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Procedia Computer Science 100 (2016) 1095 – 1102

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**Procedia**  
Computer Science

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Conference on ENTERprise Information Systems / International Conference on Project  
MANagement / Conference on Health and Social Care Information Systems and Technologies,  
CENTERIS / ProjMAN / HCist 2016, October 5-7, 2016

## Success Management as a PM knowledge area – work-in-progress

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### Abstract

It is a fact that an organization's success is closely linked with its projects' success. Although there are many studies in literature that focus on different aspects of project success like, for instance, the success factors or the criteria for success assessment, there are only few studies that mention the processes required for success evaluation. Guides and standards, such as the PMBOK 5 or ISO 21500:2012, are not exceptions to this reality. Given the high importance and complexity of the evaluation of the projects' success, in this work-in-progress the *Success Management* is proposed as a new knowledge area of project management, as well as a set of processes to be carried out in its scope.

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Peer-review under responsibility of the organizing committee of CENTERIS 2016

*Keywords:* Project Management; Success Management; Knowledge Area; Project Success; Project Management Success; Success.

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### 1. Introduction

Project Management (PM) as a discipline has gained a remarkable recognition in the last decades. This is clearly reflected by the high number and size of projects that are carried out in organizations in various industries and areas of business. In fact, nowadays it is difficult to find an organization that does not develop projects or that does not turn to project management as a way to structure and manage its investments.

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Ever since project management began to take shape as a body of knowledge in the mid-twentieth century, many processes, techniques and tools have been developed. They cover various aspects of the entire lifecycle of projects and have made possible for project management to increase its efficiency and effectiveness, thus contributing to an increased project success rate.

Nevertheless, there are still many challenges facing project management and it is not uncommon that projects present problems. Mir and Pinnington [1] argue that, despite the advancement in project management processes and tools, in recent years project success has not significantly improved. In fact, projects still fail to live up to the expectations of stakeholders as they continue to be disappointed by projects' results [2-4].

Although there are many studies that focus on various aspects of project success as, for example, the success factors (v.g. [3, 5-7]) or the success criteria (v.g. [7-10]), there are only few studies that focus on the evaluation process. In other words, there is a great concern in trying to understand what contributes to the success of a project, or the criteria that are (or should be) used [11]; however, there are several topics that have not been addressed such as: "How should the evaluation process be structured?"; "When should the evaluation process be defined?"; "Who should take part in this process?"; "When should the evaluation actions take place?"; "What criteria should be used?"; "Should the evaluation criteria be the same for all projects or should it be differentiated?"; "How should the information for evaluation be collected?"; among other relevant questions. Guides and standards, such as the PMBOK 5 [12] or ISO 21500:2012 [13], are not exceptions to this fact, since they do not address in a systematic way the processes required for success evaluation.

Given the undeniable importance of the evaluation of projects' success [14] and the absence of well-defined processes in the scientific literature and PM guides, it is proposed in this work-in-progress the *Success Management* as a new project management knowledge area, as well a set of processes to be carried out in its scope. This study, which is a part of a research project that is currently underway, aims to be a first approach to the organization and formalization of the project success evaluation processes.

This paper is organized as follows. The next two sections present a brief literature review on project success and on project management knowledge areas and processes. Then, the *Success Management* as a new PM knowledge area is presented. Finally, we conclude with some final remarks and with some highlights for further research.

## 2. Project Success

Project Management is essential for the development of successful projects, being transversal and having applications in many industries. This is particularly true in large projects, where the need for a competent project management structure becomes more evident and truly indubitable due to the complexity involved [15].

Nevertheless, despite the attention that in recent years has been devoted to project management, in many cases the projects are still not providing the expected success. For instance, in the particular case of information technology (IT) the projects continue to show lower levels of success [2, 16-18]. In fact, the success of projects is still far from the desirable and the establishment of effective and efficient project management practices still remains a challenge [16].

There are two distinct components of project success [19]: project management success; and the success of the deliverables of the project. The two components are distinguished as follows. Project management success focuses on the management process and mainly on the successful realization of the project regarding scope, time and cost. These three dimensions indicate the degree of the efficiency and effectiveness of project execution. The success of deliverables focus mainly on the effects of the project's resulting products and/or services in the post-project stage.

The project and its resulting products and/or services cannot be seen in isolation [20]. Although there is a relationship [21], the cause-effect between them is weak [22]. For example, considering the time of execution, or the budget, projects can be a failure from the point of view of project management, but may have provided a successful product [23]. Cooke-Davies [3] noted that ensuring project deliverables success is more difficult than ensuring project management success, since it involves second order control [24].

The complexity and ambiguity surrounding this issue in terms of definition and measurement [11, 19, 25-29] have been recognized as a problem since the awareness of success of project management has evolved [27]. This reality has attracted the attention of the scientific community, which in recent years has focused its research efforts to better understand the phenomenon [11, 30-33].

Some aspects of project success have been the focus of numerous studies over the last years. Several examples of these studies are related to: causes of project failure (v.g. [34-39]); concepts of project success (v.g. [22, 33, 40-42]); success factors (v.g. [3, 5, 7, 43-50]); success perspectives (v.g. [40, 43, 51]); success achieved in projects (v.g. [20, 52-57]); and the criteria used in evaluation (v.g. [7-9, 58-61]).

There is a high occurrence of the aforementioned topics in the literature. To the best of our knowledge, however, there are not studies that address the evaluation processes in the same way as they are addressed in this article.

### **3. Project Management knowledge areas and processes**

PM practices contribute to the improvement of project success. Several inputs can be used to guide an organization in improving PM by selecting the most appropriate processes and techniques in a given context, including the various bodies of knowledge (BoKs). The PM body of knowledge is the sum of knowledge within the profession of PM. The complete PM body of knowledge includes proven traditional practices that are widely applied, as well as innovative practices that are emerging in the profession [62]. The attempts by the BoKs to systematize the knowledge required to manage projects are largely based on the underlying assumption that there are identifiable patterns and generalizations, from which rules, controls and guidelines for ‘best practice’ can be established that are replicable, even if not on absolutely every circumstance [63].

Over the past decades, many guides of good practices and comprising processes and techniques, have been developed, covering several aspects of project lifecycle [64]. The proper implementation of PM processes best practices should improve PM performance, thus improving success [65]. Several standards and guides can be used by organizations in selecting the most appropriate processes and techniques in a given context, being ISO 21500:2012 [13] and PMBoK® [12] from Project Management Institute (PMI), some of the most influential publications [66].

ISO 21500:2012 provides guidance on concepts and processes of project management that are important for, and have impact on, the performance of projects. It provides high-level descriptions of concepts and processes that are considered to form good practice in project management. Projects are placed in the context of programmes and project portfolios, however, this international standard does not provide detailed guidance on the management of programmes and project portfolios. Topics pertaining to general management are addressed only within the context of project management [13]. ISO 21500:2012 identifies the following process groups: initiating; planning; implementing; controlling; and closing. It also identifies ten “subjects” for organizing processes: integration; stakeholder; scope; resource; time; cost; risk; quality; procurement; and communication. It can be used by any type of organization, including public, private or community organizations, and for any type of project, irrespective of complexity, size or duration. ISO 21500:2012 is aligned with PMBoK 5.

PMBoK 5 (A Guide to the Project Management Body of Knowledge – Fifth Edition) provides guidelines for managing individual projects and defines project management related concepts. It also describes the project management life cycle and its related processes, as well as the project life cycle. The PMBoK is a globally recognized standard and guide for the project management profession. As with other professions, the knowledge contained in this standard has evolved from the recognized good practices of PM practitioners, who have contributed to the development of this standard [12]. PMBoK 5 has the following process groups: initiating; planning; executing; monitoring and controlling; and closing. It identifies ten “knowledge areas” for organizing processes: integration; stakeholder; scope; human resources; time; cost; risk; quality; procurement; and communication.

As seen in Table 1, the differences between ISO 21500:2012 and PMBoK 5 are minimal concerning processes and subjects/knowledge areas. The main difference is in the description of tools and techniques because ISO 21500:2012 does not provide it.

Organizations have several benefits using an internationally-recognized BoK/standard to guide them in the development of the organization’s PM methodology. These include: the assurance that the organization is using what is considered to be “best practice”; demand from external customers that a recognized methodology is used; assistance with external recruitment; and the availability of suppliers of the methodology for training and support [67]; and removes to some extent the barriers to design/development of PM methodologies as BoKs are recognized as “best practices” [68].

Table 1. Project Management processes per subject/knowledge area.

ISO 21500:2012 [13]	PMBok 5 [12]
<b>Integration:</b> Develop Project Charter Develop project plans Direct project work Control project work Control changes Close project phase or project Collect lessons learned	<b>Integration:</b> Develop Project Charter Develop project management plan Direct and manage project work Monitor and control project work Perform integrated Change Control Close project or phase
<b>Scope:</b> Define scope Create Work Breakdown Structure Define activities Control scope	<b>Scope:</b> Plan Scope management Collect requirements Define scope Create WBS Validate scope Control scope
<b>Time:</b> Sequence activities Estimate activity durations Develop schedule Control schedule	<b>Time:</b> Plan Schedule management Define activities Sequence activities Estimate activity resources Estimate activity duration Develop schedule Control schedule
<b>Cost:</b> Estimate costs Develop budget Control costs	<b>Cost:</b> Plan Cost management Estimate costs Determine budget Control costs
<b>Resource:</b> Establish project team Estimate resources Define project organization Develop project team Control resources Manage project team	<b>Human Resources:</b> Plan Human Resource management Acquire project team Develop project team Manage project team
<b>Quality:</b> Plan quality Perform quality assurance Perform quality control	<b>Quality:</b> Plan Quality management Perform quality assurance Control quality
<b>Risk:</b> Identify risks Assess risk Treat risks Control risks	<b>Risk:</b> Plan Risk management Identify risks Perform qualitative risk analysis Perform quantitative risk analysis Plan risk responses Control risks
<b>Stakeholder:</b> Identify stakeholders Manage stakeholders	<b>Stakeholder:</b> Identify stakeholders Plan stakeholders management Manage stakeholders engagement Control stakeholders engagement
<b>Communication:</b> Plan Communications Distribute information Manage communications	<b>Communication:</b> Plan Communications management Manage communications Control communications
<b>Procurement:</b> Plan procurements Select suppliers Administer contracts	<b>Procurement:</b> Plan Procurement management Conduct procurements Control procurements Close procurements

#### 4. The Success Management as a new knowledge area

As the literature review shows, the debate on project success and criteria to be used in its evaluation or on the success factors, is already long. Despite this being a much-discussed topic, the fact is that the problems continue to occur in projects and there has not been a significant evolution in terms of approaches to manage success, with the focus many times being only on identifying the success factors.

While analyzing the various PM guides, it is possible to identify many references to project success. This is not surprising, since the main objective of the guides is precisely to improve success in project management. Nevertheless, that concern is not translated into systematic processes. In other words, even though the main concern is success, we cannot find processes directly related to success management in the guides (for instance, “define success criteria”), in the same way as it happens in the case of processes of areas such as communication, risk, stakeholders, etc.

The subject of success in the context of projects and project management is complex due to the diverse insights on success (which depend on, for example, the stakeholders), to the characteristics of the project (for example, project size), to the circumstantial factors of the projects (for example, offshore outsourcing), and to many other aspects that need to be managed throughout the project life cycle (for example, the interdependence of projects [67]).

Therefore, in this work-in-progress, we propose the *Success Management* as a new PM area of knowledge, together with a set of processes to be performed in its scope, as seen in Table 2. In this context, considering the temporary nature of projects, the evaluation is focused on the success of project management.

Table 2. Project Management including a new knowledge area: Success Management.

Knowledge Area	Processes
Integration	v.g. ISO 21500/PMBok processes
Scope	v.g. ISO 21500/PMBok processes
Time	v.g. ISO 21500/PMBok processes
Cost	v.g. ISO 21500/PMBok processes
Resource	v.g. ISO 21500/PMBok processes
Quality	v.g. ISO 21500/PMBok processes
Risk	v.g. ISO 21500/PMBok processes
Stakeholder	v.g. ISO 21500/PMBok processes
Communication	v.g. ISO 21500/PMBok processes
Procurement	v.g. ISO 21500/PMBok processes
<b>Success</b>	Plan Success Management Identify Success Factors Define Success Criteria Perform Success Evaluation Validate and Report Project Success

Following, the processes identified for the area of *Success Management* are briefly described. These include processes ranging from the definition of the evaluation process, to the evaluation reporting and the registration of learned lessons.

#### 4.1. Plan Success Management

*Plan Success Management* is the process responsible for defining various aspects related to the assessment, monitoring and reporting of project success. It is a process that should take place during the project planning and provides answers to the following questions: "How will the evaluation be carried out?"; "How many times and when will the evaluation be carried out?"; "Who will be involved in the evaluation?"; "What sources of information will be used?"; "What aspects will be considered when evaluating success?". It should include the discussion and the approval of the various defined aspects by the key stakeholders.

#### 4.2. Identify Success Factors

Success factors of a project are aspects that influence the likelihood of success. They are independent variables which favor the success of a project [27, 60, 68]. The identification of the factors which lead to the success of a project, has been the subject of interest among researchers and practitioners and thus, several studies have been carried out in this field [69]. *Identify Success Factors* is the process responsible for the identification and description of the project success factors, for defining its relative importance, for the identification of the project phases in which the factors are relevant, as well as for the review of the defined factors. This process should include the key stakeholders when discussing and approving the identified factors. The process should take place during the project planning (even though a preliminary identification of success factors is useful at the initial phase of the project).

#### 4.3. Define Success Criteria

Success criteria are the measures used to evaluate project success [3]. These measures are one of the most important aspects which influence the result of a project [72]. *Define Success Criteria* is the process that defines the measures which will be used when evaluating project success. It answers the following questions: "What criteria will be used to measure success?"; "In what phase of the project will different criterion be relevant?"; "What is the relative importance of each criterion for the different stakeholders?"; "How will each criterion be measured?"; "What is each criterion's contribution when assessing the project's overall success?". This process should include the key stakeholders when discussing and approving the defined criteria. The process should take place during the project planning (even though a preliminary identification of the criteria is useful at the initial phase of the project).

#### 4.4. Perform Success Evaluation

The process *Perform Success Evaluation* is responsible for collecting and periodically analyzing the information for success assessment. In addition to measuring the success of the project, monitoring the success factors should also be done in order to verify if the success factors identified in the planning phase are present in the project, if there are new success factors, or if certain factors stop being relevant due to the progress of the project. This process should include the key stakeholders when discussing and approving the results obtained. The process should take place during the project execution, many times as defined in the process *Plan Success Management*.

#### 4.5. Validate and Report Project Success

The process *Validate and Report Project Success* should take place at the project closure (or project phase). This process is responsible for reviewing the different aspects of the project's success for the final evaluation of the project, as well as for reporting the success rate to the different stakeholders. The record of lessons learned should also be ensured (lessons learned is a knowledge management mechanism defined as knowledge acquired by both positive and negative experiences, and is therefore a guide to a better performance [70, 71]).

### 5. Conclusion

Improving PM can result in a number of business outcomes [72]. For example, organizations that do projects for clients, may improve customer satisfaction and their organization's ability to attract new customers through reputation effects. Organizations that do projects primarily for internal purposes, such as organizational change projects, can benefit from increased ability to achieve project goals.

The present work has important implications for practice, education and research, since it proposes improvements in PM practices by creating a new area of knowledge: *Success Management*. A limited view on project success or the lack of well-defined processes for the assessment of success can turn projects to be managed according to a misfit and incomplete set of success objectives, later causing stakeholders' dissatisfaction. The present proposal is expected to contribute to overcome some of the difficulties experienced by organizations with regard to the formalization of the evaluation of success and to promote a close involvement of the various stakeholders in the evaluation process.

Since this is a work-in-progress, it has some limitations that lead the way for future studies. One such study can be to provide detail on the identified processes, describing inputs, tools and outputs of each process. Another prospective study involves putting the proposed processes into practice in order to gather empirical evidence.

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