Chapter 9

The Underlying Test: Human, Organisational and Technical Considerations adjoined with Critical Success Factors when implementing ERP: A Cases study of a UK SME

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ABSTRACT

Enterprise Resource Planning (ERP) systems are pervasive information systems that have been fundamental in organisations for the past two decades. ERP systems may well count as the most important development in technology in the 1990s. There are many ERP success stories; equally there are as many failure stories. However, organisations encounter obstacles when implementing ERP systems. This chapter intends to explore some of the problems that occur throughout the implementation of an ERP system. Through the exploration of the literature a framework is constructed considering human, organisational and technical considerations adjoined with critical success factors when implementing ERP. Drawing on empirical evidences from a UK SME, this study then discusses and analyses each problem identified in the framework and its affect on the implementation of their ERP system. The findings of this chapter suggests the fundamental challenge of ERP implementation is not technology but organisational and human problems, which, if not fully understood and addressed, can lead to ERP failure. Finally, this chapter considers the critical success factors that resulted in the failure of the ERP at the case company in the chartering phase of the implementation. It is hoped this chapter will assist in understanding that human, organisational and technical considerations adjoined with critical success factors will encourage practitioners to address these problems and increase their chance of success during ERP implementation.

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INTRODUCTION

In the past two decades, companies around the world have implemented Enterprise Resource Planning (ERP) Systems (Nah et al. 2006). An ERP system is a commercial software package (Davenport 1998, Markus et al. 2000) that promotes seamless integration of all the information flowing through a company (Davenport 1998). Laudon and Laudon (2006) explain that an ERP system collects data from various key business processes in manufacturing and production, finance and accounting, sales and marketing, and human resources. The system then stores the data in a single comprehensive data repository where it can be used by other parts of the business. Managers have precise and timely information for co-ordinating the daily operations of the business and a firm wide view of business processes and information flow.

ERP systems have near magical effects when they work as promised (Legare 2002; Laudon and Laudon, 2006), but unfortunately, a significant number of ERP implementation projects do not succeed (Sarker 2002). The fact that many ERP implementations fail or escalate out of control (Davenport 1998), has led academics to concentrate on what makes a successful ERP. Scholars have focused their research on critical success factors (CSF) (Parr et al. 2000, Somers et al. 2001, Nah et al. 2001, Umble et al. 2002), which focus on the factors that determine whether an ERP implementation will be successful (Umble et al. 2002). Markus et al. (2001) explains that most companies experience outcomes that fall some what short of what a “best in class” organisation might achieve. This directs their attention to the problems companies experience when they adopt, deploy, and use ERP systems. Markus’ study in 2001 is unusual as it places considerable focus on the problems experienced in ERP implementations as opposed to simply defining CSFs. They explore the aspects of organisations ERP journeys. This study will focus on the problems experienced in ERP implementations. The authors believe that focusing deeply on ERP problems will produce different findings opposed to focusing on CSFs.

Research suggests that most companies experience problems with their ERP systems, particularly during the implementation phase (Parr 2000). Both technical problems and human and organisational problems can be attributed to ERP failure. “ERP implementations are affected by both technical and social and organisational aspects” (Elbanna, 2003, p1). This is because the implementation of an ERP system is a socio-technical challenge (Kansel 2006). Laudon and Laudon (2006) emphasise that information systems are sociotechnical systems. They are composed of machines, devices and ‘hard’ physical technology, yet they require substantial social, organisational, and intellectual investments to make them work properly.

This paper firstly intends to differentiate between the human and organisational problems and the technical problems in an attempt to explore the presence of the opposing problems in an ERP implementation in a UK SME (Company X). According to Sarker (2002), there is a consensus among researchers that human factors, more than technical are critical to the success of ERP projects, this paper intends to explore this assumption. A combination of the work of Markus et al. (2001) and Kim et al. (2005) will be used to construct a framework of Human and Organisational and Technical problems in ERP Implementations during the project phase. Drawing on empirical evidences from company X, this study discusses and analyses each problem identified in the framework and its effect on the implementation of their ERP system.

What is an ERP System?

An Enterprise Resource Planning (ERP) system is a commercial software package (Davenport 1998, Markus and Tanis 2000, Kim et al. 2005) that promotes seamless integration of all the information flowing through a company (Davenport 1998).
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