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Implementing Success Management and PRINCE2 in a BPM Public Project

Research-in-progress

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Abstract

Many stages of information systems projects developed in public institutions are defined by laws and regulations, which reduces the management flexibility. In the particular case of Business Process Management (BPM) projects, it has even more influence since the business processes are also constrained by legislation. In this context, it is important to have a clear vision of what the project's success means for all the stakeholders, what can impact the success, and how success should be evaluated. This paper presents the case of a BPM project of a public institution, where it is being implemented a new PRINCE2-based project management approach which comprises success management activities. The preliminary results include a new model that integrates success management and the PRINCE2 methodology, as well as a set of success criteria and success factors identified for the project.

Keywords Success Management, PRINCE2, Project Management, Business Process Management, Public Administration.

1 Introduction

Public institutions are complex organizations, or rather a set of multiple and complex organizations, subject to pressure from the national political system (Aubry and Brunet 2016). In modern public administration, project management is one of the critical tools used to implement public policies (Moutinho and Rabechini 2020).

The project management standards, guides, and methodologies are essential contributors to the project's success (Takagi and Varajão 2019). Project management references (e.g., PMBOK (PMI 2021), PRINCE2 (AXELOS 2017), PM2 (EU 2018)) describe fundamental aspects of project management, including the standardization of concepts, processes, tools, techniques, and life cycles. However, although they frequently mention project success elements, until now, none of them describe (with explicit activities) how success can be managed (Takagi and Varajão 2019; Varajão 2018). For instance, in the literature, there are many studies related to success criteria and factors (Cserháti and Szabó 2014; Pankratz and Basten 2014), but few describe the integration of success management activities (e.g., perform success evaluation, report project success, etc.) with project management guides (Takagi and Varajão 2020b; Varajão 2016).

On the one hand, there are limited works related to the integration of success management activities (e.g., (Takagi and Varajão 2020a; Takagi and Varajão 2020b; Takagi and Varajão 2021a; Takagi and Varajão 2021b; Takagi et al. 2019; Varshosaz et al. 2021)). On the other hand, to the best of our knowledge, the extant research does not address success management implementation in the particular case of public projects, Business Process Management (BPM) projects, or projects involving PRINCE2. This is an issue since these projects have specific characteristics, and not achieving success in BPM public projects impacts the efficiency and effectiveness of the services made available to society.

The aim of this research-in-progress is to contribute to filling this gap in the literature by presenting a case of a BPM project in the public sector. In order to leverage the success of the project, a project management approach was defined, integrating the success management process proposed by Varajão (2018) with the PRINCE2 (AXELOS 2017) project management methodology. This paper presents the preliminary results of the first stage of the project, including an integrated model and the criteria defined for evaluating success.

This paper is organized as follows. First, we briefly describe PRINCE2 methodology and the Success Management process. Then, we describe the research method and present preliminary results. Lastly, we draw some conclusions, expected contributions, and guidelines for further work.

2 Background

2.1 PRINCE2

PRINCE2 is a project management methodology that can be applied to projects regardless of size, type, and organizational culture (AXELOS 2017). The methodology describes, for example, the project management activities and what needs to be controlled during the project life cycle. PRINCE2 is followed by principles, such as 'continued business justification' and 'tailor to suit the project.' The 'continued business justification' describes the need to monitor all project steps to check if the business justification remains functional. As several factors can change a BPM Public Project, this principle helps to avoid waste. The 'tailor to suit the project' is to adapt the methodology with the project characteristics. This principle is relevant to integrating other management events, such as success management activities and processes. This was one of the reasons for choosing PRINCE2 for this research.

According to Figure 1, PRINCE2 processes are: starting up a project (it consolidates information on the resources needed and available, and provides a basis for detailed planning); directing a project (to enable the project board to be responsible for the success of the project by making important decisions while the project manager carries out the day-to-day management of the project); initiating a project (to establish a solid foundation for the project by enabling the organization to understand the work that needs to be done to deliver the project products before committing to a significant spend); controlling a stage (to assign and monitor the work to be done, deal with problems, report progress to the project board and take corrective actions to ensure that management and product remain within tolerance); managing product delivery (to control the link between the project manager and the project team by agreeing the requirements for acceptance, execution and delivery); managing a stage boundary (to enable the project manager to provide for the project board sufficient information); and closing a project (to provide a fixed point at which acceptance of the project's product is confirmed, recognizing that objectives have been achieved, or that the project has nothing more to contribute).

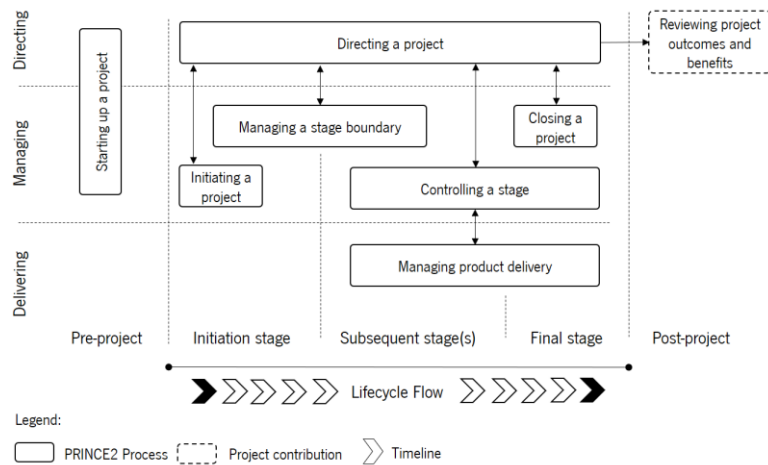


Figure 1: PRINCE2 processes based on AXELOS (2017)

PRINCE2 is considered the leading project management method (AXELOS 2017). Although PRINCE2 has the word success mentioned several times in the methodology, it does not present processes or activities to manage (defined, evaluate, and report) success. The absence of formal processes for managing success may negatively impact projects and organizational performance (Takagi and Varajão 2019). Without success management, the project manager can direct efforts and resources to activities that do not add value to the project’s success, thus turning to an eventual waste of resources (Takagi and Varajão 2020b).

2.2 Success Management

BPM is an approach to managing and driving business processes, creating value for customers, and enabling the organization to achieve its objectives with agility (ABPMP 2019). In public management, the result of BPM projects can be the key to offering quality service to citizens.

Therefore, “the traditional approach to measuring time, cost and quality may still have its place, but it does not necessarily tell the whole story” (AXELOS 2017). The success of a project is multi-dimensional (Shenhar et al. 1997). It can be viewed differently by different stakeholders (PMI 2021; Takagi and Varajão 2020a) and change during the project cycle (Varajão 2018). Thus, it is required to define a success management process (Varajão 2016). Varajão (2018) proposes a success management process comprising nine activities organized in ‘project,’ ‘phase,’ and ‘iteration’ levels (Figure 2).

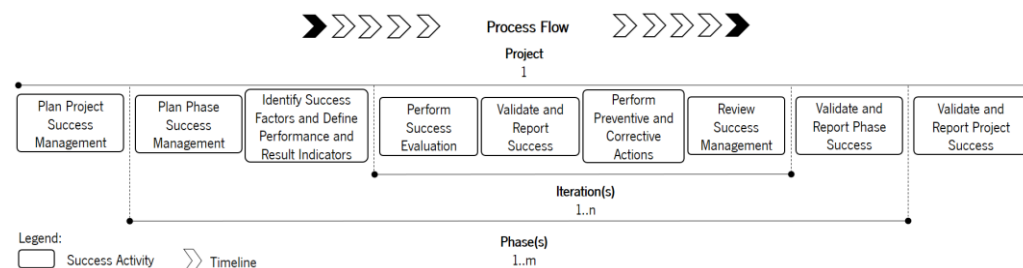


Figure 2: Success Management based on Varajão (2018)

There are two planning activities, one to define the success management in the project in general (‘Plan Project Success Management’) and the other to define it in each phase (‘Plan Phase Success Management’). In the project phase perspective, there is the activity ‘Identify Success Factors and Define Performance and Result Indicators’ (to be carried out in each phase). Data collection and evaluation of success (‘Perform Success Evaluation’) is carried out in iterations, as is the case of the activity ‘Perform Preventive and Corrective Actions.’ The ‘Review Success Management’ activity is needed since new success criteria or factors may emerge during the project, or change may be needed regarding, for instance, the success evaluation. At each level, the process also identifies activities that aim to validate the data and report the progress of success to stakeholders (‘Validate and Report Success,’ ‘Validate and Report Phase Success,’ and ‘Validate and Report Project Success’).

To achieve success, the project manager needs to understand the activities and milestones of the success management process. The integration of success management into project management guides and methodologies helps in this process (Takagi and Varajão 2019). The integration of success management and PRINCE2 is the focus of this research.

3 Research Method

The adopted research method uses concepts of action research based on Baskerville (1999). Action research helps both to solve practical problems and to expand scientific knowledge. This research method was selected because there is the direct involvement of the researchers in work, namely with interventions in project management (e.g., monitoring and assessing the risks so that the intervention does not hinder the execution of the project). The focus of this research is a ten-month duration BPM project. The project involves the development of process management products. The organizational environment is a Brazilian public institution at a national level. The area of the BPM project is higher education and has an impact on hundreds of public and private institutions.

The lifecycle of action research happens in five phases (Baskerville 1999): diagnosing, action planning, action taking, evaluating, and specifying learning. Aiming to increase the success of a BPM project in a public management context, it was proposed to integrate the activities of the success management in the PRINCE2 methodology ('Diagnosing' phase). An integrated model was defined after a detailed analysis of the success management process proposed by Varajão (2018). It was also based on related works (Takagi and Varajão 2019; Takagi and Varajão 2020a; Takagi and Varajão 2020b; Takagi and Varajão 2021a; Takagi and Varajão 2021b; Takagi et al. 2019; Varajão 2016) and the PRINCE2 methodology (AXELOS 2017). Using the integrated model, were defined milestones to plan, monitor, and control success during the project ('Action Planning' phase).

The main research question to be answered is 'How can success management be integrated with the PRINCE2 methodology?'. To collect more evidence, this research also explores other questions, such as 'What success criteria and success factors are relevant in a BPM project of a public institution?', 'Considering the project lifecycle, when are these success criteria and success factors important?'. To get answers to these questions, the activities related to success management are being carried out by the implementation team under the research guidelines ('Action Taking' phase).

Following the PRINCE2 methodology, the project was divided into five stages. Since this is a research-in-progress, it is planned that, at the end of each stage, success management results will be evaluated ('Evaluating' phase). The planning will be re-evaluated based on the lessons learned, and the success management will evolve in the next stages. The life cycle of the research model will be carried out in each of the five project stages ('Specifying Learning' phase). To avoid bias, data is always analyzed and discussed by the involved researchers.

4 Integration Model and Preliminary Results

Figure 3 shows the integrated model defined for the project. To support the integration of the success management process proposed by Varajão (2018) with the PRINCE2 methodology (AXELOS 2017), the original concepts were maintained, and some activities were consolidated. The definition of the model followed the same principles as the work proposed by Takagi and Varajão (Takagi et al. 2019).

The 'Plan Success Management' activity is connected to 'Directing a project,' 'Initiating a project,' and 'Managing a stage boundary.' The 'Identify Success Factors and Define Performance and Result Indicators' activity is carried out in the pre-project and planning stages of the project. Participation in the pre-project considers that the initial identification of success criteria and factors are part of the Business Case. The activities 'Perform Success Evaluation' and 'Perform Preventive and Corrective Actions' take place in the execution of the project stages. Both are linked to the 'Managing a stage boundary.' Preventive and corrective actions are also linked to the 'Controlling a stage' and 'Directing a project' process since the corrective actions need the approval of the project board. The 'Review Success Management' activity is related to 'Managing a stage boundary,' and 'Controlling a stage.' The 'Validate and Report Success' activity is directly connected to the PRINCE2 'Directing a project' and 'Closing a project.'

As this is research-in-progress, not all activities have yet been finished. However, the activities 'Plan success management' and 'Identify Success Factors and Define Performance and Result Indicators' have already been carried out. The identification of the success criteria and factors was performed separately

with the project team and the project client to be later confronted, explained, and understood by the different stakeholders. The success criteria identified by both parties are presented in Table 1.

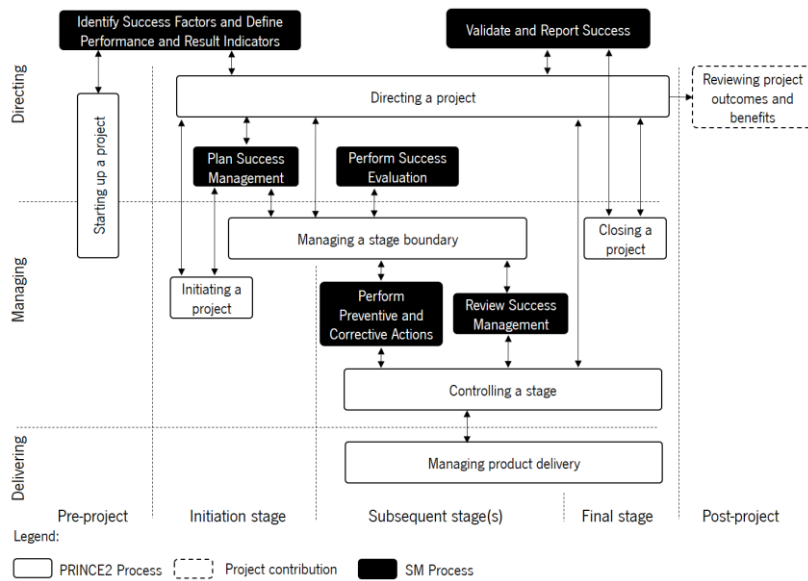


Figure 3: Integrated Model between PRINCE2 and Success Management Process

Success Criteria	Identified by	
	Project Team	Client
Achievement of strategic goals	●	●
Contractor satisfaction	●	
Contribution the developed value chain (one of the project's products) to strategic planning	●	●
Contribution to strategic contractor indicators		●
End-user satisfaction	●	
Impact of project's products to environment-community of the contractor (impact on public)	●	●
Increased control of business processes (BPM)	●	●
Indication of new service proposals to project team	●	
Low maintenance cost in the operation phase	●	
New technology, product and/or market	●	
Number of changes made during execution phase (changing the activities planned)	●	
Operational costs reduction	●	●
Operational performance (performance improvement in individual operation and organization)	●	●
Organization's image improvement	●	●
Organizational learning (development of the technical capacity of the organization)	●	●
Project execution efficiency	●	●
Quality of the publication place (papers are one of the products of the project)	●	
Schedule compliance	●	
Scope compliance (delivery of the proposed products and services)	●	
System quality (according to customer's requirements)	●	●
Team satisfaction	●	●

Table 1. Success criteria identified

To assess the success of the project management, Atkinson (1999) indicated twenty years ago that it is necessary to go beyond the evaluation of the Iron Triangle (cost, time, and quality). Since then, much research has been done about success criteria. Lech (2013) highlights the importance of criteria such as meeting requirements and user satisfaction. Pankratz and Basten (2014) mention, for example, the criteria 'contractor satisfaction' and 'if the system is used by the customer.' The criteria 'system is used by the customer' in the case of a BPM project can be interpreted, for example, as the effective use of the mapping carried out or the use of process improvement recommendations. The criteria identified in this project reveal the concern to define a rich set of criteria for evaluating success, which goes far beyond the Iron Triangle. It also confirms the differences in the perceptions of the different stakeholders since they identified different sets of criteria.

The success factors are another aspect of success management. They need to be considered since they can impact positively or negatively the success of the project. Some of the success factors identified by both sides (project team and client) were 'administrative, human, and technical competence of the

project manager,' 'engagement of client with the project,' and 'open-minded client organizational environment for change.' Tam et al. (2020) give examples of personal characteristics needed of the team, such as a collaborative attitude and a sense of responsibility. Kheybari et al. (2020), in a context of IS projects public management, present factors related to different perspectives, e.g., weak management of requirements, the bad definition of roles and responsibilities, poor business process reengineering, inadequate training of users, and project team's lack of required skills. Islam and Evans (2020) present success factors connected with foundations of PRINCE2, such as 'manage by stages,' 'learn from experience,' and 'define roles and responsibilities.' All these factors help to understand the failure or success of a project in public administration and are directly related to BPM projects. In the specific case of the studied project, it is noted not only the identification of several success factors presented in the literature but also the differences in the perspectives of the various stakeholders (which was already expected, given that the concerns are different).

5 Conclusion

Public administration is complex (Aubry and Brunet 2016; Christensen and Læg Reid 2011) and has many challenges. One of the challenges is to achieve success in projects that influence the organizational culture, such as projects related to BPM. In the last years, BPM has been extensively researched in public administration, including developing process models in an inductive way (Scholta et al. 2019), collecting lessons through business process orientation (Christiansson and Rentzhog 2019), assessing whether BPM is a critical factor for Enterprise Resource Planning (ERP) implementation success (Gabryelczyk 2020), or Business Process Management Systems (BPMS) features such as the distribution of work (Pereira et al. 2020). However, there is no work in the literature related to the introduction of success management practices in BPM project management, especially in public administration.

This work addresses this gap by promoting the integration of the success management process proposed by Varajão (2018) with the PRINCE2 project management methodology (AXELOS 2017) through the presentation of a new model applied in the case of a BPM project carried out in public administration.

The work is currently in progress, and one of the expected contributions to the body of knowledge is the presentation of an integrated model to expand the vision of success management in the context of IS project management. The comparison with other related work (Takagi and Varajão 2020a; Takagi and Varajão 2021a; Takagi and Varajão 2021b; Takagi et al. 2019; Varajão 2016) presents good perspectives for contribution. Another contribution relates to defining criteria and factors for BPM projects and identifying when they should be assessed during the project life cycle. For teaching, the PRINCE2 methodology is widely accepted in training centers and academia. Developing new perspectives related to success management broadens the vision of using the methodology and contributes to the training of project managers. For practice, the research brings evidence that can be used to manage the success of public and BPM projects. In addition to the integrated model, the identified success criteria can be used as a basis for upcoming projects. In public administration, which uses project management to implement public policies (Moutinho and Rabechini 2020), is expected to improve success rates in projects having a direct impact on the services available to citizens. One of the limitations of this work is that it reports a single case, so generalization cannot be made. As further work, it is expected that this research-in-project will continue and provide new insights. It is also recommended to carry out new studies integrating success management activities with project management methodologies.

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