2004 Survey: Understanding America's Perception of Internet Advertising and Consumer Privacy

Overview

Revenue Science, Inc. the leading provider leader in providing behaviorally-targeted audiences for Web advertising and Chapell & Associates, a premier research and consulting firm focusing on privacy-marketing commissioned The Poneman Institute to survey consumers on their attitudes about internet advertising and consumer privacy.

Executive Summary

Although consumers are extremely frustrated by advertising clutter, they continue to visit websites and make purchases as a result of their exposure to Internet ads. The 2004 survey found strong anti-banner ad sentiment among consumers. Nearly 60 percent of respondents said banner ads were "always annoying"—a frustration level just below that exhibited toward spam and telemarketers.

The survey reveals that consumers want more targeted and relevant online ads, but are hesitant to pay for online content or for a technology solution that would reduce ad clutter. This survey shows that consumers prefer banner ads that are relevant to their needs and interests by a 2 to 1 margin over those that are not relevant. Fifty-two percent of consumers said that they would be more likely to click on targeted ads than others. Moreover, although some consumers are willing to provide Personally Identifiable Information (PII) in order to reduce clutter, most consumers prefer to receive targeted ads that don't require the collection of PII.

Most Salient Findings

The purpose of this survey is to understand Americans' attitudes about the ads they receive when browsing or visiting various Web sites on the Internet. An overall analysis of the results leads us to the following conclusions:

- We see a high level of consumer frustration over ad clutter: many respondents perceive banner ads as annoying, intrusive, and irrelevant.
- Most Respondents felt strongly that banner ads are intrusive and interfere with browsing. Almost as many respondents indicate that banner ads were generally not tailored to their interests or tastes.
- Despite frustration with Internet ads, respondents are not willing to spend money in order to reduce ad clutter.
- Despite frustration over ad clutter, banner ads appear to be effective at getting people to browse and buy.
- Respondents prefer targeted banner ads over non-targeted ads as they found them to be less annoying, more relevant and more likely to induce an interaction than non-targeted banner ads.
- Respondents are more comfortable getting targeted ads that don't rely upon PII.

Survey and Sample

The purpose of this survey is to understand Americans' attitudes about the ads they receive when browsing or visiting various Web sites on the Internet. Our main object is to provide information to business marketers about how they can best utilize Internet ads to improve communication and outreach to consumers. The 25 survey items included in our instrument were carefully selected to assess the public's perceptions of ad delivery methods, profiling techniques employed by the Web marketer and the importance of their personal privacy.

Respondents were asked to frame their answers based on the following definition at the outset of the Web survey instrument:

> An Internet ad is an advertisement delivered to you when browsing, visiting various Web sites or conducting a search. Most Internet ads are delivered to you in three ways: as pop-ups, banners, or text, respectively. Unless specified in the question, please assume that all items that refer to Internet advertisements pertaining to banner ads (<u>not</u> pop ups or text ads).

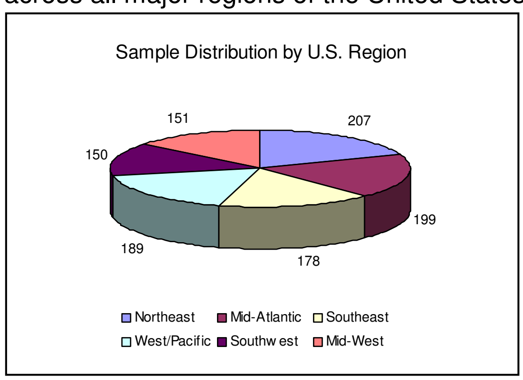
Our survey was carefully designed and edited based upon direct feedback from the sponsoring organization Revenue Science and Chapell & Associates. The study relied on the collection of a Web collection channel because the topic area (Internet ads) is only applicable to an Internet audience.

A fixed cluster sampling plan was used with two pre-selection criteria: (1) individuals must be at least 18 years of age and (2) individuals must have daily access to the Internet either from home computer, business computer or both. All subjects were given a ten (10) day response window to complete the survey for compensation set at $5 per completed instrument. Following are the response statistics, resulting in a usable sample of 1,074 individuals (15% response rate).

Response Statistics	Freq	Pct%
Total Sampling Frame	7063	100%
Total Response	1206	17%
Total Rejected	132	2%
Total Sample	1074	15%

All questions were tested with panel to determine readability and complexity of the instrument. The following table shows the sample distribution across all major regions of the United States.

Geographic regions	Freq	Pct%
Northeast	207	19%
Mid-Atlantic	199	19%
Southeast	178	17%
West/Pacific	189	18%
Southwest	150	14%
Mid-West	151	14%
Total	1,074	100%



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The following tables and graphs report the frequency and percentage distribution of subjects for 25 items presented in our survey instrument.

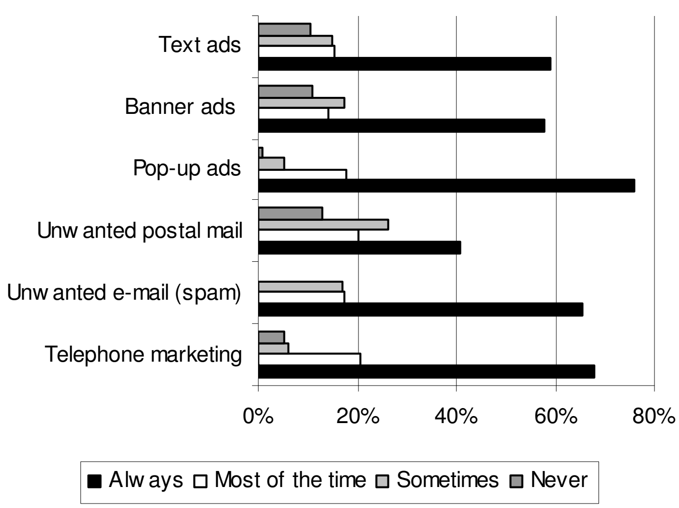
Table 1 shows distribution of the sample according to knowledge of different Internet ad delivery methods.

1. Do you know the differences among pop-up, banner and text ads that you are likely to receive when browsing or visiting various Web sites on the Internet?	Freq	Pct%
Yes	568	53%
No	506	47%
Total	1074	100%

Table 2 reports the results on how invasive or annoying the public views different marketing outreach methods. Please note that pop up ads are viewed as "always annoying" more than other marketing outreach methods listed, including telemarketing and spam.

2. Please rate the following advertising practices using the following scale:					
Place the number (1-4) that best expresses your belief about how "annoying" the following ads are to you.	Always	Mostly	Some-times	Never	Total
Telephone marketing	722	221	65	55	1063
Unwanted e-mail (spam)	688	183	179	3	1053
Unwanted postal mail	423	211	272	135	1041
Pop-up ads	788	186	53	10	1037
Banner ads	590	145	176	110	1021
Text ads	602	158	155	109	1024

Following is a graphic showing the percentage of responses to question 2.



The following table reports the point average from 1 to 100 scaled as a point estimate, and the percentile distribution of responses concerning the degree to which banner ads are viewed as an annoyance. The following scale was used in this item:

- 100 points means that you absolutely agree with the statement.
- 50 points means that you neither agree nor disagree with the statement.
- 1 point means that you absolutely disagree with the statement.

3. Are banner ads annoying to you? If yes, please rate the following statements using the following scale:						
Place the one number (1 to 100) that best expresses your level of agreement with each of the following statements.	Average	0<25	25<50	50<75	75<100	Total
Banner ads interfere with my browsing	91.6	11	182	236	633	1062
Banner ads are intrusive	93.9	21	107	247	679	1054
Banner ads are never applicable to my interest areas or needs	82.4	129	129	247	560	1065
Banner ads typically have offensive content	34.2	204	451	256	123	1034
Banner ads violate my sense of privacy	54.8	129	322	354	263	1068
Banner ads are not annoying	13.6	547	268	139	106	1060

The following graph shows the percentage distribution of responses. Clearly, most people have strongly held beliefs that banner ads are intrusive or interfere with their Web browsing activities. Very few people state that banner ads are not annoying to them.

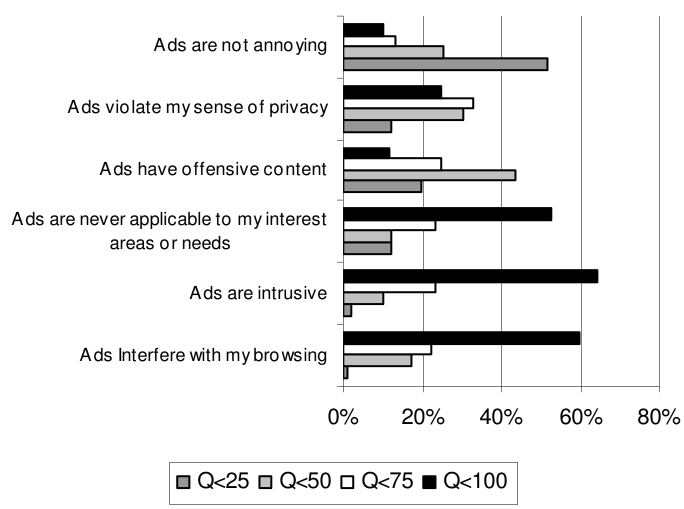


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Table 4 reports the point average from 1 to 100 scaled as a point estimate, and the percentile distribution of responses to determine if banner ads are ever viewed as interesting or valuable to consumers. The same scale was used as in Question 3.

4. Are banner ads ever of interest or value to you? If yes, please rate the following statements using the following scale:						
Place the one number (1 to 100) that best expresses your level of agreement with each of the following statements.	Average	0<25	25<50	50<75	75<100	Total
Banner ads are of interest to me most of the time	5.3	665	204	129	52	1050
Banner ads are sometimes of interest to me	17.1	364	493	139	61	1057
Banner ads are rarely of interest to me	79.7	129	107	364	455	1055
Banner ads are never of interest to me	78.0	54	357	254	395	1060

The following graph shows the percentage distribution of responses. Clearly, most people have strongly held beliefs that banner ads rarely of interest to them. Very few people state that banner ads are of interest most of the time.

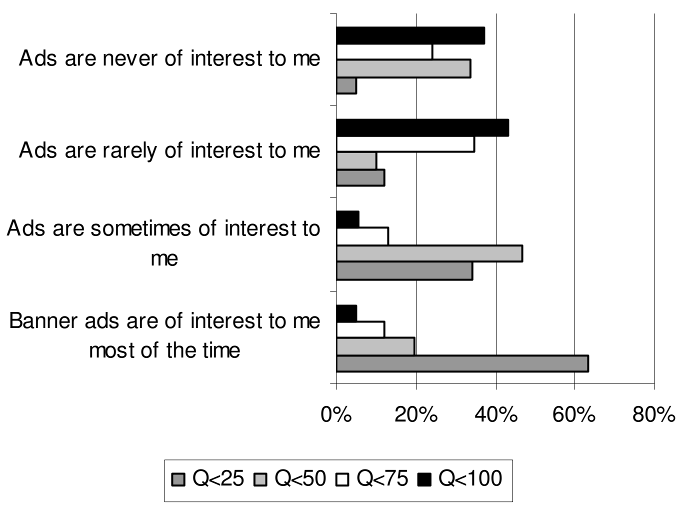

Table 5 shows that 31% of respondents said that they responded to a product or promotional offer made from an Internet advertisement. This is an interesting finding because most people said that they found banner ads annoying, intrusive and of little value.

5. Did you ever respond to banner ads, such as linking to the advertiser's Web site to see the product pitch or promotional offer that was communicated to you?	Freq	Pct%
Yes	329	31%
No	518	48%
Unsure or can't recall	224	21%
Total	1071	100%

Table 6 shows another surprising finding. That is, seven percent of subjects (which is a very high success rate) state that they actually made a purchase or engaged a service based on a response to a banner ad. Again, this result is interesting because so many respondents clearly hold an unfavorable view of banner ads.

6. Did you ever purchase a product or service based on your response to the banner ad?	Freq	Pct%
Yes	78	7%
No	840	78%
Unsure or can't recall	155	14%
Total	1073	100%

Table 7 reports the point average from 1 to 100 scaled as a point estimate, and the percentile distribution of responses to determine if banner ads appear to target the consumer in terms of specific interests, preferences, tastes and needs. The same scale was used as in Question 3.

7. Do banner ads appear to target you in terms of your specific interests, preferences, tastes or needs? Please rate the following statements using the following scale:						
Place the one number (1 to 100) that best expresses your level of agreement with each of the following statements.	Average	0<25	25<50	50<75	75<100	Total
Banner ads always target my specific interest areas or needs	3.928	590	289	118	58	1055
Banner ads sometimes target my specific interest areas or needs	14.7	355	429	125	147	1056
Banner ads rarely target my specific interest areas or needs	69.45	118	129	347	454	1048
Banner ads never target my specific interest areas or needs	74.96	194	268	335	241	1038

The following graph shows the percentage distribution of responses. Clearly, most people have strongly held beliefs that banner ads do not appear to target the consumer's specific areas of interest or needs. Very few people state that banner always or sometimes target them in terms of needs, tastes and preferences.

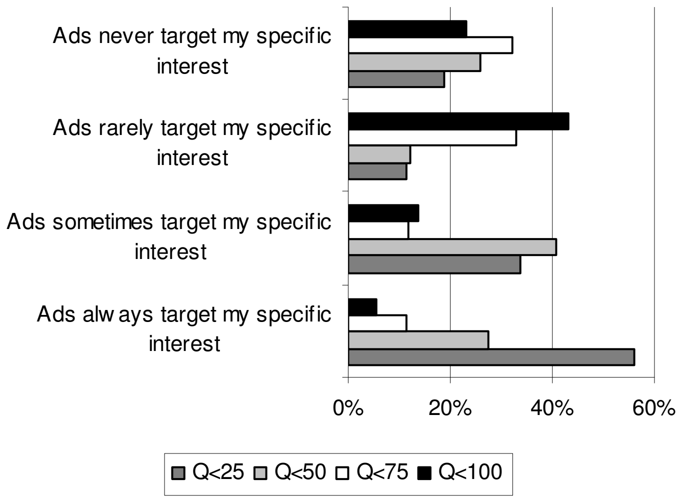

Table 8 shows that 52% of respondents would be more likely to respond to a banner ad if it was more relevant to their particular interests or needs.

8. Would you be more inclined to click on a banner ad if the product/service was more relevant to your area of interest or needs?	Freq	Pct%
Absolutely yes	132	12%
Most likely yes	425	40%
Unsure	210	20%
Most likely no	167	16%
Absolutely no	136	13%
Total	1070	100%

Table 9 shows that 66% would find banner ads less intrusive or annoying if they were more relevant to the consumer's areas of interest or needs.

9. Would you find banner ads to be less intrusive or annoying if they were more relevant to your areas of interest or needs?	Freq	Pct%
Absolutely yes	163	15%
Most likely yes	546	51%
Unsure	211	20%
Most likely no	58	5%
Absolutely no	92	9%
Total	1070	100%

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Table 10a shows that 45% of the respondents would provide additional personal information to receive more targeted ads. Also, notice that over 34% of respondents are unsure.

10a. Would you be willing to provide additional personal information about yourself to a Web marketer or merchant in order to receive banner ads that target your specific interests, preferences and tastes?	Freq	Pct%
Absolutely yes	162	15%
Most likely yes	323	30%
Unsure	369	34%
Most likely no	51	5%
Absolutely no	165	15%
Total	1070	100%

Table 10b reports the data categories that respondents feel are too sensitive or personal to share with a Web marketer, even if such sharing would results in better targeted ads to them.

10b. If you indicated Yes to Question 10a, which of the following categories of personal information would you not provide a Web marketer or merchant because you believe the information is too sensitive to share in order to get ads that are more relevant (please check all that apply).	Freq	Pct%
Credit Card Number	440	91%
Social Security Number	450	93%
Financial History	438	90%
Home Location & Telephone	76	16%
E-mail and IP Address	126	26%
Reading Preferences	415	86%
Age (Date of Birth)	156	32%
Gender	127	26%
Educational Background	202	42%
Work History	335	69%
Sexual Orientation	477	98%
Family Members	441	91%
Religious Affiliation	429	88%
Political Activities	392	81%
Legal History	462	95%

Please note that most of the data categories above were considered too sensitive or personal to share with Web marketers. The only items that did not get checked more than 50% of the time by respondents includes: home location and telephone, e-mail and IP address, age, gender, and education.

Table 11 shows that 55% of subjects feel that a technology that allowed Web marketers to achieve better targeting without collecting sensitive personal information would make them more likely to visit the Web site.

11. Would a technology that allowed a Web site to send you more targeted ads without collecting or using your personal information make you more likely to visit that site?	Freq	Pct%
Absolutely yes	158	15%
Most likely yes	423	40%
Unsure	280	26%
Most likely no	140	13%
Absolutely no	69	6%
Total	1070	100%

Table 12 supports the findings in Table 11 because it shows that 62% of respondents would be more willing to receive ads if it did not capture sensitive personal information.

12. Would you be more willing to receive a targeted ad if you knew that the ad delivered to you relied solely on technology that did not capture any personal information about you?	Freq	Pct%
Absolutely yes	185	17%
Most likely yes	478	45%
Unsure	226	21%
Most likely no	128	12%
Absolutely no	54	5%
Total	1071	100%

Table 13 suggests that verification by a legitimate third party such as TRUSTe or BBB.Online would result in higher confidence for 31% of respondents.

13. Would you be more willing to receive a targeted ad from a Web site that has a posted seal for "good privacy practices" such as TRUSTe or BBB.Online?	Freq	Pct%
Absolutely yes	94	9%
Most likely yes	236	22%
Unsure	309	29%
Most likely no	294	27%
Absolutely no	137	13%
Total	1070	100%

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Table 14 provides support for findings in earlier tables. It shows that the majority of respondents (69%) favor the use of privacy enabling technology to prevent misuse of sensitive personal data rather than third-party verification of "good" privacy practices.

14. Place the number (1 or 2) that best expresses your belief about how "important" the following practices are to you.	Freq	Pct%
The targeted ad delivered relied solely on technology that does not capture any personal information to target you?	734	69%
The targeted ad delivered relied on the capture of personal information about you, but the targeting process of the Web site was approved by an independent verification program such as TRUSTe or BBB.Online?	323	31%
Total	1057	100%

Table 15 reports the user profile for the current study in terms of active Internet use. The majority of respondents (85%) spend less than 50% of their time each day on the Internet.

15. What percentage of your average day is spent on the Internet (browsing or visiting Web sites, or doing research)?	Freq	Pct%
Less than 10% of my time	184	17%
Between 10% to 25% of my time	343	32%
Between 25% to 50% of my time	375	35%
Between 50% to 75% of my time	122	11%
Over 75%	43	4%
Total	1067	100%

Table 16 shows the rank ordering of different Web sites most frequently visited by participating subjects. It shows that Web shopping (retailers) is the most common category, followed by news sites, auctions (such as e-Bay), and sports. The least visited category is adult content sites.

16. Please rank the following eleven (11) Web site categories based on your level of interest from 1 = most interesting to you and 11 = least interesting to you (ties should get the same rank).	Average	Rank
Retailers	2.82	1
News	2.94	2
Auctions	4.34	3
Sports	4.42	4
Travel & Leisure	5.12	5
Financial & banking	5.41	6
Entertainment	5.92	7
Education	6.26	8
Chat and communications	7.26	9
Games (including gambling)	7.95	10
Adult content	9.99	11

Table 17 shows that 65% of subjects are not willing to pay for ISP services that blocked unwanted Internet ads and unsolicited messages.

17. If your ISP offered a service that blocked Internet ads in unwanted categories or unsolicited messages, would you choose it?	Freq	Pct%
Yes, at a reasonable cost	155	14%
Yes, but only if the cost is low	217	20%
Yes, but only if the service is free	494	46%
No	205	19%
Total	1071	100%

Table 18 reports that 62% of subjects have been spoofed (fake Web site that is created to look legitimate). Another 24% are unsure whether or not they were a victim of a spoofing event.

18. Have you ever received an Internet ad that presented a faked or "spoofed" Web site?	Freq	Pct%
Yes	652	62%
No	154	15%
Unsure	254	24%
Total	1060	100%

Table 19 shows that 44% of respondents believe that unwanted Internet acts should be banned by law. Another 21% are uncertain as to whether or not unwanted ads should be outlawed.

19. Do you think unwanted Internet ads should be legally banned or limited by law?	Freq	Pct%
Yes	471	44%
No	379	35%
Unsure	221	21%
Total	1071	100%

Table 20 supports the results in Table 17, showing that the majority of subjects do not strongly agree with the idea of giving up free services to avoid Internet ads. They also appear not to want to pay for current "free" services in lieu of stopping Internet ads.

20. Are you willing to pay for editorial content such as current news and articles, or search engine services such as Google or Yahoo, that you receive today for free to stop unwanted Internet ads? Please rate the following statements using the following scale:					
Place the one number (1 to 100) that best expresses your level of agreement with each of the following statements.	Average	0<25	25<50	50<75	75<100
I will pay for editorial content or search engine services to stop unwanted ads.	20.65	232	572	139	97
I will give up access to free editorial content or search engine services to stop unwanted ads.	44.07	107	557	247	148
I will accept unwanted ads to continue having free access to editorial content and search engines.	40.32	129	525	247	160

The following graph shows the percentage distribution of responses. Clearly, most people have strongly held beliefs that they will not pay for “free” Web services even if this would discontinue the delivery of annoying Internet ads.

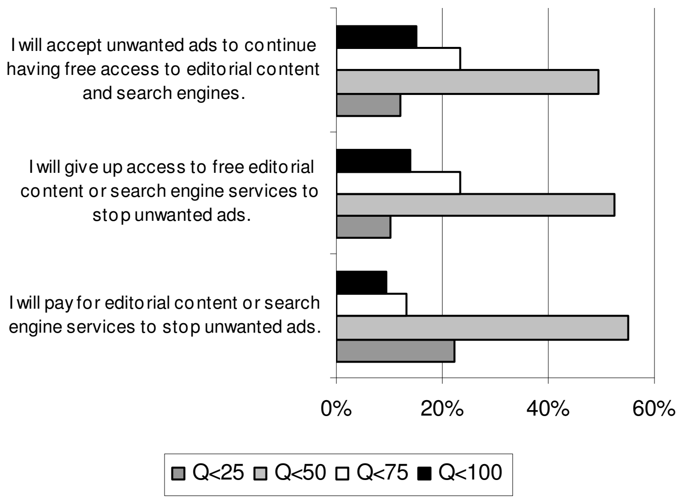

Table 21 reports that over 82% of respondents view privacy as important to them.

21. How do you feel about the privacy of your personal information?	Freq	Pct%
The privacy of my personal information is very important to me.	235	22%
The privacy of my personal is important to me.	643	60%
The privacy of my personal information is not important to me.	191	18%
Total	1069	100%

Table 22 confirms earlier Ponemon Institute studies. It shows that the number one concern for most respondents is identity theft. Stalking and spying activities, stolen assets and loss of civil liberties are other noticeably high concern areas for respondents in this study.

22. What worries you most if your personal information was leaked to individuals or organizations that do not have a right to this information (please check only those items that you have serious concerns)?	Freq	Pct%
Identity theft	980	92%
Stolen assets	620	58%
Stalking or spying activities	735	69%
Telemarketing abuse	372	35%
Unwanted e-mail activity (spam)	422	40%
Unwanted junk mail	240	23%
Loss of civil liberties	579	54%
Public embarrassment	206	19%

Table 23a shows that the majority of respondents (59%) did not know how to remove cookies from their computer system.

23a. Do you know how to delete cookies from your hard drive?	Freq	Pct%
Yes	337	32%
No	632	59%
Unsure	100	9%
Total	1069	100%

Table 23b shows that for those people who know how to remove cookies, only 39% frequently remove these unwanted cookies from their hard drive.

23b. If you indicated Yes to 23a, how often do you delete cookies from your hard drive?	Freq	Pct%
Very frequently	61	18%
Frequently	72	21%
Sometimes	101	30%
Rarely	65	19%
Never	37	11%
Total	336	100%

Table 23c shows that for those people who said they frequently remove cookies, about 25% said that the would be less likely to remove cookies that were sent without collecting personal information. Surprisingly, 46% of subjects were unsure about their action.

23c. If you indicated frequently or very frequently to 23b, would you be less likely to remove a cookie from your hard drive if you knew that this cookie was sent to you based on aggregated (group level) information and was not based on your individual private data?	Freq	Pct%
Absolutely yes	7	5%
Most likely yes	26	20%
Unsure	60	46%
Most likely no	31	24%
Absolutely no	7	5%
Total	131	100%

Table 24 provides the respondents' response to the issue of group level targeted versus profiled targeting based on private information. These data suggest that the subjects are evenly split concerning the benefits of group-level targeting versus personal information profiling.

24. How true do you believe the following statement is? *"It is better to receive an ad based on my personal information and not based on group information"*	Freq	Pct%
Always true	54	5%
Usually true	229	21%
Unsure	530	50%
Usually false	210	20%
Always false	47	4%
Total	1070	100%

Table 25 shows that more than 22% of respondents believe they were victims of a privacy or security breach. This result tracks with other recently completed Ponemon Institute studies.

25. Have you been the victim of a privacy or security breach involving your personal information?	Freq	Pct%
Yes	238	22%
No	606	57%
Unsure	228	21%
Total	1072	100%

The following tables report the study's demographics for gender, household income, and highest education level attained.

Responses	Freq	Pct%
Female	544	51%
Male	530	49%
Question total	1074	100%

Household income range	Freq	Pct%
Income < 20k	41	4%
Income 20k to 40k	105	10%
Income 41k to 60k	242	23%
Income 61k to 80k	226	21%
Income 81k to 100k	239	22%
Income 101k to 150k	99	9%
Income 151k to 200k	70	7%
Income > 200k	52	5%
Total	1074	100%

Highest level of education	Freq	Pct%
High School	252	23%
Vocational	200	19%
College (4 yr)	425	40%
Post Graduate	152	14%
Doctorate	45	4%
Total	1074	100%

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About Ponemon Institute
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About Revenue Science, Inc.
Revenue Science, Inc. is the leader in behavioral targeting for Web advertising. Revenue Science grows ad revenue for Web media publishers by finding, evaluating, and delivering customized Web audience segments that represent prime customer targets for advertisers. Revenue Science audience segments are delivered on-demand, over the Internet, and priced on an exclusive performance driven basis that completely eliminates risk for customers. The company's primary clients are leading Web publishers including The Wall Street Journal Online at WSJ.com, Marketwatch.com, Reuters.com, FinancialTimes.com, ESPN.com, and Kelley Blue Book; and advertisers include Fortune 500 companies from technology, telecommunications, healthcare, travel, finance and many other industries. For more information, visit www.revenuescience.com.

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