



Chapter X

Benefits and Pitfalls of Open Source in Commercial Contexts

Jiayin Hang, Siemens Business Services GmbH & Co. OHG, Germany

Heidi Hohensohn, Siemens Business Services GmbH & Co. OHG,
Germany

Klaus Mayr, IFS IT GmbH, Germany

Thomas Wieland, University of Applied Sciences Coburg, Germany

ABSTRACT

This chapter intends to show how companies can benefit from open source software and its development culture and how the open source communities could, in turn, be stimulated and accelerated. One of the first major steps for businesses that plan to act in this context is to accept that open source projects have their own communication culture. After explaining this fact, we illustrate its relevance on the basis of a case study in which an open source framework was used to build a commercial product. The decision-making process and the lessons learned from it point out some guidelines, particularly for companies that offer projects rather than products. As there are, however, more parties involved than just the developers when OSS is discussed as a business opportunity, we also classify the different players in the software business such as distributors, system integrators, and software/hardware vendors. Findings on roles and their motivations and restraints, partially based on a survey carried out within our research project, point up this categorization. The authors hope that

this overview of the benefits and pitfalls will encourage more companies to make use of and invest in the open source way to develop and deploy software.

INTRODUCTION

Open source has become an established model for software development. It is no longer hidden among obscure Internet mailing lists populated by purely idealistic and mostly academic programmers. It is today well known in the IT world, albeit not always fully understood. Books like this one do not need to start explaining what the basic ideas of open source software (OSS) development are, but can focus on trying to grasp the appeal of this model and its main antipodes: open source vs. proprietary source, free-of-charge vs. commercial. However, OSS is not just a menace for the business world, as some commercial software companies sometimes propagate it. OSS also offers great opportunities for enterprises. In this chapter, we want to show how companies can benefit from OSS and its development culture and how the open source community could, in turn, be stimulated and accelerated by adopting some best practices from classical commercial development.

In this chapter, we start with a short discussion about the uncertainties of OSS releasing companies and emphasize the importance of understanding the open source culture for businesses that plan to act in this context. We then describe one case study performed by one of the authors in which an open source framework was used to build a commercial product. The decisions in this project and the lessons learned from it are explained in detail. The second major part is an overview of the different players, their motivations, and restraints in the software business such as distributors, system integrators, and software/hardware vendors. Some results are based on a survey carried out within our research project.

Throughout this chapter, we will call software “open source software” if it complies with the Open Source Definition published by the Open Source Initiative (Open Source Initiative, 2003). This definition comprises ten clear and strict rules that a piece of software and its distribution license have to fulfil in order to be called “open source” justifiably. For classical OSS projects like Linux, Apache, or GNU, these requirements are a matter of course. But for companies that have become interested by the cheering press reports and just want to “jump on the OSS train,” they can represent considerable barriers.

Uncertainties of OSS Releasing Companies

One example of the ten requirements of the OSI definition is that any discrimination against a specific field of endeavour is forbidden. The consequence is that a company that releases this software cannot prevent other companies from using it for business and profit. Since it is also required that an OSS license must not place restrictions on other software with which is shipped, the originator must even tolerate his or her open source software being bundled and sold with commercial software.

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/benefits-pitfalls-open-source-commercial/18727

Related Content

Bug Triage Automation Approaches: A Comparative Study

Madonna Fanoos, Abeer Hamdyand Khaled A. Nagaty (2022). *International Journal of Open Source Software and Processes* (pp. 1-19).

www.irma-international.org/article/bug-triage-automation-approaches/313183

Emergent Data Mining Tools for Social Network Analysis

Dhiraj Murthy, Alexander Grossand Alex Takata (2015). *Open Source Technology: Concepts, Methodologies, Tools, and Applications* (pp. 1539-1556).

www.irma-international.org/chapter/emergent-data-mining-tools-for-social-network-analysis/120986

Combining Data Preprocessing Methods With Imputation Techniques for Software Defect Prediction

Misha Kakkar, Sarika Jain, Abhay Bansaland P.S. Grover (2018). *International Journal of Open Source Software and Processes* (pp. 1-19).

www.irma-international.org/article/combining-data-preprocessing-methods-with-imputation-techniques-for-software-defect-prediction/206884

The GALILEI Platform: Social Browsing to Build Communities of Interests and Share Relevant Information and Expertise

Pascal Francq (2007). *Open Source for Knowledge and Learning Management: Strategies Beyond Tools* (pp. 319-342).

www.irma-international.org/chapter/galilei-platform-social-browsing-build/27817

Making Government Policies for Education Possible by Means of Open Source Technology: A Successful Case

Marcos Castilho, Marcos S. Sunye, Daniel Weingaerter, Luis C.E. de Bona, Fabiano. Silva, Alexandre Direneand Laura Garcia (2007). *Open Source for Knowledge and Learning Management: Strategies Beyond Tools* (pp. 343-368).

www.irma-international.org/chapter/making-government-policies-education-possible/27818