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CONSUMER PRIVACY: WHAT INFORMATION DO WEB SITES COLLECT?

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Abstract

This article discusses the results of an updated consumer privacy survey based on the original version of the FTC survey. Its main objective was to find out what kind of personal information web sites are collecting from consumers today, and which web sites offer privacy notices regarding the handling and collection of personal information on their web site.

Introduction

Businesses must recognize that "companies lose out \$12 billion a year because consumers don't feel safe online, and many B2B transactions and information- sharing don't happen because partners don't quite trust the Internet" (Preston, 2001, p. 9). In a survey sponsored by the National Consumer League, it was reported that U.S. Internet users fear loss of privacy more than crime, poor health care, or high taxes (Merrick, 2001). Internet users' main concerns relate to the area of privacy of online financial information (Merrick, 2001):

- 1. 88% are worried about posting their credit card numbers online,
- 2. 61% worry about supplying their names and addresses,
- 3. 53% are afraid someone will steal their financial information,
- 4. 64% believe web sites will share their personal information, and
- 5. 59% worry web sites will collect information without their knowledge.

The online privacy problem is related to the structure of the web, "which is built to easily and automatically collect, share, and distribute information about its users" (Rombel, 2001, p. 26). Whenever Internet users go online, a path of personal information is left behind, and that information is used to provide consumers with personalized services, to build profiles on individuals, and sold to other companies or individuals (Rombel, 2001). Sarah Andrews, a policy analyst for the Electronic Privacy Information Center, states that the U.S. "lags behind nearly every other country in online privacy protection for consumers" (Fortune, 2001, p. 27). Currently, business leaders and lawmakers have only pressed for industry self-regulation, which means that "companies tell you what they do with your data, and you should trust them to abide by self-imposed privacy standards" (Fortune, 2001, p. 27). Most experts agree that the best way for consumers to protect their privacy is to find the privacy policy of a web site and to read the policy to see why the information is needed, what are they going to do with it, and how they will protect it (Fortune, 2001).

1998 Federal Trade Commission Survey

A March 1998 survey conducted by the Federal Trade Commission surveyed 1,402 commercial sites on the World Wide Web with an objective "to determine whether self-regulation is an effective means of protecting consumer privacy on the Web" (Federal Trade Commission, Survey of Commercial Web Sites, FTC-SCWS). To accomplish their objective, the Federal Trade Commission surveyed commercial web sites to determine how many are "offering notice of their information practices and offering consumers choice regarding the collection and use of their personal information online" (FTC-SCWS). The survey consists of six samples: group A, the Comprehensive Sample, which consists of U.S. commercial sites "likely to be of interest to consumers;" groups B, C, and D, sites in the health, retail, and financial sectors, respectively; group E, the

Children Sample, includes commercial U.S. sites "primarily directed to children aged 15 or younger;" and group F, which is made up of the most popular U.S. commercial sites. There are 674 sites in group A, 137 sites in group B, 142 sites in group C, 125 sites in group D, 212 sites in the group E, and 111 sites in group F.

Our 2001 Consumer Privacy Survey

We have compiled an updated consumer privacy survey based on the original version of the FTC survey, with our main objective to find out what kind of personal information web sites are collecting from consumers today, and which web sites offer privacy notices regarding the handling and collection of personal information on their web site.

Reasons for Data Collection by Companies

The Internet enables companies to conduct direct marketing through detailed customer profiles, sophisticated data mining, and one-to-one marketing solutions. Businesses regularly collect data on purchased products, prices paid, how purchases are paid for (cash, credit or debit card), repeat purchases, and customer demographics. Data that is collected is examined to identify customer behavior and buying patterns that the retailer can exploit by focusing more effectively on critical business activities such as better managing its supply chain, which ultimately, leads to higher profits.

Using data mining, a business can identify which customers are profitable and which are not, allowing them to target market. If properly used, the data that is mined can increase customer retention by improving customer relationship management. According to Alltel's vice president of marketing communications, Denise Nieves, Alltel has become "more granular in our approach to the customer by using data mining" because "gaining the ability to view and analyze customer information on the Internet has accelerated Alltel's information gathering process significantly" (Young, 2000, p. 44). Therefore, another benefit of data mining is that it can reduce the time required to analyze customer information.

1998 Federal Trade Commission Survey

Collection of Personal Information

The Federal Trade Commission (FTC-SCWS) categorized personal information into two groups: "personal identifying information," which is information that can be used to identify consumers, such as name, postal or e-mail address; and "non-identifying information," such as demographic and preference information (i.e., age, gender, income level, hobbies, or interests) that can be used either in aggregate form for market analysis or used together with personal identifying information to create detailed personal profiles of consumers.

Results of the 1998 FTC Survey

The FTC survey found that, of those web sites examined, 97% collected personal information, with 97% collecting personal identifying information and 68% collecting non-identifying information. The percentage of web sites that only collected non-identifying information was 1%, while 87% collected personal identifying information other than e-mail. The majority of all web sites collected several types of personal information, both personally identifying and non-identifying.

In contrast to the number of sites that collected personal information, the number of sites in the random samples that had any type of information practice disclosure (i.e., either a Privacy Policy Notice or an Information Practice Statement) is lower. In the random sample, 88% provided at least one privacy disclosure, 62% posted a privacy policy, 79% posted an information practice statement, and 76% had a link from their home page to the privacy policy, assuming such a policy existed.

The percentage of sites that collected personal information and posted at least one privacy disclosure is 90%; 64% collected personal information and posted a privacy policy, and 81% collected personal information and posted an information practice statement.

The percentage that collected personal identifying information and provided choice for the use of or stated they did not use personal information to send communications to consumers is 71%, and 61% provided choice for the disclosure of or said they did not disclose personal identifying information to third parties.

Of those web sites that collect personal identifying information, the percentage that stated anything about whether the site used personal information to send communications was 78%, while the percentage that stated they did not use personal information to send communications was only 4%. The percentage of all web sites where third parties attempted to place cookies and the percentage that disclosed that third parties might place cookies is 54% and 22%, respectively.

Methodology

Sample Selection

The survey was made up of 200 web sites, which included sites chosen at random from a large sampling of sites and sites chosen from the top 100 most popular sites. The top 100 web sites were used because of their significant consumer base. Another hundred sites were chosen at random sample from a list from the Federal Trade Commissions Report to Congress. From these 200 web sites chosen, they were distributed with the intent that each surveyor surveyed two sites of random sampling and two sites from the top 100 most popular web site list.

Final Samples

In order to ensure that no site was duplicated, extra sites were available. Other problems that occurred were sites that no longer existed were unattainable, and some computer problems occurred. Also, all foreign sites were excluded from the web site selection. Since some surveyors did not complete the survey, we were unable to collect information on all 200 web sites. In total, 138 surveyed web sites were collected. Each of the sampling groups (top 100 web sites and random samples) had a total of 69 web sites collected. The following table gives a broad outline of the results that we found and eventually used to complete the research portion of this paper.

| Sample | # Sites Examined | # Sites Excluded | Final Sample Size |
|--------------|------------------|------------------|-------------------|
| Random | 100 | 7 | 93 |
| Most Popular | 100 | 10 | 90 |

The Survey

The survey was divided into seven parts. The seven parts were: (a) types of information collected, (b) privacy policy notice, (c) content of disclosures, (d) corrections of personal information, (e) security of sites, (f) cookies, and (g) site demographics. The paper examined parts 1, 2, 4, and 6 of this survey. For those interested in viewing the survey in its entirety, it is located at http://www.sizzlingsolutions.com/reasearch/research.htm

Results

In our research process, we compared the 1998 data collected from the FTC report against our 2001 data. In order to easily compare the data, eight appendices were constructed. The results show that, in the random sample category, the results for 1998 and 2001 remain consistent overall, and, in the most popular web sites category the results for 1998 and 2001 differ significantly. A more in-depth look at the specific numbers is needed in order to fully understand the relationship between web sites and consumer privacy. The overall majority of web sites collected personal information. This has not changed much from 1998 to 2001. In fact, the percentage jumped by 1% to 98% in the random sample category, as seen in Appendix

Appendix 1 shows that collecting personal information, whether identifying or non-identifying, is just as important in 2001 as it was in 1998. One of the most important pieces of information asked for is a customer's e-mail address. E-mail was asked for in at least 95% of the web sites in both categories in 1998 and in the random sample category in 2001. However, in the 100 most popular web site categories, only 83% of the web sites asked for an e-mail address. This 16% decrease from 1998 may have occurred for a number of reasons that will be discussed later.

Although at least 97% of the random sample web sites in both years asked for personal information, Appendix 2 shows only 88% posted at least one privacy disclosure in 1998, and only 87% posted at least one in 2001.

However, what Appendix 2 also shows is that the 100 most popular web sites are more likely to post at least one privacy disclosure: 100% in 1998 and 96% in 2001. The decrease from 1998 to 2001 resulted primarily from the inclusion of web sites in the sample that were based in countries where privacy was not as important as it is in Europe and the U.S. This percentage is so large since companies realize customers want to be able to read and understand how their personal information is going to be protected. The reason why the 100 most popular web sites may be popular is because they offer their customers the opportunity to feel safe.

Appendix 3 combines information from both Appendix 1 and 2 to provide a different perspective on the data. One can deduce from Appendix 3 that web sites that collect personal identifying information post privacy disclosures at about the same percentage as web sites in general. Furthermore, the number of web sites that collect personal identifying information and post at least one privacy disclosure remained level from 1998 to 2001. In 1998, 100% of the most popular web sites collected personal identifying information. In 2001, 89% of the most popular group posted at least one privacy disclosure. Although at first glance it looks as if only 88% of the 100 most popular web sites post at least one disclosure, this is not so. Out of a total of 91 most popular web sites, 80 of those web sites collect personal identifying information and post at least one privacy disclosure. Since Appendix 1 shows that 81 out of 91 most popular web sites collect personal identifying information, that same number is posting at least one privacy disclosure or almost 100%.

Our data show that web sites continue to be concerned about consumer privacy happiness and legal restrictions. Whether a web site is one of the most popular, part of a random sample, collects or does not collect personal identifying information, it will most likely post a privacy disclosure. The disclosure is a way to reduce liability should a lawsuit arise, since it typically states how the information is going to be used and how the consumer will be protected, if at all. It also makes consumers feel more comfortable since they can see in writing what is happening to their information. Although many consumers do not take the time to read such a privacy disclosure, knowing that it appears on the web site instills relief and trust in the consumer towards the web site.

Appendix 4 examines the topic of choice. Choice in this context means the consumers' ability to choose how information collected from them may be used.

It would seem that web sites would want their customers to have choice. This is why they offer a variety of products and services. In fact, it is choice that makes the Internet and web sites so appealing to consumers—the choices to shop whenever I want, wherever I want, and buy whatever I want. The success of web sites is based on choice. Yet when it comes to providing customer choice regarding personal information and how that information is used, web sites are not so eager to allow choice. In 1998, 88% of the most popular web sites allowed customer choice regarding personal information being used to send communications to them and a mere 46% in 2001. That number was a high of 77% in 1998 and dropped to a low of 46% in 2001 (most popular group) when the choice concerns personal identifying information and whether it is sent to third parties.

Consumer choice is one aspect that is addressed in a privacy disclosure. Another aspect is information practice. Some web sites collect personal information and then send that information to third parties. Or, they may use that information to send customers communications/announcements via e-mail, mail, or telephone. An ethical question comes into play, however, when the topic of disclosure regarding these practices comes into question. In other words, do web sites announce that they use personal identifying information for such practices stated above? According to Appendix 5, between 66% and 72% of all web sites surveyed in 2001 said something about whether they used personal information to send communications. Only 65% to 70% said that they would disclose personal identifying information to third parties.

Although these percentages seemed low, they were comparable to the 1998 statistics in the random sample category except for the number of web sites that said they do not use personal information to send communications. This number was much higher in 2001. However, the percentages in the 100 most popular web sites category were much lower in 2001 than in 1998. This was not surprising considering the number of information practice statements (Appendix 3) posted in 2001 was only 31%, while in 1998 it was 91%.

It has already been discussed that the vast majority of web sites collect personal identifying information. But, what percentages of those web sites allow for that information to be updated, corrected, or deleted? The data thus far has shown that, for the most part, the random sample category has stayed the same from 1998 to 2001 and that it is the 100 most popular web site category that has differed greatly. According to Appendix 6, the opposite is true.

There was a 53% increase in the number of random sample web sites that allow consumers to review at least some personal information. Web sites may be increasingly more concerned over the level of comfort their customers feel. By allowing customers to have some control over their own information, they may be willing to re-visit that site. It will be interesting to see in the future if the most popular web sites will adopt this practice or if it has no bearing on a web site's popularity.

Yet another aspect of consumer privacy is the issue of security. Security issues come in two parts—security during transmission and security after receiving. With all of the new legalities and government inquiries concerning consumer privacy on the web, one would assume that there would be an increasing trend in the number of web sites that say they provide elements of security, both during and after transmission. While this is the case for the random sample web sites, it is not true for the 100 most popular web sites, as seen in Appendix 7.

Web sites contained in the random sample have increased their disclosure regarding security during transmission and after receipt. Like the issue of access (Appendix 6), this issue may have something to do with customers' perceptions. Web sites want their customers to return regularly. The web sites that are in that category now don't seem to be doing what they need to in order to stay there. Unlike the random sample, the 100 most popular web sites that say they provide steps toward security have decreased.

It should be noted that a complete comparison of data cannot be made since the 1998 data for the 100 most popular web sites was not available with respect to cookies. However, from looking at the random sample category, 32% fewer sites are allowing for third-party cookies. What the data also shows is that not all sites where third-party cookies are placed disclose that this practice occurs. It should also be noted that there is a 39% increase in the number of third-party cookies that are placed when comparing the 100 most popular web sites of 2001 to the random sample of 2001. Perhaps this is because third parties realize they will gain more information if they use the popular web sites as compared to more random sites. It is both more efficient and effective for them.

Analysis

Generalization about the results can be made. The results from the random sample data were consistent from 1998 to 2001, whereas large discrepancies occurred among the 100 most popular web sites results from 1998 to 2001.

The similarity in results for the random sample category (1998 and 2001) and the difference in results for the 100 most popular web sites category (1998 and 2001) could have occurred for a number of different reasons.

The inconsistency in the 1998 results compared with the 2001 results in the 100 most popular web site categories is that the most popular web sites are updating or changing their practices. Because these web sites are the most popular, they may be trying to keep their customers happy by not asking for as much personal information. Or, they may be complying with privacy self-regulations more than those web sites that do not receive as many hits. Since the *Double Click* problem and the increased amount of legal action and government inquiries, web sites have been trying to use more caution and self-regulate more when it comes to consumer privacy. Whatever the reason, when a web site is one of the 100 most popular, it wants to remain as one of the 100 most popular. This causes the site to update/change its practices, thus possibly explaining the large differences in survey results from 1998 to 2001.

A final reason for the discrepancies is human error. Although each site was examined twice by two different individuals, errors may still have occurred. Some of these errors occurred because of differences in interpreting the meanings of the questions, the inability to find an answer on a particular web site, even though the answer was there, or simply answering the question incorrectly.

Conclusion

The Internet provides consumers greater opportunity to research products and services. In addition, it is also making consumers more aware of the information being collected about their personal lives. By conducting research on web sites' policies and procedures, consumers can make conscious decisions about what information they feel comfortable about giving away. As previously stated, web sites from the U.S. are lacking a focus on privacy that often characterizes many European web sites. Web sites are daily collecting information about consumers, anything from name to phone number, and hobbies to

the number of children in a household. Consumers need to educate themselves on the importance of protecting their privacy. It is up to the web sites and the business associated with them to make the consumer feel comfortable with the information being collected, and ensure that privacy integrity is as important to the business as it is to the consumer.

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Appendix I
Percent of Websites that Collected Personal Information in March, 1998

| | Random Sample | | Most Pop | ılar Group |
|--|----------------------|---------|----------|------------|
| | Percent | Number | Percent | Number |
| Collected Personal Information | 97% (95.0%-98.8%) | 326/335 | 99% | 90/91 |
| Collected Personal Identifying Information | 97% (94,2%-98.3%) | 324/335 | 99% | 90/91 |
| Collected Personal Identifying Information other than E-mail | 87% (82.8%-90.3%) | 291/335 | 96% | 87/91 |
| Collected E-mail | 96% (92.7%-97.5%) | 320/335 | 99% | 90/91 |
| Collected Non-Identifying Information | 68% (62.5%-72.7%) | 227/335 | 77% | 70/91 |
| Collected Non-Identifying Information Only | 1% (0.1%-2.1%) | 2/335 | 0% | 0/91 |

Percent of Websites that Collected Personal Information in March, 2001

| | Random | Sample | Most Popt | ular Group |
|--|---------|--------|-----------|------------|
| | Percent | Number | Percent | Number |
| Collected Personal Information | 98% | 91/93 | 89% | 80/90 |
| Collected Personal Identifying Information | 97% | 90/93 | 90% | 81/90 |
| Collected Personal Identifying Information other than E-mail | 90% | 84/93 | 86% | 77/90 |
| Collected E-mail | 95% | 88/93 | 83% | 75/90 |
| Collected Non-Identifying Information | 50% | 46/93 | 52% | 47/90 |
| Collected Non-Identifying Information Only | 0% | 0/93 | 0% | 0/90 |

[&]quot;Personal Information" includes the following: personal identifying information such as name, address, e-mail address, and telephone number; and non-identifying information. Non-identifying information can either be demographic information (age, gender, education level, and income) or preference information like hobbies and interests.

Figures in parentheses represent the 95% binomial confidence interval for each calculated percentage.

There is no sampling error for Most Popular Group data, because the results were obtained using a census as opposed to a sample.

Appendix 2
Percent of Websites With a Privacy Disclosure in March, 1998

| | Random S | Sample | Most Pop | ular Group |
|---|----------------------|---------|----------|------------|
| | Percent | Number | Percent | Number |
| Web Site Contained at Least One Privacy Disclosure | 88% (83.4%-91.1%) | 294/335 | 100% | 91/91 |
| Web Site Contained a Privacy Policy | 62% (56.4%-67.0%) | 207/335 | 97% | 88/91 |
| Web Site Contained an Information Practice Statement | 79% (74.0%-83.1%) | 264/335 | 90% | 82/91 |
| Web Site Contained a link from the home page to the privacy policy, assuming such a policy exists | 76% (69.4%-81.5%) | 157/207 | 94% | 83/88 |

Percent of Websites With a Privacy Disclosure in March, 2001

| | Randon | Sample | Most Popu | ular Group |
|---|---------|--------|-----------|------------|
| | Percent | Number | Percent | Number |
| Web Site Contained at Least One Privacy Disclosure | 87% | 81/93 | 96% | 86/90 |
| Web Site Contained a Privacy Policy | 61% | 57/93 | 96% | 86:90 |
| Web Site Contained an Information Practice Statement | 61% | 57/93 | 39% | 35/90 |
| Web Site Contained a link from the home page to the privacy policy, assuming such a policy exists | 94% | 76/81 | 94% | 81/86 |

A "Privacy Disclosure" can be either a "privacy policy", defined as a comprehensive description of a Web site's information practices that is located in one place on the site and may be reached by clicking on an icon or hyperlink, or an "information practice statement," defined as a discrete statement that describes a particular practice regarding consumers' personal information.

Appendix 3
Of Those Web Sites That Collected Personal Identifying Information,
Percent With a Privacy Disclosure in March, 1998

| | Random Sample | | Most Popi | ular Group |
|--|----------------------|---------|-----------|------------|
| | Percent | Number | Percent | Number |
| Web Site Contained at Least One Privacy Disclosure | 90% (86.7%-93.4%) | 293/324 | 100% | 90/90 |
| Web Site Contained a Privacy Policy | 64% (58.1%-68.2%) | 206/324 | 97% | 87/90 |
| Web Site Contained an Information Practice Statement | 81% (76.5%-85.3%) | 263/324 | 91% | 82/90 |

Of Those Web Sites That Collected Personal Identifying Information, Percent With a Privacy Disclosure in March, 2001

| | Random Sample | | Most Popular Group | |
|--|---------------|--------|--------------------|--------|
| | Percent | Number | Percent | Number |
| Web Site Contained at Least One Privacy Disclosure | 88% | 82/93 | 89% | 80/90 |
| Web Site Contained a Privacy Policy | 86% | 80/93 | 87% | 78/90 |
| Web Site Contained an Information Practice Statement | 94% | 87/93 | 31% | 28/90 |

Appendix 4

Of Those Web Sites That Collected Personal Identifying Information,
Percent That Provide Elements of Choice in March, 1998

| | Random Sample | | Most Popi | ular Group |
|---|----------------------|---------|-----------|------------|
| | Percent | Number | Percent | Number |
| Web Site Provided Choice, for the Use of, or Said They Did Not Use, Personal Information to Send Communications to Consumers | 71% (65.7%-75.9%) | 230/324 | 88% | 79/90 |
| Web Site Provided Choice for the Disclosure of, or Said They Did Not Disclose, Personal Identifying Information to Third Parties | 61% (55.3%-66.2%) | 197/324 | 77% | 69/90 |

Of Those Web Sites That Collected Personal Identifying Information, Percent That Provide Elements of Choice in March, 2001

| | Random Sample | | Most Popt | ılar Group |
|---|---------------|--------|-----------|------------|
| | Percent | Number | Percent | Number |
| Web Site Provided Choice, for the Use of, or Said They Did Not Use, Personal Information to Send Communications to Consumers | 63% | 59/93 | 46% | 41/90 |
| Web Site Provided Choice for the Disclosure of, or Said They Did Not Disclose, Personal Identifying Information to Third Parties | 68% | 63/93 | 43% | 39/90 |

[&]quot;Communications to Consumers" includes any communications other than those directly related to processing an order or responding to a consumer's question.

[&]quot;Third Parties" was defined as any entity other than the assigned domain such as advertisers, affiliates, subsidiaries, business partners, or other companies.

Appendix 5

Of Those Web Sites That Collected Personal Identifying Information, Percent That Disclosed Whether They Did or Might Use Personal Information to Send Communications to Consumers or to Third Parties in March, 1998

| | Random S | ample | Most Pop | ular Group |
|--|----------------------|---------|----------|------------|
| | Percent | Number | Percent | Number |
| Web Sites that Stated Anything About Whether the Site Used Personal Information to Send Communications | 78% (73.5%-82.8%) | 254/324 | 98% | 88/90 |
| Web Sites that Stated They Did or Might Use Personal Information to Send Communications | 75% (69.6%-79.3%) | 242/324 | 96% | 86/90 |
| Web Sites that Stated They Did Not Use Personal Information to Send Communications | 4% (1.9%-6,4%) | 12/324 | 2% | 2/90 |
| Web Sites that Stated They Did or Might Disclose Personal Identifying Information to Third Parties | 52% (46.3%-57.4%) | 168/324 | 80% | 72/90 |

Of Those Web Sites That Collected Personal Identifying Information, Percent That Disclosed Whether They Did or Might Use Personal Information to Send Communications to Consumers or to Third Parties in March, 2001

| | Random | Sample | Most Popt | alar Group |
|---|---------|--------|-----------|------------|
| | Percent | Number | Percent | Number |
| Web Sites Stated Anything About Whether the Used Personal Information to Send Communications | 72% | 67/93 | 66% | 59/90 |
| Web Sites Stated They Would Use Personal Information to Send Communications | 66% | 61/93 | 63% | 57/90 |
| Web Sites Stated They Did Not Use Personal Information to Send Communications | 20% | 19/93 | 6% | 5/90 |
| Web Sites Stated Would Disclose Personal Identifying Information to Third Parties | 65% | 60/93 | 70% | 63/90 |

Appendix 6
Of Those Web Sites That Collected Personal Identifying Information,
Percent That Provided Elements of Access in March, 1998

| | Random S | ample | Most Pop | ular Group |
|--|----------------------|---------|----------|------------|
| | Percent | Number | Percent | Number |
| Web Sites That Allowed Consumers to Review at Least Some Personal Information | 21% (16.4%-25.5%) | 67/324 | 48% | 43/90 |
| Web Sites That Allowed Consumers to Have at Least Some Personal Information Corrected | 37% (31.8%-42.5%) | 120/324 | 78% | 70/90 |
| Web Sites That Allowed Consumers to Have at Least Some Personal Information Deleted | 17% (13.3%-21.8%) | 56/324 | 31% | 28/90 |

Of Those Web Sites That Collected Personal Identifying Information, Percent That Provided Elements of Access in March, 2001

| | Random Sample | | Most Popular Group | |
|--|---------------|--------|--------------------|--------|
| | Percent | Number | Percent | Number |
| Web Sites That Allowed Consumers to Review at Least Some Personal Information | 74% | 69/93 | 54% | 49/90 |
| Web Sites That Allowed Consumers to Have at Least Some Personal Information Corrected | 65% | 60/93 | 58% | 52/90 |
| Web Sites That Allowed Consumers to Have at Least Some Personal Information Deleted | 51% | 47/93 | 28% | 25/90 |

Appendix 7
Of Those Web Sites That Collected Personal Identifying Information,
Percent That Provided Disclosures About Elements of Security in March, 1998

| | Random Sample | | Most Popular Group | |
|--|----------------------|---------|--------------------|--------|
| | Percent | Number | Percent | Number |
| Web Sites That Stated Steps Are Taken to Provide any Security | 55% (49.7%-60.7%) | 179/324 | 74% | 67/90 |
| Web Sites That Stated Steps Are Taken to Provide Security During Transmission | 39% (33.2%-44.1%) | 125/324 | 54% | 49/90 |
| Web Sites That Stated Steps Are Taken to Provide Security After Receipt | 29% (23.8%-34.0%) | 93/324 | 48% | 43/90 |

Of Those Web Sites That Collected Personal Identifying Information, Percent That Provided Disclosures About Elements of Security in March, 2001

| | Random Sample | | Most Popular Group | |
|--|---------------|--------|--------------------|--------|
| i- | Percent | Number | Percent | Number |
| Web Sites That Stated Steps Are Taken to Provide any Security | 70% | 65/93 | 47% | 42/90 |
| Web Sites That Stated Steps Are Taken to Provide Security During Transmission | 59% | 55/93 | 29% | 26/90 |
| Web Sites That Stated Steps Are Taken to Provide Security After Receipt | 56% | 52/93 | 33% | 30/90 |

Appendix 8

Percent of All Web Sites Where Third Parties Attempted to Place Cookies and Percent that Disclosed That Third Parties May Place Cookies in March, 1998

| | Random Sample | | Most Popular | |
|--|--------------------------|---------|-------------------|-------------------|
| | Percent | Number | Percent | Number |
| Third Party Cookie | 57% (51.8%- 62,7%) | 192/335 | No Data Available | No Data Available |
| Disclosure that Third Parties Might Place Cookies/Collect Information on Site | 22% (16.2%- 83.8%) | 42/192 | No Data Available | No Data Available |

Percent of All Web Sites Where Third Parties Attempted to Place Cookies and Percent that Disclosed That Third Parties May Place Cookies in March, 2001

| | Random Sample | | Most Popular | |
|--|---------------|--------|--------------|----------|
| | Percent | Number | Percent | Number ' |
| Third Party Cookie | 25% | 23/93 | 64% | 58/90 |
| Disclosure that Third Parties Might Place Cookies/Collect Information on Site | 17% | 16/93 | 49% | 44/90 |