Chapter 6.1
Open Source Software and the Corporate World

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ABSTRACT

This chapter discusses various ways that open source software (OSS) methods of software development interact with the corporate world. The success achieved by many OSS products has produced a range of effects on the corporate world, and likewise, the corporate world influences the success of OSS. Many times, OSS products provide a quality product with strong support, providing competition to the corporate model of proprietary software. OSS has presented the corporate world with opportunities and ideas, prompting some companies to implement components from the OSS business model. Others have formed companies to support and distribute OSS products. The corporate world, in turn, affects OSS, from funding labs where OSS is developed to engaging in intellectual property disputes with OSS entities. The consumer of software is sometimes baffled by the differences in the two, often lacking understanding about the two models and how they interact. This chapter clarifies common misconceptions about the relationship between OSS and the corporate world and explains facets of the business models of software design to better inform potential consumers.

INTRODUCTION

Open source software (OSS) is impacting the corporate world in numerous ways, from providing software and competing with its proprietary software companies to changing the direction of the software industry. While some corporate giants are embracing the OSS business model, launching OSS projects of their own, and supporting existing OSS projects, others are vigorously competing with the OSS movement and its products. Still others are capitalizing on successful OSS products by packaging, distributing, and providing support for them. Sharma et al. (2002) assert that the success of OSS is turning the software industry from a manufacturing to a service industry in which customers are paying more for support and service than for the product itself. In addition, the OSS model of production

has gained recognition as an "important organizational innovation" (Lerner & Tirole, 2002, p. 1). Without a doubt, the OSS movement has had a substantial influence on the software industry and the corporate world.

BACKGROUND

Both the OSS and proprietary models of software productions have existed since the early days of software development. Unix, for example, was developed at Bell Laboratories in the late 1960s and early 1970s and distributed freely to universities during the 1970s. Unlike the altruistic motivations of many OSS products, the reason for Bell Laboratories' free distribution was to keep the "consent decree" that resulted from a 1956 antitrust litigation that prevented AT&T from marketing computing products (Vahalia, 1996). In fact, AT&T's 1979 announcement that it would commercialize UNIX prompted the University of California Berkeley to develop its own version, BSD UNIX (Lerner & Tirole, 2002). AT&T's move to make the cooperatively developed UNIX into a proprietary product came four years before Stallman's decision to develop GNU and General Public License.

By 1980, a business model for software had emerged, restricting the copying and redistribution of software by copyright. Bill Gates had already established himself as a supporter of this proprietary model, stating in his February 3, 1976, "An Open Letter to Hobbyists":

As the majority of hobbyists must be aware, most of you steal your software. Hardware must be paid for, but software is something to share. Who cares if the people who worked on it get paid? ... Is this fair? ... One thing you do do is prevent good software from being written. Who can afford to do professional work for nothing? (Gates, 1979)

Gates' letter indicates the differences in philosophy between proprietary and free software proponents that have existed since the early days of software development.

In 1984, computer scientist Richard Stallman, frustrated that all available operating systems were proprietary, quit his job at MIT to develop the GNU (pronounced guh-noo, a recursive acronym for GNU's Not Unix) system. His goal, in addition to developing a new operating system, was to change the way software was created and shared, giving users freedom to modify or add to programs, redistribute the programs with their changes, cooperate with each other, and form communities. Stallman also developed the concept of "copyleft" and the GNU General Public License (GPL) in 1989, publishing all of his work under that license. Copyleft gives software a copyright and users permission to change the software, add to it, and redistribute it, as long as it remains under the GPL terms. By preventing the software from entering the public domain, the GPL prevents users from turning free software into a proprietary derivative. Thus, the beginnings of the OSS movement were a reaction to the proprietary corporate model. In 1990, University of Helsinki student Linus Torvalds wrote the Linux kernel, releasing it under GPL, and filling the gap for a piece of Stallman's system still under development. Soon after, the Apache Web server was developed, providing an OSS application for Linux. This combination of software offered a new option to Internet service providers and e-commerce companies, which, until then, had only proprietary options.

Stallmans's Free Software Foundation Web page, reminding readers that free software means "free" as in "free speech," not as in "free beer" (Free Software Foundation, 2005), echoes a concept brought forth perhaps more eloquently by Thomas Jefferson and widely-quoted by OSS advocates that "ideas should freely spread from