



## Social Networking Sites : A Review

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**Abstract:** The use of the Internet for Social Networking is very popular among adolescents and emerging adults. The use of collaborative technologies and Social Networking Site leads to instant online community in which people communicate rapidly and conveniently with each other. The ability to stay in touch with friends and family members from anywhere in the world has millions of people caught up in the excitement of social networking. Because social networks are where the customers are, many enterprises are also turning to social networks as a free and powerful means of communication. The basic aim of this review paper is to briefly summaries what are Social networking sites and their uses in different areas along with their risks.

**Keywords:** Social Networking sites, SNS, online community, Growth, Web 2.0 application.

### I. INTRODUCTION

Social network services as defined by Boyd and Ellison (2007) define it as web-based services which allow individuals to Construct a public or semipublic profile within a bounded system, Communicate with other users; and View the pages and details provided by other users within the system[1]. This domain of digital era has seen a significant growth in the scale and richness of on-line communities and social media, through the rise of social networking sites beginning with Friendster and its relatives, and continuing to more recent systems including MySpace, Facebook, and orkut, as well as media-sharing sites such as Flickr. One of the most significant Web 2.0 tools, Social Networking Sites (SNS) are growing in popularity worldwide. In India More than 33 million Internet users who form 84% of the total Internet audience, visited social networking sites in July 2011. The total Indian social networking audience grew 43 percent in the past year, more than tripling the rate of growth of the total Internet audience in India. India now ranks as the seventh largest market worldwide for social networking. (ComScore, 2011). The following table summarizes the evolution of different SNSs as per their year of launched. Only few which are very popular globally are mentioned here. All of them are meant for the same purpose with little technological difference, keeping in mind their usage group[2].

Social Networking sites	Year
Classmate.com	1995
SixDegrees.com	1997
Cyworld.com	1999
Freindster.com	2002
Linkedin.com	2002-2003
Myspace.com	2003
Hi5	2003
Orkut	2004
Ning	2004
Bebo.com	2005
Facebook.com	2006

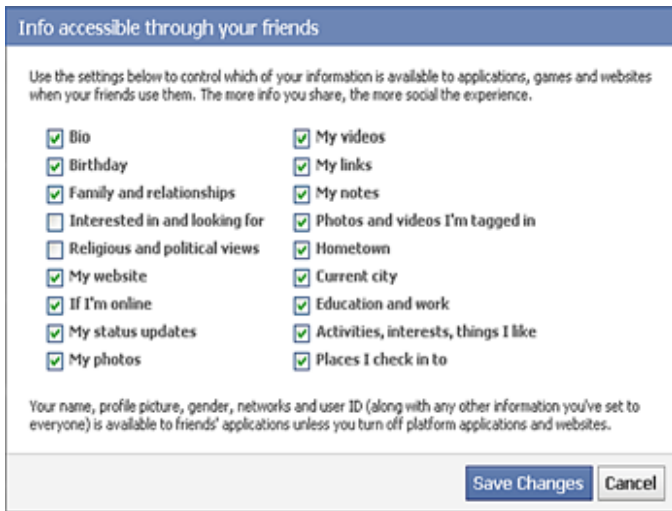
Twitter.com	2006
Badoo	2006
Google.com/buzz	2010

SNSs are seen as the pool of knowledge. Knowledge flows through a social network. This highlights the main importance of a social network, it's a real flow of knowledge between people, groups or institutions with the same interest happens. Furthermore, it allows interdisciplinary connections when there are common members in such networks.

This interdisciplinary connection enables the creation of new Concepts, development of new products and services, and Facilitates communication between different user in different areas. [23].

### II. MEMBERSHIP AND ACTIVITIES

One has to become member either by accepting the invitation send from ones friend list (which is very common today) or else create login through the home page of the SNS one wants to join. All of them follow the some or less the same mechanism: social networking services enable users to create a profile for themselves, by inserting their personal data. Users' data are not only constituted by vital statistics, but they include a lot of other information which pertains to user hobbies, passions, interests, professional background and so on[5]. This kind of personal data, all spontaneously provided by the user her/himself, permit to create interconnected networks of people who decide to put in common interests and to have an online identity which fully describes them, known as profile. The Facebook page asking the user information is given below:



Source :Facebook.com Profile Information

The profile is created depending on the nature of service one wants from these sites. The following are the results of the survey :

- 89% use their online profiles to keep up with friends
- 57% use their profile to make plans with friends
- 49% use them to make new friends

Other uses: organize with other people for an event, issue or cause; flirt with someone; promote themselves or their work; make new business contacts (a survey by PEW internet and American life Project,2009)

The main motivations of these sites are communication and maintaining relationships between the members. For this many tools like chat, messaging, wiki, email, video, voice, chat, file sharing, blogging, discussion groups, videoconferencing and many more are used.(courtesy web 2.0) Popular activities include updating others on activities and whereabouts, sharing photos and archiving events, getting updates . The more active profiles the more popular is the web site. The more popular the Web site, the more money it will be able to generate through advertising. A social networking site like Facebook has millions of active users. Access to that enormous user base is a valuable commodity. For that reason, advertisers might be willing to pay more for an adv. on Facebook than for a comparable adv on a smaller social networking site. The market value of the site having more profiles is much higher as compared to the one having less users or profiles.[3]

The numbers of members/users has increase to large extend in last 5 years. The table below gives the % change globally in 2010 to 2009.[8]

Growth of Top 10 Social Networking Markets Worldwide July 2010 vs. July 2009			
Total Worldwide – Age 15+, Home & Work Locations*			
Source: comScore Media Metrix			
	Social Networking Unique Visitors (000)		
	Jul-2009	Jul-2010	% Change
Worldwide	770,092	945,040	23%
United States	131,088	174,429	33%

China	N/A	97,151	N/A
Germany	25,743	37,938	47%
Russian Federation	20,245	35,306	74%
Brazil	23,966	35,221	47%
United Kingdom	30,587	35,153	15%
India	23,255	33,158	43%
France	25,121	32,744	30%
Japan	23,691	31,957	35%
South Korea	15,910	24,962	57%

\*Excludes visitation from public computers such as Internet cafes or access from mobile phones or PDAs.

### III. SNS CHARECTERISTICS AND FETURES

#### A. SNS Charecteristics

Boyd (2007b) argues that there are four distinctive aracteristics of social networks[1]:

- Persistence –Any thing that is said in a digital world will stay there
- Searchability –No body can hide. Everybody who participates can be found.
- Replicability – Anything can be copied
- Invisible audiences – One never knows who is watching them (Boyd, 2007b, p. 2-3)

To establish Communication on SNSs countless private messages and pokes are send to any user, this is 'one way in which people may have access to others in order to introduce themselves' and eventually gain more *Friends* (Golder 2007 p. 3). Unless users set their accounts differently, everybody can be found and contacted via their SNSs' account. Additionally, every message is visible to everybody in a group and reported to them as status updates. You never know who else other than your friends are watching you or are keeping a track of your identity.

#### B. Some common feature of SNS

User-oriented:The user of these site is the mastermind. They can build the informaton and direct the flow as per their wish. No user mean empty forums, chat rooms, and no use of the various applications that SNSs are providing. User is creating the Web and diecrting its flow.

Interactive: SNSs are not only meant for chating or mailing , there are many online gameing appliactions which keeps the user busy all the time. Now a day instead of watching Television people prefer to be online, hence instead of saying 'see you tommarow ' to their friends the young generation says 'see you at facebook '.

#### C. Community-driven

Social networks are built and thrive from community concepts. This means that just like communities or social groups around the world are founded on the fact that members hold common beliefs or hobbies, social networks are based on the same principle. Within most modern online social networks today, you'll find sub-communities of people who share commonalities, such as alumni of a particular high school, or an animal welfare group. Not only can you discover new friends within these interest based

communities, but you can also reconnect with old friends that you lost contact with many years ago. With such a large users on Facebook, the Facebook community can be the 6<sup>th</sup> largest community in world (Virtual community)

#### D. Emotional attachment

Another unique characteristic of social networks is the emotional factor. While websites of the past were focused primarily on providing information to a visitor, the social network actually provides users with emotional security and a sense that no matter what happens, their friends are within easy reach. Whatever may be the suffering, a divorce, break-up or any other family crisis, people are finding it very convenient to jump online and communicate directly with a circle of friends provides a great deal of support in an otherwise unmanageable situation. But every coin has two faces this can be dangerous too.

### IV. RELATIONSHIPS WITHIN SNS

A social network relation is 'a type of exchange or interaction and pairs who maintain one or more types of relation are said to maintain a tie' (Haythornthwaite, 2005, p. 127). Some ties may be stronger than others, and that depends on 'the types of exchanges, frequency of contact, intimacy, duration of the relationship etc.' (p. 127). Social ties can be beneficial in terms of 'companionship, access to information and emotional and material support' (Donath, 2007). In theory, strong ties are 'close confidants, people relied upon in an emergency and with whom one is likely to share multiple interests' and weak ties are 'more distant acquaintances, people known in a specific context and towards whom one feels less responsibility' (Donath, 2007). It is not simply that strong ties are those on the user's *Friends* list – 'the list of connections on a profile does not differentiate between close friends and people known only through a cursory glance at their profile' (Donath, 2007). Sometimes users have long lists of *Friends* and only have a close relationship with just a few of them. Strong and weak ties are reflected in SNSs' features called *Friends*, *Contacts*, *Fans* or *Followers*. It is not simply that strong ties are those on the user's *Friends* list – 'the list of connections on a profile does not differentiate between close friends and people known only through a cursory glance at their profile' (Donath, 2007). Sometimes users have long lists of *Friends* and only have a close relationship with just a few of them. This is due to the fact that relationships must be defined online through a verification of one's friendship (acceptance or rejection of one's friendship request) and users quite often find it difficult to say no to such a request and keeps updating the relationships. And with not so many side effects these SNSs are maintain this relationships.

### V APPLICATIONS OF SNS

#### A. Purely Personal Reasons

The most common use of Social Networking sites, and the main reason for their existence, is for personal reasons. It is used for its original purpose – to keep in touch with friends. Some people will go on simply to update their status or view their friends' statuses, or to look at photos on their weekend's night out. Some use it to connect to people they've met, a potential girlfriend/boyfriend perhaps, or someone who shares

the same interests. It is possible to keep in touch with people hundreds of miles away, maybe somebody who has gone travelling or moved to the other side of the world. In the past it would have been nigh on impossible to keep in touch, much less keep up to date with what they are doing.

#### B. Business – Connecting with customers

With the rise of Internet Marketing, social media is being embraced by businesses more and more. Innovative ways of utilizing these tools by connecting directly with customers are being found. Companies are seeing that the best way to conduct themselves online is to speak to their customers directly using these social networking sites, Twitter being especially useful for this. It increases the reputation of the company, gets them positive reviews and shows that they really care about the customer. It also gives a human face to the large corporation, meaning that customers or potential customers will feel much more comfortable coming back. A company called *Virgin Trains* have a small team of dedicated and named staff who run the Twitter feed as part of their overall PR role. Whenever a customer has a question or a complaint about the trains, for example – the train is late or any doubt about their tickets, they post it on the Twitter feed and get a pretty quick response. The response is sometimes a simple apology about a train being late, but it gives a human element to the company and this simple gesture could stop them losing a customer for the future.[6]

#### C. Business – Networking

You can find the opportunity for business types to network and expand your business on the social networking platform. To get a deal is all about knowing the right people, and if somebody that you went to school with owns a multimillion dollar business and your company do what he is looking for, using Facebook could have you on to a winner. A random friend request from somebody you haven't spoken to since you were 11 years old could be the key to your company's success. Social networking sites like LinkedIn exist for this purpose; for people to network within a business environment. It could find you a new business deal or could even find you a new job!

#### D. Marketing

Another Twitter success story is Dell and their recent Internet Marketing strategy. Their outlet site sells refurbished PCs, and they post details about the newest ones on their Twitter feed. They also post special offers just for Twitter users, and they send information about sales, along with discount vouchers to their Twitter followers. The company has generated \$6.5million in revenue from this venture. This shows the power of marketing on Twitter. This sort of strategy works well for e-commerce sites especially as they can market to an already targeted audience[6]. People would not follow the company if they weren't interested in what they have to say. Saying that the strategy works as an additional extra to the normal everyday operations, and not as a new or the only way of marketing for the company, it should not be seen as a guaranteed winning formula and is probably more suited to an established brand as they are more likely to get enough followers to make it effective in the first place It won't be a surprised that the twitter or a Facebook user for e.g. will be

paid for putting good comments for XYZ product and hence doing the online marketing for the XYZ 'S company.

### ***E. Entertainment***

Going hand in hand with the 'social' element of Social Networking, people sometimes go on purely for entertainment purposes. Myspace is a prime example of this, as many famous artists have been discovered through these sites (sort of sounds like marketing, huh?). Music is a big part but also videos, such as Youtube viral offerings, are easily spread on social networking sites. The newest craze is on Facebook, with all the game applications that have appeared over the last couple of years. The most popular of these is a game called Farmville which has managed to acquire 72.9 MILLION users per month. That is a crazy amount of people to be playing a game about running a virtual farm!

### ***F. Friend Finder***

Do you remember your best friends from way back in elementary school? You're probably puzzled on what happened to your childhood friends after all these years. If you have an account from a reputable social networking site, you have a good chance of getting reacquainted with them. Search for their accounts and check out the latest happenings in their lives. Greet each of them using the messaging system. A primary school was in danger due to less funds. An alumnus of the school took the initiative and started a facebook group and whole alumni of nearly 2000 students could donate a good amount to the school for its renovation. That's the power of social networking.

### ***G. Stalking***

If you browse through the numerous profiles in your network, you will surely find at least a dozen profiles of gorgeous people. Of course, you may have to draw the line. Viewing a sexy stranger's account is different from actually following this person wherever he or she goes [7].

### ***H. Online Portfolio***

Some social networking sites allow you to upload and display files. If you are a graphic designer or writer, you can post your works via the video, photo and blog sections of your social networking account. Almost everyone has an account these days, so millions of people may stumble upon your works at any given moment. To truly market your work, you can ask some of your more popular friends to promote your work using the same website. You'll gain connections and perhaps get your big break as an artist.

### ***I. Blog***

Many things happen in our daily lives. We can have close encounters with our romantic prospects or our own share of near death experiences. Some people opt to cherish and record those precious memories in their journals. Give it a twist! Instead of using the usual pen and paper combo, you can write your daily accounts on the blog feature of a social networking site. You will get comments from your friends or even random people. All bollywood Actors and many politicilas are in touch with their fans using blog.

### ***J. Photo Gallery***

You can upload pictures from various vents in your life.

### ***K. Music Resource***

Some social networking websites let people share their music. Check the music section of your account and you will find many people offering cool downloadable music. If you are not satisfied with the songs offered by your friends, you an instead check the music offerings of the website. You will find downloadable albums from some of your favorite artists. You can also post your own playlist on your site, which doubles as an online music player.

### ***L. Reminder/ Alerts***

People expect the best presents or the most meaningful greetings from their close friends during their birthdays. As a busy person, you can always forget those special dates, especially if you have hundreds of friends. Just view the birthday alerts section of your account and you will be informed of the birthdays of your buddies. You can also make the necessary preparations for your friend's birthday once you see it coming in a week's time.

### ***M. Resource for Events and Night Outs***

The bulletin board and the events section of social networking sites are useful in informing other people about the coolest parties or important social gatherings. If you feel that your birthday party may not have enough guests to be considered grand, you can post the details of your party using those sections. Events organizers also take advantage of those applications to make their jobs much easier.

### ***N. Horoscope***

The horoscope gives a person a vague prediction on what will happen for the day. Those predictions may not be true, but they provide readers good pointers on how to get through the day with smiles on their faces. Most social networking sites offer horoscope applications. You can view those applications whenever you need snippets of wisdom.

### ***O. Political campaigns***

Social networking sites such as Facebook, Twitter, YouTube have become a new battleground for American politicians to woo voters and reach out to the constituents. Barack Obama when he first ran for the U.S. presidency in 2008, Obama paid much attention to social networking sites[15]. Why in America, back in India we can't forget the Anna Hazare movement for the Lokbal bill and the role played by facebook to motivate the youth to join the movement.

### ***P. Cyber crime***

With all its advantages, Members of social networks need to be on the alert for malicious e-mail messages after they have proven to be the new breeding ground for cybercriminals. Somebody is digging up information about you, to attack you. Cybercriminals have taken the next step, now scouring social networks for information about prospective targets before launching their attacks. Links to videos with a titles like "Oh

God , you won't believe what this teen did on camera" are used to lure people into filling in surveys and can lead to .95 per month being billed to their mobile phone accounts. The report says they use click-jacking to dupe victims into telling their Facebook friends that they "like" this video, and that they should try it. Facebook and Android smartphones are attracting more attention from malware writers, according to the AVG Community Powered Threat Report Q1 2011.

#### **Q. Education**

Students are developing a positive attitude towards using technology systems, editing and customizing content and thinking about online design and layout. They're also sharing creative original work like poetry and film and practicing safe and responsible use of information and technology. The Web sites offer tremendous educational potential.

#### **R. Health care**

Social networking can help you learn plenty about all aspects of your health care, from prevention, through symptoms and diagnosis, treatment options and disease management. Be little careful to verify the information. Take it as opinion and not fact that someone is sharing.

#### **S. Match Making**

The main difference between traditional matrimonial profiles and social media is that while matrimony profiles are static, SNSs keeps your personality alive online and over a period of time reveals a lot more about you and your lifestyle. Your own online pages and tweets are usually a closer reflection of who you are than what you could possibly ever write in a few words in a "formal" matrimonial advertisement. Because of the growing popularity of social media, many websites are now integrating matrimonial advertisement concept with social profiles and tweets. One such website is Matritweets, which provides ability to tweet in addition to submitting a matrimonial profile. What you tweet is who you are.

## **V. THREAT AND RISKS**

All the things that make social media so attractive to users – the personalization, the ease with which information can be shared, and the real-time nature of the medium – pose significant risks to your business. The following are the some of the threats and risks social networking site and their users will be facing [25] :

#### **A. Malware**

In 2010, social media became the preferred communications vehicle for users, who are spending more than 700 billion minutes per month on Facebook alone, making social networking sites and their users ideal malware targets. According to Sophos, 40% of users were infected by malware from social networking sites. Typical attacks draw on the trust relationship established between users and their connections. They try to trick users into giving up information and access that can be exploited for financial gain. (blog.CIO-Asia) Some examples of malware particularly successful in social media are:

#### **B. Phishing**

With increasingly sophisticated techniques, attackers pose as one of your legitimate social networking connections and try

to lure you into providing sensitive information, such as your login credentials. They prey on the tendency of most people to use the same passwords for all their accounts, hoping that by tricking you into giving one username and password they can get access to more profitable banking, financial and other online accounts. Most users have their radar ON concerning financial accounts, but their daily login to a social networking site is just a speed bump, creating an opening for cybercriminals to steal online assets. This is why more and more phishing attacks are targeting seemingly "nonrelevant" online user accounts. SNSs are furthermore used as a medium for carrying out the Phishing attack itself, rather than using standard Email messages.[16]

#### **B. Click-jacking**

Attackers lure you into clicking on a link, perhaps posting it on your wall and then spamming your friends to "check it out," or "view my photos." When someone clicks on the link, they unwittingly install malware (code or script) that can be used to steal information or take control over their computer. Click jacking uses the dynamic nature of social networking and a willingness to click on links from those you know, and even those you don't, to quickly reach a large audience, cajole you into revealing private information (e.g. through surveys), collect hits for ad revenue, and eventually allow access to your entire social network.

#### **C. Data Loss**

Social networking is about making connections and sharing experiences and information, however, sometimes that information is not meant to be made public. It's not uncommon for people to inadvertently post confidential information – "hey, I just met with xxx and I think I am about to make a huge commission," or "I'm pulling my hair out, if we can't fix this software bug soon, I don't know that I will ever sleep again," that provides "insider knowledge." There have also been cases in which employees have unintentionally posted proprietary software code to social networking sites, exposing sensitive intellectual property. These actions, though unintentional, can potentially violate industry specific regulations, impact your reputation, or put you at a competitive disadvantage.

#### **D. Bandwidth Consumption**

As much as 40% of employees report that they are on social networking sites at work, creating a potential strain on bandwidth to the detriment of other business applications. When the U.S. government mandated open access to social networks, traffic on the network increased by 25%. Video alone (think of all the videos your friends share and you link to through Facebook or Twitter), can overwhelm many networks. A single video stream usually consumes between 500k to 1.2 Mbps (and that's not even HD, which can be up to 4 to 7 Mbps), and when you have tens or hundreds of people accessing videos it's easy to see how overall performance can degrade.(source-Digit Mag.)

#### **E. Productivity Loss**

Social networking sites are becoming online destinations, enabling you to post and read messages, date, shop, upload or check out videos, and play games. This makes them increasingly convenient and engaging for users, drawing them to spend more and more time there, as well as increasingly

challenging for the business to appropriately control. When unchecked, the time spent on social networking sites can affect productivity, as your employees spend more and more time (think back on the 700 billion minutes on Facebook) playing Farmville during business hours.

#### F. Cyber-bullying and grooming

Cyber-bullying are attacks done aggressively and bullying attempts carried out over the Internet, while cyber-grooming refers to attempts by adults to approach minors via the web to abuse them sexually. This are all related to human mind and psychology. One of the most infamous cases involving cyber-bullying, the "Megan Meier case", led to the suicide of a teenage girl [20]. In the Meg Meier case the perpetrator exploited the ease of setting up a fake profile, which was also used in a recent cyber-grooming case [22].

### VI. CONCLUSION

Social networking sites are becoming more popular among the youths and the adults globally. These sites are trying to bind the world virtually forgetting the caste and creed, the white and blacks. They are forming links that organize people, groups, and institutions in an equal and democratic way, and around a common purpose [25]. This is the advantage the internet and web 2.0 has given to the world. The amount of knowledge this sites stores is huge and very crucial in terms of security. Now it depends on the individual how to utilize it for one's own benefit. One need to explore these sites positively other than misusing them for him self's and to human life.

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