

Open Source Development: Why People Do It?

As Open Source becomes more and more crucial to the workings of corporations, governments and academic institutions, the issue of getting developers engaged in projects takes center stage. At the same time the subject of motivation represents one of the main issues in the open source debate. To further understand the open source phenomenon this presentation will concentrate on results of an inquiry into literature trying to answer a simple question: "what motivates developers to participate in Open Source Projects?" The presentation will start by outlining the initial debate of "gift economy" as initiated by Eric S. Raymond, and will follow with other theoretical perspectives developed in the meantime. An outline of the intrinsic and extrinsic factors as well as their interrelation will be also presented.

Keywords: open source, motivation

Apache web server, an open source software, runs more than 50% of web sites on the world wide web (Netcraft 2007). Apache is developed by thousands of highly skilled programmers, which contribute their time and knowledge without being paid. With each emerging web-site hosted on Apache, the real challenge for the open source community stakeholders is how to keep these programmers motivated and interested to continue their contribution to the Apache project. But what in fact motivates these programmers to contribute their code for no apparent economic incentive?

This presentation will outline the debate on Open Source Software, focusing on participant motivation, different models used to explain the motivation and specific sources of motivation.

In their attempt to explain the motivations for open source participation, authors have used different theoretical perspectives which can broadly be categorized in two groups: social and economic motivations (Hann *et al.* 2002). One of the earliest attempts to explain the OSS model and motivations was Raymond's (1999) seminal work in which he attempts to portrait OSS contributors as altruistic individuals operating in a "gift culture". He also suggests that in addition to altruism, developers are motivated by strong internal urge of "scratching an itch" (Raymond 2000).

While the internal urge argument seems plausible to most, the altruism and gift culture have immediately sparked a debate in the field. Raymond (1999) suggests that the gifts culture is driven by the abundance of resources, others (Bergquist and Ljungberg 2001, Bezroukov 1999) suggest that OSS developers are driven by an internal need for peer acclaim and recognition ultimately leading to a reward model similar to academia where reputation is translated into better jobs and funding for projects.

Alternatively Lerner and Tirole (2002) suggest that developers participate in the OSS community only if they expect some net benefit out of their participation.

The OSS movement, can be easily explained drawing on principles from labor economics, especially the job signaling concepts (Lerner and Tirole 2002). Developers can, through involvement in OSS projects, signal their capabilities to prospective employees thus raising their chances of securing a better job.

Over the past ten years researchers have provided different theoretical views as well as empirical studies, all of which try to explain the phenomenon. Zeitlyn (2003) uses social theories of kinship amity on OSS, economists try to apply different economic theories to OSS (Iannacci 2002, Lerner and Tirole 2002) and there are many attempts to use psychological factors in explaining the OSS model (Kavanagh 2004, Ye and Kishida 2003).

Finally, there is an emerging stream of literature claiming that the assumption of “bazaar” like activity in the open source is history and that open source software has transformed into a more mainstream and commercial form, dubbed OSS 2.0 (Fitzgerald 2006). If proven to be right, the stakeholders need not worry about the motivation of the participants. The rules of classical labor economics will take care of the motivation of the participants. The question in this case would be: will software innovation suffer?

Short Bio

Bernard Nikaj has received an MSc. in Analysis, Design and Management of Information Systems from London School of Economics (LSE) where his research concentrated on social issues of deploying and managing information systems within organizations, with particular interest in E-government initiatives. He currently works as Adviser on a number of projects in the areas of Public Administration Reform, Public Financial Management and Information Systems.

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