Chapter III

ERP System Acquisition: A Process Model and Results from an Austrian Survey

Edward W. N. Bernroider
Vienna University of Economics and Business Administration, Austria

Stefan Koch
Vienna University of Economics and Business Administration, Austria

ABSTRACT

This chapter introduces the ERP software acquisition process based on a rational or normative decision-making approach embedded within the wider ERP system lifecycle. It presents five hypotheses closely related to practical problems during ERP system acquisition, which were derived from a review of recent academic literature and suggestions from students, practitioners and researchers. Based on perceptions of an empirical survey of Austrian organizations, the hypotheses and every stage of the proposed acquisition process model were investigated. Special consideration was given to the differences between small to medium and large organizations. It was assumed that these differ in several phases of the acquisition process. As most ERP system suppliers are today striving to penetrate the market segment of small to medium enterprises, with the market for large organizations mostly saturated, this point warrants particular interest.
INTRODUCTION

An enterprise resource planning (ERP) system is a software infrastructure embedded with “best practices,” respectively best ways to do business based on common business practices or academic theory. The aim is to improve the cooperation and interaction between all the organizations’ departments, such as the products planning, manufacturing, purchasing, marketing and customers service department. ERP is a fine expression of the inseparability of IT and business. As an enabling key technology as well as an effective managerial tool, ERP systems allow companies to integrate at all levels and utilize important ERP applications, such as supply-chain management, financials and accounting applications, human resource management and customer relationship management (Boubekri, 2001). ERP systems promise the development and sustainment of competitive advantage in the global marketplace through enhanced decision support; reduced asset bases and costs; more accurate and timely information; higher flexibility or increased customer satisfaction (Davenport, 1998; Davenport, 2000; Poston & Grabski, 2000; Rizzi & Zamboni, 1999). But the far-reaching structural changes following an ERP software implementation can also be disastrous, as examples (Bingi, Sharma & Godla, 1999; Buckhout, Frey & Nemec, Jr., 1999; Scott, 1999; Scott & Vessey, 2002) show. A market research company reported that 70% of ERP implementations fail to achieve their corporate goals (Buckhout et al., 1999). Because of the high risks involved, exploring early stages of the ERP lifecycle becomes very important.

In this chapter we focus on the early stage of evaluating and selecting an ERP system prior to implementation. We also focus on the decision-making situation faced by small and medium-sized enterprises (SMEs). This is of particular importance because SMEs are more and more experiencing the need for integration, especially for inter-organizational integration, and expecting ERP software to fulfill these needs. The availability of relatively inexpensive hardware is fostering this situation (Gable & Stewart, 1999). In general, decision-making in SMEs features much greater constraints on the ability to gather information in order to reduce uncertainty about their investment (Cobham, 2000).

On the other side, ERP vendors are in search for new challenges to generate higher revenues and have turned to the small and medium-sized market segments. In the last years, ERP software packages sales flattened. A saturation of the market, as most large organizations have already implemented an ERP solution, decreased the annual ERP market growth (PDC, 1999). By 1998 approximately 40% of companies with annual revenues over one billion USD had implemented ERP systems (Caldwell & Stein, 1998). The small and medium-sized market segment is far from being saturated (PDC, 1999). The total European midsize market for IT products and services surpasses 50 billion dollars per year (Everdingen, Hillegersberg & Waarts, 2000).
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