

The integration of ideation and project portfolio management — A key factor for sustainable success[☆]

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Abstract

Effective management of single projects is no longer sufficient. In today's business market, proactive management of the whole project portfolio has become increasingly important for achieving long-term success and competitive advantage. At the front end of projects, opportunities are discovered, ideas are created, and the foundation for later project, portfolio, and, eventually, corporate success is laid. This paper contributes to the project management body of knowledge by combining the front end view on projects with the holistic view of managing project portfolio landscapes. It focuses on establishing a framework for conceptualization of the relationship between ideation and project portfolio management in product development environment by relating *ideation portfolio management*, *front end success*, and *project portfolio success*, and lays the groundwork for further empirical research. The overarching topic I address is the conceptualization of how ideation can facilitate and sustainably improve portfolio success in the product development environment in the long-term.

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1. Introduction

The share of activities and budgets in project-organized undertakings has significantly increased over the last several years. As a result of this development, the project landscape of companies has become increasingly complex. A consequence of this increasing complexity is that it is no longer sufficient to manage single projects effectively and efficiently to be successful (Dammer and Gemünden, 2006; Dammer et al., 2006; Elonen and Artto, 2003). Hence, a proactive and structured management of the project landscape as a whole that takes a holistic view of the multitude of projects becomes a major topic for companies striving for a competitive advantage (Dammer, 2008; Patanakul and Milosevic, 2009).

However, sustainable success is more likely to be achieved if portfolio opportunities are recognized and then actively managed and exploited. Potential current and future gaps in the

portfolio must be identified early on. Given that portfolio development and eventually corporate success are influenced by various factors, one of the major sources for success is a company's innovation competence. Thus, it is not surprising that an analysis of the Boston Consulting Group reveals that 72% of their interviewed companies considered innovation to be one of the top three priorities (Andrew et al., 2010). A major lever to trigger innovation and opportunities lies within the front end of a company's project portfolios (Khurana and Rosenthal, 1998; Reinertsen, 1999; Zhang and Doll, 2001).

Nevertheless, the majority of contributions examining the “fuzzy front end” – a term that was introduced in the innovation management literature 25 years ago by Reinertsen (1985) and that was made popular by Smith and Reinertsen's work (1991) – still posit that this is a *single* project management task and not a project *portfolio* management challenge. Thus, the proponents of fuzzy front end typically argue that

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innovation projects should comprise the earlier stages, that the early stages should be executed much more intensively, that technology- and market-related homework should be conducted with great care, and that the approaches should be professional and of high-quality. This is because in these early stages not only are the target costs of new products defined, but the benefits and the total cost of usage that future users of a new product have to bear are also defined (Cooper and Edgett, 2008; Zhang and Doll, 2001). However, the proponents ignore that there are thousands of interesting ideas that may lead to hundreds of very interesting concepts that can be further developed into many project proposals. Only a very small fraction of these ideas, concepts, and project proposals can and should be selected, because resources are limited and choices have to be made. It makes sense to invest more money, time, and intelligence into the earlier stages of innovation projects (Reid and de Brentani, 2004; Verworn et al., 2008), but this cannot be done for each and every innovative venture. Therefore, not only the execution stages of new products and service innovations but also the early and evolutionary stages, where new opportunities are discovered and new options are developed, require a professional portfolio management system. The decisions as to which ideas should be further developed into concepts and then into project proposals and which of these proposals should then become projects should be decided from a project *portfolio* management perspective. I call this type of portfolio management *ideation portfolio management*. The task of ideation portfolio management is to feed the subsequent project portfolio management with a sufficient flow of project proposals that generate high value and that support the implementation of developed strategic goals, which includes the support of desired changes in strategic goals that appear to be implementable within the targeted time and with accepted risk.

Attracting, selecting, and developing ideas into project candidates are important management tasks that suffer from several misunderstandings. For example, contributions from engineering management often state that the target cost of a new product is defined in the early stages, but the high budgets are spent in the later stages. Furthermore, senior management, often with a background in business administration, does not become involved until it is often too difficult and very costly to change design decisions (Creese and Moore, 1990; Herstatt and Verworn, 2003; Specht et al., 2002; Wheelwright and Clark, 1992). This claim is further supported by marketing researchers such as Robert Cooper, Elko Kleinschmidt and co-authors who repeatedly found that market-related research must be conducted at an early stage to define target groups and critical needs of key customers in this target group (Cooper and Edgett, 2003; Cooper and Kleinschmidt, 1993; Cooper et al., 2004b). This is necessary to define real product advantages that cannot be imitated easily and to elaborate and validate such unique selling propositions throughout the product development process. Again, if the early fundamentals of this proposition are weak and if they are not challenged to detect errors early, then high investments in advertising and sales will also fail and brand values will suffer. Empirical findings indicate

that senior management involvement does start earlier than suggested in the literature and that in successful firms, it is much greater during early stages than it is in low-performing firms (Dammer, 2007; de Brentani and Kleinschmidt, 2004; Unger et al., in press). Senior management, however, cannot and should not get involved in too many single projects as it has a limited management capacity. Moreover, there is a danger in senior management supporting “pet projects” that may potentially prevent or delay termination of problematic projects (Balachandra, 1984; Bonner et al., 2002; Cooper, 2008; Ernst, 2002). Professional portfolio management allows senior management to obtain more transparency about the landscape of ideas, concepts, and project proposals as well as to assess the value of the pipeline (Jonas, 2010). Thus, professional ideation portfolio management is a good means of bringing innovation management back to the boardroom and fostering the exchange between experts and hierarchical power holders.

A systematic portfolio management approach is also needed for the ideation and concept definition stage, which ensures that appropriate ideas and concepts are selected and supported. If performed properly, support should be much higher, leading to better funding of valuable ideas, concepts, and project proposals. Finally, if the ideation portfolio is well integrated with the project portfolio management, projects can, thus, be implemented much faster.

However, integrated workflows and processes between these two worlds at the front end, on one side, and project portfolio management (PPM), on the other, are, for the most part, absent (Khurana and Rosenthal, 1997). For practitioners and academia alike, it is important to know how one can apply the ideation vacuum cleaner to suck and pull the relevant ideas into the project portfolios (Terwiesch and Ulrich, 2008). Consequently, this paper takes a new approach on investigating project portfolios and focuses on the integration of ideation at the front end into PPM and develops a conceptual framework for analyzing the impact of ideation portfolio management on project portfolio success. The overarching question that I want to address with this paper is how ideation and, thus, ideation portfolio management can facilitate and sustainably improve portfolio success in the product development environment in the long run. There are three aspects to this question:

- (1) What is ideation portfolio management (IPM)?
 - a. What are the dimensions of IPM and by which constructs can it be described?
 - b. How can success of IPM (i.e., front end success) be conceptualized?
- (2) How can we conceptualize the influence of the configuration and design of IPM on PPM?
- (3) How do the IPM constructs effect PPM metrics and respectively project portfolio success?

The motivation for the first research question is quite simple. As previously mentioned, scholars examine ideation through a single project lens rather than from a portfolio vantage point (Dammer, 2008; Ernst, 2002; Gerwin and Barrowman, 2002).

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