Analysis of the Success Factors and Failure Causes in Projects:
Comparison of the Spanish Information and Communication Technology (ICT) Sector

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ABSTRACT

Projects are complex works subjected to significant time, budget and quality constraints. One or the greatest challenges in project management still remaining unsolved is determining what is necessary to do in order to achieve success or failure. According to the specialized literature, both concepts of success factors and failure causes in projects are largely subjective and therefore difficult to quantify, depending on the point of view of the stakeholders involved. This paper compares which are the most frequent failure causes and the most important success factors among three different scenarios: for any type of project, for ICT projects and for ICT projects carried out in Spain only, by means of a worldwide empirical survey carried out among project managers intended to gather their personal perceptions on the matter. The survey is based on a questionnaire anonymously distributed through a professional internet network.

KEYWORDS

Global Ranking, ICT Projects, Project Failure Causes, Project Management, Project Success Factors

INTRODUCTION AND OBJECTIVES

One of the fields of study in Project Management is success factors and failure causes in projects. The significance of how to measure success in projects was identified by the PMI (project management institute), at the Annual Seminar and Symposium, in 1986 (Cleland, 1986). From then on, it is one of the most discussed themes within specialized literature, however no conclusion has been reached yet about how to judge the failure or success in a project (Pinto & Prescott, 1988) (Freeman & Beale,

1992) (Shenhar, Levy & Dvir, 1997). Although both concepts depend on the observer's perception, criteria could be defined as the set of principles that help to measure if a project is successful or not (Lim & Mohamed, 1999).

Even though it is difficult to determine, some authors express surprise at the lack of documented guidelines on success criteria, or key success indicators in project planning (Shenhar & Wideman, 2000). In the first studies on this topic, a project submitted after deadline, over budget projects and projects with unsatisfactory outcomes were all assumed as failed projects (Olsen, 1971). However, nowadays to determine the success or failure of a project has become a more complex issue than before. Subjectivity is inherent to these concepts. Success is not only perceived differently from one person to another, but also the typology and sector of the project may influence our perception of success. Therefore, delivering successful projects is a much more complex task than meeting costs, time and specifications. In fact, a client satisfaction with the final product has a lot to do with the perception of success or failure in the project. This topic has been particularized for the ICT projects, e.g. Joosten, Basten & Mellis (2014), who analyzed the way companies in Germany measure the success of their IS projects.

Despite the close relation, this work is not focused on the concepts of failure or success, but on the study of the aspects which can lead to failure or success in projects. There are many factors which are essential to achieve a successful project. These are called critical success factors, and have been the subject of numerous studies to try to define, clarify or analyze them. Similar to success criteria, success factors are conditioned by the perceptions of those involved in the project. Therefore, these factors depend not only on the stakeholder role, but also on the presence of cultural or geographical differences in each organization (Peterson, Kim, Kim & Tamura, 2002).

It is quite clear that projects fail due to many different reasons, if we understand failure as the systematic and widespread infringement of the criteria which define a successful project (Shauchenka, 2012). However, due to the subjectivity nature of the concept, each person involved in the same project has his/her own views on what the main causes of its failure may be. Besides, these causes may vary depending on the type of project, linking distinctive patterns of causes to the failure of specific types of projects.

The huge amount of lists of success factors and failure causes which appear in the literature vary depending on the study and the type of project, therefore there is no general consensus about them. The most usual would be that a combination of several factors, with different levels of influence in different stages of the life cycle of the project, results in the success or failure of the project. Interactions between different factors or causes seem to be as important as each separate factor of cause; however there is not a clear way to taking into account these interactions.

ICT projects are different from any other type of project. Historically, the more complex these projects are, the worse results are obtained. Usually, these types of projects are subjected to potential hazards of all kind (complexity, teams with multiple members, difficulty in control and management, lack of work discipline and clear specifications and absolutely no precision in establishing costs and time) that prevent them from achieving success.

This work is part of a global study on the analysis of success factors and failure causes in projects. These factors have been studied together by other authors (e.g. Al-Ahmad, 2012). In this particular study a survey has been addressed to project managers to gather feedback on their opinions about how different aspects can influence the success or failure in projects. In the questionnaire project managers had to answer a series of questions related to the most and the least influential factors in project success, as well as the most common failure causes they have encountered. The questionnaire was based on a selection of critical success and failure factors, gathering the most frequent causes that appear in the literature, as well as results from a previous work (Cousillas, Rodríguez, Concepción

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