Chapter 5
Developing Business Model with Open Source Enterprise Resource Planning

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ABSTRACT

Open source approach to software development has been used to develop the so-called 'horizontal infrastructure' software such as databases and application servers. However, there is an increasing acceptance of open source approach for developing business applications like enterprise resource planning (ERP) software. Indeed, organizations are building business models around ERP and similar business application developed using open source. In this chapter, the authors analyze the business model of one such open source ERP and explain increasing importance of software licensing and partner networks in FOS-ERP business models.

INTRODUCTION

Open source software represents an alternative to the predominant proprietary mode of software development and distribution. In its simplest form, open source represents a licensing paradigm that allows users to access, modify, and redistribute the product (Lerner & Tirole, 2002). When these licensing norms are applied to software; the outcome is what is known as open source software. In other words, open source software is the software that grants its users the right to access the source-code, modify it and redistribute it.

Apart from licensing regimes, the development process of OSS products is distinctly at odds with the traditional proprietary software development (von Hippel & von Krogh, 2003). As a user can redistribute the software on his/her own without requiring an authorization of the original creator of the software, OSS is most often provided at no monetary cost. This provision, along with the licensing norms, is distinctly different from

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proprietary model's key source of revenue i.e. software license sale. This feature of OSS, being acutely deviant from the established economic theories, has attracted researchers to the field of OSS (von Krogh & Spaeth, 2007).

Traditionally, open source as an approach was used for developing projects that could be used for 'horizontal infrastructure' of an organization (Fitzgerald, 2006). Examples include database systems, application servers and operating systems. However, there is an increasing use of open source approach for developing business applications like enterprise resource planning and customer relationship management systems (Fitzgerald, 2006).

This transition across software types is far from obvious. There are at least two issues that differentiate open source ERP from other 'horizontal infrastructure' software developed using open source approach. First, users of business applications may have little interest in the technological aspect of the software. Therefore, unlike the vertical infrastructure projects like databases and application servers, end user may not participate in the product development for business applications developed using open source approach (Ågerfalk & Fitzgerald, 2008). Secondly, the functional requirements for business applications may not be uniformly understood by all members of the community and therefore, there might be a need for a more emphasis on planning and requirement elicitation prior to actual development (Fitzgerald, 2006).

In summary, extending open source approach to developing business applications like ERP is unclear and hence there is a need to explore business models built around open source business applications. In this chapter, we explore one such ERP software that follows the open source approach to software development and licensing and has combined it with proprietary approach to create a hybrid business model. The chapter uses software business model framework proposed by Rajala et.al (2003) to explain business model developed around the studied ERP product.

SOFTWARE BUSINESS MODELS

In this section, we provide a brief review of the term business model and provide the conceptualization of business model adopted for this study. This exercise is important as there is little consensus in organizational research literature about the term business model (Morris et.al, 2005). Thus to bring uniformity in readers' perception about business model, we explicitly define the term business model as we perceive and employ in this chapter. We also describe the business model framework by Rajala et.al (2003) which we use to analyze the business model of the product under study. We culminate the section by once again highlighting the focus of the chapter.

Business Models

Although there is some research in understanding the role of business model in firm's performance (Zott & Amit, 2008) there is no unanimously acceptable definition of 'business model' construct (Hedman & Kalling, 2003; Morris et.al, 2005). As Morris et.al (2005) posited, organizational researchers have treated business model at three levels: revenue model of a firm, organization's design, and organization's strategic direction. Clearly, none of these perspectives can individually serve the purpose of this chapter. Instead, we need a more inclusive conceptualization of the term business model. We therefore adopt the definition of business model as given by Morris et.al (2005). The definition is as follows:

A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets (Morris et.al, 2005; p: 727).