Chapter 5

ERP Post–Implementation:
A Study of a Small–and–Medium–Sized Enterprise

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ABSTRACT

This exploratory study focuses on ERP post-implementation issues in Small-and-Medium-Sized Enterprises (SMEs). The authors conducted a case study in a small Norwegian retail company, which experienced a performance dip that lasted longer than expected. The case demonstrates how overwhelming the ERP competence requirements can be for an SME. Errors in the configuration of the ERP system and improper training led to frequent workarounds. The workarounds, in turn, led to significant problems and many errors in the database. This led to a general level of frustration with the system and a high stress level in the company. This study has implications for SMEs planning to implement ERP systems.

INTRODUCTION

This study focuses on the post-implementation phase of an Enterprise Resource Planning (ERP) implementation project carried out in a Small-and-Medium-Sized Enterprise (SME). ERP systems are standardized software packages designed to integrate the internal value chain of a company, and they support effective planning and control of all the resources needed to take, make, ship, and account for customers’ orders in a manufacturing, distribution, or service company (Møller, 2005). ERP systems have become increasingly popular and have been implemented in both small and large companies. Research has demonstrated that companies implementing ERP systems can achieve seamless information flow, increased efficiency, reduced costs, and faster customer response (Davenport, 1998, 2000). However, ERP systems are technically complex, difficult to configure, and
involve organizational and human challenges when implemented in companies (Markus, 2004; Volkoff, Strong, & Elmes, 2007). Moreover, implementations in several companies are currently getting far over budget, taking a longer time than estimated, and may even fail (Markus & Tanis, 2000). Especially in SMEs, poor outcomes of an ERP implementation may threaten the existence of the company (Sun, Yazdani, & Overend, 2005). Normally, SMEs have limited resources and lower internal Information Technology (IT) competencies compared to larger companies (Fisher, Kiang, Fisher, & Chi, 2004). Accordingly, ERP implementation in SMEs is risky.

Few research studies have focused on ERP implementation projects in SMEs. In particular, there is a scarcity of research on issues that arise in the ERP post-implementation phase (Haddara & Zach, 2011). It is therefore crucial to gather more knowledge about how SMEs tackle and survive complex ERP implementations. Our research focuses on the post-implementation phase of an ERP project in a small Norwegian retail company.

The following question has guided our research: How do SMEs experience the post-implementation phase of an ERP implementation project?

BACKGROUND

In this section, we further elaborate on the ERP concept and review relevant ERP literature. We also outline different learning processes and explain why informal learning may be important to the successful adoption of an ERP system.

The Concept of ERP

There are several definitions of the ERP concept. Klaus et al. (2000) define an ERP system as “a comprehensive, packet-based software solution that attempts to integrate all the processes and functions within a company to create a complete overview of the enterprise from a single IT architecture.” Moon (2007) defines an ERP system as an information system that is designed to integrate and optimize business processes and transactions in a company. Implementation has several benefits: seamless information flow, access to real-time data, process-orientation, and improved communication across the enterprise (Davenport, 1998). During implementation of an ERP system, functional systems (e.g. legacy systems) are normally being phased out, and there is less maintenance of several systems such as silo-structures that cause integration problems and data redundancy (Davenport, 2000).

Previous Research on ERP

The ERP literature is quite comprehensive. In this section, we present a selected overview of ERP implementation studies and highlight post-implementation issues. We start with the literature on life-cycle models and critical success factors, because success in the post-implementation phase is normally dependent upon how former phases of the project has been planned for and carried out. We also discuss ERP implementation and learning processes in the organization.

An increasing number of SMEs are now implementing ERP systems. However, research has indicated that few SMEs manage these implementations in a successful manner, and that expected benefits and assumed improvements within the organizations are not achieved (Sun, et al., 2005). ERP systems have been criticized for not living up to their potential because they run over budget, are time consuming in use, and create insuperable challenges for the implementing organization, providing fewer gains than expected when the system goes live (King & Burgess, 2006). In fact, it has been reported that 90% of large companies implementing ERP systems failed in their first trial (Donovan, 1999). The first wave of ERP implementations in large companies encountered many technical challenges (e.g. Dow Corning [Ross, 1999]); however, the technology has recently im-
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