



### **Chapter III**

# **Visualizing IT Enabled Business Process Change**

Martijn R. Hoogeweegen  
Erasmus University–Rotterdam and  
A.T. Kearney, The Netherlands

Many contributions in the literature of business process change (BPC) address the questions of why and how to conduct IT enabled BPC projects. A relatively underexposed area, however, is the question of how to formulate an alternative process design. Therefore, the focus of this paper is to support BPC managers in their search for (IT enabled) alternative process design(s). The support should stem from a set of concretely defined redesign guidelines that are visualized in simple process charts. These visualized guidelines should help BPC managers to recognize their applicability in their own context. The aim of this paper is threefold. First, the literature is reviewed to formulate a number of IT enabled BPC guidelines. Second, these guidelines are visualized in process charts. Third, a case study is presented to illustrate the applicability of these visualized guidelines.

## **INTRODUCTION**

The popular topic of business process change (BPC) has been discussed and deepened in many articles, books, workshops and conferences. For instance, the book of Sethi and King (1998) provides a collage of interesting and important papers that cover a large number of important aspects of BPC. Examples are the strategic aspects, principles and methods, expected costs and benefits, the management of BPC projects, and so forth. Sethi & King present their book as being the “third generation,” since it intends to transcend the ‘cheerleading’ approach of numerous “BPC guru’s” in previous generations (published in the 1980s and early 1990s).

The difficulty of how to organize and conduct a BPC project is reflected in the report of Revenaugh (1994). He states that about 50 to 70% of BPC projects fail: BPC projects are difficult to launch, manage and conclude successfully. Many

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contributors in the literature have therefore developed all sorts of BPC methodologies and techniques to support management and BPC managers to design and conduct their own BPC projects. Kettinger, Teng and Guha (1997), for instance, found that currently about 25 methodologies, 72 techniques and 102 tools exist to assist the BPC manager.

A closer look at these methodologies, techniques and tools shows that, unfortunately, the majority focuses at the questions of why and how to conduct (IT enabled) BPC projects. The basic idea of this kind of support is to indicate the steps that should be taken in a BPC project and in what particular order. Less attention is given to the question of how to formulate an alternative process design for a particular process. This notion is supported by Kettinger et al. (1997), who argue that the development of alternative process designs is a matter of “brainstorming and creativity techniques” (p. 62). We agree that this is indeed the current status of many of the available methodologies and techniques, but for a BPC manager, this is most likely a bit unsatisfactory. The manager would be really supported when the methodologies at hand would also provide assistance in his search of formulating alternative process designs.

The assistance I project provides a number of concretely defined guidelines, which are visualized in simple process charts. In this way any BPC manager should be able to recognize the implications of the guidelines, and should therefore be enforced to apply and visualize the opportunities for BPC by applying the guidelines in his or her own BPC project. These guidelines should be formulated in terms of imperatives, which ultimately, after refinement and testing, could become “precepts of BPC” (see Davenport & Stoddard, 1994, p. 126).

In this paper I want to make a contribution in the search for these BPC guidelines. This search will be focused on those guidelines that are based on IT as an enabler for BPC because IT is considered to be an important means in the redesigned process (see, for instance, Davenport & Short, 1990; Hammer, 1990; Harrington, 1991; Venkatraman, 1994; Whitman, 1996). First, the literature is reviewed to summarize recommendations, principles and opportunities for BPR into a set of five guidelines for BPC. Second, the BPC guidelines will be visualized in graphical depictions. The result of this exercise is a set of visualized redesign patterns. These patterns help BPC participants to communicate more effectively and enable a more constructive dialogue (after Barrett, 1994, p. 17). This is illustrated with a case study in the sea transportation sector.

The paper is organized as follows. An introduction to Business Process Change (BPC) is provided in the next section. Then the use of IT as enabler in BPC projects is described, followed by a discussion of how to conduct BPC projects, referred to as the methodology for BPC. Based on these insights, the literature is further reviewed in a search for IT enabled BPC guidelines, resulting in the proposal of five IT enabled BPC guidelines. These guidelines will be visualized in a case study. Finally, conclusions are drawn.

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