

Colloquium “Open Source: Science meets practice”

Friday, April 27, 2007, Zurich, Switzerland, ETH (Rämistrasse 101, Room HG E 41)

Agenda:

2 pm: Introduction

2.15 pm: 1st discussion round

Crowding Effects in Open Source Communities: How does money influence open source projects and its contributors?

Presenter: Matthias Stürmer

Introduction:

Company involvement in open source projects is rising and more financial assets are entering the realm of previously volunteer open source communities. Although economically counter-intuitive, scientific research has shown that under certain circumstances monetary incentives may negatively influence the motivation of volunteers (Frey and Oberholzer-Gee 1997, Gneezy and Rustichini 2000). Frey and Jegen (2001) conclude that intrinsic motivation may decrease because of lower self-determination and reduced self-esteem when rewards are offered.

Discussion Issues:

Therefore, the following questions shall be addressed in this discussion panel:

- To what extent is this so called crowding-out effect of intrinsic motivation present in today's open source projects when firms involve monetary rewards and e.g. employ core developers?
- When do extrinsic benefits improve development activity and support the progress of the project?
- How do incentive systems such as Google Summer of Code, Debian's Dunc-Tank initiative and other corporate and community driven Bounty programs influence the motivation of community participants and for what kind of tasks should they best be designed for?

Goal:

The goal of the panel is to summarize the experiences of practitioners in this context, discuss under which circumstances extrinsic incentives are helpful and when do they harm motivation within the community. Eventually, a useful and realistic research setup shall be outlined in order to quantitatively investigate the positive or negative influence of extrinsic incentives in one or more open source communities or in the form of an experiment.

Literature:

Frey, B. S. & Jegen, R. 2001. 'Motivation Crowding Theory', *Journal of Economic Surveys* 15, 589-611.

Frey, B. S. & Oberholzer-Gee, F. 1997. 'The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding-Out', *American Economic Review* 87, 746-755.

Gneezy, U. & Rustichini, A. 2000 'Pay Enough Or Don't Pay At All', *The Quarterly Journal of Economics* 115, 791-810

3.15 pm: 2nd discussion round

How to sustain Open Source projects in an university context?

Presenter: Peter Sommerlad

Introduction:

Typical thesis work tends to be orphaned after the originator leaves the educational context. Funding of ongoing support could help, but how and from whom to get it? For example, with Eclipse' yearly releases each plug-in developed must consider an according upgrade, to keep up with features and may-be changes in the platform or other related plug-ins.

Relevance:

The relevance for the community is both for consumers, who might rely on Open Source created by an university as well as the educational organizations. Any ideas on how to sustain such projects within the educational context are welcome.

4.15 pm: 3rd discussion round

How to regain Simplicity of the solution as a value of software developers, complexity is just so cool. Can Open Source help?

Presenter: Peter Sommerlad

Introduction:

Today's complex world requires us to solve more and more complex problems. However, software solutions tend to incorporate the latest fab technologies, creating accidental complexity without need. Popular solutions never get simplified because of the fear of changing a running system. I claim we need simpler solution approaches to solve the problem of sustainable solutions to complex problems.

Relevance:

Many people use Open Source without looking for its internal quality. I claim that the Open Source community partly succeeded in superior quality, because they tend to create simpler solutions than some big commercial software vendors. However, there is no "school of simplicity" actually pointing towards simpler solutions. I observe the sexyness of using, e.g., XML, XSLT, EJB, and all current buzzword technologies for solving problems without any benefit besides complexity from these technologies.

5.15 pm: 4th discussion round

Firm Involvement in Open Source Projects: Finding Appropriate Measures and Interpreting the Results

Presenter: Peter P. Amhof, Matthias Stürmer

Introduction:

Although a recent study (Ghosh, 2006) reveals that still two thirds of open source software (OSS) is written by volunteers, contributions from corporations in OSS are significant. Since volunteer communities differ in various aspects from OSS projects sponsored by firms (West and O'Mahony, 2005), it is of interest how company involvement influences established or new OSS projects. Recent research has been conducted in quantitatively measuring company involvement in OSS projects listed on SourceForge.net (Bonaccorsi, 2007), however other methods in data gathering and interpretation might help to refine the results on success of firm sponsoring (see Figure 1).

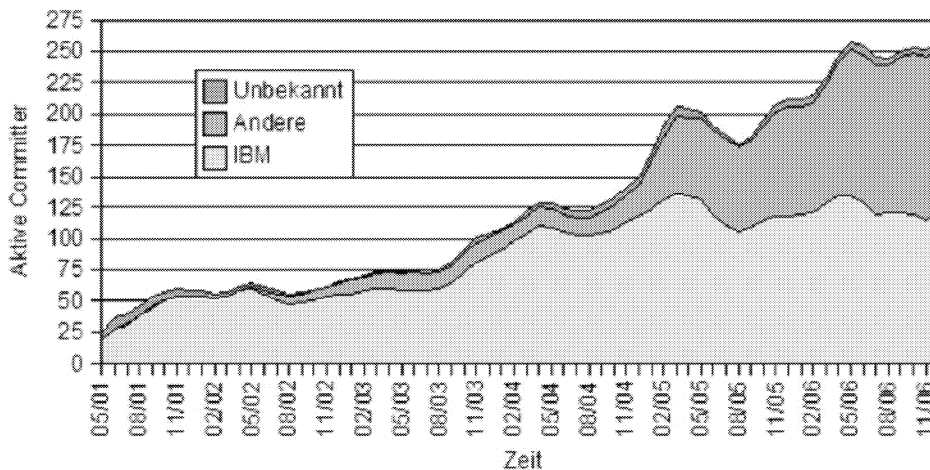


Figure 1: Number of active IBM vs. non-IBM committers in the Eclipse project (Amhof, 2007)

Discussion Issues:

- How is firm involvement in OSS projects defined (e.g. employed programmers, released lines of code, sponsoring of projects) and how can it be measured? (e.g. by email address, content analysis of emails, copyright notes within source code)
- What does the collected data reveal about the success or failure of the OSS project in respect to community building, communication, external contributions etc.?
- Where do interests of the volunteer community and the involved firms collide and how does it differ in single firm dominated (e.g. Eclipse) vs. multi-stakeholder OSS projects (e.g. GNOME)?

Literature:

Amhof, Peter Paul 2007 "Demographical Analysis of the Eclipse Core Teams" master thesis at ETH Zurich

Bonaccorsi, Andrea, Dario Lorenzi, Monica Merito, and Cristina Rossi 2007 "Firms' involvement in the projects of the OS community: Some preliminary empirical evidence and a research agenda" working paper presented at FOSDEM 2007
<http://libresoft.urjc.es/Activities/fosdem2007>

Ghosh, Rishab Aiyer (2006). 'Study on the: Economic impact of open source software on innovation and the competitiveness of the Information and Communication Technologies (ICT) sector in the EU' UNU-MERIT, the Netherlands.

West, Joel and O'Mahony, S. (2005). 'Contrasting Community Building In Sponsored And Community Founded Open Source Projects', Proceedings of the 38th Annual Hawai'i International Conference on System Sciences.