



**NUCLEUS
RESEARCH**

RESEARCH NOTE D59

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Spam: The Silent ROI Killer

THE BOTTOM LINE

Nucleus Research found that in 2003 spam will cost the average organization 1.4 percent of employee productivity, or \$874 per year per employee.

As focus on the spam problem continues to increase, many Nucleus Research clients have asked what strategy they should pursue to reduce the impact of spam on their employee productivity without overinvesting in technology.

To analyze the impact of spam on employee productivity, Nucleus analysts conducted in-depth interviews with 117 employees at 76 different US companies to learn about their experience with spam. Nucleus analysts also conducted extensive interviews with 28 IT administrators responsible for managing e-mail and other corporate applications to understand the impact of spam on IT infrastructure and resources. Key findings included the following:

- The average employee receives 13.3 spam messages per day.
- Time spent per person managing spam ranges from 90 minutes to 1 minute per day, with an average of 6.5 minutes.

Average lost productivity per employee per year: 1.4%

Calculation: 6.5 minutes/day divided by 480 total minutes/day

Average cost of spam per employee per year: \$874

Calculation: 1.4% times 2080 hours at an average fully loaded cost of \$30/hour

What is spam? The detail of definition varies by user, but the overwhelming majority agrees: unwanted unsolicited e-mail messages.

There is no argument: any unwanted unsolicited e-mail message is spam.

Nucleus found that some employees had severe spam problems that forced them to take individual action. These employees were receiving so much spam that it impacted their productivity to the extent that they invested in desktop filters and learned to use them to combat their spam problem. Even with desktop filters adjusted to their personal profiles and preferences, these individuals still

spent an average of 12.5 minutes per day – nearly twice the average – screening and managing incoming mail, at a cost of \$1,625 per year in lost productivity. Although this figure is not interesting in itself, it is a leading indicator of the potential cost of spam as volumes grow. Even for these highly-trained users with sophisticated personalized filtering devices, spam had a dramatic negative impact on productivity.

Companies currently lose an average of 1.4 percent of each employee's productivity each year because of spam; thus, for every 72 employees a company has it loses the benefits of at least one employee to spam.

In 2003, the average company will lose one out of every 72 employee's productivity to spam.

Organizations can somewhat reduce the impact of spam on their employees by deploying a companywide spam filter. While filter technology is not perfect, Nucleus found use of such a device reduced the average cost per employee by 26 percent to \$650, or 5.0 minutes per day, per employee.

Companywide spam filters reduce the productivity loss from spam by 26 percent.

While filtering may be somewhat effective in reducing the impact of spam today, administrators have found a number of challenges with filters that limited their effectiveness:

- Spam sophistication. Spammers use punctuation, spaces, and other methods to avoid the rules filters use to block spam messages and ensure their delivery to users.
- Ineffective technology. Many administrators found too-aggressive filters delayed or aborted delivery of business messages, or were ineffective in filtering out spam unless it met specific guidelines.
- Employee adoption. Although many companies had filters in place, employee use of the filters varied and additional employee education efforts were needed.
- Effective policies and management. Although many companies had e-mail policies, they didn't have a consistent corporate strategy for educating employees about spam – resulting in ad-hoc employee education instead of widespread understanding.

As stated above, even filter technology does not alleviate the spam problem; as spam volume and spammers' sophistication grows, so will the problem for most organizations, even with sophisticated filtering.

SPAM IS AN EQUAL OPPORTUNITY PROBLEM

Nucleus found the average number of IT employee hours spent per week managing spam-related problems was 4.5, with some

companies spending nearly a quarter of an IT employee's time managing spam issues. For budgeting and planning purposes, companies should assume that on a per-mailbox basis, administrators will spend an average of .7 minutes per employee per week managing spam and spam-related issues.

For every 690 employees, a full-time IT staff person will be needed just to manage spam.

Nucleus found no evidence of any economies of scale in managing spam, so large companies will have substantial growing costs with which to contend.

Nucleus also found that productivity and IT impact are not the only concerns of administrators in managing spam. Many companies worry that even with filters, unsolicited e-mail sent to employees may provoke legal action:

- According to one IT administrator, *"One of the reasons we got into spam filtering is the offensive content lawsuits that could arise. We have to prevent work environment lawsuits."*
- Another said, *"The real cost is not in hours it takes to manage spam, but in dealing individually with employees to manage it [when they call the IT department]."*

CONCLUSION

The rising cost of spam – in terms of worker and IT productivity – demands attention. All companies – large and small – should review the impact of spam on IT and employee productivity to determine the appropriate action to combat it.

Nucleus's normal practice is to recommend that companies assess technology options to determine which strategy will deliver maximum returns. However, recent activity by Microsoft and others in pursuing legal action against spammers has suggested an alternative. Given the cost of spam per employee, large companies may want to consider similar legal action, which is likely to be less costly and potentially more effective than simply investing in a filter which will only reduce, not eliminate, spam's impact.

Anti-spam policies or training, while helpful, are likely to have a limited positive impact on return on investment given the limited effectiveness and the time required. All companies should avail themselves of filtering technology and ensure users are adopting it to limit the negative impacts of spam on employee productivity.