IT Project Success:  
The Evaluation of 142 Success Factors by IT PM Professionals

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ABSTRACT

Investigation into the causes for low IT project success rates has dominated both the IT project management literature and the focus of IT project management professionals for decades. Many factors, including a variety of hard skills and soft skills, have been proposed to have an effect on IT project success. This study presented 142 such factors, collected from the IT project management literature over the past 25 years, to members of the Project Management Institute in an effort to ascertain which of these factors had the most impact on IT project success in their respective organizations. Factors were classified into 5 groups: Communication Group, Project Manager/Team Group, Project Group, Organization Group and User Group. Results indicated that 71.8% of respondents agreed that Ability to Communicate at Multiple Levels from the Project Manager/Team Group was the most important factor critical to IT project success of the 142 factors under consideration.

KEYWORDS

IT Project Management, IT Project Success, IT Project Success Factors, Project Management Soft Skills

INTRODUCTION

By definition, every project has as its goal, a successful conclusion. Thus, for decades, project management professionals have acted with a presumed shared mindset. With such singularity of purpose and significant years of experience, how is it that higher rates of success have not accrued? Project management, as a discipline, is now several decades away from the initial success criteria: on time, on budget, produced to spec. Throughout the last half century, the iron triangle has maintained its stature among PM professionals because timing, financial, and functional requirements remain obvious, important considerations when evaluating project success. However, over this same period of time, numerous additional factors have been forwarded as significant contributors to project success. The research that follows addresses the question of what is currently perceived to be responsible for project success by surveying the opinions of a national U.S. sample of 92 project management professionals on the importance of over 140 factors linked to success in the scholarly literature.

REVIEW OF THE LITERATURE

The literature review that follows will chronicle the many and varied criteria suggested as critical to project success in the scholarly literature over the last quarter century. Using the framework proposed by Belassi and Tukel (1996), we began with factor groups that addressed criteria related to

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the Organization, the Project, and the Project Manager/Project Team. Two additional factor groups were added that addressed criteria relevant to the enumeration of Communication skills and Users/Stakeholders. For purposes of discussion, items will be presented in groups using five categories comprised of:

1. Project
2. Organization
3. Project Manager/Team
4. Communication
5. User/Stakeholder

As demonstrated by the previous categories, the sources of project success have expanded from the original three (iron triangle), to include micro level social psychological factors as well as macro level organizational characteristics. Clearly, the desire to achieve project success has led PM professionals to cast a wide net—to evaluate or create a metric for a plethora of attributes. The review of the literature that follows is intended to be illustrative of scholarship in each of the five aforementioned areas, but is by no means exhaustive. Additional comprehensive literature reviews on project success range from the early work of Pinto and Slevin (1988) to the more recent work of Jugdev and Muller (2005), Shenhar and Dvir (2007), and Ika (2009). In each of these endeavors, the authors attempt to synthesize and categorize the dearth of scholarship generated in the quest to elucidate the definitions, contexts, causal precedents, and a myriad of other factors posited to impact the PM success milieu.

Returning to the five categories used in the current research, if one considers the variety in the levels of analysis represented in these groupings (organizational versus individual), or the likely disparity in the point of view regarding success (e.g., project manager versus stakeholder), the complexity of discerning success is appropriately emphasized. Furthermore, considerable editorial license has been exercised in the enumeration of selected success factors (often paraphrased) in the literature review section and the selection of items offered as illustrative of a particular category or domain of project success. These editorial liberties were implemented for the purpose of maintaining the readability of the scholarly narrative (a complete, verbatim presentation of the 142 success factors appears in the analysis section).

**Project Factors**

Among the factors deemed critical to project success, the ubiquitous iron triangle (on time, on budget, produced to spec), has been included in research across the quarter century under investigation. Although some used only these three criteria to measure success (e.g. Blaney, 1989; Redmill, 1990), most scholars have chosen to acknowledge the importance of the iron triangle while simultaneously evaluating additional dimensions of success. Early discussions of the need for an expanded list of attributes and the inclusion of perceptions of success representing all constituencies in the process were presented by Turner (1993) and Wateridge (1997, 1998). The cogency of their expansionist arguments coupled with the chronically high failure rates for IS/IT projects likely contributed to the extensive list of project factors employed by PM scholars from the 1990s forward. Thus, the current literature review includes the familiar time, money, spec trio along with seven additional categories encompassing over 40 different success variables purported to affect project success.

The first project-related category, demographics, includes a range of project characteristics such as the size of the project, the dollar value, number of people involved, schedule, project plan, system design and type of development methodology used (Belassi & Tukel, 1996; Fowler & Walsh, 1999; Fortune & White, 2006). Covering technical aspects of success, items regarding the complexity of technical tasks, overall technical performance, and the need for technical innovation were included (Belout, 1998; Pinto & Prescott, 1998). Project factors specific to goals and objectives included the
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