ fair remuneration, ▪ appreciation of activities undertaken by university authorities.
Project contractors	▪ satisfying remuneration, ▪ efficient work organization, ▪ gaining experience.
Final beneficiaries of EU assistance	▪ high quality of delivered products and results of the project and assistance offered.

Note: Source: own elaboration.

Interest groups, which have impact on implementation of EU project include both external stakeholders (from the university environment, among others: II, external auditing institutions), as well as internal (within the given university, among others, university rector, PM). It can therefore be concluded that implementation of EU projects combines external and internal universities' stakeholders in order to complete EU project successfully.

Summary

Project implementation unit, in particular the team of contractors with the project leader at the forefront, by shaping positive relations with environment, may affect the pace and efficiency of project implementation. By acquiring support of main project stakeholders, likelihood of successful completion of the project is increased. This, in turn, reduces uncertainty and risk associated with implementation of the project and costs incurred to minimize it.

Among the stakeholder groups that have the strongest influence on implementation of EU project in public universities, one can indicate the PM, Project Contractors and the Intermediate institution. It can be noticed that the mentioned stakeholders represent two key

interest groups. PM together with contractors form the representation of a unit implementing the project, while Intermediate institution represents interests of the financing entity. It should be emphasized that the greatest strength of the project manager's influence results not only from their broad competences in the scope of project implementation but also from the role of the liaison between II, contractors and final beneficiaries of the assistance. This means that selection of project manager is of a key importance to its subsequent implementation and mistakes made at this stage can significantly impede implementation of a given project.

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