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Integration of success management into project management guides and methodologies - position paper

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Abstract

Success management can bring valuable contributions to improve project results and stakeholders' relationships. However, the *success management* process must be explicitly integrated into project management approaches, guides and methodologies (such as PMBOK, PRINCE2 or PM²), which is not currently happening. The purpose of this position paper is to discuss the need and importance for this integration and to present a first proposal on how this can be operationalized. To support the position, the methodology of the European Union PM² was used. The result of the integration demonstrates that it is possible to advance management and raise the level of project success.

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1. Introduction

On average, for each \$1 billion invested in projects, 99 million are lost [1]. The poor maturity of project management is one of the reasons for this waste, which affects projects of different dimensions. Even in the case of megaprojects, which typically have a high investment in management efforts, the budget and schedule are often not met [2].

For increasing the managerial maturity and achieve more success in projects, it is necessary to understand the influence of the organizational culture, to know the competences of the teams and to adopt best management practices [3-7]. A project management methodology is designed to detail how these influences should be managed, which describes how a project should be planned, executed, monitored, and controlled. The definition of a methodology may be based on benchmarking or be based on best practice guides made available by specialized entities (e.g., Association of Project Management or Project Management Institute) [8].

There are several project management guides and methodologies, such as PMBOK [9] and PRINCE2 [10]. The first is a guide of best practices and includes definitions and processes that can be used in project management. It is organized in process groups (e.g., planning, execution, closing) and areas of knowledge (e.g., quality, stakeholders, communication). The second is a methodology and approaches project management by integrating principles, themes, processes, as well as the project environment.

PM² is another example, being a project management methodology developed by the European Commission (the executive body of the European Union). It provides a standardized language on management concepts and facilitates communication of the project team. Its use is free and was designed to meet the needs of the institutions and projects of the European Union. It contains best practices based on guides and methodologies used worldwide. It involves four sequential phases (initiation, planning, execution, and closing) and a cross-project-wide set of activities (referred to as “monitoring and controlling”) [11].

However, current guides and methodologies do not explicitly address *success management* throughout the project [12, 13]. For example, there are specific activities in PM² to identify factors and success criteria, but no activities are focused on their monitoring and controlling.

A project needs continuous monitoring and controlling since there are many changes and deviations from the planned that can arise throughout their life cycle, related, for example, to scope, quality and risk. Success-related aspects are no exception, and actions are required throughout the project to check at all times whether what was planned reflects reality. If necessary, the project manager needs to perform corrective or preventive actions. Another aspect is related to the conception of success, which may be different in each project. For example, in the case of one project may be more important the budget compliance, with the schedule being of lesser importance. However, in another project, the reverse may happen or maybe the expected benefits the pillar of success. For this reason, success management needs to be dynamic and adaptable to different scenarios.

No methodology for project management was found in the literature comprising the *success management* in all phases of the project. In other words, the project management methodologies do not currently include specific activities for managing success throughout the project, hindering the effective management of success. This position paper seeks first solutions to bridge this gap. The proposal is to integrate the *success management* process in the guides and methodologies of project management, by incorporating activities for planning, executing, closing, and monitoring and controlling the success of the project.

This paper is structured as follows: in the next section a literature review is carried out, focusing on the *success management* in projects and project management guides and methodologies; the third section describes the research methodology adopted; the fourth section presents an example of an integration model, using PM² as example; the fifth section contains the conclusions and prospects for further research.

2. Literature review

Following are briefly described some important concepts and relevant approaches in the context of the present work, regarding the *success management* and project management guides and methodologies.

2.1. Success management

The perception of success may change according to the context of the organization, the project, and the stakeholders. The success of the projects can be evaluated considering cost, time, and quality [14, 15] or by evaluating products, services, and benefits. The importance of these elements may be different in each project.

Based on public-private projects, Osei-Kyei and Chan [16] have created a list of criteria to assess whether the project was successfully conducted. Stand out: Meeting output specifications; Adherence to time; Reliable and quality service; Profitability. Pankratz and Basten [17], in information system projects, identified as main criteria the compliance with the budget, schedule and requirements, customer satisfaction, and management efficiency. There are also other works that contributed to understanding the success criteria [18-22], which reveals concern about how to measure success.

Another aspect of *success management* is related to success factors [23-27]. For example, Turner [28] lists five conditions necessary for successful project management: 1. Key stakeholders should agree on the success criteria before the project start; 2. Continue to confirm agreement at configuration review points throughout the project; 3. Maintain a collaborative working relationship between the project owner and project manager, with both viewing the project as a partnership; 4. Empower the project manager, setting medium levels of structure; and 5. The owner should take an interest in project performance. All these factors have a direct relationship with the management of the stakeholders, can be variable according to the project, being necessary to manage their perceptions, and their power and interest throughout the project.

Success must be managed considering its uniqueness, evaluating in each case the elements that influence project performance. Baccharini [29] directs success for two components: product success and project management success. Varajão [12, 13] argues that each project deserves unique attention, considering in the *success management* planning activities, identification of factors and criteria for success, monitoring, controlling, and validation. Each project has stakeholders who will be present at different times of the project and may have different perceptions about success over the project.

As shown in Fig. 1, Varajão [12] defines the *success management* process through nine activities, at three different levels: “project”; “phases”; and “iterations”. There are two planning activities, one to define how success will be managed in the project, and another in each phase. Definitions of the performance and outcome indicators to be considered, when the evaluation will be done, who will participate in this evaluation, and how to report success, are examples of outputs from these activities. In the project phase, there is also the identification of success factors, the definition of performance and outcome indicators, particular to each phase. Data collection and use of indicators are performed in the evaluation iterations, as well as corrective and preventive actions. The review of success management is responsible for rethinking the process during its execution, making it possible that new criteria or success factors may emerge and incorporated into the other activities.

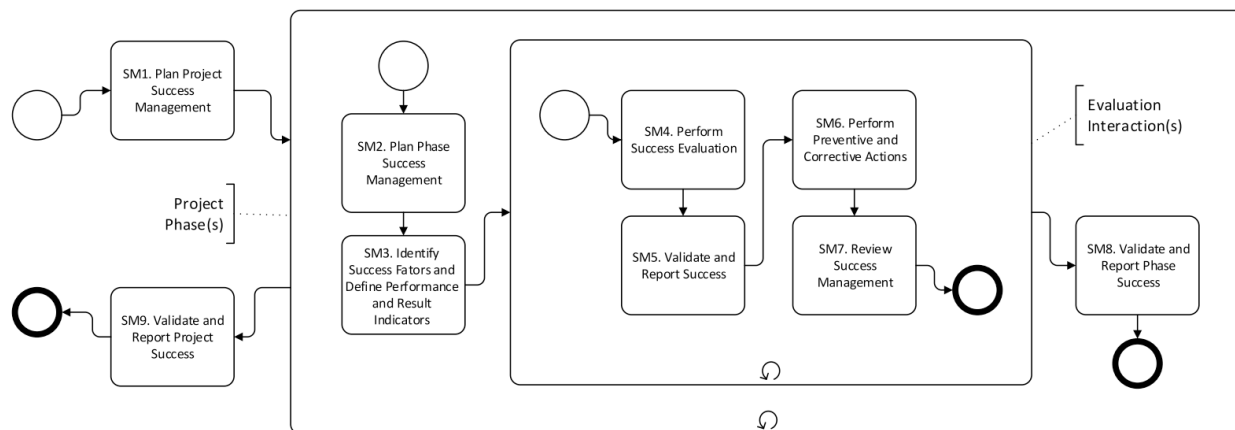


Fig. 1. Success management process by Varajão [12].

This model contains several elements that complement project management guides and methodologies since these do not explicitly address *success management*. The model is adaptable, and in this position paper, it is proposed its integration with project management guides and methodologies, using PM² as an example.

2.2. Project management guides and methodologies

Companies need to define and implement project management methodologies that specify the steps and tasks required to manage projects consistently [30]. Project management methodologies are often used to increase the efficiency and effectiveness of projects [31].

A worldwide used guide is the PMBOK [9] proposed by the Project Management Institute (PMI). For project management, the PMBOK suggests processes organized in the areas of knowledge of quality, cost, schedule, scope, resources, procurement, stakeholders, risk, communication, as well as processes for integrating all of them. According to the PMBOK, project success is measured by the quality of the product and the project, schedule and budget compliance, and customer satisfaction. In the most recent version of the guide, it is defined that measuring success is important and can be distinctive in each project. There is evidence of success by identifying criteria and success factors, and it is important the auditing project success or failure in the project or phase closure process. Despite this, PMBOK does not identify activities for planning, monitoring and controlling success specifically.

PRINCE2 [10] is a methodology spread worldwide, initially structured to be used in information technologies (IT) projects. In version two it has been expanded to be used in any project. PRINCE2 is based on several principles (e.g., continued business justification, learn from experience, manage by stages, focus on products). The principles are best practices, which support the themes. The themes of PRINCE2 (e.g., Business case, change, progress, plans) represent knowledge areas of project management that must be worked and integrated. Each theme contains a specific approach, with well-defined roles and responsibilities. Processes perform the themes over the project life cycle. Each process (e.g., starting up a project, initiating a project, controlling a stage, closing a project) provides activity checklists with product recommendations and related responsibilities.

PM² is a project management methodology developed by the European Commission. The methodology is free to use, and its design was carried out concerning the needs of the European Union institutions projects. However, it can be used in any organization [11]. In addition to the phases and activities related to project management, the methodology presents concepts about existing functions, the context in which projects are within (e.g., programs, portfolio, organizational structure), and artifact models resulting from management cycle activities. The project management cycle contains four phases: initiation, planning, execution, and closing. There are cross-cutting activities at all stages, grouped into a designated set of monitoring and controlling. The PM² methodology has the preliminary identification of success factors and the definition of criteria for the evaluation of project success. The identification of criteria occurs at the initiation stage, and these are present in the artifacts of the initial project request and the Business Case. Critical factors for success are identified in the planning phase and included in the Project Handbook. However, the methodology, as well as others, does not describe how *success management* is performed.

Success is contingent on each project and can change over time. In this paper, *we posit that it is not possible to properly manage the success of a project without performing specific activities (such as, for example, success evaluation based on previously defined criteria), which must be integrated into project management guides and methodologies*. A preliminary example of integrating the success management process proposed by Varajão [12] with the PM² methodology is presented in the following sections.

3. Design Science Research methodology

This is a position article. To support the position, a research process was followed. Design Science aims at developing solutions that solve relevant business problems. The process should be robust, based on existing theory and practice, and should contain the accuracy necessary for reliable development and evaluation to be verifiable [32]. In this work, we adopted the Design Science Research (DSR) process of Kuechler and Vaishnavi [33], as shown in Fig. 2.

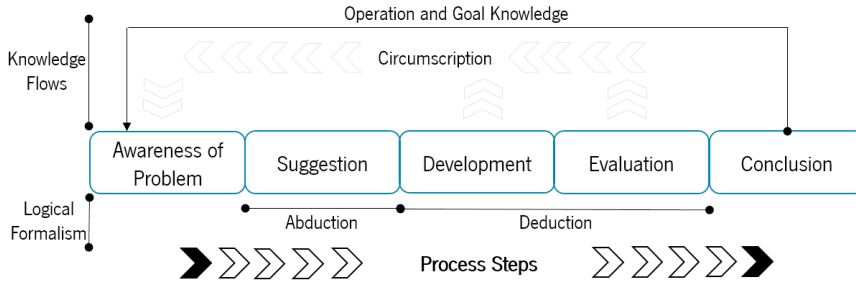


Fig. 2. Research methodology adapted from Kuechler and Vaishnavi [33]

Success can consider variables outside the schedule, budget, or quality [20]. It is necessary to identify the criteria and factors of success and to manage them from the initiation to closing of the project. This management is not currently provided by project management guides and methodologies, which constitutes a limitation (Awareness of Problem). In order to analyze different possibilities for the solution of the identified problem, a literature review on the *success management* was carried out. It was found an interactive process compatible with the phases of the project management methodologies. This led to a proposal for an integrated model (Suggestion). From the awareness of the problem and the suggestion of a possible solution, in the continuation of the present work it will be built (Development) a model integrating methodologies with a *success management* process. The new model will incorporate *success management* activities in project planning, executing, closing, and monitoring and controlling.

4. Proposal of an integrative model (research-in-progress)

The *success management* process [12] is an iterative process, which identifies cycles within the project (phases), and cycles within phases (iterations). This iterative feature of the *success management* process facilitates its integration with any methodology, regardless of whether it is waterfall or agile. The PM² [11] follows a sequential process organized in phases. In order to integrate the *success management* with PM², it was necessary to adapt the process, dividing some activities and combining others, to better adjust to the methodology of the European Union. According to Fig. 3, the success management process was incorporated into the methodology through various activities (marked with black background), involving planning, executing, closing, and monitoring and controlling. These activities aim to complement and direct the effective management of success throughout the project.

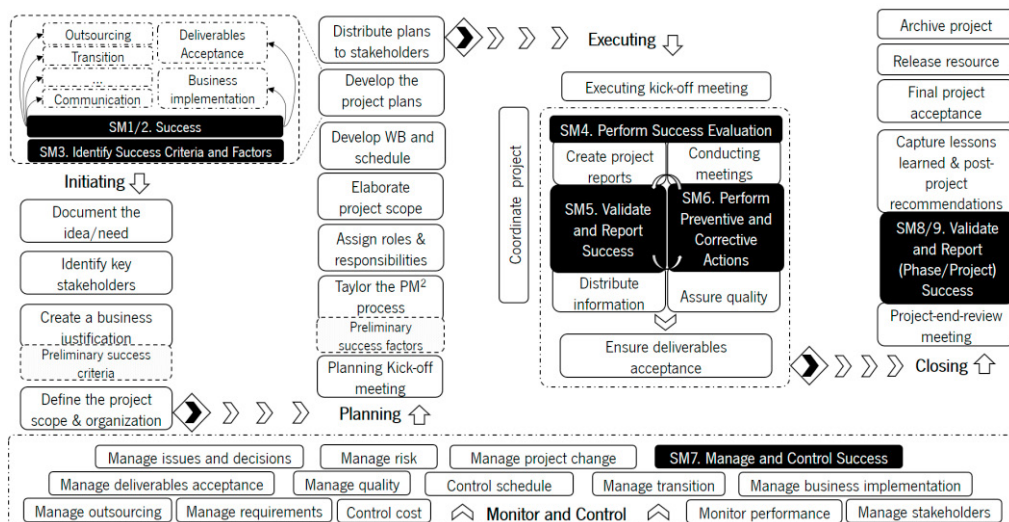


Fig. 3. Integration of the *success management* process in the PM² methodology

For example, in the activity “Develop the project plans” was incorporated the activity “SM1 / 2. Success”. This activity includes two activities in the original *success management* process: “SM1. Plan Project Success Management” and “SM2. Plan Phase Success Management”. The output artifact of the activity is the success management plan, which is complementary to the other plans already foreseen in PM². The success management plan considers the criteria and factors defined in the activity “SM3. Identify Success Criteria and Factors” (also integrated). In the original *success management* process, in the SM3 activity, there is the definition of the indicators of performance and result. This activity was also integrated into the “SM1 / 2. Success”, since the indicators are an important part of the project plan and will allow assessing the project final result and success.

5. Conclusion

Raising project success rates is an organizational challenge. In order to contribute to overcoming this challenge, this position paper presents an example of a *success management* process integrated with a project management methodology, in this case, the PM² of the European Union. The identification of criteria and factors of success is contemplated in the PM² methodology in the initiation and planning phases, but without any follow-up activities in the later phases of the methodology. The integrated model aims to increase the robustness of the *success management*, placing it as a main element of the project and incorporating the management of criteria and success factors in the project’s planning, executing and closing phases, as well as in the monitoring and controlling activities.

There is no more space for organizations that use project management methodologies, or those that have a project management office (PMO) in their organizational structure, to not manage the success of their projects. Varajão [13] proposes the *management of success* as a new area of project management knowledge, along with the management of scope, cost, schedule, quality, communication, risk, etc. In very competitive business scenarios it is necessary to succeed in the projects, and this integrated model promotes that success. This work contributes to a first approximation of how *success management* can be effectively integrated into project management guides and methodologies.

One of the limitations is the absence of similar work. There is a lot of literature related to project management methodologies and guides. There are a lot of references related to success factors and criteria. However, there are few works linking successful management processes within project management methodologies and guides. The work will continue in order to detail the integration, developing the inclusion of success management activities in guides and methodologies of project management, and then carry out the validation through a case study.

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