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OPEN INNOVATION PROCESSES IN SOCIAL MEDIA
PLATFORMS

Bachelor's Thesis 2013

ABSTRACT

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International Business

Yang Yang	Open Innovation Processes in Social Media Platforms
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Innovation power has become a priority concern for many enterprises. Open innovation, which acts as a new innovation method, is now applied in many companies due to its unique advantages. On the other hand, social media platforms have been widely accepted by public and it shares an immeasurable business resources. Based on those facts, there must be space to link social media and open innovation together to achieve win-win.

The objective was to research the important factors for open innovation and the cooperating potential between open social media platform. The research combined quantitative methods, qualitative methods and benchmarking. The research conclusion shows the most important factors of open innovation platforms and how to cooperate with matured social media platforms based on these factors.

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INTRODUCTION

1.1 Background of social media

Social media as a kind of novel online media that gives users vastly participate space, has attracted millions of users, most of whom are up to the chin of various types of social media, such as MySpace, Facebook, Twitter, Flickr, and more in their daily life. As one of the world's most popular social networking service, Facebook's membership nearing 550 million in 2010, and half of those members visit the site every day (Grossman 2010). Till now Facebook has more than 750 million users, and Twitter has more than 175 million (Sutter, 2011).

Nicole defines social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Journal of Computer-Mediated Communication 2007, 211). Open innovation is about allowing connection between internal and external resources and make them get the challenges and opportunities (Chesbrough 2001, 58).

There is no doubt that the social network tools and open innovation interact each other, especially for the aspect that various maintainers would create better innovation outcomes.

1.2 Research objectives

The purpose of this research is to describe and evaluate the current situations, trends and potentials of open innovation in different social media platforms, then draw a description for a good open innovation platform.

The objective for this thesis is to describe open innovation social media platform and evaluate the situation to determine and generalize the factors are for the social media platform to help open innovation work better. These suggestions and conclusions also can be used in similar types of open innovation social media platforms.

1.3 Research methods

By research and analysis different websites with an aim to generalize across the open innovation social media platforms, I have chosen to use case studies for conducting this work. Case study defined by Stake (1995, xi) 'Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances'. General evaluation of the open innovation platform in the social media is given by collecting and generalizing materials and literature. The cases I take are: Massidea (www.massidea.org), Innocentive (www.innocentive.com), Ninesigma (www.ninesigma.com), Yourencore (www.yourencore.com), OpenIDEO (www.openideo.com), Owela (owela.vtt.fi).

Quantitative research such as questionnaires is used to collect the experiences of the social media users. A questionnaire sample which aims to find out the important factors for a good pen innovation in social media platforms, is contained in my research. (Appendix 1. Open innovation and social media platform survey)

Benchmarking is an effective structural approach to quality engineering and management (Boxwell, 1994, 10-35). It is a very common method for compare and evaluation. The benchmarking will take these samples: Massidea (www.massidea.org), Innocentive (www.innocentive.com), Ninesigma (www.ninesigma.com), Yourencore (www.yourencore.com), OpenIDEO (www.openideo.com), Owela (owela.vtt.fi).

1.4 Analysis methods

Statistic analysing is the common method for questionnaire research. As mentioned, a quantitative research will be executed in this research; the basic statistical analysis method will be used. The general inductive analysis will also be used for presenting results and conclusions.

Statistical methods are indispensable in a quantitative study. They are useful in marketing, accounting, producing and operating activities. They bring truth to light and correct the faulty observations. They are extensively applicable to all the branches of human knowledge - governing, managing, accounting, business, research, social studies, planning and other fields (Chikkodi & Satyaprasad, 2010,1.9).

2. OPEN INNOVATION IN SOCIAL MEDIA PLATFORMS

2.1 Social media: new communicational network application

Social media is an emerging channel for the people to communicate. There are various definitions of social media from different scholars. They presented in Table 1.






Table 1. Definitions of social media

Name	Definition
Microsoft Official Academic Course Staff	“Social media has evolved from basic tools and Web sites used by professors and computer geeks into a behemoth that is fundamentally changing how people connect and converse with corporations, governments, traditional media, and each other.” (MOAC, 2011,3)
Wollan Robert, Smith Nick and Zhou Catherine	“In short, social media enables the swift and easy development, creation, dissemination, and consumption of information and entertainment by both organizations and individuals.” (Wollan, Smith & Zhou, 2010,xii)
John K. Waters	“Social media is an umbrella term that covers a group of web based software application, the content generated by users of those applications and the services that make both accessible to just about anyone with a web browser.” (John,2010,2)

Comprehensively, social media is a network application based on the internet, which allows its users to communicate and share information within.

For example, Facebook contains many applications and offers the platform for different people to share information such as recent photos, relationships, useful articles and so on. Facebook users can access to Facebook on their own PC or mobile phone with a valid internet connection or a web browser. There are some very famous social media platforms shown in table 2.

Table 2. Social media platforms

Name	Website	Logo
Facebook	www.facebook.com	
Twitter	www.twitter.com	
LinkedIn	www.linkedin.com	
MySpace	www.myspace.com	
Google Plus	plus.google.com	

Social media also contains many business elements normally. From the basic web page advertisements to various online services, with the modern business developing, more and more amazing services have been linked to the social media.

2.2. From closed to open innovation

2.2.1 Definition of open innovation

Open innovation is a new concept for most of us. It can be defined from several points of view. In table 3, three definitions of open innovation are listed.

Table 3. Definitions of open innovation

Name	Definition
Chesbrough Henry, Vanhaverbeke Wim and West, Joel	Open Innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. (Chesbrough, Vanhaverbeke, & West, 2006,1)
Lindegaard Stefan and Kawasaki Guy	Open innovation is very much about bridging internal and external resources to make innovation happen. (Lindegaard & Kawasaki, 2010,4)

From business point of view, open innovation is a method to create new business opportunities and gain competitive forces. In a word, the purpose of open innovation is to make better position for a company among the modern market through gaining more creativity power.

2.2.2 Comparison between open and closed innovation

Compared with closed innovation, open innovation is more suitable in nowadays modern business environment. Close innovation focuses on the internal innovation of a firm. The principle of innovation must be based on the firm's forces, which means only internal source could be used and all the innovation activates must be done within control. (Mitsuru, 2011)

There is no doubt that closed innovation is a secured innovation method, in which the internal sources are controllable and the risks can be minimized. However, because of the limited creativity power, the results might be unbalanced and incomplete sometimes. Through recent studies, many people sincerely believe that it is better solution to give the innovation tasks to external sources. A careful research would reveal that the emerging open innovation is accepted and used by more and more people and companies, which means open innovation has a promising future.

2.3 Open innovation and social media platforms

Combination of open innovation and social media platform is a modern social media platform and the open innovation creativity method. There are some famous open innovation platforms shown in table 4.

Table 4. Open innovation platforms

Name	Website	Logo
OpenIDEO	www.openideo.com	
IdeaBounty	www.ideabounty.com	
Massidea	www.massidea.org	
Innocentive	www.innocentive.com	
NineSigma	www.ninesigma.com/	

There are also other open innovation platforms created in the recent years, such as idea-project, Innocentive and so on. Most of the open innovation websites act themselves as innovation

agencies. Very few of them have a strong corporation with social media.

On the other hand, there is also a great potential for the open innovation websites to cooperate with social media network. A mature social media platform not only has a great number of users but also has a matured segmentation system

3. BENCHMARKING OF SOCIAL MEDIA PLATFORMS BASED ON OPEN INNOVATION PROCESSES

Benchmarking is a useful quality tool that will help your company continually improve its processes by learning how others do it. To benchmark, you first evaluate your own operation's processes to identify weaknesses and strengths; then you must identify, study and adapt from others who may be doing it better. (Patterson, 1995, 4)

In a word, benchmarking the open innovation platform is to compare with other similar platform in different factors. It will show the brief picture about this field and illuminate the key elements of a success open innovation platform.

3.1. Massidea

3.1.1 Purpose

Massidea (www.massidea.org) is a typical open innovation platform that allows its users to communicate and share challenges, ideas and visions. Massidea's aim is to boost individual and communal creativity by intelligently connecting people and their insights. It is also a free open source solution and it is publicly available for use and modifications.

3.1.2 Structure

Massidea has a simple and clear website navigation, which can be seen in figure 1.



Figure 1. Massidea website structure

Figure 1 presents the front page of Massidea, which shows different categories with different colours. The website search tool appears conspicuous on the top, following the navigations which the users can easily go through. All the latest posts are can be found at the front page. The rests of the website page consist of recent campaigns, recent groups, most active users, and most popular tags. It is necessary to login for the uses if they want to post and reply. The users also can choose language, but the most posts are in Finnish and then in English.

3.1.3 Open innovation process

Massidea's general innovation process is simple. As soon as a user registers an account, it will be granted to post and comment.

The website gathers the information from the post and creates a portfolio for every user. According to the user's own unique portfolios that involve the user's profession and specialty, the system will connect the user adept challenges and topics. Massidea believes through this way, the novel ideas will be discovered and the creativity power will be boosted.

A user posts a quest titled Inspire other to eat healthy food, which opened for comment and replay. The other users give many unique and valuable ideas in different aspect under this quest, such as: persuade skill, nutrition, life style etc. However, there is no official plan organized. (Appendix 2.)

3.2. Innocentive

3.2.1 Purpose

Innocentive (www.Innocentive.com) is a matured open innovation platform which has millions of users all around the world. The core value of this website is to gather and provide solutions for the challenges which are given by the users. The main task is to of this website is to manage their "solvers" and collect valuable solutions from them. Innocentive believes that the future of innovation is open innovation due to its low risk and high efficiency.

3.2.2 Structure

Innocentive's structure is complicated with an attractive front page. In general the website can be classified into two types of subpages: introducing pages that contain the website's brief information, history, how to join in them and functional pages contain the challenges, postings and discussions.

The screenshot shows the Innocentive website's Challenge Center. The main content area displays a list of challenges with the following data:

Title	Posted	Deadline	Award	Solvers
Determination of Cu(I) and Cu(II) in Concentrated Chloride Solutions	2/26/13	4/30/13	\$10,000 USD	28
Piping Bitumen Without the Use of Diluents	2/21/13	3/27/13	\$10,000 USD	197

Figure 2 Innocentive website structure

As figure 2 shows, the challenges are classified by sources, disciplines, and pavilions at the left side of the webpage. Every challenge has a portfolio that includes more details such as tags, award, deadline, active solvers and challenge overview. The viewer also can share and bookmark the challenges by Blogger, Facebook, LinkedIn, Twitter, and Email and so on.

3.2.3 Open innovation process

Innocentive receives challenges from different associations such as companies, governments or non-profit groups, and then collects solutions from its internal sources which can be its employees, individual solvers, and partners. Innocentive also provides awards for the challenge solvers. At last, Innocentive offers the solutions to the associations and get feedback.

Most challenges on Innocentive are given by famous associations, such as NASA (National Aeronautics and Space Administration). For instance, the NASA posts a challenge: Simple Microgravity Laundry System designing. Simple Microgravity Laundry Challenge seeks concepts for a minimal system that provides laundry freshening and amount of cleaning capability. Then the registers view the details and give their solutions. (Appendix 3.)

3.3. Ninesigma

3.3.1 Purpose

Ninesigma (www.Ninesigma.com) is a worldwide open innovation website which has websites in U.S, Europe, Korea, Japan, and Australia. The core service of this association is to offer a professional solution for its clients. With clients in every industry and technology sector, NineSigma has demonstrated their ability to successfully connect companies with the global innovation community. Their innovators are not from the public; Ninesigma has its own unique corporate culture integrate professional team

which includes including business leaders, innovation consultants and PhD-level scientists.

3.3.2. Structure

As figure 3 shows, the front-page general structure of NineSigma is simple which can be regarded as an advertisement of NineSigma. Visitors could find different information in different modules: service introducing, history, open innovation concept etc. The key of the webpage is to attract more people to join them, either as a client or a staff.



Figure 3. Ninesigma website structure

3.3.3. Open innovation process

Unlike the other open innovation platform, NineSigma.com is an agency that did not provide any platform for outside innovators but only qualified staffs who can participate to create solutions for the

company. However, the general innovation process is similar: they receive the challenges from their clients, and then create a solution through internal sources. At last, they give the solution to their clients and get evaluations to develop themselves in the future.

3.4. Yourencore

3.4.1 Purpose

Yourencore (www.yourencore.com) was founded in 2003. They have over 7500 experts as the innovation team to solve product research, development and commercialization challenges. The website offers an innovation service from the beginning to the end. They not only give their clients solutions, but they also help their clients to execute, monitor and manage the whole plan.

3.4.2 Structure

Yourencore is an advertisement website that has all information about their successful history and qualified team. The news board on the homepage displays the latest success news. There are also links to encourage the visitor to become one of the clients or staffs in different modules, which can be seen in figure 4.

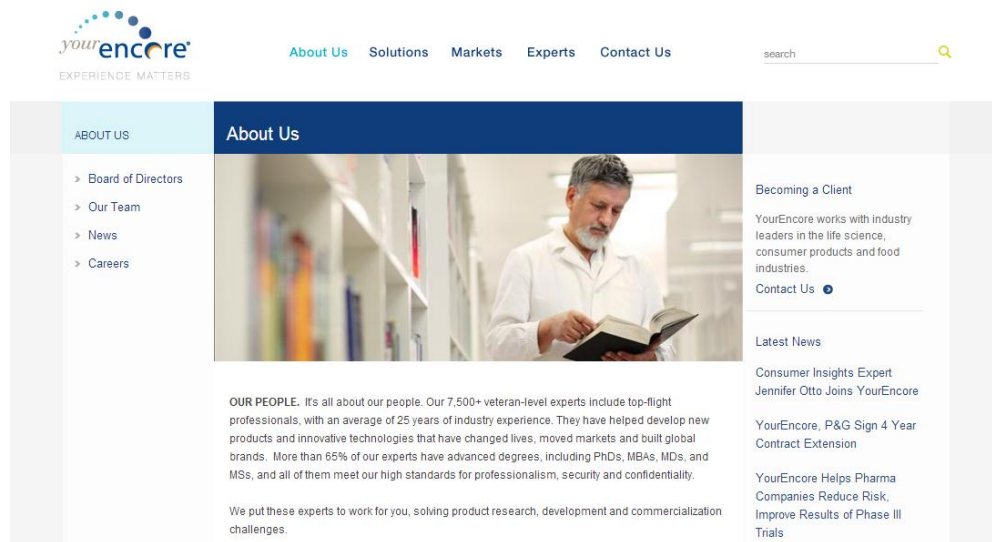


Figure 4. Youencore website structure

3.4.3 Open innovation process

Since Youencore has a very large and professional innovation team, the company does not offer service to the public. People must enrol as qualified innovators in order to take part in the whole innovation procedure. Youencore will identify the suitable solution based on the challenge which was given by clients by using their veteran innovation team. Then they track the project, monitor feedback and report progress until the results delivered.

Youencore is responsible for the whole solution it has offered. It is efficient and it greatly reduces its clients' risks.

3.5. OpenIDEO

3.5.1 Purpose

OpenIDEO (www.openideo.com), an open innovation community for public, believes that the more ideas, the better innovation results they will get. The website is responsible for giving challenges and managing the innovation process. In a word, OpenIDEO offers a health open community for the public to participate in the innovation activities.

3.5.2 Structure

Based on figure 5, we can see the home page of OpenIDEO is an introduction page which contains various kinds of information about the association. Besides, there are more details can be found in other subpages. Especially, there is a link to the user's forums that has a very common forum structure with different topics and themes which allow users post or reply inside the forums for different challenges and topics.

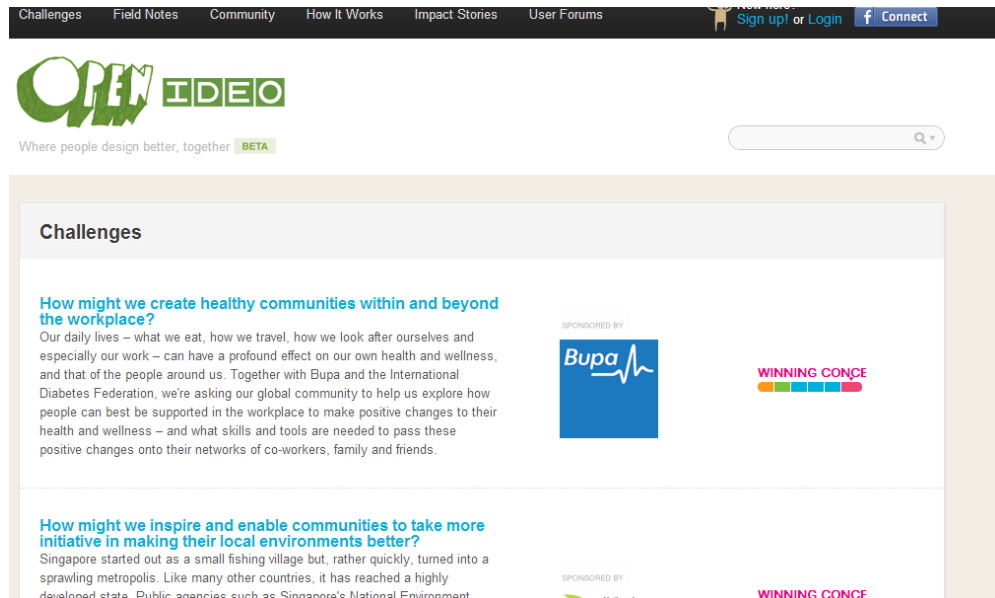


Figure 5. Openideo.com website structure

3.5.3 Open innovation process

There are four general phases for OpenIDEO: inspiration, conception, collaboration and evaluation. During the inspiration phase, all users should post the ideas or inspirations which could possibly be the solution. The conception phase aims to make the ideas into reality plans which are based on the information that mentioned in the inspiration phase and created by the users. Collaboration with other users' idea is possible and recommended. After a proper plan has been posted, the evaluation phase starts with viewing and scoring the plan by all relevant users. The final plan comes out with the highest score that is absolutely chosen by the users. At last, the plan offers to the challenge sponsor and the reward should be given to the winner. OpenIDEO believes through this open innovation process could improve the efficiency and quality because it contains collaboration of different ideas from people in different fields.

On the challenge subpage, there is a task given by Oxfam and Nokia named: how might we improve maternal health with mobile technologies for low-income countries. Each phase as introduce has an official plan. The inspiration phase asks the users to look around and tell what inspirations are already out there around this issues. In the concepting phase, the plan wants the community to contribute their own mobile solutions to improve maternal health. These could be new products, services, campaigns, or systems. Once the concepting phase is completed, the community needs to return and applaud the favourite concepts. The top concepts will also be evaluated more thoroughly for criteria like business viability and technological feasibility. Last, the collaboration work will be done by the community and the website. The official plan will be drafted and returned to Nokia and Oxfam. (Appendix 3)

3.6. Owela

3.6.1 Purpose

Owela (owela.vtt.fi) is a new open innovation platform. The main users of this website are Finnish. This website concentrates on co-design product or service for its clients with the ideas collected through the platform. The website is made for given people the general understanding of their working procedures.

3.6.2 Structure

The website has been designed very simple and clear with an introducing page as a front page that shows in figure 6. Most of its

pages are in Finnish, the public innovation platform among others. It also has different user groups to classify various topics. Compare with other open innovation platforms, the general outlook of owela is not so good because of the boring background is boring, simple text, and lack of pictures.



Figure 6. Owela website structure

3.6.3 Open innovation process

The innovation process of this website is unique. First of all, Owela creates an innovation based on the consumer's demand, and then tests the concept and prototype. Owela is also responsible to the evaluation of exciting services and marketing research.

3.7. Analysis of open innovation platforms

From the above benchmarking, we can easily find out the advantages and weaknesses of open innovation platform.

Almost all open innovation platforms are cooperating with at least one social media network. All of the websites need to log in to post or view. Different websites have different outlooks and information exchange channels. The tasks or challenges are most likely given by a company.

Based on the innovation platform knowledge, The general working procedures for a matured innovation platform can be concluded as the following figure 7.



Figure 7. How open innovation platform works

This process figure 7 presents the general process of the most open innovation platforms. In step one, the company throws out a challenge by its R & D department, which they want to solve by external innovation power. In step two, the open innovation platform receives the challenge, which will be given to the innovators after segmentation. In step three, the open innovation platform users or named innovators, will use their creative power to organize various solutions for the particular challenge. Then

they either post or use other channels to upload their solutions to the open innovation platforms. In step four, the open innovation platform will finalize the solutions they have collected and sent the valuable solutions back to the companies' R & D departments. Finally the company evaluates the solutions, gives reward and feed back to the open innovation platform.

Based on this, the keyword of the open innovation platform is communication. There are three participators in this cycle: the company, open innovation platform, and the innovators, since the open innovation platform is responsible to connect both company and innovators, the platform becomes to the most important part in the whole procedure, which can be regard as the "engine" of the cycle.

The importance of open innovation platform determines that the platforms should have a great efficiency and service quality. In other words, the ideal situation is where the innovator has enough optional plans for the task which is given by the company and the final plan chosen by the platform fully satisfies the company.

As a conclusion, I created a mind map to show what kind of a good open innovation platform should be, see Figure 8. These are the basic qualities which a good open innovation platform should acquire. This mind map can be regarded as a "hint" to successful plan of open innovation platforms.

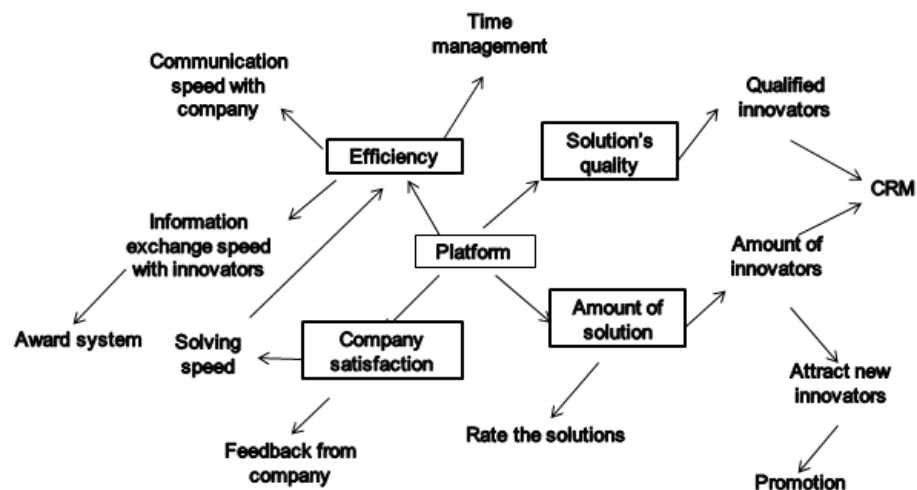


Figure 8. Mind map of a good open innovation platform

According to figure 8, there are 4 main elements could decide the quality of an open innovation platform: efficiency, company satisfaction, quality of solutions and amount of solution. Efficiency means how fast the platform could give an official plan which based on the solutions it has collected back to the company. Company satisfaction is the most important factor to the platform. Obtaining feedback from the company after giving back the official plan could easily help an open innovation platform to improve its next task. The quality and amount of the posted solutions are relied on the amount and quality of the users. Therefore how to attract and maintain qualified user becomes very important. Normally, the website could use CRM knowledge and software to manage this issue.

3.8. Open innovation platforms, co-operation in social media

There is a great potential for open innovation platforms with social media platforms. The key concept of social media is that it is

shared with those that you identify as friends or follower, an inner circle, which has opted in to view any content or information you opt to share, thereby making it the act of being social online.

(Agresta, 2010, 2)

If the open innovation platform organized a proper strategy involved social media network, the working efficiency will be increased. The groups in many social media networks have been segmented; as a result the information flow can be controlled much easier than any other channel.

A matured social media network has a great amount of users which is larger than the amount of open innovation platform's resisted users. The social media networks also have more opportunities than individual open innovation network.

There are many valuable social media platforms that have not concentrated on open innovation. It is worth studying for the great potential cooperating opportunities, such as FaceBook, Twitter, LinkedIn, Google+, etc.

For instance, Facebook already has 651,835,100 active users till 2012 (2012). Figure 9 describes the age distribution among all Facebook users.

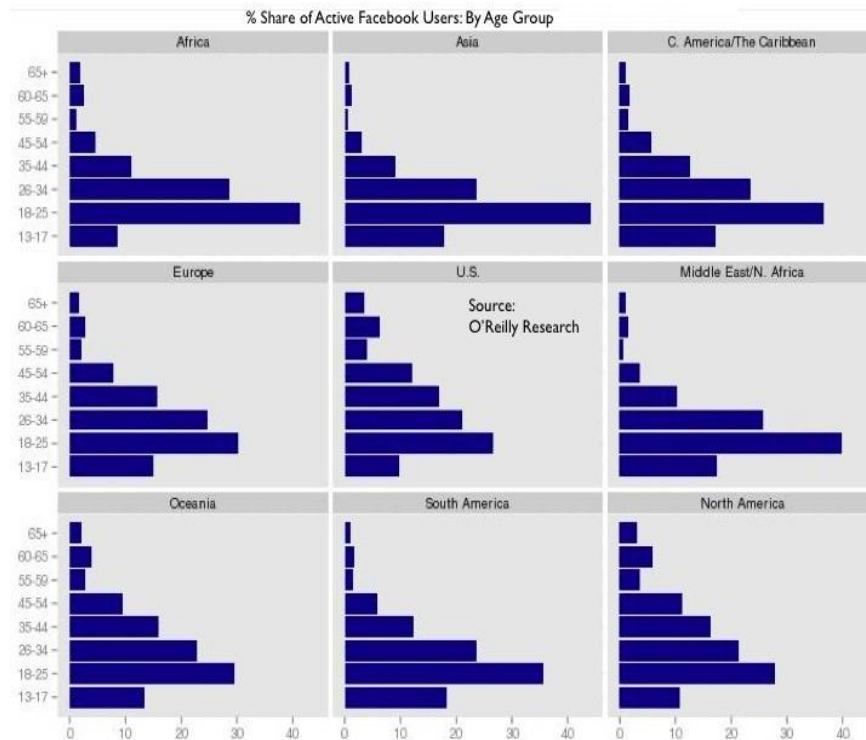
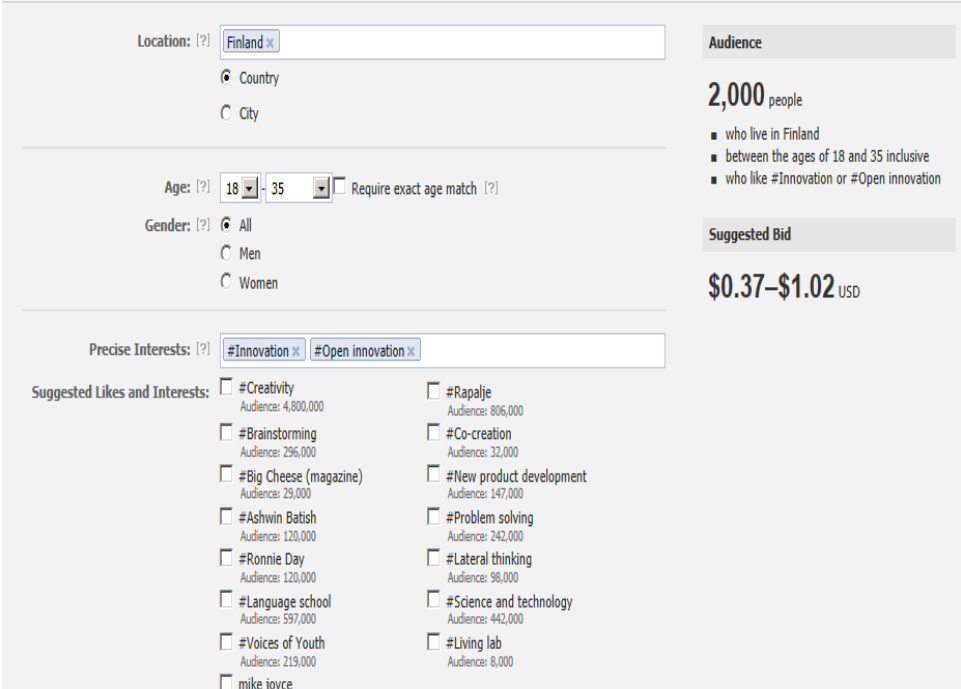


Figure 9. Facebook age distributions (Ben, 2010)

From the upper figure 9, we can see the age of main user of Facebook is 18 to 34. This group of people has ideas, abilities and energy. It is an ideal target group for the open innovation or other business activities. For instance, if one business posts an advertisement on the login page of the Facebook, the advertisement would be viewed by millions of people per day. None of the traditional advertising channel can achieve this effect.

Facebook is not the only popular social media platform, there are also many other social media in different forms which are sharing the social media market. On the other hand, there is a good opportunity for business marketing that they could position in different platforms accurately based on the user segmentation or other business elements.

From another point of view, carrying out a strategy with social media network is also more profitable than using other channels. I still take Facebook as an example. There is a well-designed guide system to help users create an advertisement including budget. I went through the process under my Facebook account, see figure 10:



Choose Your Audience [Learn More About Targeting](#)

Location: [?]

Country
 City

Age: [?] - Require exact age match [?]

Gender: [?] All
 Men
 Women

Precise Interests: [?]

Suggested Likes and Interests:

<input type="checkbox"/> #Creativity Audience: 4,800,000	<input type="checkbox"/> #Rapalje Audience: 806,000
<input type="checkbox"/> #Brainstorming Audience: 296,000	<input type="checkbox"/> #Co-creation Audience: 32,000
<input type="checkbox"/> #Big Cheese (magazine) Audience: 29,000	<input type="checkbox"/> #New product development Audience: 147,000
<input type="checkbox"/> #Ashwin Batish Audience: 120,000	<input type="checkbox"/> #Problem solving Audience: 242,000
<input type="checkbox"/> #Ronnie Day Audience: 120,000	<input type="checkbox"/> #Lateral thinking Audience: 98,000
<input type="checkbox"/> #Language school Audience: 597,000	<input type="checkbox"/> #Science and technology Audience: 442,000
<input type="checkbox"/> #Voices of Youth Audience: 219,000	<input type="checkbox"/> #Living lab Audience: 8,000
<input type="checkbox"/> mike joyce	

Audience

2,000 people

- who live in Finland
- between the ages of 18 and 35 inclusive
- who like #Innovation or #Open innovation

Suggested Bid

\$0.37–\$1.02 USD

Figure 10. Facebook advertising system

I chose Finland as my searched audiences' location, and set up age range from 18 to 35. After that, hundreds of categories appear which includes creativity, brainstorming, big chess, and Ronnie day and so on. I chose innovation, and then chose open innovation as the sub-category. A window came out which brief you the amount of audience and suggested bid. As can be seen, this procedure is very easy and accuracy.

Since the user has been highly segmented, it will make the customer relationship management (CRM) easier. The open innovation platform could focus on the most profitable group if they could use the social media network's category system.

In my opinion, it is worth to cooperate with the matured social media network as an open innovation platform. From the benchmarking, it is shown that many open innovation platforms have already linked with the popular social media websites.

Now it has become a fact that the social media contains a huge business potential. Considering its large user volume and different types of groups, more and more business will enter and share this big cake. Based on all the fact, it is obviously a great opportunity for open innovation subject as well.

4. EMPIRICAL RESOURCE ABOUT OPEN INNOVATION IN SOCIAL MEDIA PLATFORMS

This survey is based on the experiences of social media users to find out what is the most important factor for social media platform and open innovation, at the same time, the participants' of suggestions of improving social media platform and open innovation are also one of the aims I do the survey. (See appendix 1.)

4.1. Preparing the questionnaire

First the questionnaire is designed include all necessary questions. Then I asked my friend who is a native speaker to help me to check the language veracity, in order to let every participant would understand the questions and give their answers without any misunderstanding.

The technical implementation of the survey was designed and distributed thorough Google Drive. This is the link directly to it: https://docs.google.com/forms/d/1nmdOYOXzhPSh8rr4JrFwYkhZNF_YIH5hDCFQ5eG5low/viewform. Google Drive is a kind of elastic block service that can save and share files or documents. It is easy to design a questionnaire by typing text in the template, at the same time, it is easy to distributed by sending the website link, moreover, it is also convenient and fast to gathering the data and make out the charts and figures.

The questionnaires were sent by my Facebook message on 24th of April 2013. The questionnaires were sent to my 25 friends who

are seems to be willing to respond to the survey. They are not only bachelor students, but also master students as well as people already work for a span. I got 21 replies till I started to analysis data and results were reported to Google drive immediately.

4.2. Survey questions

The survey contained three parts: social media survey, open innovation survey and personal data. In social media section, there are 8 questions. Open innovation section also contains 8 questions. And personal data has 4 questions.

4.2.1 Social media survey section

Question 1: *“How long, in average, do you spend on social media network per day?”* This question is to find out the general time-spending situation on social media platform.

Question 2: *“What kind of social media website do you usually visit?”* This question aims to identify the most common social media platform that accepted by the public. There are different kinds of social media platforms shown following the question, such as social networking, micro blogging, forum, video sharing platforms, and photo sharing platforms, the answers can be chosen from the question’s checkbox.

Question 3: *“To what extent do you agree with the importance of the following factors in social media platforms?”* There are eight different common factors among social media platforms need to

be rated: general website outlook (front page, main page etc.), update frequency (bug fixing, new function etc.), entertainment (fun applications, interesting information etc.), accessibility (can be logged in through PC, cell phone etc.), information exchange channel (post, internal message system etc.), possibility of meet people (meeting old friends or making new friends), popularity, account security. From very important to not important at all, there are 4 options. The aim of this question is to find out important factors the users thought.

Question 4: *“What kind of activities do you usually engage while using the social media platform?”* This question is to study the main usage for a social media platform from an individual user’s point of view.

Question 5: *“What do you think of quality of the information you get from social media?”* The reliability of the information which is obtained from the social media platform will be researched in this question, since the authenticity of some information from the social media platforms is not legally guaranteed.

Question 6: *“What factors do you think could be added or improved for social media platform in the future?”* There is an open question with a text box below that can be filled in. It gives an opportunity for the respondents to share opinions about the social media platforms improvement.

Question 7: *“Do you take part in the following activities with social media platforms?”* All following activities are business related:

research market trends or issues, deliver product information, advertise, offer customer service, look for potential business opportunities, report on live events (e.g. trade shows, conferences), maintain relations with clients, business partners and etc, solve business problems. The question designed to find out what kind of business related activities the users would like to take part in with social media platforms.

Question 8: *“What kind of business activities would you be interested in while using social media platforms?”* Together with question 6 and question 7, it all aim to discovering new potential cooperating opportunity between social media platform and other business such as open innovation. The question 7 and question 8 are the transition between social media section and open innovation section.

4.2.2 Open innovation section

Question 1: *“Do you know open innovation in social media platforms?”* This is an introducing question. Open innovation platform is a new concept for many people, using this question could sift some respondents whom have no idea on open innovation. There are 3 options for this question: *“Yes, I know what is open innovation”*, *“Not quite sure, but I have heard it before”* and *“No, I don't know what open innovation is”*. The first option will link to question 2; second option will link to the page which contains brief introduction about open innovation platforms; if the respondent chose the last option, the survey for them will link

to personal data section directly which means they skip all the question related to open innovation.

Introduction page has an introduction of open innovation. It is designed to let more people understand what open innovation is so that respondents could continue to finish the questionnaire. After reading the introducing article, there are two options: *“Yes, I know what open innovation is”* and *“No, I don’t understand what open innovation is”*. The first option will link to question 3; the second option will skip all question related to open innovation and then link to the personal data section.

Question 2: *“Which open innovation platforms have you used?”*

This question will only be asked when the answer is *“Yes, I know what is open innovation”* in question 1, since it is logically impossible to answer this question without basic knowledge of open innovation. This question is aim to find out the particular open innovation platform that has been widely used among the public.

Question 3: *“If/While you are using an open innovation platform, you want to act mainly as a:”* There are three options: solver, seeker and both. This question could discover the main role of the majority existing and potential users.

Question 4 and question 5: *“What motivates you to post solutions?”* and *“What motivates you to post tasks or quests?”* This is two similar questions. Based on the answer of these two questions, the motivation of posting solutions or tasks will be found out.

Question 6: *“To what extent do you agree with the importance of the following factors in open innovation platform?”* This question contains 10 different factors of open innovation platforms: quest solving speed, reward system, quality of solutions, amount of solutions per quest, integration of ideas and solutions, amount of solvers, quality of solvers, easy to access, popularity, privacy and information security. The respondent must rate the importance for each of them from very important to not important at all. This question is to study how people consider an open innovation platform to be a good one.

Question 7: *“Do you think it is good to use open innovation method to solve problems? Why?”* To find out how the respondents think about the open innovation is very important. According to the answer, a general impression of the open innovation could be drafted, although it might be changed with the time passed.

Question 8: *“What factors do you think could be added or improved for open innovation platform in the future?”* This question has a textbox below. Respondents could write down their opinions about the potential improvement of the open innovation platform.

4.2.3 Personal data section

There are 4 questions in the personal data part: age, education level, net income per month and employment history. This part is used to find out if the personal data influences the attitude to

social media platforms and open innovation. If these personal data influence the result, it is necessary to find out the relationship between personal data and the pervious questions. The aim was to find out if personal data effects trust level of open innovation and usage rate of social media platforms.

4.3. Survey results and analysis

4.3.1. Social media survey section analysis

Question 1.How long, in average, do you spend on social media network per day?

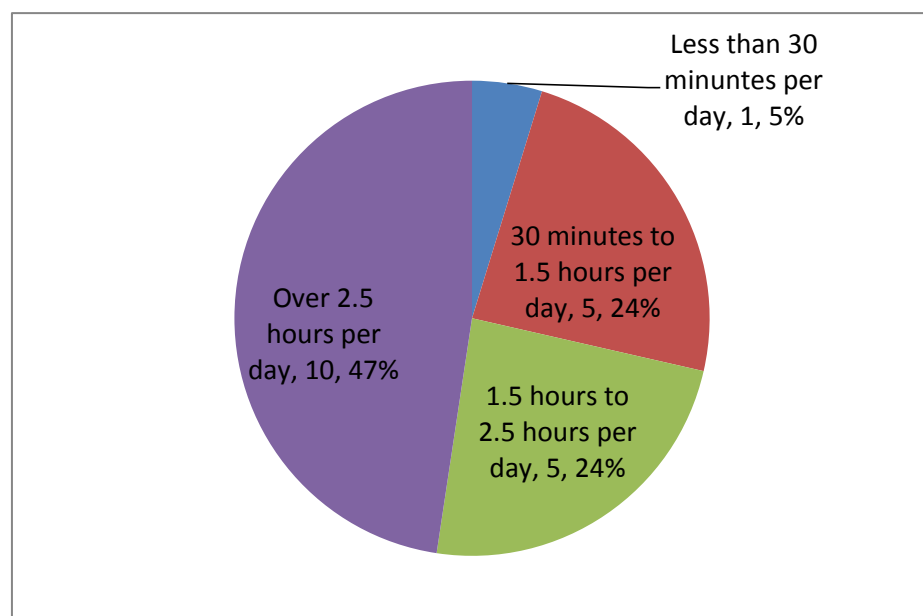


Figure 11. Time time-spending situation of social media platforms

As figure 11 shows, almost half of the respondents (47%) claimed that they spent over 2.5 hours on the social media platforms, another 53% of the respondents spent less than 2.5 hours: 1 spent less than 30 minutes per day, 5 of them spent 1.5 hours to

2.5 hours per day and another 5 spent 1.5hours to 2.5 hours per day.

This means that it will be a great potential to advertise on social media platforms. Logically, more time spending on social media network, more web pages would be viewed and more information would be obtained. Based on all these facts, open innovation platforms could post some advertisements on some subpages inside social media network instead of putting the advertisements on the front pages or some pages can be easily opened since the price of posting advertisements on the subpages would be much cheaper.

Some of the users of the social media platforms are also the potential users of open innovation platforms because they are will to spend such long time on the internet.

Question 2.What kind of social media website do you usually visit?

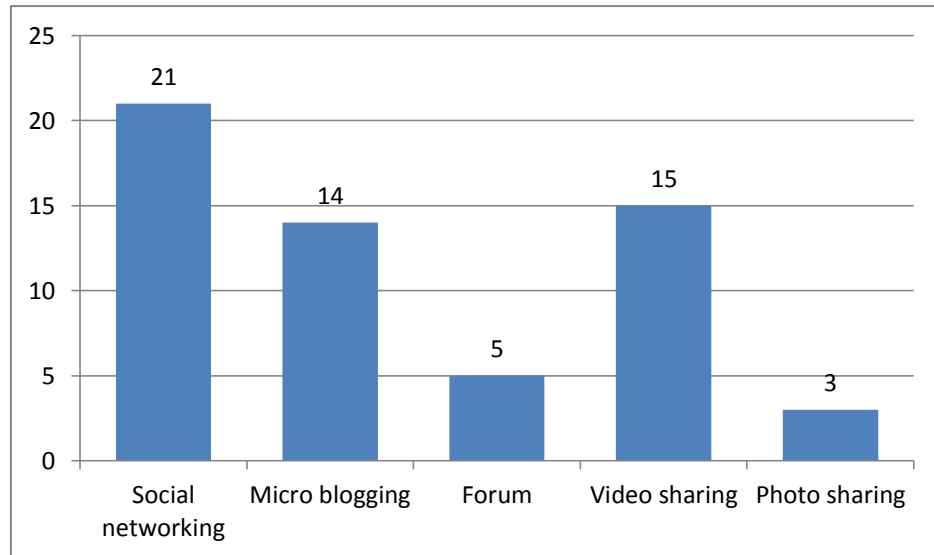


Figure 12. Social media platform visit situation

This figure 12 shows that the most acceptable social media network model is social networking, which used by all respondents. The sample of social media network is Facebook, LinkedIn, Google+ etc. Video sharing such as YouTube and micro blogging such as Twitter are also wildly used; over 50% of respondents usually use them. Besides, there were only 5 choice of forum and 3 choice of photo sharing.

This result clearly gives open innovation platform a priority to cooperating with social media platforms. To receive the best return, platform like Facebook or Google+ should be invested firstly, and then YouTube and Twitter could be marked as second choices, since these are the most used social media platforms for the public.

Question 3. To what extent do you agree with the importance of the following factors in social media platforms?

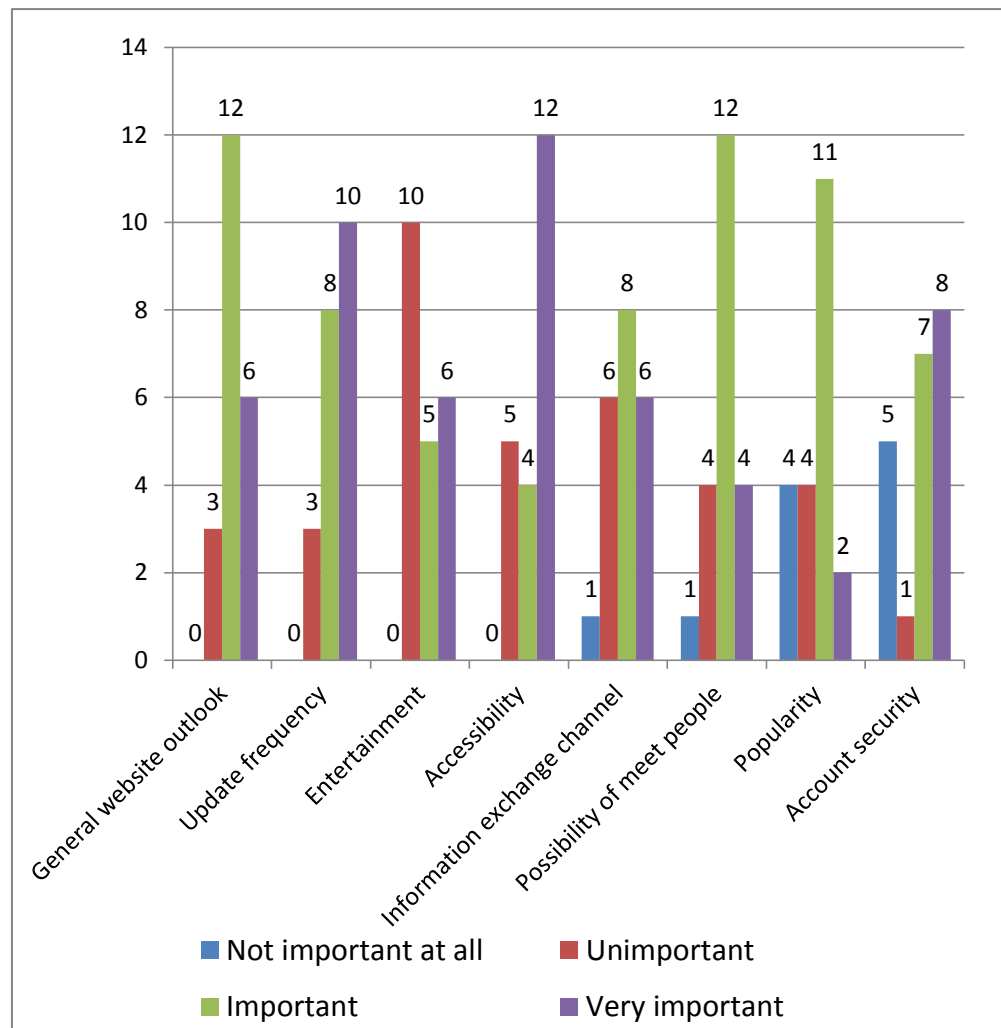


Figure 13. Different factors' importance of social media platforms

This figure 13 shows the accessibility is the most concerned issue about social media platforms, then follows update frequency and account security. Due to the result, how to improve the access channel can be regarded as the key element of a mature social media platform. In fact, most famous social media platform noticed the importance of this issue. For instance, Facebook can be logged in on PC, iPad, and most mobile phones. From open

innovation platforms point of view, they could also offer some applications that let them users to access the platforms from different devices. This application is not only cost small, but also has a great potential.

Question 4. What kind of activities do you usually engage while using the social media platform?

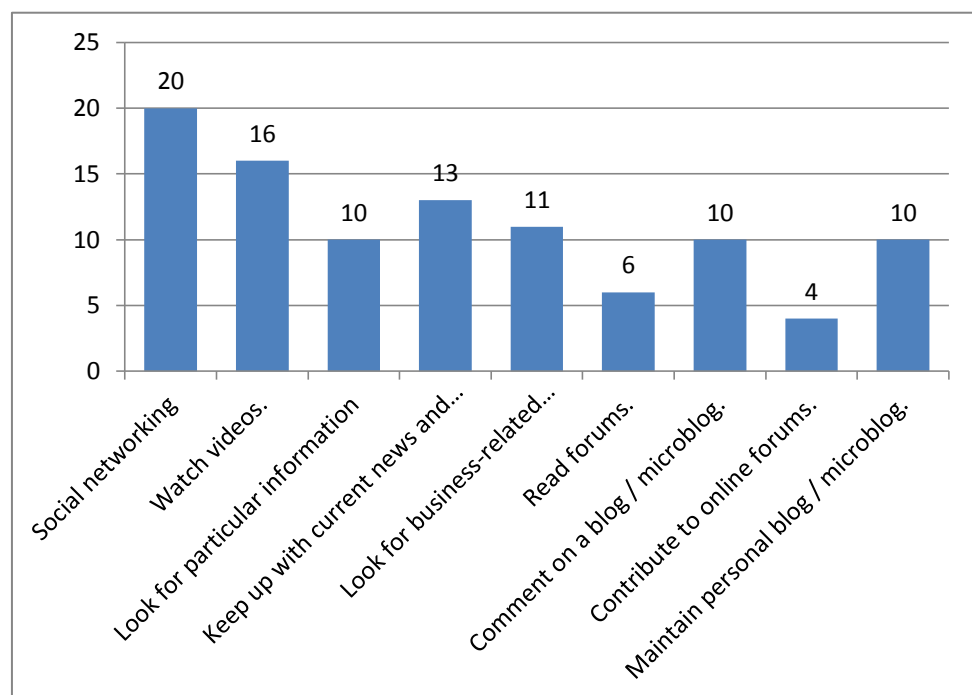


Figure 14. Majority functions engaged while using social media platforms

Figure 14 shows the activities the respondents usually engaged with social media platforms. 20 out of 21 respondents were using social media networks to make friends and check their recent statuses. And 16 out of 21 respondents would like to watch videos on the social media networks. 13 people would like to keep up with current news and events by using social media networks. These are the top three main usages for social media platforms.

According to this, open innovations could put their own accounts and marketing videos on the target social media platforms then keep all the information update to attract more users.

Understanding the main function that the public used the most will bring advantages for the open innovation platform.

Question 5.What do you think of quality of the information you get from social media?

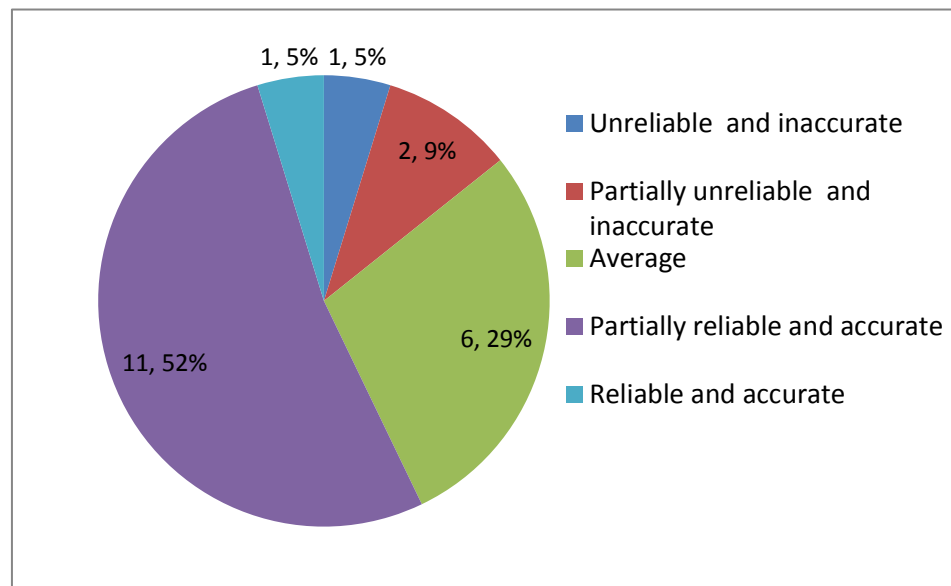


Figure 15. Information quality on social media platforms

Based on figure 15, there are 11 respondents among the whole 21 respondents think the quality of the information they get from social media are partially reliable and accurate that maintains 50 percentages. Besides, 7 respondents think the information quality is average which maintains 32 percentages, 2 respondents think the quality of the information is reliable and accurate (9% of the answers), one choose partially unreliable and inaccurate (5% of

the answers) and one choose unreliable and inaccurate (5%of the answers).

Question 6.What factors do you think could be added or improved for social media platform in the future?

This is an open question. There are 19 various answers of this open question, two comments were just to say no ideas so it is pointless to add them into the thesis work result.

Four of the all respondents mentioned that they thought the information showed and shared on the social media platforms should be managed: more reliable and useful information, less fake and repeated information. Three respondents suggested these different social media platforms could integrate and cooperate with each other so that they could see all the friends' current events in one platform. At the same time, three respondents thought their personal data and accounts should be secured. Two of them suggested more business information, especially recruitment information and job offers; two complained the social media platform's connected junk email to their register email box.

Besides, the other suggestions are mentioned just once, such as: more funny videos, more design factors of the website outlook, more charity issues, easy to access. Furthermore, one respondent just wonder how these social media platforms deal with the billions of useless accounts after hundreds years.

As a conclusion, the social media platforms are developed so well so far. The shared information should be screened and controlled by the webmasters. It is also a good way for the social media platforms to cooperate with each other, to share information and certain more users.

Question 7. Do you take part in the following activities with social media platforms?

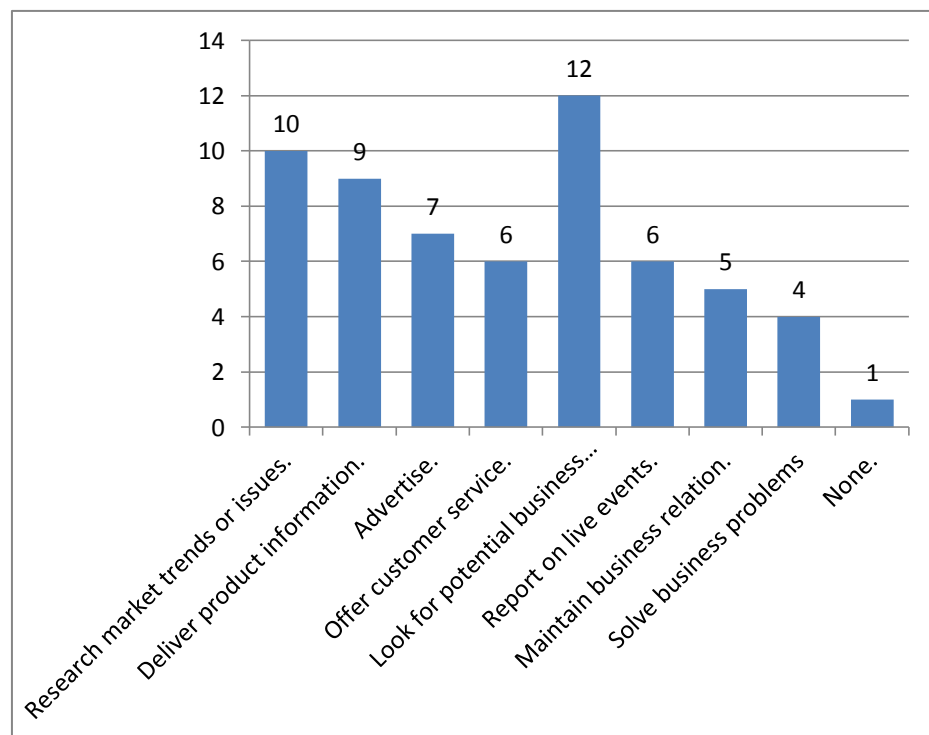


Figure 16. Business activities situation

This question 7 and question 8 are business related. From the figure 16, we can see that there are 12 out of 21 respondents were looking for potential business opportunities while using the social media platforms. There were also 10 out of 21 respondents participated marketing researches. This fact means it would be great if any business could cooperate with social media platforms

while marketing or researching. Open innovation platforms could also take this into consideration. In fact, there are many open innovation platforms has already linked up with some famous social media platforms.

Question 8. What kind of business activities would you be interested in while using social media platforms?

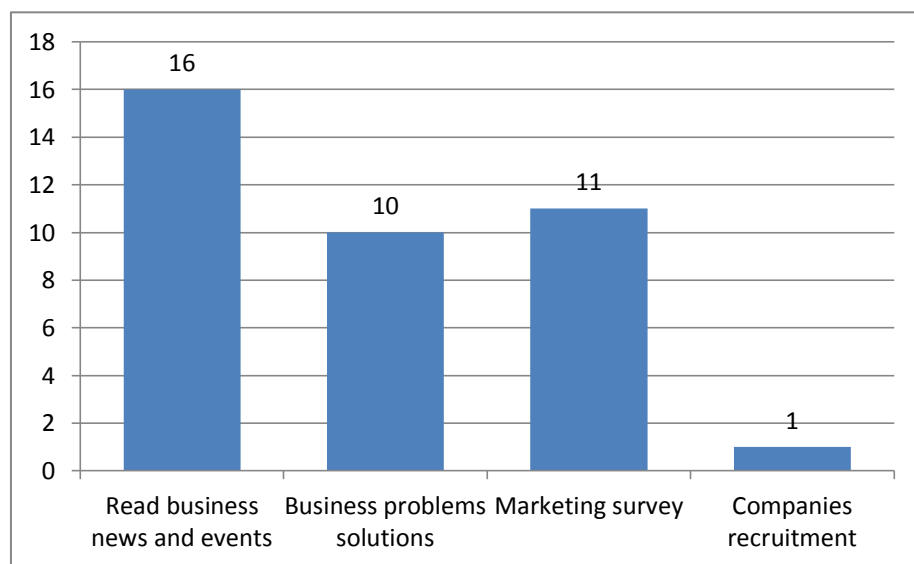


Figure 17. Preferred business information

This Figure 17 shows that the most common business activity for the respondents while using social media platform is read business news and events, then it follows marketing survey and business problem solutions.

According to this result, there is no doubt it is a good thing and huge opportunity for open innovation platforms that half of the social media users are willing to solve the business problems. Update the news and post new event is the best way to reach the users of social media platforms. Open innovation platform could

post some business news and events, or current challenges they have to the social media platforms. It will greatly increase the opportunities to attract people and make open innovation platform known by more people.

4.3.2. Open innovation survey section analysis

Question 1. Do you know open innovation in social media platforms?

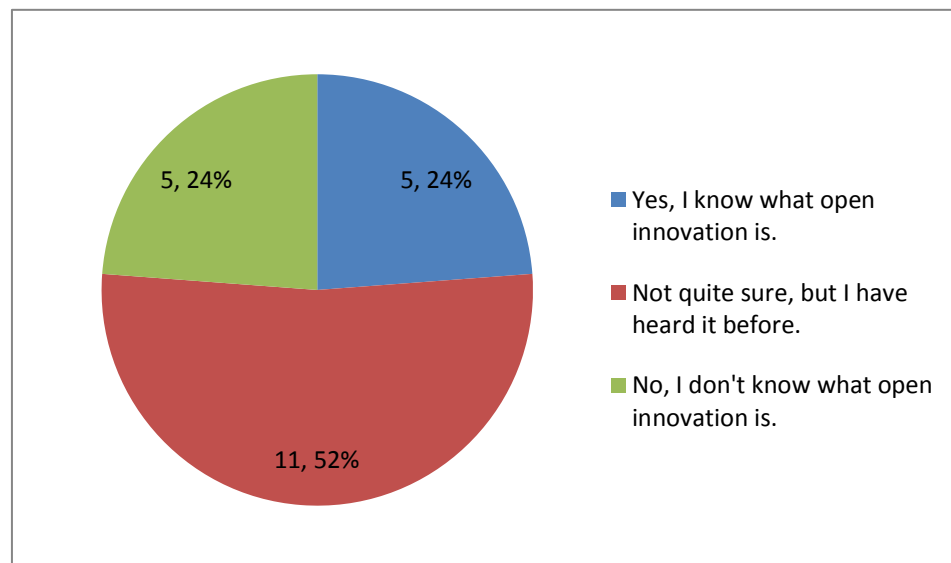


Figure 18. Understanding of open innovation

First question is to make sure that all the open innovation section will be answered by the respondents who have the knowledge of open innovation, or at least a general understanding of open innovation. According to figure 18, 5 out of 21 (24%) respondents knew clearly what open innovation platform is. At the same time, 11 respondents were not sure about the open innovation, but heard it before. Therefore these 11 respondents would be linked

to a page contained introduction about open innovation (See appendix 1). After this page, the respondents who still didn't have a general understanding of open innovation would be linked to the personal data section. According to answers of question 1, there are 13 respondents left to finish this open innovation survey section.

Question 2 .Which open innovation platforms have you used?

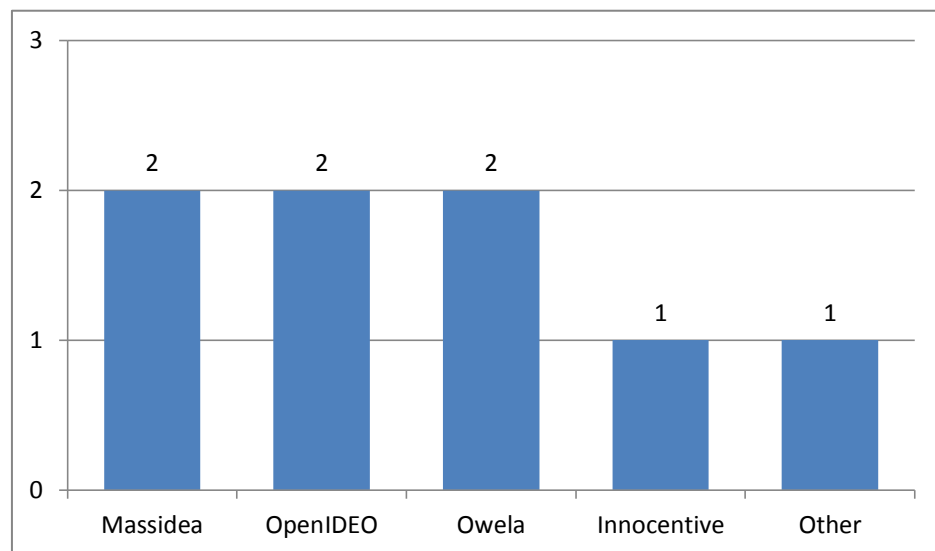


Figure 19. Most used open innovation platforms

There were 5 respondents able to answer question 2. This question only could be answered when they clearly know what open innovation is. The result is: Massidea, OpenIDEO and Owela were most voted. Each of these three open innovation platforms had two votes, Innocentive had one vote.

The open innovation platforms are rarely known by people, even the social media users, which encourages open innovation to do good marketing and attract more users

Question 3.If/While you are using an open innovation platform, you want to act mainly as a:

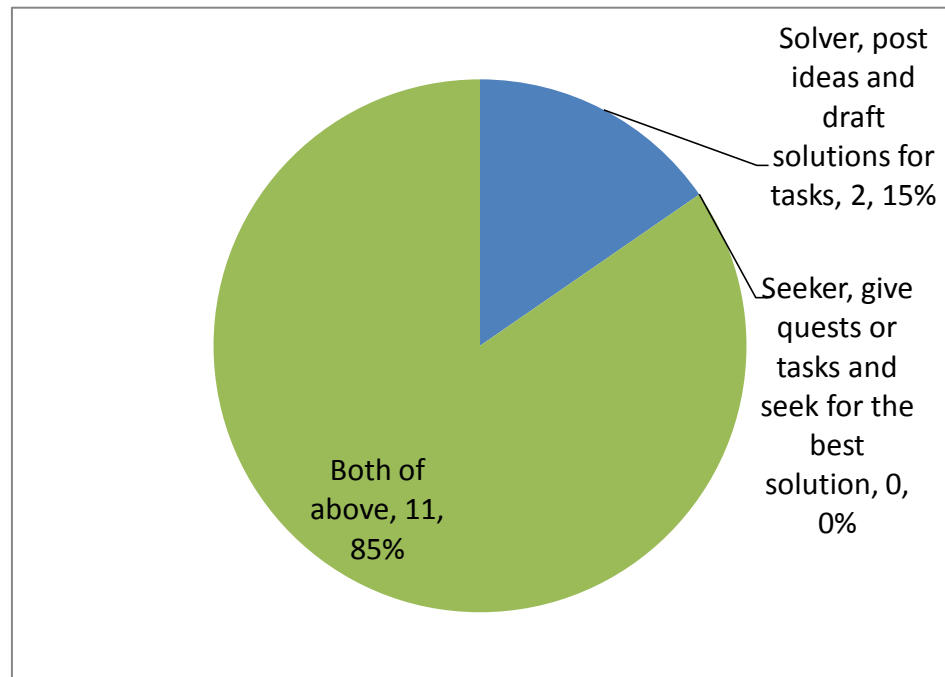


Figure 20. Main role in open innovation platforms

As figure 20 shows, there were 11 out of 13 respondents (85%) who wanted to give tasks and to offer solutions while using the open innovation platforms. Only 2 respondents (15%) wanted only to share ideas but not to give any tasks to others. This situation means that open innovation platforms have a great potential on attracting more users by solving the tasks for them. For instance, the open innovation platforms could solve 10 tasks freely and openly. It would be a good way attracting both users and clients. It not only gives an open innovation experience opportunity to the public, but also markets the brand itself while doing this activity.

Question 4.What motivates you to post solutions?

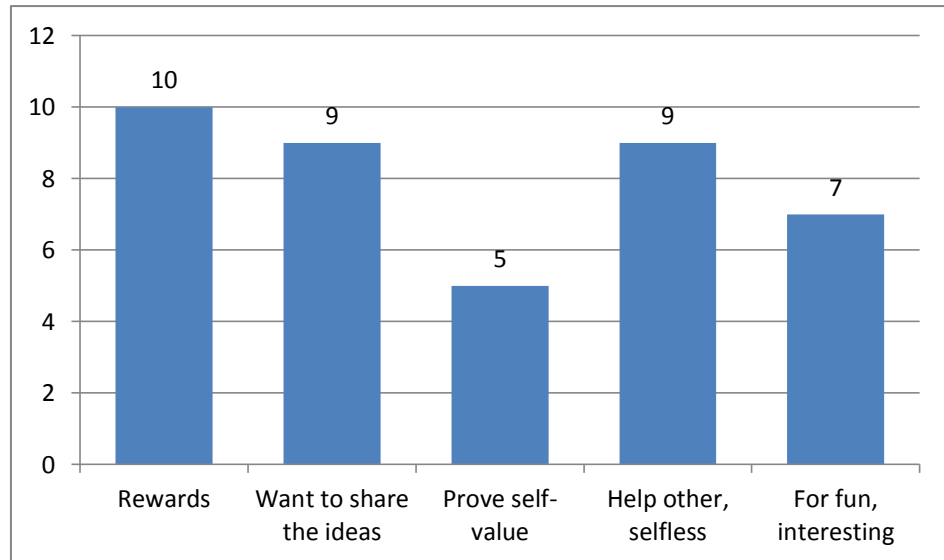


Figure 21. Motivation of post solution

According to figure 21, 10 out of 13 (76%) respondents thought that rewards motivated them to post solutions. According to this result, if an open innovation platform wants to be successful, it must have a completed, matured and stabled reward system. Showing this reward system or reward itself to the platform users would certainly motivates the users to provide more qualified solutions. There were nine choices of want to share the ideas and nine choices on help others, which shows again social media platform users are potential creative open innovation users.

Question 5.What motivates you to post tasks or quests?

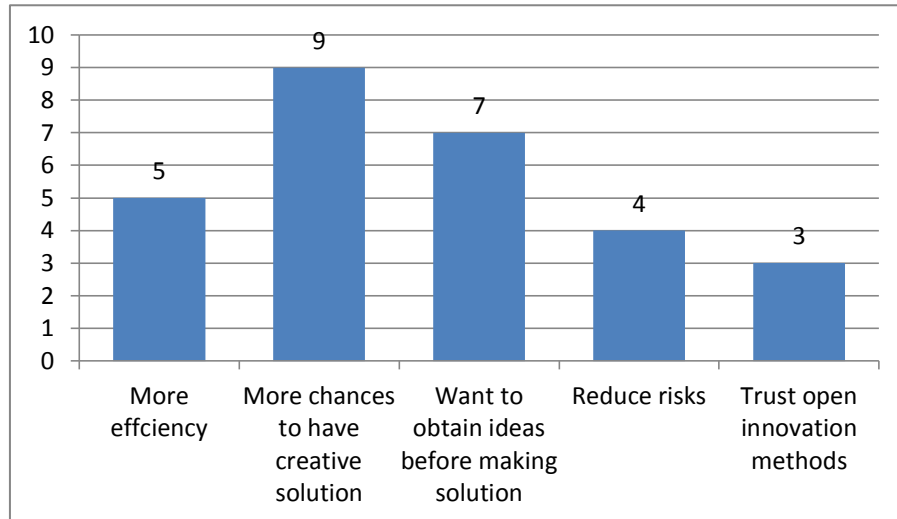


Figure 22. Motivation of post tasks

Nine respondents believed more chances to obtained creative solutions through giving tasks on the open innovation platforms (See figure 22). From this result, a conclusion can be drawn: from the public point of view, the core value of the open innovation platforms is integration power, so how to manage and enlarge this power becomes to the key to success.

Question 6. To what extent do you agree with the importance of the following factors in open innovation platform?

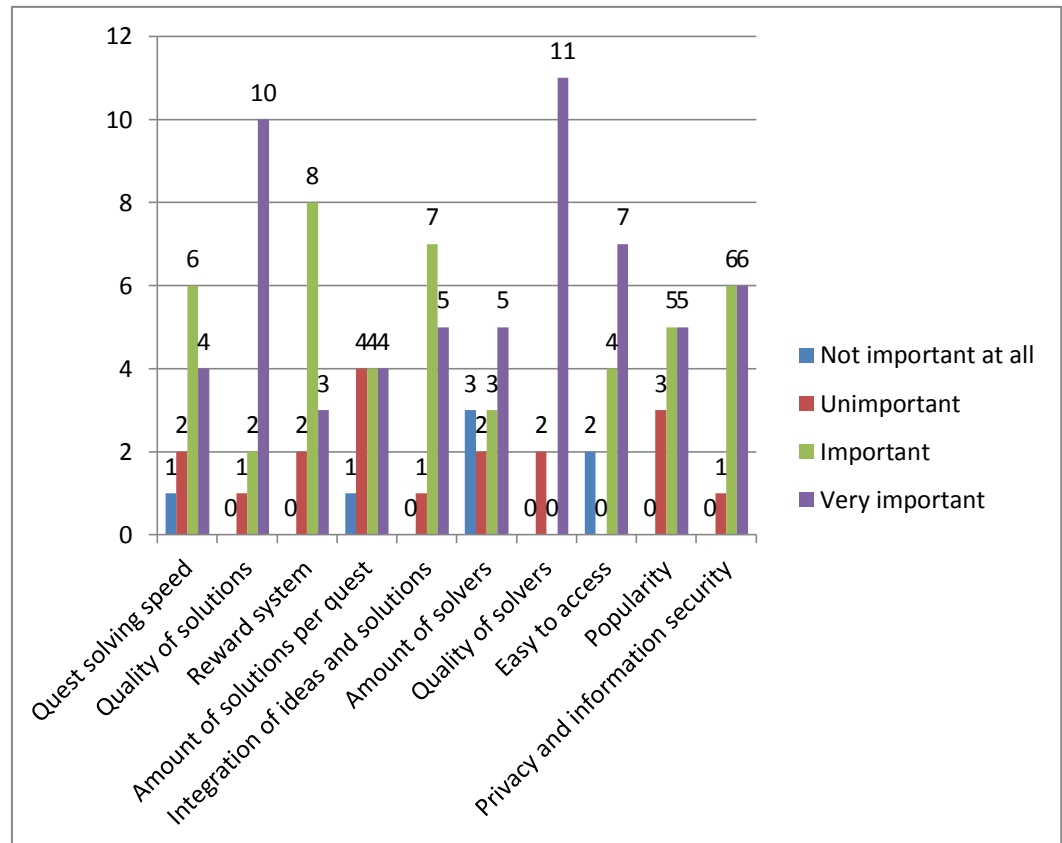


Figure 23. Different factors' importance of open innovation platforms

Quality of solver and solution is the most important factors among open innovation platforms as figure 23 shows, then follows quality of solutions, easy to access, and integration of ideas and solutions.

The quality of solutions is important because it is the core service that open innovation platforms offer. If the provided solutions are not executable, then the open innovation platforms will lose the meaning of exciting. So, offering a professional and creative

solution should be the priority issue for every open innovation platform. All high quality solutions are from professional and qualified solvers, whom will probably be the users of the open innovation platforms. Based on all this two facts, the open innovation platforms should not only increasing their own integrating power, but also should maintain and attract qualified solvers.

Question 7. Do you think it is good to use open innovation method to solve problems? Why?

75% of respondents thought it's good to use open innovation method. The variety of answers could be concluded as: more ideas from different people with different backgrounds will provide more valuable ideas which will help to solve the problem more creatively, completely, efficiently and economically. For the 25% respondents shared the opposite opinions, the main reason is they have the doubt of the solution's quality. Some of them think the open innovation just solve the unimportant issues. From this result we can see that the majority respondents believe the public creative power and willing to use open innovation method.

Question 8. What factors do you think could be added or improved for open innovation platform in the future?

I only got 8 comments: "More attractive awards, more participants. The quality of solvers and solutions should be improved.", "How to attract and maintain the qualified users. Like give them money or other reward.", "More professional users. It is better if the solutions

are selected by the administrator of website.”, “Communication system development”, “develop more popular and more users.”, “The platform should be attracted users who are specialized at different industry and the platform should easy for them to discuss. The fee for the businesses should not too high.”, “Better legal system and individual feedback system should be improved. Everyone must be responsible for its post and solution” and “good management. Better web design would attract more users. More awards.” Summarized these answers there are 5 respondents thought the open innovation platform should be more popular and attract more users, especially people from different backgrounds and industries. Maintaining the high-quality users is also an important issue the innovation platform should deal with, more awards would be a solution based on these answers. On the other hand, the quality of the user and the quality of the solutions should be improved. What is more, good management and integration are mentioned by 2 respondents. There are other answers, such as, better communication system, better legal system, and low-charged fee for the businesses.

4.3.3. Personal data section analyse

Question 1.Age

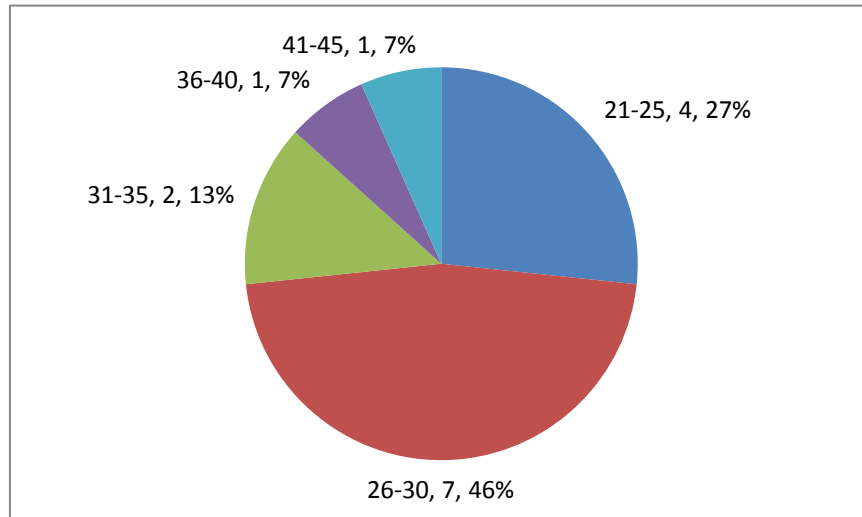


Figure 24. Age distribution

46% of respondents' ages are between 26 to 30 years' old, 27% of the respondents' ages are between 21 to 25 years' old, and 13% of their ages are between 31 to 35 years' old. Besides, one respondent's age belongs to 36-40 and one belongs to 41-45. (See figure 24) This age distribution range is the most possible to know both open innovation and social media platform.

Question 2. Education level

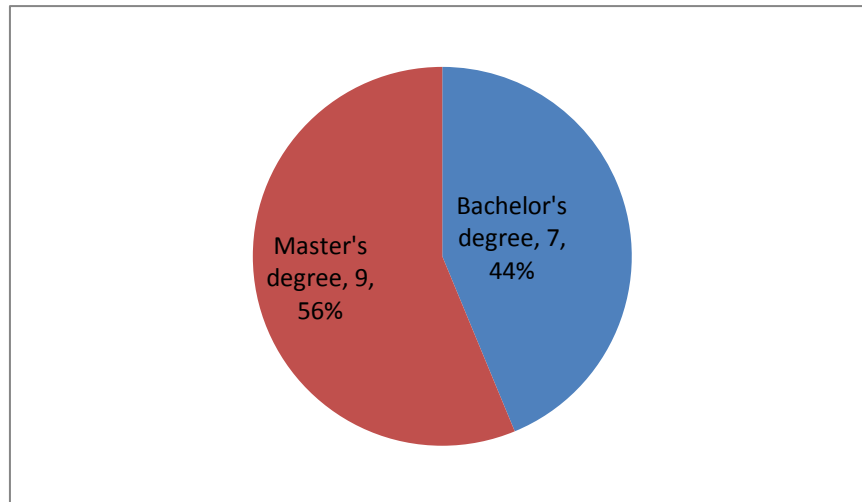


Figure 25. Education level situation

The figure 25 education situation shows about 56% of respondents have a master's degree and 44% have a bachelor's degree, which can be considered that all the results gained suit the bachelor and master education status people.

Question 3. Net income per month

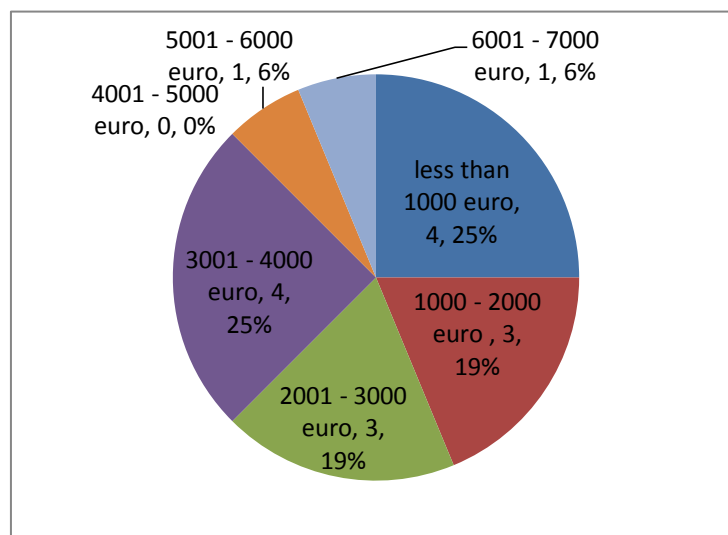


Figure 26. Net income situation

According to figure 26, the most respondents' income of the survey is between 3001 to 4000 euro (25%) and less than 1000 euro (25%). The income situation shows that no respondent earned more than 7000 euro per month. This fact would mean that the majority of respondents are employees. Based on the open innovation platforms also provide service to the employers, the research related to this issue could be done in future.

Question 4. Briefly introduce your employment history

Respondents in my survey are from various industries, such as bank, hospitality industry, restaurant, delivery, gym, tourism, design, shopping mall, accounting company, fashion industry, computer program and magazine industry.

There is no doubt that open innovation can be received by the employees from almost every industry. Further, open innovation probably fits almost industries as well.

Above the results analysis, there are several points should be noticed. The respondents who know open innovation well are all from 25 to 35. This fact supports that the open innovation platform is more acceptable and well known among this age range.

The higher net income the respondents have, the more they know about open innovation platform. There are 5 respondents have a clear understanding about open innovation platform. The average net income is 3500 to 4500 euro per month, which is higher than the average net income of all 16 respondents.

5. CONCLUSION AND SUGGESTION

5.1. Major finding

According to the whole research, some important issues have been found among social media platforms and open innovation platforms. There are two types of open innovation platforms based on the research: agency platforms and open platforms. Agency companies are concentrated on serving associations or companies, which usually has their own creative teams to organize plans and the tasks, but not open to the public. Open platform is concentrate on the public. These types of open innovation platforms serve individuals, associations and companies; especially a lot of charity or non-profit associations give their tasks. The solvers are most individuals and the tasks are priced and open to the public. Although the quality of the solvers is not guaranteed, this type of open innovation platform would be still powerful due to the amount of users and ideas though efficiency management. Open innovation as a new method of solving problems is not known by many people yet, which also means that it has a great potential. Based on my survey, the majority of open innovation platforms' users believe in the public power: the solutions will be creative, economy, efficiency and alternative by open innovation.

On the other hand, social media can be regard as part of life now. The social media's great information exchange rate and speed are unique compare to the other media forms. I believe this is the new trend, for example future's E-business. In fact, many companies

have already created the main pages or relevant applications linked to famous social media platforms.

5.2. Managerial implications

First of all, the reward system for open innovation platforms, no matter monetary reward or nonmonetary reward, must be well managed since it is the main motivation for people who post solutions and share ideas. Evaluating solutions and allocating rewards fairly are very important in the whole management process. Otherwise, the core function of open innovation platform will suffer a negative influence.

Secondly, guarantee of the quality of solutions and solvers are equally important. Increasing integration power is one way to guarantee the quality of the solutions. On another hand, the open innovation platforms must summarize and integrate all the ideas and solutions to a final plan which could satisfy their clients. Besides, rate the ideas is one useful method: the open innovation platforms could rate the ideas while the tasks open for discussed. At the same time, abandoning the lowest rated ideas and focusing on high rate ideas will be more efficient. This method also gives a better chance to find creative ideas and organize a high quality plan at the last. To manage the qualified users is also important since most valuable ideas come from the qualified users. Open innovation platforms should identify the users and give extra benefits to high quality users who are find out by evaluated every high rated solution's authors. Then give this group of users extra benefit, such as money or voucher to keep the loyalty. The

qualified the users are the life line of the open innovation platform, therefore this issue must be treated seriously.

From long-term point of view, it is good for all open innovation platforms to cooperate with matured social media platforms. Based on the survey result, most people would like to spend quite long time on social media platforms every day. The social media platforms like Facebook, Google+ is most popular. It is really easy and efficiency to cooperate with these kinds of social media platforms: open innovation platforms could link to Facebook's account for instance, so that users can log in the open innovation platforms with their Facebook accounts. Open innovation platforms should set up their own main pages on Facebook or other social media and keep the recent news and statues updated since most of social media user would like to read business news and events. In my opinion, these two activities will greatly increase the viewers and qualified solvers to the open innovation platforms.

Also the open innovation platforms could create applications which linked with social media platforms on different terminals. For instance, Facebook has its application on mobile phone which makes the users could access to Facebook anywhere anytime. If open innovation platforms could have a similar application on mobile phone, it will receive the same result as Facebook: solvers could post and exchange ideas anytime anywhere. The resources from Facebook could also be used since the application is linked them together.

Last, in a word, open innovation platforms have potential and the future. To cooperate with social media platform wisely will bring open innovation platforms a great advantage in the innovation field.

5.3. Future reasearch

Due to the limitation of the survey respondents, I think more research could be done in the future. The amount and range of the survey need to be enlarged. The research objective should be more specific. For instance it will be useful and necessary to research what kind of reward of open innovation platform should offer so that could motivate its users the most. Since based on this thesis, it is shown that reward system of an open innovation platform is one of the most important factors and it directly influences the core service that the open innovation offered.

Find out what is the core application that social media platform is using is necessary. As discussed, there are great potential between open innovation and social media platform. The future research related to this issue could easily link up open innovation platform and social media platform, which will benefit each side.

How to marketing the open innovation platform to more people could be study as well. To have a great number of qualified users is a valuable resource for an open innovation platform. This topic could be related to social media platform as well since it has a large number of users and its classified system is matured and complete.

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APPENDICES

Appendix.1.Social media & open innovation survey
questionnaire**Social Media and Open Innovation survey**

Social Media and Open innovation nowadays have been used widely. It is essential to find out what is important for them. This survey contains 21 questions. It will take no longer than 15 minutes.

Social Media survey section**1. How long, in average, do you spend on social media network per day?**

- Never
- Less than 30 minutes per day
- 30 minutes to 1.5 hours per day
- 1.5 hours to 2.5 hours per day
- Over 2.5 hours per day
- Other:

2. What kind of social media website do you usually visit?

- Social networking, e.g. Facebook, LinkedIn, Google+.
- Micro blogging, e.g. Twitter, Weibo.
- Forum, e.g. Finland Forum.
- Video sharing, e.g. YouTube.
- Photo sharing, e.g. Flickr, Pinterest
- None
- Other:

3. To what extent do you agree with the importance of the following factors in social media platforms?

	Very important	Important	Unimportant	Not important at all
General website out look (Front page, main page etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Update frequency (Bug fixing, new function etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertainment (Fun applications, interesting information etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility (Can be logged in though PC, cellphone etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information exchange channel (Post, internal message system etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Possibility of meet people (Meeting old friends or making new friends)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Account security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. What kind of activities do you usually engage while using the social media platform?

- Social networking: making friends and keeping up friends' news feed.
- Watch videos.
- Look for particular information e.g. travel suggestion etc.
- Keep up with current news and events.
- Look for business-related information.
- Read forums.
- Comment on a blog / microblog.
- Contribute to online forums.
- Maintain personal blog / microblog.
- Other:

5. What do you think of quality of the information you get from social media?

- Reliable and accurate
- Partially reliable and accurate
- Average
- Partially unreliable and inaccurate
- Unreliable and inaccurate

6. What factors do you think could be added or improved into social media platform in the future?**7. Do you take part in the following activities with social media platforms?**

- Research market trends or issues.
- Deliver product information.
- Advertise.
- Offer customer service.
- Look for potential business opportunities.
- Report on live events (e.g. trade shows, conferences).
- Maintain relations with clients, business partners and etc.
- Solve business problems
- None.

8. What kind of business activities would you be interested in while using social media platforms?

- Read business news and events
- Business problems solutions
- Marketing survey
- Companies recruitment
- Other:

Open Innovation survey section

1. Do you know open innovation in social media platforms?

- Yes, I know what is open innovation.
- Not quite sure, but I have heard it before.
- No, I don't know what is open innovation.

Open innovation introduction

Open innovation is very much about bridging internal and external resources to make innovation happen, in other words, to use external resource and to solve innovation problem. For example, NASA has given its task of creating a washing machine in space station to a open innovation company, and the company then helps NASA to design a new machine.

Do you have a general understanding of open innovation?

- Yes, I know what is open innovation.
- No, I don't understand what is open innovation.

2. Which open innovation platforms have you used?

- Massidea
- OpenIDEO
- Owela
- Innocentive
- Other:

3. If/While you are using an open innovation platform, you want to act mainly as a:

- Solver, post ideas and draft solutions for tasks
- Seeker, give quests or tasks and seek for the best solution
- Both of above

4. What motivates you to post solutions?

- Rewards
- Want to share the ideas
- Prove self-value
- Help others, selfless
- For fun, interesting
- Other:

Open Innovation survey section

1. Do you know open innovation in social media platforms?

- Yes, I know what is open innovation.
- Not quite sure, but I have heard it before.
- No, I don't know what is open innovation.

Open innovation introduction

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- Both of above

4. What motivates you to post solutions?

- Rewards
- Want to share the ideas
- Prove self-value
- Help others, selfless
- For fun, interesting
- Other:

5. What motivates you to post tasks or quests?

- More efficiency
- More chances to have creative solution
- Want to obtain ideas before making solution
- Reduce risks
- Trust open innovation methods
- Other:

6. To what extent do you agree with the importance of the following factors in open innovation platform?

	Very important	Important	Unimportant	Not important at all
Quest solving speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reward system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of solutions per quest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intergration of ideas and solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of solvers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of solvers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy to access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Privacy and information security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Do you think it is good to use open innovation method to solve problems? Why?

8. What factors do you think could be added or improved for open innovation platform in the future?

Personal data

1. Age

- under 15
- 16-20
- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- over 55

2. Education level

- High school
- Bachelor's degree
- Master's degree
- Doctoral degree
- Other:

3. Net income per month

- less than 1000 euro
- 1000 - 2000 euro
- 2001 - 3000 euro
- 3001 - 4000 euro
- 4001 - 5000 euro
- 5001 - 6000 euro
- 6001 - 7000 euro
- 7001 - 8000 euro
- over 8000 euro

4. Briefly introduce your employment history

Appendix 2.Chanllege description in Massidea.

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No linked challenges.

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Everyone knows that at all the time is not perfect with us. Life's like instrument white essential aspects represent the enjoyably periods of the way of lifestyle other than dark-colored essential aspects represents unfortunately periods of way of lifestyle so it is important when you control it how you always grin. Experience your terrible situation with fulfillment then you will see how achievements comes in your way of lifestyle. Life crazy quotations are such kinds of quotes that will carry look on your encounter also in the bad it

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Appendix 3. Challenge description Innocentive.

Please note that the details of this Challenge are no longer open. This challenge is awarded and is no longer accepting new submissions. You can:

- [Browse for a new Challenge in the Challenge Browser](#)



NASA Challenge: Simple Microgravity Laundry System

TAGS: Engineering/Design, Physical Sciences, NASA, Theoretical-IP Transfer
STATUS: **Awarded** | ACTIVE SOLVERS: 598 | POSTED: 5/27/10

NASA Challenge: Long-Distance space travel will require astronauts to be able to launder clothing in space. There are currently few or no efficient means of washing clothing within the micro-gravity of space since terrestrial cleaning processes cannot be directly applied. This Challenge asks Solvers to conceive of new methods of cleaning clothing such that it can be performed either on the International Space Station or aboard a vehicle that travels beyond low-earth orbit. More details can be found inside this Challenge.

The Simple Microgravity Laundry Challenge seeks concepts for a minimal system that provides laundry freshening and some amount of cleaning capability. The laundry system would enable clothing to be reused several times but not necessarily indefinitely as with conventional terrestrial laundry systems. It is the intent that this limited cleaning capability will significantly decrease laundry complexity and the impact on spacecraft resources, including water, consumables, and power. The mass of the laundry system equipment

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Appendix 4. Challenge description in OpenIDEO.



Congratulations to all our contributors!

Learn more

The Rules of Brainstorming →

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Challenge Brief

OpenIDEO has partnered with Oxfam and Nokia to explore how mobile technologies can be used to improve maternal health (particularly in pregnancy and childbirth). We're asking you, the OpenIDEO community, to come up with inspirations and concepts around improving the knowledge and access to maternal health services, specifically where mobile technologies can be used as a tool to aid this. We're focusing our solutions in low-income countries, such as Burkina Faso and Bangladesh. In many such countries fees for health care prevent millions of mothers from seeking the professional care they need or where under-investment means health workers or medicines are unavailable.





Sponsored by:
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Challenge Start Date:
January 24, 2011, 10:00AM

Challenge End Date:
April 21, 2011, 09:00AM

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