Chapter XV
Social Networking Site:
Opportunities and Security Challenges

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ABSTRACT

Social networking has become one of the most popular applications on the Internet since the burst of the dot-com bubble. Apart from being a haven for teenagers and online marketers, social networking sites are increasingly adopted by the corporate community. The trend makes viable many new business models and applications. The popularity of these sites has altered the way society interacts, but it also greatly heightened the threats of cyber crime. Safety and crime issues aside, the massive amount of user-generated content in these Web 2.0-enabled social networking sites are becoming fertile grounds for viruses. Furthermore, these sites pose great challenges on how to protect copyrighted works as they are havens for digital content sharing. Society must learn to balance the benefits of social networking with its drawbacks as the phenomenon is an inescapable global trend, expanding at the speed of light.

INTRODUCTION

A social networking site is a category of websites with user profiles and persistent public commentary forming a traversable networked virtual community. A user profile contains identifiable information about the participant, such as, age, gender, interests and etc. The profiles have unique URLs that can be visited directly. Site visitors can also post comments or other information for everyone to see. Network participants have the ability to list other profiles as "friends", link to friend's profiles, and see comments posted by others. The comments are semi-permanent because they may disappear over a period of time or upon removal. All of the above functions generate a virtual network for social interaction where each node contains a link to the profile of the other person so that individuals can traverse the network through friends of friends.

Social networking sites bring people together in a virtual community to talk, gossip, exchange ideas, share interests and making new friends. The sites typically provide tools for posting messages,

sharing photos and creating personal pages. The Internet is made of people, and people are social by nature. Embraced mostly by teenagers and young adults who find it irresistible, MySpace. com, a social networking site, launched only four years ago is now one of the world's most popular. In U.S., it ranks second only to Yahoo in page views, drawing almost 5% of all site visits, ahead of even Google, which drew only a little over 4%. According to a recent web metrics report (Tatham, 2006), one in every twenty U.S. Internet visits went to one of the top twenty social network sites in September 2006.

The popularity of social networking has altered the way society interacts, but it also greatly heightened the threats of cyber crime. Safety issues aside, the massive amount of user-generated contents in the Web 2.0 enabled sites are becoming fertile grounds for viruses. Furthermore, these sites pose great challenges on how to protect copyrighted material as they are now havens for digital content sharing. Society must learn to balance the benefits of social networking with its drawbacks as the phenomenon is an inescapable global trend, expanding at the speed of light.

Social Network Theory and Social Network Analysis

"Social network", a term coined by J.A. Barnes (1954), represents a web of relationships and flows between people, groups, organizations, animals, computers or other information processing entities. Social network theory differs from traditional sociological studies. In traditional theories, attributes of individual actors are assumed to matter the most. Social network theory takes a different approach, where individual attributes are less important than their relationships and ties with others within the network. Social network theory in Social Sciences began with the urbanization studies of the Manchester School (Barth, 2005). Started as an attempt to quantify social relationships, social network theory has been helpful in explaining many real life phenomena, from the success of individual business to the rise of political powers, and from the process of how juries

reach consensus to the decision that countries pattern their trade.

Social network theory, deeply rooted in Sociology, has recently found a home in many business applications. Social network analysis helps us to understand the dynamic of informal networks. Social network analysis theory views social relationships in terms of nodes and ties. Nodes are individuals within the networks, ties are the relationships between the individual, and a social network is a map of all of the relevant ties between the nodes being studied (Scott, 1991). The International Network for Social network Analysis, http://www.insna.org/, is an academic association of social network analysts. New visualization tools are constantly being developed and many are available online for scholars to study the patterns of complex social interaction using graphical images of network models. A social networking service is a website specifically focused on providing and supporting online social networks for whatever purpose. As of April 2006, social networking sites claim an estimate of 68.8 million unduplicated unique participants, reaching 45% of active web users (Nielsen, 2006).

A Short History of Social Networking Site

Hammersley (2003) noted, "Given the right knowledge of the people between us, I could probably plot a chain of people between myself and you, wherever you are. If such information was available, and it turned out it might be advantageous for us to chat, then we could ask each of the middlemen in turn for an introduction and get on with it. Or we could skip the middle guys altogether. That's the idea of the growing number of social network sites on the net today."

The non-digital form of social networking has existed as long as human civilization. As the cliché goes, "It is not what you know, but who you know". The Small World Theory, or the Six Degrees of Separation, speculates that there are only six degrees, or levels, of separation between a person and everybody else in the world (Barabasi, 2003). A degree of separation is defined as

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