Using Social Methods to Support Privacy Management

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ABSTRACT
Social methods are a promising approach for privacy management. We discuss three endeavors in which we use social methods to support privacy management.

POSITION STATEMENT
The Human-Computer Interaction community has advanced its understanding of privacy management considerably over the past decade. We now understand that privacy management cannot be addressed solely or even largely by a static set of preferences that determine how a user's information can and cannot be shared. Rather, privacy management is a fluid, organic process in which users are constantly refining their choices based on any number of contextual facets [1][6]. This is true not only for privacy management among peers but also for privacy management between individuals and "third parties," such as corporations and government agencies.

For the purposes of this statement, we define 'privacy' to be an individual's ability to control when and how he shares his personal information with other people and third parties; when an individual manages his privacy, then, he manages when and how he shares his personal information.

We are exploring privacy management solutions that leverage social methods exclusively and solutions that leverage social methods in conjunction with technological methods. Such solutions leverage context and are flexible and adaptive; thus, these solutions can often better support fluid privacy management than can technological methods alone.

We have identified three areas of focus within this broad exploration. One area investigates how social navigation techniques can be utilized to support privacy management. Social navigation is the process of using other people's behavior to inform one's own behavior [2]. The Acumen system uses social navigation to support fluid privacy management of Internet cookies. Acumen employs social navigation data to provide users with greater awareness of cookies, help them make informed decisions about managing cookies, and enable them to automatically manage their cookies [4].

A second area of focus concerns aggregation of user activity data. Aggregating many small activity readings for the purposes of modeling and prediction has become increasingly common (e.g. [6]), yet little work has been done to empower users with an understanding of and control over the aggregation process. We are investigating solutions that enable users to understand the aggregation process and afford some measure of control over the process. We are especially interested in aggregation of activity data that is readily available, such as instant messaging status and group calendaring data.

Our third area of focus explores privacy solutions that enable users to leverage social networks to mediate information dissemination. Much information sharing occurs via ties in social networks; however, users are often unaware of how information moves through social networks and have little control over how information does so. The Saori infrastructure uses social network features to provide users and end-user applications with social and technological methods to mediate information sharing [3].

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