303.1 Major Research Project

Commons Identity: A Conceptual Model for Designing Brand Identity in Free and Open Source Software Projects

Submitted in partial fulfilment of the Bachelor of Arts, Honours – Multimedia Arts at SAE Institute Byron Bay

Supervisor:	Dr. Gert Gast
Student Name:	Nicolas Schudel
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Abstract

Purpose: Open Source is a popular term to describe a development and production method based on the free sharing of information. The computer software industry has embraced Open Source practices increasingly since the nineties. Participation in Free and Open Source Software projects is commonly voluntary and there is a need for specialized knowledge surrounding the production of software. This report focuses on the topic area of designing brand identity.

Objective: To create a conceptual model for designing brand identity in Free and Open Source Software projects based on Wheeler's Brand Identity Process of 2006.

Design: Participatory action research with three cycles and five interviews conducted online.

Participants: Three Free and Open Source Software projects named *Sociopath*, *OpenEats*, and *Jajuk*. Five industry professionals with expertise in branding and Open Source development.

Results: Wheeler's brand identity process is modified towards the Open Source method and incorporates community votes and commons-based peer-review. Outcomes specific to Free and Open Source Software projects are included as exemplary brand identity assets. Furthermore, a preparation phase is added showing the entry into the project's community.

Conclusions: The created model is a practical tool for designing brand identity in Free and Open Source Software projects. Further applications of the model are needed for its evaluation.

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1 Introduction to the Research

1.1 Introduction

Starting in universities back in the sixties (Raymond 2001, p. 4), a new model of production has arose. The core concept of freely sharing innovations with peers, in order to create a product, has become known under the term Open Source [OS] since the late nineties (Raymond 2001, p. 175; Dibona et al. 1999, p. 3).

Originating in the computer software industry, the methodology behind OS has extended its reach to other products such as sports equipment (Shah 1999, p. 339), beverages (Mulhall 2006, [online]), and even medication (Hessel 1999, p. 281). The computer software industry however, remains the main market and driving factor for this new approach. Worldwide corporations, such as *IBM* and *Sun Microsystems,* began to embrace OS as a development model in their product range, sharing the source code of their software to anyone with interest (IBM 2006, [online]; Sun Microsystems 2006, [online]). From the corporation to the hobbyist, people are collaborating publicly to create new products – motivated by a need or desire (Benkler 2002, p. 378; Ye & Kishida 2003, p. 10; Searls 2006, p. 232).

These created products are not faceless. In the cogitations of the creators and users of the product, a brand starts to form. A brand, described in the book "Designing Brand Identity" by Alina Wheeler, is "*the promise, the big idea, and the expectations that reside in each customers mind about a product service or company.*" (Wheeler 2006, p. 4) I will argue repeatedly that the brand is created by the OS community, since they are both the producers and users of the outcome. This approach is inverse to commercial branding. Instead of targeting a specific group of customers and creating a brand for them, the members of a new OS project are participating while the product and brand are formed. Since the motivation of an OS project is based on a need, be it business or pleasure, the creators of an OS product are their own target audience in the initial phase. As I will further argue during the course of this report, they define how their own brand should be.

While the brand is being built inside the minds of each community member, its manifestation has little guidance. Newcomers for instance, cannot know the attributes of the brand, since there is nothing tangible to express it. In order to do so, a brand identity [BI] must be created. According to Wheeler: "*Brand identity is the visual and verbal expression of a brand.*" (Wheeler 2006, p. 6)

During the course of this report, I will assemble and explain a conceptual model on how to design BI inside an OS community.

The relevance of a brand goes in two directions. Towards the outside, a brand creates a link between a product (or service) and a consumer. As Dr. Robert Sevier, Vice President for Research and Marketing for *Stamats Communications*, describes:

> *"If [the customers] don't know you – and don't know what you are all about – you will not be included in their choice set because, in their minds, you are not a brand but a commodity. [...] Instead of Sunkist, a trusted brand able to charge a higher price, you are, as someone once said, just another orange."* (Sevier 2000, p. 1)

Towards the inside, a brand helps boost the members commitment to a product, because a brand helps grasp the concept of working for a cause. Chuck Brymer, CEO of *Interbrand*, describes this concept as follows:

> *"Leading brands understand that an internal culture supportive of the brand strategy has a far better chance of delivering a consistent yet differentiated experience. [...] The true test of a leading brand is whether employees' commitment to the brand is high, as that will help keep customer commitment high. If those who make and sell the brand are not committed to it, why should anyone else be? In other words, those who live the brand will deliver the brand." (*Brymer 2004, p. 4*)*

With this understanding applied to the OS development model, the process of designing BI is targeted towards the inside of an OS project in order to support the culture of the community.

1.2 Research Problem

Software development with the Open Source model [FOSS], has been around since the seventies, yet business arena has not taken much notice of it until the mid nineties (Open Source Initiative [OSI] 2006a, [online]). With the gain in acceptance of FOSS projects like *Linux* and *Firefox*, and the rise of the Internet, the OS model has become wide spread (Fogel 2006). New FOSS projects start up daily (Sourceforge 2006, [online]). However, according to Fogel, 90% to 95% of these start-ups fail (2005, p. 2). While there are many influences and reasons for failing, one of them is that the project cannot gather enough people, be it users or developers, to join into the mix to create a community (Ye & Kishida 2003). Similar to starting a business, the project must be promoted in order to reach a critical mass. In an analysis of the evolution of FOSS communities, Yunwen Ye and Kouichi Kishida of the university of Colorado argue:

> *"A large base of voluntarily contributing members is one of the most important success factors of FOSS."* (Ye & Kishida 2003, p. 3)

To catch new users, the project must present itself in a professional manner. Not only with a need or with content, but also with appealing visuals. Fogel explains this in his book "Producing Open Source Software" as follows:

> *"The corollary [...] is that appearances matter. Programmers, in particular, often don't like to believe this. Their love for substance over form is almost a point of professional pride. It's no accident that so many programmers exhibit an antipathy for marketing and public relations work, nor that professional graphic designers are often horrified at what programmers come up with on their own."* (Fogel 2006, p. 18)

Projects that do not invest time in design tend to look unprofessional, thus demotivating potential community members to involve themselves. Fogel continues:

> *"This is a pity, because there are situations where form is substance, and projects presentation is one of them. For example, the very first thing a visitor learns about a project is what its web site looks like. […] The site's appearance signals whether care was taken in organizing the project's presentation. […] This is the first piece of information your project puts out, and the impression it creates will carry over to the rest of the project by association."* (Fogel 2006, p. 18)

As Fogel points out, there is a need for good design to gain more people into a FOSS project. The next complication arises when the expertise to do so is missing. While many programmers join in FOSS communities, creative professionals [CP] lack. In a skills survey conducted by the University of Maastricht, 64% of the participants said they write code and only 10% contribute creative elements (Ghosh & Glott 2005, p. 18). This difference can be leveled somewhat, since the workload of software engineering is potentially higher.

There may be several different reasons why CP do not participate in a FOSS project. Three of which I will now describe:

Lack of interest CP may not be interested in participating in OS projects, since there is no driving need. Robert Cooksey, in his Master thesis "I Walk the Open Road: Toward an Open Source Philosophy" argues that *"open source is a virtual entity with ontological significance beyond the realm of the software movement that granted its naming"* (2005). Based on his findings, professionals outside the realm of programming should have interest in OS development (ibid.).

Lack of organization The OS community may not communicate to the CP, or the tools for organizing collaboration are missing. These aspects have been covered in research by Tim van den Bosch. As a result of his report, he created a web platform for OS design collaboration named "Commons Design" (2006). The results of his thesis show that further research in motivating CP in OS is needed (van den Bosch 2006).

Lack of knowledge CP may not participate due to the lack of specific knowledge on a topic. This is the key point I wish to address in this report. By analyzing the process of creating BI for FOSS projects, I wish to create a model for CP to follow. This now leads me to my hypothesis.

1.3 Hypothesis

The conceptual Commons Identity Model is a practical tool for designing brand identity in Free and Open Source Software projects.

1.4 Scope of the Research

In order to narrow the focus of the research, the following decisions were made:

1. The research will only target the FOSS industry, because it is both the original and most advanced industry using OS (see section 1.1).
2. The target audience of the model are CP, more specifically graphics designers, with fundamental knowledge in designing BI. A brand consultant or marketer could use the model, but CP are needed for production.
3. The model will solely show the BI process, in order to focus on a single aspect of branding and marketing. Furthermore, the practical involvement in the FOSS project will be limited to producing the core elements of a BI (see section 3.4).

1.5 Key Terminology

1.5.1 Innovation Communities

An innovation community is a socially structured model based upon the open, voluntary, and collaborative efforts of users (Shah 2006, p. 339). These users are commons or corporations that derive benefit from a product or service and collaborate in its production (ibid.). The innovations produced inside communities are shared and discussed freely (Shah 2006, p. 340). Yochai Benkler has given this phenomena the name "Commons-based peer-production" and characterizes it in his article "Coase's Penguin":

> *"Its central characteristic is that groups of individuals successfully collaborate on large-scale projects following a diverse cluster of motivational drives and social signals, rather than either market prices or managerial commands."* (Benkler 2002, p. 375)

There is a core team inside the community that contributes on a regular basis and has an administrative role. A community member may participate by giving feedback to peers, but must not necessarily be involved with the actual production.

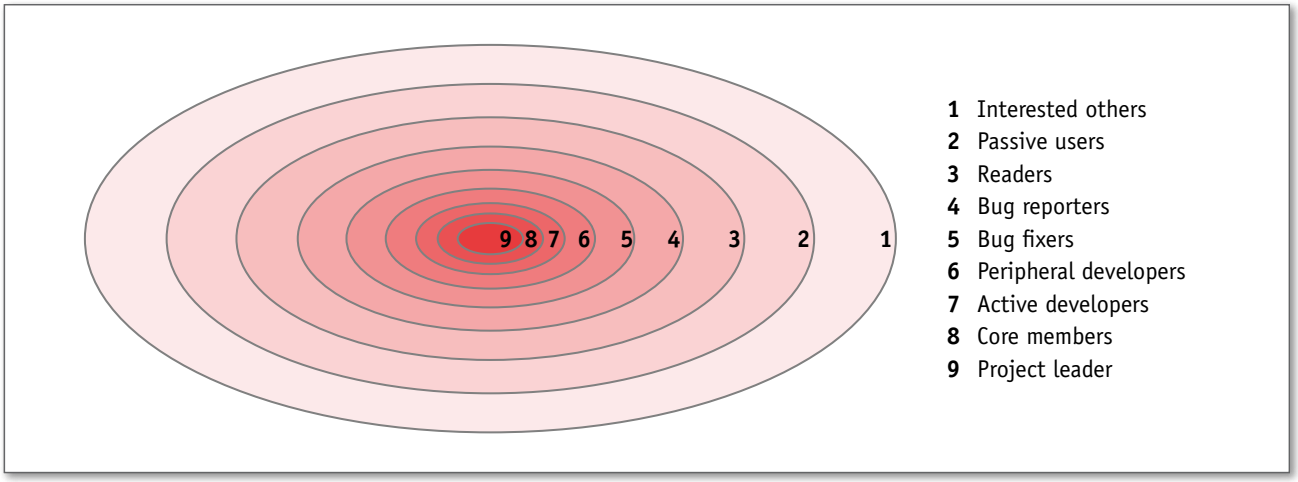

Fig. 1 An overview of a community producing FOSS (Adapted from: Farmer 2006, p. 37)

1.5.2 Open Source

Open Source, as the name says, allows the creation process and its information to be open and modifiable to anyone. A clear definition of the term can be found in a *Wikipedia* entry, a relevant OS project (Sanger 2006, p. 307):

> *"Open source describes practices in production and development that promote access to the end product's sources. [...] The term open source gained popularity with the rise of the Internet and its enabling of diverse production models, communication paths, and interactive communities."* (Wikipedia 2006, [online])

1.5.3 Free and Open Source Software

The "Free/Open Source Research Community" defines this software type as:

> *"Software for which the human-readable source code is made available to the user of the software, who can then modify the code in order to fit the software to the user's needs. The source code is the set of written instructions that define a program in its original form, and when it's made fully accessible programmers can read it, modify it, and redistribute it, thereby improving and adapting the software."* (Free/Open Source Research Community 2004, [online])

The term "Open Source Software" was created in 1998 in order to market the "Free Software" movement (Raymond 2001, p. 175). The movement was given a new name due to the ambiguity of the term "free" (ibid.). With the change in name, the focus of the movement changed as well, separating the terms "free software" and "open source software". The Free Software Foundation describes the distinction as such:

> *"The fundamental difference between the two movements is in their values, their ways of looking at the world. [...] Open source is a development methodology; free software is a social movement."* (GNU 2005, [online])

For the purpose of this report, there is no need to make a distinction between Free Software and Open Source Software. Therefore, the overall term Free and Open Source Software [FOSS], as was defined by the Free/Open Source Research Community (2004), will be used.

Both parties have detailed definitions and copyright licenses that explain the freedom to use, study, copy, modify, and redistribute the software's source code (FSF 2006, [online]; OSI 2006b, [online]).

1.5.4 Brands and Branding

There is no single standard definition of a brand. The original explanation, as described from the *Longleaf Alliance*, gives an insight:

> *"Marks burned onto the hides of live cattle with a red-hot branding iron. Such marks were used help identify ownership of cattle."* (Gjerstad et al. 2002, [online])

The new definition of a brand is far broader than just cattle and differentiates entire offers. According to *Landor*, a leading company in the field:

> *"The sum of all the characteristics, tangible and intangible, that make the offer unique."* (Landor 2006, [online])

Branding, in its essence, is synonymous with brand development and has become a specialized are of expertise (Saldanha 2006, [online]). *Landor* defines branding as such: *"The process by which both a brand and brand identity are developed."* (Landor 2006, [online]) Branding is the process of creating a brand, the same way as advertising is the process of creating an advertisement.

A key factor of a brand, unlike advertising, is that it cannot be created directly. A brand is formed in the minds of each individual person. Alina Wheeler, defines the term brand more precisely:

> *"Brand is the promise, the big idea, and the expectations that reside in each customer's mind about a product, service or company."* (Wheeler 2006, p. 4)

While this promise is formed by the costumer, its essence can be communicated from the outside (Wheeler 2006, p. 5). The communication channels between the costumer and the brand are called "touchpoints", as I will explain in a moment. First I will explain BI.

1.5.5 Brand Identity

BI is the tangible part of a brand and is its visual and verbal expression (Wheeler 2006, p. 6). *Landor* defines BI as:

> *"The outward manifestation of the essence of a corporate brand, product brand, service brand or branded environment."* (Landor 2006, [online])

BI is not only the brand name and mark, but the entire matrix of communications including product design, packaging and even word of mouth (Wheeler 2006, p. 6). It can be divided further into two sub-segments:

Visual Identity — The visual identity are the visual elements of BI. For instance logos, colors, and formats (Landor 2006, [online]).

Verbal Identity — The verbal identity is the spoken part of BI. It is mainly the brand name, but it also includes taglines and slogans (ibid.).

1.5.6 Brand Touchpoints

Touchpoints are the points of interaction between the brand and the prospect (Wheeler 2006, p. 5).

Fig. 2 Brand Touchpoints (Adapted from: Wheeler 2006, p. 5)

1.5.7 Brand Champion

A brand champion is an individual that understands and can articulate the projects core values, vision, and brand essence (Wheeler 2006, p. 160). These individuals are collectively involved in managing the brand and its touchpoints.

1.6 Order of Presentation

Starting in the next chapter, I will talk about the knowledge this report is built upon. This will include a brief overview of both the FOSS engineering process and BI process. I will then discuss the chosen research methods, before talking about applying them in chapter 3. This will include an overview of the research process and a production plan.

In chapter 4, I will describe the participants of this research in order to show the source of my primary data.

Chapter 5 is the main part of my research, where I will apply all the previous information, participate in three FOSS projects and describe my findings. Thereafter, I will evaluate the findings in chapter 6.

In chapter 7, I will conclude this report by summarizing the key findings made during the research.

The practical outcomes of my work in the FOSS projects and a production logbook can be found in the appendix at the end of this report.

2 Background Information

2.1 Key Producers

Top FOSS projects are backed by a clear brand strategy and a strong BI (Mozillazine 2006, [online]; Ubuntu 2006 [online], Fackelmayer et al. 2006 [online]). I will now show three examples surrounding *Linux*.

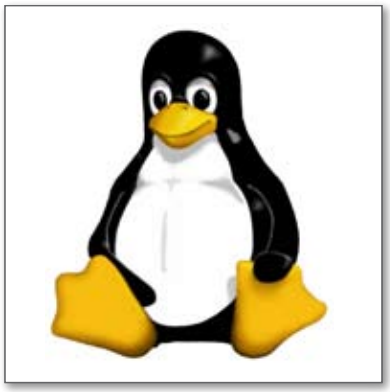

Fig. 3 The *Linux* Mascot *Tux*
(Source: Ewing 1996, [online]).

Fig. 4 The *Red Hat* mark
(Source: Red Hat 2006, [online]).

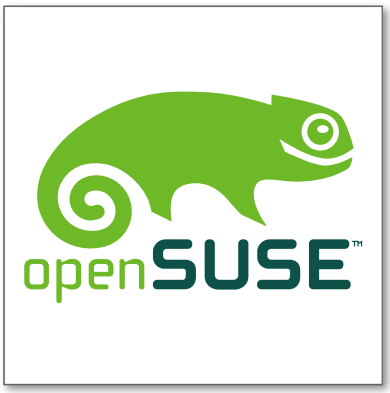

Fig. 5 The *openSUSE* mark
(Source: openSUSE 2006, [online])

The *Linux* brand, visualized as a penguin and verbalized as *Tux*, is seen and heard everywhere. Jennifer Mears, senior writer for the magazine *Network World*, describes the impact of the *Linux* brand as follows:

> *"That computer thing is everywhere. From ashtrays and earrings to coffee mugs and baseball caps, Tux, as the penguin is known, has gained a kind of cult following. [...] Seven-foot incarnations mingle with show-goers at tech industry conferences. [...] And IBM plastered larger than life images of Tux on the sides of buildings in New York during its Peace, Love, Linux campaign in 2001."* (Mears 2003, [online])

Distributions of *Linux*, such as *Red Hat* and *SUSE,* rely heavily on branding. DiBona Ockman and Stone discuss:

> *"Open-source software is a commodity market. In any commodity market, customers value a brand they can trust. Red Hat's strength comes from brand management [...]. The same is true for SUSE, and the two companies own their respective markets mostly because they were first to take brand management seriously."* (DiBona, Ockman & Stone, 1999, p. 5)

With the help of strong BI, as stated, these products are steadily gaining market share in the computer software industry (Gillen & Kantcheva 2006, [online]). Three additional key producers are presented in section 4.2. Next, I will describe some of the knowledge driving FOSS projects.

2.2 Review of Literature

Both the topic areas of software engineering and BI are influential to this report and have detailed process models:

2.2.1 The Software Engineering Process

The process for creating software involves a wide set of activities other than programming. Paul Vixie, President of the *Internet Software Consortium* and head architect of the OS project *Bind,* explains seven steps in the software engineering process (Vixie 1999, p. 91):

Marketing A marketing plan is created that describes the target audience and the need for the product (Vixie 1999, p. 92).

System-Level Design A high level description of the product is created, to see if it would function and to estimate its production time (ibid.).

Detailed Design The software is designed in detail, describing each single module and how they communicate between each other (ibid.).

Implementation This is the act of coding or programming and is the core part of the software engineering process (Vixie 1999, p. 93).

Integration All the separate modules are compiled together and packaged as a system (ibid.).

Field Testing The software gets tested externally by users that were not involved in the previous production phases (ibid.).

Support Defects get assigned to a software engineer for correction (Vixie 1999, p. 94).

The software engineering process was created with commercial software in mind. In his report, Vixie argues that the FOSS engineering process should build on the same basics and later describes each step again in detail, focusing on the differences in an OS project (Vixie 1999, p. 96).

2.2.2 The Brand Identity Process

The BI process was documented by Alina Wheeler in 2003 with the book "Designing Brand Identity". The second edition, with an upgraded process, has been released in mid 2006. Wheeler divides the BI process into five phases (Wheeler 2006, p. 72).

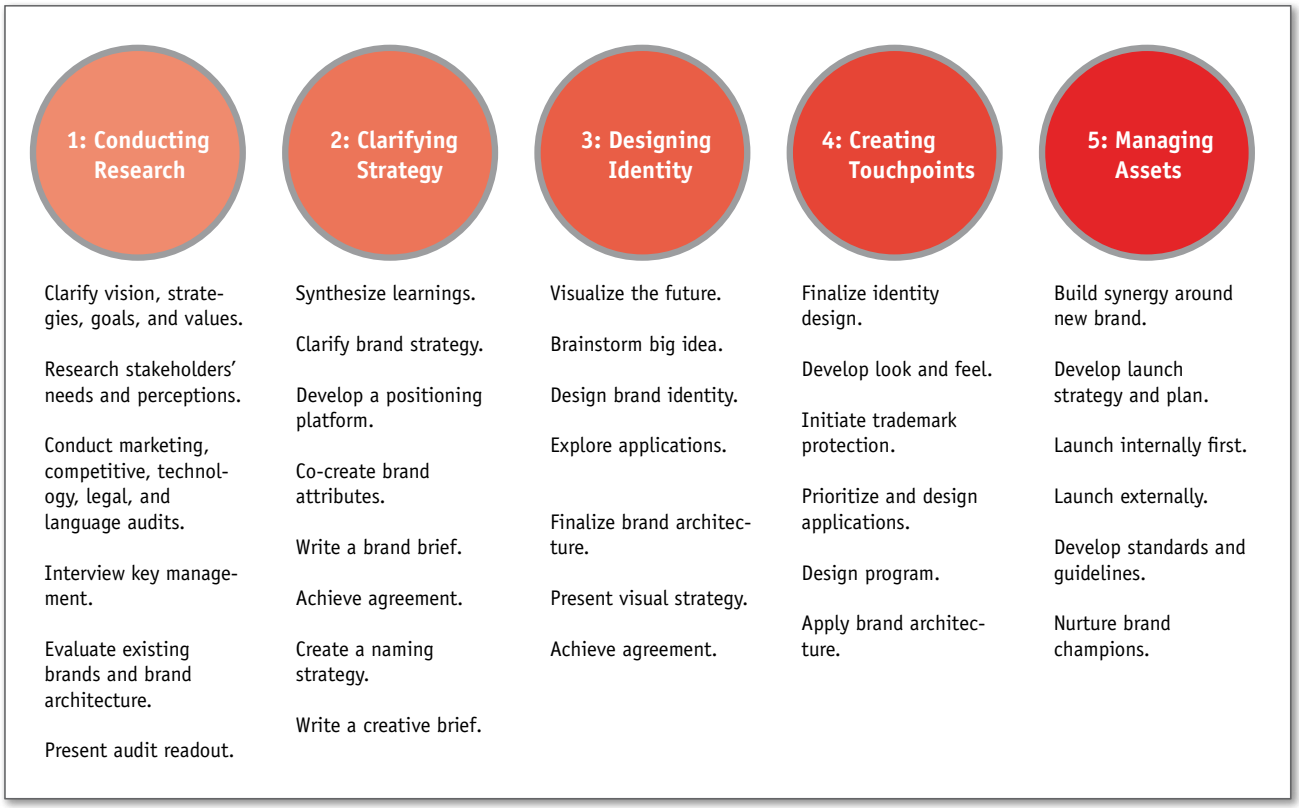

Fig. 6 Overview of the Brand Identity Process (Adapted from: Wheeler 2006, p. 72).

Conducting Research The goal of the first phase is to collect data about the organization. This includes its mission, vision, target markets, corporate culture, competitive advantage, strengths and weaknesses, marketing strategies and challenges for the future (Wheeler 2006, p. 82). Through reading and interviews, understanding is created about the organization (ibid.).

Clarifying Strategy At this stage all the information is processed and the learnings are synthesized. The attributes and the strategy of the brand are clarified and both a brand brief and a creative brief are written (Wheeler 2006, p. 96).

Designing Identity Variants of the BI are produced and presented. This includes the verbal identity, such as the brand name and slogan, and also the visual identity such as the mark (Wheeler 2006, p. 106). An actual version is agreed upon by the participants at the end of this stage (ibid.).

Creating Touchpoints The identity design is finalized and applied to various touchpoints (Wheeler 2006, p. 124). For instance, the business cards are created in alignment with the visual identity.

Managing Assets The brand is launched, first within the organization then outside. The assets of the new identity are then managed in order to assure consistency (Wheeler 2006, p. 152).

Alina Wheeler's process model will be the basis for creating the Commons Identity Model. Details of both FOSS and BI production processes will be highlighted when needed in chapter 5 of this report.

2.3 Research Methodology

The research process will be designed as Action Research [AR]. I will first give insight how the method works, and discuss how I will apply it in chapter three.

Action research is a method in which the researcher joins a target community. Using theoretical tools, the researcher helps the community to solve the problems it is facing (Routio 2005, [online]). Bob Dick of Southern Cross University defines AR as: "*Action Research consists of a family of research methodologies which pursue action and research outcomes at the same time.*" (Dick 2000, [online]). AR is a systematic approach to the definition, evaluation and solution of problems (Blaxter, Hughes & Tight 2001, p. 67). In "Participatory AR", the researcher can be involved directly with solving a problem, instead of taking the position of an observer (ibid.). Dick also describes some characteristics of AR:

> *"Cyclic – similar steps tend to recur, in a similar sequence;*
>
> *Participative – the clients and informants are involved as partners, or at least active participants, in the research process;*
>
> *Qualitative – it deals more often with language than with numbers;*
>
> *Reflective – critical reflection upon the process and outcomes are important parts of each cycle."* (Dick 2000, [online])

The AR process typically includes the steps: plan, act, observe, and reflect (ibid.). The step of creating a model can be included as an addition to the cycle (Routio 2005, [online]).

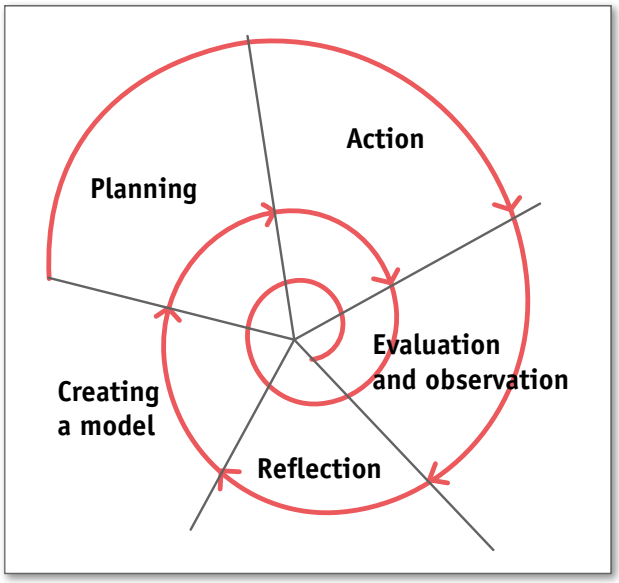

Fig. 7 An Action Research Cycle (Adapted from: Routio 2005, [online])

3 Research Design

3.1 Process Overview

> *"The purpose of a process model is to reduce complexity of understanding by removing unnecessary detail."* (Johnson 2001, p. 4)

The research is designed around the creation of a process model, therefore participatory AR will be used. The AR will consist of three major cycles. As previously shown, each cycle is divided into the parts: plan, act, observe, reflect, and the creation of the model. The first version of the Commons Identity Model will be created at the end of the first cycle, based on the knowledge gathered while participating in the first FOSS project. In the next two cycles, the model will be implemented and optimized.

> *"The purpose of action research is, always and explicitly, to improve practice."* (Griffiths 1998, p. 21)

I will analyze both processes of designing BI (Wheeler 2006) and engineering FOSS (Fogel 2006; Vixie 1999) to find similarities or points where each of the steps would match best. I will then combine both processes together to create the new model. I wish to find out to what extent OS methods can be applied to the BI process.

In each project I seek to initialize the BI process and continue it until key elements of the visual and verbal identity are complete. Upon completing these elements, the slower process of building the brand and creating touchpoints will take place in the OS community. My involvement will then be that of a brand champion.

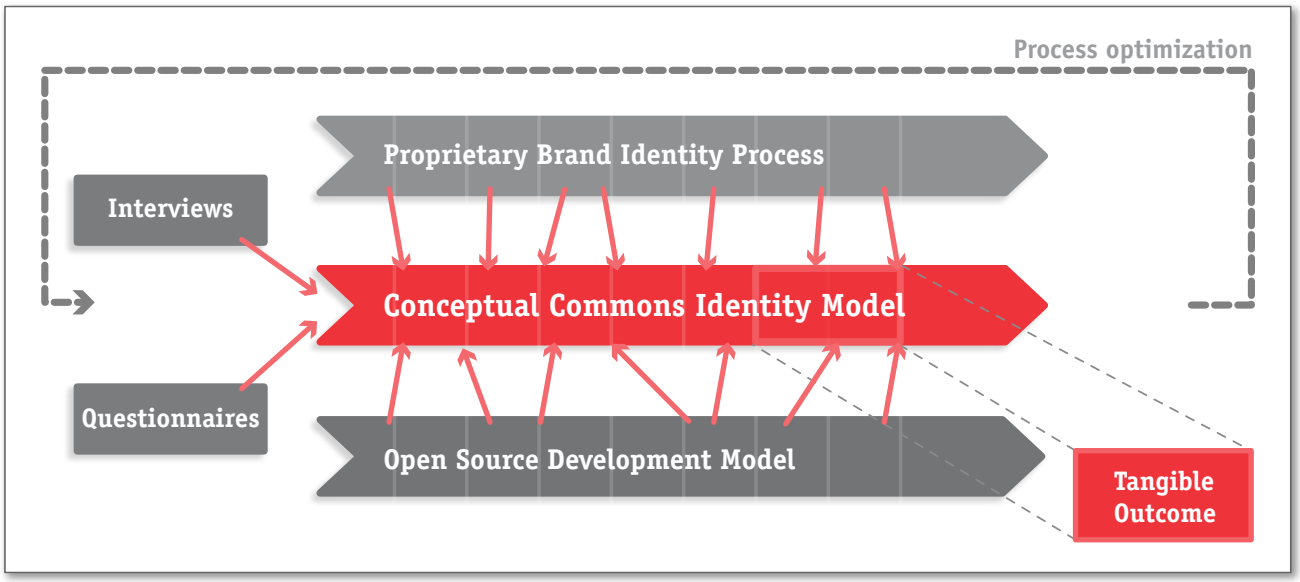

Fig. 8 Overview of the research design

My reasons for choosing AR, based on a criteria list provided by Denscombe (2003), are:

- The research addresses the practical problem of designing BI;
- I can actively participate in all stages of the process;
- A partnership will be negotiated between myself and the FOSS project;
- The research is a continuous cycle of development;
- The findings will feed back directly into practice;
- The research is limited in order to be combined with the practical workload.

A different approach that has been taken into consideration is designing the research as a case study for one single project and including more practical work. I chose to limit the scope of my work by distributing it to peers instead, thereby allowing the participation in multiple projects.

Insider knowledge of the project has the advantage that the process can be configured in greater detail. However, personal bias towards the design of the new model must be taken into consideration. A biased outcome is partially avoided by discussing the model with two industry professionals chosen in chapter 4.

3.2 Ethical Considerations

Before commencing the practical work in the FOSS project, I informed each project manager [PM] that I am doing research in the topic area. The FOSS project participants have not been informed individually of my work. However, the information that I am in my studies has been made clear in my user profile or my first messages in the respective communication channels. The participants in each FOSS project will be kept anonymous, and instead will be titled according to their role in the project. In addition, most FOSS project members participate using a nick-name, providing an additional layer of privacy. Since my work for each project has a practical outcome, the FOSS project members profit indirectly from my research.

Professionals on the subject have been asked via e-mail for their participation in answering questions. They were also given the option to receive a copy of the report in return for their efforts. None of the professionals explicitly required to stay anonymous.

3.3 Data Gathering Methods

All research is desk work. However, the data gathering methods have the characteristics of field work, since I am collaborating within online communities. According to the Market Research Association [MRS], field work is "*the live collection of primary data from external sources by means of surveys, observation and experiment*" (MRS 2006, [online]). For this research, observation and interviews are the main tools for collecting primary data. The research will be qualitative, as most of the primary data is communi-

cated by the OS community members and industry professionals. Secondary information has been obtained from personally owned books and on the Web throughout the research process.

3.4 Practical Work

The participation in each of the three FOSS projects will generate the following practical outcomes.

Visual Identity — The visual identity will consist mainly of the project mark and logotype. In addition colors and fonts will be defined as a basis for further touchpoints.

Verbal Identity — The verbal identity, for the most part, is the project title. To support it, both a descriptor and a tagline will be created.

Touchpoints — Initial touchpoints will be created for the project with the involvement of other community members. Such touchpoints are for instance splashscreens or promotional graphics.

BI Guidelines — A document describing the application of BI will be submitted to the FOSS project. The rules will be concise in order to keep the learning time at a minimum for community members.

3.5 Validation of the Process Outcome

In order to validate the outcome of the Commons Identity Model, a distinction must be made for whom the validation is for. The effectiveness of BI can be validated either inside or outside an organization. Wheeler's BI Process, the basis for my model, is validated towards the inside in the form of agreements, as seen in figure six. I argued in chapter 1 that BI is designed for the FOSS community, because they are the creators of the brand. As I will show later in this report, there are several instances in the Commons Identity Model that validate the BI within the OS community using peer review. This is becoming a proven method of validation. Richard Smith, having done extensive research on the method, concluded: *"Peer review will become increasingly a scientific discourse rather than a summary judgment."* (Smith 1999, [online])

BI is the tangible expression of a brand (Wheeler 2006, p. 6). Therefore, BI cannot be validated by people that do not have a perception of the brand, as could be the case outside an organization. Their opinion, therefore, would be limited to the visual and verbal appeal of the assets. For instance if they think a logo is well designed. Wheeler addresses the outside measurement of success in the final stages of her BI process:

> *"Decision makers frequently ask, 'Why should we make this investment? Can you prove to me that it has a return?' It's difficult to isolate the impact of a new logo [...] Those who don't expect instant results, and think in the cumulative long term, understand the value of incremental change and focus."* (Wheeler 2006, p. 158)

I agree to Wheeler's argument, that a process for measuring the impact of a design is hard to isolate. I won't state that this measurement is impossible however and will leave this as an open weakness to both Wheeler's process and my new model. I cannot fully address this weakness during this research for the following reasons:

- A FOSS project would need to be monitored over an extended period of time in order to gather sufficient data;
- Different research methods exist on how to measure the effectiveness and equity of a brand, of which the BI is part (Romeo & Nyhan 2002; Hislop 2001; Dynamic Logic 2000). A new hypothesis and research design would therefore be required to apply the existing methodology to a FOSS project;
- There must be reason to believe that a validated BI could become "invalid" outside the boundaries of its community.

I will recommend further research in measuring the effectiveness of my model outside its community in chapter 7.

4 Research Participants

The research participants can be divided into three groups apart from myself. The main participants are the members of the 3 FOSS projects named *Sociopath*, *OpenEats,* and *Jajuk*. The second group consists of 3 professionals on the topic of FOSS branding and marketing. In the third group are two commercial branding and design professionals. In this chapter, I will describe these groups in detail. First, let me explain how I chose the projects in the first group.

4.1 FOSS Projects

Since the processes of software engineering and designing BI are not directly dependant on each other, the work could be commenced at any stage. For the purpose of this research, I investigated FOSS projects that had already advanced from the start-up phase. Two reasons are that there are more than just the founders in the project and that a brand is forming inside the community from which to create the identity. There is one downside to starting in a later phase. As I will describe in detail in chapter five, the crucial decision has already been made about the brand name while founding the project (Fogel 2006, p. 21). I contacted multiple project managers via the *SourceForge* web site. As of May 2006, a home to over 125 thousand FOSS projects (SourceForge 2006, [online]). On the site, there is a section where FOSS projects can request creative expertise.

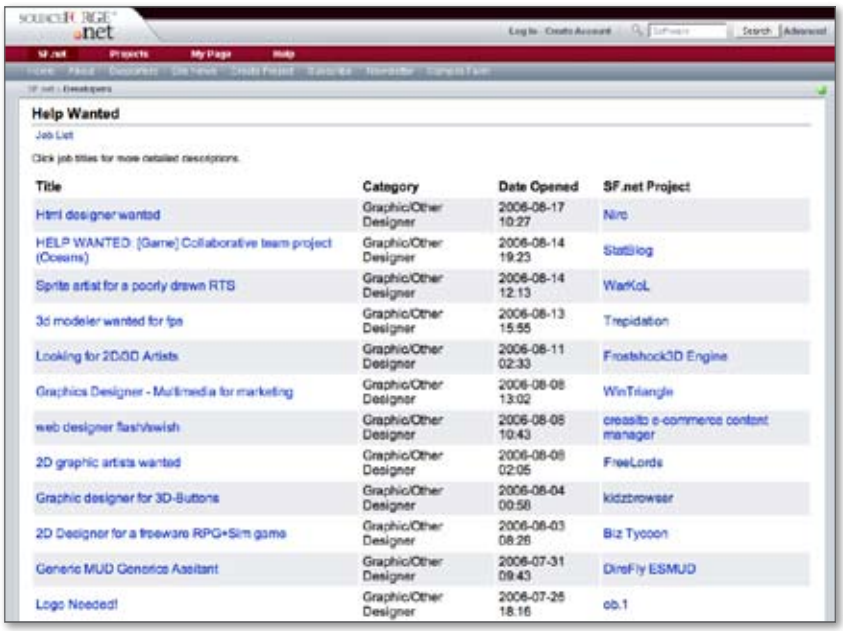

Fig. 9 A screen-shot taken of the SourceForge 'Help Wanted' section (2006)

Applying my criteria, I contacted six FOSS projects via SourceForge. All the projects responded and an agreement was reached with the following three.

Sociopath — A project in the planning phase for creating an online life simulation game for multiple players. The project is managed by Dale Greer, and had five active developers in May 2006.

OpenEats A project in the alpha stage of creating web based software with which people can share cooking recipes and plan meals. The PM is Quenten Griffith. He had a team of four active developers in June 2006.

Jajuk A project shortly after its first major release of a feature rich music jukebox application. Administered by Bertrand Florat, the project counted seven active developers and the software had been downloaded over 68'000 times by July 2006.

All three projects are highly active and have a growing community around the core team. The projects have multiple communication channels, such as mailing lists and forums, with which the community members frequently collaborate.

4.2 Industry Professionals

I have investigated other FOSS projects online, and have interviewed 3 professionals involved in creating strong brand identities for their projects. They are:

- John Baer, PM in the *Ubuntu* branding team. *Ubuntu* is an operating system based on *Linux* (Ubuntu 2006, [online]).
- Steven Garrity, leader of the *Firefox* visual identity team. *Firefox* is a web browser that is maintained by the Mozilla project (Mozillazine 2004, [online]).
- Rasmus Skjoldan, leader of the *TYPO3* design team. *TYPO3* is a web based enterprise content management framework and the software was re-branded in late 2005 (Fackelmayer et al. 2005, [online]).

Fig. 10 The *Ubuntu* mark
(source: Ubuntu 2006 [online])

Fig. 11 The *Mozilla Firefox* mark
(source: Mozilla 2006 [online])

Fig. 12 The *TYPO3* mark
(source: Typo3 2006 [online])

Additionally, I have contacted two commercial branding and design specialists to comment on the usability of my model. They are:

- Nicky Glover, Creative Digital Producer of *Glove Digital* in Australia (2006, [online]).
- Pascal Schrafl, Creative Director of *JetNet Services* in Switzerland (2006, [online]).

5 Action Research Process

I will now discuss my participation in each of the three chosen FOSS projects, going through the cycles of AR as I advance. A logbook of the practical work and correspondence with the projects are included in the appendix of this report.

5.1 Planning the First Cycle

Finding a FOSS project was a simple task. There was a demand for graphics artists on SourceForge on the 24th of May, with 15 requests in the "Help Wanted" section of the site, and six of those specifically for work relating to designing BI. These are projects directly aware of the need for branding. Compared to the 127'453 projects registered on the site, merely 0.004% of these projects were openly requesting knowledge in the specific topic area on that day (SourceForge 2006, [online]).

I will apply Alina Wheeler's BI Process as closely as possible during the first cycle. This is an approach similar to Vixie's, when he applied the software engineering process to FOSS (1999, p. 91). Wheeler's process allows the separation of management and production. Due to the reduced amount of participants in the FOSS projects, I will combine both of the jobs of managing and producing. This combination is common with small scale projects in the commercial industry, and Wheeler herself is a designer (Wheeler 2006, p. 280). The process could be managed by somebody with a marketing or business background, however the practical element requires skill in graphics design.

5.2 Action Phase in the First Cycle

In this phase, I will describe my actions for the first project. Please note that the following text describes the BI process and not the AR process.

I answered two of the requests posted on SourceForge, using the sites contact form. Both project managers requested some of my previous work before allowing me to participate. Examples were sent via e-mail. I joined the *Sociopath* project because it fit my criteria best.

Before starting the BI process, I registered as a participant in the community. *Sociopath* uses a forum as the main tool for communication, but also has a mailing list for developers. I created user accounts for each and introduced myself in the forums.

5.2.1 Phase One

Using the forums as the main source of information, I started gathering data on the project. Sociopath was still in the concept phase and had guidelines posted on the project web site. In order to retrieve additional information about the brand, I asked questions on the forums in a new topic titled

"Visual Identity". The amount of feedback was good and I had sufficient information to move to the next phase of the BI process.

5.2.2 Phase Two

The brand strategy was clarified together with the project participants. Community members gave inputs on the graphical style of the visuals. The perception of the brand was in unison, and, therefore, no vote was required to move on.

5.2.3 Phase Three

I started producing the mark and the logotype as the core elements of the visual identity (Wheeler 2006, p. 120). Based on the different inputs of the visuals I was previously given, I designed two different variants. These visuals were submitted back to the group via the forums for discussion.

Opinions and choices varied, so a vote was needed in order to move on. Since I submitted two variants, a binary vote was possible (e.g. choosing one or the other mark). An agreement was reached, however the community was not satisfied with the logotype.

In a second round, two new variants of the logotype were created. Again these visuals were submitted and voted upon, resulting in the chosen logo for the project.

After finishing the logo, the creation of the verbal identity was commenced. The main element, the brand name had already been created at the start of the project. A descriptor was also made by the PM. In a new forum topic, the verbal identity was addressed and a tagline was suggested. While the first suggestion was accepted by the PM, two community members objected. Based on their inputs, I created a new tagline that was accepted by all members.

5.2.4 Phase Four

With both the visual and verbal identity in place, additional brand touchpoints could be made. For the *Sociopath* project, this included the creation of promotional graphics for their web site. A photographer outside the community was asked to participate at this stage, in order to create the basis for the graphics. A separate graphics designer was also contacted in order to create the in-game graphics. The brand identity was the basis for both these touchpoints.

5.2.5 Phase Five

I created BI guidelines to summarize the work I had done for the project.

Guidelines and documentation are common tools in FOSS projects (Fogel 2006, p. 28), due to the decentralized working environment. Developer guidelines give a brief indication on how development is done inside the project (ibid.).

I created the file as an HTML document, so that it can be added to the project web site. In addition to the guidelines I saved the final logo in the SVG format. This format should be readable by most project participants, since it is based on the structure of XML and can be viewed with modern web browsers.

5.3 Observations in the First Cycle

- I treated the creation of the visual and verbal identity as two separate steps. I will run both discussions in parallel in the next cycle.
- Releasing drafts of the logos at an early stage helped boost the influence of the project members. This is a method, used originally by Linus Torvalds, the creator and lead programmer of *Linux*, from which Eric Raymond defines the following rule: "*Release early. Release often. And listen to your customers.*" (Raymond 2001, p. 29)
- Contacting individual members to vote via e-mail was too time-consuming. Therefore, other communication channels will be tested.
- Forcing project members to chose from a limited set of options, speeds up the decision making process in debates.
- I did not take part in the votes and did not state my opinions, since my influence as the creator of the BI is already great enough. I, therefore, kept to managing the discussions.

5.4 Reflecting upon the First Cycle

5.4.1 Process Involvement

There was high involvement by project members in the creative process. Collaboration is a key attribute in OS projects and peer review is common practice in FOSS development (Fogel 2006, p. 164). This is in contrast to the proprietary method, where a client is not usually expected to have design specific opinions.

When creating the tagline, there was the same amount of involvement from the community as creating the logo. I assume that programmers are well versed in writing and that they are more comfortable discussing verbal issues over visual ones.

5.4.2 Management of the Discussion

The BI creator takes the role of managing the discussion in the forum. The debate about the BI would sometimes come off track and it was my task to politely give a reminder about the goal of the discussion.

I had to make sure that the key votes were communicated to all project members. The downside of the forum as a communication channel is that members do not monitor all the topics frequently. A mailing list is, therefore, more sufficient when conducting votes, since the message is communicated to all members at once.

5.5 Creating a Model of the First Cycle

I will now present a visual model of the BI process applied to FOSS production. I used the 5 phases defined in the ADDIE model: Analyze, Design, Develop, Implement, and Evaluate (Strickland 2006, [online]). The outcome of each phase is evaluated by the community before proceeding. The final stage of the model evaluates the consistent application of the BI inside the project with the help of brand champions.

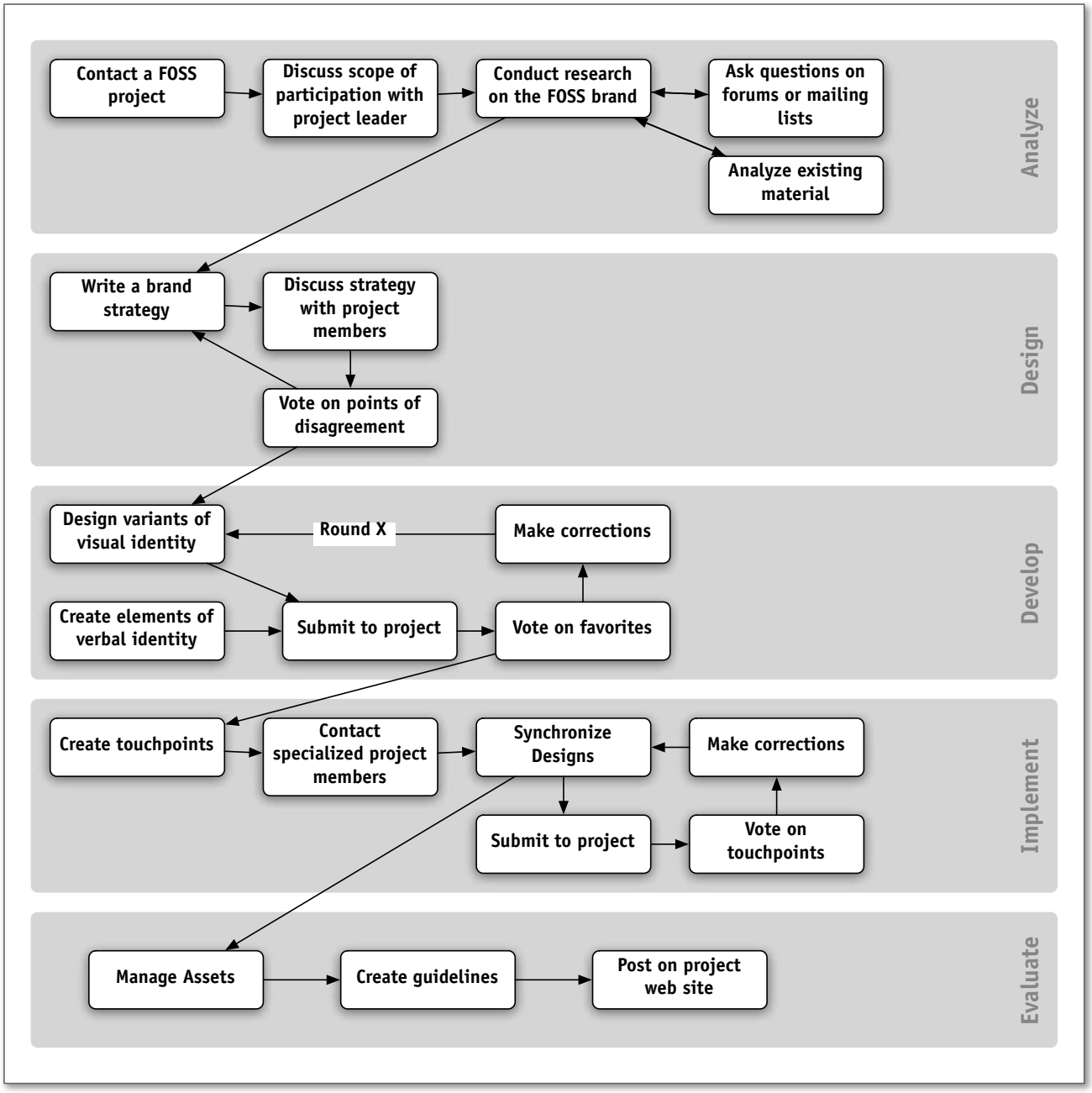

Fig. 13 A model for designing FOSS BI in cycle one.

5.6 Planning the Second Cycle

I selected one project from the SourceForge "Help Wanted" section that fit my criteria. In my first contact with *OpenEats*, I briefly stated who I am and what I could contribute. In the second mail, I sent some samples of my work. My offer was accepted and I was welcomed into the project. A user-profile was created for the project mailing lists and the forum, and I introduced myself into the latter. *OpenEats* was further advanced than the previous one, with some of its code already available for download and a project web site containing developer guidelines and their mission statement.

5.7 Action Phase in the Second Cycle

5.7.1 Phase One

The web site contained good documentation and collecting brand attributes was less time consuming than in the *Sociopath* project. Next, I created a new topic in the forum called "Visual Identity" and started asking questions on brand perception. For example I asked: "If the project were a person, what would its character be?"

5.7.2 Phase Two

The characteristics of the brand were described similar in each answer and, therefore, no vote was needed to proceed.

5.7.3 Phase Three

Based on my findings in the first cycle, I set out to create the visual and verbal identity at the same time. This resulted in two taglines and three visuals. I posted them in the forum and asked the members to chose their favorite. A tagline was chosen and there was no need for a correction. I went through two further rounds of correcting, submitting and discussing before the logo was approved.

5.7.4 Phase Four

The project needed photos and elements for the user interface of the software. I recommended the setting for the photos and the work was passed on to one of the project participants. I created buttons for the user interface myself and started a new topic in the forums for it.

5.7.5 Phase Five

The documentation of my work was submitted to the project as BI guide-

lines via e-mail. The document and the logo were posted on the project web site by the site administrator.

5.8 Observations in the Second Cycle

- Defining the brand as a person in the question in phase one helped prevent answers with software specific attributes (e.g. user-friendly) compared to the previous cycle.
- To limit the amount of e-mail in the planning phase, I could submit a link to a web page containing examples of my work in the first contact e-mail instead of the second. The PM can view the work up front before giving an answer.
- The first thread in the forum was called "Visual Identity". Instead, the name "Brand Strategy" will be given in the next cycle to clearly mark phase two of the model. The visual identity phase would then build on the outcomes from the brand strategy discussion.
- Links to the forum discussions could be inserted into the BI guidelines, since the document is created in HTML. This would reduce the time it takes to find the discussions in the forum and would also prove that the guidelines were openly debated by the community.

5.9 Reflecting upon the Second Cycle

5.9.1 Decision Making

While several developers were actively coding, they did not participate in creating the BI. Instead, I had frequent communication with the PM. This structure of decision making is described by Fogel as a "benevolent dictatorship" and is defined as such: *"Final decision-making authority rests with one person, who by virtue of personality and experience is expected to use it wisely."* (Fogel 2006, p. 89) The PM had such a role and made the final decision on the logo. The FOSS project of the previous cycle used a model Fogel describes as "consensus-based democracy" (Fogel 2006, p. 91). In this method, the decisions are made based on the majority of the votes (ibid.). Since both methods make use of votes, they effect the outcome but not the structure of the model.

5.9.2 Voting Population

For the vote upon the mark, the PM presented the variants to potential users outside the community. This is not a correct method for choosing a mark, because of the probability that the voters do not know the brand. The purpose of the vote is to find out which mark best fits the perception of the brand and the only people that already have one are the participants within the community. On the other hand, the marks should appeal to the outside audience in order to attract them to join the project. The vote inside the community would also cover this aspect of visual appeal. During Wheeler's BI process, the designs are presented to the organization (Wheeler 2006, p. 122) – the equivalent to the community.

5.9.3 Naming the Project

The brand name was already created by the PM when the project was founded. Fogel describes part of the verbal identity process:

> *"Choose a good name. Put yourself in the shoes of someone who's just heard about your project [...]. The first thing they'll encounter is the projects name. [...] A bad name can slow down adoption of the project, either because people don't take it seriously, or because they simply have trouble remembering it."* (Fogel 2006, p. 21)

I agree with Fogel's statement, the name is very important for the projects adoption. Yet, I oppose the order in which it is created. He writes about choosing the name as one of the first things to do when creating a project (ibid.). I have two arguments against this. First, the name is decided upon by few people only. Second, there is not yet enough information about the brand to give it a fitting name. Due to its importance, it should be created in an open source manner – the community should collectively brainstorm and vote upon the brand name. Opposing this argument would be the fact that a project must have a name in order to start up. I would therefore suggest the same approach as in the development of proprietary software. This problem is avoided by using a code name for a software product before it becomes marketable. For instance, *Microsoft* titled their new version of *Windows* "Longhorn" before officially naming it "Vista" (Microsoft 2005, [online]). Such an approach would change the way FOSS projects are founded, but could potentially result in better brand names.

5.9.4 Documenting the Work

As the term Open Source suggests, it is crucial that all work is documented. This allows newcomers to re-use the previous knowledge. For the work of designing BI, I found that the guidelines are also a documentation of the outcomes. The exact process can be followed in detail inside the forums or the archives of the mailing lists if needed.

5.10 Creating a Model of the Second Cycle

As a result of my arguments in section 5.8, I added the creation of a brand name and logo in phase three of the process as an exemplary outcome. Additionally, the model shows the involvement of the community and the influences of peer review.

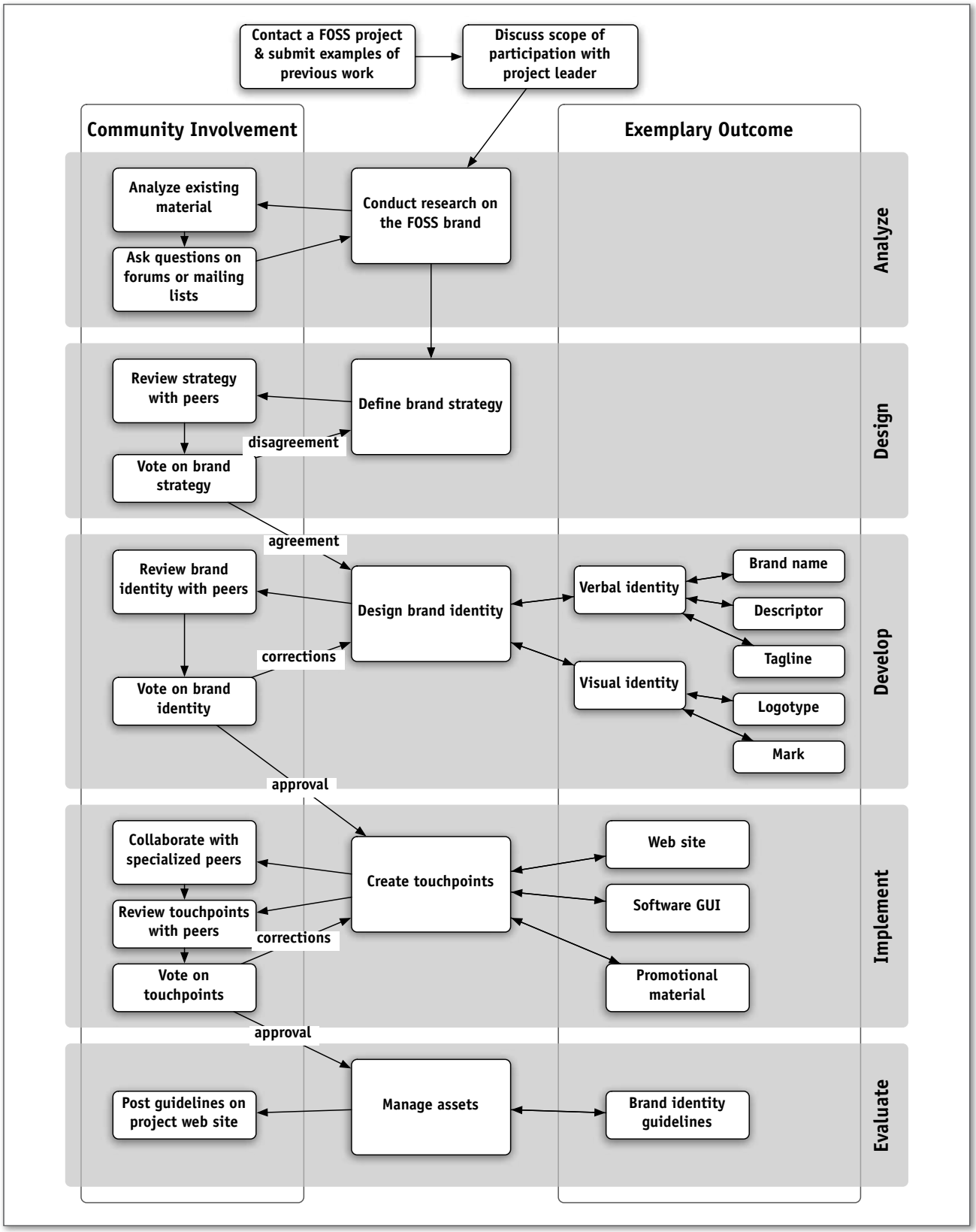

Fig. 14 A model for designing FOSS BI in cycle two.

5.11 Planning the Third Cycle

Contacting FOSS projects has proven itself a simple task using the SourceForge "Help Wanted" section in the previous two cycles. In this one, I tested a different approach. Still using SourceForge, I viewed multiple project web sites and audited their BI. I contacted three projects with a high activity rate (a percentage showing the projects activity over time) and a weak BI. One project accepted, but stated they would not want to change the key visuals. The second project declined my involvement all together, stating that the community had already familiarized itself with the existing design. The third project, named *Jajuk*, welcomed my offer. After agreeing upon the scope of my work with the PM, I subscribed to the projects communication channels.

5.12 Action Phase of the Third Cycle

5.12.1 Phase One

The project is further advanced than the previous two. As part of the brand analysis, I was able to download the software and test it. The web site included a fair amount of information on the project. Community members use mailing lists as the main form of communication. To retrieve more information about the brand, I first introduced myself in a mail and then started asking questions. For example, I asked to describe the identity of the *Jajuk* software.

5.12.2 Phase Two

Attributes of the BI were defined mainly by the opinions of the PM. No vote was needed, since the few opinions were similar.

5.12.3 Phase Three

Three different variants of the visual identity were designed and submitted on the mailing list and I received much feedback. Thereafter, a voting process was initiated by the PM, allowing participants to distribute 100 points between the three options (e.g. A=20 B=50 C=30). At the end of the vote, one week later, the version with the highest cumulative score had won. In a second round, I submitted two new variants based on the chosen style, thus allowing a final binary vote.

Concurrently, the verbal identity was discussed. I had found two existing taglines during phase one, and recommended dropping one of them. No new ideas were needed on my behalf, since the project already had a fitting verbal identity in place.

5.12.4 Phase Four

In addition to the mark, the project needed a splash screen and icon set for the software. Two variants of the splash screen were designed and voted upon. The icon set was derived from the mark and posted on the mailing list for testing on different operating systems.

5.12.5 Phase Five

All the production data and the BI guidelines were submitted to the PM. The guidelines were made in the same way as the previous cycles, with the enhancement of URLs linking to the discussions in the project's mailing list archive.

5.13 Observations in the Third Cycle

- Showing early results stimulated collaboration on the mailing list, thus proving the "release early, release often" theory described in the second cycle.
- In comparison to the previous two cycles, I was able to retrieve the needed information regardless of the communication channel (e.g. mailing list or forum).
- In this cycle I received access to the projects "Concurrent Versions System" [CVS] in order to make changes to the web site and post the guidelines. As a non-programmer, I found setting up CVS access too time consuming compared to its benefits and would prefer an easier tool for the task. A further communication channel, the Wiki, would make it easier for me to publish and maintain the BI guidelines. The three projects I participated in did not have this form of communication.

5.14 Reflecting upon the Third Cycle

5.14.1 Early Results to Enhance Participation

The communities participation in the second phase was weak. Only the PM had a clear opinion on the brand attributes. Once the first visuals were submitted in the third phase however, many community members started to get involved in the process.

5.14.2 Peer Review

In FOSS projects, the quality of the software's code is enhanced through peer review (Hillesley 2006, p. 31). For this to work correctly however, the peers must have similar expertise. As the single designer in the project, I did not benefit from direct reviews. Instead I used design variants to retrieve opinions by peers and interpreted them. The process of peer review, therefore, remains the same in the model, but the inputs (amount of vari-

ants) and outputs (quality of reviews) differ depending on the expertise inside the project.

5.14.3 Open Data

When committing production data to the project, file formats should be chosen that allow other community members to work with them. In this project, I had the problem that the preferred font for the logotype was not freely available. To avoid that other project members would need to purchase a copyrighted font before using my work, I had to chose a similar version that is accessible to the community.

My files were produced with proprietary software, because I am not yet accustomed to the OS counterparts. I, therefore, needed to export the final versions into an open format. I chose SVG for vector graphics and PNG for images.

5.14.4 Managing Assets

Apart from posting guidelines on the projects web site, specific project members should take the role of becoming brand champions in order to manage the consistent application of the BI. If a new design, for instance, does not match the BI, the producer should be made aware of the conventions. This role is primarily executed by the designer of the BI or the PM. If the project has a marketing team, they could also participate in this task.

5.15 Creating a Model of the Third Cycle

During the completion of the third cycle, I presented the model to the two branding professionals Nicky Glover and Pascal Schrafl to test its usability. They both found that they would be able to apply the model (Glover 2006; Schrafl 2006). To Schrafl, the voting process and discussion platform were unclear (2006). I did not include these two points in the model, since they are project specific. These points are usually addressed in the project guidelines. I, therefore, added learning the guidelines in the preparation phase of the model. An overview of the finished model will be presented again in full size in chapter 7.

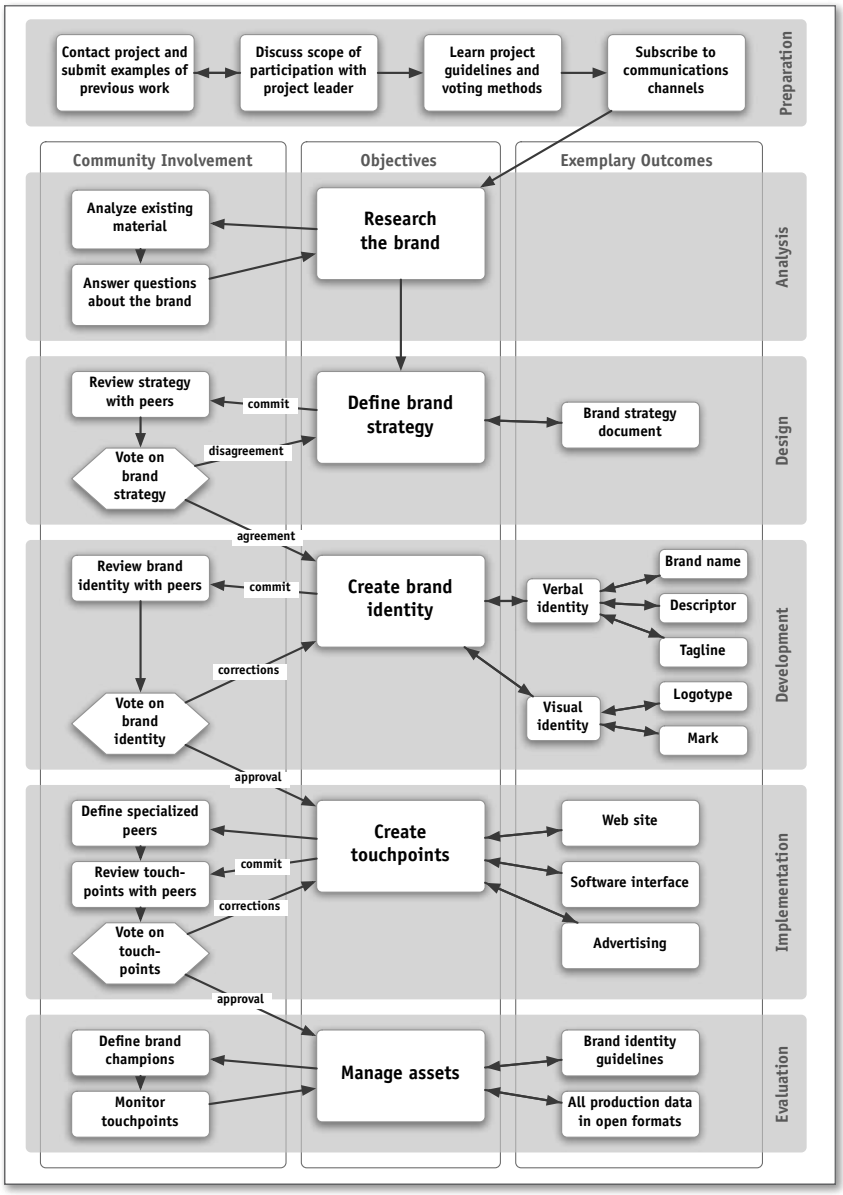

Fig. 15 A model for designing FOSS BI in cycle three.

6 Evaluation

In the previous chapter I have created a model CP can follow to participate in a FOSS project. In order to evaluate my claims and findings, I interviewed industry professionals involved in large FOSS projects on the subject via E-mail (see chapter 4). I will now compare the findings from AR with these interviews. The full texts of these interviews are included in the appendix of this report.

Participants are an OS communities main asset.

In the concept phase of this research report, I found that two reasons for designing a model are reducing production time and increasing the equity of the outcome. This thinking comes directly from business practice, where two key factors are time and money. With the voluntary participation in OS projects, these factors remain, but are not major influences (Vixie 1999, p. 95). The main asset of an OS project is the community, therefore, gaining more participants is the primary goal of this model. The claim has been made before by Ye & Kishida (2003, p. 3). I can reinforce it with my experiences during this research.

The community creates the brand.

I claimed this in the introduction and discussed it in relation to the voting population. All three of the interviewed professionals agreed that the contributors create the brand. John Baer added: "*If the project is professionally sponsored, the sponsor will define the core attributes.*" (2006). Sponsors would count as part of the community and should be included accordingly. Rasmus Skjoldan added: *"I believe the original core brand attributes are found [...] within the leading group of coders."* (2006)

FOSS lacks good BI.

I found before and during the research, that FOSS in general lacks good BI and the six projects I contacted were such cases. The answers from the interviews match my argument. Steven Garrity included that: "*this has been improving dramatically over the last few years*" (2006), providing *Firefox* and *Ubuntu* as examples. Skjoldan stated that a FOSS project: *"would benefit externally and especially internally from the right brand identity."* (2006) That large FOSS projects are taking branding more seriously, shows that the OS model is maturing as a business practice.

FOSS lacks CP.

Similar to the previous argument, I observed that FOSS lacks CP. The three projects I was involved in had a healthy amount of developers, but little expertise in branding and graphics design. The answers in the interviews showed that there is no balance yet between the technical and creative sides of FOSS development. Baer stated: *"Talent is often centered around the technical."* (2006) and Garrity added CP: *"that offer their help [...] are re-*

ceived with appreciation and enthusiasm. This would indicate that developers are aware of the lack of creative skills and value it highly." (2006) Skjoldan included it's: *"inspiring to experience the amount of emotional response to a creative process in an OSS project."* (2006) The ease of being accepted by a project, as I experienced in all three cycles of AR, leads me to believe that the demand is greater than the offering.

There is a lack of specific knowledge keeping CP from participating in FOSS projects.

Previously, this was the major problem keeping myself, as the subject of AR, from actively contributing my expertise. The interviewed professionals agreed to this claim for different reasons. Baer stated that the subject is "*very new and undefined*" (2006), while Garrity mentioned "*the lack of awareness*," and "*quality tools*" (2006). Skjoldan first disagreed, but then added: *"It is hard, though, to understand the mechanics of an OSS project for someone who's not coding."* (2006) These answers are in alignment with my decision to create a model.

Both the visual and verbal identity should be created together.

I found this in section 5.3. Garrity agrees by stating: "*The verbal identity is often in place long before the visual identity is considered.*" (2006). He also thinks the combination of the two would be "*convenient and efficient*". Baer and Skjoldan agree fully on this argument. This leads me to my next statement.

The brand name is created too early.

I made this argument in section 5.9.3 and suggested that code names should be used in the early stages of the project so the community and the brand can start to form before being titled. Large FOSS projects, such as *Mozilla*, put this into practice. For instance, the *Firefox* browser was previously named *Phoenix* and *Firebird* (Ross 2005 [online]). I would recommend applying this procedure to all FOSS projects, regardless of its size.

BI Guidelines provide consistency in FOSS projects.

This claim is not entirely true. While guidelines "help" to provide consistency, it cannot be relied upon that the community will follow the guidelines. Brand champions must, therefore, monitor the work inside the project and evaluate it according to the guidelines. Garrity compared this role to that of a *"code maintainer"* (2006), a programmer responsible for a part of a software's source, as a means of quality insurance.

7 Conclusions

7.1 The Commons Identity Model

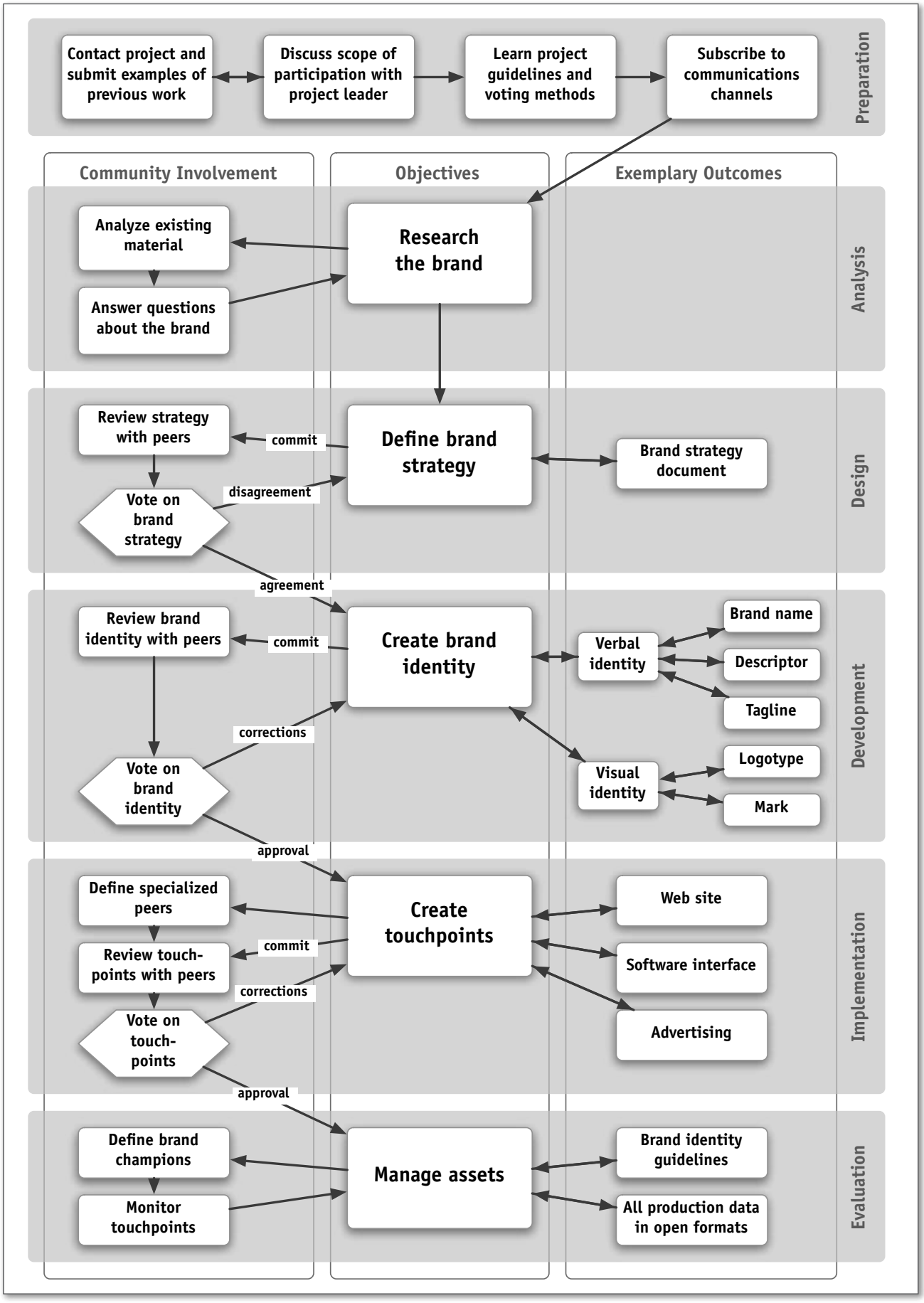

Fig. 16 The Commons Identity Model based on Wheeler's Brand Identity Process.

7.2 Critical Analysis of the Model

Upon presenting the model to Glover, she asked how it differs to the original (2006). The three key changes made from Wheeler's BI process are:

1. The incorporation of community votes and commons-based peer-review.
2. Outcomes specific to FOSS projects are included as exemplary assets.
3. An additional preparation phase shows the entry into the community.

A further point of criticism is the presentation of the model. Therefore, the model has been branded as the Commons Identity Model. Derived from the term Corporate Identity, the name makes it easier to promote and describe.

At what point the model could be used is unclear. Because FOSS development is modular (Benkler 2002, [online]), the Commons Identity Model is not directly dependant on other software production processes and could be initiated at any time. It would be optimal to implement a new BI together with a major release of the software in order to promote the brand. Designers of touchpoints should wait until the brand strategy has been defined and the key BI elements are decided upon.

There has been little research in the topic area of branding and marketing FOSS, therefore further contrasting opinions could not be found as of yet that would falsify this model.

7.3 Conclusions Regarding the Research Process

7.3.1 Successful Applications of the Research Design

- Sufficient primary data could be gathered using AR and field work in order to validate the hypothesis.
- Repetitively applying the model to new projects by means of AR lead to finding inconsistencies. These may have been missed with a case study approach.
- The process overview (fig. 8) illustrates the combination of the BI and software engineering processes correctly, since I did not define any clear starting or ending points.
- The research participants have been helpful and all the contacted professionals were willing to take part in interviews.

7.3.2 Improvements to the Research Design

- The interviews could have been conducted in earlier cycles of the AR process.
- Evaluation using the interviews could have been included in the "observation and evaluation" phase of each AR cycle (see fig. 7).

7.4 Conclusions Regarding the Research Findings

I will now summarize the key findings that were made during the AR cycles and were evaluated by industry professionals.

In a FOSS project, the community creates its own product. In the initial phases of the project, the community is also its own target audience and, therefore, creates their own brand.

There is a lack of expertise in the topic area of designing BI for FOSS, due mainly to the overall lack of participating CP.

Since participants are the FOSS projects main asset, a good BI should primarily aim to gain them. Equity and revenue of a brand would follow as the project matures.

The brand name is usually created before the community can grow and form the brand. I would, therefore, recommend that FOSS projects start up using code names and decide upon the brand name at a later stage together with the community and under guidance of the BI designer.

There is a lack of knowledge keeping CP from participating in FOSS projects to design BI. During the course of the research, I have created a model as a possible solution to this problem.

7.5 Conclusions Regarding the Commons Identity model

Three defining factors of the FOSS production, as defined by Hillsley, are open communication channels, discussion, and version control (2006, p. 33). As discussed throughout chapter 5, the Commons Identity Model makes use of these factors and I will now summarize the key points influencing its design:

7.5.1 Open Communication

The work is openly communicated to the other community members in each phase of the Commons Identity Model.

At the end of the process, BI guidelines both document the work and help provide consistency when designing further touchpoints.

7.5.2 Discussion

Crucial decisions during the process are voted upon by all community members. The voting population should consist of the community, since they are the creators of the brand.

The individuals in charge of designing BI should manage related discussions in order to keep them goal oriented and efficient.

Early releases of practical work motivates community members to participate in the process.

Practical involvement of community members should be welcomed, in order to generate new ideas and ultimately enhance the outcome.

Presenting multiple design variants encourages comparisons and stimulates peer review within the community.

7.5.3 Version Control

Changes are submitted back to the project and, if needed, are voted upon before they are committed. This boosts the quality of the production.

Brand champions should monitor and evaluate touchpoints to ensure a consistent BI.

It is recommended that all the production data is saved in an open format, to allow its re-use.

7.6 Recommendations for further Research

As discussed in section 3.6, there is a weakness in validating BI outside a FOSS community. I, therefore, recommend measuring the community growth and brand equity of mature FOSS projects over an extended period of time. A survey could be conducted on new community members, asking them if the BI influenced their decision to join. This process could be included in the evaluation phase of the Commons Identity Model.

In order to further enhance the model, I also recommend applying it to more OS projects as case studies. This would concurrently increase the validity of the model. The research could go into more depth in the touchpoints phase. For example, a research question could be: How does the Commons Identity Model influence the creation of a FOSS project's web site? As the name of the model hints, it should be applicable to OS projects other than software since it does not directly depend on other processes.

Research addressing my proposed approach to naming a FOSS product would be necessary. My question is: Does a FOSS project gain a better brand name by postponing its creation to a later stage of the production process? The quality of the new brand name should then be weighed against the increase of communication necessary to create it.

7.7 Conclusions Regarding the Hypothesis

In this report I have shown how I designed BI for FOSS using the Commons Identity Model. I can, therefore, verify my hypothesis that the model is a practical tool for production. I acknowledge that the model must be applied further in order to become a widely proven method.

Time will tell if the model will contribute to an overall goal: In combination with existing organizational tools, such as SourceForge (2006) or Commons Design (2006), and personal motivations, such as the need to learn (Ye & Kishida 2003) or the need to supply a demand (Searls 2006, p. 232), the Commons Identity Model could encourage CP to become active in FOSS projects to design BI.

8 Glossary

ADDIE Model

"The ADDIE model is a generic and simplified instructional systems design (ISD) model. ADDIE is short for Analyze, Design, Develop, Implement, and Evaluate." (Strickland 2006, [online])

Brands and Branding

See section 1.5.4

Brand Champion

See section 1.5.7

Brand Equity

The value of a brand as derived from consumer attitudes, behaviors, awareness and perceptions (Hislop 2001).

Brand Identity [BI]

See section 1.5.5

Brand Identity Process

The process for designing brand identity as defined by Alina Wheeler (2006).

Brand Impact

Numerical results and statistics of measuring brand equity (Hislop 2001).

Creative Professional [CP]

Creative Professionals are people who work full-time in creative endeavors. Professions can range from designers to musicians (Blumenthal n.d.).

Concurrent Versions System [CVS]

Software that keeps track of text files and the changes made to them. These systems allow multiple users to work at the same time and is commonly used for writing software (SourceForge 2006, [online]).

Descriptor

"*A term used with a brand name to communicate an informational attribute about a specific offer.*" (Landor 2006, [online]).

Forum

An internet forum is web application used for holding discussions. Forums are usually divided into topics. A message submitted by a person inside the topic is called a post. (SourceForge 2006, [online])

Free Software Foundation [FSF]

The Free Software Foundation promotes the use of Free Software (FSF 2006, [online]). See Section 1.5.3.

Free / Open Source Software [FOSS] *"Free/open source software [..] is software for which the human-readable source code is made available to the user of the software, who can then modify the code in order to fit the software to the user's needs."* (Free/Open Source Research Community 2004, [online]). See section 1.5.3

Hypertext Markup Language [HTML] A descriptive language in which web pages are created.

Icons In computer terms, an icon is a pictogram that describes a computer program in a graphical user interface. (Semaphore 2002, [online])

Layers See TIFF.

Logotype The part of a signature that shows the name of the brand. (Wheeler 2006, p. 108)

Mailing list *"A list of e-mail addresses identified by a single name [...] When an e-mail message is sent to the mailing list name, it is automatically forwarded to all the addresses in the list."* (Loughborough University n.d., [online])

Mark A mark is a visual expression of a brand and is synonymic with the words: Brandmark, Trademark, Symbol, Avatar, Icon, and Logo. (Wheeler 2006, p. 53)

Open Source *"Open source describes practices in production and development that promote access to the end product's sources."* (Wikipedia 2006, [online]). See section 1.5.2

Open Source Initiative [OSI] *"Open Source Initiative is a non-profit corporation dedicated to managing and promoting the Open Source Definition for the good of the community."* (OSI 2006, [online]). Section 1.5.3

Portable Network Graphics [PNG] A file format for storing images that is compatible with web browsers.

Post See Forum

Project Manager [PM] The leader of the project. In FOSS, the project manager is usually the first point of contact. If the project is structured as a benevolent dictatorship, the project manager has the final say in discussions.

Signature The combination of a mark and logotype (Wheeler 2006, p. 108).

Slogan A slogan is a short, memorable advertising phrase. Examples include: "*Coke Is It*," "*Just Do It*," and "*Don't Leave Home Without It*." When a product or company uses a slogan consistently, the slogan can become an important element of identification in the public's perception of the product. (Motto n.d. [online])

SourceForge A web site that provides management tools to FOSS projects (SourceForge 2006, [online]).

Splash Screen A splash screen is a term used to describe an image that appears while a computer program is loading (O'Hanley 2006).

Scalable Vector Graphics [SVG] A file format and emerging standard for vector graphics on the web based on XML.

Tagline Similar to a slogan, a tagline is a memorable phrase that sums up the tone and premise of a brand. Taglines are usually used for entertainment products, such as movies, games and web sites. The Johns Hopkins Bloomberg School defines it as *"a statement or motto that succinctly defines or represents an organization's mission." (John Hopkins Bloomberg 2006, [online])*

Tagged Image File Format [TIFF] A file format for storing images. The format allows multiple images to be placed in the same document. A concept known as "layers".

Touchpoint Applications of BI. See section 1.5.6

Uniform Resource Locator [URL] Commonly known as a hypertext link used in web pages.

Verbal & Visual Identity The visual and verbal elements of BI. See section 1.5.5

Wiki A Wiki is a dynamic web site that allows users to edit the contents directly on the page (Wikipedia 2006, [online]).

Wordmark *"A freestanding acronym, company name, or product name that has been designed to convey a brand attribute or positioning."* (Wheeler 2006, p. 52)

Extensible Markup Language [XML] A file format for structuring data.

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11 Appendixes

The following appendixes can either be found on the CD accompanying this report or can be downloaded from:
http://stoletheshow.com/sae/bah-303-1-2_schudel.zip

A Research Project Proposal

A PDF document of the research proposal.

B Reflective Logbook of the Practical Components

A PDF file documenting the production in the three FOSS projects *Sociopath, OpenEats,* and *Jajuk*.

C Production Data of the Practical Components

This contains folders of the three FOSS projects *Sociopath, OpenEats,* and *Jajuk*. Each folder contains the full production data and a PDF file providing an overview.

D Correspondence with the FOSS Projects

PDF documents of the correspondence with the FOSS projects: *Irrlicht, Jajuk, OpenEats, Sociopath*, *XFwall, and XMeeting*.

E Interviews with the Industry Professionals

PDF documents of the correspondence with the following industry professionals:

- John Baer
- Steven Garrity
- Nicky Glover
- Pascal Schrafl
- Rasmus Skjoldan