



**NUCLEUS  
RESEARCH**

RESEARCH NOTE E50  
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ROI ANALYSIS YOU CAN TRUST™

## Spam: The Serial ROI Killer

### **THE BOTTOM LINE**

The costs of spam show no signs of abating. Nucleus Research found that users are receiving more than twice as much spam than they did a year ago. Because of the limited efficacy of existing legislation and filtering technology, companies should continue to deploy and upgrade filtering tools while pursuing stronger legislative action.

In a July 2003 study on the costs of spam, Nucleus found that unsolicited e-mail reduced employee productivity by a staggering 1.4 percent (see Nucleus research note D59: *Spam The Silent ROI Killer*). Worse, spam-filtering solutions were doing little to control this onslaught, reducing spam levels by only 26 percent on average.

To gauge the impact of new anti-spam legislation and technologies introduced since, Nucleus turned to the same organizations contacted for the previous study and interviewed them in May 2004. Based on interviews with employees at 82 Fortune 500 companies, Nucleus found the following:

- End users are receiving more than twice as much spam as they did 10 months ago, with respondents reporting an average of 29 e-mails a day against the earlier average of 13 e-mails.
- The average amount of productivity lost to spam has gone up accordingly, from 1.4 percent in 2003 to 3.1 percent in 2004.
- The impact of filtering technology on the volume of spam has dropped from 26 to 20 percent. Whereas spam filters have become more sophisticated over the past year, sheer growth in messages sent by spammers and corporate hesitation to set aggressive filters are among key factors driving this figure.

**Table 1. The Growing Cost of Spam, July 2003 and May 2004**

<b>May 2004</b>
<b>Average lost productivity per employee per year: 3.1%</b>
Calculation: 30 seconds/e-mail at an average rate of 29 e-mails/day
<b>Average cost of spam per employee per year: \$1934</b>
Calculation: 3.1% of 2080 hours at a fully loaded cost of \$30/hour
<b>July 2003</b>
<b>Average lost productivity per employee per year: 1.4%</b>
Calculation: 30 seconds/e-mail at an average rate of 13 e-mails/day
<b>Average cost of spam per employee per year: \$874</b>
Calculation: 1.4% of 2080 hours at a fully loaded cost of \$30/hour

## RELATED RESEARCH

D59 Spam: The Silent ROI Killer

### SPAM FILTERS STILL NECESSARY

Nucleus found that end users at companies having deployed an enterprisewide spam filter received 20 percent less spam, on average, than companies that had no filtering tools deployed. This statistic points to the clear ROI opportunities from spam-filtering tools. Regaining even a portion of the productivity, bandwidth, hardware, and other resources hogged by spam can easily justify the costs of the technology in most situations. Therefore, for the vast majority of companies, Nucleus strongly recommends the purchase of companywide spam filters and an aggressive upgrade strategy to ensure that they are using the most current functionality.

**On average, users at companies with enterprisewide spam filters receive 20 percent less spam, indicating the ROI opportunities from the technology. Regaining even a portion of the productivity, hardware, and other resources lost to spam can easily justify an investment for most companies.**

That said, it is striking that whereas spam filters were reducing the impact of spam by 26 percent on average in 2003, that number has dropped to 20 percent today — almost six months after the passage of the CAN-SPAM Act and the introduction of enhanced spam-filtering tools. Two trends explain this decline:

- Many IT administrators have shied away from configuring spam filters to more aggressive levels, for fear of deleting legitimate e-mail. Companies would do well to revisit such lenient configurations, with vendors such as BrightMail and ProofPoint placing increasing development efforts on minimizing the instance of false positives.
- The sheer volume of spam is increasing exponentially — a factor outside the control of technology vendors.

### THE PERCEPTION-REALITY DIVIDE

As an estimate of the annual cost of spam, \$1934 per employee per year is relatively conservative — it does not recognize the dollar expense of IT personnel, software, CPU hardware, and bandwidth hogged by spam. The figure also doesn't account for the less visible layer of costs associated with spam, like the negative impact of virus-triggered network outages on customer satisfaction or increased corporate exposure to harassment suits.

**On average, respondents estimated that the cost of spam per employee per year is \$220. Based on actual customer data, Nucleus determined the productivity cost of spam alone is as high as \$1934 per employee per year — emphasizing the need for ongoing education about the real damage done by spam.**

But when Nucleus asked respondents for an estimate of what they considered to be the per-employee cost of spam to their company,

they provided starkly low figures. Employee estimates ranged from as low as \$25 to a high of \$1000 and averaged out to \$220 per employee, but none approached the actual average of \$1934 per employee, indicating the continuing gap between the perceived and actual costs of spam.

## **CONCLUSION**

Nearly six months after the passage of the CAN-SPAM Act, Nucleus found the costs of spam to have doubled: The average e-mail user is receiving 29 spam messages daily, as compared with the average of 13 messages reported less than a year ago. Although companies should continue to deploy and upgrade to the most current versions of their spam-filtering solutions, eliminating spam necessitates a strategy that combines technical and legal devices.

Consistent with the recommendations made in Nucleus's last study, stronger legislation is the most promising weapon against spam. As it now stands, the CAN-SPAM Act defines spam and curtails the activities of legitimate e-mail marketers, but it doesn't yet do enough to dampen the burgeoning growth of egregious and illegal spammers. Corporations should continue to lobby for legislators to impose greater burdens on commercial e-mail marketing and join industry leaders like Microsoft, Yahoo!, and others to file lawsuits against spammers.

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