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**A User Perspective  
on Social  
Networking Sites**

# A User Perspective on Social Networking Sites

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## Abstract

For years, social media have been a part of daily life. Within the last 5-10 years, the use of social media (and in particular social networking sites) has expanded to almost all sides of life: private people, businesses and public institutions. This paper presents an overview of different uses of social networks to give a picture of the variety in use. The paper describes differences in private persons' use of social networking sites, different business purposes, and how social networking sites can challenge public administrations. Throughout the paper there are provided small cases and situations where the social networking sites have been used in a remarkable way. The paper is made in collaboration between partners in the World Wide Research Forum.

Key-words: Social Media, Social Networks, user types

## 1 Introduction

Social networking sites (SNS) are an inherent part of everyday: privately, we keep updated on friends and family members' whereabouts; at work, we use the social networking sites to keep us informed about news in a research field, to find the experts to ask or the right jobs to apply for, and public institutions send alerts via the social media to warn about disasters. In spite of the fact that the introduction of social media now is dated several years back, continuously developments are seen in functionalities, areas of use, and even new social network services emerge.

It started seriously in the 1990s with sites such as Six Degrees, MoveOn and others (Edosomwan et al, 2011). Services like Napster for peer-to-peer sharing, and ThirdVoice where users could post comments on webpages, were both frontrunners of the SNS (Edosomwan et al, 2011). In the beginning of the 2000, the web 2.0 became a reality and many SNS were introduced. Examples of these were Wikipedia, MySpace, LinkedIn, Hi5 to mention a few. In 2004, Facebook was introduced and in 2005 Yahoo, and YouTube (Edosomwan, 2011).

Worldwide, there exist more than 30 different SNS, where Facebook is the dominating one and has been so for several years (GlobalWebIndex, 2014). The latest trends are that Facebook experiences a decline in private use in particularly in the US, while Instagram, Reddit and MySpace experience a large raise in the number of active users (GlobalWebIndex, 2014).

The purpose of this paper is to present an overview of the current use of SNS. By understanding the broadness in use of SNS, ideas and new possibilities will arise for further use and perhaps technical developments and that is the foundation and motivation for the paper.

The paper takes a literature study approach. Different databases have been sought in order to find literature and provide a broad picture of the use of SNS. However, when it comes to documenting current use, the academic literature is not fast enough in the publication process, so existing blogs, reports and websites have also been used as sources to present the contemporary view.

To fulfill the purpose of the paper method wise, literature has been divided into three elements: firstly the understanding of the concept of social media hereunder social network sites; secondly a characterization of different user categories and types such as private users, businesses and government/public administration; and thirdly there is a presentation of different use situations which go across these categories. In no way, this approach shall be seen as all encompassing. The literature study and categorizations have been made according to current use here and now.

The paper is divided into the following sections: Section 2 provides an overview of definitions of social media and shows the broadness of the concept. Furthermore, the section gives an overview of known SNS which are the tools being used by all types of users. Section 3 gives an overview of different types of private users as they are presented in categories by different authors. This provides a background for understanding the diversity in private use of SNS. In section 4, there is a focus on how different enterprises use the social media to their advantage and how the best of enterprises earn money on the interaction. Section 5 presents other uses of SNS such as political activism as well as safety and alerts, and discusses the function of the SNS in these contexts. In section 6, some future elements of use of SNS are presented while the conclusion is presented in section 7.

## **2 The Broadness of Social Media**

There exist many different definitions of social media/social networking sites as a concept; however, they are often “blurred” and not clear in terms of unambiguity and the relational concepts used in the definitions.

For many people, the concept of social media equals the sites of Facebook, LinkedIn and Twitter (Kane, 2013). However, these web sites change over time in functionalities, focus, content and use and therefore the definition is not precise.

The Australian government has a definition with more nuances than social networking sites. They say (Australian Government, 2014): “*Social media are defined by a number of tools. The uses of these tools are:*

- *Blogs: Can be used to tell the public or stakeholders about agency activities...*
- *Wikis: One example is Wikipedia... they are best for collaborative document authoring*
- *Discussion forums: A forum may be appropriate when smaller, more in-depth consultation is required*
- *Microblogs: One example is Twitter; best for short public announcements and drawing attention to new information on agency websites*
- *Social Networking sites: Facebook is probably the most well known. These sites may be useful in raising public awareness of government services or initiatives and engaging with relevant pre-existing online communities.”*

This definition focuses on the different tools that spans the social media sphere and has an orientation towards what and when to use the different tools, but it does not say anything about use of the tools.

In 2008, Boyd and Ellison (2008) defined the concept of Online Social Media Sites, SNS as: “*web-based services that allow individuals to a) construct a public or semi-public profile within a bounded system, b) articulate a list of other users with whom they share a connection, c) view and traverse their list of connections and those made by others within the system*”. This definition inherently focuses on the sites and communities and the functionalities that define these, and it primarily relates to the user - the individual, and the possibilities he/she has. The definition does, never the less, not relate to the many possibilities of social media for enterprises and businesses.

In an update of the above-mentioned definition, Boyd and Ellison (2013) now define the concept of social media as: “*communication platform in which participants 1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-level data, 2) can publicly articulate connections that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site*”. This definition is much broader than the Boyd and Ellison (2008) definition and covers also the business potentials of social media.

A more technical definition is found in Kaplan and Haenlein (2010) who define social media as: “*a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content*”. This definition focuses on the User Generated Content and in that way omits the professionally and automatically generated content that is important for particularly businesses. Again, there is a focus on the individual as a user of social media.

Kane (2013) argues that it is not the technologies themselves, which make social media interesting, it is more about behavior and what you can do in the interaction with them. Therefore he suggests the following definition: “*Social media enable people to organize groups in the hundreds of*

*thousands or more in a few short hours. It allows people to share information about good or bad customer experiences globally in the blink of an eye. It allows employees to collaborate with each other and with customers to improve the business experience”.*

From the above, it is clear that there is not one clear and unambiguous definition of social media. However, the tools and the possibilities that they provide for all sorts of stakeholders are inherently defining the social media. Kaplan and Haenlein (2010) provide a good overview of the tools or dimensions of the social media:

- Collaborative projects – such as Wikies that allow different users to interact, add, modify text (example is Wikipedia<sup>1</sup>) and the social bookmark applications, which allow users to categorize their internet links, etc. and share this with others (an example is de.li.ci.ous<sup>2</sup>)
- Blogs – that present the blogger’s entries, dated, and with the possibility for others to comment on the entries. This can be all from presenting personal views on technology trends, to personal dairies, recipes and book forums. Examples are: elektronista.dk; www.stylebubble.co.uk; eatlikeagirl.com.
- Content communities – where the purpose is to share contents in form of photos, video, books, and PowerPoint presentations. Examples are Instagram<sup>3</sup>, YouTube<sup>4</sup> and SlideShare<sup>5</sup>.
- Social Networking Sites – that are the sites with which most people associate when talking about social media. Examples are Facebook<sup>6</sup>, Pinterest<sup>7</sup> and Twitter<sup>8</sup>.
- Virtual game worlds – these are platforms that allow users to play together via personalized avatars that interact in virtual worlds as they would interact in real life. There are two divisions: the MMO (Massive Multiplayer Online) games that provide the user with a simultaneous Internet access and a set-up competition of some kind relating to the virtual world. This kind of game can run on varying platforms such as PC, PlayStation or X-Box. One such example is Uncharted<sup>9</sup>. The other type is the MMORPG (Massively Multiplayer Online Role Playing Game) where a huge number of gamers play the game simultaneously and several servers must be in action and where the users pay a fee to play over a certain time period. World of War Craft<sup>10</sup> is one of the most famous examples of MMORPGs.
- Virtual social worlds – these refer also to the use of virtual worlds where users can more freely do what they want in the virtual world – with no specific rules or limitations. Second Life<sup>11</sup> is an example of this kind of worlds but also games such as SIM<sup>12</sup> have similar possibilities for social and free behavior – even though they also can belong to the virtual game world category.

This categorization overlaps in some of the categories for example in the content community, where most SNS provide commenting functionalities which resemble blogs.

A variation of the above categorization can be found in Li and Bernoff (2011). In Li and Bernoff (2011) is a special focus on the social trend where humans communicate, generate and get contents and information from each other specially focusing on businesses and how they can gain from the interaction. This is referred to as “groundswell”. Details on the so-called groundswell technologies and recommendations to businesses can be found in Li and Bernoff (2011).

This paper will adopt a broad definition as provided by Nair (2011): “social media can be described as online tool where content, opinions, perspectives, insights, and media can be shared”. For the remains of this paper, there is a focus on the online tools or SNS. In order to provide an insight in some variations of SNS, Table 1 compares 6 popular SNS in terms of focus, what it is known for, the users and the approximate number of active users.

<i>SNS</i>	<i>Focus</i>	<i>Known for</i>	<i>Uses are</i>	<i>Approximate no of active users</i>
<i>LinkedIn</i>	Business oriented	Networking between professionals, recommendations of professional, sharing of text, video, pictures, status updates	People in job, companies, people searching for job	240 mill <sup>1</sup>
<i>Facebook</i>	Social sharing, status updates	Multiple opportunities for sharing – text, video, pictures, links	Private users, brands, enterprises	1 billion <sup>1</sup>
<i>Instagram</i>	Social sharing of pictures and videos			150 mill. <sup>1</sup>
<i>Twitter</i>	Micro blogging (140 characters)	Tweets including links to video, other tweets or pictures	Private users, marketing people, public administration, companies, VIPs (sports, politics, movie- music stars etc.)	560 mill. <sup>1</sup>
<i>Pinterest</i>	Social site about discovering of new interests or learn about new elements within existing interests	Through pictures, bloggers can upload new stories and others can see them	Private users with special interest – much focus on fashion, décor, weddings,	70 mill. <sup>1</sup>
<i>Reddit</i>	Oriented towards stories, news and discussions and to learn about things. Posting of text, pictures and video	Wiki structure where everyone can start a story, or discussion. Ask me Anything where all can start a timely session (used by VIPs). Open source	Private users can share stories, discussions, VIPs use Ask me Anything for promotion	113.5 mill monthly users <sup>2</sup>
<i>Google+</i>	Social networking site integrated with all other Google services. Focus on creating identities.	User interface with circles for visibility of groups and inter-connections	There exist versions (Google badges and pages) for businesses	540 mill <sup>3</sup>

<sup>1</sup>Snydergroup (2014); <sup>2</sup>Smith (2014) – users do not have to be members, <sup>3</sup>Barr (2013)

*Table 1 Overview of six social networking sites.*

### 3 Private Users

Users and their habits are changing. WWRF Outlook on User 2020 vision (Porras et al., 2014) analyses the changing habits of users. Both technology developments as well as new user generations shape the expectations as well as usage of digital services. Flurry Analytics report a 28% increase of time usage in texting and social networking in the last two years (Khalaf, 2014).

A global study of social media use by Social Media Tracker (2010) found that close to 75% of all with Internet access had used or use one or several SNS. Around 50% of these have joined an online brand community as for example Facebook or Twitter.

Worldwide, the usage of SNS is not consistent – globally there are substantial differences in the media use (Singh *et al.*, 2012). Singh *et al.* (2012) present a global study on differences in SNS usage and discuss worldwide emerging trends. The study concludes that there are significant differences in cross-regional preferences for social media networks, and that country specific social media are seen used with more global social networks such as Facebook and Twitter. Furthermore, there is a strong preference for local language in SNS language. According to social2b (2014), social network sites as Twitter, Pinterest, Instagram, Facebook, LinkedIn, Google+ are all mainly linked to Europe and the USA. Orkun is most popular in India, Brazil and Japan. Qzone is a Chinese Social Network Site. Odnoklassniki is very popular in Russia. Xing is a German version of LinkedIn and is popular in Germany, Austria and Switzerland. And Badoo, which is a dating service, is popular in specifically Spain, Italy, Brazil and France.

Even though a majority of people is member of a social network community, there are large differences in how private users interact and behave at the sites. To understand the differences in interaction style of individuals, different segmentation models on SNS personas or use have been developed. Dyer (2012) has identified 6 different SNS personas:

- No shows (4%) – users who did not use a social networking site for at least 30 days
- New comers (15%) – users who are passive using a single social networking site
- Onlookers (16%)– users who may lurk on several social media networks but without posting much
- Cliquers (6%) – users who are active, single-network users often using Facebook. They are active within a small network of family members and friends
- Mix-n-Minglers(19%) – these users participate actively on several social networking sites. These users also follow different enterprises and brands for offers and news. They understand the importance of data privacy.
- Sparks (3%) – these users are the most active and engaged users of social media. They use the social media for self-expression, are concerned about privacy but can control within these lines. They engage in brands also.

This segmentation model places the users in one specific persona. Forrester Research (forrester.com) has over the years developed the so-called Social Technographics ladder, which

describes a profile (where groups overlap) of different users. The ladder has the following groups attached (Li and Bernoff, 2011; Bernoff, 2012) starting from the top:

- Creators (24%): Publish blogs, webpages, upload videos, music or post articles
- Conversationalists (33%): Update status on social media networking sites
- Critics (37%): Post ratings, reviews of products/services, and comments on others' blogs, contribute to online forums, edit or contribute to wikis.
- Collectors (20%): Use RSS feeds, vote for web-sites online, add tags on photos, etc.
- Joiners (59%): Maintain profile on a social networking site and visit additional sites
- Spectators (70%): Read blogs, listen to podcasts, watch videos from other users, read tweets and customer ratings
- Inactives (17%): None of the above.

This ladder takes into account that private users can act with several personas dependent on the social media element. It is based on US statistics. Forrester, however, has made several national studies of other nations, which also have been part of the development of the above personas (Fleming, 2012).

In particular the social technocratic ladder shows that it is important not to generalize the type of user or customer base. The percentages of users representing each group are changing over the years. The change goes towards a more dynamic one and with a larger percentage of users in the groups of joiners, and creators (Digital Supremo, 2010). It shows that businesses need to be aware of the fact that the customer/user base is dynamic and ever changing and it can be a good idea to identify who they are at a regular basis. Especially in mobile environments, the user base on an average app will drop with one third within a month (Khalaf, 2014) changing the user base.

Another perspective is of course the age, gender and culture as elements in the use of SNS. The Pew Research (2014) has made statistics on the SNS use in respect to gender, age, ethnicity, education, urbanization and household income. It shows that age is the only parameter where the usage of SNS varies. Most usage is between ages of 18-29 where 90% use SNS, while the lowest percentage is for the above 65 year old with a 46% use rate (Pew Research, 2014). Additionally, different SNS attract different gender and age groups. In a study by Pingdom (2012) it is showed that there are large variations between age groups, gender and SNS.

## **4 Enterprises and Brands**

When it comes to social media and the usage of these in enterprises and brands, often there is a focus on the external use, meaning how the social media are used between the enterprise/brand and the customers, vendors and the general public (Leonardi et al., 2013). However, SNS are getting way into many organizations' internal communication lines and social interactions as well (Leonardi et al., 2013). The internal use is often based on blogs, wikis, social tagging and document sharing. Here we take a look at both aspects of use.



Necessity on moving toward social networks is obvious, as already many major businesses have moved to this area of communication. Steizner (2013) conducted a survey asking marketers whether using social media helped to grow businesses. The survey consisted of more than 3000 participants including SME's, larger companies and self-employed individualists. According to the results, 94% of the companies employed at least one SNS platform for their marketing purpose, and almost 50% of these were more inclined to engage in SNS as platform marketing.

#### 4.1 External Use

Enterprises and brands have a long time been active players of the SNS. For some time, they were experimenting their way into the SNS not knowing what to expect from the social networking engagement, however, now it seems as if there are established different ways of using the SNS, which are to advantage of the enterprises and brands (Li and Bernoff, 2011; Shih, 2011). Generally, enterprises and brands are present and active using SNS due to either one or a combination of these following activities (Shih, 2011):

- Sales
- Customer service
- Marketing
- Innovation and collaboration
- Recruiting.

A relatively new phenomenon has risen based on the involvement of enterprises/brands and their users of SNS. This is referred to as crowdsourcing. Crowdsourcing is closely associated with the aspect of innovation and collaboration as is written above. More precisely it is (Estellés-Arolas and González-Laudrón-de-Guevara, 2012):

*“a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number via a flexible open call, the voluntary undertaking of a task.....The user will receive the satisfaction of a given type of need, be economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage what the user has brought to the venture, whose form will depend on the type of activity undertaken”.*

The above definition of crowdsourcing covers more or less a broad number of different definitions, which put emphasis on varying perspectives of the above. Alternative definitions can be viewed in Estellés-Arolas and González-Laudrón-de-Guevara (2012). Examples of crowdsourcing enterprises are: Coca Cola, Oreo and Budweiser (Abramovich, 2013)

Some of the more structured and first enterprises to engage in crowdsourcing activities were Dell and Starbucks. Dell has its Ideastorm Site where users can submit ideas and vote or comment on ideas of others. Starbucks have the same set-up with My Starbucks Idea. Both enterprises have only

implemented a low percentage of the number of ideas they have received (destination innovation, 2012).

There exist many examples on brands and companies that are doing well with the social media. One of the examples being mentioned as a role model is Maersk.

#### 4.1.1 Maersk

One particular case that stands out just in these years is the worldwide shipping company Maersk. For years Maersk has been representing one of the most closed and private companies imaginable. The company that dates back to the 1880s, is today a global company in shipping and oil and gas companies and has more than 600 container ships worldwide (Dragon, 2013). In 2007, the company decided that it was time to work towards a more open organization and firstly an organizational strategist was hired to change the image and organizational culture (Møller, 2014); secondly in 2011, the company launched their social networking strategy (Mikkelsen, 2013). In 2013, the company had more than 1 million “likes” on Facebook and has become a worldwide role model on how to use social media/SNS. The company is present on most SNS: Instagram, Pinterest, YouTube, Facebook, Twitter, LinkedIn, Google +, etc. Each of the SNS are used differently: Instagram is used to find lost cargoes (every year 18 containers are lost); Pinterest is used to limit public relations setback on accidentally bad stories – such as for example killing a whale (Mikkelsen, 2013); LinkedIn is for customer relations and expert gatherings (Cambié, 2012); Facebook is used to reach out to followers including employees, NGO’s, potential employees, competition, suppliers, regulatory bodies and shipping “nerds and enthusiasts” (Cambié, 2012). Central persons in the organization write tweets about messages or stories of what they experience – like the head of sales and customer service or captains of some ships. Container spotters around the world share information and pictures and create discussions on these.

The company has a saying that: “*Social media are about communicating, not marketing*” (Whittaker, 2013). By addressing critique, the company has had a chance to turn criticism into something else and to involve the audience in many different ways. By being present with different purposes on so many social media websites, the company has established a variation and a personality that has never surrounded the company before.

#### 4.1.2 Users Likes on Facebook

There has been made different surveys trying to explain why individual SNS users want to become “friends” or “follow” enterprises and brands. In a study, Porterfield (2010) it was found that around 86% of American Facebook users say they like a brand on Facebook and nearly 50% of these users say that they find the Facebook page more helpful than the company website. Porterfield (2010) says that the motivations for liking a brand on Facebook are:

- Promotions and discount possibilities
- Free giveaways
- Loyal customers
- Brand trust
- Feel that brands listen to them

- Like a brand because a friend likes it
- The Facebook website is more helpful than the company website
- Others.

Generally, people on social media follow or “like” brands and companies, if they think they gain something in the relationship.

## 4.2 Organizational Internal Use

Using social media internally in organizations is a tendency, which has risen within the last 5 years. According to Bughin and Chui (2010) McKinsey has made a survey, which says that 65% of enterprises asked used Web 2.0 technologies in their organization. Purpose of using the SNS internally in an organization is of course to raise the level of communication, knowledge sharing and bring forward transparency to a higher level.

The definition of social media as written above, does not completely fit to this particular case. Leonardi et al. (2013) refer to the use of social media internally as “enterprise social media”. This term is defined as (Leonardi et al., 2013):

*“Web-based platforms that allow workers to 1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; 2) explicitly indicate or implicitly reveal particular coworkers as communication parties; 3) post, edit, and sort text and files linked to themselves or others; and 4) view the messages, connections, texts, and files communicated, posted, edited, and sorted by anyone else in the organization at any time of their choosing”.*

Treem and Leonardi (2012) describe the diversity of different technologies, which are used in the organizations. However, the social media being used in the and by the public are not used internally in organizations. Different integrated enterprise softwares have been developed for this particular use and for protecting the data from external misuse. Examples of such software are (Leonardi et al., 2013): Salesforce’s Chatter, Microsoft’s Sharepoint, Yammer, IBM’s Connections, Oracle’s Social Network, Cisco’s Webex Social, BlueKiwi from Atos, etc. Beside this, there are enterprises that have developed their own enterprise social media.

### 4.2.1 Cisco

The integration of social media into the enterprise is seen by many organizations as a success. One of the cases being mentioned as a successful case is Cisco. Cisco is a worldwide company that sells switches and routers for computer networks. It has more than 64.000 employees worldwide (Blackhouse, 2009).

Cisco has built the organization and the general strategy on social networking making the organization focused on stimulation of entrepreneurial mindsets, implementation of internal platforms to avoid silo structure, internal consultancy teams on projects and many more actions (Peteghem, 2011).

Cisco has SNS for both internal and external purposes. Internally, the company uses blogs, wikis, tagging facilities, RSS feeds, and C-Vision (an application providing YouTube functionality) (Blackhouse, 2009). Also a system provides a Facebook type of profile for staff, which makes it easier to identify people with the right skills, and to contact them. This is all to support information and knowledge sharing, visibility of skills, and management of documents.

Externally, Cisco uses the public social media sites for advertisement, marketing, information and interaction with the public (Blackhouse, 2009).

Cisco is of course only one company with focus on integration of social media throughout the organization. Other large companies are for example IBM and BBC that over the years have done much to follow the same line (Blackhouse, 2009).

## **5 Government/Administration and Public Institution Use**

Social networking sites are being used in all thinkable and unthinkable situations around the world. Here is a collection of some use situations related to public/administration and public institution use.

### **5.1 Political and Activism Use**

For years digital media have been used to mobilize collective action amongst autonomous groups or activists (Harlow and Guo, 2014). Within the last 10 years, the use of social media has supported different protest actions (Harlow and Guo, 2014):

- In 2009, Twitter was used in a student protest in Tehran. The State Department did at the time ask for a suspension of a scheduled maintenance of its web site, because the Administration did want such a critical organizing tool out of service in the height of the demonstrations.
- In 2011, the Arab world experienced heavy protests, which resulted in the decline of some regimes. This was in particular the case in Egypt where more than 85,000 people on Facebook did pledge to attend an anti-government protest against the Mubarak Administration. Eventually, the administration fell (Hausbohnner, 2011).
- In 2013, the Turkish Prime Minister Erdogan described Twitter as “the worst menace to society” (O’Mahony, 2013). At the time, environmentalists were fighting against the development of a park in the center of Istanbul. The users of Twitter amongst the environmentalists sent news and pictures of police brutality to others in Turkey and to the world. It was envisioned that these pictures never would have been communicated to the rest of Turkey via the traditional media channels (O’Mahony, 2013). In March 2014, Erdogan banned Twitter completely in Turkey as a reaction towards criticism on Twitter and other social media on him and his government. However, the court quickly removed the ban after international condemnation of the ban.

The above-mentioned are just a small selection of cases where social media have had an impact on activist communication and information sharing and acting. More examples can be found in Harlow and Guo, (2014).

However, it should be emphasized that SNS not only are used in the Arab countries for protesting. In many Arab cities, there are initiatives to strengthen democracy and stabilization via SNS, e-government, e-services, etc. (Elmahfoudi et al., 2013).

In political engagement, social media are becoming a feature of civic engagement particularly in the USA (PewResearch, 2012). In a study, the PewResearch (2012) has investigated how social networking sites are used for political engagement in the US. Their study found that of 66% of SNS users in the US (adults) the 39% have done at least one civic or political activity with the SNS (the same study found that around 60% of adults in the USA use or like SNS).

When Barack Obama was elected in 2008, it was with as many as 8.5 million popular votes (Aaker and Chang, 2009). One of the reasons for these many votes is considered to be the specific combination and use of SNS to empower and engage volunteers, donors and advocates and create a lively online discussion and advocacy (Aaker and Chang, 2009). During the campaign, Obama had 5 million supporters on social networks – between 2.5-3.2 million on Facebook, 115,000 followers on Twitter and it was estimated that around 50 million viewers watched campaign related videos on YouTube for around 14 million hours (Aaker and Chang, 2009). The 5 million supporters on SNS were distributed between 15 different social networking sites for a broad coverage (Aaker and Chang, 2009).

## 5.2 Natural Disasters Use

The use of SNS has become a central tool for organizing, information sharing and alerting when it comes to natural disasters. Over the years there are many examples of use of social media in natural disaster situations (Peary et al, 2012). In particularly after 2010, the use of social media in natural disasters has exploded and many examples of different uses can be found. Examples are (Peary et al, 2012):

- The 2010 Haiti Earthquake where a 7.0 magnitude earthquake hit Haiti and killed around 220,000 people, it injured more than 300,000 people and 1.5 million people became homeless. The use of SNS here was mainly for setting up an sms based crisis mapping system, as an alternative to 911, and that received sms's from the Haitian people. Through Facebook around 12,000 translators were recruited, who translated the messages with a 5-10 seconds turnaround time for incoming messages. Using the map, cholera outbreaks were identified and tracked 6 months after the disaster.
- The 2011 Christchurch Earthquake in New Zealand, where the government used Twitter to coordinate recovery information to residents. There was created a hash tag keyword. However, it was also seen that misinformation was spread via Twitter.
- The 2011 Earthquake and Tsunami in East Japan, where Twitter and Facebook acted as lifelines for individuals who were directly affected. The SNS acted as information sharing both inside and outside Japan, where they were used to perform vital functions such as

safety identification, persons locating, damage information provision, support for disabled individuals, volunteer organization, fundraising and moral support systems.

A recent case was when the tropical storm Sandy in 2012 hit the US North Coast and New York. Here the social media were used extensively by organization and community groups, who organized resources where needed, and the New York Office of Emergency Management gave hourly updates and evacuation orders via Twitter. The New York City (and the Mayor Michael Bloomberg) used SNS to enable the city's services, offices and departments and to engage and inform the public (Cohen, 2013). Throughout the storm, the public could receive text alerts from the Mayor's Twitter account. The New York Fire Department monitored the SNS for false reports and pictures and corrected these to make sure that people were given correct information. The US Virtual Social Media Working Group has by now published several documents on guidance for how SNS can benefit public safety, etc. (Cohen, 2013).

### 5.5 Other Types of Use

Social networking sites are also being used in all other sorts of areas: Health care, Education, and sports to mention a few.

In health care, particularly Twitter is used to post updates about information on self-management, rare disease tracking, infant care tips, drug safety alerts, diabetes management, etc. (Fisher, 2011). But also physicians use the social media for communication, knowledge and information sharing amongst peers and experience exchange for different drugs (Liebert, 2009). Hospitals also use Twitter to reach both patients but also physicians and other health care services. Through Twitter hospitals push news, press releases, etc.

There are some medical centers that are more advanced in their use of social media. For example in a practice in Brooklyn, New York, a doctor uses SNS at several levels as a service to clients (Hawn, 2009). For a fee, the patients can get electronic feedback on requests of advice if for example the patient has a fever. Also this doctor has a blog where he provides insights to health care. Generally, the small medical centers have difficulties in finding the time and money to adapt to the use of SNS (Hawn, 2009).

SNS is also used in education and in particular in e-learning. Current platforms, as for example Moodle, often do not have possibilities to link with friends and upload for students. Implementing SNS traits into e-learning systems creates a much more dynamic, active and social education (Rodrigues et al, 2010; Rodrigues, 2011). Veletsianos and Navarrete (2012) present a good description of different trends and examples on platforms used in particular higher education.

In sports SNS is used as for enterprises: to increase fan loyalty and personalize teams and athletes; to advertise merchandise, etc.; and for news (hootsuite/enterprise, 2013). Sports teams, and news are on social media offering a tighter connection with the single sports man. For example many people follow for example Messi or Wozniacki on Twitter where news about their whereabouts or views is posted regularly.



Several car brands, such as Mercedes-Benz and Ford (as examples) have plans to build Facebook into the car (Oreskovic, 2012). Mercedes-Benz in the USA has brought Facebook to its cars through a new in-vehicle telematics system. In the in-vehicle version of Facebook, there will be special focus on critical safety and therefore the service will have limited functionalities in the vehicle (Oreskovic, 2012).

SNS data has been used in order to capture innovativeness of companies. Content analysis techniques performed in Twitter by Hajikhani (2014) in order to evaluate companies' innovativeness performance. The results showed that User Generated Content in SNS can be used as a high potential indicator for measuring companies' innovativeness performance.

## 6 Conclusions

Social media are an integrated part of many activities of today: business models are formed around the use of social media/SNS, internal organization set-ups are changed to explore and use the benefits of social media, and the general public suddenly has a shorter way to public administration and sports stars to mention a few. It is hard to see the limitations for use of SNS and it is difficult to see why this should stop in the immediate future. New SNS still pop up and provide a dynamic and new way of communicating and exchanging information. This gives feedback to the service providers of existing social media to be creative and think new all the time.

The large amount of big data, which is being exchanged and processed through SNS, can perhaps, be one of the elements which will be explored more in the future. From a marketing perspective this data can be used much more targeted creating a better foundation for marketing around the data gathered (Tung, 2013).

Another perspective for the future of SNS can be to provide more access for the users into preferences bridging blog and SNS more, and providing more personalized interfaces and accounts (Young, 2013). This could also include unlocking of social media dashboards for better usability, as is seen in MySpace (Young, 2013).

One area, which has not been mentioned so far, is the aspect of security of private data, which is so important for SNS. The general use of SNS often disregards privacy, trust and security elements to a degree that is naïve and not recommendable (Ashford, 2013). In the future it must be foreseen that security of privacy elements in SNS must have a high importance and must be solved in some ways. Focus on privacy is already seen in a new SNS, where users interact without profile and identification and freely share ideas, knowledge and information. This is called "secret's" ([www.secret.ly](http://www.secret.ly)).

This paper provides a general overview of the use of social network sites. Even though SNS seem explored in almost any aspect of life, there are still ways for improving the use of these, and that will come in the future.

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[pinterest.com](http://pinterest.com)  
[twitter.com](http://twitter.com)  
[www.unchartedps3.com](http://www.unchartedps3.com)  
[battle.net/wow](http://battle.net/wow)  
[secondlife.com](http://secondlife.com)  
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