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The Application of PRINCE2 in IT Project: A Comparative Analysis of Methodologies

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Abstract:

Purpose: *The purpose of this article is to identify and evaluate the benefits of using the PRINCE2 methodology in IT project management compared to other methodologies used in IT projects.*
Design/Methodology/Approach: *Two research methods were used: a literature review and a survey. In the first stage, information was collected on the PRINCE2 methodology and other project management methodologies used in the IT sector: Agile, Scrum, Kanban, and PMBOK. The survey was conducted among project managers, Scrum Masters, and project team members. The research sample included 108 respondents.*
Findings: *Agile and Scrum methodologies were identified as more flexible, allowing for faster adaptation to changing market conditions thanks to their iterative nature and less formalized structure. The results of the study confirmed the extensive and formal nature of Prince2 documentation, which often constitutes a barrier to effective implementation of the methodology, especially in organizations that expect rapid changes and a flexible approach to project management.*
Practical Implications: *The results obtained may form the basis for further research on optimizing the use of PRINCE2 and developing hybrid models that will enable the effective combination of formal control mechanisms with the flexibility of agile methodologies. This type of approach may prove crucial in a rapidly changing project environment, where the success of a project increasingly depends on the skillful combination of management techniques.*
Originality/Value: *The study confirmed that PRINCE2 remains a highly valued methodology in the IT industry, especially in the context of projects with a high degree of complexity and risk. Respondents noted that although the use of PRINCE2 involves more work on management processes, its systematic approach to management ensures a higher level of predictability and security of implementation in the project environment.*

Keywords: *Project management, PRINCE2, IT sector, design methodologies.*

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1. Introduction

According to the PRINCE2 methodology, a project is understood as a contractual relationship between a customer and a supplier. The customer, who finances the project, has precisely defined requirements for the results, while the supplier, using their resources and competencies, delivers the expected result (Cano and Lidón, 2011, pp. 525-536). This methodology does not define a project in terms of specific positions but rather indicates the roles that project participants play, with each having clearly defined tasks (Chin, Spowage, and Yap, 2010).

When extending the customer-supplier model to the area of project stakeholders, a third party must also be taken into account: the business, which has its own goals and expectations related to the project (Ratlewska and Zrobek, 2015, p. 272). In the context of the IT sector, the definition of a project takes on a specific dimension, as projects in this sector create new software, integrate systems, develop infrastructure, or implement new technologies.

They are characterized by high dynamics, which results from continuous technological progress and changing market requirements. IT projects are also subject to a high degree of uncertainty due to rapidly changing technology (Wysocki, 2018, pp. 44-46).

The high level of variability in requirements is an important factor that must be taken into account when planning and implementing IT projects. In IT projects, such as the implementation of a new ERP system, the development of a mobile application, or migration to the Commerce Cloud platform, there is a clear need to adapt to the specific requirements of a given technology.

These examples show how complex IT project goals can be, as they must not only respond to the current needs of the organization, but also be consistent with predictions about future trends and technological developments. Such projects require close supervision, a flexible approach to changing requirements, and effective communication between technical teams and project stakeholders (Kerzner, 2009). Implementation of IT projects has evolved significantly since the 1990s.

Initially, the approach to IT projects was based on the Waterfall model, which assumed a linear and sequential implementation of project stages - from analysis through design and implementation to testing and deployment. This model was strongly inspired by industrial engineering, where changes in later phases of the project were costly and difficult to implement (HISTMAG.ORG, 2019). With the development of the IT market, especially during the dot-com bubble at the turn of the 1990s and 2000s, there was a growing need for faster product delivery and better adaptation to changing customer needs.

This contributed to the popularization of agile methodologies, the most recognizable of which is Scrum. The formal turning point was the publication of the Agile Manifesto in 2001, which emphasized collaboration, flexibility, and value delivered to the end user (Bodys, 2019).

In the following years, there was further development of project management tools and concepts, such as DevOps, which integrated development and operations teams, Continuous Delivery, and modern architectural approaches based on microservices. Today, more and more IT projects are also implementing solutions based on artificial intelligence and automation (Obere *et al.,* 2019).

2. Literature Review

2.1 Overview of IT Project Management Methods and Methodologies

Effective project management requires the use of appropriately selected methods and methodologies that allow planning, implementation, and monitoring of work progress. The choice of the right approach should depend on many factors, such as the nature of the project, the level of technical complexity, stakeholder expectations, and the dynamics of the business environment (Kerzner, 2009, p. 30).

In the IT sector, approaches based on PRINCE2, PMBOK, Scrum, Kanban methodologies, as well as hybrid solutions combining the features of classic and agile methods, are particularly common (Simonaitis, Daukšys, and Mockienė, 2023).

PRINCE2 (PRojects IN Controlled Environments) is a process-based project management methodology, originally developed for the needs of public administration in the United Kingdom, currently recognized as one of the global standards in project management (Takagi, Varajão, Ventura, *et al.,* 2024).

The main assumptions of the methodology are based on a precise division of the project into stages, within which defined processes and management products are implemented (Vanićkova, 2017). PRINCE2 distinguishes seven principles, seven themes, and seven processes, which ensure a high degree of standardization and transparency of project activities (Bentley, 2012).

The key principles include continuous business justification, learning from experience, clearly defined roles and responsibilities, stage management, management by exception, focus on products, and adaptation of the methodology to a specific project (Hinde, 2018). This methodology is widely used in the public, financial and IT sectors, among others (Prince 2, 2009, p. 11).

PMBOK (Project Management Body of Knowledge), developed by the Project Management Institute (PMI), is a compendium of knowledge containing a set of proven practices and standards in the field of project management. Unlike PRINCE2, PMBOK is not a methodology, but rather a set of tools and processes organized into ten knowledge areas, such as scope, time, cost, quality, resources, communication, risk, integration, stakeholders, and procurement management (Frederico, 2021).

The management process according to PMBOK comprises five groups of processes: initiation, planning, execution, monitoring and control, and project closure. PMBOK is primarily used in large technical projects, including construction, engineering, and IT, where precise planning and documentation of each stage of implementation are required (PMBOK GUIDE, 2010, pp. 4-6).

Scrum is one of the most commonly used approaches within Agile methodologies, which is based on an iterative and incremental method of delivering products. Work in Scrum is carried out in sprints – cycles usually lasting from one to four weeks, at the end of which a potentially deployable product increment is created (Sassa, Alves de Almeida, Fernandes Pereira *et al.,* 2023).

Scrum requires strong commitment from the project team and stakeholders, as well as frequent reviews of work progress (e.g., daily Daily Scrum meetings, Sprint Review, Sprint Retrospective). The key roles in Scrum are Product Owner, Scrum Master, and Development Team (Budiman, Raharjo, Suhanto, 2022). The advantage of the Scrum approach is its high flexibility, enabling quick response to changing requirements and intensive cooperation with the end customer (Ćwiklicki, 2010, p. 16).

Kanban is a visual workflow management method that has its roots in production systems used in the Japanese automotive industry, particularly at Toyota. In the context of IT, Kanban is used to optimize processes by visualizing tasks on a Kanban board, controlling the number of tasks in progress (WIP – Work in Progress) and continuously improving processes (Ahmed, Munir, Nafees *et al.,* 2024). Unlike Scrum, Kanban does not introduce project roles or an iterative schedule.

The work is carried out continuously, which allows for smooth delivery of value and shorter task completion times (Hamzach, Mazni, Rohaida, 2021). The advantage of Kanban is its simplicity of implementation and low requirements for organizational change (Vacanti and Coleman, 2023). Due to the increasing complexity of IT projects, more and more organizations are opting for so-called hybrid approaches, which combine elements of traditional and agile project management (Grau, Luis, and Salvador, 2022).

Hybrid models allow for the preservation of project structure and control (characteristics of PRINCE2 or PMBOK), while implementing flexible iterative practices (e.g., Scrum, Kanban) in the implementation phase. An example of this is the use of Scrum at the development team level with simultaneous reporting in accordance with classic waterfall-style management stages (Ajam, 2018). Another example is PRINCE2 Agile, a solution that integrates product management and stage control with the iterative and adaptive mechanisms known from Agile (Highsmith, 2009).

This approach can be particularly effective in IT projects commissioned by public institutions or large corporations, where compliance with formal documentation requirements is necessary (Ciric, Lalic, Gracanin *et al.,* 2019). Effective implementation of a hybrid approach requires the project manager to have broad methodological knowledge and the ability to adapt his management style to changing project conditions, which makes this role more demanding than when using a single consistent methodology (Dong, Dacre, and Baxter, 2022).

Hybrid approaches to project management combine the advantages of traditional methodologies and agile frameworks (White, 2009, pp. 63-98). PRINCE2 Agile provides structure and control while allowing flexibility in task execution. Agile-Waterfall allows detailed planning to be combined with iterative execution, which works well in projects with high formal requirements. Scrumban, on the other hand, is a lightweight approach that increases work fluidity and adaptability in smaller teams. However, they require the Project Manager to have a high level of maturity and the ability to adapt methods to the realities of the project.

2.2 Comparative Analysis of PRINCE2 with Other Methodologies

PRINCE2 (PRojects IN Controlled Environments) is one of the most widely used project management methodologies in the world, developed in the United Kingdom. It is a standardized system based on clearly defined processes, principles, and roles that enables projects to be carried out in controlled environments. Due to its universal nature, it can be used in various industries, including the dynamic IT sector (Sargeant, Hatcher, Trigunarsyah *et al.,* 2010).

The PRINCE2 methodology was developed based on the practical experience of project teams and managers, which allows it to be flexibly adapted to a variety of projects. In particular, it ensures: an orderly start and end to the project, quality management, effective communication with stakeholders, ongoing monitoring of progress, and control of changes and deviations from the plan (Roudias, 2015). The process preceding the initiation of a project includes, among other things, organizing the team, defining the scope and objectives of the project, identifying risks, and planning further stages.

This approach promotes transparency and accountability in management (Rynkiewicz, 2015, pp. 137-145, Kos, 2019, 30-32). Compared to other approaches, PRINCE2 stands out for its high level of formalization and effective risk management (Table 1).

Table 1. PRINCE2 vs. other methodologies

Criterion	**PRINCE2**	**Agile**	**Scrum**	**Kanban**	**PMBOK**
Risk management	Highly developed and an integral part of the methodology	Based on adaptation, less formal	Mainly occurs in retrospectives	No formal approach	Systematic but less structured than in PRINCE2
Budget management	Planning	Iterative budget management	Sprint budgeting	No formal budgetary mechanisms	Formal planning and budget control
Roles and responsibilities	Clearly defined roles and responsibilities	Flexible roles, self-organizing team	Three basic roles (PO, SM, team)	Informal, flexible roles	Clearly defined roles in the organizational structure
Formalization	High level of formalization – processes, documentation, controls	Low level of formalization, emphasis on value	Moderate level of formalization	Minimal formalization	Highly formalized, but more flexible than PRINCE2
Adaptive flexibility	Limited flexibility requires adaptation within the methodology structure	Very high – iterativeness, rapid adaptation	High – short cycles and quick response	Very high – no rigid framework	Moderate – depending on the context. and implementation

Source: *Own study based on Rynkiewicz, (2015); Kos, (2019).*

The comparison shows that PRINCE2 offers strong control and structuring mechanisms, which is an advantage in complex projects. However, in agile environments, typical for IT, it may require adaptation to meet the expected flexibility and speed of operation. As a result, PRINCE2 works best where risk management, budget control, and clearly defined roles and responsibilities are key.

The PRINCE2 methodology is based on a set of integrated components: clearly defined principles, themes, and processes that provide a framework for effective project management, regardless of scale, complexity, or sector of implementation. Key PRINCE2 principles, such as continuous business justification of the project, stage management, clearly defined roles and responsibilities, and adaptability, make it a versatile methodology, but one that requires precise adaptation to the characteristics of a specific project (Hedeman and Seegers, 2022).

In the IT project environment, which is characterized by a high level of volatility, innovation, shortened product life cycles, and a strong emphasis on rapid response to customer needs, the use of PRINCE2 can both support management efficiency and generate specific challenges. In particular, this methodology works well in projects (Prince2, 2009, pp. 11-14):

1) implementation projects, where strict control over scope, time, and budget is necessary;
2) integration projects, requiring cooperation between different systems and teams;
3) infrastructure and transformation projects, carried out in large public and commercial organizations.

The practical application of PRINCE2 in the IT industry is confirmed, among others, in projects such as the implementation of a central document management system in the UK administration or the integration of electronic banking systems in international financial institutions (Hatim, Hala, Nuredin, 2022). In both cases, the application of the PRINCE2 methodology enabled effective control of schedule, quality, and risk, and ensured a consistent decision-making structure in a complex project environment.

On the other hand, in development projects carried out by small teams, for example, in startups creating mobile applications,PRINCE2 is sometimes perceived as too formal a burden. In such conditions, agile management methodologies, such as Scrum or Kanban, offer greater flexibility and responsiveness to changing user requirements. Therefore, hybrid approaches such as Agile PRINCE2, which combine the structure and control of PRINCE2 with the iterativeness and flexibility of Agile, are increasingly being used (Marnada, Raharjo, and Hardian, 2022).

Depending on the type of IT project, the effectiveness of PRINCE2 can vary. In implementation projects, PRINCE2 supports change management, provides precise planning, and offers tools for risk and quality management. An example of the application of the PRINCE2 methodology in implementation projects is the implementation of the SAP system at the Bank Gospodarstwa Krajowego, which covers the areas of accounting and budgeting, where strict management of the schedule, risk and communication was necessary.

Implementing the Government Secure Intranet system by the UK Ministry of Finance also confirms the effectiveness of PRINCE2 as a mandatory standard in public administration, ensuring phased implementation and quality control (AXELOS, 2015). In integration projects, where the coordination of many components of the system is crucial, the methodology facilitates the management of dependencies, communication, and responsibility.

An example of the application of PRINCE2 in integration projects was the integration of IT systems at Santander Bank Polska after its merger with BZ WBK, where this methodology supported the coordination of IT teams and the management of parallel processes. Similarly, in the Orange Group, when combining CRM, billing, and help desk systems in international structures, PRINCE2 enabled effective stage planning and risk management related to data protection and communication between units.

However, in development projects (creating software from scratch), PRINCE2 must be appropriately adapted so as not to limit the dynamics of the team's work. Otherwise, it can lead to slow implementation and a lack of response to rapid market changes.

The GOV.UK project example involves the construction of a central government service with access to digital services, where PRINCE2 Agile combines the PRINCE2 structure with the Scrum and DevOps approach, ensuring agile implementation under the supervision of the Steering Committee.

In the PKO BP – IKO project, on the other hand, the development of a mobile banking application was based on PRINCE2 in the planning phase, and then the Scrum/Agile approach was used for iterative implementation of the system (PKO Bank Polski, 2019; Paterek, 2019, pp. 14-47, https://www.gov.uk, 10/08/2025). An analysis of the PRINCE2 methodology in an IT environment allows for a better understanding of its usefulness, but also the limits of its effectiveness.

Its significant advantages include a comprehensive risk management mechanism, phased planning, clear assignment of roles, and a transparent decision-making structure. Its limitations include reduced flexibility, significant documentation requirements, and difficulty in fully integrating with agile methodologies without adequate team preparation (Kous, 2023).

In summary, PRINCE2 can be an effective tool for managing IT projects, especially those with a high degree of complexity and strategic importance. However, its effectiveness depends on conscious and contextual adaptation – both to the type of project and to the organizational culture and team competencies.

3. Materials and Methods

3.1 Research Methods

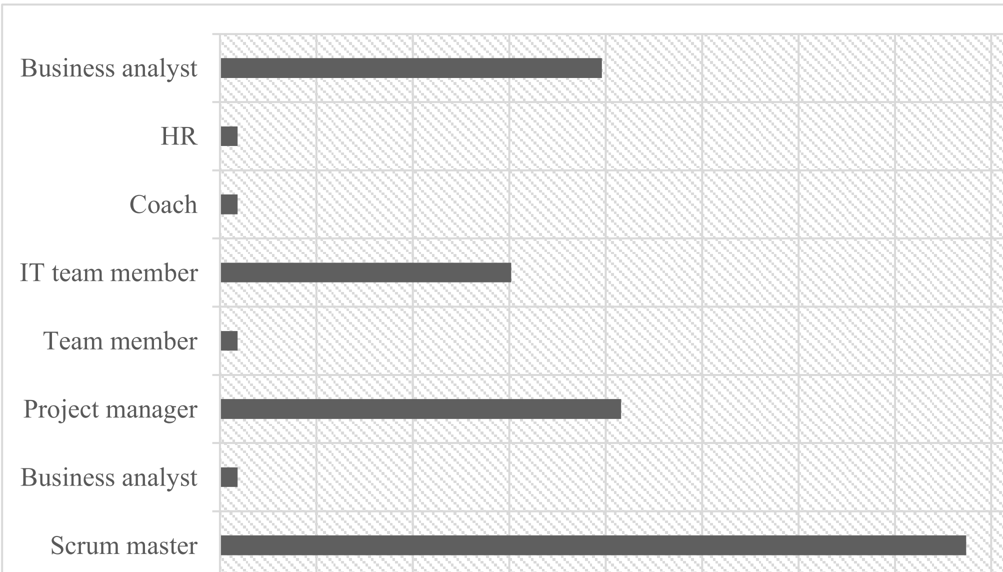
The article attempts to determine the effectiveness of the PRINCE2 methodology compared to Agile, Scrum, Kanban, and PMBOK. The main objective of the article is to identify and evaluate the benefits of the practical application of the PRINCE2 methodology in IT project management, taking into account other methodologies used in the IT sector.

The article defines research hypotheses that served as a starting point for analyzing the effectiveness of the PRINCE2 methodology.

H1: PRINCE2 is most commonly used in large, complex IT projects and in organizations with hierarchical structure.
H2: Agile and Scrum methodologies are considered to be more flexible and faster in project implementation than PRINCE2.
H3: The most common challenge in using PRINCE2 is the low flexibility and complexity of documentation.
H4: Despite the challenges, PRINCE2 is still recommended for the IT industry, especially in projects with a high degree of complexity and risk.

The purpose of the study was to verify the research hypotheses using the results obtained from the survey. In the article, two research methods were used: a literature review and a survey. The purpose of the literature review was to gather information on the PRINCE2 methodology and other popular IT project management methodologies, such as Agile, Scrum, Kanban, and PMBOK.

Figure 1. *Research Group*



Source: *Own study*

Thanks to the diversity of respondents (project managers, Scrum Masters, project team members), it was possible to obtain a complete picture of the practical application of PRINCE2 and to compare the results with the experiences of people working with agile methodologies and PMBOK. The research sample included 108 respondents: 105 in the Polish-language survey and 3 in the English-language survey (Figure 1).

An analysis of responses to the question concerning professional roles in the sample indicates that Scrum Masters constitute the largest group, with 39 respondents. This suggests that Agile methodology and related roles are strongly represented in the study. The second largest group are business analysts, with 27 respondents, indicating a significant share of people responsible for requirements analysis and business process support.

Third, are project managers, with 21 responses, which highlights the significant presence of project managers in the sample population. The members of the IT team appeared in 19 responses, indicating the active participation of technical personnel and those who implement projects from the technological side. Other roles, such as member of the production team, HR representative, and trainer, appeared very rarely, each with one response, meaning that these groups were significantly less represented.

The structure of the respondents indicates a strong focus on roles related to project management and the implementation of Agile methodology, with the simultaneous participation of business analysts and IT specialists. This distribution of roles may have a significant impact on the interpretation of the survey results, as it shows that the study primarily reflects the perspective of people who manage and support project processes from the point of view of agile methodologies and business analytics.

4. Results

The identified differences between PRINCE2, Scrum, Kanban, and PMBOK reflect opinions on which methodology works best in different types of IT projects. The question concerned the respondents' experience with other project management methodologies, such as Agile, Scrum, Kanban, and PMBOK? The question was intended to determine whether the respondents had experience working with project management methodologies other than PRINCE2, such as Agile, Scrum, Kanban, or PMBOK.

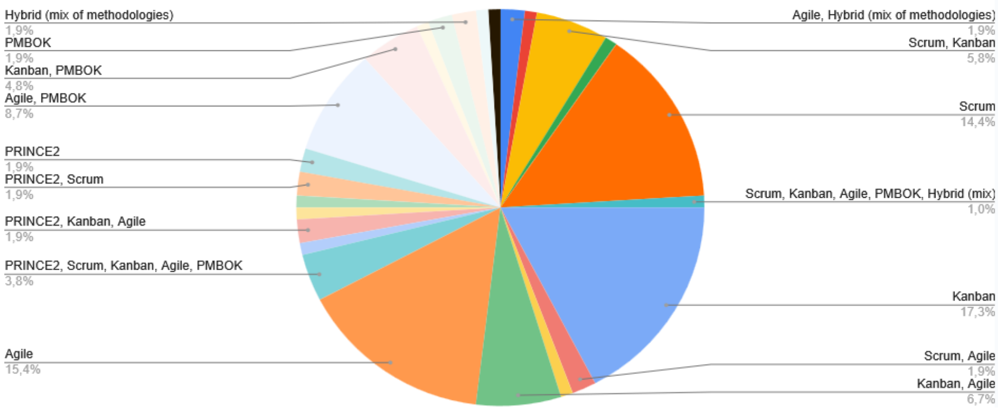
The question was answered by 108 people, the vast majority of whom answered ‘Yes’. The analysis of the responses indicates that more than 89.7% of the respondents have experience with various methodologies, demonstrating a wide range of knowledge and practices in the field of project management. The presence of such a high percentage of people with experience in other methodologies provides an important context for further comparative analyses of PRINCE2 with other methodologies.

This shows that the respondents are able to realistically assess the strengths and weaknesses of different methodologies based on their own practical experience. This fact increases the credibility and substantive value of the results obtained in subsequent questions concerning comparisons between methodologies.

However, the small percentage of negative responses ("No") indicates that a certain group of respondents may have limited knowledge or practice exclusively within PRINCE2, which may affect their perception of the effectiveness of this methodology in relation to others. In summary, the results confirm that the study group is competent in a variety of project management methodologies, providing a solid basis for reliable comparisons of PRINCE2 with other popular methodologies.

The next question was: 'Which project management methodology does your organization use the most often?' The options included methodologies such as PRINCE2, Scrum, Kanban, Agile, PMBOK, hybrid approach, and others (Figure 2).

Figure 2. *The most commonly used project management methodology in the IT sector*



Source: *Own study.*

The question was aimed at determining which project management methodology is most commonly used by the organizations represented by the respondents. The survey involved 108 people who could indicate one dominant methodology. Analysis of the collected data shows that Agile methodologies, including Scrum and Kanban, are the most popular among the organizations surveyed. Agile was mentioned in about 75% of the responses, Scrum being mentioned by about 65% of respondents and Kanban by about 50%.

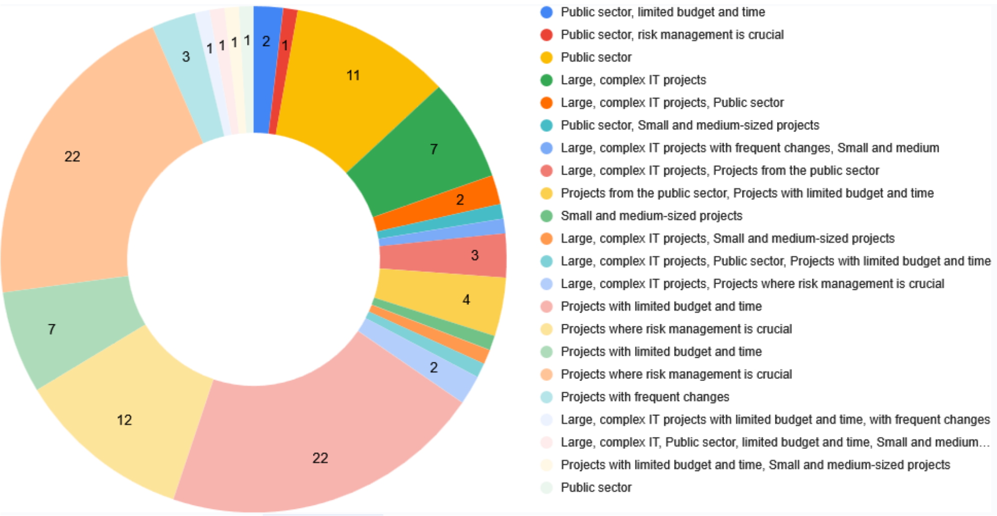
PRINCE2, despite being a traditional methodology, was used in about 30% of cases, often in combination with other methodologies such as Agile or PMBOK. PMBOK, in turn, was mentioned in about 25% of the responses, also often as part of a hybrid approach.

The hybrid approach, which involves the combination of different project management methodologies, was mentioned in about 20% of the cases, which indicates a growing tendency to adapt and combine methods in project practice. Other methodologies occurred sporadically and did not play a significant role in the respondents' choices.

These results confirm that a flexible approach to project management prevails in the organizations surveyed, based on the adaptation of popular Agile methodologies, supplemented by traditional standards such as PRINCE2 or PMBOK.

This distribution indicates the diversity of management practices and the need to use different tools depending on the specifics of the project and the organizational context. Analysis of the responses indicates the superiority of the Prince2 methodology over other project management methodologies (Figure 3).

Figure 3. *Application of the Prince2 methodology in economic sectors*



Source: *Own study.*

The area of application most frequently indicated was public sector projects – this type of project was mentioned by as many as 53 respondents. This dominance in the responses may be due to the fact that PRINCE2 is a widely used and often required methodology in public institutions which, due to specific regulations and formal requirements, need methodologies that ensure high control over the course of the project and formalization of management processes.

The second area that was mentioned most frequently was projects in which risk management is key. 56 people highlighted by 56 people, confirming that the PRINCE2 methodology is perceived as an effective tool for controlling and minimizing risk in projects.

Due to its formal approach to risk management and clear procedures for responding to threats, PRINCE2 appears to meet the expectations of organizations that implement projects with a high degree of uncertainty. Projects with limited budgets and time frames were also frequently mentioned, selected by 47 respondents. This indicates that PRINCE2 is appreciated for its ability to effectively plan, control costs, and schedule, which is particularly important for projects that require strict supervision of resources and deadlines. 32 participants identified large and complex IT projects as an area where PRINCE2 has an advantage over other methodologies. This response confirms that the methodology is recognized as a tool capable of managing complex project structures where the coordination of numerous teams, complex processes, and the integration of many technological elements is required.

Respondents showed less interest in small and medium-sized projects, which were mentioned only 9 times, which may indicate that PRINCE2 is perceived primarily as a methodology intended for larger and more demanding projects, and its implementation in smaller projects may be considered too formalized or resource intensive.

Additionally, projects with frequent changes in requirements or objectives, as indicated by 18 respondents, are perceived as less optimal for the application of PRINCE2, which may result from its structural nature and clear division into stages, making it difficult to respond quickly and flexibly to dynamic changes.

Analysis of the survey results indicates that the PRINCE2 methodology is particularly valued in the context of projects requiring rigorous management, especially those in the public sector, with a high level of risk, and in projects with limited time and budget resources. At the same time, PRINCE2 seems less suited to small-scale projects or those characterized by high dynamics of change. This picture indicates the specialization of this methodology, which works well where strong control and formalization of management processes are necessary.

5. Discussion

Based on the survey, it was possible to verify the hypotheses and assess their relevance to the project reality. The aim of the article, related to presenting the theoretical foundations of project management and the characteristics of selected methodologies, confirmed that PRINCE2 is a method particularly well suited to managing large and complex projects, as well as functioning in hierarchical organizations.

Thus, hypothesis (H1) was confirmed, namely that PRINCE2 is more often used in such conditions, which corresponds to the observations of practitioners indicating its wide application in projects requiring a high level of formalization and control.

At the same time, attention was drawn to the greater flexibility of Agile and Scrum methodologies, which, thanks to their iterative nature and less formalized structure, allow for faster adaptation to changing requirements and market conditions.

Therefore, H2 was confirmed: these methodologies are evaluated as more flexible and conducive to rapid implementation, indicating significant differences in project management and the need for a conscious selection of a methodology appropriate to the specific nature of the project.

The hypothesis concerning the main challenges in the application of PRINCE2, primarily low flexibility and the complexity of documentation, was also verified. The study results confirmed H3: the extensive and formal nature of the documentation often constitutes a barrier to the effective implementation of the methodology, especially in organizations that expect rapid changes and a flexible approach to project management.

The study participants pointed to the time-consuming nature of the documentation processes and the difficulty in adapting formal requirements to dynamic implementation conditions, which confirms the limitations of PRINCE2 resulting from its rigorous structure. Despite the challenges, the study confirmed that PRINCE2 remains a highly valued methodology in the IT industry, especially in the context of projects with a high degree of complexity and risk.

Respondents noted that although the use of PRINCE2 involves more work on management processes, its systematic approach to risk, budget and role management ensures a higher level of predictability and security in project implementation. Thus, Hypothesis (H4) regarding the practical recommendation of PRINCE2 in the IT industry has been positively verified, which emphasizes its long-term value and importance in the project environment.

6. Conclusions

The study confirmed the validity of the research problem and allowed the achievement of the objective, which was to identify and evaluate the advantages and challenges associated with the practical application of the PRINCE2 methodology in IT project management, including a comparison of its effectiveness with other methodologies.

The hypotheses formulated in the article were verified on the basis of empirical data, which provided a comprehensive picture of current trends and practices in IT project management. In the context of further research, it is worth noting the possibility of deepening the analysis of the integration of the PRINCE2 methodology with agile approaches such as Agile or Scrum.

In practice, it is increasingly common for organizations to use hybrid solutions that combine the formal structural elements of PRINCE2 with the flexibility and adaptability of agile methodologies. Research could therefore focus on identifying integration models and assessing the effectiveness of such an approach in different types of projects and industries.

Additionally, an important direction is an in-depth analysis of the impact of organizational culture and team specifics on the choice and effectiveness of the project management methodology used. The diversity of the respondents in terms of professional experience and the sector they represent ensured a wide range of opinions, which significantly influenced the cognitive and practical value of the results obtained.

However, it should be remembered that a larger number of participants could further increase the representativeness of the results, especially when it comes to less popular industries or specific types of projects. Therefore, it is worth striving to expand the research sample in the future.

The results obtained can form the basis for further research on optimizing PRINCE2 use and developing hybrid models that will enable the effective combination of formal control mechanisms with the flexibility of agile methodologies. This kind of approach may prove crucial in a rapidly changing project environment, where the success of a project increasingly depends on the skillful combination of different management techniques.

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