

CRITICAL SUCCESS FACTORS FOR IT PROJECT PORTFOLIO MANAGEMENT PROCESSES: WHAT DO WE KNOW, WHAT CAN WE LEARN?

Completed Research Paper

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Abstract

Digital transformation and globalization lead to permanent changes in companies and organizations, resulting in more and more Information Technology (IT) projects and a rapidly increasing importance of IT project portfolio management. Companies and organizations have to make optimal portfolio decisions, which requires optimized business processes. However, many IT projects still fail and miss their goals due to missing or poorly structured portfolio management processes. Guided by Design Science Research, we deduce findings, knowledge, and know-how from literature and expert interviews to develop and evaluate four critical success factors to improve IT project portfolio management processes. Based hereon, we derive up to five maturity levels for IT project portfolio management processes. Finally, we present a further research agenda. Companies and organizations can benefit from our critical success factors combined with their maturity levels to classify their IT project portfolio management processes and identify value creating improvements.

Keywords: IT Project Portfolio Management, Critical Success Factors, Design Science Research, Process Management.

1 Introduction

Digital transformation creates many chances and challenges associated with value creation and growth for, e.g., sustainability, research collaboration, and to share information and collect more data (Almeida, Santos, and Monteiro, 2020; Bhutani and Paliwal, 2015; Legner et al., 2017). Thus, IT has a crucial impact on organizational competitiveness, long-term performances, and is a critical success factor (CSF) (Bezdrob, Brkić, and Gram, 2020; Maruping et al., 2019). This also means that companies and organizations need to keep up with new technologies, software, and devices (Spitzer et al., 2019). To implement or expand these new technologies or software into a business, more complex IT projects are carried out and the constant revision and adaptation of already existing ones is necessary (Beer et al., 2013; Cooper, Edgett and Kleinschmidt, 2002). IT processes and activities in companies and organizations are increasing in dimension and complexity. This requires that ITPPM structures and processes are defined and implemented, maximizing the value of IT investments and minimizing risks (Ahriz et al., 2018). Structured processes enable companies and organizations to align their IT strategy and operations with their corporate strategy (Rosselet, Jolliet, and Wantland, 2015). Several IT project portfolio management (ITPPM) process models are described in literature, varying in their phases and activities (Ahriz et al., 2018; Archer and Ghasemzadeh, 1999; Chiang and Nunez, 2009; El Hannach, Marghoubi, and Dahchour, 2016; Karrenbauer and Breitner, 2022; Pilorget and Schell, 2008). Despite