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Enforcing strategic fit of project portfolios by project termination: An empirical study on senior management involvement

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Abstract

Project portfolios are vehicles for strategy implementation. Senior management should terminate projects no longer conforming to corporate strategy in order to ensure strategic fit. This paper investigates how rigorous termination of bad and troubled projects affects portfolio effectiveness and senior management's decisive role in this context. We introduce the concept of project termination quality, analyse its consequences for strategic fit and how it is affected by senior management involvement. Using a quantitative longitudinal study of a sample of project portfolios, we show that termination quality positively affects strategic fit. We also show a positive, but inverted u-shaped relationship between senior management involvement and termination quality. We conclude that there is an optimal degree of involvement, beyond which an additional involvement of senior managers results in negative effects.

Keywords: Senior management involvement; Project termination quality; Project portfolio management; Empirical study

1. Introduction

Making decisions to pursue the appropriate projects is the key task in project portfolio management (PPM) in order to sustain competitive advantage and thus prolong business success (Cooper et al., 2000; Dye and Pennypacker, 1999; Roussel et al., 1991). Handling a project portfolio is generally challenging, because it is about deciding upon and thus mastering the competition for the firm's limited resources between all individual projects (Chao and Kavadias, 2008; Dye and Pennypacker, 1999). Additionally the firm's conflict of interest between innovation and efficiency may manifest itself in the portfolio (Green et al., 2003), a characteristic typical for a collection of new product development projects, making these portfolios notoriously difficult to structure.

Ensuring strategic fit is one of senior management's core mandates in PPM. Senior managers here are understood as financially responsible for project portfolios. This puts them in charge of making ultimate go/kill decisions at the gates of the portfolio review process to select the fitting projects and to stop inappropriate ones. In practice first-tier senior managers of an organisation or a business unit take up this role and are also recognised as sponsors (Project Management Institute (PMI), 2008). *Senior management involvement* (SMI) is therefore the extent to which the role senior management is actually fulfilled by the people involved. The literature acknowledges the importance of senior management involvement in steering single projects (Balachandra, 1984; Chakrabarti, 1974; Johne and Snelson, 1988b; Zwikael, 2008) and project portfolios (Cooper and Kleinschmidt, 1995; Johne and Snelson, 1988a) towards success. If in a project portfolio a given project is characterised only by low congruence to corporate strategy, senior management should withdraw resources. Thereby they steer the resource competition to the disadvantage of this particular project, but in favour of the strategic fit of the aggregate portfolio (de Brentani et al., 2010; Pinto and Mantel, 1990; Swink,

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E-mail addresses: barbara.unger@tim.tu-berlin.de (B.N. Unger), alexander.kock@tim.tu-berlin.de (A. Kock), hans.gemuenden@tim.tu-berlin.de (H.G. Gemünden), daniel.jonas@tim.tu-berlin.de (D. Jonas).

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2000). Withdrawing resources from unfitting projects effectively is project termination and of fundamental interest to firms for two reasons: First, collective resources are not worn down in vain. Second, strategy is implemented and executed consciously as only those projects remain in the project portfolio that are in line with corporate strategy.

At the same time project termination has been identified as major managerial challenge for example by Cooper (2008), who highlights that for new product development portfolios weak and late decisions are shortcomings detected in 77% of the firms that claim to have a structured idea-to-launch process. There are several reasons that prevent project abortion to happen including reluctance to terminate on the side of managers (Schmidt and Calantone, 1998), missing prerequisites for termination (Kumar et al., 1996) as well as the difficulty of timing (Tadisina, 1986). Consequently too many bad and troubled projects linger on and decrease overall project portfolio effectiveness.

Numerous studies acknowledge senior management's role in the course of terminating a project to be problematic (Cooper et al., 2000; Gomes et al., 2001; Pinto and Covin, 1989). Cause is primarily senior management's overestimation of own capabilities and over-optimism to allocate resources appropriately (Lovallo and Kahneman, 2003; Staw, 1981). Cooper (2008) presents comprehensive evidence on that matter: senior managers foster their "pet projects", miss important resource meetings, take single-person decisions by "executive edict" and only apply personal instead of transparent prioritisation criteria. There is indication that SMI may have dysfunctional effects (Balachandra, 1984) and thus might limit success (Young and Jordan, 2008). Dilts and Pence (2006) could not conclusively answer if senior management's role impacts on project termination decisions, and reiterated the need to address this question in future studies. Cooper (2008) confirms this demand also from a practitioner's perspective and calls for a definition of governance roles and responsibilities to establish effective "*gatekeepers*". Furthermore the inquiry into how management actually decides to terminate a new product development project remains unresolved (Green et al., 2003; Montoya-Weiss and Calantone, 1994). Moreover, project termination has been identified in past studies as vital activity to structure a project portfolio strategically (Blau et al., 2004; Seider, 2006), whereas the quality of the project termination process in the execution of project portfolio management is an open issue. Thus our first research question is: What is *project termination quality* (PTQ) and how is it relevant to achieve strategic fit, the necessary project portfolio success dimension? Despite previous research that showed SMI's significant role in executing resource allocation in project portfolio management, senior management's type of activity and degree of involvement are still controversial topics. Specifically, the matter of effective SMI in terms of project termination remains open. The second research question of this paper therefore is: What is the adequate degree of senior management involvement in project termination?

In this paper we investigate the central role of senior management involvement for project portfolio success (Calantone et al., 2003; Kleinschmidt et al., 2007; Markham and Griffin, 1998), because they are most relevant for decision-making on portfolios and thus for project termination. In doing so, we make several contributions by clarifying the contradictory findings on SMI (Balachandra, 1996; Brockhoff, 1994; de Brentani et al., 2010; Gomes et al., 2001). First, we adopt a multi-project perspective (Söderlund, 2004) and consider direct and indirect effects of SMI in this project portfolio context. This is especially meaningful when judging the appropriate extent of SMI with regard to a global optimum across a bundle of projects. Second, in contrast to Cooper and Kleinschmidt (1995), who suggested intimate involvement, we propose that the adequate degree of involvement is optimal for fit, meaning that more SMI is not always beneficial. Third, we show PTQ is important for strategic fit, thus promote a lever to achieve systematic and consequently effective project termination (Kumar et al., 1996). Fourth, this paper contributes to the literature by showing that the influence of SMI on success is partially mediated by PTQ, giving more insights into the actual mechanisms in contrast to studies that only investigate the direct effect (Henard and Szymanski, 2001). In our methodology we use multiple informants and measure at two different points in time in order to differentiate cause and effect. This avoids ex-post rationalisation or attribution, which has been acknowledged as concern in studies on SMI (Bonner et al., 2002).

2. Management and context of project portfolios

Project portfolios are defined as collections of concurring and competing single projects, where managerial involvement of senior management occurs mainly via resource allocation as a result of senior management's strategic decisions (Archer and Ghasemzadeh, 1999). Project portfolios are acknowledged as most relevant for a firm's success (Roussel et al., 1991). This is manifested by the fact that the sum of all projects in a portfolio embodies an organisation's investment strategy (Dye and Pennypacker, 1999). In order to yield success, these investments need to be continuously optimised to implement strategy effectively (Herfert and Arbige, 2008; Seider, 2006). We hence focus on the project portfolio as object of analysis which is more critical for a firm's success than single projects. Accordingly, project portfolio management is the vehicle to implement strategy in that investments are only provided to fitting projects (Cooper and Edgett, 2003; Cooper et al., 1998; Noda and Bower, 1996) in order to enforce the link of these projects to the business purpose whilst aligning the portfolio to corporate strategy (Artto and Dietrich, 2004; Morris and Jamieson, 2005). Strategic alignment thus is a success criterion for project portfolios. This rationale is typical for strategic management (Venkatraman and Camillus, 1984), but different to single project goals (Lycett et al., 2004).

Challenges of project portfolios arise from their context and the nature of related management requirements (Papadakis et al., 1998). The dynamics of competitive opportunities that open up unpredictably and demand for responses to these changes put project portfolios in an especially demanding set-up (Turner and Müller, 2003). One fundamental objective of project portfolio management is therefore responsiveness to alterations (Dietrich and Lehtonen, 2005; Turner and Müller, 2003). Typical