

Open innovation through social media in the idea generation phase of the design consultancy process. Case company: Case Company X

Oladimeji Joseph Fakayode

Bachelor's Thesis

Degree Programme in International

Business

November 2012



Abstract



Date of presentation

Degree programme

Author	Group or year of
Oladimeji J. Fakayode	entry
	GLOBBA '09
Title of report	Number of
Crowdsourcing input from end users using social media in the idea	pages and
generation phase of the design consultancy process. Case	number of
company: Case Company X	appendices
	pages
	79 + 31

Supervisor(s)

Jari Luomakoski & Maija Suonpää

In a competitive business environment, innovation among others present companies and organizations the opportunity to differentiate themselves from competitors. While in the past, internal R&D activities of companies could provide the magic required for world class innovation, the fast changing demand of users requires their involvement in the innovation process refered to as open innovation. This paradigm shift from closed innovation to open innovation is applicable at different stages of the design process. Furthermore, the proliferation of digital technology especially in the form of social media and online communities supports this paradigm shift. Social media has not only been utilized for engaging customers and enhancing brand images of companies but also for generating input from end users especially in the business to consumer category. In addition, weak ties such as public creative thinkers or professionals who do not work for such firms in the design consulting process are rarely looked upon for such inputs.

Therefore, this study explored social media platforms that enables contribution of input by such creative thinkers, their profile, as well as establish techniques, strategies and processes required to make this function. The entire study was carried out in the second half of year 2012 through a qualitative research method of indepth interviews, video analysis and benchmarking. The selected method was due to the exploratory nature of the research and rarity of materials in the field.

The convergence of theoretical concepts and collected data was utilized in establishing different strategies and techniques utilizable in online open innovation. In addition, the result of the study pointed to online open innovation as a new way of producing things as well as the source of new business models for a design consulting firm.

Keywords

Open innovation, crowdsourcing, social media, online community management, business model, competitive advantage.

Table of contents

1	Intr	oduction	1	
	1.1	Background of this study		
	1.2	Case company introduction		
	1.3	Research problem and objectives		
	1.4	4 Key concepts		
	1.5	Scope and limitation of the study	7	
2	The	Theoretical concepts		
	2.1	Open innovation		
	2.2	.2 Crowdsourcing		
		2.2.1 Collective intelligence or wisdom of crowd	. 10	
		2.2.2 Crowd creation	. 11	
		2.2.3 Crowd voting	. 12	
		2.2.4 Implicit crowdsourcing	. 12	
		2.2.5 Summary of crowdsourcing techniques	. 12	
	2.3	Social Media	. 13	
	2.4	Online Community Management	. 14	
	2.5	Competitive advantage and Business model generation	. 17	
	2.6	Relationship between theories	. 20	
3	Field	Field research design 21		
	3.1	Research methodology and design	. 21	
	3.2	Research method	. 22	
	3.3	3 Data collection technique		
	3.4	Data quality assurance	. 26	
	3.5	Type of data collected	. 27	
	3.6	Interviewees and benchmarked platforms	. 27	
	3.7	Data analysis and main issues	. 29	
4	Resi	ults	. 30	
	4.1	Type of social media that enables crowdsourcing	. 30	
	4.2	Strategies, techniques and processes utilizable in online open innovation	. 30	
		4.2.1 Categories of open innovation	. 31	

		4.2.2	Application of open and closed challenges	. 33
		4.2.3	General process of starting a microsite	. 34
		4.2.4	Motivation of people for contribution to open innovation	. 35
		4.2.5	Other Important factors to consider in online open innovation	. 38
	4.3	Existi	ng profile of people for open innovation in benchmarked B2Bs	. 38
	4.4	Acqui	iring and maintaining online social communities	. 39
		4.4.1	General procedures and guidelines	40
		4.4.2	Targeted marketing on the social web	. 40
		4.4.3	Customer engagement effort as obtained in benchmarked platforms	41
		4.4.4	Other collected community engagement features	. 45
		4.4.5	Internal structure and resources	. 46
	4.5	Comp	petitive benefits and challenges of open innovation	. 47
		4.5.1	Benefits of open innovation to the current service offering of Case	
		Comp	oany X	. 48
		4.5.2	Challenges and keys to mitigating them	. 50
	4.6	Sumn	nary of collected information from fieldwork	. 51
5	Key	finding	gs and interpretation of results	. 53
	5.1	Recap	on study background	. 53
	5.2	Туре	of social media that enables crowdsourcing idea generation	. 54
	5.3		8 8	
	3.3	Strate	gies, techniques and processes utilizable in online open innovation	. 55
	5.4			
		Existi	gies, techniques and processes utilizable in online open innovation	. 60
	5.4	Existi	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs	60
	5.4	Existi Acqui 5.5.1	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities	. 60
	5.4	Existi Acqui 5.5.1	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities Marketing on the social web and customer engagement process	. 60 . 60 . 61
	5.4	Existi Acqui 5.5.1 5.5.2 5.5.3	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities Marketing on the social web and customer engagement process Other suggestion for online community building	. 60 . 60 . 61 . 64
	5.4 5.5	Existi Acqui 5.5.1 5.5.2 5.5.3 Comp	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities Marketing on the social web and customer engagement process Other suggestion for online community building Internal structure and resources	. 60 . 60 . 61 . 64 . 65
	5.4 5.5	Existi Acqui 5.5.1 5.5.2 5.5.3 Comp 5.6.1	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities Marketing on the social web and customer engagement process Other suggestion for online community building	. 60 . 60 . 61 . 64 . 65 . 66
6	5.45.55.6	Existi Acqui 5.5.1 5.5.2 5.5.3 Comp 5.6.1 5.6.2	gies, techniques and processes utilizable in online open innovation ng profile of people for open innovation in benchmarked B2Bs iring and maintaining online social communities	. 60 . 60 . 61 . 64 . 65 . 66 . 66
6	5.45.55.6	Existi Acqui 5.5.1 5.5.2 5.5.3 Comp 5.6.1 5.6.2 clusion	gies, techniques and processes utilizable in online open innovation In profile of people for open innovation in benchmarked B2Bs Iring and maintaining online social communities	. 60 . 60 . 61 . 64 . 65 . 66 . 66 . 70
6	5.4 5.5 5.6	Existi Acqui 5.5.1 5.5.2 5.5.3 Comp 5.6.1 5.6.2 clusion The u	gies, techniques and processes utilizable in online open innovation In profile of people for open innovation in benchmarked B2Bs In and maintaining online social communities	.60 .60 .61 .64 .65 .66 .66 .70

6	.4 Research reliability and validity	73
6	5.5 Suggestions for development	74
6	6.6 Assessment of own learning and thesis process	75
Ref	erences	76
Atta	achment	80
I	Attachment 1. Overlay matrix	80
I	Attachment 2. Profile of experts and video analysis subject	82
I	Attachment 3. Measurement themes/questions	84
I	Attachment 4. Elements of an open challenge system of open innovation	87
I	Attachment 5. Challenge process at OpenIDEO	88
I	Attachment 6. Elements of closed challenge system of open innovation	89
A	Attachment 7. Design process at OpenIDEO	90
A	Attachment 8. Types of motivation for open innovation	91
A	Attachment 9. Different elements of a challenge questions	92
A	Attachment 10. Engagement efforts at OpenIDEO	93
1	Attachment 11. Engagement effort at Innocentive	95
1	Attachment 12. Image showing tip in order to motivate community members	96
1	Attachment 13. Sample of a site layout at OpenIDEO	97
A	Attachment 14. Sample of challenge display at Innocentive	98
1	Attachment 15. Challenge project room at Innocentive	99
A	Attachment 16. Problem solving process at Innocentive	00
1	Attachment 17. Sample Agreement at Ideastorm 1	01
A	AAttachment 18. Sample of initial question framing at OpenIDEO1	02
	Attachment 19. Business model canvas of the open network system of creating	
t	hings1	03
I	Attachment 20. Sample how Innocentive markets its services to clients	04
I	Attachment 21. Sample business model for the open network	05

1 Introduction

This part of the study introduces the background to this study, the case company, scope of the thesis and the key concepts covered in the study.

1.1 Background of this study

Marketing, a primary activity in the value chain associated with providing a means by which consumers can purchase a product and influencing them to do so through advertising, promotion, salesforce, quoting, channel selection, channel relations and pricing has evolved over the years (Porter 2004, 40). Recent trends in marketing as indicated in recent articles and publications indicate a shift to digital media in marketing communications and genericization of brands- described as a single brand name dominating a product category. Dominating the shift to digital media is search engine marketing and optimization, influencer management, mobile and tablet, social media such as Facebook, viral and emotional video and internationalization and localization of content.

Marketing nowadays is seen from a holistic point of view cutting across different activities of the value chain including service, operations outbound logistics among others. Customer Relationship Management and Communication as a specialization programme at Haaga-Helia University of Applied Sciences approaches marketing similarly. As a consequence, Innovation Management for Global Competitiveness, Creative and Corporate Marketing Communications emerged as part of the core specialization courses studied where social media and innovation became of personal interest to me.

Like other companies in the fast changing business environment, Case Company X, customer-centred design firm is faced with numerous business challenges. They include among others, how to be different in the emerging customer experience industry, how to communicate its strategies to clients, how to offer a complete user experience service consulting to clients, how to gather innovation input from the external world, how to utilize the ubiquitous social media for competitive benefit, how to acquire an online community on social media and how to maintain such communities. Filtering

the business challenges faced by Case Company X using my specialization and personal interest, the focus of the thesis research began to unfold. The focus was identified as how the company can obtain external input for innovation in order to improve the quality of service offered to its clients as shown in figure 1 below. The figure was modified from the customer involvement stages and purpose of Edvardsson, Gustafsson, Kristensson, Magnusson and Matthing (2006, 6).

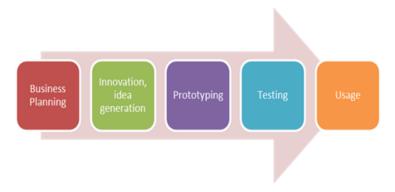


Figure 1. Customer involvement stages in service design (adapted from Edvardsson, Gustafsson, Kristensson, Magnusson, & Matthing 2006, 6)

While most firms choose to rely on people, companies or labs they already know well for such external inputs which often result in same local search biases that are present in internal problem solving, this study aims at exploiting the strength of weak ties (Howe 2008, 153). Such weak tie in this study is indicated in figure 2 below which includes the end customers of its clients or even ordinary creative thinkers from the general public. Figure 2 below had been drawn by the author of this thesis to describe the different players in this design process.

Due to its collaborative nature, social media emerged as the platform to be explored for this purpose. In the interactive process, social media had become a platform for brand monitoring, crisis management, customer service, referrals and recommendations, fostering communities, brand content awareness, targeted deals, offers, product launches and customer input (Edelman, 2012). However, the use of social media in the business to business industries is quite restricted for such purposes and it is mostly used for support activities such as recruitment and networking. This is obviously due to the difference in the decision making structure in B2B compared to B2C markets.

As a result, customer input through social media in B2B consultancy became the purpose for which this study will be carried out.

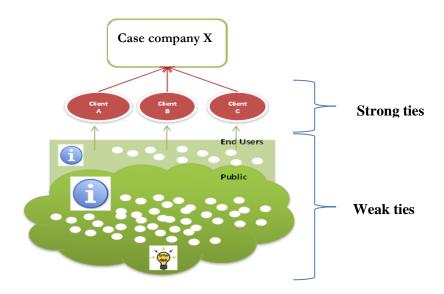


Figure 2. Image describing different players that might exist in the design process

In order to get the best out of this study, it aims to focus on utilizing this platform(s) for open innovation in the idea phase of design service as indicated in the figure 3 below but not restricted to this only. Based on the outcome of the field research, there exist possibilities to extend the outcome to include prototyping, testing and usage as these are important service stages of Case Company X.

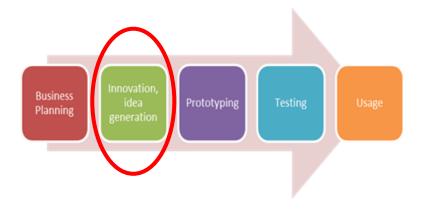


Figure 3. Customer involvement stages in service design indicating innovation stage as the focus of the study (adapted from Edvardsson, Gustafsson, Kristensson, Magnusson, & Matthing 2006, 6)

This study therefore covers theoretical concepts in the fields of open innovation, social media, crowdsourcing, competitive advantage and online community management theories and combined with an empirical study, a set of recommendations for Case Company X in building and managing such open innovation platforms were proposed

1.2 Case company introduction

Case Company X is a customer-centred design consulting firm. It brands itself as a company that provides world best customer experiences by helping its clients increase service value for end customers (Case Company X 2012.) Case Company X's customers are across different sectors such as IT, healthcare, processing, media, industry, public and consumer product sectors. Some of the companies Case Company X works with include Nokia, Rovio, Fifth Element, Sulake, Suunto, KONE, Veikkaus among others.

Figure 2 below shows the main services provided by Case Company X. The services are broken into research, design and evaluation. Research services include requirement specification; user persona development; customer feedback analysis; user experience competitor analysis and user experience lifecycle study. (Case Company X 2012)



Figure 4. The service offerings of Case Company X to its clients (Case Company X 2012)

Its design services include conceptualization, user interface design, visual design, user interface guidelines and service design. Furthermore, Case Company X provides evaluation services such as usability testing, usability expert evaluation, concept evaluation and testing among others. (Case Company X 2012)

Case Company X's direct competitors in Finland include Adage, IDEAN among others. On a global scale, IDEO, the American design consulting giant is also a competitor. Adage's strategy is slightly different from Case Company X's because it is more of an evaluation company than one that provides the integrated services of research, design and evaluation. There are many other design and marketing companies that are obviously competitors but Case Company X comes from a different angle of providing fully integrated services to its clients. The competitive advantage of the company compared to competitors lies in its vast portfolio of usability experience and user centred design.

1.3 Research problem and objectives

Customized to the service process of the case company, presented below is the thesis topic:

Open innovation through social media in the idea generation phase of the design consultancy process. Case company: Case Company X

As described in the introduction, the thesis topic transcends marketing but the central idea is a marketing challenge. Currently in customer centred design consulting, end users are mainly utilized offline in the service process and in restricted stage of the service process. Similarly, social media as a tool for end user input in a B2B consultancy is rather an uncommon phenomenon. Therefore, the problem in this research can simply be described as "How to obtain end user input at the idea generation phase of the design consulting process and how this can lead to competitive advantage." In order to cover all aspects of the research problem, the investigative questions below have been developed to divide the research problem into researchable chunks. They include:

- 1. What types of online social media platforms enable crowdsourcing idea generation? (IQ 1)
- 2. What are strategies, techniques and processes utilizable in online open innovation? (IQ 2)
- 3. What is the existing people profile for open innovation in benchmarked B2Bs? (IQ 3)
- 4. How to acquire and maintain these online social communities? (IQ 4)
- 5. What are the competitive benefits and challenges of open innovation for Case Company X? (IQ 5)

1.4 Key concepts

The key concepts covered in this study include open innovation, social media, online communities, crowdsourcing and competitive advantage. They are deeper discussed in the next chapter but are briefly defined below.

Open Innovation

Open innovation can be defined as

"the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation respectively. Furthermore, it can be described as the antithesis of the traditional vertical integration model where internal research and development (R&D) activities lead to internally developed products that are then distributed by the firm." (Chesbrough, Vanhawerbeke &West 2006, 1.)

Crowdsourcing

Crowdsourcing as defined by Sheehan (2010, 107) is "the ability to gather large group of people around your brand and get them working to develop products and/or solutions.

Social Media

Social media is defined as that which provides the way people share ideas, content, thoughts and relationships online (Scott 2010, 38). Also, Sterne (2012, xvii) defines social media as that which allows anybody to communicate.

Online community management

Online communities are communities that have their own identities, norms, goals and these goals may be shared with one or more other related communities (Brandtzaeg, Obrist, Geerts & Berg 2010, 2)

Competitive advantage

Competitive advantage is that which allows a firm to differentiate itself from competitors by being unique at something that might be valued by its clients (Porter 2004, 119).

Business model

"A business model describes the rationale of how an organization creates, delivers and captures value". (Osterwalder & Pigneur 2011, 14).

1.5 Scope and limitation of the study

This part of the study describes the scope of this study. Open Innovation, a rather wide concept would have been too wide for the scope of this study. As a result, the demarcation of the topic has been done by considering just one part of open innovation which is crowdsourcing or co-creation. Another aspect of open innovation as will be seen in description of theoretical concepts could include the use of technology from other firms among others. In addition to this, the demarcation has also been done by considering only certain aspect of the design process. Figure 3 above depicts the stage of the design process that will be considered for democratization in this study. Finally, while this might be applicable to any category of business, this study is focused on low involvement brands such as consulting companies who usually don't have direct access to the end users of consumer products or services.

2 Theoretical concepts

The next paragraphs describe the key concepts, theories, models and practices and previous studies covering the theoretical aspects of this study.

2.1 Open innovation

In the competitive business environment, innovation among others offers an opportunity for companies and organizations to differentiate themselves from competitors. While in the past, the internal R&D activities of companies could provide the magic required for world class innovation, the fast changing demand of users requires their involvement in the innovation process. And contrary to the bias found in corporate environments, open innovation, co-creation and user innovation enables organizations to collaborate with the crowd and tap into their collective intelligence.

The paradigm of open innovation (Chesbrough, Vanhawerbeke &West 2006, 1) assumes that firms should use both internal and external idea parts to markets in their technological advancement. They further state that open innovation combines internal and external ideas into architecture and systems. Chesbrough et al (2006, 2) also states that open innovation assumes that useful knowledge is widely spread and that capability extent of R&D should not limit the identification, connection and leveraging of external knowledge sources as a core process in innovation. It is however important to bear in mind that the external R&D discussed by Chesbrough extends to patented technologies by other organizations while this study aims to focus only on co-creating with users or user innovation.

Based on an earlier project on how people interact and create user-generated content in online communities, Brandtzaeg, Obrist, Geerts & Berg, (2010,1) in their paper on innovation in online communities, predicted that online communities will be a key enabler of novel innovation chains and network. Two years after Brandtzaeg et al. published their paper, Quesenbery and Szuc (2012, 29) utilizes another term related to open innovation and online communities called open network. Open network poses a problem and invite people to contribute ideas or solutions to such problems using

their creativity. While it has mostly been used for social innovation purposes in some organizations, some profit making organizations have been able to apply similar concept to their business. Examples include firms like Nokia, Ideo, Toyota among others. This concept is further described in the crowdsourcing section later in this chapter.

Furthermore, the question of which category of customer and how to get them involved for this innovation purpose comes into place. Studies of innovation (Jokula 2012, 24) have shown that active participation among innovation processes is frequently taken by lead users, main suppliers and large institutions. These studies have also demonstrated that innovators share their knowledge openly and are often part of communities or network of interactions. They rarely innovate alone, as they tend to be part of teams within communities of their interests in which they interact with their ideas (Brown & Duguid 2000, 31). In this respect, the relationship between the firm and the external environment can play a very important role in shaping innovative performance. This relationship will be further discussed in the online community management of the theoretical framework.

2.2 Crowdsourcing

As seen from the theories of social media and online community management, it requires motivation and carefully laid out technique to get people engaged in online communities. Crowdsourcing, an emerging concept in the online open innovation offers a rich approach and a number of techniques to get users engaged or to obtain input from online community members. Aniket, Chi & Suh (2008, 1) describe that collecting user input is important for many aspects of the design process which requires several techniques and it is expensive. However, crowdsourcing models enable a large number of users to be engaged for low time and monetary costs.

There are several definitions that have been coined for the term "Crowdsourcing" by different authors. Crowdsourcing as defined by Sheehan (2010, 107) is "the ability to gather a large group of people around your brand and get them working to develop products and/or solutions. Henry Ford would say "if he had asked people what they wanted, they would have said faster horses." However, crowdsourcing offers another

perspective to that these days. Crowdsourcing can help lead your team to invent the "ipod" or lead your team in that direction. (Sterne 2010, 196.) Similarly, Crowdsourcing as described by Howe (2008, 280) can occur in different forms including collective intelligence techniques such as crowdcasting; idea jams; prediction markets; collective intelligence improvisation, crowd creation, crowd voting and crowdfunding. Tina Rosenberg (2011, 1) in a New York Times article says "companies stuck on a problem put it up on the site and offer a cash prize for a solution. About 30 percent of the time, an outsider solves the problem — often someone who isn't even in the same field". For the purpose of this study aimed at a customer-centred design consultancy firm, collective intelligence, crowd creation, crowd voting and implicit crowdsourcing are explored as possible crowdsourcing categories for user innovation purpose.

2.2.1 Collective intelligence or wisdom of crowd

Collective intelligence or wisdom of the crowd aims to collect large amounts of information and aggregates it to gain a complete picture of a topic based on the idea that a group of people is often more intelligent than an individual (Howe 2008). Collective intelligence, which utilizes the existing knowledge of the crowd, has been used in three different forms as earlier described. However, only two of them are considered suitable at this stage of the study. **Crowdcasting** can simply be described as broadcasting a problem to the widest possible audience in the blind hope that someone, somewhere will come up with a solution (Howe 2008, 147). Like an open source, you pose a problem, and someone suddenly pops up saying I have got a solution to that problem. The people you would least expect to solve a problem were exactly the ones most likely to crack it (Scott Page's diversity trumps ability theorem). This can be traced to historical problem solving process such as the invention of a way to determine longitude on a sailing vessel. After failures at several attempts by the Royal Navy to solve the problem, the British established a prize of 20,000 pounds for someone who is able to come up with the solution. John Harrison, a cabinet maker was able to develop a device for this purpose. The key to making it work is to broadcast a problem or open up an idea collection platform using a massive network like Innocentive's, an online open innovation platform. Examples of companies that have used such innovative approach include Colgate, P&G, Boeing and Netflix. (Jeff Howe 2008, 153.)

On the other hand, "Idea jams" category of collective intelligence is a customer collaboration technique that does not aim to solve a specific problem but to create solutions to problems that don't exist yet. It has been pointed out that this is more like an internet-enabled suggestion box making crowdsourcing vastly more effective. This technique has been used at IBM's innovation jam and Dell's ideastorm to create new businesses using the power of diversity. (Howe 2008, 159.) Conclusively, social community members can be utilized for solving difficult product or service problems as well as coming up with new product ideas and/or design.

2.2.2 Crowd creation

Crowd creation is also often referred to as crowdsourcing creative works. This often consists of sourcing creative projects from a crowd by utilizing the assumption that the crowd possess a great deal of creative energy. (Howe 2008, 281.) Over the years, creative works from the crowd has evolved in the form of user generated content platform like iStockphoto, YouTube, Digg where users or members of a community are relied on as the source of content for the consumption of other members of the same community (Howe 2008, 277). Crowd creation usually involves cultivating a robust community comprising of people with deep and continuous commitment to their craft and to one another. However, traditional compensations can be adopted in crowdsourcing creative works but the social environment usually provides creative works with a great meaning for the invested resources. (Howe 2008, 180-181.)

As cited by Howe (2008, 181-182), it is important to pay attention to the caveats that come with the gathering and maintaining an online community as will be later discussed later in section 2.5. Some of them include intellectual property possession, transparency issues and trust. It is also important to pay attention to Bradley Horowitz's postulation on participatory media- the 1:10:89 rule, which indicates that for every 100 people on a site or community, 1 percent creates something, 10 percent will vote (crowd voting) on what has been created and the rest of the people are there to consume. However if a company is able to mix the ingredients appropriately, the reward can be an invaluable source of creative production for its business. When nar-

rowed down to utilization by a user experience design consulting firm like Case Company X, there exist a possibility to crowdsource product or service design from online communities with certain incentives as a motivating factor.

2.2.3 Crowd voting

While collective intelligence utilizes what the crowd knows, crowd voting utilizes the thoughts of the crowd. It utilizes the crowd's judgement to organize information often the one created by the crowd itself. (Jeff Howe 2008, 281.) It mostly occurs when a website gathers a large group's opinion and judgement on a certain topic. Examples of firms around the world that have used crowd voting include Threadless, iStockphoto and Dell's IdeaStorm. iStockphoto allows anyone to upload photo a photo by utilizing crowd creation technique earlier described above. However, a user searching for an excellent image might encounter more than 50,000 images while searching for a perfect fit. Through crowd voting, a collaborative filtering technique that utilizes users' ranking of contributors and number of downloads allows users to find the best images within a short period of time. (Howe 2008, 224-225.) In similar way, online social community members can be utilized for validating new product ideas and/or design and usability testing as might be validated later in this study.

2.2.4 Implicit crowdsourcing

This type of crowdsourcing is less obvious and users do not necessarily know they are contributing but can still be very useful in competing tasks. It involves users doing another task while a third party obtains information for another topic based on the user's action.

2.2.5 Summary of crowdsourcing techniques

As a summary, figure 5 below shows the four crowdsourcing types described above that are considered in this study as techniques for open innovation. While it is apparent why these selected categories of crowdsourcing will be adoptable on social media platforms, the field study later discussed in chapter 4 will help justify the what and how of making it work in reality for the case company.

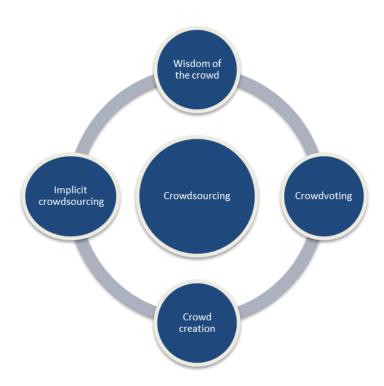


Figure 5. Modified cycle showing different crowdsourcing techniques to be considered in this study (Howe 2008, 147-281)

2.3 Social Media

The main channel to be explored in this study is the use of social media as a platform for obtaining end user input. Social media, a media that fosters online community is defined as that which provides the way people share ideas, content, thoughts and relationships online (Scott 2010, 38). Similarly, Sterne (2012, xvii) defines social media as that which allows anybody to communicate. Based on Sterne's definition, social media has been categorized into six broad categories which include forums and message boards, review and opinion sites, social networks, blogging, microblogging, bookmarking and media sharing. These media have unique characteristics that position them for specific purposes. Similar to traditional communities, the communities formed on social media are distinguished by enabling technology, frequency of interaction, links in or outside the community and the member characteristics. (Brandtzaeg, Obrist, Geerts & Berg 2010, 2)

For the purpose of this research, the social media categories considered include forums and discussion boards, social networks and micro blogging. McCorvey (2012) wrote that the ability of users to create profiles on social networking sites is what distinguishes them from other social media sites. He further states that this helps set the stage for building relationships with people who share the same interest and activities as opposed to just disseminating information. This among others such as ability to incorporate the earlier mentioned types of crowdsourcing techniques helps justify the consideration of the earlier listed social media categories for obtaining end user input as this will happen among people with similar interest. Other criteria or questions (McCorvey, 2010) necessary to ask in selecting the best social media includes: What are the business needs? What am I using the sites for? Whose attention am I trying to get? Which sites do I want to take on? The field research addressed some of these questions as will be later seen in section 4 of this study.

Finally, Brandtzaeg et al (2010, 3) argues that the novelty of utilizing online social communities as a platform for co-creation in the open innovation process is that users are allowed to contribute their creativity and problem solving skills. Social media, which usually comes in the form of online communities, is further addressed in the next section as they both have some common elements in the build-up and management.

2.4 Online Community Management

As earlier stated, online communities have their own identities, norms, goals and these goals may be shared with one or more other related communities (Brandtzaeg, Obrist, Geerts & Berg 2010, 2). However, it requires a systematic process to build and attain the end goal on such communities. For the purpose of this study, community management is divided into two parts:

- 1. Online community engagement process
- 2. Building and managing the communities

In the online community management process, figure 6 describes the steps customers pass through before the end goal is attained (Sterne 2010, 15).

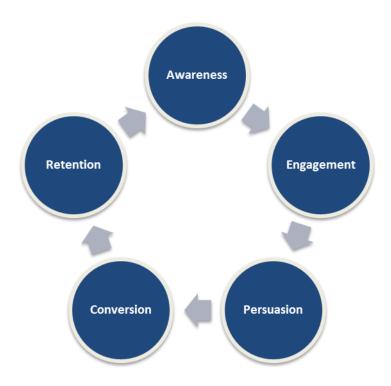


Figure 6. Online community engagement process adapted from Social Media Metrics (Sterne 2010, 15)

Awareness, the first step in the process need not necessarily happen in the social media sphere. However, the other four steps should happen on the selected social media platforms. Engagement is described as both when someone cares about your content and interacts with it. Persuasion has to do with people not just engaging with the content but also seeing a positive side and justifying reasons to take action. Conversion is when the final business objective has been achieved which in this case represents when a user contributes to open innovation online. (Sterne 2010, 106.)

Weber (2009, 65) focuses on the other aspect which includes building and managing the online communities. This includes the internal process of acquiring the community, internal organizational structure and the relationship between the organization and the end users. "To avoid the build it and they will come syndrome, you have to do your homework, build a solid foundation for your community and get the dialogue going.

The internal process can be summarized as shown in figure 7 below: Observe caters for finding the most important places online where people congregate, listening to them and mapping their conversations. Recruitment is about enlisting a group of people who wants to talk about the brand or industry, evaluation is about figuring out where to enter the conversation-blog, own social network or a combination of places, while engaging is about content-how to get them coming back. Measure, promote and improve in order to drive towards the business goal. (Weber 2009, 66&67.)



Figure 7. Steps to marketing on the social web (Weber 2009, 66&67)

While the detail of the steps above will not be thoroughly discussed here to keep this study focused, it will be value adding to discuss step two; recruit, a critical and rather not-so-easy to accomplish part of online community building for a business consulting firm that has no direct access to end users. The customer needs a real reason to show up for this purpose and that is where recruitment comes in. Furthermore, only by recruiting and getting ready for community members can the power of social media be harnessed for the purpose of this study (Weber 2009, 79). A study by Compete Inc.

(Weber 2009, 29) shows that people join online communities to meet people, entertain themselves, learn something new and/or influence others.

Weber (2009, 84) further states that it is harder to recruit people for a community involving a low-involvement service- which applies strongly to the case company considered in this study. One way to start building an online community in this category is to set up a microsite for enthusiasts in the industry you operate in as a way to add appeal to an existing site. This will enable members of the community to share or exchange content-video, photos, texts with other members of the community. Preferably, the members of the community should include experts and amateurs from geographical areas of the business to ensure balance of knowledge. The survival of online communities (Brandtzaeg et al 2010, 2) is largely dependent on user motivation and user participation. Content like linked blogs, photos, articles, contests will inspire people to come as well as maintain their presence in the community. Other means to building the community could include search engine optimization, paid search, paid advertisements among others.

Finally, McCorvey (2010) addressed some of the most important questions that address internal criteria for successful management: Such questions include who's going to manage my page? Who has access to my page? In their thesis research which focused on how businesses implement web 2.0, Hirn & Melto (2009, 82) concluded that small and medium sized companies were more satisfied when their online communities were built internally as opposed to outsourcing to external firms. They argued that the success of building these communities internally can be related to control over such communities and manageability.

2.5 Competitive advantage and Business model generation

Porter (2004, 119) states that a firm can differentiate itself from competitors if it can be unique at something that might be valued by clients. This differentiation is usually viewed too narrowly by firms along the value chain. Therefore, any activity along the value chain can be a potential source of uniqueness for the firm. The drivers of uniqueness can come from different factors such as policy choices of the firm, linkages

within the value chain, supplier linkages, location, interrelationships, integration and scale. Policy choices about activities to perform along the value chain and how to perform them offer some of the most prevalent uniqueness drivers (Porter 2004, 124). Example of such policies includes technology employed in performing an activity, quality of input procured for an activity among others. Utilizing external input using social media for innovation purpose by Case Company X can offer similar uniqueness from input and R&D perspectives.

Furthermore, the uniqueness described above can come in the form of a new business model as discovered later in the fieldwork. Therefore it became important to understand in this theory part the concept of business model. "A business model describes the rationale of how an organization creates, delivers and captures value" (Osterwalder & Pigneur 2011, 14). They further use the nine building blocks mentioned below to describe how businesses can create and capture value. The building block referred to as the business model canvas is shown in attachment 20.

The first element of the business model is the customer segment which describes the different groups of people or organization a firm aims to reach and serve. And in relation to the use of open innovation in design consultancy, it is important that the firm understands which customer segment it will be able to offer and capture value from. Such segments can be niches in the market, multi-sided platforms, mass market and diversified. The second element of the business model is the value proposition which describes the bundle of products and services that create value for the identified segments. Value propositions can be disruptive or similar to existing market offers. They often come from identifying opportunities in design, newness, performance, and customization cost reduction among others. (Osterwalder & Pigneur 2011, 20-25.)

Next is the delivery channel which describes the way the company will communicate the value proposition and reach its customer segments. There are different channel phases. They include awareness, evaluation, purchase, delivery and after sales. In relation to the study at hand, such channels will include how Case Company X can communicate the value obtained from its online innovation to the customers. Also, differ-

ent customer segments require different customer relationships. The customer relationship element of the business model describes these types of relationship required to capture value from the clients. Relationships could come in terms of co-creation, automated services, self-service among others. The revenue stream element shows how the company will make money by generating cash from customer. Such cash in this study might be additional value captured from clients for using online open innovation in design process. This type of revenue stream can be classified as brokerage fees charged for facilitating open innovation. (Osterwalder & Pigneur 2011, 21-31.)

The other elements of the business model canvas include key resources, key activities, key partners and cost structure required in creating the proposed value. Key resources are the most important assets required to make a business model work. They include people, money and intellectual property among others. Similar to the key resources, the key activities describes the most important actions required to create the value. Activities identifiable at open innovation companies include platform maintenance (Innocentive, 2012). Furthermore, key partnership is another important element of the business model and it describes the collaborative network of people required to create and deliver value. The advantages of such partnerships include risk reduction, business model optimization and resource acquisition. The last but not the least element of the business model is the cost structure and it describes the cost of actually creating value. The cost may come in different structures such as fixed cost, variable cost, economies of scale and economies of scope. (Osterwalder & Pigneur 2011, 38-41.)

While the theories explored in this study were pulled together from several trusted sources, there exists an inter-relation of the key concepts which helps provide the basis for the hypotheses that are verified through the field research. The next section provides a pictorial image of this relationship as well as a short description of the relationship without repeating the deeply discussed concepts above.

2.6 Relationship between theories

Though the relationship between the theoretical concepts has been somewhat discussed while discussing individual theories above, figure 8 below is matrix showing the relationship between the theoretical concepts that are involved in this study.

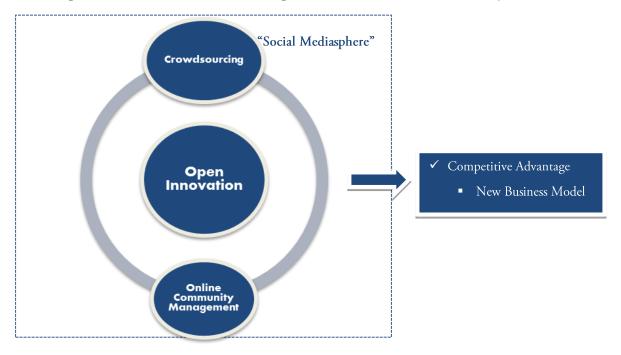


Figure 8. Theoretical frame of reference developed by the author

Figure 8 clearly shows open innovation as the central idea of this study as a way to gain competitive advantage. Online community management is the theoretical concept supporting the recruitment, engagement, persuasion, conversion and retention of members of the online community. Crowdsourcing indicates the input techniques because social media is being considered unconventionally in this study as a platform for open innovation. As reflected in figure 5 earlier, wisdom of crowd, crowdvoting, crowdsourcing creative works and implicit crowdsourcing all serve as the techniques explored for open innovation. Social media in this case includes social networking site as well as the possibility to create a separate online social media that will enable open innovation. With all happening in the "social mediasphere"- a combination of several social media platforms, this will amount to competitive benefits in the form of new ways of servicing clients and a completely new business model.

3 Field research design

This chapter describes the research methodology, research method and data collection technique adopted in this study and justifications for the selected methods. In addition to these, detailed description of data collection process, data analysis method and data quality assurance issues are also covered.

3.1 Research methodology and design

Attachment 1 shows the relationship between the research problem, research objectives, the theoretical concepts, research methodology and the expected outcome of the study.

The utilization of qualitative methodology in this study has various justifications. Firstly, this study involves the unusual use of emerging social media to crowdsource innovative idea during the service process of a business to business consultancy company. This therefore makes the detail of experience and perception more useful to this study than a quantitative study which focuses on variance (Silverman 2005, 8). However, this does not completely render the use of quantitative approach useless as both research methods aims at generating individual points of view. Moreover, if resources permit, the combination of different research methods can facilitate thorough address of the investigative questions (Silverman 2005, 8). Furthermore, a qualitative study allows the investigators to get closer to the actor's perspective through the adopted data collection tool (Silverman 2005, 10). This aligns perfectly with Burns & Bush's (2010, 233) description which state that a qualitative study allows for an in-depth exploration of each respondent's experiences and perceptions in order to develop a set of hypothetical techniques, processes and recommendations from the research.

In addition to the above, while there are a few papers and books encountered on how social media can be a crowdsourcing platform for open innovation, this study provides recommendations to B2B organizations but not restricted to other categories from experiences of leading organizations and thought leaders in the field of study. Lastly, as

suggested by Silverman (2005, 7) I consider myself, the author of this study more comfortable with a qualitative method than a quantitative one.

Using purposive sampling in the selection of cases, this study sought out individuals and settings where the processes being studied are most likely to occur (Silverman 2010, 141). The cases in this study had been selected to cut across both B2B and B2C organizations and experts that have been able to build and crowdsource ideas from online social communities. As earlier mentioned in the previous paragraph, social media and the adoption of the crowd in creation of things, popularly known as web 2.0 is an evolving one. A few individuals and organizations around the world are at the frontend of this while some are lagging behind. Such organizations have been able to apply some of the theories studied in chapter 2 of this study to build online communities using social media and involve the crowd in their value creation process and maximized the advantage presented by this phenomenon. Similarly, while there is access to some of these organizations for qualitative studies via online technologies, some are not reachable. This therefore justifies the utilization of both the emotionalist model (opinions, stories, and perceptions) and constructivist model (existing behaviours) of qualitative studies in the data collection instrument.

3.2 Research method

As stated in the earlier subsection, the research design accessed the perception, meaning and behaviours of individuals and organizations that are at the front-end of utilizing this phenomenon. Case documentary analysis (existing behaviour) and Experience surveys (opinions, stories, examples) were chosen as the research methods. Case study analysis is reviewing available information about past situations that has similarities to the current study (Burns & Bush 2012, 146). In addition, case study (Swanborn 2010, 13) also refers to a social phenomenon that focuses on process tracing i.e. describing and explaining social processes existing between persons in the process, people and their values, expectations, opinions, perceptions, resources, controversies, decisions, mutual relations and behaviour. In this study, case analysis has been referred to as benchmarks for congruence with the introductory chapter of this study. This aims to study how phenomena are constructed as indicated by Silverman (2005, 11). On the

other hand, experience surveys in this study referred to as expert interviews is the act of gathering information from knowledgeable people on the issues related to the research problem. This was utilized in gathering authentic insights through open-ended interviews from experts in the fields of open innovation, customer-centred design, social media and crowdsourcing.

The selected methods are justifiable because in applied research, we try to solve the problems of description and explanation- what is, how and why questions (Swanborn 2010, 33). Specifically, this is related to what platform is most suitable for open innovation, how can the platform be set up and what should be the motivation for the company as well as the contributors. In addition to the design problem, other justifications for the case methods include rarity of the phenomenon at hand and ability to compare actions at the selected cases. However, one of the challenges associated with this approach is that researchers often find it difficult to generate conclusions based on their case studies (Swanborn 2012, 12). This risk posed by this method was mitigated by the analysis of up to 3 cases which enlisted a number of actors in the watch for useful information (Stake 1995, 68).

Table 1 below shows the research method and investigative issues that are covered in the study.

Table 1. Data collection technique and investigative questions aimed to address

Research method	Investigative questions
Expert Interviews	(1) What types of online social media
	platform enables crowdsourcing
	idea generation?
	(2) How to acquire and maintain these
	online social communities?
	(3) What are the strategies, techniques,
	and processes involved in online
	open innovation?
	(4) What are the competitive benefits

	and challenges of crowdsourcing for open innovation for Case
	Company X?
Platform analysis of benchmarked	1. What types of online social media
companies	platform enables crowdsourcing
companies	idea generation?
	(2) How to acquire and maintain these
	social communities?
	(3) What are the techniques, strategies
	and processes involved in online open
	innovation?
	(4) What is the existing people profile
	for open innovation in benchmarked
	B2Bs?
	(5) What are the competitive benefits
	and challenges of crowdsourcing for
	open innovation for Case Company
	X?

3.3 Data collection technique

Qualitative studies are more focused on detail other than scope and they tend to deal with a small number of cases (Silverman 2005, 9). This therefore limited the number of companies studied as well as experts interviewed. At the planning stage of this research, it was planned to combine interview of experts and benchmark across international firms from Finland, The United States of America and other parts of Europe. The collective case analysis approach is utilized where a number of cases are examined in order to investigate generalizable phenomenon (Silverman 2010, 138). The chosen geography was due to accessibility and experience of firms and individuals in this area

of study. While most of the companies selected are business to business firms, some business-to-consumer firms are as well included. This is because social media as an open innovation platform has been widely used in the B2C categories compared to B2B and good practices can be applied to this study.

Experts, earlier defined as knowledgeable people on the issues relevant to the research problem are divided into 3 main categories. First is an expert in social media and online communities. The others are experts in open innovation techniques and strategies, and experts in usability and design. Experts in usability and design as well as the open innovation are assumed to possess adequate knowledge on how this mechanism could be transformed into competitive benefit for the case company. Attachment 2 shows the profile of the interviewees and the issues covered by the interaction with them.

As earlier indicated, responsive interviewing termed as an approach to depth interviewing research (Rubin & Rubin 2005, 30) is one of the instruments used for data collection in this study. There are several characteristics of this model that affected the entire research process. Firstly, this model relied on combining interpretive constructionist philosophy and theory to meet the needs of doing the interview (Rubin & Rubin 2005, 30). For a quick clarification, interpretive constructionist philosophy in research, "look for specifics and the detailed and try to build an understanding based on those specifics." (Rubin & Rubin 2005, 28b). The other characteristics of responsive interviewing that affected the build- up of the interview include focus on depth understanding and flexibility in design through the entire process. The interviews were structured to consist of main questions, follow-up questions and probes as indicated by Rubin & Rubin (2005, 129). The main themes were prepared in advance as shown in attachment 3. In depth interviews were planned to be recorded and later transcribed into texts during the analytical process. The flexibility earlier described above was reflected in the modification of questions along the data collection process. As more data were collected, it was important to reduce and shape data collected in order to ensure that all relevant information was obtained. This was achieved by modifying the thematic questions used for every interview conducted.

On the other hand, data and information from benchmarked companies were collected through desktop analysis of their online platform and guided by the investigative questions allocated to this method in table 1. This serves as the constructionist approach (Objective) aimed at balancing the emotionalist method of in-depth interviewing (Subjective). In addition to this, a video detailing existing behavior and practices at one of the benchmarked companies was combined with the platform analysis. The video consisted of detailed description of the set-up of a similar mechanism at one of the benchmarked companies. The subject of the video is later described as Expert Y.

Using multiple data sources comes with its own setbacks but the data collected from different sources converged. Therefore the results were accepted.

3.4 Data quality assurance

There are several measures taken to ensure the quality of the collected data. Firstly, in selecting experts, it was ensured that they had first-hand experience in the covered themes (Rubin & Rubin, 2012, 60). Similarly, experts interviewed had diverse experience covering the different concepts of the study. And where data collected was deemed to be insufficient to ensure richness, other methods were employed to cover missing data. Such is reflected in the usage of benchmarks to obtain information about intellectual property since respondents were unable to give comprehensive responses on how intellectual property could be managed in open innovation.

Furthermore, the use of diverse experts with different backgrounds as well as combination with platform analysis and video analysis helped mitigate the risk of imbalance and lack of thoroughness (Rubin & Rubin 2012, 62). The subjective opinions of experts were complemented with more factual documentation of practices at benchmarked platforms. As matter of fact, interviewees were further queried using probing question when they make comments that brought new perspectives or unanticipated ideas.

And for accuracy, expert interviews were recorded and later transcribed in order to ensure that details of the interview were captured. In addition to that, notes were taken to make side remarks that helped to understand some statements during analysis. In

several cases, the transcripts were read more than two times in order to truly capture the expressions. And to ensure the credibility of collected information especially expert interviews, the measurement questions were framed to emphasize the usage of own experiences and opinions. For example, when an expert cited the usage of externals in her company's service delivery, follow up questions were asked to clarify if it was from the strong ties of the company or weak ties. (Rubin & Rubin 2012, 65.)

Finally, Swarnborn (2010, 36) stipulates that an obvious way to determine the quality of an applied research project is that the result will be usable for the commissioning company which will be verified months from now.

3.5 Type of data collected

As described in the previous chapter, multiple data collection methods were employed in obtaining information required to achieve the objective of this study. The methods were initially planned to include only platform analysis of benchmarked companies and expert interviews in the fields of user experience design, open innovation and online community management. However as mentioned earlier section 3.3, an additional video analysis was added to ensure sufficiency of collected data.

More than 20 experts across the world were approached via phone, email and LinkedIn for possible interviews. In the end, 5 experts were interviewed, 3 open innovation platforms were benchmarked and one video analysis was conducted. The data collected were in the form of texts, images and audio recording of experts.

3.6 Interviewees and benchmarked platforms

For the purpose of anonymity, the experts are described in as Expert A, B, C, D and E in attachment 2. Their names or their organizations are not recorded in this report but can be provided in special circumstances. On the average, the time spent interviewing each respondent was about an hour and all interviews were conducted in respondents' company premises. Interviews were conducted using the responsive interview model described earlier in chapter 3. Also, brief summary framework of the study and inter-

view themes was sent in advance to respondents. During interviews, a mobile recording application was used to tape responses and they were later transcribed into written texts. Each time an interview is completed, it gives me more insight on what how to structure the next interview and what data would be the priority. For example, after the first interview, it was figured out that a study framework was needed so that they would better understand the purpose of the study. As a result, a summary of the study framework was designed and subsequently attached it to the interview themes for every contacted expert.

On the other hand, the benchmark platforms are open and are briefly described below for the purpose of familiarity with their services.

"OpenIDEO is a place where people design better, together for social good. It's an online platform for creative thinkers: the veteran designer and the new guy who just signed on, the critic and the MBA, the active participant and the curious lurker." (OpenIDEO, 2012.)The description above reflects the diversity of the crowd on OpenIDEO's open network

"Innocentive is the open innovation, crowdsourcing, and prize competition pioneer that enables organizations to solve their key problems by connecting them to diverse sources of innovation including employees, customers, partners, and the world's largest problem solving marketplace." (Innocentive, 2012.) As opposed to OpenIDEO, Innocentive combines internal capabilities with input from the open network in solving client's problems.

Ideastorm is a platform for Dell's customers and fans to submit product ideas they will like to see implemented by the company. Ideastorm is mainly used in the idea phase of the product development as contributors are not mandated to make a prototype of their ideas.

3.7 Data analysis and main issues

Data analysis cuts across the method in which the data gathered during the field work were refined to extract the required information in order to draw a conclusion on the study at hand. Walliman (2011, 132) suggested that in most qualitative studies, the data analysis usually undertakes three basic processes of data reduction, data display and conclusion drawing/verification which usually happens concurrently (Huberman 1994, 10).

The first two interviews conducted provided a lot of familiarity with the customer experience design process and this helped clarify some themes and reduce the amount of information needed in subsequent interviews. After collection of all data, collected information was organized using typologies based on similar characteristics. Retrieval and pasting of text from transcripts as well as reflective memos were utilized in data reduction. Subsequently, themes, relationships and concepts were identified across analyzed cases.

Furthermore, themes and emerging variables from cross case analysis and expert interviews were reviewed to establish a basis for conclusion drawing (Walliman 2011, 135). In the proceeding findings chapter, conceptually ordered displays showing processes, procedures are utilized. Similarly, networks are utilized to show relationships (Walliman 2011, 137).

4 Results

This chapter records the raw details of the information obtained from the field work. The questions used in the interviews and themes used in drawing information from the benchmarks were utilized below. The data collected from the questionnaire were later categorized under the investigative questions pointing to the research problem. Investigative questions are sometimes referred to as IQ followed with the respective numbers. (E,g IQ 1 or IQ 2)

4.1 Type of social media that enables crowdsourcing

This part of the result addresses investigative question 1 (IQ 1). As a starting point, respondents were often asked to identify what types of social media utilizable for the purpose of this study. Expert E and expert Y pointed out the first step is the creation of a social community related to the product and then use it to engage people on other social platforms. Facebook was recommended as a global social platform that will make it easier to get people on board. And specifically for Finland, combining this and blog will make a perfect combination. However, "Twitter is not so attractive in Finland compared to other international communities." (Expert E)

Similarly, benchmarked platforms employ their microsite and a combination of other social networks where people do have an existing profile in making this mechanism work. The social media obtained from the field study include Facebook, Google plus, Blogs, Twitter, LinkedIn and Vimeo for video hosting.

4.2 Strategies, techniques and processes utilizable in online open innovation

This section reports the information gathered to address investigative question 2 (IQ 2) of this study.

The data collected for this research question are related to different themes revolving around open innovation techniques and processes from benchmarks and experts. This will enable the employment of practices in the process of establishing the same for the

case company. The following sections report the outcome of interviews, video analysis and documentary analysis conducted around this question

4.2.1 Categories of open innovation

Experts A, B, C and D acknowledged the use of different methods in conducting user testing or co-creating with customers. Methods include group or individual interviews, observations, online surveys, remote usability testing and long term trialing service. Lon term trialing service is where a product or service is made available to users over a period of time and information is obtained in different ways to improve design of such product or service. Open networks offer a different kind of approach of creating things with users and there are different categories of it.

This part of the field work reports the different categories of open innovation mainly obtained from the video analysis and online platforms of OpenIDEO, Ideastorm and Innocentive, the benchmarked companies in this research. Using these benchmarks, there are several themes, processes and techniques outlined in the theory part of this study that emerged but this will be intensively discussed in the proceeding chapters of this study. People can contribute in different ways online. There are two broad categories of contribution namely:

- 1. **Conscious contribution** where members of the community are fully aware of their participation in co-creation of value. Examples include the benchmarked platforms featured in this study.
- 2. **Unconscious contribution** where people are unaware of their participation in co-creation of value. An example of this is the participation of people in making Google smarter each time they make a search but they do not know themselves (Expert Y, 3 Oct 2012).

In the benchmarked platforms, there are two subcategories of the conscious contribution system. They include open challenge and closed challenge. The open challenge allows anyone on the web that has an idea to be part of a community to solve problems. It allows for open contribution, open moderation and open selection. Attachment 4 depicts the elements of the open challenge system as obtained from the field study. Such elements include a request for input by the host company, ideas discussed within the community and between ad-hoc smaller groups, exciting areas for implementation and so on. Using the purpose of its decision to delve into the open network as a guide, OpenIDEO decided to apply the open challenge system where members of the community are used in gathering, inspiring, concepting and evaluating people's contribution as shown in attachment 5 (Expert Y 3 Oct 2012). OpenIDEO throws in a big question and asks community members to provide possible solution to such problems. As observed, such contribution comes in the form of ideas, creative concepts such as images, mockups and so on. Furthermore, community members can vote for best ideas and can obtain the same as well. It was figured out that this decision to create an open challenge network instead of a closed one was guided by the company's DNA which includes:

- 1. Diversity in the form of intersection of disciplines such as entrepreneurship, engineers, designers and so on
- 2. Looking at extremes for inspiration: extremes of behavior and extremes of market is where the future lies. Therefore if you want perspectives of where the future sits, start looking at the extremes of behavior today.
- 3. System design: Citing that IDEO design systems and creation of OpenIDEO was another opportunity to increase the elements of its system. (Expert Y 3 Oct 2012.)

In addition to the values described, it was obtained that if some of the stages in the design process were closed, the amount of information to be filtered internally will be too overwhelming for the company to handle.

On the other hand, it was observed that in the closed system, only a selected category of people are allowed to join, while moderation and selection are subjected to internal criteria. Furthermore, the closed system hardly encourages community collaboration as community members are often skilled people in the area of interest. Attachment 6 is a description of the closed system as obtained from the field study. The company throws

a big challenge and solvers are triggered to develop solutions for such challenges. The best is selected without necessarily encouraging collaboration in the development of such solution. The same pattern was obtained at Ideastorm where the company throws in a challenge and invites solution from community members. Also, something unique at Ideastorm is the ability of members to also request a wish and if the crowd votes it as important, the company will go ahead to implement it. Innocentive and Ideastorm utilizes the closed system because as opposed to OpenIDEO whose major purpose is for social impact, Innocentive and Ideastorm are mainly for commercial purpose. The closed system as obtained out requires some form of internal moderation in order to minimize the effect of overwhelming information and infringement on intellectual properties.

As a summary, table 2 below shows the types of crowdsourcing, an open innovation technique observed in the benchmarked platforms.

Table 2. Contrasting utilization of different crowdsourcing types in the benchmarked platforms

	Open Ideo	Innocentive	Ideastorm
Crowdcasting	×	×	×
Idea jams			×
Crowd creation	×	×	×
Crowd voting	×	×	×
Implicit			×
crowdsourcing			

4.2.2 Application of open and closed challenges

Both the interviews and the video analysis reveal that both closed and open challenge systems can be applied in the ideation phase of the design process. Expert D suggested the open system can be used for recruiting enthusiasts on a global scale through an online tool, used for generating ideas for partners and provide a trigger for contribution to the topic in question. The open system might be harder to handle from a com-

pany's perspectives because it can turn to anything. In any case, the target group must be what the customer wants.

Expert D and E stated that there could be a closed platform for professionals. It was stated that in a professional community, members are willing to show what kind of skills they have which is motivating for people. Expert E cited a crowdsourcing effort by the Finnish technology company, Reaktor. Reaktor has positioned itself as a leader in the industry, by branding itself as the best technology company in Finland. Besides that, they engage in offline crowdsourcing by inviting the best programmers to a coding championship and make them code and compete with each other. They were able to gather together these geeks because the geeks knew it will bring recognition to them and they are able to show their skills. However, they don't do it completely for free. In addition to that, the winner gets a trip to Dubai and lots of other fancy prizes. So in this sense, closed communities can actually bring better benefit than the open communities where anyone can participate. It could be very efficient and a lot of great ideas have come from this type of community especially when you manage to gather the smartest people in the area. Through this system, one can minimize the risk by taking a targeted group of skilled people.

Furthermore, Experts D and E cited that intellectual property might be better manageable in the closed system because of the minimal number of people involved as opposed to an open system.

A common element among the justification of the type of system to be adopted provided by all respondents is the provision of incentives to trigger contributors. The result of this is presented in section 4.2.4.

4.2.3 General process of starting a microsite

In the theoretical part of this study, one of the ways to gather an online community as described by Weber (2009, 84) is to set up a microsite and link it to an existing site. Questions related to the set-up of such a microsite were included in the questionnaire (attachment 3). This will be discussed later in the proceeding chapter but it is important

to point out that the outcome of the objective analysis of the benchmark platforms converges with the subjective opinion of some of the interviewees. Expert E particularly stressed finding something related to that product, "for instance something related to a pen, and then create this community around this rather than around pen itself." Expert Y reveals that it is important to have a process in place and decide which of the design bits one wants to democratize. Attachment 7 shows the design process at OpenIDEO which is similar to the one described in the opening chapter of this study. OpenIDEO decided to democratize the insight, ideation and evaluation which can be categorized into generation and synthesis phases. As a summary, the common themes around the process of setting up such a microsite are as follows:

- 1. Decision of which bits of the design process to democratize.
- 2. Creation of an open network for to make this bit work.
- 3. Recruitment of people to the platform.
- 4. Introduction of idea challenges.
- 5. Constantly development and measurement.

4.2.4 Motivation of people for contribution to open innovation

Different types of open innovation considered in the theory part of this study require different compensation methods to trigger interest. As a result, themes related to the motivation of contributors for this purpose were included in the measurement questions. Subjects of the fieldwork pointed out the importance of internal motivation as a key to making people participate in an open network. Depending on the type of open innovation system one is adopting, the data collected indicates there could be different motivations behind people's interest in being part of a product or service design process.

Firstly, in the video analysis, Expert Y used Abraham Maslow's hierarchy of needs shown in figure 9 below in articulating the profile and motivation of people to contributing to a better society in the open network system. He mentioned that human beings have a need for self-actualisation in which creativity and problem solving are major elements.

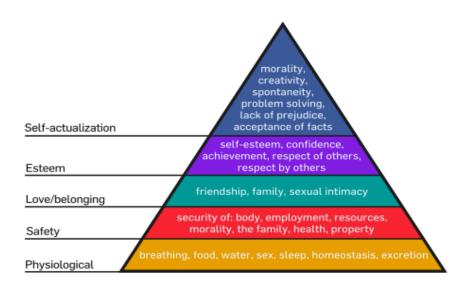


Figure 9: Abraham Maslow's hierarchy of needs (Expert Y, 3 Oct 2012)

This is particularly what OpenIDEO relies on as the main driver of motivation in its community even though other incentives are utilized. Innocentive use phrases like "How often do you have an opportunity to make a meaningful contribution to the world"? or "Apply your knowledge and creativity beyond your day job" as a way to trigger the interest of people in joining its community. Therefore, if people are really motivated about some certain type of topic, they would be really interested in contributing. Experts B and C and D cited the example of people who have been earlier involved in usability testing in Finland as simply interested in being part of decision making and showing their creativity. Therefore, contribution is the key here especially for Finnish people.

Secondly, financial benefits could be used to induce members of the community in contributing ideas. This is mostly applicable in the closed systems where professionals are solely relied on in generating ideas, developing concepts and coming up with prototypes of their designs. In addition to the good feeling that comes with their contributions being valued, members of the Innocentive community can obtain financial incentives ranging from \$5,000 to \$1,000,000 for their ideas. Similarly, the same practice was observed at the platform of Ideastorm owned by DELL computers. The approach at OpenIDEO is that once money is introduced to this type of systems, it automatically

selects for the most interesting type of person which is market based and other values of the community like collaboration gets tougher to foster (Expert Y, 3 Oct 2012)

Furthermore, skills display can also be one of the key reasons for contribution. At OpenIDEO, it was obtained that contributors get points at every stage of the innovation process shown in attachment 5 which when summed up, becomes a Design Quotient. The Design Quotient (DQ) is a measure of your contributions to OpenIDEO and it increases every time you comment or build on other people's inspirations and concepts. Contributors can share it with their friends, colleagues, teachers, and even potential employers to give them some insight into what they are best at. The same pattern was obtained at Innocentive and at Ideastorm. At Innocentive, community members get points on how many problems they have been able to solve as well as how many of their problem solving ideas have emerged as the winning idea. At Ideastorm, community members are ranked based on the number of contribution. Contribution point is an aggregate of the number of ideas, number of votes and the number of comments submitted as well as received.

The subjective side of the field study reveals a similar pattern during the interview where one of the respondents stated that one of the benefits for contributors would be that they can show their skills, use it in job applications and reference that they have done this type of designs. Other motivation behind contribution obtained from the video analysis is described in attachment 8 where motivations are split into extrinsic and intrinsic motivations. While extrinsic is market based, intrinsic is community based.

In summary, the analysis of benchmarks provides adequate information to identify underlying themes related to the strategies, techniques, and processes involved in open innovation. This also converges with majority of the opinion of the experts interviewed during the field work.

4.2.5 Other Important factors to consider in online open innovation.

Apart from the earlier mentioned strategies, processes and techniques, there are other important factors to take into consideration while engaging in online open innovation.

Respondents cited the choice of channel as one critical factor. Bringing people to a community of like-minded people might make it easier for them to participate in a discussion rather than in a general place like on Facebook. This is reflected as well in the benchmarked companies' platforms where majority of the input are obtained on the microsites while other social media are just pull tools.

Another important factor in triggering people to participate in such an open system is the theme and how you frame the topic or question. Elements identified by respondents as highly important include relevance, how exciting or interesting the topic is or on what product or service is the idea required. The type of questions you ask and how you frame it is extremely important. The video analysis subject at OpenIDEO suggested asking the question- what is the manageable chunk one can ask people to participate in? By using the business model as a guide, OpenIDEO is able to ask the right questions. If you ask a bad question, you get a bad answer. Ask the questions by connecting it with media, terms and conditions, evaluation criteria, initial contributions and the partners involved as shown in attachment 9. This is important because this will keep everyone towards the right direction.

4.3 Existing profile of people for open innovation in benchmarked B2Bs

This section aimed at addressing IQ 3 of the investigative question was initially meant to be approached by obtaining factual information from the business to business firms among the benchmarked companies. However, only two of the three firms studied had reliable facts related to the measurement questions. Therefore, the responsive interview was designed to include questions related to the profile of people that might find online open innovation attractive.

In general, Experts D, E and Y stated personal interest in technology as a key characteristic of such contributors. They include a small group of people who are a step ahead and generally enthusiastic about technology and are willing to find out trends in their field of interest. Expert E also stated they could be people who are users of such product or service and people who the product might influence directly. Experts E stated that these are usually young people and skilled professionals in the field of interest.

At OpenIDEO, the profile of people as obtained is as follows:

- Gender- split in gender, 50% male and 50% female
- Age group- 20-40, the often creative class
- Geography- community representative from 199 countries
- 80% are lurkers and 20% are active users (Expert Y, 3 Oct 2012)

On the other hand, the statistics available at Innocentive are as follows

- Total Registered Solvers- More than 260,000
- Geography- from nearly 200 countries
- Total Solver Reach: 12+ million through strategic partners
- Total Challenges Posted: 1,450+ (Innocentive 27 Sep 2012)

4.4 Acquiring and maintaining online social communities

This research question was designed to obtain guidelines and best practices from benchmarked companies as well as experts about IQ 4 which is how to build a community on the selected social platforms and what kind of internal resources and structure are essential to the success of this mechanism.

Information collected was broad and in some cases very detailed. In reporting this, I have tried to group them using the theoretical framework covering this question. In cases where they don't fit, I have summarized them under related themes.

4.4.1 General procedures and guidelines

While most companies think building an online community is easy, opinion survey reveals that it really requires an effort and when it proceeds beyond just posting but making people to contribute for open innovation purpose, the company really needs to define if it wants to commit its resources to this mechanism (Expert Y, 3 Oct 2012). Presented below is a summary of the general to-be-followed procedures suggested by respondents.

- 1. Firstly, decide if the benefit is worth the effort.
- 2. Agree on what kind of channel is to be utilized.
- 3. Start small: Start with one channel, for instance Facebook and build the community there by putting relevant content.
- 4. After a certain momentum has been gathered, launch a blog and engage on other platforms.
- 5. Market in the right way and ensure people know that this kind of place exists.

4.4.2 Targeted marketing on the social web

This part of the fieldwork covers the steps required to get people on the selected platforms. The information for this section was obtained as indicated in the overlay matrix from video analysis, online expert interview and platform analysis.

Firstly, it was obtained from Experts E and Y that the company needs to go to where the target group is which depends on the purpose for which the social platform was established. And the best way to do that is to harness other platforms where people already congregate such as Twitter and Facebook. At OpenIDEO, they tend to go where people are rather than expect them to always come to their platform. Facebook is common because people are there but there are also specific communities of designers, conferences targeted at these groups, as well as blogs and website where you can reach designers or creative people in general.

Secondly, Expert E suggested one might need to pay to get those people especially if high profile people are needed. She further suggested spending some pretty low cost customer acquisition fund especially on Facebook because compared to Google ad words or banner ad, it is fairly cheap. These types of low cost targeted marketing can ensure that the right people are reached. It is basically marketing and because value is required from the community, it is important to think about what kind of people can give this value to the community and try to reach them.

Another important step obtained is to ensure the regular availability of content in order to engage the community. One of the interviewees specifically stated the company might consider having a blog and a Facebook page. However, there is no point to start a blog if they are no new content every week or a couple of times a week. Most importantly is also that the content matters to the people. The company will need to show they have something useful for this people. And if the company decides to go for the closed platform exclusive for the creative designers, content is one way to brand themselves as the best in the field.

4.4.3 Customer engagement effort as obtained in benchmarked platforms

As earlier stated, the theory part of this research was used in constructing the measurement questions. Customers go through an engagement process on the social media and companies are required to make targeted efforts, as reflected above in order to ensure that customers go through these stages. The following sections include obtainable summary of efforts made by benchmarked platforms in taking customers through these stages. The actions and strategies indicated in the right side of the tables under each stage of the engagement process are not directly related to the social platforms on the right.

Awareness

The three platforms studied all use different approaches in creating awareness on their social platforms. For comprehensive details of these efforts by OpenIDEO and Innocentive, see attachment 10 and attachment 11 respectively. Ideastorm was exempted from this typology because of the shallowness of obtainable information and its direct

linkage to the mother company, DELL Computers. Table 3 shows that both companies have combined a number of social media in order to enable online contribution and drive traffic to the microsite. Similarly, they have as well utilized similar strategies and action in terms of content and website features.

Table 3. Summary of awareness activities by OpenIDEO and Innocentive

Social Platforms	Action and Strategies
Own microsites	Promotion of platform
• Facebook	Sharing challenges
• Twitter	Sharing thought leader's content
LinkedIn	Sharing of industry related content
Google plus	Tips ahead of upcoming challenges
• Vimeo	Re-sharing own content
Company blog	Integration with Facebook
Partner social media pages	• Referrals
	Social sharing add-ons

Engagement

In engaging users, both companies have also utilized similar efforts to creating awareness. Table 4 below summarizes the platforms, strategies and actions utilized for this purpose.

Table 4. Summary of engagement activities by OpenIDEO and Innocentive

Social Platforms	Action and Strategies
Own microsites	Availability of relevant content
• Facebook	Alignment of challenges with world
• Twitter	events
• LinkedIn	• Connecting ideas or challenges with
Google plus	people's passion
Company blog	Regular updates
	Discussion forum

Process focusedCompetitive actions

Most of the engagement actions are done on own social platforms and are focused on content and making sure people do care about such content. This is seen across both platforms.

Persuasion

Persuasive efforts observable on the platforms is summarized in table 5 below. Competitive effort mentioned in the table refers to displaying top contributors which tends to challenge community members to participate as well. Other persuasive efforts include display of accreditation by trust partners, show casing winners on social media and sharing performing tips that can help members create ideas or solve problems.

Table 5. Summary of persuasion activities by OpenIDEO and Innocentive

Social Platforms	Action and Strategies
Own microsites	Competitive actions
• Facebook	• Performance tips
• Twitter	Accreditation by trust partners
• LinkedIn	• Announcement of winners on so-
Google plus	cial media
Partner social media pages	• Reminder and re-sharing of content
Company blog	New challenge notification

Conversion

In order to ensure the end goal of the online engagement is attained, the companies also put special efforts in converting persuaded members. Table 6 below shows a summary of efforts in ensuring conversion of community members.

Table 6. Summary of conversion activities by OpenIDEO and Innocentive

Social Platforms	Action and Strategies	
Own microsites	Sharing video and detailed in-	
• Facebook	structions to increase interac-	
• LinkedIn	tivity	
• Twitter	Showing leads when necessary	
Google plus	Encouraging collaboration	
Company blog		

These happens majorly on the owned social communities and conversion in this case is when a community member takes an action which can include, inspiration, concepting or just evaluating another person's concept. The companies also show challenge tips to give members a head way in tough challenges. An example from OpenIDEO is shown in attachment 12.

Retention

Retention action identified at benchmarked platforms can be summarized in table 7 below.

Table 7. Summary of retention activities by OpenIDEO and Innocentive

Social Platforms	Action and Strategies
Own microsites	Open reward on social net-
• Facebook	works
• Twitter	• Share a lot of persuasive indus-
• LinkedIn	try content
Google plus	Discussion forum
Company blog	Referral commission
	 Monetary rewards
	• Newsletters

They include sharing microsite rewards on other social networks, regular update and sharing of contents and creating a discussion forum for community members to discuss. Innocentive also rewards people for sharing awards.

4.4.4 Other collected community engagement features

Apart from the conscious effort performed daily to engage customers, the microsites of the benchmarked companies were observed to have been equipped with a variety of features that are worth covering for the purpose of this report. The following are some of these features as recorded during the platform analysis.

Attachment 13 shows some of the important features of OpenIDEO's site that encourages engagement. On OpenIDEO's platform, an activity feed that shows most recent conversations on the platform is displayed on the left while other social sharing tools are displayed on the right bottom side to encourage social sharing at stage in the design process. On top of the page is a flow chart showing the different stages of the design process as well as highlighting which stage the information a viewer is looking at belongs. A "read the brief" button lies close to the challenge title so that a viewer can quickly navigate to the challenge details. Also as reflected in attachment 13 the profile of a concept owner is displayed at the right top of the page and real time statistics of her contribution is displayed. A viewer can decide to keep up-to-date with a challenge with the help of a follow update button. (OpenIDEO, 15 Sep 2012.)

Furthermore, every call to action related to every design phase is well highlighted at OpenIDEO as shown in attachment 13. At the evaluation phase, the page reflects applause which is a call for a viewer to applaud an already suggested concept.

Similar important features were obtained at Innocentive. Attachment 14 shows the challenge page of Innocentive showing on the right social sharing tools and trust partners. In the project room shown in attachment 15 which requires signing an agreement before a user can enter, detailed information such as challenge criteria, requirement and attachments are provided. On the solution page shown in attachment 16 detailed step by step processes required to guide a solver is shown. (Innocentive, 27 Sep 2012)

Lastly, Ideastorm which is mainly used for idea jam also had some features worth obtaining for the purpose of this study. Challenges are thrown into the platform with some specific details such as eligibility to participate, sponsor, time-frame, how to attend, who the judges are and the winning criteria.

4.4.5 Internal structure and resources

Part of the online community management part of this study deals with what internal resources and structure is required by the company to succeed with this mechanism. Questions related to this were obtained from respondents. Also the video analysis did reveal some good practices from OpenIDEO.

As against general assumption, running a microsite and other social communities does require resources and effort. The subject of the video analysis pointed out that "it is important to be active and maintain the drum beat" (Expert Y, 3 Oct 2012). And in order to make this happen, adequate human resources is required. Expert E further expressed that everyone needs to be on board because it works better in this way. Hiring a community manager is not enough. The work can be divided between many people especially in a small company of less than 22 employees. Experienced people in the company can be used as content provider while it is important to have someone who is really driving the mechanism. (Expert E, Sept 2012.)

Another important point stressed by an Expert E is the financial resources. Money is definitely needed for external branding and for hiring the extra driver of this mechanism within the company.

When it comes to the role of the company in this mechanism, the opinions of Experts D, E and F reveals they should consider themselves as facilitators of innovation. This also converges with facts obtained from the analysis of Innocentive's platform. They become facilitators by creating a kind of snapshot of activities especially in the closed system, looking at the situation and forming an opinion about it, creating a kind of summary and maybe showcasing something concrete to company clients about the progress of the challenge.

Respondents were also asked if the company should outsource or build an internal team for managing this platform. Expert E suggested that both approaches are employable but outsourcing will only work with a very high communication mechanism put in place between the involved firms. For instance, if a customer complains on a Facebook page, the contracted firm will probably be unaware of what is happening and why it happened. As it might not be a stand-alone mechanism but part of marketing, service development or product development, it is therefore more beneficial to build it in-house.

4.5 Competitive benefits and challenges of open innovation

This part of the fieldwork focused on obtaining information from experts on the benefits this mechanism might offer as well as challenges ahead. This is directly linked to answering investigative question 5 of this study. The opinions and ideas of respondents are summarized below. Furthermore, some of the information collected during the platform analysis of benchmarked companies that are recognizable benefits or challenge solving facts are recorded here.

Firstly the importance of open innovation is collected, benefits to current service offering, possible new service model and challenges are recorded.

Importance of open innovation in a customer centered design consultancy

As earlier emphasized, this study is not aimed to prove the importance of open innovation but to find out and develop techniques that could be utilized in adopting open innovation in a design consultancy firm. However, as part of IQ 5, the interview questions and documentary analysis were structured to first identify the opportunities open innovation could offer firms.

Interview respondents all stressed the importance of collaborating with externals in R&D, especially end users of such products. This is because you tend to create better value than when done internally. Expert A, B and C pointed out that companies are more bound to have commercial success when they design with end users or are able

to pre-obtain idea in the design process. And specifically in a consulting company, the value for them lies in the awareness of the wishes and knowledge of the client's customer which will help solidify their relationship. However, Expert E and D specifically emphasized that while something new might be discovered in the open innovation process, it could as well lead to waste of resources especially in an open system where anyone can be part of the process. Therefore it is important to obtain the idea from the right people. Expert E also pointed out that from experience, people don't know what they want until you show them in majority of cases. Therefore, one needs to get to the roots to understand the problem and what could be the solution to the problem as well as make sure the desired outcome is clear to contributors.

Though it is important to generate new methods in an innovation inclined firm, it was pointed out by all respondents that any organization needs to prove the economic benefit of a useful method and must be ready to get the best out of it. Creating such platforms for open innovation could as well represent a potential service module for the case company if combined with internal expertise.

4.5.1 Benefits of open innovation to the current service offering of Case Company X

Figure 10 below shows the current service process of Case Company X and people involved in value creation as explained by the company representatives. The process is rather an agile one in which during analysis, design would have commenced as well as evaluation such that feedbacks or customer perceptions could be implemented instantly. This is called agile design and development or rapid prototyping. The opposite of that would be waterfall which means approaching the phases in a sequential manner which does not just take a longer time but does not work in the fast changing environment that we operate in today. The benefit of this is that the company can ideate quickly, design quickly and evaluate quickly.

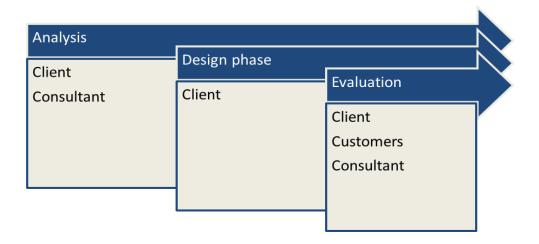


Figure 10. Current service process of the case company and involved parties (Experts B & C, 6 Jun 2012)

Service offering to clients on open netwo

Experts A, B, C and D pointed out the benefits associated with producing things in a new way. Experts B and C stated that when combined with the company's expertise and somehow guiding and facilitating the challenges, it could represent a new service module that could be offered to clients.

Another important benefit is that the company can get data about trends from the platform. Such trends could come from invention by somebody or links to something hot at the moment among others. This can give some new ideas in addition to what the company might already be suggesting to its clients. As emphasized, this might not be a standalone service but rather like a module that can be combined to other modules or maybe even a couple of modules. (Expert D, 26 Sep 2012.)

Experts B, c and D emphasized that testing and evaluation is usually the starting point of such offerings. In this regard, customers might want to know how to modify a product to succeed in the Chinese market or what special features are required for the Chinese consumers. What are the US consumer needs compared to Finnish consumers? We have a pink product for the Japanese market and clients might want to validate the appeal of such product to this target group. After this, design based offerings might be requested later.

Marketing the mechanism to clients

Apart from identifying the benefits, Expert D suggested how the mechanism can be marketed to clients. Workshops or presentations could be made to clients on what could be obtained from this community or mechanism and showcase of what could be produced with the system. A typical example is to describe to clients how this can be a useful source of information in designing better products

Customer segments

Respondents were asked about the customer segments that this mechanism might be applicable to. The general opinion is usage in digital products and ICT. However, there is an increasing demand for UX in other industries as well. Firms like Nokia, Rovio and KONE might be quick to identify the benefit of this mechanism because they are leaders in their own field and they know how to utilize the services of design consulting firms like Case Company X's very well. However, this is not restricted to businesses only but also includes public services where demand for improvement of the usability of public utilities has been on the increase.

4.5.2 Challenges and keys to mitigating them

The measurement questions were also designed to address some of the challenges related to online open innovation. Expert interview was planned to address this part of the study. However, relevant information was encountered during the platform and video analysis of benchmarked companies that supports opinions of the experts.

Firstly, Expert Y suggested that open networks might be potentially disruptive to the business model of a design consulting company. However, he suggested they give it a trial. He further stated that by deciding which part of the design process they want to democratize, such disruption could be mitigated.

Perhaps the most emphasized challenges across the different methods are issues related to intellectual property (IP). The more concrete you go in the product development cycle, the more the level of concreteness and the higher the risk of IP property expo-

sure especially for tangible products. In the ideation phase, it is not necessarily a big problem but it might require that the host company is kept anonymous.

In tackling IP issues at Innocentive and Ideastorm, community members are made to sign a NDA before entering project rooms where details of a challenge are available. An example of the agreement used at Ideastorm is shown in attachment 17. Clients of the case company are usually fine with the involvement of externals in product or service development but when products are very juicy, the people involved are always limited (Expert B & C, 6 Jun 2012). It might require the setup of special panels or restriction to internal people or just client employees. At OpenIDEO, the open challenge platform, contributors own the concepts generated on OpenIDEO which they non-exclusively license to the challenge host for possible publication. On the other hand, only Innocentive and the seeker that post a challenge can view the proposed solutions in their closed challenge system. They make both the seeker and the solvers to sign legal agreements that protect confidential information.

Another obtained key to mitigating these challenges is that questions or challenges are framed in a way that you cannot track the original purpose for which it is initiated. Furthermore, if combined with the company's own expertise, better result could be obtained. This can be an interesting additional module to the current service offering.

Other challenges pointed mentioned include over enthusiasm and level of realism of contributors versus the view of real users of products especially for usability testing purpose. From an online community management point of view, Expert E and Y pointed out that building a microsite and gathering an online community is very expensive.

4.6 Summary of collected information from fieldwork

In the research design, data collection methods were assigned to the investigative questions. However during data collection, relevant information encountered from unplanned methods were gathered. This was done to give more credibility and ground to the overall data. In most cases, and where dualistic information was obtainable from

more than one method, the opinion and experiences of experts converged with obtained facts and existing behaviour at benchmarked platforms.

Since the theory and the investigative questions were used in designing the measurement questions, majority of the themes were covered in the field work. Factually, field data also gave new dimension to the direction of my findings in this study which will be discussed in the following chapter. An example of that is the design of new business model for Case Company X which will show the elements of a new service offering around open innovation. Also, crowdsourcing terms as used in the theory are not directly obvious in the data collected but the underlying attributes of the different categories of crowdsourcing are strongly represented.

5 Key findings and interpretation of results

This chapter gives a brief recap of the study background, discusses the connection between the theories used in this study and the data reported in chapter 4. Discussions and different conceptual ordered displays showing categories, processes and procedures are utilized. Similarly, networks are utilized to show relationships between variables. Due to the nature of qualitative studies, it is also important to point out that the information in this result part is not recorded according to the flow of investigative questions but such that it is easier for a reader to follow the logic.

5.1 Recap on study background

Before proceeding with the key findings from the field research, below is a quick recap on the background of this study.

As earlier mentioned, case company X, a customer-centred design firm is faced with numerous business challenges. Among these challenges is how the company can obtain external input for innovation stage of its service process as shown in figure 3. Other services in its process could include business planning and analysis, design which covers idea generation and prototyping as well as evaluation which includes testing.

While most firms choose to rely on people, companies or labs they already know well for such external inputs which often result in same local search biases, this study is aimed at exploiting the strength of weak ties. Such weak ties include creative thinkers and professional designers in the general public that does not necessarily have direct relationship with the company. This study therefore aims to propose strategies, techniques, guidelines required to engage the target group in open innovation. In addition to this, the study also aims to propose a mechanism around online social communities that will also add value to the external brand of the company.

5.2 Type of social media that enables crowdsourcing idea generation

The discussion in this section aims to provide answer to IQ 1 of this study. The theoretical part of this study covering online social communities in chapter 2 suggested that one way to start building an online community in a low involvement firm like the case company is to set up a microsite for enthusiasts in the industry of operation. This will enable members of the community to share or exchange content-video, photos, texts with other members of the community. Preferably, the members of the community should include experts and amateurs from geographical areas of the business to ensure balance of knowledge. (Weber 2009, 84.) Similarly, McCorvey's (2012, 1) view of social network converges with the outcome of the analysis of benchmarked platforms shown in sub-chapter 4.4 where companies have made a microsite in the form of a social network for crowdsourcing as well as connect it to other existing social media platforms.

Weber (2009, 65) also pointed that in building such platforms, one needs to find the most important places online where people congregate, listening to them and mapping their conversations. This in particular reflects elements of the suggestion by Experts E and Y that Facebook, Twitter and blogs are essential tools to reach the public. However, it is important to bear in mind that Twitter is not very viral in Finland compared to other international markets. The type of other social platforms selected is influenced by the type of challenge system chosen for the microsite. Innocentive, the professional network of solvers uses LinkedIn because this is the most used professional network in the world. As a result, launching a microsite and establishing connection to other social media platforms represents the mechanism that enables open innovation in the form of obtaining input from professionals or ordinary creative thinkers. Figure 11 below shows a conceptual relationship between the proposed microsite for crowdsourcing and other social networks.

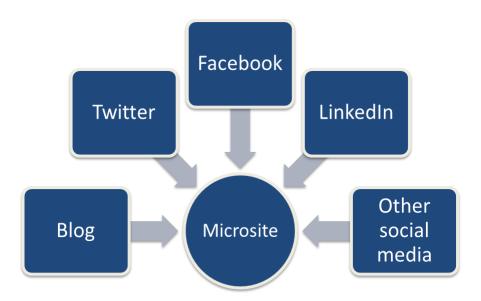


Figure 11. Crowdsourcing microsite in relation to the most congregated social media

The key to getting people engaged and get them coming back in an online community is content. Furthermore, people join online communities to meet people, entertain themselves, learn something new and/or influence others. (Section 2.4.) The microsite provides this bit for the case company which has a low involvement brand. The surrounding social media platforms will be used in driving people to the microsite where the overall objective of obtaining input will be achieved.

5.3 Strategies, techniques and processes utilizable in online open innovation

This part of the finding aims to draw conclusion on the categories of open innovation, where they are applicable, strategies and general processes for setup. (IQ 2)

Open innovation can come in the form of conscious and unconscious contribution (Section 4.4.2). And in section 2.2, crowdsourcing, an open innovation techniques was categorized into four main areas using different classification. Collected data from the field work enabled the convergence of this varying classification mode. Unconscious contribution described by expert Y in section 4.5.2 as when community members are unaware of their contribution to something is harmonious with implicit crowdsourcing defined in section 2.2.4 as when users do not necessarily know they are contributing but can be very useful in competing tasks. Furthermore, conscious contribution can be sub-divided to open and closed challenges as obtained from field data. OpenIDEO

uses mostly crowdcasting and crowdcreation techniques. As Howe (2008, 153) described, the key to making it work is to broadcast a problem or open up an idea collection platform. This occurs when openIDEO casts a big question to its community and expects its community members to work together to provide creative works or ideas in finding solution to the problem. The same pattern was observed at Innocentive where questions are thrown and members are expected to create solutions using their creativity. Ideastorm uses ideajam when it asks its customers for opinion about product features they will like to see which mirrors the definition of idea jam described earlier in section 2.2.1. Lastly, all the benchmarked platforms used a sort of crowd-voting described in the theory chapter as a collaborative filtering technique that utilizes users' ranking of contributors (Howe 2008, 224-225). Using table 2 and the text described above, figure 12 below summarizes the categories of open innovation encountered in the study process.



Figure 12. Open innovation categories

This implies that crowdcasting, ideajam, crowd creation and crowdvoting are all techniques that could be found in both open and closed challenge system.

As earlier stated above, both open and closed challenge system approach can be used on this microsite because the different crowdsourcing techniques can be applied in both systems. The following sections present the final findings on each of the employable strategies.

Open challenge strategy

The main thing that separates the open challenge system from the closed challenge system is that it allows for open contribution, open moderation and open selection. It also completely utilizes the crowd's judgement to organize information created by the crowd itself. This also correlates with crowdvoting attribute described by Jeff Howe (2008, 281) in section 2.2.3. Also as observed at OpenIDEO, the open system encourages diversity in terms of interest, field, discipline and many more. Furthermore, it reflects diversity by considering differences in people in the breakdown of the challenge process. For instance, a member can earn points for being better at inspiration than at developing concepts. Examining Scott Page's diversity trumps ability theorem cited in section 2.2.1, the people you would least expect to solve a problem were exactly the ones most likely to crack it. So when the system selects for a particular target group, it reduces the chances of exploiting such diversity. The general process and elements involved in the open challenge system is described in figure 13 below. Similar to the closed system, there is always a seeker of solution which in this case could be the case company or any of its clients.

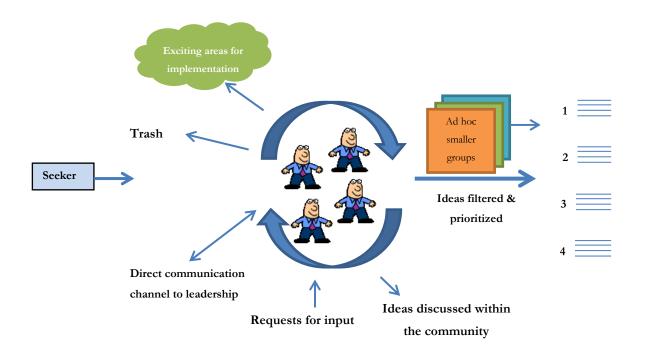


Figure 13. Modified elements and process of the open challenge system

The contribution process always starts with a request for input after which members of the community will collaborate online. Other important elements of the system described above include the ability to discuss ideas within the community, diversity of collaborators, direct communication with leadership of challenges and participation of members in filtering ideas. Finally, the best ideas are announced within the community and all other engaged channels. The bottom line is that OpenIDEO system possesses the highest element of collaboration and truly maximizes the diversity of the community.

Closed challenge strategy

As earlier recorded in section 4.5.2, the closed challenge system differs from the open challenge system mainly in its partial use of the crowd's judgement to organize information. Additionally, the information obtained in the fieldwork also recorded the use of different motivation style and processes in the closed system. For example, as collaboration within the online community is not a primary factor for Innocentive and Ideastorm, they employ a different process compared to the open challenge system as shown in figure 15 below.

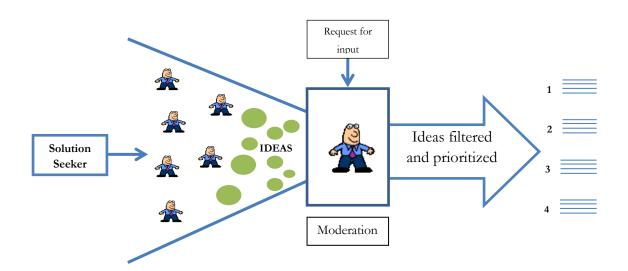


Figure 14. Modified elements and process of the closed challenge system

Similar to the open system, there is always a solution seeker in the closed system as well. The system selects for a target group right from the beginning as seen in the case of Innocentive bwhere scientists are the main target group. The big question is casted

to the community and community members work on solutions and usually individually. This is also subjected to internal moderation by the host company. This approach is synonymous to crowdcasting as described by Howe (2008, 147) earlier in section 2.2.1 Submitted ideas are afterwards selected by a group of judges which usually include the seeker and the host company. This system differs from the open system which allows for open creation, open moderation and open selection.

Motivating community members in both open and closed challenge systems

As earlier stated by Brandtzaeg et al 2010, 2 in section 2, the survival of online communities is largely dependent on user motivation and user participation. Furthermore, a study by Compete Inc. (Weber 2009, 29) earlier cited in section 2.4 shows that people join online communities to meet people, entertain themselves, learn something new and/or influence others. The result chapter reported that depending on the type of open innovation system one is adopting, there could be different motivations behind people's interest in being part of the product or service design process. Across Ideastorm, Innocentive and OpenIDEO, different motivation factors were obtained. A common motivation factor is the application of creativity to making something better which justifies Howe's (2008, 180-181) stipulation that crowd creation usually involves cultivating a robust community comprising of people with deep and continuous commitment to their craft and to one another. One thing that separates OpenIDEO from the rest of the platforms is the non-application of financial rewards which is justifiable by its social purpose. Furthermore, as stated by Howe (2008, 180-181) in section 2.2.2, the usage of traditional compensations is also applicable in crowdsourcing creative works as observed at Innocentive and Ideastorm but the social environment is usually the ultimate motivator.

As a conclusion, the motivation for open innovation obtained from the theory and field data can be summarized as

- 1. Self-actualization in the application of creativity to fulfilling human needs.
- 2. Financial motivation.
- 3. Skills display.
- 4. And learning from other community members.

All these can be applied to the creation of this mechanism by Case Company X. Other motivation triggers obtained from the field work that can also be applied is shown in attachment 8.

5.4 Existing profile of people for open innovation in benchmarked B2Bs

This part of the findings aims to find out the profiles of the people in the benchmarked companies (IQ 3). Information obtained from experts was also used to enrich the information collected. The analysis of OpenIDEO platform reveals the gender split between male and female is 50-50 and the age group is 20-40 years. This correlates especially with the creative elements of the self-actualization part of the hierarchy of needs mentioned in the results section 4.5.5. Furthermore, I also found out that 80% are lurkers and 20% are active users. This helps validate the 1:10:89 rule, (Howe 2008, 181-182), stated in section 2.2.3. And from a geographical point of view, the community representatives are from 199 countries. Similarly, Innocentive has users from 200 countries which validate the geographical scalability of open networks.

In alignment with the early studies of innovation by Jokula (2012, 24) on the interest of people for innovation in section 2.2, personal interest in technology, general enthusiasm about technology and willingness to find out trends in their field of interest are other internal motivation for open innovation. Therefore, these contributors could be people who are users of such product or service of Case Company X's client, people who the product might influence directly and people who are just interested in the field, usually young people and skilled professionals. And in this particular case, they would be creative thinkers and professionals in the product and service design field.

5.5 Acquiring and maintaining online social communities

This part summarizes the general procedure required to build this community, the alignment of marketing activities with customer engagement process and how the case company can structure itself to get the best out of this mechanism. This addresses investigative question 4 of the research problem.

5.5.1 Marketing on the social web and customer engagement process

In section 2.4 of the theory chapter, it was stated that building a community require certain techniques and processes. After the company would have decided to engage through the creation of a microsite, the following steps should be followed in building the community.

- 1. Firstly, ensure that the benefits are worth the effort.
- 2. Secondly, agree on what kind of channel would to be utilized.
- 3. Start with one channel, for instance Facebook and build the community there by putting relevant content.
- 4. After a certain momentum has been gathered, launch a blog and engage on other platforms.
- 5. Market in the right way and ensure people know that this kind of place exists.

Some of the above steps are evident in Weber's (2009, 66 & 67) steps to marketing on the social web described in figure 4 in the theory chapter. Observe which caters for finding the most important places where people congregate online will help in the selection of channel shown in step 2 above. This was particularly echoed by an Experts E and Y who said that a company needs to go to where the target group is depending on the purpose for which the social platform was established. Furthermore, recruitment, platform evaluation, engagement, measuring and promotion will all ensure that the system is marketed in the right way as shown in step 5 above.

Also, Case Company X must spend some resources to attract contributors especially if it requires a certain profile of people from a certain part of the world. As suggested, spending some pretty low cost customer acquisition fund especially on Facebook is a good way to get started because it is fairly cheap. These types of low cost targeted marketing can ensure that the right people are reached. This will support recruitment, engagement and promotion described in the steps in figure 4.

Furthermore, data in chapter 4.7.3 recorded some of the actions performed by Innocentive and OpenIDEO in taking the customers through the engagement process de-

scribed in figure 6 of section 2.4. The social platforms that could be engaged at Case Company X in taking customers through the engagement process therefore includes the proposed microsite, Facebook, Twitter, LinkedIn, Google plus, Vimeo, company blog and social media pages of partners. Furthermore, it is important to recommend such activities in each engagement stage as recorded from the analysis. Awareness actions which do not necessarily happen on the social mediasphere but also other media can be summarized as shown in figure 16 below.



Figure 15. Summary of recommended awareness actions for Case Company X

Similar to the awareness actions, figure 17 below are engagement actions that are recommended to the Case Company X in engaging users using this mechanism. Engagement actions as described by Sterne (2010, 106) ensures that users do care about the content and interacts with it.



Figure 16. Summary of recommended engagement actions for Case Company X

Similarly, persuasive actions are also unique. Engaging with content is never enough to ensure conversion but some actions must be taken online to get users contributing Sterne 2010, 106). Such persuasive actions are depicted in figure 18 below



Figure 17. Summary of recommended persuasive actions for Case Company X

Conversion is when the business outcome is achieved which in this case represents when a user contributes online through the microsite (Weber 2009, 66&67). Figure 19 below shows recommended actions to ensure conversion in the process is achieved.

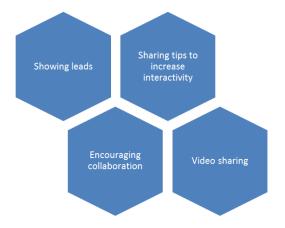


Figure 18. Summary of conversion actions recommended for Case Company X

The last stage of the engagement process is ensuring that majority of engaged users are retained over a certain period of time such that they will keep coming to contribute on the platform. Some of the identified actions shown in figure 20 are recommended to Case Company X in its retention efforts.



Figure 19. Summary of retention actions recommended for Case Company X

5.5.2 Other suggestion for online community building

The recommendations below are some of the identified features of the benchmarked platforms that support successful building and management of the mechanism. For visual samples as obtained from the benchmarked platforms, please visit section 4.7.4.

- 1. Provide an activity feed that shows most recent conversations on the platform.
- 2. Include social sharing tools such as LinkedIn, Twitter at every stage of the collaborative process. This will enable users who are mainly motivated by skills display to quickly share with others.
- 3. Ensure highlight of current stage in the creative process
- 4. Include features such as "Read the brief" button that makes it easy for a viewer to view challenge details.
- 5. Provide real time statistics of contributors' points on their profile page so that anyone in the community can view.

- 6. Provision of a follow update button will make it easier for community members to keep up-to-date with challenges.
- 7. Refer to trust partners on the microsite and on challenge pages.
- 8. In question framing, ensure that the organization understands the problem and make sure the desired outcome is clear to contributors.
- 9. Provide detailed information such as challenge criteria, requirement and attachments, eligibility to participate, sponsor, time-frame, how to attend, who the judges are and the winning criteria.
- 10. Provide step by step processes required to guide a solver.

5.5.3 Internal structure and resources

This part of study recommends the type of internal structure required to ensure this mechanism is successful. It also covers briefly what kind of resources this might take from Case Company X.

Weber (2009, 65) already pointed out that to avoid the build it and they will come syndrome, it is important to get the homework right, build a solid foundation for the community and get the dialogue going. As pointed out by in the result chapter 5.7.3, it is important to be active and maintain the drum beat. The following are recommendations for ensuring that internal capabilities are aligned with the management of this mechanism:

- 1. Everyone needs to be on board because it works better in this way.
- 2. The work should be divided between many people especially in a small company of less than 22 employees.
- 3. Experienced people in the company can be used as content providers.
- 4. It is important to have someone who is really driving the mechanism but hiring a community manager is never enough.
- 5. Money is definitely needed for external branding and for hiring the extra driver of this mechanism within the company.
- 6. When it comes to the role of the company in this mechanism, data collected reveals they should consider themselves as facilitators of innovation. They be-

come facilitators by creating a kind of snapshot of activities especially in the closed system, creating a kind of summary and maybe showcasing something concrete to company clients about the progress of the challenge.

Finally, Case Company X should build this mechanism internally. The thesis research of Hirn & Melto (2009, 82) earlier cited in section 2.4 argued that the success of building these communities internally can be related to control over such communities and manageability. This corresponds to expert E's suggestion that as it might not be a stand-alone mechanism but part of marketing, service development or product development, it is more beneficial to build it in-house. The only exception is when a high communication system is put in place which in reality is hard to come by.

5.6 Competitive benefits and challenges of open innovation

This part of the study discusses the obtainable benefits and challenges open innovation mechanism might offer to Case Company X using specifics of the company's service process, information obtained from experts and relationship with the theory in section 2.5 (IQ5). In the opening chapter of this study, it was stated that a part of the demarcation was done by focusing on the idea generation phase of the design process. This discussion therefore strongly considers the benefits of open innovation when used in this phase. However, there exist some examples for other stages in the design process.

5.6.1 Competitive benefits: New way of producing things

In alignment with Sheehan's (2010, 107) definition of crowdsourcing cited in section 2.2, companies are more bound to have commercial success when they design with end users or are able to pre-obtain idea in the design process. And specifically in the case of Case Company X as justified by expert A, the value for them lies in the awareness of the wishes and knowledge of the client's customer which will help solidify their relationship. Furthermore, Aniket, Chi & Suh (2008, 1) describes that collecting user input is important for many aspects of the design process because the company will tend to create better value than when done only internally.

Porter (2004, 119) states that a firm can differentiate itself from competitors if it can be unique at something that might be valued by clients. Therefore, any activity along the value chain can be a potential source of uniqueness for the firm. Also, Expert Y who is among World Economic Forum WEF's 100 most influential persons in the world stated that the use of open networks serves as an opportunity for new business models for design companies rather than being disruptive. This means that the mechanism can be a source of competitive advantage to the case company. The current approach at Case Company X is rather an agile one in which during analysis, design would have commenced as well as evaluation such that feedbacks or customer perceptions could be implemented instantly. For instance, the mechanism among others can be used in the idea generation stage of its service process to obtain:

- 1. Customer preferences ideas for a particular product or service design.
- 2. Complete design concepts through competitions.
- 3. Ideas on how a single part of a design process can be handled.
- 4. User interface design ideas or concepts.

Furthermore, this can also be utilized for web based usability testing of products or services in which the intellectual property issues are manageable within the platform. It is important to note that this cannot be a standalone service as seen at Innocentive. As a matter of fact, the views of expert A and expert B also confirmed that when combined with the company's expertise and somehow guided and facilitated, it could represent a new service module that could be offered to clients. Another important benefit is that the company can get data about trends from the platform. Such trends could come from invention by somebody or links to something hot at the moment among others. This can give some new ideas in addition to what the company might already be suggesting to its clients. Clients might want to know how to modify a product to succeed in the Chinese market or what special features are required for the Chinese consumers. What are the US consumer needs compared to Finnish consumers? We have a pink product for the Japanese market and clients might want to validate the appeal of such product to this target group.

In conclusion, the business model canvas in attachment 21 shows how value can be created using this mechanism. In the model, there exist two customer segments: Medium to large ICT companies who are seekers and creative thinkers and professionals who are solvers. The value proposition to the companies is an access to these solvers while the value proposition to the solvers includes access to creative community of designers and challenges with opportunity for awards. The solvers require online profiles managed through the open network termed as OpenCaseCompanyX in the canvas. On the other hand, the companies will require dedicated personal assistance through the salesforce/account managers from the case company for effective customer relationships. The main revenue streams will be the additional revenue received from clients for the open network module. This emergence of business model necessitated the introduction of business model concept in the theoretical part of this study.

Customer segments and marketing the mechanism to clients

Apart from the above mentioned benefits, this section recommends potential customer segments and how to make the benefits of the platform visible for these clients. Interviews with experts B, C and D pointed out that this will be most applicable to digital and ICT products though there is an increasing demand for user experience (UX) in other industries. Industry leaders such as Nokia, Rovio and KONE might be quick to identify the benefit of this mechanism especially when combined with the internal services of Case Company X. This is not restricted to businesses only but also includes public services where demand for improvement of the usability of public utilities has been on the increase. Workshops or presentations could be made to clients on what could be obtained from this community or mechanism and showcase of what could be produced with the system. A typical example is to describe to clients how this can be a useful source of information in designing better products. Attachment 20 shows a preview of how the message is communicated at Innocentive to businesses which can be used in the set up at Case Company X.

5.6.2 Challenges of open innovation and how to mitigate them

As cited by Howe (2008, 181-182), it is important to pay attention to the caveats that come with the gathering and maintaining of an online community. This part reports the findings related to possible challenges.

The challenges earlier mentioned by Howe (2008, 181-182) can include intellectual property possession, transparency issues and trust. The most emphasized challenges across the different methods in the field work are issues related to Intellectual property. In the ideation phase, it is not necessarily a big problem but it might require that the host company is kept anonymous. Therefore, the more concrete you go in the product development cycle, the more the level of concreteness and the higher the risk of IP property exposure especially for tangible products. As a result, it is important to make community members sign NDA before they can be part of a challenge. The seeker and the solvers should sign legal agreement that protects confidential information. A sample of the agreement can be assessed through attachment 17.

Also, contributors can own the concept or ideas generated on this platform which they non-exclusively license to the challenge host for possible publication. Another obtained key to mitigating these challenges is that questions or challenges can be framed in a way that you cannot track the original purpose for which it was initiated. Other challenges such as over enthusiasm and realism of contributors versus views of the real users of products especially when used for usability testing purpose can be mitigated by contrasting with internal expertise.

6 Conclusion & recommendations

Based on the findings in chapter 5, this chapter summarizes the main points as a conclusion and recommendations in setting up the open network. Furthermore, important critical success factors for getting the best out of this mechanism are listed as well. Ethical issues related to this study and its reliability are as well included.

6.1 The use of open and closed challenges

Firstly, facts and figures collected from Innocentive and OpenIDEO indicates the success of early adopters of this open system of creating things. At the point of this research, Innocentive has been able to gather 260,000 solvers from nearly 200 countries, post 1450 challenges, attracted 31,000 solutions and has awarded 1215 challenges on its platform. On the other hand, OpenIDEO has over 38,000 users from 199 countries by October 2012, 8457 Facebook fans and a record inspiration of 900 on its microsite. Based on the result and discussions in chapters 4 and 5, I recommend the combination of the elements of the open and closed system. This is because they both have their unique advantages that could bring benefit to the entire process. Such elements from the open system include:

- 1. Open creation, open moderation and open selection which signifies optimum utilization of the diversity of the group.
- 2. Encouraging collaboration between community members which truly taps into the creative ability of the diverse group.
- 3. Adding creative quotient accumulated from skill display in the design process as a key motivator.

On the other hand, key elements of the closed system to take include:

- Combination of the crowdsourced ideas with internal processes of the case company
- 2. Exclusivity of particular challenges to certain profile in strict target segments and high skilled areas. It could be very efficient help minimize the risk.

Furthermore, the decision process of Case Company X internally should follow the following pattern:

- 1. Decision of which bits of the design process to democratize.
- 2. Creation of an open network for to make this bit work.
- 3. Recruitment of people to the platform.
- 4. Introduction of challenges &Issues.
- 5. Constantly development and measurement.

And externally, the innovation process contributors go through can be described using figure 20 below.



Figure 20. Open innovation process experienced by contributors on the microsite

The process starts with problem casting or just an idea request after which contributors starts sharing ideas, videos and pictures that will help provide the basis for the problem solving or creative process. At the concepting stage, ideas are more concrete and contributors can build on each other's ideas. This is where the collaborative elements of the open system come into play. Applause phase involves early adoption of crowdvoting technique to pre-evaluate concepts and reduce the number of options. The community is utilized for this purpose as well. Concept owners can refine their ideas further before being subjected to final crowdvoting. The best ideas win and become available to the seeker afterall.

6.2 Critical success factors

As a part of the conclusion, below are critical success factors for making this mechanism work

- 1. The company must decide if it wants to democratize part of its design process by making a cost benefit analysis of the mechanism.
- 2. The company must be certain that its brand is able to attract and accumulate contributors over a long period of time.
- 3. The company must be willing to invest required resources mentioned in chapter 5 which include the setting up the site for with optimum engagement features and hiring people to manage the community and mechanism.
- 4. Everyone in the company must be on board to understand the importance of this mechanism.
- 5. As this will add significant impact to the company's brand, it must be certain its name is not changing before it commence the online community building activities.
- 6. Proper measure must be put in place to protect intellectual property related issues as suggested in chapter 5.
- 7. Start small and expand later. Start with the Nordic countries and then expand to Baltic countries and the rest of the world.
- 8. It is important to note that this will not be an overnight success but will require patience and hardwork.

6.3 Ethical points of view

In this section, I address some ethical issues related to qualitative research and how my work has been able to address these issues.

Firstly, I do not have employment relationship with the case company other than to carry out this research. In this sense, there is no special interest in the economic benefit of this work rather than to embark on a research that delivers value to the stakeholders and meet the requirement for the award of my institution's bachelors.

Secondly, I do not have any special relationship with all the experts other than for professional reasons except for one. The online community engagement expert, named expert E worked in the same organization as me and we have been in contact before this study.

Furthermore, in conducting my interview, I have paid attention to the ethical issues related to interviews especially the areas on human interaction. I listened, queried ideas where needed and had kept confidential information secrets. The transcripts used in this study had also been kept confidential as requested by the experts.

6.4 Research reliability and validity

In this section, I address issues related to the reliability and validity of my research.

For the research, I have used high quality sources and authors in the theory part. As a matter of fact, the authors of the books used in open innovation, crowdsourcing and competitive advantage are the most notable authors and academics in the field. Furthermore, the book used in social media and online community management are authored by 21st century authors who have written best-selling books in the emerging and increasingly important social media and online communities. Moreover, other sources were utilized to add variety and cross check concepts.

Secondly, the interviewed experts all have at least 4 years of experience in the field and they have been selected based on high relevance to this study. Similarly, the benchmarked companies are frontier business-to-business firms and business-to-consumer firms at the top-end of open innovation.

On the other hand, it was planned at the initial stage of the study to interview 10 experts with a mix of background from the covered field and evaluate 5 platforms as benchmarks. However, there were constraints such as inaccessibility to experts as well as time resources. This limited the number interviews conducted although this had only low impact on the results of the study as other measures were put in place to obtain better information. A mix of method including interviews, video analysis and platform analysis ensured the richness of the information obtained. The subject of the video analyzed is actually one on the WEF's 100 most influential people based on his contribution in this field. More interesting fact is that the video completely addresses the entire themes I would have covered if I would have had a chance to interview him.

In design researches, we are often not certain about the adequacy of a proposed policy measures or a combination of measures. Therefore, "ceteris paribus" condition is applied to the formulation of recommendations in this study. This means that if basic conditions change, the implementation of this study has to be monitored by a process-evaluation method in which the researcher is allowed to adjust measures if they do not function according to plan and preferably at an experimental stage in which the cost is negligible. (Swanborn 2010, 33.)

Finally, the research process and guidelines provided by my reputable institution had been adhered to and my personal value of hard work is reflected in the number of hours used to conduct this research as it exceeds the required 400 hours by standard.

6.5 Suggestions for development

Below are my suggestions for the case company in relation to this research.

Firstly, it will be of added value if the study could be cross checked by another researcher. This is because the benchmarked platforms operate in a totally different market from the Nordic countries. As a result, some cultural issues might exist which are beyond the scope of this study. This is also important since the implementation of the mechanism has cost implications that require careful planning. However, for any company to innovate and try something new there is always the place of risk taking.

Furthermore, the system should be developed in an agile way such that feedbacks can be implemented along the customer development process.

Finally, a descriptive research can be done few months into the system in order to establish better arguments for the utilization of either the closed or open system of open innovation.

6.6 Assessment of own learning and thesis process

Over the entire thesis process, my ideas and understanding of the topic had changed a lot.

Firstly, I developed better understanding of the concepts as reflected in the changes in the title, modification of the investigative questions and introduction of new theories after the fieldwork was completed. Main learning had come from deeper understanding of innovation, open innovation, online community engagement and social media and business model development.

Also, I had developed better understanding of my research methods, content and structure after meeting with my research advisors. I have always understood that in exploratory research, it's better to be flexibility and open towards the phenomenon under study but discussions about emerging themes helped me to truly understand the nature of qualitative studies.

More important is my development in project management, stakeholder management and aligning details with the big picture. Even though I could not meet the personal deadline I had set for myself to complete this project, I had been able to keep all stakeholders informed and manage schedules professionally. I had also been able to keep my eyes on the overall objective and ensure that the involved stakeholders in the thesis are satisfied with the entire outcome. All through my thesis, I was digging for data, converting them to consumable information, adding a soul to it to make it a compelling or appealing story.

Finally, this study has increased my interest in the field of innovation and business development and will serve as a basis for my Master's studies in entrepreneurship.

References

2012.

Associated Press. New York. URL:

http://www.usatoday.com/money/companies/story/2012-04-07/apple-ipad-generic-name/54110024/1. Accessed: 10 April 2012.

Brandtzaeg, P.B., Folstad, A., Obrist, M., Geerts, D. & Berg, R. 2000. Innovation in online communities- Towards community-centric design. URL: http://sintef.academia.edu/PetterBaeBrandtz%C3%A6g/Papers/814038/Innovation_in_Online_Communities_Towards_Community-Centric_Design. Accessed: 10 April

Brown J.S. and Duguid, P. 2000. The Social Life of Information. Harvard Business School Press. Boston, MA.

Burns, A.C. & Bush, F.B. 2010. Marketing research. 6th ed. Pearson Education. Upper Saddle River, New Jersey.

Ceteris Paribus. URL: URL http://en.wikipedia.org/wiki/Ceteris_paribus. Accessed: 21 September 2012.

Chesbrough, H., Vanhaverbeke, W. & West Joel. 2006. Open Innovation. Researching a new paradigm. Oxford University Press, UK.

Edvardsson, B., Gustafsson, A., Kristensson, P., Magnusson, P. & Matthing, J. 2006. Involving customers in new service development. Imperial College Press, London.

Case Company X. URL: www.Case Company X.fi. Accessed: 24 May 2012

Guarino, P. 6 digital marketing trends to watch in 2012. URL: http://www.boston.com/business/blogs/global-business-hub/2012/01/6_digital_marke.html. Accessed: 10 April 2012.

Hirn, S. &Melto, S. 2009. Community marketing: how businesses implement web 2.0. Kymenlaakson Ammattikorkeakoulu University of Applied Sciences. Finland.

Howe, J. 2009. Crowdsourcing: How the power of the crowd is driving the future of business. Randon House Business Books, New York.

Hulme, T. 3 Oct 2012. Design Director. IDEO. Video analysis. URL: http://vimeo.com/21660675

Ideastorm. URL: www.ideastorm.com. Accessed: 30 Sep 2012.

Innocentive.com. URL: https://www.innocentive.com. Accessed: 27 Sep 2012.

Jukola, F. 2010. Optimizing innovation management: A customer integration perspective. Hogeschool INHolland, School of Economics, Amsterdam/Diemen.

Miles, M. B. & Huberman, A. M. 1994. Qualitative Data Analysis. Sage Publications. Thousand Oaks.

McCorvey, J. How to use social networking sites to drive business. URL: http://www.inc.com/guides/using-social-networking-sites.html. Accessed 30 Jun 2012.

Osterwalder, A. & Pigneur, Y. 2010. Business model generation. John Wiley & Sons, Inc., Hoboken, New Jersey.

OpenIDEO. URL: www.openideo.com. Accessed: 15 Sep 2012.

Patros, D. & Ibarra, O. M. 2009. User centric media: First international conference, UCMedia 2009, Venice. Revised selected papers. Springer.

Porter, E.M. 2004. Competitive advantage. First free press export edition. Free Press, New York.

Quesenbery W & Szuc D. 2012. Global UX. design and research in a connected world. Morgan Kaufmann.

Rosenberg, T. Crowdsourcing a better world. URL:

http://opinionator.blogs.nytimes.com/2011/03/28/crowdsourcing-a-better-world/. Accessed: 21 September 2012.

Rubin H.J & Rubin I.S. 2012. Qualitative interviewing. Sage publications, California.

Sheehan, B. 2010. Basic marketing 02: online marketing: online marketing. AVA publishing, London.

Silverman, D. 2010. Doing qualitative research. Third edition. Sage publications London.

Silverman, D. 2005. Doing qualitative research. Second edition. Sage publications London.

Stake, E. R. 1995. The art of case study research. Sage publications. California.

Sterne, J. 2010. Social media metrics; how to measure and optimize your marketing investment. John Wiley & Sons, Inc., New Jersey.

Swanborn, P. 2010. Case study research. What, why and how? First edition. Sage publications, London.

Trend Watching April 2012. Flawsome; why brands that behave more humanly, including showing their flaws, will be awesome. URL:

http://trendwatching.com/trends/flawsome/. Accessed: April 10 2012.

Walliman, N. 2011. Research methods: the basics. First edition. Routledge, Oxon.

Weber, L. 2009. Marketing to the social web; how digital customer communities build your business. John Wiley & Sons, Inc., New Jersey.

Attachment

Attachment 1. Overlay matrix

Research	Investigative Ques-	Theoretical	Measure-	Results **
Problem	tions (IQs)	Framework	ment Ques-	(Your hypothe-
(RP)		*	tions	sis of anticipat-
		(concepts &	(Question	ed results)
		models)	number in	
			survey form	
			or interview	
			frame)	
Crowdsou	1. What types of	Social Media	Expert inter-	Social media
rcing for	online social	and its crite-	views	platform or a
innovation	media platform	ria for		combination of
from end	enables	crowdsourc-		several choices
users	crowdsourcing	ing customer		and how they
through	idea generation?	input		will support each
social me-				other
dia in	1. How to acquire	Online	Expert inter-	Processes plan or
B2B. Case	and maintain	Community	view to ex-	course of action
Company;	these social	management	plore cus-	for acquiring and
Case	communities?		tomer en-	managing the
Company			gagement	social platforms
X Finland			process, in-	
Limited.			ternal com-	
			pany re-	
			quirement,	
	2. What is the ex-	Open Inno-	Benchmarked	Demographics,
	isting people	vation	organizations	
	profile for open		to find profile	
	innovation in		and target	

benchmarked		group suita-	
B2Bs?		ble for the	
		purpose of	
		this study	
3. What are the	Open Inno-	Expert inter-	Techniques,
strategies, tech-	vation,	views and	strategies, pro-
niques, and	crowdsourc-	benchmarks	cesses and rela-
process in-	ing	to find out	tionships con-
volved in online		how to make	necting all aspect
open innova-		users con-	of open innova-
tion?		tribute for	tion
		innovation	
4. What are the	Competitive	Expert inter-	Recommenda-
competitive	Advantage;	view and to	tions on how to
benefits and	Differentia-	establish	utilize the out-
challenges of	tion	competitive	come in core
crowdsourcing		benefits and	business process
for open inno-		challenges	as well as manage
vation for Case		related to	the challenges
Company X?		open innova-	that accompanies
		tion	the new mecha-
			nism

Attachment 2. Profile of experts and video analysis subject

Open Innovation Experts

Name	Expert A
Role/Position	Managing Director/CEO, Culminatum Innovation
Background	Innovation, entrepreneurship
Issues covered	Open innovation, social media, competitive benefits and challenges

User experience design experts

Name	Expert B	
Role/Position	User Experience Team Leader & Partner, UX Design company	
Background	User research, user interface and user experience design, usability	
	testing and usability and user experience evaluations. Team leader-	
	ship.	
Issues covered	Open innovation, competitive benefits and challenges, where could	
	there be demands for people's contribution	

Name	Expert C
Role/Position	Account Manager, UX Design company
Background	Consultant, User Experience & Partner
Issues covered	Open innovation, competitive benefits and challenges, adoption of research work into the service process of Case Company X,

Name	Expert D
Role/Position	Manager, Service Management& Partner, UX design company
Background	User experience, service management, team leadership
Issues covered	Open innovation, competitive benefits and challenges, adoption of
	research work into the service process of Case Company X,

Name	Expert E	
Role/Position	Project manager, Online web system and application development	
	firm	
Background	Project management, community management, service packaging	
Issues covered	Open innovation, social media, Online community management,	
	Competitive benefits and challenges	

Name	Tom Hulme (Video analysis subject)
Role/Position	Design Director IDEO, Founder OpenIDEO & entrepreneur
Background	Innovation management, design thinking, user experience, digital strategy
Issues covered	Open innovation, social media, online community management, competitive benefits and challenges

Attachment 3. Measurement themes/questions

Note: All information provided below will be kept confidential and where required, the personal information of the respondent will be kept anonymous as well.

Demographics

Name	Field of work of the respondent	Date
Position of the respondent	Industry	Country

Main Questions

1.	How would you describe the opportunities centered on open innovation es-
	pecially co-creating or innovating with end users of product and services?

2.	How would you describe the possibilities social media offers for gathering
	input from end users rather than traditional service and product promotion?
	(Considering a B2B without strong ties with the public)

3.	Considering technology, frequency of interaction and other factors, what
	specific category of social media has enabled or might enable organizations
	to engage community members for open innovation?

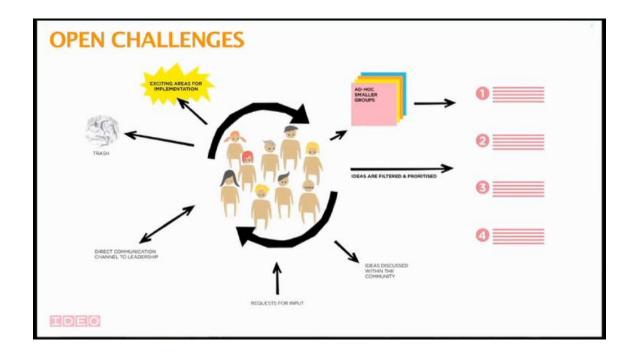
- 4. Studies of innovation shows that innovators are often part of their communities of interest in which they interact and share ideas. And because of users' ability to create profiles, social networks set the stage for building relationships with people who share the same interest.
 - a. What concrete social networking sites or possibilities would you recommend for crowdsourcing for open innovation?

a. How will you describe the interest and motivation of contributors for usability and design?						
4. Building an open microsite network for industry enthusiasts in a low involvement firm offers the possibility to engage people and make community recruitment easier						
a. How will you describe the potential of such a microsite?						
b. Based on your experience and opinion, How can this microsite get started?						
c. What strategies could be utilized in the engagement process on such a						
microsite?						
5. How would you describe crowdsourcing as an open innovation technique?						
6. There are a number of crowdsourcing techniques (including wisdom of the crowd, crowd-voting, crowdsourcing creative works and implicit crowdsourcing) what will you say will be effective in a low involvement B2E						
consulting firm?						
7. The data or input obtained on this platform could be an important factor of production, how can this be attained?						

	a. How can this be utilized for better product or service design consultative service?
8.	How can this mechanism serve as a unique source of differentiation to the commissioning firm?
	Twenty and the state of the sta
9.	What type of internal structure and resources is required to succeed with these social platforms?
	a. Should online community building and management be outsourced or built internally?
10	Data maliar issues and as mairrour associate of data. ID might be a shall
10.	Data policy issues such as privacy, security of data, IP might be a challenge in this regard, and how would you compare the risks to the benefits?
	a. How can these challenges be managed in order to obtain the best from the mechanism?
11.	Other inputs, comments and ideas beyond the scope of this questionnaire?

Thanks for the time spent on these questions. All questions will

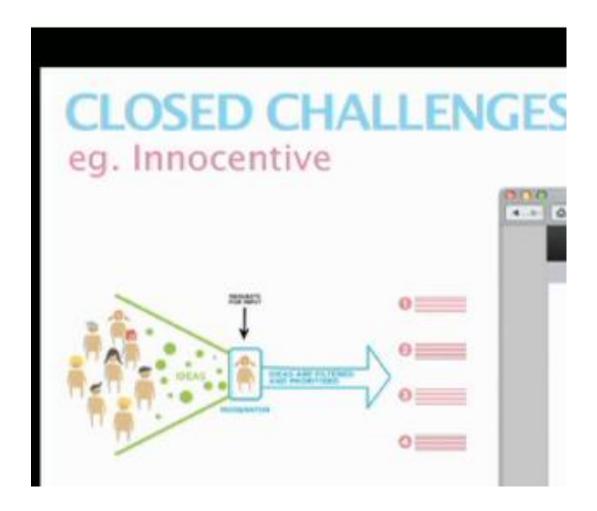
Attachment 4. Elements of an open challenge system of open innovation



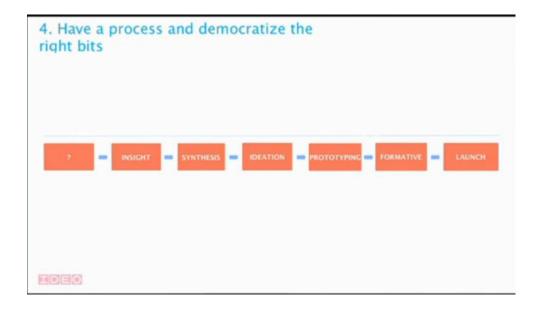
Attachment 5. Challenge process at OpenIDEO



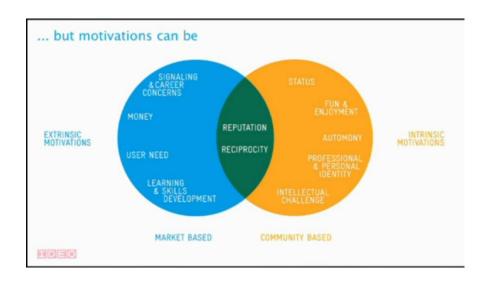
Attachment 6. Elements of closed challenge system of open innovation



Attachment 7. Design process at OpenIDEO



Attachment 8. Types of motivation for open innovation



Attachment 9. Different elements of a challenge questions



Attachment 10. Engagement efforts at OpenIDEO

Engagement pro-	Description					
cess						
Awareness	- Initial promotion of Open Ideo on Ideo's social media					
	pages including facebook page and twitter, Google plus					
	and videos hosted on Vimeo					
	-Later creation of Open Ideo's Facebook page, Twitter					
	page, google plus page and Vimeo					
	- Sharing of challenges on OpenIdeo's social media pag-					
	es					
	-Sharing of challenges on Ideo's social media pages					
	- Retweeting other thought leader's content such as					
	HBR, Fast company					
	- Sharing of other relevant content					
	- Webby Awards and sharing on social media					
	- Re-sharing old content such as launch videos to in-					
	crease awareness					
	- Providing tips ahead of upcoming challenge					
Engagement	- Availability of challenges,					
	- More picture uploads,					
	- Sharing of other relevant content					
	- Alignment of challenges with world events. Like mater-					
	nal health and International Women's day					
	- Connecting ideas or challenges with people's passion					
	- Sharing analytics					
	-Asking questions from facebook community members					
	- Realtime update about what's coming to reduce sus-					
	pense					
	- Discussion forum on Zendesk					

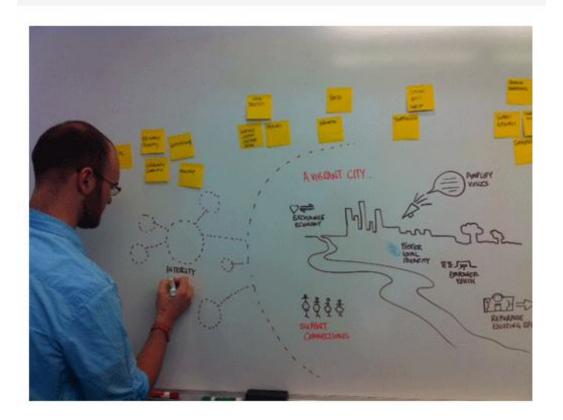
	- Share at every stage of the design process					
	- Real time question and answer time					
	-Top inspirers					
	- Top evaluators					
	-Top concepters					
	- Top collaborators					
Persuasion	- Announcement of winners on social media,					
	- Interesting challenges,					
	- Reminder and re-sharing of content					
	-					
Conversion	- Video and detailed instructions to increase inter-					
	activity					
	- Show leads when necessary or when things are					
	not going in the right directionlike tips (Con-					
	cepting tips, inspiration tips), themes and so on					
	- Encouraging people to build on the inspiration					
	and concepts of others by displaying it on the mi-					
	crosite's either inspiration or concept page					
Retention	- Open reward on social networks					
	- Share a lot of persuasive articles on design and					
	social innovation					
	- Discussion forum on Zendesk					

Attachment 11. Engagement effort at Innocentive

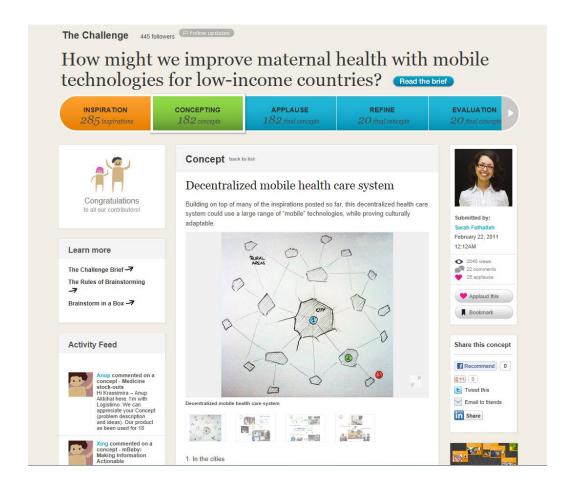
Engagement pro-	Description					
cess						
Awareness	- Referral awardpaying people for referring					
	- Integration with facebook					
	- Social sharing features on the challenge page					
Engagement	-					
Persuasion	- Monetary Awards					
	- Performance tips					
	- Accreditation by trust partners					
	_					
Conversion	- Team project rooms are primed up for collabora-					
	tion					
	-					
Retention	- Referral awardpaying people for referring chal-					
	lenge solverwith a specially generated link					
	- Monetary rewards					

Attachment 12. Image showing tip in order to motivate community members

Vibrant Cities Challenge Concepting Tips



Attachment 13. Sample of a site layout at OpenIDEO

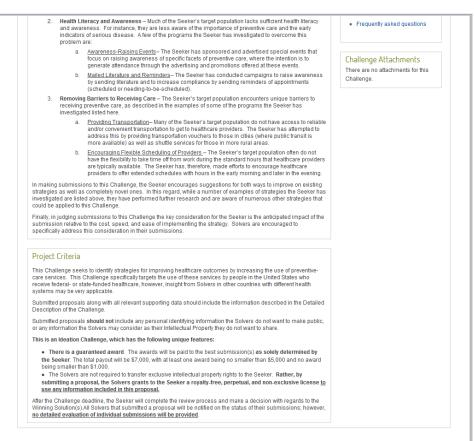


Attachment 14. Sample of challenge display at Innocentive

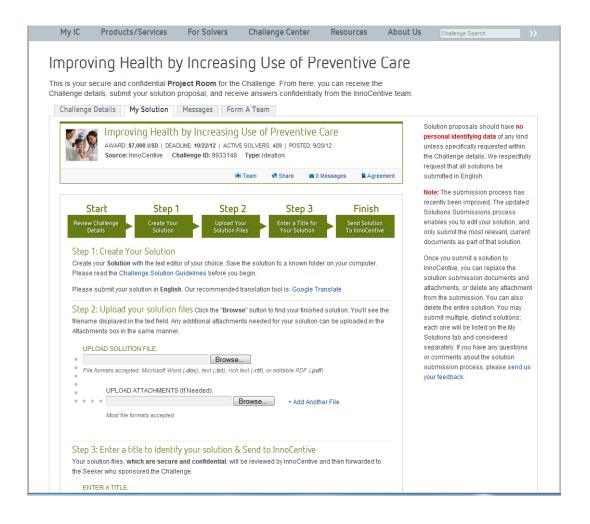


Attachment 15. Challenge project room at Innocentive





Attachment 16. Problem solving process at Innocentive



Attachment 17. Sample Agreement at Ideastorm

Content Restrictions:

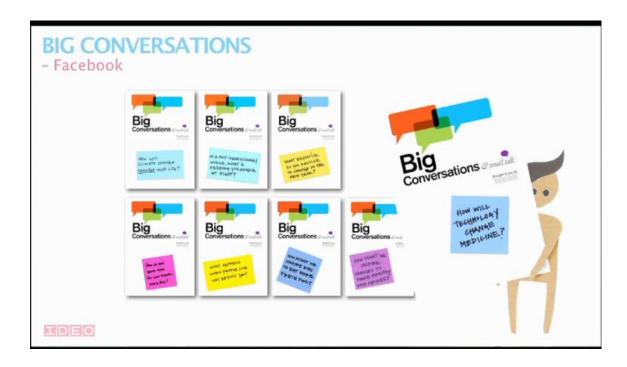
- The Submission must be original with you;
- The Submission cannot have been submitted previously in a promotion of any kind or exhibited or displayed publicly through any means;
- The Submission must not contain material that violates or infringes another's rights, including but not limited to privacy, publicity or intellectual property rights, or that constitutes copyright infringement;
- The Submission must not disparage Sponsor or any other person or party affiliated with the Contest;
- The Submission must not contain brand names or trademarks other than those owned by Sponsor, which entrant has a limited license to use to incorporate in his/her Submission in this Contest:
- · The Submission must not contain material, images or artwork not created by entrant;
- The Submission must not contain material that is inappropriate, indecent, obscene, hateful, tortious, defamatory, slanderous or libelous;
- The Submission must not contain material that is sexually explicit or suggestive, depicts illegal drug use, alcohol abuse, terrorism, weapons, violence or nudity;
- The Submission must not contain material that promotes bigotry, racism, hatred or harm against any group or individual or promotes discrimination based on race, gender, religion, nationality, disability, sexual orientation or age; and
- The Submission must not contain material that is unlawful, in violation of or contrary to the laws or regulations in any state where Submission is created.

Use of any automated system to participate is prohibited and will result in disqualification. In the event of a dispute as to any registration, the authorized account holder of the email address used to register will be deemed to be the registrant or player. The "authorized account holder" is the natural person assigned an email address by an Internet access provider, online service provider or other organization responsible for assigning email addresses for the domain associated with the submitted address. The potential winner may be required to show proof of being the authorized account holder. Released Parties (as defined in Section 7, below) are not responsible for lost, late, stolen, damaged, incomplete, invalid, un-intelligible, garbled, delayed or misdirected Submissions; all of which will be void.

5. Finalist Selection: Sponsor's decisions as to the administration and operation of the contest and the selection of the potential finalists are final and binding in all matters related to the contest. On or around 10/29/12, Sponsor will select two (2) finalists from all eligible entries received during the Entry Period based on the Judging Criteria listed above. The potential finalists will be notified by email. Each potential finalist (parent/legal guardian if finalist is a minor in his/her state of residence) will be required to sign and return to Sponsor, within ten (10) days of the date notice or attempted notice is sent, an Affidavit of Eligibility and Liability & Publicity Release in order to claim his/her prize. If a potential finalist cannot be contacted, fails to sign and return the Affidavit of Eligibility, Liability & Publicity Release within the required time period, or prize is returned as undeliverable, potential finalist forfeits prize. By entering, entrant agrees he/she is in compliance with all of his/her employers' rules, policies, and procedures that relate accepting prizes. Potential finalist must continue to comply with all terms and conditions of these Official Rules, and winning is contingent upon fulfilling all requirements. In the event that a potential finalist is disqualified for any reason, Sponsor will award the applicable prize to an alternate finalist by random drawing from among all remaining eligible entries. Only three (3) alternate drawings will be held after which the prize will remain

6. Prizes: Two (2) finalists will receive round trip economy airfare for one (1) from a major airport closest to the finalists' residence to Austin, TX, two nights accommodation at the Hilton

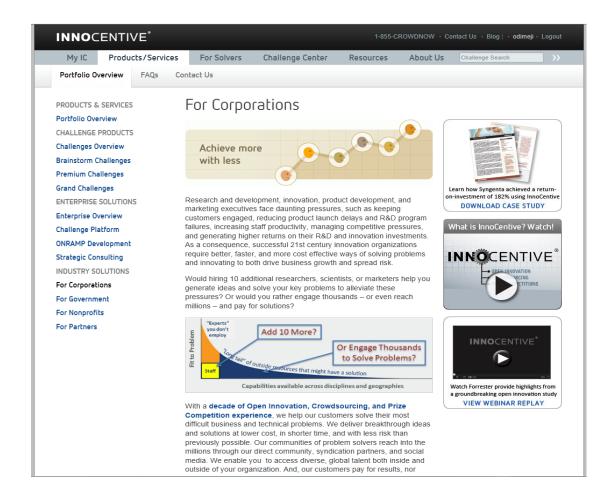
AAttachment 18. Sample of initial question framing at OpenIDEO



Attachment 19. Business model canvas of the open network system of creating things

Key partnerships	Key activities	Value prop	ositions	Customer relationships	Customer segments	
KP	KA Key resources	VP		CR Channels	CS	
Cost structure			Revenue streams			

Attachment 20. Sample how Innocentive markets its services to clients



Attachment 21. Sample business model for the open network

