Chapter 6.16
Revenue Models in the Open Source Software Business

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ABSTRACT

Profit-oriented business behavior has increased within the open source software movement. However, it has proved to be a challenging and complex issue due to the fact that open source software (OSS) business models are based on software that typically is freely distributed or accessed by any interested party, usually free of charge. It should be noted, however, that like all traditional software businesses, the business models based on OSS ultimately aim at generating profits. The aim of this chapter is to explore the key considerations in designing profitable revenue models for businesses based on OSS. We approach the issue through two business cases: Red Hat and MySQL, both of which illustrate the complexity and heterogeneity of solutions and options in the field of OSS. We focus on the managerial implications derived from the cases, discussing how different business model elements should be managed when doing business with OSS.

INTRODUCTION

Whereas the business models of the traditional providers of proprietary software are grounded in one way or another on the distribution of access to the use of software-related intellectual property (IP) protected by copyrights, business models within the open source movement have to rely on other types of revenue models. This is due to the fact that open source software (OSS) business models are based on software that typically is freely distributed or accessed by any interested party, usually free of charge. OSS is often mistaken for shareware or freeware, but there are significant differences between the licensing models and the processes between and within these types of software. It should be noted, however, that like all traditional software businesses, the business models based on OSS ultimately aim at generating profits. However, profitability and business models of OSS are still poorly understood phenomena, and there is no single framework that would explain the potential determinants of firm-level revenue model choices.

In this chapter, we make an attempt to identify key considerations in designing successful revenue models in the OSS business. We explore the revenue models of two selected OSS business cases. Through these cases, we aim at identifying the firm-specific business model elements that guide, enable and constrain the choice of revenue model options in OSS business. As a limitation to the analysis presented in this chapter, we leave the exogenous factors (such as competition and other environmental factors) beyond the scope of our consideration.

BACKGROUND

In this chapter, we discuss the background of the OSS business, typical licence OSS choices, and the potential for conducting for-profit business with OSS.

Development of OSS Business

The history of the open source movement goes back to the early ages of computing. In the 1960s and 1970s, it was common for programmers in certain academic institutions (e.g., Berkeley, MIT) and corporate research centers (e.g., Bell Labs, Xerox's Palo Alto Research Center) to share computer program source codes with other programmers. It was not until the early 1980s that proprietary software became very popular, thus causing problems with cooperative software development (Lerner & Tirole, 2002). The predecessor of the open source movement, the Free Software Foundation (FSF), was founded in 1983 by MIT employee Richard Stallman in his attempt to formalize cooperative software development and create a complete free[1] operating system with necessary software development tools. This project was called the GNU Project. Stallman's general concept of free software possesses four essential freedoms (Stallman, 1999):

- Freedom to run the program
- Freedom to modify the program
- Freedom to redistribute the program
- Freedom to distribute modified versions of the program

Stallman didn't want to release software with restrictive copyright terms because it would prevent certain forms of valuable cooperation. On the other hand, releasing software to the public domain would leave it vulnerable to be copyrighted and included in proprietary packages. Thus, Stallman came up with the idea of copyleft, or protecting the freedom of software with the means of copyright laws. In addition, copyleft ensures that the modified works are also released under copyleft terms and, therefore, to the use of the community. Stallman, (2002) argues, "Proprietary software developers use copyright to take away the users' freedom; we use copyright to guarantee their freedom. That's why we reverse the name, changing 'copyright' into 'copyleft.'" To implement this idea, the FSF developed the GNU General Public License (GNU GPL), the first of the now extensive selection of copyleft licenses that are used to protect free/OSS. Meanwhile, the open anticommercialism of FSF led to a group of free software movement leaders deciding to find new ways to strengthen their cause, but with less radical means. They came up with the term "open source," which they thought would better describe the software ideals, and founded the Open Source