

Key Success Factors in Project Management from the Perspective of Organisation's Project Maturity – Research Results

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Identification of key success factors is of significant importance for the smooth management of projects and this phenomenon has been explored by numerous studies. However, a cognitive gap remains regarding the strength of the relationship between key success factors and the level of project maturity. The aim of the article is to identify key success factors in project management in the basic units of local government in Poland and to verify the extent to which these factors depend on the degree of project maturity of the organization. The article is based on the assumption that a link between project maturity and key success factors in project management exists. The starting point of the study was the specificity of project maturity of an organisation from the perspective of project management excellence. The relationship between these factors and levels of project maturity of the surveyed units was verified, which allowed to identify factors having a significant impact on the level of excellence in project management in the organisation. Research covered 1,900 basic local government units in Poland. The article presents research results in dynamic terms covering two periods, 2010–2012 and 2016–2018. The research procedure was based on a standardized questionnaire with unit scale responses, and brought quantitative results that would allow drawing general conclusions and findings.

Keywords: project maturity, project management, key success factors in project management, project management in local government units.

Kluczowe czynniki sukcesu w zarządzaniu projektami z perspektywy dojrzałości projektowej organizacji – wyniki badań

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Identyfikacja kluczowych czynników sukcesu ma istotne znaczenie dla sprawnego przebiegu zarządzania projektami, a zjawisko to stanowi przedmiot licznych badań. Jednakże wciąż istnieje luka poznawcza odnosząca się do siły związku kluczowych czynników sukcesu z poziomem dojrzałości projektowej. Celem artykułu uczyniono identyfikację kluczowych czynników sukcesu w zarządzaniu projektami w podstawowych jednostkach samorządu terytorialnego w Polsce oraz określenie zależności tych czynników z poziomem dojrzałości projektowej organizacji. U podstaw niniejszego artykułu leży założenie o istnieniu związku pomiędzy dojrzałością projektową a kluczowymi czynnikami sukcesu w zarządzaniu projektami.

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Punktem wyjścia w badaniu uczyniono specyfikę dojrzałości projektowej organizacji z perspektywy doskonałości zarządzania projektami. Relacje pomiędzy tymi czynnikami a poziomami dojrzałości projektowej badanych jednostek poddano weryfikacji, co pozwoliło wyznaczyć czynniki mające istotny wpływ na poziom doskonałości w zarządzaniu projektami w organizacji. Badaniami zasadniczymi objęto 1900 podstawowych jednostek samorządu terytorialnego w Polsce. W artykule przedstawiono wyniki badań w ujęciu dynamicznym obejmujące lata 2010–2012 oraz 2016–2018. Postępowanie badawcze oparte na ustandaryzowanym kwestionariuszu ankietowym z wyskalowanymi odpowiedziami pozwoliło na uzyskanie kwantytatywnych wyników, umożliwiających wyprowadzenie ogólnych wniosków i konkluzji.

Słowa kluczowe: dojrzałość projektowa, zarządzanie projektami, kluczowe czynniki sukcesu w zarządzaniu projektami, zarządzanie projektami w podstawowych jednostkach samorządu terytorialnego.

JEL: M,R

1. Introduction

The ongoing processes of economic globalization and development of modern technologies have changed factors that determine the development of modern organizations. The contemporary business environment is characterized by a high level of volatility and growing competition, which means that in order to improve their competitive position, organizations are forced to constantly develop. The pressure of constant changes within an organization and the dynamically evolving environment require organisations to engage in unique and one-time activities, and therefore the use project management knowledge and methods.

Research conducted on the basis of consultations with companies Manpower Polska (2016) and PriceWaterhouseCoopers (2010) shows that the ability to manage projects, due to its impact on the efficiency of the organization's functioning, can be considered a key success factor of the management process. However, effective and efficient implementation of projects cannot be considered an immanent feature of any organization using project management. This means that organizations have a different level of knowledge and skills in the field of project management, which shows that they are at different levels of project maturity. Given the above, we can conclude that project maturity has a dual nature, and can be treated as both a determinant and a measure of the organization's capacity of an entirely efficient (perfect) project management, whereas key success factors are the variables that significantly determine the success of an implemented project (Kisielnicki, 2013; Szpitter, 2014; Radujkovića & Sjekavica, 2017; Amoatey & Hayibor, 2017; Gunasekera & Chong, 2018; Zuo, 2018). If we assume the above, key success factors of project management should be sought among the variables determining the efficient implementation of projects to the greatest extent, described using the criteria of time, budget, quality and scope. In turn, the identification and improvement of a consistent set of accepted project success criteria can ensure the proper

targeting of strengths, which should ultimately lead to an increase in project management excellence and allow this success to be transferred to other projects, thus translating into organizational development. Therefore, the question of key success factors in project management becomes essential.

When referring to the aim of undertaking research in the context of local government units in Poland, two main conditions should be addressed in the context of local government units in Poland.

First of all, the process of attaining objectives by public institutions significantly differs from the process of attaining objectives by business entities. The main purpose of local government units is to fulfil their statutory duties, i.e. to promote desired behaviours in local communities and to improve the state of the environment, rather than to make profit. What is more, local government units are liable for their actions towards a larger group of stakeholders than companies.

Second of all, it should be emphasized that local government units are undergoing a process of transformation and transition from traditional management to the so-called co-management, which makes use of market mechanisms and management methods that have proven successful in companies.

As a result of the foregoing, local government units, whose actions are targeted at achieving their stakeholders' goals while being under both public and political pressure, have to meet increasingly more complex demands regarding the reduction of task completion time while relying on limited financial resources and having to ensure top quality services. This can be achieved, *inter alia*, through the implementation of project management.

As a result of the decentralization of duties, powers and resources, a three-level territorial division of the country was introduced, which includes *województwa* (provinces – 16), *powiaty* (districts – 308) and *gminy* (communes – 2479). Due to the nature and scope of their duties, differences between local government units are formed horizontally, which means that a commune performs its duties independently within its own territory, a district carries out tasks beyond the territorial scope of communes, while a province fulfils duties that fall beyond the competence of both districts and communes. A communes, being the fundamental and the smallest local government units within Poland, performs the duties whose public utility is relatively greater than that of the tasks performed by districts and provinces. Owing to their number, they are more diverse than provinces or districts. As a consequence, it can be assumed that communes implement a larger number of projects than districts and provinces. It seems justified to conduct research on the level of project management maturity within the fundamental local government units in Poland and on the key factors that have an impact on attaining subsequent maturity levels.

In an attempt to address this research issue, the article is to identify key success factors in project management in basic units of local government

in Poland, and to determine the extent to which these factors depend on the level of project maturity of the organization.

2. Project maturity of an organization – theoretical basis

The term ‘maturity’ is colloquially defined as ‘the state of achievement of full development’ or ‘the state of readiness to accomplish specific tasks’ (Szymczak, 1978, p. 414). In this approach, the term applies both to living organisms and social phenomena. This means that the process of reaching maturity is related to the improvement of skills that can be achieved in various dimensions: economic, social, and biological (Juchniewicz, 2017).

The meaning of the team of project maturity of an organization in the scientific dimension is subject to continuous evolution. According to J. Schlichter (1999, pp. 8–10), project maturity proves the organization’s ability to repeatedly achieve the same level of success in project management, understand causes of this project success and eliminate recurring problems. Referring to this broadly formulated definition of project maturity, it should be emphasized that the concept of development is a process of transition from less to more complex and more perfect states (Kozmiński & Piotrowski, 2000; Maylor, 2010). Development in project management involves the attainment of at least the same, or possibly higher level of success (Pszczółowski, 1978, p. 212). Stagnation and inertia are, therefore, not related to development, which should occur as part of project maturity. Again, the aspect related to factors conducive to either success or failure should not be the only reference point in formulating the definition of the organization’s project maturity, as we would need to specify how this should be determined. Undoubtedly, the organization’s ability to understand reasons for success and failure in project management is extremely important (in a sense – crucial), but in the context of the organization’s project maturity, and not as its determinant.

When analysing the definition of project maturity, attention should be paid to the fact that most definitions focus on explaining what project maturity is through bringing to light various important criteria that an organization must meet to be defined as mature. Referring to the semantics of the concept of maturity, it is worth emphasizing that it is a certain state reflected at various levels. Therefore, it should be expected the definition of project maturity will focus on connecting the level of project management with levels of project maturity. This means that it is less essential to explain when an organization can be assumed to be mature than what the organization must do to become mature.

The need to develop project management, which involves a gradual transition from simple to more complex forms, is pointed out by H. Kerzner, who claims that all organizations undergo stages of development and maturity that precede the achievement of the state of excellence by the organization

(Kerzner, 2017). However, only organizations that plan and consistently implement a strategy for the developing their project management maturity are able to achieve a certain level of perfection (Szymczak, 1978, p. 434), which is a prerequisite for the transition to a higher level of project maturity. Thus, attaining a higher level of project maturity is possible when strictly defined criteria of action at each stage of the project maturity are met separately, which requires ensuring a stream of efficiently managed projects. The closing of projects upon the attainment of project parameters consistent with those planned is the measure of success of the aforementioned efficiency.

According to H. Kerzner, project maturity is reflected in the degree of development and integration of the project management system and processes that are inherently repeatable and present a high probability of success in future projects. The author draws attention to the fact that the repeatability of processes used in project management does not guarantee success, but only increases chances thereof. An assumption can, therefore, be made about the need for the evolutionary implementation of project management (Harmon, 2014; Kerzner, 2017; Zurga, 2018), and thus for gradual passing through particular stages of project maturity. At the same time, a conclusion can be drawn that an increased use of project management leads the organization to a higher level of project maturity. It should be underlined, however, that an organization can move to a higher level of project management maturity only when it reaches excellence at its previous level. In addition, in reference to the definition of project maturity proposed by H. Kerzner, it ought to be assumed that it is crucial to ensure the coordination and synchronization of all projects implemented in the organization.

3. Methodology of research procedure and characterization of the research sample/ Methodology and research sample

The findings presented are part of a broader research aimed at determining the level of project maturity and indicating project management improvement directions in basic units of local government in Poland. At the core of this article lies the assumption that there is a correlation between project maturity and key success factors in project management.

Considerations presented in the article refer to the results of research that was carried out in two stages. The same research methodology was applied in both, stages, with the same subjective and objective scope. The first part of the research was carried out in 2013 and it covered the period 2010–2012, whereas the second stage took place in 2018 and covered the period 2016–2018.

A two-stage research procedure was used for the purpose of the empirical part, consisting of a pilot study and a basic study. When designing the

sample size of organizations surveyed in the basic research, questionnaires were sent to 1,900 basic local government units in Poland, i.e. 77% of their total population in order to ensure research representativeness. Stratified-random sampling method was chosen as the basic method of selection of population subsets, resulting from the division of all basic territorial government units in Poland into different subpopulations (strata) according to the municipality type criterion. The number of subjects surveyed within each of the three strata (municipalities, urban and rural municipalities, rural municipalities) was proportional to the number of these municipalities in the entire population.

From the point of view of the subjective scope, the research covered persons responsible for the implementation of projects in basic units of local government in Poland.

The PAPI method, direct individual questionnaire interviews and questionnaires sent by post were used in the study.

The aim of research work undertaken at both stages of the procedure was to identify and shape key success factors in project management, and to diagnose the current level of project maturity of basic local government units in Poland. Subsequently, the dependence of key success factors that are most strongly correlated with the level of project organization maturity was to be explored. The research covered five areas: (1) description of the approach to project management, (2) ways of organising project teams, (3) methods and tools for IT support in project management, (4) key success factors in project management, (5) project organization maturity. A questionnaire comprising 31 semi-open and verifying questions was used in the survey.

During the first stage of research (relating to the period 2010–2012), 598 subjects completed the questionnaire; upon verification, 241 of them were rejected due to inconsistencies in the information provided. Taking into account 23 correctly completed questionnaires from pilot research, the total number of questionnaires analysed during the first stage of research was 380 (Fig. 1); the return rate was 20.5%. 37 questionnaires were obtained from urban municipalities, 111 from urban-rural municipalities, and 232 from rural municipalities. During the second stage of research relating to the period 2016–2018, completed questionnaires were submitted by 643 local government units in Poland. 127 questionnaires were rejected due to the fact that 34 units declared lack of project implementation and project management, whereas the remaining 93 questionnaires could not be used because they contained a number of contradictory answers. Thus, the total number of questionnaires analysed in the second stage of the research was 516 (Chart 1), and the return rate of questionnaires was 27%. As could be expected, this rate of return caused slight disruptions to the adopted research structure, with the observed structural differences amounting to an average of 3.3 percentage points in the first and 6.7 percentage points in the second stage of research; these deviations can be considered acceptable.

The structure of the research sample obtained and the actual structure of the surveyed population is compared in Chart 1.

The structure of the research sample differs slightly from the population structure. Therefore, results obtained in the research procedure allow us to draw general conclusions and, given the sample size and distribution, may form the basis for the generalisation of results with respect to the entire population of basic local government units in Poland.

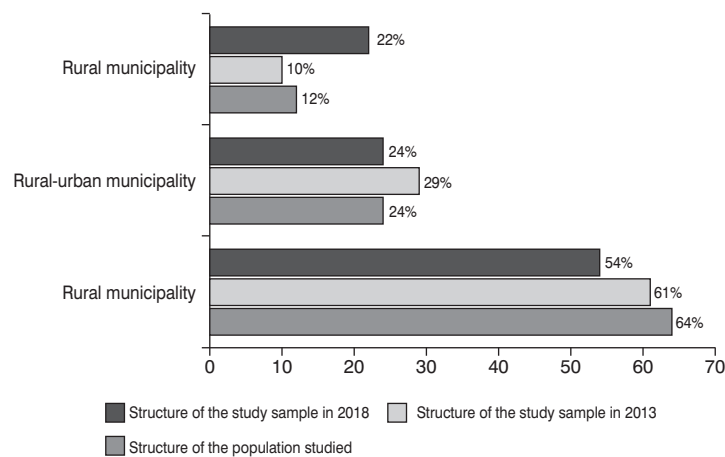


Chart 1. Structure of the population studied and the study sample in terms of the municipality type criterion (in %). Source: author's own work based on empirical studies.

4. Results of the empirical studies

Respondents were asked to evaluate the impact intensity of twelve variables selected on the basis of the literature review and the author's own experience (Karbownik & Spałek, 2005; Iyer & Jha, 2005; Hyvaeri, 2006, p. 31; Standish Group's CHAOS Report, 2009; Haffer & Haffer, 2015; Joslin & Mueller, 2015; Kowalczyk et al., 2015; Amoatey & Hayibor, 2017; Zuo et al., 2018) as potential key success factors for project management in basic local government units in Poland. According to respondents, variables that determine to the greatest extent project management success in the studied units, are respectively¹ (Tables 1 and 2): proper definition of project parameters in terms of scope, time, costs and quality (14% and 13% of the maximum response level), the selection of project manager on the basis of his/her competences and project experience, and the style of management (13% and 12% of the maximum response level), support and involvement of heads of municipal offices (13% and 12% of the maximum response level), an appropriate schedule of project activities, including an appropriate division of tasks and responsibilities within the project (12% and 11% of

the maximum level of indicated responses), ongoing supervision and control over all implemented projects (12% and 12% of the maximum level of indicated responses). On the one hand, these results show that respondents appreciate value added to projects through top-down project control by means of synchronization and coordination processes; on the other hand, they emphasize the need to accurately determine project parameters and to continuously monitor their implementation levels in order to ensure the effectiveness of project management.

According to the respondents, variables that have the least impact on level of project management maturity are: use of project management techniques and IT support tools (26% and 27% of the maximum response level) and the use of project management methodologies (22% and 27% of the maximum level of indicated response). It transpires that the studied units do not see the relevance and purposefulness of defining and applying unified project management standards and using IT support tools, which on the one hand allow a more orderly approach to project management and the attainment of a higher level of project maturity and, on the other hand, would enable the implementation of the designated project parameters and guarantee the effectiveness of the measures taken. Therefore, such a distribution of responses is symptomatic of the project manager's incompetence and the limited use of project management in basic local government units in Poland.

Specification	1	2	3	4	5	6	7	8	9	10	11	12
no impact	0%	6%	8%	0%	0%	5%	1%	4%	7%	7%	21%	17%
low impact	4%	4%	5%	2%	3%	6%	9%	7%	8%	11%	26%	24%
moderate impact	9%	17%	9%	14%	13%	17%	23%	24%	24%	34%	35%	37%
strong impact	40%	29%	35%	43%	43%	45%	43%	42%	41%	34%	14%	17%
very strong impact	47%	44%	43%	41%	41%	27%	24%	23%	20%	15%	4%	5%

* 1–5 scale was adopted, where 1 means an absence of impact, 2 – low impact, 3 – moderate impact, 4 – strong impact, 5 – very strong impact

Legend: 1 – proper definition of project parameters; 2 – support and commitment from the president/mayor/head of municipality; 3 – proper selection of the manager of all projects taking into account his/her competences and project experience, as well as the style of management; 4 – ongoing supervision and control over all implemented projects; 5 – appropriate schedule of project activities, including a proper division of tasks and responsibilities; 6 – selection of suitable project team members (in terms of their competences, experience, attitudes); 7 – identification of risks and regular risk monitoring in relation to all implemented projects; 8 – orientation on people in project management; 9 – working meetings of project teams; 10 – development of appropriate communication rules; 11 – using project management techniques and IT support tools; 12 – using project management methodologies.

Tab. 1. Assessment of the strength of impact of key success factors in project management in basic local government units in Poland in 2010–2012 (n = 380). Source: author's own work based on empirical research.*

When analysing the dynamics of changes on the basis of results from the two research periods, a significant increase in terms of the reliable selection of project team members and the need for an ongoing supervision and control of all implemented projects should be emphasized (a 14 percentage point increase was observed). There was also a significant increase in the importance of appointing a manager in charge of synchronization and coordination of all projects implements in the organization and an appropriate definition of project parameters (a 13 percentage point increase). This strong appreciation of the abovementioned aspects suggests the need for the centralization of project management.

Specification	1	2	3	4	5	6	7	8	9	10	11	12
no impact	0%	2%	1%	0%	5%	3%	1%	9%	3%	2%	14%	14%
low impact	0%	2%	1%	1%	3%	2%	4%	2%	3%	5%	15%	18%
moderate impact	6%	10%	5%	7%	10%	13%	21%	17%	23%	26%	37%	38%
strong impact	34%	36%	36%	36%	34%	41%	37%	41%	40%	40%	22%	18%
very strong impact	60%	51%	56%	55%	47%	41%	37%	31%	32%	27%	12%	12%

* 1–5 scale was adopted, where 1 means an absence of impact, 2 – low impact, 3 – moderate impact, 4 – strong impact, 5 – very strong impact

Tab. 2. Assessment of the strength of impact of key success factors in project management according basic local government units in Poland in the years 2016-2018 (n = 516). Source: own development based on empirical research.*

Results of research on key success factors in project management, carried out both in Poland and abroad, show a similar distribution of impact in relation to research carried out by Polish and foreign scholars. The success of projects is contingent mostly on intra-organizational factors, in particular: competences of project managers, the need for coordination and synchronization of project activities, and the need for support and involvement of project managers and participants in the implementation of tasks (Karbownik & Spałek, 2005; Iyer & Jha, 2005; Hyvaeri, 2006; Standish Group's CHAOS Report, 2009; Haffer & Haffer, 2015; Joslin & Mueller, 2015; Kowalczyk et al., 2015; Amoatey & Hayibor, 2017; Zuo et al., 2018).

However, levels of project maturity of organizations in the studied entities had to be specified beforehand. Obtaining the above data was possible thanks to an original research tool, which assumed that all elements, i.e. integration, competences, project management methods and IT support tools, comprised in the original definition of project management², have an impact on the effectiveness of projects implemented in an organization, and that the method of their implementation affects the level of project maturity. The evaluation of the project maturity level depends on the intensity of the

implemented activities and the scope of applied methods. It was assumed that in a fully mature organization:

1. the person responsible for the synchronization and coordination of all implemented projects has been designated,
2. emphasis is placed on the competences of project team members,
3. methods and techniques of project management, as well as IT support tools are applied in all projects implemented by the organization,
4. the level of project integration management is high.

It should be noted that each of these areas may represent various levels of intensity. Imposing the above assumptions on levels of intensity of project management use led to distinguishing five levels of project maturity:

1. lack of project maturity,
2. low project maturity,
3. moderate project maturity,
4. high project maturity,
5. very high project maturity.

The research tool had been designed so that it was possible to conduct evaluate project maturity in an organization with regard to ten separate fields of knowledge. It was assumed that an overview of partial evaluations of the maturity level in particular fields of project management would lead to evaluating the level of project maturity in a given entity. The research material gathered formed the basis for creating an algorithm for the quantification of the level of project maturity of basic local government units in Poland at an aggregated level. The general project maturity of an organisation was calculated using the weighted average of competences of project team members and the applied methods, techniques of project management and IT support tools, whereby it should be stressed that the greatest importance (0.5) was given to the field of integration management as a necessary mechanism of synchronization and coordination of activities implemented in all projects of an organization. The 0.5 importance was given to the sum of the nine remaining fields of knowledge. Using this research material, it was possible to specify the level of correlations between particular factors that are crucial for project management success and the level of maturity of the studied entities.

In order to verify the significance of weights attributed to individual key success factors in project management, the strength of the correlation between these factors and the level of maturity of the studied units was calculated using the Spearman's rank correlation coefficient. Moderate and strong statistical correlations between the variables studied were found (Tab. 3). This means that all identified factors affect the level of the organization's project maturity.

After identifying key success factors in project management, due to the strength of the correlation with the organization's project maturity, when analysing empirical research results from the point of view of

change dynamics, it was noticed that the strongest relationship between the organization's project maturity and key success factors exists in relation to: proper definition of project parameters, using project management methodologies, using IT support techniques and tools to enhance project management, ongoing supervision and control over all implemented projects, proper selection of the manager of all projects taking into account his/her competences, project experience and style of management.

	Key success factors in project management	Spearman's rank correlation coefficients in research in 2010–2012*	Spearman's rank correlation coefficients in research in 2016–2018*
Organization's project maturity level	proper selection of the manager of all projects taking into account his/her competences and project experience as well as the management style	0.614	0.611
	support and involvement of the president/mayor/head of municipality	0.541	0.576
	appropriate schedule of project activities, including a proper division of tasks and responsibilities	0.489	0.383
	proper definition of project parameters: project scope, time, costs, quality	0.712	0.678
	ongoing supervision and control over all implemented projects	0.651	0.457
	identification of risk and regular risk monitoring in relation to all implemented projects, risk management skills	0.472	0.589
	working meetings of project teams	0.305	0.522
	development of suitable communication rules	0.274	0.242
	using project management methodologies	0.671	0.599
	using IT support techniques and tools to aid project management	0.657	0.364
	reliable (careful) selection of project team members (in terms of their competences, experience, attitudes and involvement)	0.425	0.343
	orientation on people in project management (ensuring their knowledge development, improvement of skills, creation of an appropriate motivational system and ensuring a proper flow of information)	0.343	0.399

* Correlation is significant at the level of 0.05 (two-sided)

Tab. 3. Spearman's rank correlation coefficients for project maturity levels and the impact of key success factors on project management in basic local government units in Poland in 2010–2012 (n = 380) and 2016–2018 (n = 516). Source: author's own work based on empirical research.

The group of factors with moderate, but statistically significant correlation include: the involvement and support of superiors from basic local government units in Poland, appropriate schedules of project activities (including a suitable division of tasks and responsibilities), appropriate selection of project team members (taking into account their competences, experience, attitudes and involvement), identification and regular monitoring of risk in relation to all implemented projects, and the ability to manage risk.

The group of factors least correlated with the organization's project maturity include: orientation on people in project management (ensuring the development their knowledge, improvement of skills, creation of an appropriate motivational system and ensuring a proper flow of information), organisation of working meetings of project teams, and developing communication rules.

If we compare Spearman's rank correlation coefficients with the assessment of key success factors in project management, we may conclude that competences, and most of all of knowledge in the field of project management remain insufficient; in addition, the studied units seem unaware of factors that have the strongest impact on the organization's project maturity. Undoubtedly, in order to improve project management and achieve a higher level of project maturity, the surveyed units should focus on gaining knowledge and skills in this area.

5. Conclusions

Observations made show that in the opinion of respondents, soft factors of project management affect the attainment of the successive levels of project maturity. This does not mean, however, that the importance of hard factors should be marginalized, as their correlation with project maturity is strongest. Knowing and, consequently, properly implementing them is important, as they contribute to an effective execution of project measures. The importance of project management methods seems to be marginalized by both respondents and those involved in the discussion on research into key success factors of project management (Westerveld, 2003; Tuman, 2006; Iyer & Jha, 2007; Kozuch & Sienkiewicz-Małyjurek, 2013; Haffer & Haffer, 2015; Demirkesen & Ozorhon, 2017; Zuo et al., 2018). The acquisition of appropriate skills, the ability to work in a team and the development of appropriate incentive systems are all of great importance. However, the efficiency of project management requires the synchronization and coordination of activities. An orderly and homogenous approach to project management is therefore needed. It can be achieved mainly through the implementation of standards encompassing project management methodologies and techniques. They would increase the efficiency of project management and reduce the risk of project failure, while alleviating the

sense of insecurity among project team members which, in turn, would translate into a higher level of project maturity of the organisation.

Several conclusions can be made as regards further research directions. Due to the complexity of the studied phenomena and constant changes in the functioning of organizations, project maturity should be studied in more detail. It means that field recommendations should be formulated on the basis of the profiles of the studied entities, which need to be defined and compared. Taking into account the criterion of the level of project maturity, studied entities could be classified as “mature” and “immature”. Then, the level of differentiation of the specific profiles of communes with regard to the assumed conditions of the surveyed units should be subject to statistical verification. What is more, it seems interesting and valid to the expand the study through the adoption of a systemic approach and a multi-criteria evaluation of the organization’s project maturity.

Endnotes

- ¹ The value of the maximum level of indicated responses refers to the assessment of the intensity level of the phenomenon studied, which is the percentage of all responses defining each impact level separately, while taking all variables into account.
- ² As a result of the conducted literature analysis, it is assumed that project management is a process that involves the coordination and synchronization of all projects implemented in an organization in which synergy is achieved through the proper use of competences, management methods and IT support tools. The effectiveness of project management defined this way is contingent on the couplings of different variables; as a result, factors that are both internal and external to the organization must be taken into account. The advancement of project management in local government units can be evaluated through an analysis of the implemented projects in the context of their maturity level. Therefore, the level of project maturity depends on the intensity of activities undertaken with regard to project management and the scope of the used methods (Dolata 2014).

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