

ASSESSING THE USEFULNESS OF SIMPLIFIED PROJECT MANAGEMENT FRAMEWORKS IN A SMALL ENTERPRISE CONTEXT

Sławomir WAWAK^{1*}, Małgorzata ZAKRZEWSKA²

¹ Krakow University of Economics; wawaks@uek.krakow.pl, ORCID: 0000-0001-6206-4489

² Krakow University of Economics; zakrzewm@uek.krakow.pl, ORCID: 0000-0001-7914-1313

* Correspondence author

Purpose: The study aims to evaluate the applicability and perceived usefulness of a light-weight project management methodology tailored for small-scale projects, particularly within environments with limited project management experience and resources.

Design/methodology/approach: An experimental research design involving multiple student-led teams executing real-world small projects over four months was employed. The methodology under evaluation was systematically applied by each team, supported by trained mentors. Data were collected through structured surveys assessing various dimensions of the methodology's practicality and effectiveness, including documentation, role clarity, stakeholder engagement, and risk management.

Findings: The findings indicate that simplified project management approaches can effectively support small project environments. Respondents reported high satisfaction levels with the ease of use, clarity of documentation, and effectiveness of core tools such as role assignment mechanisms, project boards, and deliverables mapping. The methodology also demonstrated utility in enhancing stakeholder communication and managing evolving project requirements. Minor challenges were observed, primarily related to stakeholder engagement variance and unforeseen risks.

Research limitations/implications: The study's limitations include student teams in an academic setting, not fully reflecting commercial pressures or dynamics. Mentor involvement may have inflated performance, limiting findings' generalizability and needing further research.

Practical implications: The study suggests that small enterprises and nonprofit organisations can benefit from adopting streamlined methods that emphasise clarity, frequent feedback, and simple documentation.

Originality/value: This study contributes to the limited empirical literature on project management in small-scale and resource-constrained environments. It provides evidence-based insights into minimalist project management methodologies' practical benefits and limitations, offering value for researchers, practitioners, and educators seeking adaptive, accessible tools for managing small projects in SMEs, NGOs, and student settings.

Keywords: small projects, project management methodology, experimental research, stakeholder engagement, lightweight frameworks, SMEs.

Category of the paper: Research paper. The testing of a framework.

1. Introduction

While substantial research has focused on project management practices for large and complex projects, much less attention has been given to the challenges small and medium-sized enterprises (SMEs) face in managing small-scale initiatives (Bai et al., 2016). Traditional methodologies, such as PMBOK or PRINCE2, are often too resource-intensive and require high levels of expertise, making them unsuitable for micro-project environments where simplicity, adaptability, and limited overhead are critical. This misalignment is particularly problematic given that SMEs account for a significant share of employment and innovation in both developed and emerging economies (Turner et al., 2012; Marcelino-Sádaba et al., 2014). In the European Union alone, they generate 66.7% of employment, employing over 90 million people (Marcelino-Sádaba et al., 2014). Studies show that projects can be associated with more than 40% of the turnover of small and medium-sized projects (Turner et al., 2012). SMEs require project management to effectively manage their innovation, achieve growth, and meet strategic goals while minimising high inherent risks. However, these companies lack project monitoring and control systems, have poorly distributed roles and management structures, and lack experienced project managers (Turner et al., 2009). This situation has evolved in recent years due to the increasing popularity of project management methodologies, but other barriers still prevent a comprehensive solution to this problem.

Small organisations often lack the expertise or resources necessary to participate in the creation of standards (Laporte, Chevalier, 2015). None of the existing waterfall or agile methodologies are fully adapted to the needs of small companies and small projects (Kolimar et al., 2022). The tailoring proposed by the authors of these methodologies does not work in practice due to the lack of advanced project competences (Marcelino-Sádaba et al., 2014). Rigid adherence to predefined methodologies that are not tailored to the organisation's and projects' specific needs leads to delays, errors, and budget overruns. Therefore, it is necessary to propose methodologies specifically designed for small projects. In recent years, such methodologies have been emerging. One example is micro.P3.express. Unfortunately, unlike large and well-known methodologies, no studies show their usefulness in project management.

Existing literature acknowledges the need for lightweight or minimalist project management approaches tailored to the unique constraints of SMEs (Rowe, 2020; Zaheri et al., 2022). However, there is a lack of empirical studies that evaluate these approaches under controlled, yet practical, conditions (Rode et al., 2024). Prior research tends to be conceptual or based on single case studies, offering limited generalizability. This study addresses that gap by experimentally assessing a simplified project management methodology designed for micro-projects, focusing on its ease of use, stakeholder engagement, and support for planning and control in resource-constrained contexts.

The study aimed to assess the usefulness of the micro.P3.express methodology and the tools it uses for managing small projects. The following research questions were formulated in the study:

- Is the studied methodology easy to use in teams without project experience?
- Do the techniques proposed by the methodology (roles, project board, follow-up register, deliverables map) support project implementation?
- Does the methodology properly and sufficiently support stakeholder relationship management?
- Does the methodology properly and sufficiently support requirements management?

The article is organised as follows: the next section presents a literature review, confirming the problems associated with managing small projects. The research methodology is then discussed, followed by presenting research results, discussion, and conclusions.

2. Literature review

2.1. Project management in Small and Medium-Sized Enterprises

Small and medium-sized enterprises (SMEs) make key contributions to the economy in terms of employment, innovation, and growth. Project management can significantly facilitate this contribution, but SMEs require less bureaucratic project management than larger, well-structured organisations (Turner et al., 2010). SMEs more often implement projects to achieve outcomes related to direct market activities. They are characterised by a more significant efficiency orientation, with a dominant intention to increase revenues, while large enterprises prefer economic options related to optimisation and reduction of operating costs (Kozłowski, Matejun, 2016). Micro, small and medium-sized enterprises spend about the same percentage of turnover on projects, but the smaller the company, the smaller the projects it implements and the less often it uses project management and its tools. Projects implemented in small companies are short. Most of them are in the range of 3-12 months (Turner et al., 2009). At the same time, these projects are more prone to risk due to their inherent characteristics, such as resource constraints, tight schedules, competition and low-profit margins. This causes limited formal documentation. The main problem becomes the disproportion between management expenditure and project costs (Hwang et al., 2014).

Many of these projects occur in parallel with the company's current operations (Marcelino-Sádaba et al., 2014). Small companies rarely have dedicated project managers and are less likely to adopt project management practices (Turner et al., 2012). It is typical for SMEs to have employees participating in multiple projects simultaneously, acting as participant or manager while performing current tasks resulting from their job position. This forces frequent switching

between tasks and reduces the quality of work (Rowe, 2020). In some organisations, there are no employees who are not involved in at least one project. At the same time, some companies consciously undertake more projects than they can complete to maximise the use of their resources (Bai et al., 2016). Therefore, people without management training who attend small projects need simple methods and techniques to implement them (Laporte, Chevalier, 2015) effectively.

Concerning the processes and tools used for project management, small and medium-sized enterprises are noticing a tendency to use less formal approaches, simplify planning and control techniques, and limit formal reporting. SMEs do not use all project management tools, such as PERT or milestone planning, as confirmed by research indicating their limited presence in these enterprises (Sane, 2020). Standardisation is low, and decision-making is based mainly on intuition (Kozlowski, Matejun, 2016; Turner et al., 2012). The abandonment of tools is not only due to haste or reluctance. Some techniques are not readily adaptable to small projects. Many processes from large organisations do not scale well to small ones (Rowe, 2020). For example, the essential IT tool, Microsoft Project, is treated by project managers from small organisations as too complicated for their needs (Turner et al., 2010).

Projects in SMEs are often run by company owners, who usually do not have formal management education (Zaheri et al., 2022). Owners influence project management to control the development of the whole organisation (Turner et al., 2010). Project management in small companies is often carried out by one person, without the support of specialists from inside and cooperation with the business partners. Not having their own technological solutions, small companies are more willing than large ones to use advanced communication technologies and highly specialised equipment (Kozlowski and Matejun, 2016). At the same time, the use of advanced project management tools (CPM, EVM) remains low (Turner et al., 2009).

Small and medium-sized enterprises expect that project management methodologies, methods and techniques will be adapted to the specifics of small projects (Zaheri et al., 2022). They require simple planning, control and reporting tools. They often do not need standardisation, which is required by companies with many large projects (Turner et al., 2010). Project methodologies intended for large projects cannot be straightforward adaptations, but they should be prepared from scratch with small projects in mind (Rowe, 2020). Tailoring does not work because its application requires high project management competencies, which are unavailable in SMEs. SMEs do not see an economic justification for using ISO standards or project management methodologies. Given the scale of their operations, they treat them as a source of costs that do not bring benefits (Laporte, Chevalier, 2015). In small projects, much more depends on people's attitudes. SMEs expect methodologies that focus on the involvement of project team members, efficient work and resource management rather than creating documentation (Turner et al., 2012).

2.2. Limitations of existing project management methodologies

Most of the available waterfall methodologies and some agile ones were designed primarily for managing large or medium-sized projects (Jovanovic, Bric, 2018; Piwowar-Sulej, 2021). They are not suitable for solving the problems faced by small enterprises (Marcelino-Sádaba et al., 2014). The main weaknesses of standards in the context of their application in SMEs include insufficient guidance on the selection and application of standards, difficulty in understanding standards, the cost of acquiring and implementing standards, the cost of certification, and the slow evolution of standards, which may inhibit innovation (Laporte, Chevalier, 2015). SMEs have limited time and financial resources, leading to a lack of understanding of how to use standards to their advantage. Standards such as ISO describe what should be done but do not explain how it should be done, making practical implementation difficult. Some B2B customers expect the use of several different standards and methodologies, which leads to conflicts between their requirements. Meanwhile, managers of small projects rarely have sufficient competencies to resolve these conflicts. Companies in the SME sector often do not gain clear benefits from the implementation of the standards. The cost of training, implementation and certification is also significant. Standards introduce additional bureaucracy, which requires additional employees and increases operating costs without leading to increased revenues (Laporte, Chevalier, 2015).

Turner et al. (2010) point out that waterfall methodologies, in particular, do not meet the needs of SMEs in terms of flexibility and formalisation. The formal decision-making process is irrelevant when the only decision-maker is the company's owner. Defined structures do not work correctly when each employee participates in several projects simultaneously, sometimes as a manager and sometimes as a team member. The waterfall approach requires a significant dose of planning at the beginning of the project, which may be cost-ineffective in the case of small projects and is also unwelcome to the clients, who do not yet know all of their requirements. Changes during project implementation are frequent, which leads to tensions between the project team and the client (Kolimar et al., 2022). PMBOK supporters emphasise that tailoring allows for the selection of processes, techniques, and approaches appropriate for a given project. Unfortunately, tailoring requires good knowledge of the standard and extensive experience from the project manager. A person without a management education cannot choose the right tools and processes from a document seen for the first time, which is several hundred pages long (Zaheri et al., 2022). The PMBOK approach has changed with the 7th edition and is now easier to adapt to small projects. However, it still requires too many competencies (Maslennikov et al., 2022). PRINCE2 is less flexible than PMBOK. It works well in large and structured projects, but the formalisation of this methodology significantly limits the flexibility necessary in projects implemented by SMEs. Other weaknesses for small projects are high competency requirements and a broad scope of project documentation (Hasibovic, Tanovic, 2019).

The studies show that agile methodologies do not fully meet the needs of SMEs and minor projects, too. Agile methodologies strongly rely on the team's competencies and the client's commitment and understanding of the approach. In practice, SME clients are usually unfamiliar with agile project management, which leads to misunderstandings. Clients expect the project team to take full responsibility despite the limited project planning phase. The continuous introduction of changes typical of agile projects is more demanding for the team, especially when its members participate in several projects simultaneously (Kolimar et al., 2022). This is especially visible in Scrum, where incomplete stakeholder involvement can easily lead to project failure. The decision to change the waterfall approach to Scrum in SMEs only to increase flexibility often does not lead to the intended effects. In turn, the lack of documentation, although convenient for the team, is a source of problems in contact with the client (Hasibovic Tanovic, 2019). Extreme Programming is associated with techniques and procedures that can be burdensome for small companies without developed IT support. Therefore, practices such as on-site customer, continuous testing and integration can be an obstacle to completing small projects. Using agile methodologies in small projects with relatively constant requirements leads to problems meeting the schedule (Anwer et al., 2017).

2.3. The need for lightweight, fit-for-purpose methodologies

Researchers have advocated lightweight or minimalist methodologies – simplified frameworks explicitly designed for small projects and teams. Turner et al. (2010) proposed developing a light version of project management methodologies. Authors stated that small companies will need an even more straightforward method called micro-lite (Turner et al., 2012). This methodology should focus on the definition of people and requirements. It should use simplified scheduling, risk management, cost management and reporting techniques. Anwer et al. (2017) proposed Tailored Extreme Programming as a response to the limitations resulting from the XP methodology. Kozlowski and Matejun (2016) proposed a hybrid project management model adapted to the specifics of SMEs. Kolimar et al. (2022) developed the assumptions of the methodology, which in the first phase retains the planning elements typical of the waterfall approach but later uses an iterative approach. Rowe (2020) proposed focusing project management on four issues: planning, situation analysis, task delivery, and monitoring, but in a way that is formalised at a minimal level. A similar proposal was made by Zaheri et al. (2022), who compared this simplified approach to the use of tailored processes proposed by PMBOK and obtained better results. Hasibovic and Tanovic (2019) suggest combining the strengths of PRINCE2 and Scrum to develop a flexible but easy-to-use methodology. Another interesting direction is using ISO 29110 standards, which are dedicated to managing software projects in small organisations (Laporte, Chevalier, 2015). However, this standard remains unclear concerning the compatibility with ISO 21500 family of standards and other management standards, which require further work.

These methods emphasize core project functions (e.g., planning, stakeholder coordination, deliverable tracking) while reducing bureaucratic load. However, empirical validation of such frameworks is lacking. Most existing literature is conceptual, case-based, or anecdotal, with few experimental or comparative evaluations (Kolimar et al., 2022). This creates a pressing gap for research that tests whether simplified methodologies actually meet the operational needs of small teams and resource-constrained environments.

2.4. Micro.P3.Express methodology

The micro.p3.express methodology is a minimalist project management system designed specifically for micro-projects, which usually involve small teams (mi-cro.P3.express, 2022). It is a simplified version of the P3.express framework, which aims to provide an effective and simple approach to managing small projects in a variety of environments (Rad, Turley, 2021). The system is scalable and versatile, allowing it to be used by freelancers, small teams, and individuals alike. This is particularly important in the dynamic landscape of project management, where traditional methods such as PRINCE2 or PMBOK Guide can be too complicated for smaller projects.

The methodology is based on the following principles. The micro.P3.express system is designed for small teams of 1-7 people, making it ideal for micro-projects. The system is characterized by minimalism and simplicity, avoiding excessive documentation and focusing on key activities such as planning, risk monitoring and problem solving. Furthermore, the basis for successful project management with this methodology is adherence to the Nearly Universal Principles of Projects (NUPP), which form the foundation for effective management. It is based on a process structure divided into six groups of activities, including two one-time activities and four cyclical activities (micro.P3.express, 2022). Figure 1 shows the project management process of micro.P3.express.

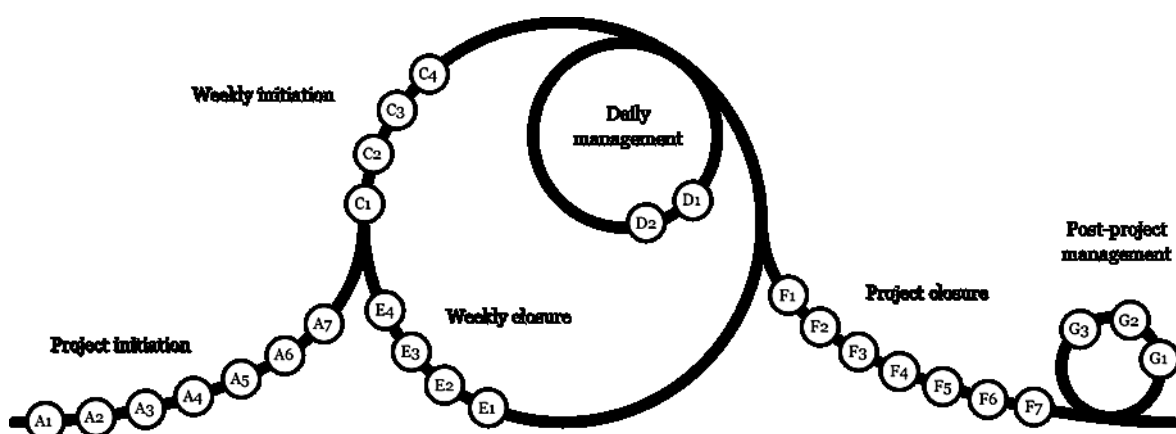


Figure 1. Structure of the micro.P3.express process.

Source: (micro.P3.express, 2022).

The activity groups in the micro.P3.express methodology include (Rad, Turley, 2021):

- Project initiation (linear group of activities, one-time) – consists of preparing the project for implementation, i.e. identifying a sponsor, dividing roles in the team, developing project documentation, planning and making decisions about the project implementation.
- Weekly initiation (cyclical group of activities) – consists of checking the business justification, reviewing tasks and preparing for a new project cycle.
- Daily management (cyclical group of activities) – consists of ongoing management of project products and derived elements (risks, problems, changes, improvements, experiences).
- Weekly closure (cyclical group of activities) – consists of analysing the project results achieved in the last cycle, assessing stakeholder satisfaction and planning improvements.
- Project closure (linear group of activities, one-time) – consists of reviewing project results, transferring products to end users and archiving documentation.
- Post-project management (cyclical group of activities) – consists of evaluating the benefits of a project and generating new ideas.

Additionally, the flexibility allows for the adaptation of work cycles; for longer projects that do not require intensive involvement, the weekly cycle can be changed to a monthly one, allowing for a better fit to the specifics of the project.

3. Methodology

This study employed an exploratory, quasi-experimental research design to evaluate the practical utility of a lightweight project management methodology in small-project settings. Experiments are rarely used in project management studies due to the difficulty of conducting, obtaining data, and above all, designing in a way that can be repeated. Very short experiments conducted in strictly controlled conditions dominate, which makes it difficult to draw broader conclusions (Kutsch et al., 2011). Studying the application of project management methodology with the help of an experiment allows for collecting observations regarding actual usefulness in diverse environmental conditions. The results can be used to improve the tested and other project methodologies.

As part of the experiment, teams composed of students were planned under the supervision of mentors, and small projects were implemented in practice. The preparation and implementation time of the project did not exceed 4 months. During the implementation, the teams were supported by mentors. The task of mentors with experience in project management was to help the early identification of risk factors and to respond in the event of

problems exceeding the capabilities of the teams. Such a procedure was necessary because, in most cases, the teams had no project experience. In practice, such problems did not occur during the experiment.

The project topics and the place of their implementation were selected by the teams. The projects were implemented mainly in small and medium-sized enterprises and student organisations. The teams consisted of 3-5 people. The teams were created based on the preferences of their members without the participation of mentors. In about half of the cases, the students had known each other for at least half a year before the team was created. The fact of prior acquaintance had no significant significance for the results presented below.

The procedure followed the micro.P3.express methodology and included the following main steps:

- Initiation and planning phase (familiarising students with the micro.P3.express methodology, creating project teams, selecting the project topic and agreeing with stakeholders, developing project documentation, approving the project documentation by the mentor and stakeholders).
- Implementation phase (weekly update of plans, implementation of tasks by teams, assessment of the degree of project implementation, documentation update, regular communication with the mentor and stakeholders).
- Closing phase (delivery of project results, obtaining approval from stakeholders, presentation of a project report).

In the case of some projects, the results were also provided during the implementation phase (e.g., organising a series of workshops for students). The project report presented the degree to which the goals and requirements were met and the results were delivered.

After completing and assessing the projects, each group of students received a survey in which they could evaluate the usefulness of the micro.P3.express methodology for use in small projects. The survey was prepared in accordance with the formulated research questions and consisted of the following sections: general evaluation, roles management evaluation, project board evaluation, follow-up register evaluation, deliverables map evaluation, stakeholder management, requirements management. Cronbach's Alpha was 0.76, which is interpreted as a good result. The result would have been much higher if not for the use of control questions, to which the answer was expected to be the opposite of most answers. Such a procedure negatively affects the Cronbach Alpha value, but at the same time increases the credibility of the obtained answers.

Data was collected through an online questionnaire survey in January and February 2025. To maintain data quality and validity, various verification measures were implemented, including assessing the completeness of questionnaires, comparing the time taken to fill out each form against the average completion time, and scanning for any patterns or inconsistencies in the responses. Control questions were introduced to identify filling in the questionnaire without reading. This rigorous data collection procedure ensured that the findings derived from

the study were both reliable and indicative of the true views and opinions of respondents within the target population.

The study investigating the application of the micro.P3.express methodology in student-led projects was conducted strictly according to ethical principles to ensure participants' integrity, independence, and respect. The following measures were implemented to address key ethical considerations. To maintain impartiality, the evaluation of the micro.P3.express methodology was separated from the academic assessment of the students' projects. Students were explicitly informed that participation in the survey was unrelated to their project grades or educational outcomes, ensuring their responses were provided freely and without external pressure. Before participating in the survey, all students were provided with comprehensive information about the study's objectives, the scope of data collection, and the intended use of the results. The form also outlined participants' rights, including anonymity and data protection. The survey was designed to ensure complete anonymity of respondents. No personally identifiable information was collected, such as names, student IDs, or project details. Data were gathered using a secure online platform that was compliant with GDPR standards for data protection. Participants were informed about the data storage and processing procedures, and it was emphasised that results would only be reported in aggregated form, preventing any possibility of linking responses to individual students. Data quality was maintained through rigorous verification processes, including checks for questionnaire completeness, response time analysis, and screening for inconsistent patterns. These ethical measures were implemented to uphold the highest standards of research conduct, safeguard participant rights, and ensure the study's findings were robust and trustworthy.

4. Results

The projects on which the application of the micro.P3.express methodology was evaluated were diverse (Figure 2). The most common projects involved promotional campaigns (27%), educational events (21%), and charity events (21%). Other projects consisted of organising social events (10%), developing e-learning courses (9%), and developing educational campaigns (9%). The projects surveyed included two that involved creating a podcast and one that involved renovating a medical facility.

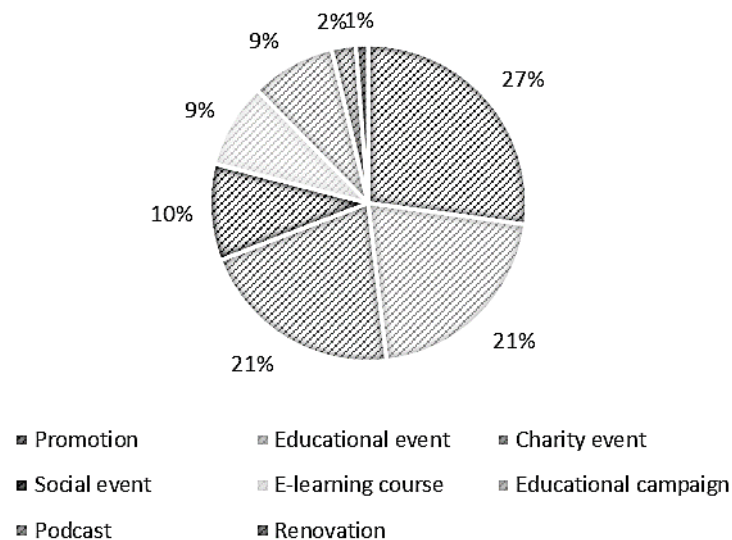


Figure 2. Types of projects.

Source: research results.

The micro.P3.express methodology was evaluated based on an analysis of several key aspects to understand how its application affects project implementation. Respondents were asked to rate each process element on a seven-point scale (1-7, disagree-agree), allowing detailed analysis of their experiences and opinions. The main areas included the ease of preparing the documentation, its completeness and usefulness during project implementation, as well as the effectiveness of the methodology itself in facilitating management and potential problems arising from its limitations. Figure 3 presents the study's results regarding the overall assessment of the approach.

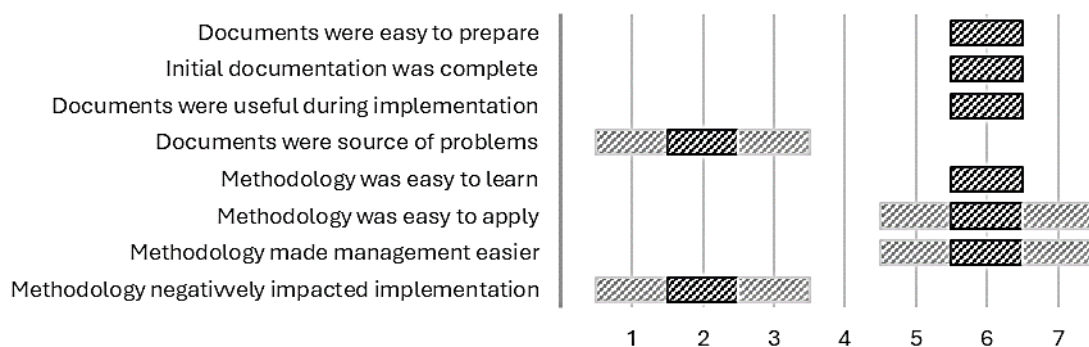


Figure 3. General evaluation of the approach.

Source: research results.

Respondents felt that the project documentation was easy to prepare. Similarly, the majority thought that the documentation prepared at the beginning of the project contained all the necessary information. The documentation was rated as very useful during project implementation. In these aspects, the median response equals 6, and the average absolute deviation is 0. The lack of scatter indicates complete agreement in the perception of these characteristics, and the responses obtained confirm the practical value of the approach used.

At the same time, the way the documentation was developed rarely caused problems, as indicated by the lower median equal to 2. In this case, the average absolute deviation is 1, which means that there was some variation in opinion. Respondents also agreed that the methodology basics were easy to learn and apply in practice, as evidenced by a median of 6. However, when evaluating the ease of application, respondents were less in agreement than when evaluating the ease of learning the basics of the methodology. In addition, the methodology made the project easier to manage, as confirmed by a median of 6, and the limitations of the methodology rarely negatively affected project implementation, as evidenced by lower ratings (median of 2). A slight variation in responses can also be seen in these questions, as the average absolute deviation was 1. The overall picture indicates user satisfaction and belief in the benefits of implementing the micro.P3.express methodology in projects.

The results of the evaluation of the hat method are shown in Figure 4. In most of the cases analysed, the teams used a hat (role) division in accordance with the micro.P3.express methodology, as evidenced by a median response of 6. Hat assignment was generally performed well as a method of role division (median equal to 5), and team members exchanged hats somewhat regularly (median equal to 5). In each of the three criteria, the mean absolute deviation equals 1, which may suggest a slight ambiguity or subjective differences in perceptions of particular aspects.

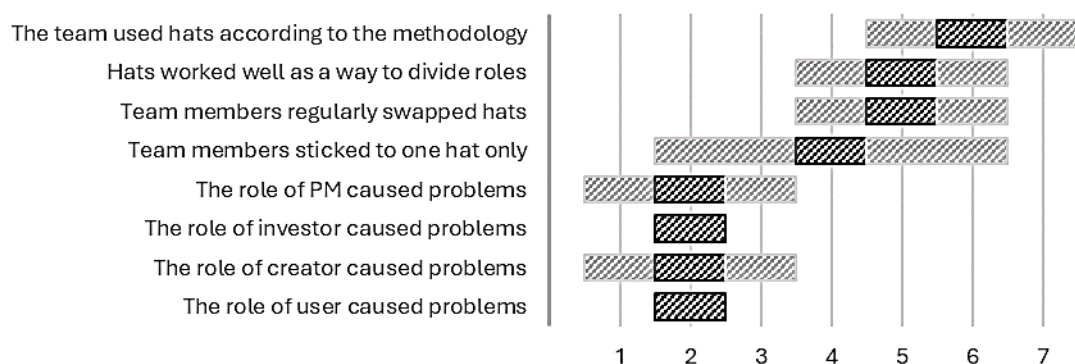


Figure 4. Hats (roles) evaluation.

Source: research results.

A median of 4 indicates that the overall evaluation bias oscillates around a neutral value – respondents do not explicitly express strong agreement or disagreement with the thesis that a rigid division of roles is a better solution. However, the mean absolute deviation of 2 suggests that there were quite significant differences in ratings among participants.

A low median of 2 indicates that respondents were unlikely to experience problems with the roles of project manager, developer, creator or user. There was relatively little difference in respondents' opinions regarding issues with the roles of project manager and developer, as indicated by a mean absolute deviation of 1.

The results of the project board evaluation are shown in Figure 5. Regarding time management, respondents rated the issues of using the project board and organising project team meetings. Most respondents rated the project board as an intuitive and easy-to-use tool, as evidenced by a median of 6. On this issue, a consensus was observed among respondents on the evaluation of the project board, as evidenced by a mean absolute deviation of 0.

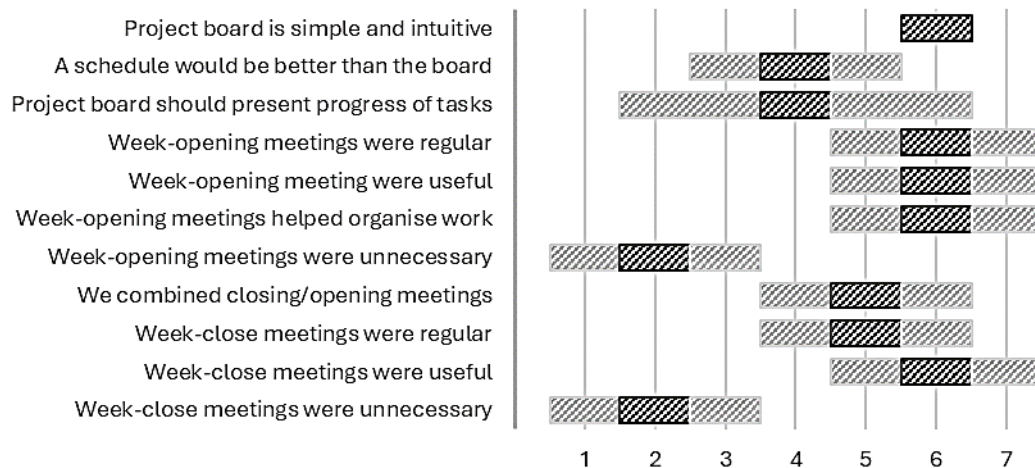


Figure 5. Project board evaluation.

Source: research results.

Respondents were neutral in their assessment of whether the development of a schedule would be preferable to a project board, and whether this one should have a layout according to the advancement of activities. On both issues, the median response was 4. Despite the slight variation in responses on the schedule issue, respondents were more in agreement than on the layout of the project board, as here the average absolute deviation was 2.

All opinions about the week's opening meetings (except for the question about annoyance) have a high median of 6, indicating that in most cases they were conducted regularly, respondents find them valuable and orderly for the teams. The mean absolute deviation of 1 suggests that most responses cluster near the median. The question about annoyance has a low median (2), confirming that respondents do not see these meetings as unnecessary. The mean absolute deviation in opinions on opening meetings equals 1, indicating relatively slight variation in respondents' answers.

A median equal to 5 indicates a relatively positive tendency to combine meetings. The mean absolute deviation of 1 suggests that respondents' opinions are mostly consistent, although some attitudes toward this solution vary.

It can be read from the results that closing meetings were primarily conducted somewhat regularly, as indicated by a median equal to 5. In addition, the usefulness of closing meetings was rated highly (median equal to 6). A median equal to 2 confirms that respondents generally did not consider closing meetings of the week to be an unnecessary nuisance. As in the case of opening meetings, the mean absolute deviation equal to 1 in opinions regarding closing meetings reports relatively slight variation in respondents' answers.



Figure 6. Follow-up register evaluation.

Source: research results.

Figure 6 refers to the evaluation of the registry of derivative elements. Overall, the management of derivative elements was rated positively by respondents. The distribution of responses shows that, for the most part, project teams identified the risk factor prior to commencement and that the derivative element register was updated at weekly meetings - a noticeably high percentage of ratings in the higher value sector (e.g., 5 and 6) with a median of 5 in both questions. The results also show that the majority made immediate updates to the element registry (median equal to 6) and that the derived element registry facilitated event management (median equal to 6). The same median (6) confirms the positive assessment of the use of the registry in the context of preparing for risks, and that despite the use of the derivative element registry, teams encountered unforeseen risk factors in the projects analysed. In all responses regarding the management of derivative elements, the mean absolute deviation of 1, despite the slight variation, suggests general agreement among respondents on the issues presented.

Figure 7 shows the results of the evaluation of the results map. The high rating of respondents (median equal to 6) and their agreement (mean absolute deviation equal to 0) confirm that in the projects analysed, the results matrix included direct products of the projects.

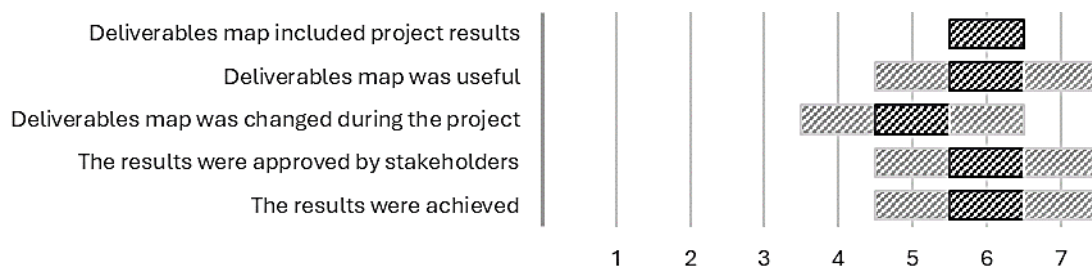


Figure 7. Deliverables map evaluation.

Source: research results.

In addition, respondents mostly agreed that the results matrix was helpful in defining the backlog (median equal to 6). A median equal to 5 indicates that respondents generally agreed with the statement that the results structure changed during the project. This means that most participants noticed some modification in the structure of the results - this was not extreme, but relatively moderate. The majority of responses at levels 6 and 7 confirm that the main results

of the projects were approved by the stakeholders and that the detailed results were achieved (median equal to 6). The average absolute deviation equal to 1 in the cases described indicates relatively consistent opinions of respondents.

The results of the survey regarding stakeholder management are shown in Figure 8. Most respondents (median equal to 6) declared that stakeholder analysis was conducted diligently before the project, and preferred communication channels were established with them.

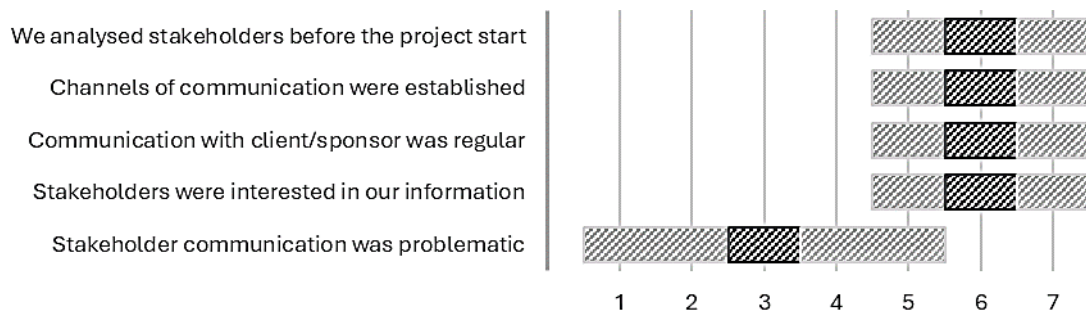


Figure 8. Stakeholder management.

Source: research results.

In addition, responses indicate that projects had regular communication with the client/sponsor (median equal to 6), and that stakeholders were interested in the information they received (median equal to 6). For all these issues, the absolute deviation of the median is 1. Its value indicates the low spread and consistency of respondents' answers. Regarding problems in communication with stakeholders, the median response equals 3. In this case, lower ratings indicate a smaller scale of problems. The absolute deviation here is 2. This suggests that the responses were more scattered, and some respondents rated this issue significantly higher or lower than the median. This result suggests that the experience of communication problems was more varied than that of other stakeholder management issues.

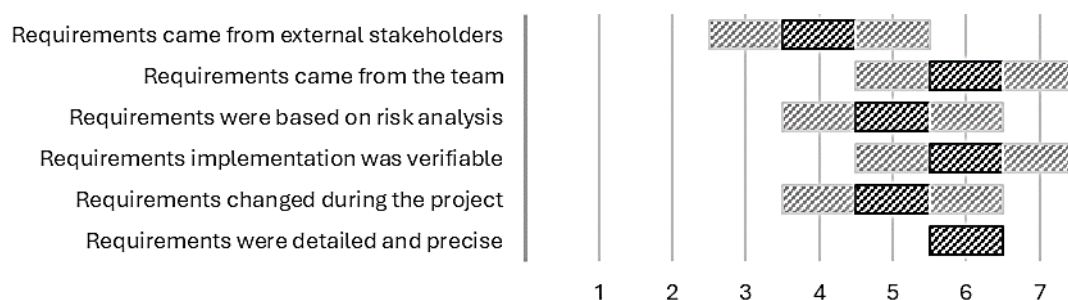


Figure 9. Requirements management.

Source: research results.

Figure 9 shows the results for requirements management. A median of 4 indicates that respondents do not have a unified opinion on whether requirements came mainly from external stakeholders. Responses oscillate around the middle of the scale, suggesting that respondents were divided or unsure - in some cases, requirements may have come mainly from external stakeholders, and in others, not. Most respondents confirm that the requirements were

formulated by the project team and that the implementation of the requirements was verifiable only after the project was completed. On these issues, the median is equal to 6. A median of 5 indicates that respondents mostly agreed that requirements were based on risk analysis and that requirements changed during project implementation. In all these aspects, the mean absolute deviation equals 1, indicating relatively slight variation in responses among respondents.

In addition, most respondents confirm that the requirements were formulated in a detailed and precise manner, as reported by the median of 6. In this regard, the mean absolute deviation of 0 confirms the respondents' agreement and uniform experience.

Although the examination of problems encountered by project teams was not the primary focus of the study, respondents, in their answers to open-ended questions, reported the occurrence of various difficulties. These primarily concerned communication with stakeholders, consistency in team work, and the division of roles. Stakeholders tended to prefer forms of communication that were often different from those proposed by the teams. Individuals from Generation X favoured direct, face-to-face contact, particularly at the beginning of the project. This preference was not immediately apparent to teams composed of individuals from Generation Z. Additionally, in several cases, teams encountered unreliable stakeholders who failed to fulfil their commitments. Not all teams immediately recognised the time-consuming nature of the project. Consequently, some teams commenced work with delays and demonstrated a lack of systematic working habits. This led to project delays and stressful situations caused by the accumulation of numerous tasks within a short timeframe. Not all teams adopted a dynamic approach to role allocation. Some teams established fixed roles, while others did not define roles at all. The latter scenario resulted in blurred responsibilities and missed task deadlines. None of the problems identified stemmed from deficiencies in the methodology under examination.

5. Discussion

This study evaluated a lightweight project management methodology for small-scale projects in environments with limited experience and formal structures—conditions typical of SMEs, start-ups, and nonprofit initiatives. The findings indicate that the methodology was generally perceived as easy to implement, with key tools such as simplified documentation, stakeholder engagement protocols, and risk registers rated positively by participants. These results reinforce earlier calls for minimalist methodologies that reduce bureaucracy and support agility in small teams (Turner et al., 2012; Kolimar et al., 2022).

The findings align with the broader project management literature, emphasising the mismatch between formal methodologies and the resource constraints of smaller organisations (Zaheri et al., 2022; Laporte, Chevalier, 2015). Notably, the study's results echo Rowe's (2020) argument that small projects benefit from tools focused on deliverables, stakeholder clarity, and ongoing feedback cycles—elements embedded in the tested methodology.

The first research question addressed whether the micro.P3.express methodology is straightforward for teams with no project management experience. The high median score of 6 for learning and using the methodology, combined with the low variability (median absolute deviation of 1), highlights its accessibility and intuitiveness. These results correspond to the design principles of the micro.P3.express system, which primarily focuses on simplicity and reduced documentation (micro.P3.express, 2022). In comparison, traditional methodologies such as PRINCE2 or the PMBOK Guide require a higher level of expertise, making them impractical for small and medium-sized organisations, and when project managers lack formal training (Hasibovic, Tanovic, 2019; Zaheri et al., 2022). Tailoring large frameworks does not work well in these situations because it requires higher competencies. The ease of use indicated by the participants aligns with the claim that small and medium-sized enterprises require lightweight methodologies that do not require advanced competencies (Turner et al., 2010). However, slight differences in the assessment of the ease of use of this approach suggest that, despite its simple principles, its implementation in practice may depend, for example, on the project's complexity or the project team's commitment. This aspect highlights the importance of mentoring in the experiment to bridge the gap between theoretical understanding and practical application, which is often missing in real SME conditions (Kozlowski, Matejun, 2016).

The second research question was whether the techniques proposed by the micro.P3.express methodology, i.e. roles (hats), project board, follow-up register and deliverables map, support project execution. Consistently high ratings (median scores of 5 and 6) for these tools confirm their effectiveness in facilitating project management.

The possibility of flexible role assignment with regular exchange of “hats” refers to the multitasking nature of project teams in small and medium-sized organisations, where people often have to handle multiple responsibilities (Turner et al., 2012). This type of flexibility reflects the reality of SMEs, where employees perform operational and project tasks simultaneously (Rowe, 2020). The high median for role exchange (5) confirms the observation that adaptive role structures increase team agility in small projects (Kolimar et al., 2022), e.g. in software development. This suggests that micro.P3.express effectively addresses the need for versatility in resource-constrained environments. The neutral assessment of rigid role allocation (median 4, mad 2) indicates diverse team preferences, which may result from differences in project requirements or team dynamics. This assessment supports the argument that SMEs cannot often implement a structured role framework due to limited staff numbers and a lack of specialist competencies (Marcelino-Sádaba et al., 2014).

The project board was rated intuitive and easy to use, indicating its value as a visual tool supporting planning and control. Respondents were neutral about their preference for a traditional schedule or other board layout, and weekly opening and closing meetings were rated highly. These results confirm that the project board meets the needs of small projects for simple tools that minimise bureaucracy (Rowe, 2020). Unlike complex tools such as Microsoft Project, which are considered too complicated for SMEs, the project board offers clarity and ease of use (Turner et al., 2010). The high ratings for weekly meetings indicate their role in coordinating teams, which is crucial in environments where employees are involved in multiple projects simultaneously (Turner et al., 2012).

The follow-up register received positive evaluations regarding risk identification before the project start, updates during weekly meetings, event management and risk response. Despite the use of the register, the studied teams encountered unforeseen risks. These results indicate that the follow-up register is an effective risk management tool. This is especially important for small projects, which are more exposed to risk due to resource constraints and short schedules (Hwang et al., 2014). The intuitive and straightforward use of the register contrasts with advanced techniques such as CPM or EVM, which are rarely used in SMEs due to their complexity (Turner et al., 2009). Using the register to prepare the team for risks addresses the need for proactive management in SMEs, as Marcelino-Sádaba et al. (2014) described. However, unforeseen risks suggest that the register's effectiveness may be limited in dynamic environments, which requires further research on its adaptation (Bai et al., 2016).

Similarly, the high evaluation of the deliverables map used to define the project outputs refers to the literature emphasising the precise definition of results in small projects (Marcelino-Sádaba et al., 2014). Moreover, the obtained results confirm that small and medium-sized enterprises benefit from a clear focus on results due to limited access to resources, which was the case during the implementation of student initiatives (Zaheri et al., 2022).

The third research question was whether micro.P3.express sufficiently supports stakeholder relationship management. The results, with medians of 6 for thorough stakeholder analysis, regular communication and stakeholder engagement, show that the methodology supports effective stakeholder management. Considering the challenges SMEs face in engaging stakeholders, especially when customers are unfamiliar with project management practices, the obtained results are significant in the context of the overall assessment of the usefulness of micro.P3.express (Kolimar et al., 2022). This contrasts with agile methodologies such as Scrum, which rely heavily on customer engagement and may fail due to misaligned expectations (Hasibovic, Tanovic, 2019). The structured but simple communication protocols of micro.P3.express seem to mitigate such risks. A median of 3 for communication problems, with a higher variance (2), indicates that some teams encountered challenges, possibly due to stakeholder diversity or unclear expectations. This variability mirrors earlier findings of the disproportionate impact of stakeholder risk in small projects (Hwang et al., 2014), suggesting

that while micro.P3.express facilitates stakeholder management, its effectiveness may depend on the team's communication skills or the project's external environment.

The fourth research question aimed to investigate the assessment of the micro.P3.express methodology's support for project requirements management. Positive assessments regarding precise requirements formulation and their verification after the project completion emphasise the micro.P3.express approach's adaptability to provide clarity in a domain where SMEs often struggle with ambiguous customer needs (Zaheri et al., 2022). Moderate agreement on requirements changing during projects and their formulation based on risk reflects the dynamic nature of small projects, where adaptability is key (Turner et al., 2010). A neutral assessment of whether requirements come mainly from external stakeholders suggests that teams draw from internal and external sources. This confirms flexibility and is consistent with Rowe's (2020) recommendations for adaptive requirements management in small projects. Compared to waterfall methodologies that struggle with changes during a project, or agile approaches that can overwhelm small organisations with constantly changing requirements, micro.P3.express strikes a balance by allowing iterative updates within a structured framework (Anwer et al., 2017). This balance is especially valuable for SMEs where resource constraints require meeting requirements with minimal rework.

These findings also offer relevant implications for the theoretical development of project management methodologies tailored to small organisations. The results provide empirical support for the emerging shift in the literature from universal, process-intensive frameworks towards context-specific, lightweight approaches grounded in contingency theory. In particular, they validate the proposition that the effectiveness of project management stems less from methodological comprehensiveness and more from contextual suitability – especially in terms of simplicity, cognitive accessibility, and adaptability. The strong usability and perceived value of micro.P3.express among novice teams align with Rowe's (2020) minimalist paradigm, indicating that project success in micro-environments may depend more on iterative learning and stakeholder coordination than on formal process maturity. This highlights the need to advance theoretical models that conceptualise “methodological adequacy” as context-dependent, rather than as an absolute standard derived from large-organisation practices.

6. Conclusions

This study examined the application and perceived usefulness of a simplified project management methodology tailored to small projects implemented under resource and competency constraints. Through an experimental approach involving real-world project execution by student teams, the study generated empirical insights into the usability, effectiveness, and limitations of lightweight project tools in micro-project contexts.

The findings contribute to project management theory by providing rare experimental evidence on the implementation of minimalist methodologies. Unlike traditional frameworks that require tailoring and extensive experience, the methodology tested here was accessible to novice teams and supported core project management activities – planning, monitoring, and stakeholder engagement – without introducing unnecessary complexity. These results support the argument that purpose-built, lightweight methodologies may be more appropriate for small organisations than adapted versions of enterprise-scale frameworks.

From a practical perspective, the study suggests that small enterprises and nonprofit organisations can benefit from adopting streamlined methods that emphasise clarity, frequent feedback, and simple documentation. These tools, when supported by basic training and stakeholder coordination, can enhance project delivery even in the absence of formal project management infrastructure.

Nevertheless, the study has several limitations. The sample consisted of student teams operating in an educational context, which may not fully replicate the pressures, stakeholder dynamics, or accountability found in commercial environments. Additionally, mentor involvement may have enhanced performance beyond what the methodology alone would yield. These constraints limit the generalizability of findings and highlight the need for further research.

Future studies should replicate this work in professional environments, comparing lightweight methodologies across industries and team structures. Mixed-method approaches incorporating interviews, longitudinal tracking, and outcome-based evaluation would deepen understanding of the mechanisms driving success or failure in small project contexts. Moreover, exploring how minimalist approaches can integrate with digital tools or hybrid models may offer new pathways for innovation in project management practice.

Competing interest statement

The authors declare that they have no competing interests.

Acknowledgements

The publication was supported by the Krakow University of Economics grant 060/ZZP/2024/POT.

References

1. Anwer, F., Aftab, S., Ali, I. (2017). Proposal of a Tailored Extreme Programming Model for Small Projects. *Int. J. Comput. Appl.* 171, pp. 23-27. <https://doi.org/10.5120/ijca2017915112>
2. Bai, J., So, K.C., Tang, C. (2016). A queueing model for managing small projects under uncertainties. *Eur. J. Oper. Res.* 253, pp. 777-790. <https://doi.org/10.1016/j.ejor.2016.02.052>
3. Hasibovic, A.C., Tanovic, A. (2019). *PRINCE2 vs Scrum in digital business transformation*. 2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO). Presented at the 2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), IEEE, Opatija, Croatia, pp. 1514-1518. <https://doi.org/10.23919/MIPRO.2019.8756716>
4. Hwang, B.-G., Zhao, X., Toh, L.P. (2014). Risk management in small construction projects in Singapore: Status, barriers and impact. *Int. J. Proj. Manag.* 32, pp. 116-124. <https://doi.org/10.1016/j.ijproman.2013.01.007>
5. Jovanovic, P., Beric, I. (2018). Analysis of the available project management methodologies. *Manag. J. Sustain. Bus. Manag. Solut. Emerg. Econ.* 23, pp. 1-10. <https://doi.org/10.7595/management.fon.2018.0027>
6. Kolimar, O., Kusnirak, K., Kucera, E., Haffner, O. (2022). *Delivery Team Management on Small Software Development Projects in Practice*. 2022 Cybernetics & Informatics (K&I). Presented at the 2022 Cybernetics & Informatics (K&I), IEEE, Visegrád, Hungary, pp. 1-6. <https://doi.org/10.1109/KI55792.2022.9925969>
7. Kozłowski, R., Matejun, M. (2016). Characteristic features of project management in small and medium-sized enterprises. *EM Ekon. Manag.*, 19, pp. 33-48. <https://doi.org/10.15240/tul/001/2016-1-003>
8. Kutsch, E., Maylor, H., Weyer, B., Lupson, J. (2011). Performers, trackers, lemmings and the lost: Sustained false optimism in forecasting project outcomes — Evidence from a quasi-experiment. *Int. J. Proj. Manag.*, 29, pp. 1070-1081. <https://doi.org/10.1016/j.ijproman.2011.01.010>
9. Laporte, C.Y., Chevalier, F. (2015). An Innovative Approach to the Development of Project Management Processes for Small-Scale Projects in a Large Engineering Company. In: K. Jakobs (Ed.), *Effective Standardization Management in Corporate Settings: Advances in IT Standards and Standardization Research*. IGI Global. <https://doi.org/10.4018/978-1-4666-9737-9>

10. Marcelino-Sádaba, S., Pérez-Ezcurdia, A., Echeverría Lazcano, A.M., Villanueva, P. (2014). Project risk management methodology for small firms. *Int. J. Proj. Manag.*, 32, pp. 327-340. <https://doi.org/10.1016/j.ijproman.2013.05.009>
11. Maslennikov, V.V., Popova, E.V., Kalinina, I.A. (2022). Classic Project Management Based on PMBOK 7.0. In: *Towards an Increased Security: Green Innovations, Intellectual Property Protection and Information Security*. Presented at the Institute of Scientific Communications Conference, Springer, Cham, pp. 835-840. https://doi.org/10.1007/978-3-030-93155-1_90
12. *micro.P3.express - minimalist project management for micro projects* (2022). <https://micro.p3.express/>, 13.04.2025.
13. Piwowar-Sulej, K. (2021). Organizational culture and project management methodology: research in the financial industry. *Int. J. Manag. Proj. Bus.*, 14, pp. 1270-1289. <https://doi.org/10.1108/IJMPB-08-2020-0252>
14. Rad, N., Turley, F. (2021). *P3.express Manual*.
15. Rode, A.L.G., Jensby, A., Svejvig, P. (2024). Evaluating a project management methodology to improve project performance. *Int. J. Manag. Proj. Bus.*, 17, pp. 405-429. <https://doi.org/10.1108/IJMPB-08-2023-0182>
16. Rowe, S.F. (2020). *Project management for small projects*. Oakland: Berrett-Koehler Publishers.
17. Sane, S. (2020). Effect of using project management tools and techniques on SMEs performance in developing country context. *Int. J. Manag. Proj. Bus.*, 13, pp. 453-466. <https://doi.org/10.1108/IJMPB-11-2018-0251>
18. Turner, R., Ledwith, A., Kelly, J. (2009). Project management in small to medium- sized enterprises: A comparison between firms by size and industry. *Int. J. Manag. Proj. Bus.*, 2, pp. 282-296. <https://doi.org/10.1108/17538370910949301>
19. Turner, R., Ledwith, A., Kelly, J. (2010). Project management in small to medium-sized enterprises: Matching processes to the nature of the firm. *Int. J. Proj. Manag.*, 28, pp. 744-755. <https://doi.org/10.1016/j.ijproman.2010.06.005>
20. Turner, R., Ledwith, A., Kelly, J. (2012). Project management in small to medium- sized enterprises: Tailoring the practices to the size of company. *Manag. Decis.*, 50, pp. 942-957. <https://doi.org/10.1108/00251741211227627>
21. Zaheri, A., Rojhani, M., Rowe, S.F. (2022). Evaluating PMBOK for Small Project Management. *Int. J. Ind. Eng. Prod. Res.*, 33, pp. 51-67. <https://doi.org/10.22068/ijiepr.33.1.9>