Chapter 16

A Method for the Management of Service Innovation Projects in Mature Organizations

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ABSTRACT

The ability to design innovative services is an important capability for organizations in the 21st century. Although innovation is the fundamental force to create a sustainable business, many organizations, especially mature organizations, struggle to develop innovative services. This paper offers a method for managing service innovation projects in mature organizations. The method is described using the elements of method engineering. Its relevance is evaluated through an exploratory case study at the intersection of business and IT, focusing on a German financial services provider that sought to develop new IT-based service innovations. Information technology plays a major role as an enabler for a broad range of innovative services, and IT organizations are in a unique position to design services in collaboration with business units to address evolving customer requirements. The key finding of this case study is that while processes, methods, and tools are important for managing service innovation projects, socio-technical aspects such as context, environment, team management, and project setup also are essential for the successful design of innovative services. The current literature provides rudimentary guidance in these areas, yet a thorough description of these factors and their integration into a complete method has not yet been documented.

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1. INTRODUCTION

Services and the service industry are becoming an increasingly important part of the 21st century global economy (Chesbrough & Spohrer, 2006). The pursuit of a better understanding of the development of new services has given rise to a new research direction known as Service Science, Management, and Engineering (SSME). Several models exist that describe the process of service development and engineering (Kingman-Brundage & Shostack, 1991; Edvardsson & Olsén, 1996). These models are narrow in that they focus solely on the service development process and activities and less on the environment in which these process and activities take place. Johnson et al. state that effective new service development projects are characterized by their successful use of and management of enablers such as teams and tools and propose this as an opportunity for future research (Johnson, Menor, Roth, & Chase, 2000). The method described in this paper contributes toward this research problem by providing insights from a real-world service design project in the financial industry where special attention has been given to the enabling factors such as team constellation, organizational environment and IT infrastructure.

This extension of scope in new service development is necessary because many organizations, especially those that are mature, struggle to develop innovative new services and products due to a lack of access to the resources, processes, and strategies that are needed to spark innovation (Dougherty & Hardy, 1996; Leifer, Gina Colarelli, & Rice, 2001). Several studies have suggested that overcoming this obstacle requires a different management approach capable of supporting not only incremental innovation, but also breakthrough innovations in mature organizations (Jolivet, Laredo, & Shove, 2002; O’Reilly & Tushman, 2004).

The design methodology that we have applied in this case study has its roots in mechanical engineering education and has been practiced for more than 40 years at a leading U.S. engineering school (Dym, Agogino, Eris, Frey, & Leifer, 2006; Carleton & Leifer, 2009). It is an iterative, prototyping, and user-centered methodology to solve problems and develop engineering solutions (Carleton, Cockayne, & Leifer, 2007; Skogstad, Curran, & Leifer, 2008); artifacts and results that have been realized using this methodology have received several innovation awards (Wilde, 2008). Based on these successes, we have decided to apply this methodology in a business context, and have transferred it from the mechanical engineering domain to the service design domain. The transfer of an established concept from mechanical engineering to industrialize and professionalize the service development process represents an innovative - and potentially fruitful - solution (Zarnekow, Brenner, & Pilgram, 2006; Walter, Böhmann, & Krcmar, 2007). The methodology is described by following the principles of method engineering and design science.

Additionally, the selection of this methodology contributes to the increasing interest and the intensified academic discourse on “design thinking” as a new approach for the development and management of innovation (Dunne & Martin, 2006; Dym, Agogino, Eris, Frey, & Leifer, 2006; Brown, 2008). We define design based on the definition advanced by Dym, Agogino, Eris, Frey, and Leifer (2006), namely, as “[…] a systematic, intelligent process in which designers generate, evaluate, and specify concepts for devices, systems, or processes whose form and function achieve clients’ objectives or users’ needs while satisfying a specified set of constraints.” While the first generation of design research leveraged the field of operations research to decompose complex problems into smaller, more manageable components, the second generation of design research shifted toward understanding design as a social process (Beckman & Barry, 2007). The method described in this publication reflects this understanding and the application of this method in an organization provides insight into the social
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