Social Networking: Innovative Communication Technology

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Abstract - Businesses are increasingly using business social networks as a means of growing their circle of business contacts and promoting themselves online. In general these networking tools allow professionals to build up their circle of business partners they trust. By connecting these business partners the networking tools allow individuals to search for certain people within their network. Through introductions, the members of these tools then get in contact with new prospective business partners. Since businesses are expanding globally, social networks make it easier to keep in touch with other contacts around the world. Specific cross-border e-commerce platforms and business partnering networks now make globalization accessible also for small and medium sized companies.

Keywords: Business, Networking, Cross-border, e-commerce, Globalization.

1 INTRODUCTION:
Online social networking web sites have recently exploded in popularity. Sites offer services for finding friends like MySpace, Orkut, and Friendster, for sharing photos like Flickr for sharing videos like YouTube and Google Video, and for writing blogs like LiveJournal and BlogSpot. These sites are extremely popular with users: MySpace claims to have over 100 million users, while Flickr and Orkut boast 2.5 million and 13 million users, respectively. MySpace recently has been observed to receive more page hits than Google.

SOCIAL NETWORKING:
A social network is a social structure made up of individuals (or organizations) called "nodes", which are tied (connected) by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, relationships of beliefs, knowledge.

![Diagram of Social Networking]  

Architectural Design of Social Networking:  
Distributed Social Networking Protocol (DSNP)

DSNP is a protocol for distributed social networking. It allows everyone to collaborate to create one social network that is decentralized, like the Internet itself. It is an open technology that supports private communications, in a manner that users of modern social networks have come to expect. DSNP aims to cover any use case that can be described as first creating a profile for yourself, establishing connections to people you know, then broadcasting private information to those people.

It is well known that the value of any network is determined by its membership. It is therefore natural for a single social network to emerge as the most popular. Unfortunately, all social networks are currently married to the entity that hosts them, and so the most popular social network will inevitably be contained within a single proprietary database. As it grows, a disturbing reality emerges.

The central idea behind DSNP is that users should be free to choose where they host their profile, without the decision impacting who they are able to invite as connections. DSNP introduces competition among providers, without imposing segregation of users.

SECURITY:
It is easy to share information on the web. It is harder to share it only with those you choose. DSNP leverages RSA public key cryptography for identity.
authentication, the sharing of secrets and the declaration of facts. It can be described as a public-key cryptosystem for web-based identities. It relies on SSL to bootstrap security (distribute public keys) on the grounds that SSL is already required to secure the web interface.

**POPULAR SOCIAL NETWORKING SITES:**
Following table shows most popular Social Networking Sites

<table>
<thead>
<tr>
<th>Name</th>
<th>Description/ Focus School, college, work and the military</th>
<th>Date Launched</th>
<th>Registered Users</th>
<th>Registration Open to people #8 and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flixster</td>
<td>Movies</td>
<td>2007</td>
<td>63,000,000</td>
<td>Open to people 13 and older</td>
</tr>
<tr>
<td>Google+</td>
<td>General</td>
<td>June 25, 2011</td>
<td>25,000,000</td>
<td>Invite only, during pre-release field-trial</td>
</tr>
<tr>
<td>hi5</td>
<td>General. Popular in India, Mongolia, Thailand, Romania, Jamaica, Central Africa, Portugal and Latin America. Not very popular in the USA.</td>
<td>2003</td>
<td>80,000,000</td>
<td>Open to people 13 and older</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Business and professional networking</td>
<td>May 2003</td>
<td>100,000,000</td>
<td>Open to people 18 and older</td>
</tr>
<tr>
<td>MyLife</td>
<td>Locating friends and family, keeping in touch (formerly Reunion.com)</td>
<td>2004</td>
<td>51,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Myspace</td>
<td>General. Owned by Google Inc. Popular in India and Brazil</td>
<td>August 2003</td>
<td>100,000,000</td>
<td>Open to ages 13 and older</td>
</tr>
<tr>
<td>Orkut</td>
<td>General. Owned by Google Inc. Popular in India and Brazil</td>
<td>January 22, 2004</td>
<td>100,000,000</td>
<td>Open to people 18 and older, (Google login)</td>
</tr>
</tbody>
</table>

**Rediffmai 1(6)** | **Yahoo 7** | **All (1) And (3)** | **Total (100.00)**
3.45 | 3.45 | 13.7 | 9.90 | 100.00

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Face book (1)</th>
<th>Twitter (2)</th>
<th>Orkut (3)</th>
<th>Google+ (4)</th>
<th>Gmail (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>41.38</td>
<td>3.45</td>
<td>17.24</td>
<td>3.45</td>
<td>6.90</td>
</tr>
</tbody>
</table>

From the above table it realize that, 41.38% respondents are using Face book site for social networking. Whereas 17.24 uses Orkut. 13.79% uses all the above sites. It is shown by the following graph.
Social networking is allowing scientific groups to expand their knowledge base and share ideas.

3. TEACHERS/STUDENTS COMMUNICATION TOOLS-
- to extend classroom discussion to posting assignments, tests and quizzes, to assisting with homework outside of the classroom setting.
- to foster teacher-parent communication.
- by college students using the services to network with professionals for internship and job opportunities.

4. ENTREPRENEURS
Since businesses operate globally, social networks can make it easier to keep in touch with contacts around the world.
- connect people at low cost; which can be beneficial for entrepreneurs and small businesses looking to expand their contact bases.
- act as a customer relationship management tool for companies selling products and services.
- for advertising in the form of banners and text ads e.g. LinkedIn.com, which aims to interconnect professionals. LinkedIn has over 100 million users in over 200 countries.

5. MEDICAL APPLICATIONS
Social networks are beginning to be adopted by healthcare professionals as a means to manage institutional knowledge, disseminate peer to peer knowledge and to highlight individual physicians and institutions. The advantage of using a dedicated medical social networking site is that all the members are screened against the state licensing board list of practitioners. [82]

The role of social networks is especially of interest to pharmaceutical companies who spend approximately "32 percent of their marketing dollars" attempting to influence the opinion leaders of social networks.

6. SOCIAL AND POLITICAL APPLICATIONS
Social networking sites have recently showed a value in social and political movements. By presenting a platform for thousands of people to instantaneously share videos of main events featuring brutality, social networking proves to be a vital tool in revolutions.

7. GOVERNMENT APPLICATIONS
Social networking is more recently being used by various government agencies. Social networking tools serve as a quick and easy way for the government to get the opinion of the public and to keep the public updated on their activity.

This list of connections can then be used in a number of ways:
- A contact network is built up consisting of their direct connections, the connections of each of their connections (termed second-degree connections) and also the connections of second-degree connections (termed third-degree connections). This can be used to gain an introduction to someone a person wishes to know through a mutual contact.
- It can then be used to find jobs, people and business opportunities recommended by someone in one's contact network.

Employers can list jobs and search for potential candidates.
- Job seekers can review the profile of hiring managers and discover which of their existing contacts can introduce them.
- Users can post their own photos and view photos of others to aid in identification.
- Users can now follow different companies and can get notification about the new joining and offers available.
- Users can save (i.e. bookmark) jobs which they would like to apply for.

8. FACE-TO-FACE BUSINESS NETWORKING
Professionals who wish to leverage their presentation skills with the urgency of physically being present attend general and exclusive events. Many professionals tend to prefer face-to-face networking over online based networking because the potential for higher quality relationships are possible. Many individuals also prefer face-to-face because people tend to prefer actually knowing and meeting who they intend to do business with.

9. NETWORK BUSINESS
Networked businesses tend to be open, random, and supportive, whereas those relying on hierarchical, traditional managed approaches are closed, selective, and controlling.

ISSUES:
1. PRIVACY
Privacy concerns with social networking services have been raised growing concerns amongst users on the dangers of giving out too much personal information and the threat of sexual predators. Users of these services also need to be aware of data theft or viruses. However, large services, such as MySpace and Netlog, often work with law enforcement to try to prevent such incidents. In addition, there is a perceived privacy threat in relation to placing too much personal information in the hands of large corporations or governmental bodies, allowing a profile to be produced on an individual's behavior on which decisions, detrimental to an individual, may be taken.

2. NOTIFICATIONS ON WEBSITES
There has been a trend for social networking sites to send out only 'positive' notifications to users. For example sites such as Bebo, Facebook, and Myspace will not send notifications to users when they are removed from a person's friends list. Similarly Bebo will send out a notification if a user is moved to the top of another user's friends list but no notification is sent if they are moved down the list. This allows users to purge undesirables from their list extremely easily and often without confrontation since a user will rarely notice if one person disappears from their friends list. It also enforces the general positive atmosphere of the website without drawing attention to unpleasant happenings such as friends falling out, rejection and failed relationships.
4. ENTERED TRUE INFORMATION

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.10</td>
<td>6.90</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Majority of respondents i.e. 93.10% provided its true information for opening account as well as in their personnel profile. Whereas only 6.90% had entered fake information.

5. USAGE PLACE

<table>
<thead>
<tr>
<th>House</th>
<th>Office</th>
<th>College</th>
<th>Internet Café</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.48</td>
<td>6.90</td>
<td>31.03</td>
<td>27.59</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Majority of respondents using social networking service in house and in colleges followed by internet café and offices.

6. SECURITY

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.72</td>
<td>48.28</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Majority of respondents are worried about security. 51.74% respondents says its secure but 48.28% are dissatisfied regarding security.

7. Security Method

<table>
<thead>
<tr>
<th>Biometric</th>
<th>Double password</th>
<th>Accession control</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.14</td>
<td>41.38</td>
<td>27.59</td>
<td>6.90</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Opinion regarding security method is that, 41.38% respondents are suggested to provide double password system to authenticate users, whereas 27.59% are prefer to provide accession control to restrict unauthorized users. 24.14% suggest biometric technique like- thumb, iris-palm-face recognition but for that authentication it require such facility for that machine.

APPLICATIONS

1. COMPANY/ BUSINESS-
Companies have found that social networking sites such as Facebook and Twitter are great ways to build their brand image. According to Jody Nimetz, author of Marketing Jive, there are five major uses for businesses and social media:
- to create brand awareness,
- as an online reputation management tool,
- for recruiting,
- to learn about new technologies and competitors, and
- as a lead gen tool to intercept potential prospects.
These companies are able to drive traffic to their own online sites while encouraging their consumers and clients to have discussions on how to improve or change products or services.

2. SCIENCE COMMUNITIES/RESEARCHERS-
- New Biotechnology Firms are using social networking sites to share exchanges in scientific knowledge
ACCESS TO INFORMATION

Many social networking services, such as Facebook, provide the user with a choice of who can view their profile. This prevents unauthorized user(s) from accessing their information. Parents who want to access their child's MySpace or Facebook account have become a big problem for teenagers who do not want their profile seen by their parents. By making their profile private, teens can select who may see their page, allowing only people added as "friends" to view their profile and preventing unwanted viewing of the profile by parents. Most teens are constantly trying to create a social barrier between their private life and their parents.

To gain information on a certain social networking service account, the social networking sites require you to login or provide a password. This prevents unauthorized user(s) from adding, changing, or removing personal information, pictures, and/or other data.

RISK FOR CHILD SAFETY

Citizens and governments have been concerned by a misuse by child and teenagers of social networking services, particularly in relation to online sexual predators. A certain number of actions have been encouraged by governments to better understand the problem and find some solutions.

INTERPERSONAL COMMUNICATION

Interpersonal communication has become a growing issue as many more people have turned to social networking as a means of communication. "Benniger (1997) describes how mass media has gradually replaced interpersonal communication as a socializing force. Further, social networking sites have become popular sites for youth culture to explore themselves, relationships, and share cultural artifacts." A Privacy Paradigm Many teens and social networking users may be harming their interpersonal communication by using sites such as Facebook and MySpace. The convenience which social network sites give users to communicate with one another can also damage their interpersonal communication.

PSYCHOLOGICAL EFFECTS OF SOCIAL NETWORKING

As social networking sites have risen in popularity over the past years, people have been spending an excess amount of time on social networking sites and on the Internet in general. The excessive amount of time that people spend on social networking sites has led researchers to debate the establishment of Internet addiction as an actual clinical disorder. Social networking can also affect the extent to which a person feels lonely.

INVESTIGATIONS

Social networking services are increasingly being used in legal and criminal investigations. Information posted on sites such as MySpace and Facebook has been used by police (forensic profiling), probation, and university officials to prosecute users of said sites. In some situations, content posted on MySpace has been used in court.

REFERENCES


