

INTERNAL ENVIRONMENT FOR PROJECT MANAGEMENT IN CITY AND COUNTY COUNCILS IN POLAND

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Purpose: The aim of the article is to assess the internal project management environment in municipal and district offices in Poland.

Design/methodology/approach: Based on the literature analysis, the paper develops a research tool to conduct a survey on a group of 200 city and district offices in Poland.

Findings: Based on the research conducted, the factors of the internal environment of project management in the studied local government organisations were identified.

The work is of cognitive value for the development of knowledge, learning and quality in project environment management in local government organisations.

Keywords: project environment, project management.

Category of the paper: research paper.

1. Introduction

The need to streamline the work process to increase productivity and efficiency in project management is ever-present. Individual organisations strive to provide the right environment so that projects can be completed within time and financial constraints.

The project management process takes place in an organisational environment that is characterised by certain company- or organisation-specific features. These characteristics reflect the organisation's state of readiness for project implementation and primarily relate to the enterprise's system architecture (including organisational structure, internal procedures, communication systems, etc.), organisational culture and social potential (Pachura, 2016). This system directly influences the project implementation and project management process.

The literature points to tools that streamline the project management process while creating a certain project management environment. Their purpose is to ensure that all elements of the project, such as the project manager and his team, can interact and work with access to project information. The effect of this is to provide a favourable environment so that people work together to achieve a common goal.

This paper will examine the internal project environment and its role in project management in city and county offices in Poland. In particular, the factors of the project's internal environment that can affect project implementation will be analysed.

2. Internal project management environment factors

Environmental characteristics have a significant impact on all aspects of management, including project management (Ochieng et al., 2013). Project management as a management concept deals with creating a favourable environment so that people work together to achieve a common goal (Reis, Ribeiro, 2022).

The project environment is defined as 'the set of phenomena, processes, institutions, groups and individuals - both external and internal - that are affected by and influence the project' (Trocki, 2013; Trocki, Grucza, 2009). The environment can therefore be understood as the setting in which a project is created and implemented, which is why the project environment is often referred to as the project context or project environment. This environment includes the actors and objects of the project (Grucza, 2019).

The relevance of the project environment in the PRINCE2 methodology is encapsulated in the definition of a project, where a project is '(...) a management environment created to deliver one or more business products according to the specific requirements of the business' (Office of Government Commerce, 2005, p. 7). Furthermore, in the PRINCE2 methodology, the approach to the project environment is embodied in the principle (principium) that states adaptation to the conditions in which the project is implemented and the role of the Steering Committee.

The project context in the International Project Management Association (IPMA) standard is reflected in the contextual skills of the project manager. The project manager's contextual competencies cover areas such as the role of project management in permanent organisational structures and the interrelationship of project management and the organisation's business administration (SPMP, 2009, p. 30).

The effective implementation of a project requires considering the strong influence of various elements constituting the project environment, such as: processes, events, activities, as well as organisations, teams, individuals, which have a mutual relationship with the project.

The project environment so understood can be divided into external and internal (Grucza, 2019), i.e.:

- a) the external project environment includes:
 - the project macro-environment (further, global) indirectly affecting the project, e.g.: social, technological, political, economic, natural environment,
 - the proximate environment directly affecting the project, e.g.: suppliers and competitors, customers, regulators.
- b) the internal project environment includes:
 - the intra-organisational project environment, which is formed, among others, by the supervisory and managerial bodies of the project organisation, its management and line and functional staff, experts, employee representations,
 - the intra-project environment, which comprises: the project steering committee, project management, project management teams, administrative and technical support teams, specialists, consultants.

Similarly, Sarah Burner (Burner, 2024) divides key project environment factors into two categories: internal and external. Internal project environment factors consist of elements within the organisation and are mostly under direct control, these include, but are not limited to: employees, team dynamics, project management software, assets and resources, culture and organisational structure, which can be easily shaped through internal policies or decisions. External factors that are out of our control but can affect project performance include but are not limited to: changes in political power or regulatory compliance in a jurisdiction.

The Project Management Institute (PMI) standard indicates the positive or negative impact of the project environment on projects. According to the standard, there are two categories of impact, i.e.: business environmental factors and organisational process assets.

Business environment factors are conditions ‘that influence, constrain or direct the projects that are beyond the control of the project team’. These factors include internal and external factors (Table 1).

Tabela 1.

Factors in the project management enviro

Factors in the project management enviro	
Internal environmental factors of the business	External environmental factors of the business
Organisational culture, structure and supervision	Market conditions
Geographical dispersion of facilities and resources	Impact and social and cultural issues
Infrastructure	Legal restrictions
Software	Commercial databases
Availability of resources	Research
Staff capacity	Government or industry standards
	Financial considerations
	Physical elements of the environment

Source: PMBOK Guide, 2019.

Organisational process assets are factors internal to the organisation that have an impact on project management. These factors can be divided into two categories:

- Processes, policies and procedures for carrying out project work.
- Organisational knowledge bases for storing and granting access to information.

The analysis of the project environment is also addressed in project maturity studies of organisations. In this context, the project environment is understood as the organisation's organisational structures, management system, awareness of the importance of project management, stakeholder management and support of the organisation's management, procedures to support project management (Spalek, 2013, p. 41).

Both the organisational process assets and the project environment defined for the project maturity study indicate the factors that influence project management in an organisation. It is these factors that are worth examining to answer the question of the state of the project management environment in an organisation.

It is the environment in which a project is implemented that determines the methods and tools used to implement it, and ultimately influences its ultimate success (Swietoniowska, 2015). Projects are launched and implemented in a dynamic environment. The bidirectionality of the project-environment interaction should also be noted, i.e. the project throughout its cycle is created and influenced by the environment, but also influences it.

Managing the project environment in local government organisations requires a different approach compared to the private sector. This is related to the specific characteristics of the public sector. This makes public projects characterised by certain features that distinguish them from private projects. As Wirick writes (Wirick, 2009, p. 8) public projects:

- are implemented in an environment that may contain elements of political struggle,
- are carried out in organisations that have little project experience,
- most often have to be implemented within existing staff resources,
- require the interaction of individuals outside the project team,
- are often implemented in an environment with different objectives and expecting different results,
- involve different stakeholders with different expectations,
- are managed within the constraints imposed by administrative rules, cumbersome procedures and policies.

All these circumstances make it unjustifiable to automatically, unreflectively transfer solutions developed in private organisations to public organisations.

The project context in public sector organisations undoubtedly contains elements of political gamesmanship, but these belong to the environmental factors of the activity, i.e. the conditions affecting the projects that are beyond the control of the project team.

Considering the above considerations, the internal factors of the project management environment were divided into four categories, viz:

- 1) the project team,
- 2) project management procedures, tools and techniques,
- 3) knowledge base,
- 4) organisational culture and structure.

For the purpose of the research conducted, internal project management environment factors were identified in each category (Table 2).

Table 2.
Internal factors of the project management environment

Internal factors of the project management environment	
Project team	Z1. Provision of competent people for project management. Z2. Project managers effectively manage project stakeholders. Z3. Project managers are willing to share knowledge and experience. Z4. Project team members are willing to share knowledge and experience gained during projects.
Project management procedures, tools and techniques	P1. A formal appraisal system is in place to measure the level of competence of those involved in project planning and implementation. P2. Project management is used as an avenue to achieve strategic objectives. P3. Common terminology associated with project management. P4. Defined tools and techniques for project management. P5. Defined processes for initiating, planning, executing, monitoring, controlling and closing a project. P6. Defined project stakeholder management process.
Knowledge base	B1. There is a system for collecting and sharing data on completed projects. B2. There is an awareness of the importance of knowledge in effective project management. B3. Knowledge and experiences from completed projects are collected and stored. B4. Knowledge and experience from completed projects is applied to subsequent projects. B5. Project experience is documented. B6. A system is in place to support project knowledge management.
Culture and organisational structure	K1. Adapt project management processes to the needs of individual projects. K2. Organisational structure aligned to support project management. K3. Separation of project management organisational unit. K4. There is an awareness of the importance and value of project management.

Source: own elaboration.

3. Research methodology

To preparing the article, a research mode of procedure was adopted in line with the methodological principles applicable in the management sciences. The research mode consists of the following stages: formulation of the research problem and research questions, analysis of the collected empirical material and formulation of conclusions.

The internal environment of the project consists of, among others, the organisation's management, the employees concerned, the project manager and the other members of the project team, as well as the organisation's values, its mission, adopted strategy, procedures, its culture or organisational structure. The project is also implemented in a broader context in which, among others, suppliers, competitors, public institutions, local government, trade unions, and, in the case of projects with social impact, residents or community organisations, etc. must be considered.

In this context, the paper will examine the internal project environment and its role in project management in city and county offices in Poland. In particular, the internal factors of the project management environment will be analysed, which have been identified and grouped into four categories (presented in Chapter 2). The main objective will be achieved by finding answers to the following research questions:

Q1. Is the project environment managed in city and county offices in Poland?

Q2. Is there a relationship between internal project management environment factors?

A diagnostic survey method and a research tool, the survey questionnaire, were used to find answers to the research questions posed, which were directed at identifying internal environmental factors. The survey questionnaire prepared for the research was developed based on a critical analysis of national and international literature. The survey questionnaire contained a metric, and 20 questions graded on a scale from 1 to 5, where 1 means no such factor and 5 means the factor is always present.

The research was conducted among Polish local government organisations selected by the authors. The research allowed data to be collected from 200 organisations, i.e. 55 county offices and 145 town halls. Data was collected using the CAWI (Computer-Assisted Web Interview) method.

The research was carried out among competent local government officials, most of whom were employees of offices with seniority of more than 16 years and higher education.

4. Research findings

As a result of the empirical research, data were obtained to determine the actual situation regarding the assessment of the internal factors of the project management environment in city and county offices in Poland. Basic descriptive statistics were calculated for the factors studied: mean, median and standard deviation (Table 3).

Table 3.

Descriptive statistics on internal project management factors in municipal and district offices in Poland

Category	Factor	Average for individual factors	Median	Standard deviation	Average
Project team	Z1	4,40	4,00	0,62	4,13
	Z2	3,89	4,00	0,86	
	Z3	4,15	4,00	0,69	
	Z4	4,09	4,0	0,74	
Project management procedures, tools and techniques	P1	3,66	4,0	1,08	3,60
	P2	3,78	4,0	0,94	
	P3	3,53	4,0	1,07	
	P4	3,57	4,0	1,07	
	P5	3,70	4,0	1,11	
	P6	3,43	4,0	1,06	
Knowledge base	B1	3,87	4,0	0,94	3,80
	B2	4,05	4,0	0,87	
	B3	4,08	4,0	0,92	
	B4	4,32	4,0	0,73	
	B5	3,78	4,0	1,01	
	B6	2,73	3,0	1,23	
Culture and organisational structure	K1	4,04	4,0	0,79	3,71
	K2	3,84	4,0	0,95	
	K3	3,12	3,0	1,54	
	K4	3,83	4,0	0,97	

Source: own elaboration.

The lowest averages for individual internal factors of the project management environment in the surveyed organisations are in the category of project management procedures, tools and techniques. The average for this category is 3.60 and is the lowest among the surveyed categories. This means that in many organisations there are shortfalls in common terminology, tools and techniques, project management processes, as well as the application of rules for appointing people to a project and measuring the level of competence of these people. And yet these shortfalls will have an impact on the factors in the other categories. Thus, it can be assumed that the factors included in the category of project management procedures, tools and techniques are correlated with each other and are correlated with the factors in the other categories.

To examine the relationship between the internal factors of the project management environment, the rho-Spearman correlation testing method was used

The rho-Spearman correlation coefficient can take values in the range $\{-1,1\}$. A positive sign at the value of the coefficient indicates that an increase in the value of one variable defines an increase in the value of the other variable, while a negative sign at the value of the correlation coefficient means that an increase in the value of one variable defines a decrease in the value of the other variable. The strength of the correlation between variables is expressed by the absolute value of the correlation coefficient, with a value of 0 indicating no correlation and a value of 1 indicating perfect correlation, with an interval interpretation most adopted (Pulaska-Turyna, 2005):

- Correlation very weak for values between 0 and 0.2.
- Weak correlation for values between 0.2 and 0.4.
- Moderate correlation for values between 0.4 and 0.6.
- High correlation for values between 0.6 and 0.8.
- Correlation very high for values between 0.8 and 1.0.

In this study, a significance level of 0.05 was used. If the significance level p is less than 0.05, the relationship between the variables should be considered significant.

The study showed that there are high and moderate positive values of the correlation coefficient between the internal factors of the project management environment, which means that an increase in the value of one variable defines an increase in the value of the other variable. For all the correlations tested, the significance level p is less than 0.05, which allows us to consider that the relationship between the variables is statistically significant (Table 4).

The obtained correlation results occurring between the internal factors of the project management environment in the category of procedures, tools and techniques indicate high and positive values of the correlation coefficient. The highest value of the correlation coefficient in the studied category concerns the factor P4 which is strongly correlated with the factor P5, the correlation value is 0.86. This means that offices that have defined tools and techniques for project management also have processes in place for project initiation, planning, implementation, monitoring, control and closure. High positive values of the correlation coefficient also apply to P3 with factors: P4-0.78 and P5-0.75. Public organisations that have ensured the use of common project management terminology also have project management tools, techniques and processes in place. It is worth noting that a high positive correlation ascends between the internal project management environment factors from the project team category and the internal project management environment factors from the knowledge base category. High correlation values apply to factor Z2 with factors: B2-0.66; B3-0.63; B4-0.65 and B5-0.60. Thus, it can be said that the effectiveness of project stakeholder management is influenced by the awareness of the importance of knowledge in effective project management, as well as the documentation of project experiences and the collection, storage and use of knowledge and experience from completed projects.

High correlation values apply to factor Z3 and Z4 with factors B3, B4, B5, confirming that project managers and project team members sharing knowledge and experience contribute to the fact that knowledge and experience from completed projects was accumulated and used in subsequent projects.

Table 4.
Correlation results between internal project management environment factors

		Z1	Z2	Z3	Z4	P1	P2	P3	P4	P5	P6	B1	B2	B3	B4	B5	B6	K1	K2	K3	K4
Z1	R	NaN	0.50	0.49	0.47	0.45	0.39	0.39	0.40	0.38	0.40	0.35	0.47	0.39	0.50	0.37	0.23	0.47	0.43	NaN	0.40
	p	1	1	3,19E-13	2,27E-12	3,82E-11	8,02E-09	8,28E-09	3,68E-09	4,40E-08	3,96E-09	3,94E-07	1,40E-12	1,30E-08	6,12E-14	5,01E-08	0,00094	2,77E-12	2,54E-10	0,25732	5,63E-09
Z2	R	0.50	NaN	0.63	0.63	0.46	0.55	0.50	0.52	0.58	0.51	0.66	0.63	0.65	0.60	0.41	0.67	0.52	0.34	0.62	
	p	3,00E-14	1	1,49E-23	1,71E-23	1,30E-11	1,98E-17	3,16E-14	3,75E-15	1,54E-17	4,82E-19	2,30E-14	3,08E-26	6,28E-24	5,38E-25	8,55E-21	2,35E-09	4,27E-27	2,37E-15	6,54E-07	4,66E-23
Z3	R	0.49	0.63	NaN	0.85	0.35	0.47	0.46	0.45	0.47	0.45	0.39	0.56	0.62	0.68	0.61	0.28	0.47	0.51	0.33	0.58
	p	3,19E-13	1,49E-23	1	1,87E-57	3,69E-07	3,29E-12	5,24E-12	1,34E-11	1,23E-12	2,27E-11	1,60E-08	5,65E-18	1,34E-22	1,05E-28	5,42E-22	7,05E-05	1,59E-12	1,36E-14	1,57E-06	2,41E-19
Z4	R	0.47	0.63	0.85	NaN	0.36	0.49	0.41	0.45	0.43	0.46	0.42	0.58	0.59	0.65	0.63	0.27	0.48	0.55	0.32	0.58
	p	2,27E-12	1,71E-23	1,87E-57	1	1,28E-07	2,54E-13	2,17E-09	1,58E-11	1,67E-10	1,05E-11	7,31E-10	2,92E-19	5,82E-20	1,27E-25	9,48E-24	9,02E-05	9,94E-13	6,15E-17	4,05E-06	3,71E-19
P1	R	0.45	0.46	0.35	0.36	NaN	0.34	0.47	0.45	0.40	0.51	0.34	0.39	0.35	0.42	0.40	0.34	0.39	0.38	0.14	0.37
	p	3,82E-11	1,30E-11	3,69E-07	1,28E-07	1	9,75E-07	2,26E-12	1,85E-11	4,10E-09	7,41E-15	8,18E-07	7,33E-09	5,59E-07	6,76E-10	4,47E-09	1,15E-06	1,55E-08	3,59E-08	0,04552	4,84E-08
P2	R	0.39	0.55	0.47	0.49	0.34	NaN	0.45	0.54	0.50	0.50	0.40	0.65	0.52	0.47	0.47	0.41	0.56	0.66	0.39	0.69
	p	8,02E-09	1,98E-17	3,29E-12	2,54E-13	9,75E-07	1	2,09E-11	1,88E-16	3,68E-14	6,64E-14	4,03E-09	1,62E-25	5,26E-15	1,25E-12	3,27E-12	1,61E-09	1,13E-17	6,71E-26	7,86E-09	1,18E-29
P3	R	0.39	0.50	0.46	0.41	0.47	0.45	NaN	0.78	0.75	0.59	0.48	0.50	0.52	0.50	0.43	0.46	0.52	0.34	0.44	
	p	8,28E-09	3,16E-14	5,24E-12	2,17E-09	2,26E-12	2,09E-11	1	1,34E-42	1,14E-37	2,16E-20	6,57E-13	7,06E-14	1,95E-15	6,05E-14	2,65E-15	2,46E-10	6,74E-12	1,62E-15	9,73E-07	1,09E-10
P4	R	0.40	0.52	0.45	0.45	0.45	0.54	0.78	NaN	0.86	0.70	0.54	0.49	0.53	0.49	0.53	0.43	0.53	0.60	0.36	0.49
	p	3,68E-09	3,75E-15	1,34E-11	1,58E-11	1,85E-11	1,88E-16	1,34E-42	1	2,07E-58	7,42E-31	2,29E-16	1,10E-13	4,39E-16	2,18E-13	5,12E-16	1,68E-10	1,31E-15	6,81E-21	1,91E-07	2,12E-13
P5	R	0.38	0.55	0.47	0.43	0.40	0.50	0.75	0.86	NaN	0.66	0.53	0.46	0.56	0.52	0.50	0.41	0.48	0.57	0.39	0.45
	p	4,40E-08	1,54E-17	1,23E-12	1,67E-10	4,10E-09	3,68E-14	1,14E-37	2,07E-58	1	1,25E-26	4,03E-16	4,28E-12	9,10E-18	3,11E-15	6,70E-14	1,18E-09	4,40E-13	2,35E-18	1,14E-08	2,04E-11
P6	R	0.40	0.58	0.45	0.46	0.51	0.50	0.59	0.70	0.66	NaN	0.57	0.49	0.52	0.45	0.54	0.51	0.57	0.55	0.32	0.47
	p	3,96E-09	4,82E-19	2,27E-11	1,05E-11	7,41E-15	6,64E-14	2,16E-20	7,42E-31	1,25E-26	1	9,77E-19	9,80E-14	4,06E-15	1,66E-11	2,12E-16	2,17E-14	6,34E-19	4,63E-17	4,50E-06	3,52E-12
B1	R	0.35	0.51	0.39	0.42	0.34	0.40	0.48	0.54	0.53	0.57	NaN	0.48	0.58	0.57	0.53	0.37	0.51	0.44	0.20	0.48
	p	3,94E-07	2,30E-14	1,60E-08	7,31E-10	8,18E-07	4,03E-09	6,57E-13	2,29E-16	4,03E-16	9,77E-19	1	3,61E-13	2,03E-19	1,22E-18	5,02E-16	1,04E-07	6,61E-15	5,20E-11	0,00493	5,66E-13
B2	R	0.47	0.66	0.56	0.58	0.39	0.65	0.50	0.49	0.46	0.49	0.48	NaN	0.66	0.56	0.61	0.43	0.61	0.56	0.23	0.70
	p	1,40E-12	3,08E-26	5,65E-18	2,92E-19	7,33E-09	1,62E-25	7,06E-14	1,10E-13	4,28E-12	9,80E-14	3,61E-13	1	2,94E-26	7,09E-18	3,79E-22	2,53E-10	1,38E-21	1,35E-17	0,00101	4,10E-31
B3	R	0.39	0.63	0.62	0.59	0.35	0.52	0.52	0.53	0.56	0.52	0.58	0.66	NaN	0.71	0.66	0.35	0.50	0.52	0.26	0.59
	p	1,30E-08	6,28E-24	1,34E-22	5,82E-20	5,59E-07	5,26E-15	1,95E-15	4,39E-16	9,10E-18	4,06E-15	2,03E-19	2,94E-26	1	3,44E-32	3,42E-26	3,93E-07	3,38E-14	2,50E-15	0,00017	3,06E-20
B4	R	0.50	0.65	0.68	0.65	0.42	0.47	0.50	0.49	0.52	0.45	0.57	0.56	0.71	NaN	0.59	0.21	0.57	0.56	0.29	0.52
	p	6,12E-14	5,38E-25	1,05E-28	1,27E-25	6,76E-10	1,25E-12	6,05E-14	2,18E-13	3,11E-15	1,66E-11	1,22E-18	7,09E-18	3,44E-32	1	2,02E-20	0,00298	8,02E-19	2,94E-18	3,91E-05	2,35E-15
K1	R	0.37	0.60	0.61	0.63	0.40	0.47	0.52	0.53	0.50	0.54	0.53	0.61	0.66	0.59	NaN	0.48	0.55	0.56	0.31	0.60
	p	5,01E-08	8,55E-21	5,42E-22	9,48E-24	4,47E-09	3,27E-12	2,65E-15	5,12E-16	6,70E-14	2,12E-16	5,02E-16	3,79E-22	3,42E-26	2,02E-20	1	1,04E-12	3,70E-17	8,93E-18	7,82E-06	2,79E-21
K2	R	0.23	0.41	0.28	0.27	0.34	0.41	0.43	0.43	0.41	0.51	0.37	0.43	0.35	0.21	0.48	NaN	0.36	0.38	0.29	0.48
	p	0,000944424	2,35E-09	7,05E-05	9,02E-05	1,15E-06	1,61E-09	2,46E-10	1,68E-10	1,18E-09	2,17E-14	1,04E-07	2,53E-10	3,93E-07	0,00298	1,04E-12	1	1,50E-07	2,57E-08	3,20E-05	5,30E-13
K3	R	0.47	0.67	0.47	0.48	0.39	0.56	0.46	0.53	0.48	0.57	0.51	0.61	0.50	0.57	0.55	0.36	NaN	0.67	0.33	0.60
	p	2,77E-12	4,27E-27	1,59E-12	9,94E-13	1,55E-08	1,13E-17	6,74E-12	1,31E-15	4,40E-13	6,34E-19	6,61E-15	1,38E-21	3,38E-14	8,02E-19	3,70E-17	1,50E-07	1	6,73E-28	1,55E-06	1,30E-20
K4	R	0.43	0.52	0.51	0.55	0.38	0.66	0.52	0.60	0.57	0.55	0.44	0.56	0.52	0.56	0.56	0.38	0.67	NaN	0.51	0.59
	p	5,63E-09	4,66E-23	2,41E-19	3,71E-19	4,84E-08	1,18E-29	1,09E-10	2,12E-13	2,04E-11	3,52E-12	5,66E-13	4,10E-31	3,06E-20	2,35E-15	2,79E-21	5,30E-13	1,30E-20	8,76E-20	4,97E-08	1

Source: own elaboration.

Internal project environment factors in the category of procedures, tools and techniques correlate with organisational culture and structure. The highest correlation values relate to factor P2 with factors K2-0.66 and K4-0.69. On this basis, it can be concluded that organisations that use project management as a route to achieving strategic goals are aware of the importance and value of project management and therefore adapt the organisational structure to support project management.

5. Summary

The article assesses the internal project management environment in municipal and district offices in Poland. Based on literature research, four categories of internal project management environment factors were specified, i.e. 1) project team, 2) project management procedures, tools and techniques, 3) knowledge base, 4) organisational culture and structure.

In order to find answers to the research, questions posed in the article, which were aimed at analysing the internal factors of the project management environment, a questionnaire survey was conducted among 200 randomly selected city and county offices in Poland.

The results obtained suggest that city and county offices in Poland manage the project environment. The highest average scores were given to internal project management environment factors in the project team category, and the lowest average scores were given to factors in the project management procedures, tools and techniques category.

The research conducted showed (answering the second research question) that there are correlations between the internal factors of the project management environment. When examining each internal environment factor with the others, it can be seen that positive, moderate and high correlation coefficient values are most often observed, which means that an increase in the value of one variable defines an increase in the value of the other variable. In addition, there are high positive correlations between the internal project management environment factors from the project team category and the internal project management environment factors from the knowledge base category, and between the internal project management environment factors from the procedures, tools and techniques category and the internal project management environment factors from the organisational culture and structure category.

In the organisations surveyed, project management is used as an avenue to achieve strategic goals and thus there is an awareness of the importance of knowledge in effective project management. In these organisations, project managers effectively manage project stakeholders by adapting project management processes to the needs of individual projects and appreciate the importance of knowledge in effective project management, where knowledge and experience from completed projects is accumulated used in subsequent projects.

The results of the research show that the analysed local government organisations, while having defined tools and techniques for project management, also have an organisational structure tailored to support project management and use project management as a route to achieving strategic goals.

The results of the research show that organisations should strive to develop individual internal project environment management factors, as this will allow the development of other project environment management factors. As Randall Englund and Robert J. Graham write, senior managers play the biggest role in this area. They are the ones who ultimately create the environment that supports projects. The way senior managers define, structure and act in relation to projects has a significant impact on the success or failure of those projects, and consequently on the success or failure of the organisation (Englund, Graham, 2019).

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