

Chapter 12

An Ideation Framework for Service Process Improvement

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ABSTRACT

Service delivery processes play a key role in the competitiveness of modern organizations. Their effectiveness and efficiency are a consequence of successful design of new processes and improvement of existing processes. Improvement methodologies commonly focus on generic steps serving as a road map for moving a process from its current state along a guided path to better performance. However, these methodologies ignore the crucial step of methods for modifying processes, which often necessitate the generation of new improvement alternatives; generally based on “randomized” brainstorming rather than on systematic triggering of new ideas and reusing past improvements. The authors’ framework comprises and integrates 21 goal determinants to be achieved through process redesign, 32 best practices describing possible process modifications, 40 TRIZ inventive principles for generating new improvement ideas, and case-based reasoning (CBR) for retaining and reusing past improvements. This paper illustrates the application of the proposed methodology using an example of an inbound telesales process.

INTRODUCTION

The service industry is a major component of modern countries and the core of modern economies. As the service sector of the global economy grows, the study of services is moving

to center stage (Spohrer & Kwan, 2008). Service theory and practice are now being investigated not only from a marketing-oriented view but also from an engineering perspective concerned with the systematic development, design and improvement of services using suitable models, methods and tools (Bullinger et al., 2003; Spohrer & Kwan, 2008).

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Services are process centric (Lusch & Vargo, 2006; Sampson & Froehle, 2006), so that the design of new service processes and improvement of existing processes are one of most important concerns of service engineering. Furthermore, service process improvement is what many customers wish to see happen as an outcome of service recovery after a service failure or a customer complaint (Johnston & Michel, 2008). A redesigned process can add value for customers by improving benefits through increased speed of delivery, improved functionality and reduced costs (Berry & Lampo, 2000).

Service process improvement implies creativity. Idea management is one of the crucial steps supporting this creativity. Oke (2007) found a significant connection between creativity and idea management and pursuit of innovative services. Hence at some stage of the redesign the designer must either be able to generate creative ideas or profit from past experience of successful improvements. Thus the two aspects of idea generation and the reuse of past improvements are necessary for service process improvement (SPI).

In this paper we concentrate on the process redesign aspect of services and suggest a framework for process-oriented improvement within the general model of service structure and development (Fähnrich & Meiren, 2007). We integrate three aspects of this model: idea management, goal-oriented requirements analysis, and process improvement conceptualization. We respond to several research questions:

- Which objectives does the organization wish to achieve through improving its service processes?
- What actual modifications can be made to the processes?
- How can ideas for modifications be generated?
- How can the organization exploit experience gained through improvement of its service processes?

To answer these questions we incorporate and integrate four components: (a) Service Process Improvement (SPI) goals; (b) “best practices” as the mechanism for process modification (Reijers & Mansar, 2004; Mansar & Reijers, 2005; Mansar & Reijers, 2007; Netjes et al., 2007; Netjes et al., 2009); (c) TRIZ inventive principles (Terninko et al., 1998; Chai et al., 2005; Mann, 2007) as a springboard for suggesting how improvements should be made; and (d) case-based reasoning (CBR) (Kolodner, 1993; Leake, 1996; Aamodt & Plaza, 1994) as a vehicle for managing and reusing the knowledge gained from previous improvements.

Our paper is organized as follows. First, we present fundamental concepts, related research and a focus on how our work contributes to this area. Second we describe and demonstrate a proposed framework for service improvement idea management. Third we illustrate the application of the framework to the example of an inbound telesales process. Then we detail limitations and challenges in implementation of the proposed framework. Finally, we summarize contributions and conclusions.

FUNDAMENTAL CONCEPTS AND RELATED RESEARCH

SPI Goals and Determinants

Many authors (e.g., Clark et al., 1988; Harrington, 1995; Lynch & Cross, 1995; Cross et al., 1994; Reijers & Mansar, 2004; Forster, 2006a; Forster, 2006b; Das & Canel, 2006; Meiren, 2008; Spohrer & Kwan, 2008; Shtub & Karni, 2010) grapple with the question: what are we aiming for by improving service processes? Hayes and Wheelwright (1984) have suggested that companies compete in the marketplace by virtue of one or more of the following competitive priorities: time, quality, cost and flexibility – the basic measures for assessing all business

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