

# Information Technology Project Management and Project Success

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## ABSTRACT

*One of the most important issues for organizations and information technology professionals is the success of information technology (IT) projects. This study reviews a survey of financial executives and examines their views on aspects of project management and project success. First, it was found that overall systems development projects are viewed as being successful by organizations. Next, a series of analyses were performed to assess several variables' impact on IT project success. Skilled project measurement was found to result in higher IT project success. Restrictions on IT application development were found to correlate to lower IT project success. The most important project consideration did not affect project success. Finally, a significant positive relationship was found between the IT project success and overall IT returns. The implications, limitations, and conclusions of these findings are discussed. The study can be used as a basis for further exploration on project management success, influencing variables, and motivators. The findings can also be used to guide management teams in project management decisions to maximize returns to their organizations. The paper studies a large secondary data sample set, which empirically reviews corporations' experiences with project management. In addition, it explores variables influencing overall project management success perception.*

*Keywords:* Information Technology Project Management, Information Technology Success, IT Professionals, IT Project Success, IT Return

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## INTRODUCTION

One of the most important issues for organizations and information technology professionals is the success of IT projects. This study reviews a survey of financial executives and examines their views on aspects of project management and project success.

In 1994 the Standish group published their CHAOS report that suggested dismal success rates for IT projects. Their results suggested

only a miniscule 16% success rate for IT projects (Chaos, 1994). According to many other sources, information technology (IT) projects have experienced a less than stellar reputation with regard to success. Demarco (2005) notes "According to Office of Electronic Government and Information Technology (OEGIT), only 25 percent of the 1,400 projects reviewed by the Office of Management and Budget in 2002 achieved the office's goals. More than \$21 billion worth of the \$59.3 billion IT projects in the president's 2004 budget are dubbed "at risk" because of inadequate project planning"

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(p. 12). Against this backdrop, some researchers have attempted to analyze either reasons for failure or processes that can lead to success. The validity of these dismal returns has been challenged recently, including even the CHAOS report (Eveleens & Verhoef, 2010). As a result, the actual success rates of information technology projects remain elusive.

## PROJECT SUCCESS

There have been many researchers that have explored project success and its influencing variables. Wateridge (1998) suggests that there are many factors that can influence project success and not just the traditional meeting time and cost constraints. According to users, the top two success requirements for successful projects were meeting user requirements and “happy” users. Delone and McLean (1992) suggested the following six categories of information systems success measures: system quality, information quality, use, user satisfaction, individual impact and organizational impact. Anderson and Aydin (2009) noted the importance of social and behavioral processes in health care information success. De Wit (1988) suggested the importance of efficient and dynamic project controls.

Nah, Lau, and Kuang (2001) suggest 11 factors relating to ERP success: 1. ERP teamwork and composition, 2. change management program and culture, 3. top management support, 4. business plan and vision, 5. business process reengineering with minimum customization, 6. project management, 7. monitoring and evaluation of performance, 8. effective communication, 9. software development, testing and troubleshooting, 10. project champion, and 11. appropriate business and IT legacy systems.

Biehl (2007) found “Top management support is the one most commonly cited when implementing complex systems, followed by capable and well-understood business processes, the use of a cross-functional team, and maintaining cross-functional cooperation and communication. Other significant factors suggested include clear project goals and the

management of affected employees. Note that employee management also relates to the training of managers and a system’s future users.” Christensen and Walker (2004) found “a significant driver of project management success is effective and intelligent leadership communicated through an inspiring vision of what the project is meant to achieve and how it can make a significant positive impact.” Demarco (2005) suggests assembling the right team, using a life cycle model, correct cost estimating, process training, project control, and re-assessment.

Karlsen, Andersen, Birkely, and Odegard (2006) found these key factors for project success: 1) top management support; (2) end-user involvement; (3) a clear project goal; (4) good communication and feedback from involved parties; (5) clear responsibilities. Fowler & Horan (2007) found “factors critical in the success of the investigated system (in order of importance):

1. Lack of effective project management.
2. Top management commitment.
3. Project team commitment.
4. Effective project management.
5. Project personnel knowledge/skills.
6. Enlisting of external contractors.
7. User acceptance.

Kendra and Taplin (2004) note that organizations that adopt the confirmed project success model must develop a project management culture based on shared cultural values of the organization’s members that support adoption of project management. Remus and Wiener (2010) tried to develop a broad holistic method of critical success factors. Some of the areas that Wateridge (1998) found as major criteria for project success include meets user requirements, happy users, and meets budget. Zahedi (1987) focused his work on the concept of critical success factors for PM. Ruth (1995) suggested criteria for information technology (IT) systems success include: 1. low unit cost, 2. high unit yield, 3. proven use in similar ap-

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