Chapter II

Healthcare Process Redesign: A Case Study

Minh Huynh and Sal Agnihothri
Binghamton University, USA

In this chapter, we present key principles and the limitations of business process reengineering (BPR) in general, and the use of BPR in healthcare in particular. We then present a case study of reengineering a healthcare process. The purpose of this case study is to explore the reality of how a BPR project is initiated, formulated, and implemented in a hospital setting and how it can fail. In the final discussion, we analyze the possible reasons for the failure of the BPR project and discuss their implication to the implementation of BPR in general.

INTRODUCTION

Designing or redesigning processes in order to produce outputs that meet organizational goals is one of the most important activities in any business. There have been enough discussions on this topic, which is commonly called business process reengineering (BPR), in the literature. In this chapter, we present key principles and the limitations of business process reengineering. We then briefly discuss the literature on the use of BPR in healthcare. Since information technology is one of the enablers of BPR, we also present the role of information systems and some useful technologies to capture information in healthcare. Finally, we present a case study of redesigning...
a healthcare process. The purpose of this case study is to explore the reality of how a BPR project is initiated, formulated, and implemented in a hospital setting and how it can fail. In the final discussion, we analyze the possible reasons for the failure of the BPR project and discuss their implication to the implementation of BPR in general.

**PROCESS REDESIGN: PRELIMINARIES**

Business process reengineering has been one of the hottest topics in management in the 1990s. There are several tutorials written on this topic including those by Grover and Malhotra (1997) and Rohleder and Silver (1997). The remarkable success of the best-seller book *Reengineering the Corporation: A Manifesto for Business Revolution* by Michael Hammer and James Champy (1993) is evidence of BPR’s popularity. According to Hammer and Champy, “reengineering” is termed for the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed. Many executives (some surveys show that as many as 88% of large corporations) have initiated BPR projects as a way to turn their companies around, to regain their competitive edge, and eventually to boost their profitability.

Reengineering entails seven basic principles of doing work, relating to who does the work, where and when it is done, and information gathering and integration (Hammer, 1990). These principles are summarized below.

- **Organize around outcomes, not tasks.** Have one person or a team perform all the steps in a process. Design that person’s job around an outcome instead of a single task. Organizing around outcomes eliminates the need for handoffs, resulting in greater speed, productivity and customer responsiveness. It also provides a single knowledgeable point of contact for the customer.

- **Have those who use the output of the process perform the process.** Instead of establishing specialized departments to handle specialized processes in order to benefit from specialization and scale, let the people closest to the process actually perform the work. Relocating the work in this fashion eliminates the need to coordinate the performers and users of a process.

- **Merge information-processing work into the real work that produces the**
Related Content

Towards Telemedical Centers: Digitization of Inter-Professional Communication in Healthcare
www.igi-global.com/chapter/towards-telemedical-centers/78056?camid=4v1a

Nonparametric Decision Support Systems in Medical Diagnosis: Modeling Pulmonary Embolism
www.igi-global.com/article/nonparametric-decision-support-systems-medical/2184?camid=4v1a
Utilization of TETRA Networks for Health Information Transfer
www.igi-global.com/chapter/utilization-tetra-networks-health-information/47119?camid=4v1a

Medical Informatics: Preventive Medicine Applications via Telemedicine
www.igi-global.com/chapter/medical-informatics-preventive-medicine-applications/40661?camid=4v1a