Does Social Networking Mark The End of Online Privacy?

Norman Sadegh is our newest instructor from Carnegie Mellon University, teaching an ECOM elective on mobile and pervasive commerce. In the article below, he shares some interesting findings from one of his many research projects. For a more detailed information about Norman and his other projects, please visit http://www.cs.cmu.edu/~sadegh/

Social networking sites such as Facebook, MySpace or LinkedIn each have tens of millions of active users. They thrive on the exchange of personal content such as pictures, opinions, marital status, activities or professional qualifications. While the privacy settings they offer are usually very detailed, they are subject of controversy. As these sites continue to attract large numbers of new users. This growing popularity has led some to wonder whether online users truly care about their privacy and to what extent we are not witnessing a significant shift in attitude. Over the past several years, my research group at Carnegie Mellon University has been trying to better understand these and related questions.

Our work has been conducted in the context of a location sharing application originally called “PeopleFinder” – the application has also been developed on Facebook under the names of “Locounty” and “Locaccino”. It allows mobile users with location-enabled devices such as GPS-enabled cell phones or laptops with WiFi-based location tracking to specify conditions under which they are willing to share their location with others. Specifically, users can invite friends, organize them in groups (e.g., colleagues, family, close friends, etc.,) and specify conditions under which they are willing to let their friends see their location (e.g., "Only let my colleagues see my location during working hours on week days and while I am on company premises"). Our work has involved observing the types of preferences people specify, how happy they are with the preferences they specified, how often they change them and in what particular way, how much time they spend refining their preferences, etc.

One interesting observation is that people’s privacy preferences when it comes to sharing their locations with others are quite rich and tend to vary significantly from one individual to another. Allowing people to simply control the dissemination of their location based on lists of individuals or social relationships, while useful, is often insufficient. People generally seem to want more expressive mechanisms to control the sharing of their location. Through work in mechanism design, we have been able to define metrics that evaluate how well a particular set of attributes captures people’s location sharing preferences. These metrics enable us to quantify the benefits of introducing richer privacy settings such as allowing people to qualify their location sharing preferences based on where they are. By actively engaging part of the community, we aim to empower users to more closely control the sharing of their location. As settings become more restrictive, they also place a greater burden on users and may reduce the overall time that users are willing to devote to configuring their application. In one of our studies, we showed that an important number of users were quickly reaching a plateau. It did not matter how much time they spent refining their preferences: they remained equally unhappy with the results. We also showed that this had nothing to do with the interface, which users thought was pretty good. Instead, people were just struggling articulating their preferences. In addition, because social networking applications such as Facebook and MySpace are almost completely new, people did not know how the application would be used by their friends. Would they constantly be asking for their location? Under which conditions would they try to find out where they are and for what purpose? In other words, it was unrealistic to assume that these users would be able to set their preferences right on day one.

In a subsequent study, where we divided users into two groups with people in one group able to see who had requested their information and the other unable to do so, the group with the added visibility over time grew distinctly more comfortable with the application than the other. While everyone had originally defined fairly restrictive preferences, people in the group with more visibility gradually and selectively started to relax their preferences.

These and many other results suggest that the success of social networking sites will not mark the end of online privacy, as some had prematurely announced. Instead, they indicate that, as people become more aware of the privacy implications of some of the applications made available through these sites, they will likely be looking for more effective ways of controlling how their information is shared with others. This will involve giving users more visibility into how their information is being shared, richer sets of options, and more effective interfaces to configure these options. Some promising solutions in this area include dialogue technologies to help users better understand how their preferences actually work in practice. We have also been developing functionality that leverages user feedback to suggest ways in which they could improve their current privacy settings.

For further information, you can access our project’s webpage at http://www.cs.cmu.edu/~sadegh/user_controllable_security_and_privacy.htm It includes links to the following publications:


A fully redesigned version of PeopleFinder will be released on Facebook in early 2009 under the name of “Locaccino”.

JOINING MEICOM SPORTING ACTIVITIES

The second MEICOM bowling fun night of the year, held on 21 October, was well received by alumni members. It was such an enjoyable evening that most participants threw themselves into the spirit of the game and enjoyed tremendously the dinner as well as the opportunity to chitchat and catch up with the latest news.

We also had a competition among the players. Anthony Law scored 235 and won the prize for top player for the second time. Alumni members are encouraged to try and beat Anthony’s record at our next bowling fun night. For those who are not fond of bowling, it is still a valuable gathering to catch up with alumni friends.

If you would prefer outdoor events, some interesting activities are being planned.

Joining the activities is a great way for all alumni and current students to have a welcome respite from our busy day jobs, and enjoy quality time by taking our family along, as well as networking with fellow professionals for greater business insights and news. Stay tuned.

The MEICOM Alumni Sports Activity Team