Chapter 4
ERP System Selection Criteria: SMEs’ Perceptions

Andreja Pucihar  
University of Maribor, Slovenia

Gregor Lenart  
University of Maribor, Slovenia

Frantisek Sudzina  
Copenhagen Business School, Denmark

ABSTRACT

This chapter presents the importance of ERP system selection criteria for SMEs. Altogether, 28 ERP selection criteria were investigated. The criteria were grouped into the ERP benefits criteria, ERP system quality criteria, ERP vendor-related criteria and ERP package criteria. The main purpose of the study was to identify the current situation of ERP usage in SMEs in Slovenia and to measure how important the identified ERP selection criteria are in the process of acquisition of ERP systems. Beside the importance of ERP selection criteria for SMEs, the impact of companies’ factors (company size, representation of the IT department on the board level in the company, implemented information strategy in the company, ERP implementation stage and turnover growth) on ERP system selection criteria was also investigated. The findings are useful for companies considering ERP system implementation and for ERP system vendors to better understand different customers’ needs and expectations.

1 INTRODUCTION

Companies face a rapidly changing business environment with raised customer expectations in expanded markets with increased competition. This increases the pressure on companies to change their existing business practices and procedures to achieve lower total costs of operation in the entire supply chain, to shorten throughput times, to drastically reduce inventories, to expand product choice, to provide more reliable delivery dates and better customer service, to improve quality, and to efficiently coordinate global demand, supply, and production (Umble et al., 2003; Jafari et al., 2006). From the information systems perspective, coordination of the individual elements of the overall set of business processes can be supported by enterprise resource planning (ERP) systems.
ERP systems can be considered the most important development in the corporate use of information technology and are beginning to become the backbone of companies. Also referred to as “enterprise-wide systems” due to their enterprise-wide scope, they provide seamless integration of all the information flows and business processes across functional areas within a company, including finance, human resources, manufacturing, logistics, sales, distribution and purchasing (Davenport, 1998; Markus & Tanis, 2000; Law & Ngai, 2007; Bernroider, 2008). Thus, ERP systems aim to integrate business processes and information and communication technologies (ICT) into a synchronized suite of procedures, applications and metrics that cross companies’ boundaries (Wier et al., 2007).

Due to their nature (complexity and high implementation costs), ERP systems used to be mostly in the domain of large companies. However, in recent years ERP vendors have faced challenges in also providing ERP systems to the SMEs (Malie et al., 2008). The reasons for this trend could be the saturation of the market (as most large companies have already implemented an ERP system), increasing possibilities and need for the integration of systems between companies (mostly pressures of large companies) and the availability of relatively inexpensive hardware (Gable & Stewart, 1999; Esteves, 2009). Furthermore the importance of SMEs in the global economy is opening new markets for ERP vendors and, as such, presents an enormous market opportunity for them.

Across the EU, there are approximately 23 million SMEs; i.e. 99% of all enterprises (Eleftheriadou, 2008; European Commission, 2008; European Commission, 2002); they account for about 75 million jobs. Moreover, in some key industries, such as textiles, construction and furniture-making, they account for as many as 80% of all jobs. They are, therefore, the generators of dynamic and economic growth (Eleftheriadou, 2008; European Commission, DG Enterprise and Industry 2008).

In Slovenia, a country with just two million citizens, 96.2% of enterprises are micro- or small enterprises in which 45.0% of employees are employed. In the less than 1% of Slovenian enterprises that are ranked among large enterprises; one third of employees are employed (SURS – Statistični urad Republike Slovenije 2007).

Although SMEs are generally considered to be flexible, adaptive and innovative (Rao, et al., 2003), and thus have more ability to respond to the new opportunities and innovations than larger enterprises (Lomerson et al., 2004), various studies have reported that SMEs are generally lagging behind large organizations with regards to the adoption and usage of new ICT (Eleftheriadou, 2008; Kartiwi & MacGregor, 2007; Levy et. al., 2005; Levenburg, 2005; Chitura, 2008; Riquelme, 2002). This is becoming a serious issue since SMEs are the backbone of the European economy.

SMEs are not simply scaled-down large businesses. They have their own distinct and special characteristics. Although size is a major distinguishing factor, SMEs also differ from large companies in important ways affecting their ICT adoption (Bouanno et al., 2005, Ramdani & Kawalek, 2009). The adoption of information systems innovations in SMEs cannot be perceived as a miniaturised version of that in larger companies (Ramdani & Kawalek, 2009).

Many SMEs report practical difficulties in ICT adoption. SMEs often lack of adequate levels of technical expertise, managerial resources, financial resources for ICT investments, and awareness about the possible benefits of ICT usage (Pucihar et al., 2009; Kartiwi & MacGregor, 2007; MacGregor & Vrazalic, 2005; Cragg/King, 1993). Many SMEs also consider a lack of trust and confidence as barriers to their engagement in B2B e-business (European Commission, DG Enterprise and Industry, 2008). In contrast, the perceived benefits, organisational readiness, and