An Analysis of Privacy and Security Information Provided and Elicited by Different Types of Web Sites

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Introduction

Privacy policies need to be communicated to end users, enabling them to make meaningful decisions about whether to provide data online. Ackerman, Cranor, and Reagle (1999) conducted a survey of 381 Internet users from the U.S. regarding privacy concerns. The authors classified users into three types:
- privacy fundamentalists,
- pragmatic majority,
- marginally concerned.

Spiekermann et al. (2001) found similar categories of users, but showed that users’ reported privacy concerns did not match their actual behavior. Most participants did not live up to their self-reported concerns for privacy.

Jensen and Potts (2004) reported that recent surveys have shown that approximately 77% of Web sites now post a privacy policy. Although users indicated that they were concerned with privacy policies, an analysis of log files indicated that only 0.2% actually visited the privacy policies page.

One reason why the policies are not examined more is that a considerable amount of time is required to locate, read, and analyze the policies. Byers, Cranor, and Kormann (2003) reported that users spent as long as 35 minutes locating and analyzing a site’s privacy policy.

Present Study

1. The goal of this study was to survey Web sites from several categories to determine the amount and type of information solicited from users when performing transactions with the sites.

2. We also wanted to estimate the percentage of Web sites that post privacy policies, include privacy policy logos, and allow users to select privacy preferences.

3. We wanted to examine the consistency of the recorded information within and between categories of Web sites.

Method

Forty-two Web sites representing seven categories were selected for analysis. Categories varied from financial institutions to online games.

Results

All sites in the categories of financial, insurance, and pharmacy asked users to provide their date of birth.

All financial institutions used “mother’s maiden name” as a password security question.

With the exception of on-line gaming, at least 80% of the Web sites had links available to the sites’ privacy policy information.

These links were typically located at the bottom of the page, either centered or to the right.

<table>
<thead>
<tr>
<th>Type of Web site</th>
<th>% of sites with Logos</th>
<th>% of sites that allow selection of privacy preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>33</td>
<td>85</td>
</tr>
<tr>
<td>Insurance</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>66</td>
<td>50</td>
</tr>
<tr>
<td>Travel</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Retail</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>Technology</td>
<td>50</td>
<td>83</td>
</tr>
<tr>
<td>Games</td>
<td>0</td>
<td>33</td>
</tr>
</tbody>
</table>

As illustrated in the table, not many Web sites displayed a privacy logo.
- Only 1/3 of financial institutions had privacy logos
- Only 1/3 of insurance companies posted logos compared to 2/3 of pharmaceutical companies, even though insurance and pharmaceutical sites collected approximately the same amount of information from users.

Discussion

Although a large amount of private information is requested by Web sites in the categories we examined, considerable differences exist within and between categories with respect to the type and amount of information that a user is asked to provide. Given the highly competitive nature of the Web and that users have the option of leaving a site without completing a transaction, an organization should promote user trust by ensuring that:
- their Web site does not needlessly ask for information that users may be hesitant to supply, and
- their site compares favorably to those of competitors with regard to users’ perceptions of privacy.

References


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