

# Perceived user value of social networking

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## Abstract

Online social networks have raised an interest in the research communities. The privacy issues related to the online social networking are widely studied, but the perceived user value of online social networks has not been researched in large scale. This article tries to address the perceived user value and what is the motivation for people to be a part of the online community, based on the existing literature and reasearch. The negative impacts of the online social networks are discussed with some real life examples of the problems and possible solutions. The online social networks are such a new phenomena, that there exists a lot of room for new studies and some ideas for conducting future research are also presented.

**KEYWORDS:** Facebook, YouTube, MySpace, social networking, online communities, addiction, privace issues

## 1 Introduction

In recent years, social networking in online communities has gained momentum and attracted big crowds. Communities such as Facebook, MySpace and YouTube attract millions of users who create and share content with each other [10]. The online social networking has also drawn the attention of the research community. A lot of research exists already on the privacy issues and possible security threats created by the online communities. What motivates people and why they use the online communities has not been widely studied yet. This is a gray area for research since it involves the psychological perspective and also the technological perspective of the online social communities. I am interested in the user perspective and motivations for using the online social networks, since human behaviour and motivations are never so easily explained. In this paper I intend to discuss the user motivations for joining and using online communities and the perceived benefits and disadvantages of being a part of a social network. When discussing the disadvantages of the online social networks, I present some examples of incidents, which have already occurred and how these issues could be avoided in the future. This paper is based on the existing reasearch available about the online social networks.

## 2 Overview of Different Social Networks

In this section, some of the online social networking sites are described briefly. These online communities are the basis of further study in the later chapters of this seminar work. The list presented here is by no means a complete list of social networking sites, it is only an example of variety of online social networking sites available for the public.

### 2.1 Facebook

Facebook is maybe one of the most well known online social networking sites. It was established in 2004 and it started as a community for college students in the USA [10]. It has attracted approximately 64 million active users [10]. Facebook intends to provide users with opportunities to communicate with friends and colleagues online. Users can share pictures and other content, write blogs and updates about their life.

### 2.2 LinkedIn

LinkedIn is a very similar online community compared to Facebook, but its main audience is professionals. Its intention is to provide people with opportunities to create a resume' and connect with companies and other professionals. LinkedIn intends to create job opportunities and connections for professionals [2]. LinkedIn has approximately 17 million users and 150 industries represented in their online social network [2].

### 2.3 MySpace

MySpace is an online community focused at people sharing content, such as music videos and blogs. MySpace was launched in 1999 and has approximately 190 million registered users [16]. MySpace hosts the profiles of many famous musicians and bands enabling them to share their material online before it is officially published. MySpace acts as a connecting network between bands and music fans.

### 2.4 YouTube

YouTube is a content sharing online community like MySpace. It was founded in 2005 and it is one the most popular video hosting services [3]. YouTube enables its users to share videos, blogs and other content. YouTube hosts approximately 69 million videos, based on using an asterisk ("\*") as search string on their site. This search query will list all the videos on their site.

### 3 Motivation for Online Social Networking

In this section I discuss the user motivations and benefits for being a part of an online social network. The section is started off with summarizing the different services offered by the online social networks, since they have an impact on the user motivation for joining such a network.

Different users might have different reasons and motivations for joining a network. Someone might join simply out of curiosity to see what the network can offer. Others, like myself, might join because of peer pressure. User motivation to join a network is one thing to consider, but another thing is motivation for a user to continue using the network, he or she must experience some benefits or satisfaction, that outweigh the possible negative impacts. Psychological and personal features also have an impact on persons desire to participate in an online community.

#### 3.1 Services Offered by the Social Networks

Social networks could be studied from many different perspectives. The most obvious way would be to study what they offer to the user. In this section I discuss what services online social communities offer to the users.

Online social networks such as MySpace and YouTube mainly focus on users sharing content such as videos, pictures and music. Users upload their videos, music or pictures for other users to see and comment on [16]. The content is divided in categories and users browse different topics of interest. Content is not limited to just videos and pictures, but it may be anything from online games to broadcasting radio station. Content sharing social networks may also include other features, such as sending messages and commenting other peoples content.

Facebook and MySpace enable their users to create online blogs. Users can express their ideas and opinions and get comments from other users. Blogs are to some people a modern substitute for a diary.

For many people the online social network is a way to communicate with friends. The online community offer the means to write messages, chat and catch up with friends. Online communities may even replace the more traditional communication channels such as emails, phone conversations, sms messages.

A study performed by Govani and Pashley indicated that students have two main reasons for joining the Facebook online community. The first group is people who joined because of a friends recommendation or peer pressure [12]. The other group is students who view the network more as a functional thing, and joined because it offers means of keeping in touch with friends and meeting new people [12].

Next sections discuss the different groups of users and what online networks offer for them.

#### 3.2 Categorizing Facebook Profiles

Social networks offer different things for different people and motivations for joining vary a lot. Despite the difficulty of analysing peoples' motivations for being a part of

an online social network some patterns are detectable in the profiles of different users. DiMicco and Millen [9] have proposed categorizing Facebook users into three main groups: "*Reliving the College Days*," "*Dressed to Impress*," and "*Living in the Business World*" [9]. These user groups have their own motivations and reasons for being a part of an online network. The following paragraphs describe these in more detail.

##### 3.2.1 Reliving the College Days

According to DiMicco and Millen, the category "*Reliving the college days*" is the largest group of users. These people generally have a lot of friends in their school and university networks and they are active users of the online network [9]. These people tend to have fewer people in their work related networks and usually they have not listed their job description [9]. Typically these people started using Facebook during their years in college and they continue to keep in touch with their friends after they have moved on to working life [9].

##### 3.2.2 Dressed to Impress

*Dressed to Impress* people are another big user group of Facebook. They are generally people who started using Facebook after they began their working life [9]. According to DiMicco and Millen, this group of users tend to list working colleagues and studying friends as their online friends [9]. These people often give detailed descriptions of their work [9].

##### 3.2.3 Living in the Business World

*Living in the Business World* is a smaller user group than the two previously discussed. These people have generally joined Facebook in order to keep in touch with their work colleagues [7]. Generally, their network of friends consists of a few people and they are not members of other networks than their company network. These people usually list detailed work descriptions [7].

#### 3.3 Self Presentation and Friends in Online Communities

The emerging of online social networks has widened the meaning of the term: "*friend*." Being someone's friend in an online social network does not necessarily mean that the people are friends in other contexts [7]. Traditionally, being friends has meant that people share a common interest or enjoy spending time together. Online social networks have changed this view, since many people have included acquaintances and other people, whom they do not know in other context than the online social networks [7].

Each of the different user groups introduced previously have their own motivations for being a part of an online social network. By reviewing the analysis of their profiles it is logical to conclude that each group uses the network for their own distinct purposes and this can be seen in their profiles.

*Reliving the college days* group seems to be the least worried and concerned in their self presentation [9]. They use

the network to keep up with their friends and share many things about their private life online [9]. They seem to use the network for almost any type of communication need.

*Dressed to Impress* is an active group of users who are aware of their self presentation. According to DiMicco and Millen, they do not share as much personal information as the *Reliving the college days* group [9]. The main purpose of using the online network for *Dressed to Impress* people is to use it for business purposes, but they also use it for some personal communication, although, not as much as the *Reliving the college days* group [9].

*Living in the Business World* user group is a group who uses Facebook almost exclusively to only business purposes, such as connecting with colleagues and co-workers [9]. It would be tempting to consider that the users of LinkedIn could be categorized to either: "*Dressed to Impress*," or "*Living in the Business World*," however, this type of research does not exist.

LinkedIn is a different type of an online social network compared to Facebook. LinkedIn exists for the purpose of providing the users with connections to companies and other professionals in their field of business. This would lead to obvious conclusion that the motivation for users for joining and being a part of the LinkedIn network is to get job and career opportunities. This possesses an interesting question and opportunity for further studying since no material about this exists. How many people have actually been hired or offered a job by the connections made with LinkedIn? Are there users with alternative motives for being a part of the network?

### 3.4 Value of Content

Once a person has joined the online community, the value of the services and the content become a factor. To continue using the network, the user must get some perceived value, such as entertainment value or other perceived benefits for using the network. Otherwise there would not be any motivation for user to continue using the network after joining.

Content, such as videos, pictures, games and blogs have an entertainment value for people. Many people spend time surfing the online social networks browsing through the content in similar fashion as people watch television. Online social networks, such as YouTube and MySpace, have raised the user created content in to the spot light. Users rate the content created by other users and some of the most popular content may get large amounts of publicity.

Some sites, such as video sharing site Break.com, even pay for users who upload the most popular material. This publicity has lead some users even making dangerous stunts, just to get attention in the online community. This is clearly detectable in some of the videos available in Break.com.

The online social network eco system is different compared to the old, traditional way of creating content for television and radio. The content is often created by the users of the online social networks and old fashioned production companies are not used in such a wide scope. These companies are producing content for television and radio, but the online social networks are different. The user creates the content, and that is likely to be one of the reasons con-

tributing to the popularity of the online social networks. The content may not be well polished and may not be always politically correct. Anyone can publish content and the censorship, if it exists, is not very effective. Any material that is removed, can usually be found somewhere else within very short time. This is visible in the futile efforts of BBC to remove the popular tv show Top Gear from the YouTube. As this approach did not work the BBC made a deal with YouTube to provide their content legitimately [18].

## 4 Disadvantages of Online Social Networking

Online social networking has also negative side effects and, as with Internet, it is not a risk free place. Privacy issues and threats created by the online social networking are widely studied and in this section they are presented. Some examples of security incidents related to online social networks are also presented as they illustrate more easily the different types of threats associated with the online communities.

### 4.1 Privacy Issues and Openness to the World

People share detailed information about themselves in the online social networks. This information may be stored for a long time and, depending on the users privacy settings, it may be available to a large audiences. According to a study by Govani and Palsley more than 60% of students share their birth date, picture, home town, high school, relationship status [12]. This detailed information opens many possible attacks for a malicious user.

Information will likely be stored for a very long period of time, so future employers will have the possibility of doing research in the online social networks about potential employees. Many people start using Facebook in their college years and as they move on to the working life, the information, which they posted years ago will remain in the online social network. This information could become available if a user of an online social network is running for a public office or some other high profile position [12].

If a private person becomes a target of high publicity, they may find themselves quoted based on their online profiles. The former New York governor Elliot Spitzer had to resign his position in February 2008, because of accusations of him being a customer of a high class prostitution ring. In the aftermath the identity of the prostitute was published and as her name leaked out, it took only some hours until her MySpace profile was published in the national news broadcasts in USA [14].

Online social networks also open up a frightening possibility of data mining all the information provided by the user [12]. Even if the user removes some information, no one guarantees, that the information is not stored anywhere for future reference.

As companies are considering their policy on Internet use on the work place, they also have to consider the policy on the use of online social networks. Companies are also facing the fact that employees may want to create blogs and share information related to their work. Blogs create the need for

defining what information may be shared to parties outside the company. This may create a possible security leak, as it may not be obvious for individual employees what information is not to be disclosed in public. Several companies have taken measures to monitor employees Internet usage and even block some sites, which are deemed unappropriate.

Even if the material in a blog is not business secrets, criticism or jokes about the employer may not be welcomed either. In 2003 a former employee of Microsoft, Michael Hanscom, was fired because of publishing a funny photo about Microsoft [6]. In 2005 Mark Jen, learned the hard way, that financial matters of the employer should not be discussed in public blogs, as Google terminated his employment [1]. These incidents are just two examples, which clearly illustrate the difficulty of drawing a line between matters which can be publicly disclosed and which can not be. Companies need to define policy on what type of Internet usage is allowed at work.

Users may defend themselves against these type of threats by limiting the information they provide. Another way to approach this problem might be to limit the features in the online social network, so that no user has the possibility to share their actual birth date for example. However, this solution is unlikely to happen, so educating users about the security measures is probably the best alternative.

## 4.2 Identity Theft

The amount of the information some people provide is vast and based on the information a malicious user could try to steal the users identity. Malicious user may try to guess or otherwise figure out the social security number of the victim. According to Gross and Acquisti the American social security number can be reverse engineered quite easily from the information people provide in the Facebook, such as birth date and home town [13].

Knowing persons social security number opens up a frightening amount of possible attacks. Criminal could obtain credit cards, financial accounts, loans, medical services, rental appartments or mobile phone subscriptions with false identity. The victim will suddenly loose his or her credit records and run in to the debt collectors [5].

Identity theft may cause serious consequences to the victim and this type of crimes are very hard and time consuming to clear. Government records are also distributed to creditors and other agencies. Clearing the government records does not necessarily clear the other records, such as financial records [5].

User of online social network may reduce the risk of identity theft by not providing detailed personal information. Birth date and home address should not be published in the online communities. The more limited personal information user provides, the less appealing it will be for a criminal to steal the identity. As there are always users, who give generous amounts of personal information, it becomes more likely, that the criminal will choose someone else as the target.

## 4.3 Fake Profiles

Fake profiles are online profiles created by a malicious users as a prank joke or in order to do real harm on the actual person. Fake profiles are means of online harrassing and they may be used against anyone.

Several news agencies reported in December 2007 the assassination of prime minister of Pakistan Benazir Bhutto. Her son, Bilawal Bhutto Zardari, had a genuine Facebook profile, but some pranksters created fake profiles for him. These fake profiles contained statements, that he had not released or given [11]. Many news agencies, such as Los Angeles Times [8] and Canada's Globe and Mail, quoted widely these fake profiles in their news broadcasts [17].

Fake profiles may have unexpected consequences for the person who created the profile. A Maroccan computer engineer, Fouad Mourtada, was sentenced to three years in prison, because he created a fake profile a member of the royal family [4]. Luckily for Mourtada, he was released on pardon, due to the international pressure and news coverage of his sentence.

In the online communities there are no real means of protecting the user against fake profiles. Anyone can create a fake profile, so it is very hard to detect whether the profile is genuine or a fake. The victim of a fake profile or other users may report the incident to the online social network administrators, who will remove or close the fake profiles. However, this could take long time if the incident goes unnoticed, because it may not be obvious to other users which profiles are fake and which profiles are legitimate.

## 4.4 Spam

Spam is a world wide problem in the Internet. In online social networks, at least in Facebook and LinkedIn, users must give their email address. With millions of users the online social network is an appealing target for malicious users to try to get access to the email addresses, which are stored in the system. These email addresses are likely to be valid and therefore are of a high value for spammers. The online social network service providers are in the responsibility of keeping the email addresses and other sensitive information secure. However, it is impossible for anyone to guarantee, that there is no possibility of leaking sensitive information out.

Users may choose to share their email address in the online social network, so that it is convenient for others to get in contact with the user. This exposes the users email address for risk of getting unwanted emails or even large amounts of spam emails, so as a precaution, the user should consider if it is necessary to publish his or her email address.

## 4.5 Lack of General User Profile

Online social networks are growing in popularity and new networks are opened frequently. Friends can not connect with each other unless they are registered in the same network. For example users of Facebook will not find their friends in the LinkedIn, because the integration between the two systems does not exist.

Users have to register in both systems in order to connect with each other. This creates another problem of maintaining several profiles, one in each system. User has to update and check regularly with each system, where he or she is registered. As the number of online social networks grows this problem becomes even harder and time consuming. This integration between online social networks could even open up a new possible business opportunities, because for a single user it would be more appealing to be able to just create one profile, which would be registered in every online community, the users wants to participate.

Another alternative solution to this problem would be to provide conversion tools, so that a profile can be converted from one social network to the other. This could be similar to Mozilla Firefox web browser installation procedure, where the installation program asks if the user would like to import favorites and bookmarks from the Internet Explorer.

#### 4.6 Addiction and Time Consumer

The online social networks have the entertainment value for people. Surfing in the online social networks may consume a lot of time and could even develop in to a serious addiction.

The difference of a person being addicted or just simply using the Internet or online social network is very small. According to Dr. Kvasny Internet addiction may be defined with symptoms such as psychological problems, social issues and physical health effects [15]. Online communities have developed in to a such a massive phenomenon, that there may even exist a peer pressure to join the community [15]. Part of the addicting side of online communities may be the games and entertainment they offer. The other perspective is that anyone can create an account and join the community and automatically all users have something in common: the users are members of the same community [15]. According to Dr. Kvasny especially the interactive features of the Internet are the factors, which are likely to increase the chance of developing an addiction [15]. Young people, ages between 11 and 23, are most likely to develop an addiction for Internet according to Dr. Kvasny [15]. It is quite obvious to draw the conclusion that the pattern of addiction would also apply for online social networking, although, there is no research to prove this.

The negative side effects of addiction or massive use of online social networks is the fact that people meet in the virtual environment. People may reduce their social contacts to purely online environment. This may create psychological problems among the obvious physical problems.

## 5 Conclusions

The online social networks is a wide topic and the user motivations for using them could be studied extensively. In my opinion, large scale questionnaires for users of the online social networks might be very interesting to conduct. These questionnaires should be done within the online social network, so that the target audience would be easily accessible and it would be easy for users to participate. Many online social networks contain functionality to make polls and voting, so it would be quite easy to conduct such questionnaires.

This type of research could provide an interesting insight to what direction these services should be developed in the future. This research might reveal something unpredictable or very interesting about users motivations for using and joining the networks. This topic is easy to dismiss, with simply stating that people use these networks to keep in touch with their friends. However, I believe that this question is actually much more complex than that. In this paper I presented some ideas and drew some conclusions, but I think this would need much more studying and research to make any conclusive decisions or theories. One interesting key point to research would be to make questionnaires about how many users of LinkedIn have actually been offered job or career opportunities, based on their presence in the online community.

I think online social networks present well the culture of the youth today. People are watching reality TV-shows, such as American Idol, in which any person could theoretically become a pop star. I think this creates a desire for publicity and fame for young people, which is partly satisfied with using online social networks. As people are sharing things and details about their daily and private life, the online social networks create an inherent illusion of "some one caring or being interested in what I do or say."

Online social networks contain some security related features already, but currently the users are not utilizing these features extensively. As I have presented many example incidents, I think it will still require some high publicity incident involving regular online social network users, before people start really taking advantage of the security features.

I am a person who likes privacy and for myself online social networks are uncomfortable in some perspective, because I do not want to share things about my life in public. I may share things in private discussions, but I dislike the idea of sharing them online with possible millions of other users. However, it is very interesting that there are millions of users, excluding myself, who are willing to share their life online. I think this question is very interesting and the reason that motivates me to research this topic.

## References

- [1] Google blogger 'was fired'. ZDNet.co.uk, A News Web Site, 14-02-2005. Accessed 16-02-2008. <http://news.zdnet.co.uk/itmanagement/0,1000000308,39187856,00.htm?r=1>.
- [2] LinkedIn Factsheet. A Company Web Site, 2008. Accessed 18-03-2008. [http://www.linkedin.com/static?key=company\\_info&trk=gfoot\\_about](http://www.linkedin.com/static?key=company_info&trk=gfoot_about).
- [3] YouTube Factsheet. A Company Web Site, 2008. Accessed 18-03-2008. [http://www.youtube.com/t/fact\\_sheet](http://www.youtube.com/t/fact_sheet).
- [4] Jail for Facebook spoof Moroccan. BBC News, A News Web Site, 23-02-2008. Accessed 07-04-2008, <http://news.bbc.co.uk/2/hi/africa/7258950.stm>.

- [5] H. Berghel. Identity theft, social security numbers, and the web. *Communications of the ACM*, 43(2), February 2000. [blogs.nytimes.com/2008/01/02/prankster-playing-bhuttos-son-on-facebook-fools/index.html?hp](http://blogs.nytimes.com/2008/01/02/prankster-playing-bhuttos-son-on-facebook-fools/index.html?hp).
- [6] J. Bonne. Blogger dismissed from Microsoft. MSNBC Interactive, A News Web Site, 30-10-2005. Accessed 16-02-2008. <http://www.msnbc.msn.com/id/3341689/>.
- [7] D. Boyd. Friend, friendster, and top 8: Writing community into being on social network sites. Accessed 11-02-2008, [http://firstmonday.org/issues/issue11\\_12/boyd/](http://firstmonday.org/issues/issue11_12/boyd/).
- [8] R. Brooks. For the record. Article in the Los Angeles Times, A News Web Site, 05-01-2008. Accessed 18-03-2008. <http://www.latimes.com/news/printedition/asection/la-oe-correx5jan05,1,3210494.story?cset=true&ctrack=1>.
- [9] J. M. DiMicco and D. R. Millen. Identity Management: Multiple Presentations of Self in Facebook. In *Proceedings of the 2007 international ACM conference on Supporting group work*, pages 383–386. ACM, 2007.
- [10] Facebook Factsheet. A Company Web Site, 2008. Accessed 11-02-2008. <http://www.facebook.com/press/info.php?factsheet>.
- [11] S. Fraser. Facebook tackles Bhutto hoaxers. BBC News, A News Web Site, 03-01-2008. Accessed 14-03-2008. [http://news.bbc.co.uk/1/hi/world/south\\_asia/7170329.stm](http://news.bbc.co.uk/1/hi/world/south_asia/7170329.stm).
- [12] T. Govani and H. Pashley. Student awareness of the privacy implications when using facebook. 2005.
- [13] R. Gross and A. Acquisti. Information Revelation and Privacy in Online Social Networks. In *Proceedings of the 2005 ACM workshop on Privacy in the electronic society*, pages 71–80. ACM, 2005.
- [14] S. F. Kovaleski and I. Urbina. For an Aspiring Singer, a Harsher Spotlight. Article in the New York Post, A News Web Site, 15-03-2008. Accessed 18-03-2008. [http://www.nytimes.com/2008/03/13/nyregion/12cnd-kristen.html?\\_r=1&ref=nyregion&oref=slogin](http://www.nytimes.com/2008/03/13/nyregion/12cnd-kristen.html?_r=1&ref=nyregion&oref=slogin).
- [15] D. L. Kvasny, D. Bove, J. Conrad, P. Dobbs, E. Reckner, and J. Walker. An analysis of internet dependency and addiction in the youth. 2006-04-17. Accessed 11-02-2008.
- [16] A. Mislove, M. Marcon, K. P. Gummadi, P. Druschel, and B. Bhattacharjee. Measurement and Analysis of Online Social Networks. In *Proceedings of the 7th ACM SIGCOMM conference on Internet measurement*, pages 29–42. ACM, 2007.
- [17] M. Nizza. Prankster Playing Bhutto's Son on Facebook Fools News Outlets. Article in the New York Times, A News Web Site, 02-01-2008. Accessed 14-03-2008. <http://thelede>.
- [18] T. Weber. BBC strikes Google-YouTube deal. BBC News, A News Web Site, 05-01-2008. Accessed 18-03-2008. <http://news.bbc.co.uk/2/hi/business/6411017.stm>.