Internet Privacy from the Individual and Business Perspectives

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INTRODUCTION: PRIVACY

People have always been concerned about protecting personal information and their right to privacy. It is an age-old concern that is not unique to the Internet. People are concerned with protecting their privacy in various environments, including healthcare, the workplace and e-commerce. However, advances in technology, the Internet, and community networking are bringing this issue to the forefront. With computerized personal data files:

a. retrieval of specific records is more rapid;
b. personal information can be integrated into a number of different data files; and
c. copying, transporting, collecting, storing, and processing large amounts of information are easier.

In addition, new techniques (i.e., data mining) are being created to extract information from large databases and to analyze it from different perspectives to find patterns in data. This process creates new information from data that may have been meaningless, but in its new form may violate a person's right to privacy. Now, with the World Wide Web, the abundance of information available on the Internet, the many directories of information easily accessible, the ease of collecting and storing data, and the ease of conducting a search using a search engine, there are new causes for worry (Strauss & Rogerson, 2002). This article outlines the specific concerns of individuals, businesses, and those resulting from their interaction with each other; it also reviews some proposed solutions to the privacy issue.

CONTROL: PRIVACY FROM THE INDIVIDUAL'S PERSPECTIVE

The privacy issue is of concern to many types of people and individuals from different backgrounds. Gender, age, race, income, geographical location, occupation, and education level all affect people's views about privacy. In addition, culture (Milberg et al., 2000; Smith, 2001) and the amount of Web experience accumulated by an individual is likely to influence the nature of the information considered private (Hoffman et al., 1999; Miyazaki & Fernendez, 2001). Table 1 summarizes the kinds of information people would typically consider private.

When interacting with a Web site, individuals as consumers are now more wary about protecting their data. About three-quarters of consumers who are not generally concerned about privacy fear intrusions on the Internet (FTC, 2000). This is due to the digitalization of personal information, which makes it easier

Table 1. Private information

Information
▪ Address
▪ Credit card numbers
▪ Date of birth
▪ Demographic information
▪ E-mail
▪ Healthcare information and medical records
▪ Name
▪ Phone number
▪ Real-time discussion
▪ Social Security number
▪ Usage tracking/click streams (cookies)

Table 2. Individual's concerns

Concerns
▪ Access
▪ Analyzing
▪ Collection
▪ Combining data
▪ Contents of the consumer's data storage device
▪ Creating marketing profiles of consumers
▪ Cross matching
▪ Distributing and sharing
▪ Errors in data
▪ Identity theft
▪ Reduced judgment in decision making
▪ Secondary use of data
▪ Selling data (government)
▪ Spam
▪ Storing
▪ Use
▪ Video surveillance on the Internet
▪ Web bugs

for unauthorized people to access and misuse it (see Table 2 for a list of concerns regarding the uses of data). For example, many databases use Social Security numbers as identifiers. With this information and the use of the Internet, personal records in every state's municipal database can be accessed (Berghel, 2000).

There also are many issues regarding policies and security controls. Individuals are concerned about breaches of security and a lack of internal controls (Hoffman, 2003). However, surprisingly, about one-third of Web sites do not post either a privacy policy or an information practice statement (Culnan, 1999), and only about 10% address all five areas of the Fair Information Practices (FIP), U.S. guidelines to protect computerized information (see FIP in Terms section) (Culnan, 1999; Federal Trade Commission, 2000). Additionally, there is a mismatch between policies and practices (Smith, 2001); this means that a company may publicize fair information policies but in practice does not follow its own guidelines.

Furthermore, as a result of the data mining technology, computer merging and computer matching have become a new privacy concern. One reason is because individuals may have authorized data for one purpose but not for another, and through data mining techniques, this information is extracted for further use and analysis. For example, a consumer's informa-

tion may have been split up among many different databases. However, with sophisticated computer programs, this information is extracted and used to create a new database that contains a combination of all the aggregate information. Some of these data mining techniques may not be for the benefit of the consumer. It may allow the firms to engage in price and market discrimination by using consumers' private information against them (Danna & Gandy, 2002).

Some additional concerns are whether the Web site is run by a trusted organization, whether individuals can find out what information is stored about them, and whether their name will be removed from a mailing list, if requested. Consumers also want to know who has access to the data and if the data will be sold to or used by third parties. They want to know the kind of information collected and the purpose for which it is collected (Cranor et al., 1999; Hoffman, 2003). In addition, consumers want to feel in control of their personal information (Hoffman, 2003; Olivero & Lunt, 2004). According to a Harris Poll (2003), 69% of consumers feel they have lost control of their personal information.

TRUST: PRIVACY FROM THE BUSINESS PERSPECTIVE

Privacy also is important to businesses. A business collects information about its customers for many reasons: to serve them more successfully, to build a long-term relationship with them, and to personalize services. To build a successful relationship, businesses must address their customers' privacy concerns (Resnick & Montania, 2003) so that their customers will trust them. They must also protect all information they have access to, since this is what consumers expect of them (Hoffman et al., 1999). Furthermore, they must be aware of the fact that some information is more sensitive (Cranor et al., 1999), such as Social Security numbers (Berghel, 2000). This trust is the key to building a valuable relationship with customers (Hoffman et al., 1999; Liu et al. 2004).

One of the many ways a business can gain consumer confidence is by establishing a privacy policy, which may help consumers trust it and lead them to return to the Web site to make more purchases (Liu

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