

## Chapter 45

# Why Select an Open Source ERP over Proprietary ERP?

### A Focus on SMEs and Supplier's Perspective

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## ABSTRACT

*This chapter introduces the key factors that motivate Small and Medium Sized Enterprises (SMEs) to select Open Source ERP (OS ERP) over the proprietary ERP. The chapter starts with the related previous research works by stating the basic concepts of OS ERP selection. The goal of this chapter is to empirically identify the most important factors that may motivate the Small and Medium Sized Enterprises (SMEs) to select this category of enterprise systems. Therefore this chapter proposes a Theoretical Model for Open Source ERP selection by SMEs and later on conducts an empirical study based on that theoretical model. The chapter tries to broaden the discussion around the important selection factors by including the perspective of the suppliers along with the perspective of OS ERP implementer SMEs.*

## INTRODUCTION

The global ERP market is growing at a fast rate and continues to grow due to an increased demand for integrated solutions. The ERP systems have rapidly become the de facto industry standard for

replacement of legacy systems (Parr & Shanks, 2000). As long as Open Source has become matured, it gained more reliability. Open Source has become strong in business applications areas like ERP, CRM, content management and Business Intelligence (Bruce et al., 2006). Open Source ERP is considered as a viable alternative of proprietary ERP paradigm (Dreiling et al., 2005). These

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categories of enterprise systems are getting more and more acceptance (de Carvalho, 2009). ERPs are complex and costly systems. For SMEs it is difficult to deploy such costly systems. Smets-Solanes and de Carvalho (2003) cited in Johansson and Sudzina (2008) points the elevated cost to be the major factor that prevent SMEs to implement ERPs. Only the large firms have been able to enjoy the benefits of ERP systems (Cereola, 2000). According to Johansson and Sudzina (2008), it is SMEs that downloads open source ERPs and use them as a source of supply. Serrano and Sarreiegi (2006) argue that 12 SMEs successfully implemented Open Source ERP after evaluating proprietary ERPs and the interesting fact is that the adopting SMEs were not interested in Open Source license (cited in Johansson & Sudzina, 2008). There might be some other motivating factors than cost involved in the selection process when organizations make a decision on adoption of Open Source ERP (Johansson & Sudzina, 2008). But in the academic sector those factors were not empirically explored and there have not been enough research work done about different issues of Open Source ERP (de Carvalho, 2009).

This chapter aims to identify empirically the most important factors that may motivate the Small and Medium Sized Enterprises (SMEs) to select OS ERP. For this, perspective of Users (SMEs) and Suppliers (Vendors/Consultants) of OS ERP as well as the potential difference between their perspectives is analyzed in this chapter. Finally mutually most important factors are represented. The basic question discussed in the chapter is: *what are the most important factors from the perspective of users (SMEs) and Suppliers in Open Source ERP selection?*

## **BACKGROUND**

Open Source ERP is defined in the context of 'Open Source' and 'ERP'. Literature review reveals that Open Source ERP got acceptance because may

be organizations were confronted with problems while using Proprietary ERP systems or Open Source phenomenon got maturity (Johansson & Sudzina, 2008). Valkov (2008) discusses problems of traditional ERP systems and illustrate that current commercial ERP software models are too complex, hard to extend or update which leads to high costs, big development efforts, and redundant data structures. The author further argues that the integration and implementation are too complicated, sluggish, costly and unable to meet the needs of clients in most of the cases.

Johansson (2008) explains that vendors of Proprietary ERPs face various challenges, which they should tackle of if they want to remain in business market in upcoming times. The authors illustrate that the question, whether or not Open Source software can serve as a useful input to manage future challenges engender by current proprietary ERP systems. Kim and Boldyreff (2005) explain that Open Source is still in its infancy but the Open Source Software community has started to move into ERP sector. The authors further discuss that because of the complexity associated with large corporations of their business processes, Open Source ERP might never be suitable for them, while SMEs are more suitable candidates for it as they can more easily adapt themselves to ever changing business environments.

Dreiling et al. (2005) argue that dissatisfaction with Proprietary Enterprise Systems can be explained by the relation between developers and users, which is in favor of developers and the proprietary nature of software licensed to organizations is a significant cornerstone for that. With various successful Open Source development initiatives the Open Source software development provides a viable alternative to proprietary development of Enterprise Systems. Soh et al. (2000) describe that problem of 'misfit' persists in adopting software package, which means that there is a gap between the functionality offered by the package and the functionality required by adopting organization. This gap can be trounced

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