

# Chapter 1.6

## Business Process Reengineering and ERP: Weapons for the Global Organization

**Marianne Bradford**

*North Carolina State University, USA*

**Robert Gingras**

*Business Process and Technology Advisor, USA*

**Jonathan Hornby**

*SAS Institute, USA*

### ABSTRACT

This chapter suggests that reengineering is an analysis of existing processes you wish to change to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed. There are two distinct methods of reengineering, technology-enabled and clean-slate, with most global companies choosing somewhere in between. There are also a number of principles any reengineering project team should understand before embarking on a reengineering effort, and these are discussed from a global perspective. The chapter concludes with how to select processes to reengineer, lessons learned from global reengineering, benefits of global reengineering, and future implications.

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### INTRODUCTION

One of the primary tasks facing global organizations today is the analysis of business processes in order to make them more efficient as well as to have a flexible process framework for continuous improvement. Global competition has forced organizations to look beyond their traditional processing methods to implement major changes to their work processes. As opposed to incrementally improving processes (i.e., total quality management, or TQM), the changes global companies must make these days in order to become or remain competitive must be dramatic. Changes like this are known as business process reengineering (BPR)—the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, speed, and service (Hammer & Champy, 1993).

Reengineering is an essential component of any enterprise resource planning (ERP) system implementation. As noted by Michael Hammer, the “father of reengineering”: “[ERP] implementation equals forced reengineering” (Hammer, 1997). ERP systems make organizations consider how different functional areas interact with each other and how the process of doing business is accomplished in the firm. Understanding business processes is crucial to selecting and implementing ERP systems (O’Leary, 2000). Through requirements analysis and a study of industry best practices, organizations choose an ERP system that meets their needs, while hopefully providing them with competitive advantage. Since often the current processes of an organization are different from the process flows in the ERP system(s) the organization chooses, implementing an ERP system will most likely involve changing business processes (i.e., reengineering) to match the best practices in the software (O’Leary, 2000; Sumner, 2005). This reengineering of processes takes place during the design stage of the ERP lifecycle and generally requires strong change management skills in order to make these modifications successful (Sumner, 2005).

There are several objectives of this chapter. We first provide a background to reengineering from a practitioner and academic viewpoint. We also discuss the two distinct methods of reengineering, technology-enabled and clean-slate, as well as the principal tenets any reengineering project team should understand before embarking on a reengineering effort. These tenets are discussed from a global perspective. We continue by discussing factors to consider when selecting business processes to reengineer and the use of process mapping to visualize “as is” and “to be” process states. Next, we discuss lessons learned from global reengineering as well as benefits that can accrue. Finally, we end with future research directions and a discussion/conclusion section.

## **BACKGROUND**

The development of reengineering as a tool to company-wide excellence began in the 1980s when Michael Hammer began to notice that a few high-profile global companies, such as IBM and John Deere, had drastically improved their performance (Hammer, 1990). With further research it was found that these companies were not making changes to their core competencies, but were making *radical* changes to their business processes and even removing entire processes completely (Hammer & Champy, 1993). These organizations had scrutinized their employee tasks and cut out many (if not all) tasks that did not have as their primary purpose satisfying customer needs. Tasks that were put into place only to satisfy the internal demands of the organization were eliminated (Hammer & Champy, 1993).

As a result of his research, Hammer coined the term “reengineering” and has espoused his vision in numerous books over the last two decades (e.g., Hammer, 1990; Hammer & Champy, 1993; Hammer & Stanton, 1995). Business processes, which are defined as a collection of activities that take one or more kinds of input and create output that is of value to the customer, are at the heart of reengineering (Hammer & Champy, 1993). Distinguished from TQM, which focuses on continuous, incremental change, reengineering is radical and dramatic—“big bang” change with the goal of vast improvements from the status quo.

What Hammer preached was the purest form of reengineering—that of “clean-slate” reengineering. This type of reengineering involves starting from scratch, improving a process design with a blank (clean) slate. The processes are reengineered with the customer in mind foremost, and the reengineering team is allowed to design with no bounds or constraints. A free flow of ideas is encouraged in order to make the focus of the reengineering as streamlined, efficient, and ef-

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