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Investigating the Distribution of Open Source Funding

within Nonprofit Organizations

Maria Josefsson
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IT University
of Göteborg

CHALMERS | GÖTEBORG UNIVERSITY

Department of Applied Information Technology

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An Investigation of the Decision Processes within Nonprofit Organizations and the Distribution of Economical Support to Open Source Software Development Projects

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SUMMARY

Open source software development projects are often lacks financial support. But nonprofit organizations and hosts are providing services and the possibility of funding the development. Several donators willing to support these nonprofit organizations exist. There has not yet been any formal investigation of the decision processes for the division of the financial support within nonprofit organizations.

The qualitative study in this report is motivated by this lack of previous studies in this area as well as the increasing acceptance of open source software. The target group, consisting of respondents from large and nonprofit organizations and hosts, which are well known within open source software development.

The purpose of the study is to contribute to the current research in the area by presenting today's situation about how nonprofit organizations choose to divide and distribute financial donations.

The results show how different nonprofit organizations decide and divide financial support. But the fact that the division of financial support is problematic can not be denied. When comparing the amount of financial support that is received by an organization to the existence of a well defined decision process there seems to be a connection. The amount of financial support seems to have an affect on the need for a decision process concerning. The complexity of dividing the financial support among member project seems to be another major cause why division of funding is avoided.

Keywords: Open source software (OSS), Open source projects, Financial support, donations and Investments in open source, Division and distribution of financial support.

Preface

This report presents the results of a master thesis study, conducted from the 19th of January 2007 to the 25th of May 2007 in the IT University of Gothenburg. The purpose of the study was to investigate and present the actual

This report is the result of a literature study partially accomplished with a collaborative effort involving a fellow master student, Mathias Bronner, who shared the same research area although with a different focus. The collaboration resulted in a background chapter – *Open Source*, presenting a general picture of open source software, including an economical perspective.

I would like to thank my supervisor Thomas Lundqvist for the support and advice during this study. Further more I would like to thank Mathias Bronner, for the cooperation with the common literature study. I would also like to thank the respondents who accepted the invitation, answered my questions and contributed to my results; Josh Berkus, Treasurer of SPI, Jacob Moorman, Director of Operations for SourceForge.net, Cornelius Schumacher representative for KDE, Jonas Öberg representing FSF Europe.

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1   Introduction

There are today many open source software (OSS) projects successfully creating good quality software. The economical situations for many of these projects are often hard and some projects do not receive any financial support at all. For some smaller projects, this is not an issue, since the software development is done during the developer's spare time, just because they have an interest of developing OSS. For larger projects though, financial support and sponsoring of hardware can be of critical importance. Larger projects also have a higher possibility to be accepted as serious development projects and are more possible to receive financial support from companies and organizations with an interest in the software developed.

Financial support such as donations and investments are needed for the continued development of OSS and the financial support can probably also increases the quality of the software. Nonprofit organizations with the mission to support and host open source development projects are gratefully accepting such monetary donations. SorceForge.net [9], a popular open source software development web site, is one of the open source organizations that are welcoming financial donations. SPI (Software in the Public Interest, Inc.) [10], is a nonprofit organization which was founded to help organizations develop and distribute open hardware and software [10]. SPI also accepts financial donations.

The main reason for monetary donation according to SourceForge.net [9] is either the usage of any software hosted by SourceForge.net or the interest in the research related to OSS projects on SourceForge.net. One example of a donator that is known to financially support open source projects is the Omidyar Network, which is a mission-based organization established by eBay founder, Pierre and Pam Omidyar [2]. Omidyar Network makes both nonprofit and for-profit investments. Omidyar presents that they support "institutions and structures that foster conditions for individuals to improve the quality of their lives. These conditions include equal access to information, resources and tools, the ability to connect to others with shared interests, and a sense of ownership over outcomes."

A motivation for this type of study can be found in the article *A Framework Analysis of the Open Source Software Development Paradigm by Feller and Fitzgerald* [16] who states that for the increasing commercial interest, use and investments in open source software there is a need to investigate how the financial decisions are made. The question that is interesting to investigate among organizations is "How are the donated money divided and distributed among different member project within one organization hosting a number of projects?"

There are several blogs (web logs) discussing the difficulties of funding open source projects. No similar study, investigating the economical decision processes of nonprofit organization or host supporting open source software development, was found during the literature study. According to this literature search there has not yet been any investigation or study published about this subject, how the financial investments and donations are divided and distributed among different activities and member projects in nonprofit organizations receiving this financial support. There has not been any documented comparison between the different decisions techniques used in different organizations. For donators and investors this might be an important issue

when deciding which nonprofit organization to support financially. The interest of all donators, of either hardware or financial support, would be to know where the donation is used inside the organization.

This qualitative study aims to give the answer to the following research question:

How does different nonprofit organizations, hosting and supporting open source projects, divide donated money among projects and activities?

The purpose of this research is to make a contribution and to present the actual situation of how nonprofit organizations divide and distribute financial donations and investments in open source projects. The lack of previous published information in this subject further motivates the study as well as the importance of the ongoing discussions about OSS and the spreading acceptance to use OSS in more organizational structures. The results have the possibility to affect the ongoing discussions about the research field of open source by presenting how the division and distribution of finances takes place in nonprofit organizations. It is possible that the motivation for donators and investors, supporting open source movement, will increase when the methods and strategies for dividing and distributing financial support can be presented.

Another motivation for this type of study, involving open source development are of current interest today. Open Source Software is one of the most discussed and debated subjects in the Information Technological society today. The Swedish are one of the orgaizations that lately have decided to change from traditional software to Open Source [31]. The decision to use OSS will at least halve the expenses according to CIO Per-Ola Sjösvärd [31]. Some of the new software that will be used in the Swedish police are Linux, JBoss and MySQL [31]. The fact that government organizations are now changing their software into OSS is a reminder of how accepted open source have become during the past years.

1.1 Outline of the report

The following chapter, *Open source*, gives a short introduction of what open source is and presents relevant background including *Open source hosts and nonprofit organizations* and *Open source economy*. The *Methodology* chapter describes how this study was conducted. The *Results* presents the results of the conducted study while the *Discussion* chapter analyzes the results. In the *Conclusion* the most important outcomes of the study are presented and in the *Future work* the recommendations for future studies are suggested.

2 Background

This chapter presents the background to the study and gives an overview of open source and OSS including nonprofit organizations and open source hosts. The economical aspect of the open source is also presented in with a number of examples of different business models used to gain profit from the OSS development. The section *Open source investment flow* presents a visualization of the approximate amount of contributions, either consisting of money or time, from different actors.

2.1 Open source

One basic requirement of an open source project is the availability of the source code to the users [7, 16]. That implies that open source refers to shared software code with open standards, and the collaboration between software developers and users, to build software [1]. In addition this includes the modification of the code by identifying and correcting errors and making improvements to the software [1, 16]. Open source Software allow individual developers, the possibility to contribute to the existing source code and gives users the right to use or modify a program and its code. Open source software can therefore be reproduced and redistributed [16].

OSS is often referred to as free software. This "free" does not refer to the price, but as the freedom of running, modifying and distributing a software program [17]. The founder of the Free Software Foundation (FSF), Richard Stallman, defines free software as the freedom to run, copy, modify, and redistribute the program, for any purpose [17, 18]. The policy of FSF was formed by ideological tendencies, much like the Open Source Initiative (OSI), despite the difference in definition of terms like "free" and "open" [22, 23].

The traditional approach of software development referred to as "closed source", is based on the assumption that software development includes specialized process, best handled by a localized team of skilled developers and a manager [3]. This development results in the form of periodical releases. Open source is on the other hand based on inter-geographical collaboration between developers and users, continuous improvement and frequent releases, and conformance to open standards using open source licenses [3].

Unlike the traditional approach of software development, open source users have free access to the source code. This enables users to modify the code and correct possible errors, which might include porting the software to another hardware or software platform. As a result the users can create add-on software programs, solve additional problems or just use the software as it is [2].

The central element in open source development model is the open and collaborative environment in which software products are created swiftly. The cooperation between both developers and end users in the open source community encourages towards building products with a higher level of quality throughout the product life-cycle [9].

Earlier studies presents that programmers contributes to open source software for social recognition and status in the open source community. The contribution may be recognized by potential employers and lead to future career opportunities [4, 5, 6]. This motivation can be referred to Maslow's hierarchy of needs as the category of

self-actualization [15]. Other possible factors of motivation are proposed to be learning and skill opportunities, together with social and political factors [16]. Prior studies show that open source developers are the most talented and highly motivated software developers [24].

Using OSS in a commercial context has been explored for some time, and unlike traditional software the revenue is not generated from the actual product. Open source business models in its many shapes tries to overcome the limitations gaining direct revenue by the product, often by using a less strict license or releasing the same software under several licenses. This implies that business models and license types are closely related and build to suit one another, as shown in the following subsection.

2.2 Open source hosts and nonprofit organizations

The hosting of open source software projects is a necessary and important foundation for the distribution of the code in an open source development project and among members of a community. An OSS host offers web space for the development of an open software development project.

SourceForge.net is one of the world's largest open source software development web sites that hosts and provide services to more than 100 000 projects [9]. SourceForge.net is owned by OSTG (Open Source Technology Group, Inc.) which is a network of technology sites for IT managers and development professionals.

SPI (Software in the Public Interest, Inc.) is a nonprofit organization which was founded to help organizations develop and distribute open hardware and software [10]. SPI is like OSTG, a non profit organization.

KDE e.V. (Eingetragener Verein, German for registered club or organization) [13] was registered as an association and nonprofit organization under German law 1997, and is know for the development of the K Desktop Environment [11]. In 1997 KDE e. V. was registered as an association under German law. The purpose of the organization is the promotion and distribution of the free desktop software K Desktop Environment (KDE) in particular and to promote the free exchange of knowledge inside the organization [13]. The organization creates and distributes KDE by securing cash, hardware, and other donations and then uses donations to further develop and promote KDE.

The GNOME project [13] provides the OSS called GNOME desktop environment for Linux or UNIX users and the GNOME development platform. The GNOME development platform is a framework for building applications that can be integrated to the GNOME desktop environment. GNOME is free software and part of the GNU project [19].

Besides the hosting of the code, hosting organizations like SourceForge [9] and SPI [10] provides a starting open source project with an array of various tools for inter-group communication, version control and a donation system. Minimizing the interdependency between project members by focusing on a small mutual web based platform, enables members to utilize custom tools and techniques, ensuring their freedom of choice.

As a result of gathering numerous open source projects at a central place, give potential investors a possibility to search and contact open source projects developing software of interest. In addition private contributors can be member of the community and search for projects where they can join the development.

2.3 Open source economy

In OSS the main source of income is generated from what is around the product, rather from the product itself. Red Hat [25] for example, charges for setting up an Apache Web server, developer training or "24-hour technical support for one year" [29].

The financial model of conventional software development is mistakenly built upon the assumption, that software development is a manufacturing industry and not mainly a service one [30]. The high purchase price and low service support fee is not correlated with the maintenance cost which is estimated to be 70-80% of the total software development cost [27, 28]. This is acknowledged in the OSS model, where the purchase price is low and companies can contest on the service to the user, viewing the software as a commodity product where the ingredients are free [21].

Conventional software development companies can gain benefits from embracing open source development and distribution, and by such, enhancing their reputation [29]. According to FSF, the freedom to sell copies is of great importance to this freedom. Selling collections of free software on a media e.g. a CD-ROM will raise funds for free software development. The software that cannot be included in these collections is not free software according to FSF.

The exact degree of freedom included in the distribution of code relies on the license type on which they the software is released. Many of license types exist and are being constructed to support the interest of the producing community, meaning that OSS and the license applied to them are closely associated [1]. Certain restrictions are imposed on OSS licensing; an OSS license; the license must not discriminate against any type of user group, field or endeavor [16]. The license must be applied to all parties where the software is distributed; meaning that the open source distribution cannot be re-licensed by any user [16].

The mechanism which ensures the adherence to the principles of the freedom of software is the General Public License (GPL) and copy lefts, where the latter is copyrights with GPL regulations [16, 19]. Basically the GPL is a restriction, forcing variations of free software to follow the same license, thus providing a guarantee that resulting software contains the same degree of freedom [16, 19].

An open source bounty is a reward for the completion of an open source projects. GNOME [14] has a number of open source bounties available for completion [20]. The different bounty projects are ranging in difficulty and value. The bounties are not directly raising funds for the nonprofit organizations and software projects hosts, but improved software will lead to new releases which can raise more funds for the organization.

2.3.1 Business Models

Different variants of business models are used when creating an open source product, but what they share are the perspective of changing the revenue source from the actual product, to generating value from what is around the product, e.g. services, support and documentation. Almost every business model used in open source development is build with the restrictions from a licence type in mind. The following sections gives short presentations to the most popular business models used in open source development, they are gathered from the article *Commercializing Open Source Software* by *Michel J. Karels* [8].

Distribution

The distribution business model includes the distribution of a collection of open source software on a media in order to facilitate easy distribution and installation.

Most businesses using the *Software Integration business model* (see section *Software Integration)*, in specific when packaging Linux operating systems, uses the *Distribution business* model in addition, where the creators of the distribution offers to ship the downloadable version on a CD or DVD for free. Still the distribution is a relatively low source of income, compared to the income based on services around the distribution [16].

The revenue from this business model is the sales of the media containing public software available for download. This business model was most successful when downloading software was limited by the speed of the connection to internet.

Software Integration

This business model includes more knowledge regarding packaging of the OSS. The packaging of OSS often includes configuration, compilation and installation of "ready to run" binaries to facilitate the installation and use of the software.

With a reasonable download speed these packages challenges another business model called *Distribution* business model. Some companies, who still make a mentionable profit out of this business model, are companies who have achieved to build a strong brand, e.g. Red Hat [25] and Ubuntu [26].

Hardware Integration

This business model includes OSS, often operating systems, pre-installed on hardware. Customers buying the hardware will pay also for the installed software, in this case the OSS. This business model gains revenue by taking market shares from commercial vendors of operating systems and software.

Support

This business model offers support to users by using different pricing depending on the specific needs of the user. This service can contain support for installation, configuration and customization, and code fixes. The revenue is gained from support agreements to organizations, companies and private users.

Publications

This business model is similar to the support business model. By providing support publications, documentation, tutorials and even training services. From these publications and training session revenue can be gained.

Contract Development

This business model is an extension of the support model in which a company provides development services to fill gaps in existing software without being dependent on the OSS. Features and functions developed can be contributed to the OSS as a bounty.

Commercial Value-Added

This business model uses OSS as a base and combines with commercial software to generate profit. The distribution of a collection of open source software combined with commercial software on a media can gain revenue.

Dual License

This business model is a variation of the *Value-Added* model. This model is specialized in packages linked with applications. Packages are distributed for free for non-commercial use, but are also distributed under another license for commercial use. Revenue is gained from the commercial licensed packages.

2.3.2 Open source funding

Economical resources are one of the different types of resources that can be provided to an open source project. The economical funding can be provided by venture capitalist companies but also by private persons, companies and organisations to open source projects hosts and organisations of their interest.

The financial contribution of investors is a more unreliable source of funds for most Open Source projects however it does exist and some Open Source projects have received economical funding in the form of donations. Venture capitalists, private investors and companies all have their reasons to invest in certain Open Source projects.

For companies the natural reason for investing in an Open Source development project is that the company uses the software that is developed in that project and wants to encourage the evolvement of that software. With financial donations it might be easier to control some of the development of certain directions, like the development of certain functionalities, to cover the needs of the company.

2.3.3 Open Source Investment Flow

This chapter contains an overview of the investment flow, from different donators and investors contributing to an open source project. The illustration below (see Figure 1), is based on the personal investigations made during the literature study for this master thesis. The figure presents the approximate size of the donations, money and time, the two main factors that can be invested in an Open Source project, are the two. Time refers to the effort of developers, managers and coordination. The arrow size in the illustration below represents the approximate amount of the contribution that can be received from the two factors, money and time.
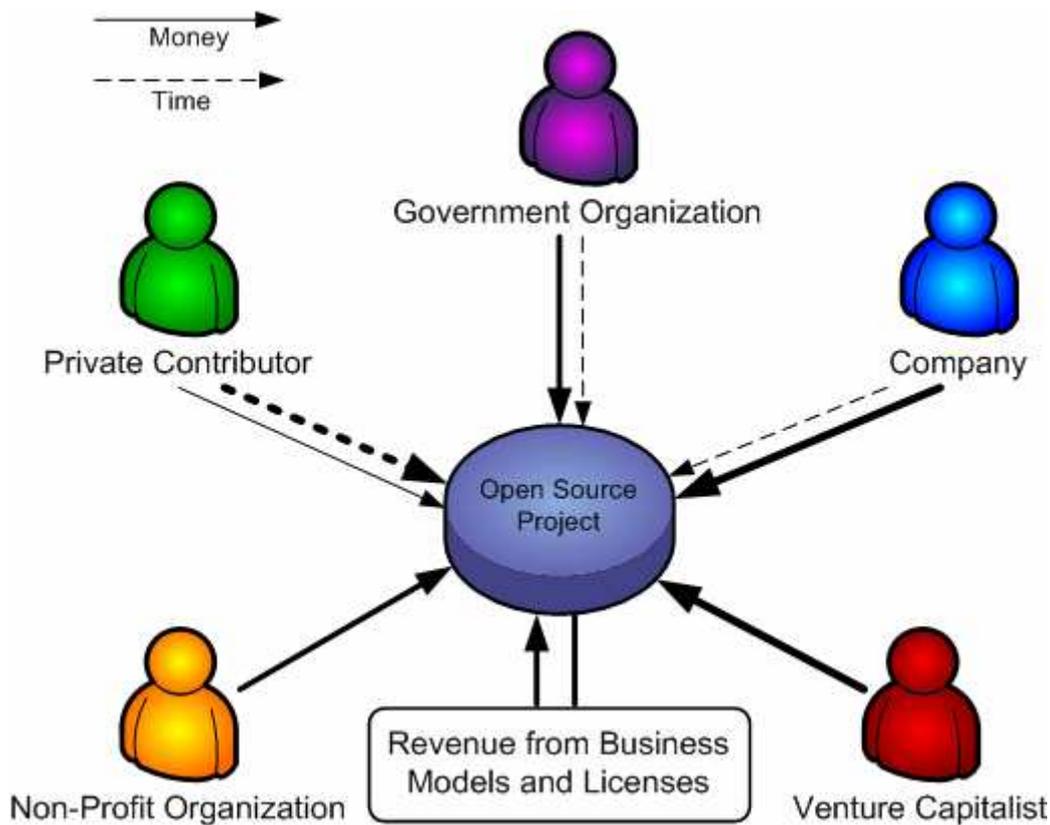
Figure 1 Describes possible sources of contribution to an open source project. The private contributor can both be a private donator, giving money to an Open Source project or a developer contributing with time in a open source development project.

The government organization is a user of open source that is willing to contribute with money (and time) in order to achieve specific functionality beneficial to a need, e.g language specific software support.

Companies can have different interests in open source project, investing both time and money for achieving a long time return of investment. Like government organizations, companies can have the need of specific functionality critical to their business goal.

Venture capitalists have a direct interest in open source projects, due to the possibility to gain attention by the possibility to add a successful open source project to their portfolio. Many Venture capitalists are interested in earning money from the success of the open source project.

Business models and licenses can bring financial revenue to an OSS project. Open source business models and licenses focuses on retrieving money from services around the product, e.g software support and distribution.

Nonprofit organizations do not generate a profit, but may receive donations for the purpose to distribute this financial support to OSS projects.

3   Methodology

This chapter defines the methodology used in this study as well as how the target group was selected and approached. The section *3.1.2 Questions asked* presents the questions asked to all respondents to facilitate possible replication studies and to declare how the results were collected. Section *3.1.3 Motivation for Methodology* states motivations for the chosen methodology.

In order to explain the background to the results as well as to the results itself, the aim of this qualitative research was to collect extensive results from the respondents. The method was decided to consist of semi structured interviews conducted over a geographical distance, but e-mail contact was the actual method used for all the contact and the collection of the results. The reason why the method changed is discussed in chapter *5 Discussion*.

The respondents were sent an e-mail with the questions (see section *3.1.2   Questions asked)*. Respondents in the interviews were nonprofit organizations, known to support and host open source projects. The purpose of the interviews was to understand how different organizations decide how to divide financial support and investments inside the organization, among projects and activities.

The gathered results were analyzed in order to find out if the organizations had predefined decision processes. The results from different respondents were also compared with each other in order to find similarities and differences between the organizations participating in

The aim with the analysis of the results was to find similarities among the different organizations. By comparing the different results both similarities and examples of how different organizations decision processes was analyzed and discussed. Trough this analysis and discussion some conclusion could be made.

3.1.1   Target group and Approach

The target group was chosen to be respondents from the largest nonprofit organizations and hosts of open source software development projects. All the organizations chosen were first studied in order to verify that they were accepting financial support such as donations. This criterion was needed to be fulfilled in order to contribute to the final results, because of the formulation of the research question.

The target group was initially approached with an e-mail to verify the interest of becoming a respondent in a master thesis study investigating the decision process concerning the financial support from donations and investments in their organization. This e-mail also presented a short introduction to the thesis subject including the research question and a motivation declaring the importance of the study. The e-mail was then asked to be forwarded to the most suitable person within the organization, with knowledge of the economical decision processes.

A first reply was sent back which either politely declined the offer to be a respondent of the study or with contact information to the person, best suited to answer the questions, within the organization. Two organizations turned down the offer to be part of the study and five other organizations did not send any reply. Those organizations are not mentioned anywhere in this study.

For those organizations that accepted the invitation, a second e-mail was sent, to the person whose contact information was given in the reply. This e-mail included a short thank you note to the respondent as well as the questions to be answered. All respondents were given the possibility to be anonymous and not presented by name in any parts of the study.

3.1.2 Questions asked

The questions were designed to be open ended without any predefined answer alternatives and also neutral in order not to influence the answers. The formulations of the questions were intended to respondents familiar with the organizations economical decision processes.

The following questions were asked to all respondents willing to participate in the study:

1. Can financial support be donated directly to a specific member project within your organization?

2. Can you receive financial support to the organization (without the donators wish for it to be sent to a specific project)?

> *If yes:*
>
> *The financial support donated without being marked to a specific project. How do you decide how to divide this among different projects and other activities? Can you give me a description of your process?*

What kind of other services and equipment (besides financial support) have your organization been offered from companies, organizations and universities and how you divide these resources among projects?

3.1.3 Motivation for Methodology

The motivation for this study and methodology was that the research question and research area have not yet been studied or compared in a published study, only discussed. The method used were considered to be able to give sufficient results in order to answer the research question of this study, by targeting a number of well known nonprofit organizations and hosts supporting OSS projects.

The decision to have few questions was because of the fact that it would be more likely for the respondents to take time and respond within a shorter period of time. More questions were considered to take more time to answer and therefore require a longer period for response time. The questions although were designed in order to provide sufficient material for analysis to be able the answer the proposed research question.

The study is repeatable and the same research question can be used in a replication study to investigate if the result can vary using different respondents. A replication study can also be used on the same respondents in order to investigate the possible introduction of formal decision processes in the responding organizations.

4 Results

The results presented in this section are collected from both software hosts and nonprofit organizations supporting and hosting a number open source projects. Information collected from websites and other information sources about the organizations are presented separately in order not to confuse the results of the respondents with these results.

The aim of the results is to show how the economical decisions are made within nonprofit organizations and hosts of OSS development today and also give the necessary facts in order to draw conclusions about if there are similarities between the different organizations.

All results are summarized from the answers of each question sent to the respondents for the readability.

4.1.1 SPI

SPI [10] was represented by Josh Berkus. Mr. Berkus is treasurer of SPI.

Josh Berkus declared that SPI have not received significant amounts of donations that have not been marked to a specific project. Berkus explains that if SPI would get a larger financial donation the decision of how to spend the money would probably be "inspirational" in nature. The example below, of how the decision probably would be carried out was given by Josh Berkus;

1) SPI Member gets an idea for something SPI can/should do with the money

2) A proposal is presented to the board.

3) The board votes to either accept or decline the purpose.

Berkus, also stated that "I don't see us engaging in any kind of strategic planning for SPI funds, as an all-volunteer board doesn't really have the time or skills to do so."

Josh Berkus, further explained that "general money", are rarely donated to SPI, and that most of the financial donations are "tagged" to specific member projects. He continued explaining that other donations are more popular than the pure financial donations; "We have received quite a few web servers from various organizations, including Sun and HP. We also get server hosting, DNS and bandwidth from several companies, especially Blackcat Networks. And Open Source Labs of Oregon State University hosts some of our stuff, as they do for other OSS projects."

Berkus also gave the information about another non financial donation SPI gets from the attorney Greg Pomerantz. Josh Berkus explains that Mr. Pomerantz donates 20 hours legal advice a year to SPI.

"I think you'll find that in general major open source projects and nonprofit organizations get almost their entire internet overhead donated in-kind by tech companies. I know for PostgreSQL that we actually have more donated web servers than we can use, and have loaned them out to other OSS projects."

4.1.2 SourceForge.net

SourceForge.net [9] was represented by Jacob Moorman. Mr. Moorman is director of Operations for SourceForge.net.

Moorman explained that "SourceForge.net provides free hosting of OSS projects on SourceForge.net, and a number of these projects are nonprofit organizations." Jacob Moorman further explained that "These projects tend to be smaller groups and to divvy-up the donations of hardware and money either within their project team based on the project hierarchy, or based on specific strategic need." He stated that he had direct evidence (based on discussion with the project lead) that at least one of our (100,000+ hosted) projects has used inbound donations to bolster interest within their project team to focus on continued development.

Moorman also declared that SourceForge.net provides a donation facility within their site to aid projects in receiving donations; these donations are direct to projects.

Jacob Moorman explains that "SorceForge.net does not have any role in selecting the distribution of these donations to specific projects or within project teams." Mr. Moorman believe that a fairly substantial number of donations also occur directly to projects (e.g. outside SourceForge.net's donation facility), particularly in the case of hardware donations, since SourceForge.net system is purely for financial donations.

Further Jacob Moorman believes that the "Amazon.com wish lists" are also is a popular mean for donation; end-users who like the software and want to give back can buy something off of the developer's Amazon wish list.

On SourceForge.net webpage [9] the following information was found.

> By donating money to SourceForge.net the organization ensures that the donation will help to continue to provide a strong service offering to OSS projects and their end-users. A financial contribution results in the possibility for SourceForge.net to provide services to the member projects, and fund the plans to expand the SourceForge.net site and service offering (including the redesign of a number of existing services to be feature rich and user-friendly).

4.1.3 KDE

KDE e.V [13] was represented by Cornelius Schumacher Vice President and Treasurer of KDE e.V [13].

As a representative for KDE e.V, Mr. Schumacher explained that "In general KDE sees itself as one project". He continued with clarifying that "there are some prominent sub projects like KOffice, but in general donations go to the project without any specific subproject target."

Cornelius Schmacher further presented that almost all donations goes to the general KDE project, but if financial donators wanted to support a specific project, they had that possibility as well.

When it came to the division of financial support Mr. Schumacher stated that KDE does not divide the financial support on a project basis, but on an activity basis. "The support therefore is used to cover travel costs of KDE members to conferences,

meeting and trade shows. The donations also support KDE's yearly project meeting aKademy as well as organizing targeted developer meetings, and sponsor hardware, etc" Cornelius Schumacher declared.

Besides the financial support, Mr. Schumacher states that "KDE are provided with bandwidth from some universities and servers from some companies."

4.1.4 FSF

FSF [18] was represented by FSF Sweden Europe and the core team member of Sweden Jonas Öberg.

Mr. Öberg explained that some financial donations to FSF can be targeted to specific projects, but that this is rather rare. He further states that "We try to find financial support to certain projects, for example those that are financed by the European Union. Usually donations are given to the entire organization in order for us to have the maximal freedome to use the money where we consider it to be appropriate, Öberg continues.

Jonas Öberg described that the FSF projects within different areas deliver a budget for each year. On annual meetings it is decided which projects that will be allowed their budget and if some projects will get more or less money or if some projects has to be canceled.

5 Discussion

The results show that the majority of the participating organization supporting and hosting OSS projects seems to lack formal decision processes for the division of financial donations and investments.

FSF [18] seems to have the most formal process for the division of economical support among projects based on the budgets presented for each project. They have a board that will decide which projects that will be allowed the financial support according to their budget.

KDE e.V [13] seems to base their economical decisions on an activity basis and divide the financial support among the different activities instead of member projects. A reason for this might be the fact that KDE e.V considers KDE to be one large project and that the support is used to support this project through the activities that are financed.

SourceForge.net [9] has developed a donation facility which facilitates the possibility for projects hosted by SourceForge.net to receive financial donations. Economical support donated to SourceForge.net is used to ensure the offers of services to the member projects. Since SourceForge.net does not run any other projects than the service for member projects, this seems to be a natural division of the support.

SPI [10] did not have a predefined process for the division of financial support. A reason for the lack of decision process was mentioned as the lack of larger financial donations. SPI seems to get financial donation, but most of those donations are "targeted" to specific member projects of SPI.

The lack of formal processes that the results show can have an explanation in the relatively limited amount of money that is donated and invested in the different open source hosts and nonprofit organizations supporting the development of open source software projects.

The exception is FSF, who seem to have a well structured process are one of the largest OSS organizations. It is possible that FSF receive a much larger amount of financial support than the other organizations in this study and are therefore in need of a well defined process.

The fact that the invested and donated financial support will not be divided to member projects can have other explanations. The possibility to divide the money among member projects of the organization is very complex, especially when it comes to deciding how much of the support the different projects should be allowed. What should this decision be based on? Suggestions can be; success of the project, activity in the project, lines of code written, the use of the software produced, or the possibility to continued development of the software.

Application for funds from the different member projects are another alternative, using a reviewing board. This process is similar to the one used in FSF. The problem with this process is that the board then has to read the applications (or budgets) and decide which projects suggestion that will be accepted for financial support.

The decision process seems to require more work for the nonprofit organization or the hosts and the methods for deciding how to divide the support seems to involve problems, especially problems of how to decide how much support individual projects should receive. The connection by avoiding the division of the financial support you can also avoid the problems with deciding which project that is worth the support can be noticed.

Most of the organizations receive hardware support from companies and universities, so another question is; "If the project has been sponsored with the necessary HW, why does the project need financial sponsoring?"

6 Conclusion

The problems that appears when discussing the division of the financial support among different projects, and the actual lack of division within the organizations, seems to have a connection. The complexity of dividing the financial support among member project seems to be one major cause why this problem is avoided. The amount of financial support that is received by an organization also seems to affect the need for a decision process concerning the division of the financial support. If financial donations were larger the need for a decision process would be larger, and a larger number of organizations would have a formal decision process.

7 Future work

To find the perfect decision process to divide the money within a non profit organization might not be impossible, but in order to come up with a common process that can work for several different organizations more studies are needed in this area.

This study could be designed in order to collect more results to further complete the results with more respondents. Using a larger number of respondents a deeper analysis of the differences between the responding organizations can be made.

Possible future studies are a survey to the donators and investors in order to investigate their decision processes when deciding which organization or OSS project to support financially. Is seems that FSF receive more financial support than SPI. But why are FSF more popular for donators and investors? There are no studies published of the decision process of the donors and investors.

Another possible research question is: Is it possible to receive larger financial donations because of a predefined decision process of how to divide the support among member projects and activities? Considering the donators and investors it might be valuable to be able to track the donated support into the different activities and projects. By investigating the possibility to receive larger financial donations because of the fact that an organization has a predefined process for the division of the support might encourage the nonprofit organizations and OSS hosts to present predefined decision processes.

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