Internet Users and Spam: What the attitudes and behavior of Internet users can tell us about fighting spam

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1 Introduction

Data from two nationwide surveys suggest that spam is beginning to undermine the integrity of email and even to discourage its use. The vast majority of Internet users are outspoken in their disdain for spam, although enough of them respond to commercial offers that spam remains a viable source of income to spammers. While most users want to do the right thing to avoid and get rid of spam, they need clear and simple guidelines on how to behave. Data presented here offer a profile of Internet users' behavior and attitudes toward spam. This may be useful for designers and developers of anti-spam solutions, especially where solutions make assumptions about or depend on users' behavior.

2 Users' attitudes toward spam and email

In large numbers, Internet users reported that they trust email less, and 29% of users even say they use email less because of spam. Why? Users worry that the growing volume of spam is getting in the way of their ability to reliably send and receive email. They complain that it uncontrollably clutters their inboxes and imposes uninvited, deceptive, and often disgustingly offensive messages

- 63% of email users say spam has made them less trusting of email in general.
- 77% of email users say spam has made being online unpleasant or annoying.
- 30% of email users are concerned that their filtering devices may block incoming email.
- 23% of email users are concerned that their emails to others may be blocked by filtering devices.

Findings also demonstrate that Internet users' disillusionment with email is becoming a trend. We polled users on the complete survey of questions in June, 2003, and repeated some of the questions eight months later, February - March, 2004. Over that span of time, the number of emailers who said they used email less because of spam increased from 25% to 29%; users who became less trusting of email increased from 52% to 63%; users who said spam made life online unpleasant increased from 70% to 77%.

Interestingly, there is little correlation between the volume of spam users receive and their attitudes toward spam. A little spam in the inbox seems to make people as unhappy or angry as a lot of spam. The most desperate spam stories, however, came from people who were in small businesses that relied heavily on email correspondence.

3 Users' behavior with spam

Many email users believe they know how to behave in a spam-saturated environment, and they act in a very straightforward way. Hoping to avoid spam, most email users are judicious about guarding their email addresses. In dealing with spam once it arrives, most email users simply click "delete." Only a small number of email users sustain the spam industry by ordering products or services offered through unsolicited emails. We suspect that a variety of "spamminess" exists among products ordered, ranging from fake drugs to legitimate software.

- 73% of email users avoid giving out their email addresses; 69% avoid posting their email addresses on the
 Web
- 86% of email users report that usually they "immediately click to delete" their incoming spam.
- 5% of email users report that they have ordered a product or service that was offered in an unsolicited email. This figure is lower than the 7% who responded positively eight months earlier.

Many say they benefit from employer-installed filters on their email accounts at work. But when it comes to acting on their own behalf, far fewer users take the initiative to install filters for themselves, either in their work or personal email accounts. It is likely that many of them are simply choosing among spam filtering settings provided by their ISPs.

- 62% say their employers use filters to block spam from their work email accounts; half of them get no spam at all in those accounts.
- 37% of those who have a personal email account apply their own filters to their email system;
- 21% of those with filters in personal accounts say less than a tenth of the email they receive is spam.

4 Implications: Simplicity and trust matter

Throughout this study, we were struck by email users' behavior to go for the simplest, most obvious solutions in their own confrontations with spam. In identifying spam, they looked at the subject and sender lines. In dealing with spam, they clicked "delete". In trying to avoid spam, they would do less rather than more on the Internet. In comments about their tactics for dealing with spam, it was only the most technologically savvy and bold who said they would go to any lengths to take advantage of the sophisticated filters available to divert their spam. Even then, many wondered if the time they spent holding spam at bay might be equally well spent by just deleting it.

These data point to a potential chasm between the sophisticated solutions of anti-spam industry experts and the simple behavior of average emailers. They suggest that the best solutions will be simple ones that Internet users can and will employ.

Time and time again in our surveys and reports on the Internet, we have found that trust is the backbone to making the most of the Internet. Internet users look for Web sites they can trust. Web sites look for ways of conveying trust. Consumers have to trust in the transactions they do on the Web. In the case at hand, emailers need to trust that their email is legitimate and that it is reliably delivered or received. We have seen evidence in this survey that there is a continuing erosion of trust in email. Nearly two-thirds of respondents say they are now less trusting of email in general.

Not only must engineers provide sound systems that are easy to use, and not only must legislators and regulators provide well-crafted laws and regulations that are enforceable, but they both have to convince the Internet users that these solutions will work, will be reliable, and can be trusted.

5 Methodology

This paper is based on the findings of two nationwide surveys conducted for the Pew Internet & American Life Project by the Princeton Survey Research Group in June of 2003 and after the CAN-SPAM Act passage during February-March of 2004. Some 2200 adults including nearly 1400 Internet users were polled by telephone for each survey. The margin of error is plus or minus 3 percentage points. In addition and as background, we had access to 4000 narratives that users submitted to the Telecommunications Research & Action Center, recounting their experiences with spam.