



Osterman Research Executive Summary

Spam in the Enterprise: Market Problems, Needs and Trends

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Although there are varying and arguable definitions of email "spam", its key characteristics generally include:

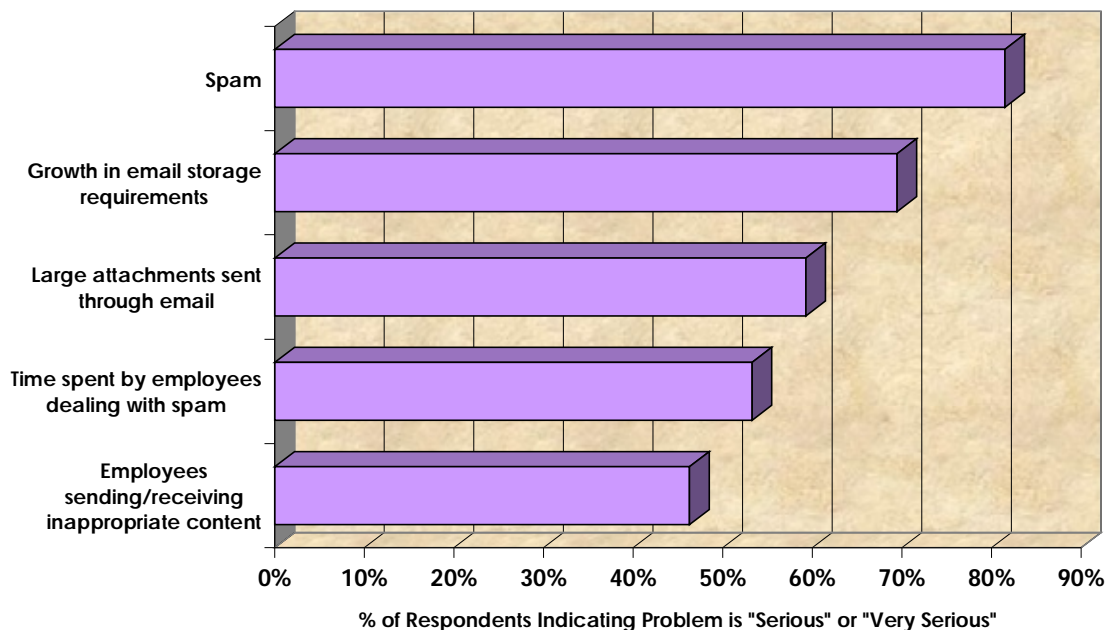
- The unsolicited nature of the communication.
- The commercial focus of the communication.
- The significant volumes in which these messages are typically sent.

While other types of email messages may technically be categorized as spam, any email that meets these criteria can, in most cases, be considered spam.

The Problem is Getting Worse

As any user of email or email administrator can readily attest, the problem with spam in enterprise environments is seriously and negatively impacting employee productivity, messaging system storage requirements, email server performance and message delivery times.

Leading Problems in Messaging Management



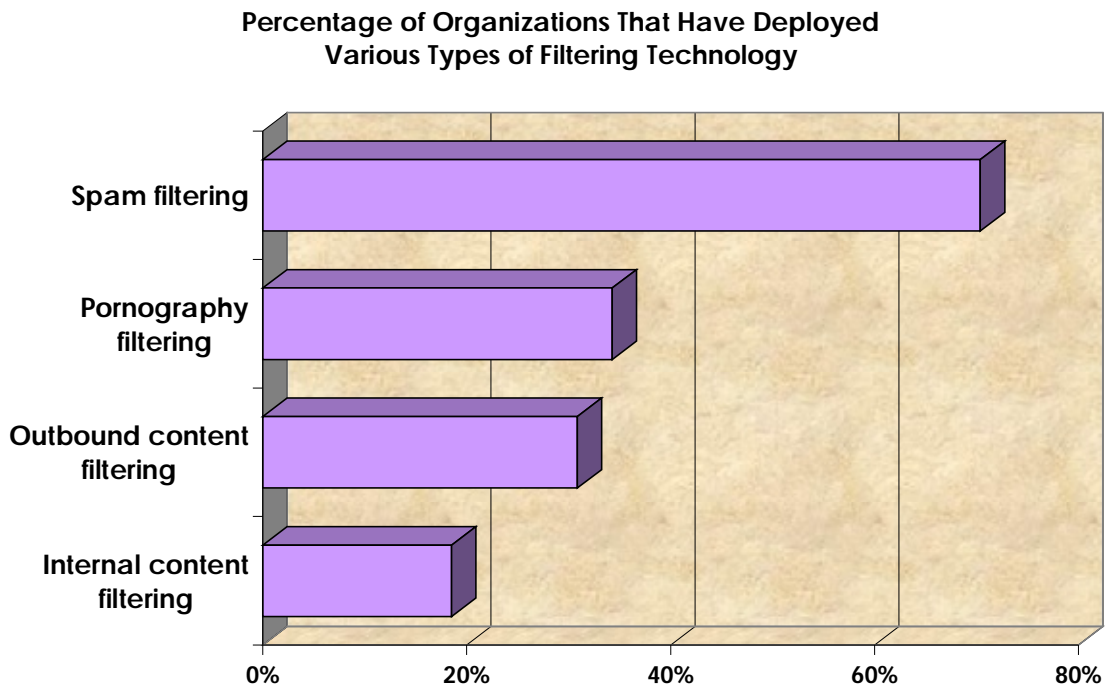
Spam is getting worse due to three key factors:

- An increasing number of individuals and companies are using spam to market their products and services because it is an extremely inexpensive, albeit inefficient, method of distributing a sales message.
- Enough recipients of spam respond to these messages to make the practice of sending spam worthwhile for spammers to continue.
- Spammers are getting more sophisticated in their efforts to avoid spam filtering technologies.

In addition, spam imposes significant burdens on messaging servers through a technique known as a Directory (or Dictionary) Harvest Attack (DHA). In a DHA, an automated system will send thousands of messages to a server, each message using a slight variation of an email address. When the spammer determines that a message has been accepted, that address is added to a list of valid email addresses.

Most Enterprises Have Spam-Blocking Capabilities in Place

As shown in the following figure, most organizations have deployed some sort of spam filtering capability, whether this is a simple blacklist or a full-featured spam-detection and spam blocking product.



How the Problem Will Be Solved

What will be required for the economics of spam to reach equilibrium? The most important factor will be a dramatic increase in the cost of delivering an email to the end user. That will not come through legislation, but it will come about as a result of the rapidly increasing use of spam-blocking tools. What these tools accomplish, at their most fundamental level, is to dramatically increase the cost of sending spam. For example, if a spam-blocking tool can prevent 95% of spam from reaching an end user, the spammer's cost of marketing to that potential customer is increased by 20 times, simply because only one in 20 spam messages sent can now reach the intended target. Increasing the effectiveness of these filters slightly more to 97% increases the cost to the spammer by 33 times. At the same time, the potential revenue available to spammers drops by a corresponding amount, and (hopefully) equilibrium is achieved.

Further, the use of spam-blocking tools dramatically decreases the negative impact of spam on end-user productivity. Our research found that spam-blocking tools reduce the productivity loss of the typical employee by 60% -- our research has found that the typical email user protected by spam-blocking technology saves 3.7 workdays each year compared to unprotected users.

The Future of Spam Blocking in the Enterprise

Is the problem with spam simply going to keep getting worse? To be sure, spam is getting worse in the near term. However, some forecasts of the spam problem that predict huge increases in the amount of spam reaching the end user by the middle part of this decade seem to assume a steady state view of the messaging world, namely:

- That spammers will simply continue to generate more spam, that they will get better at doing so, and that they will not be provided with disincentives to continue spamming.
- That enterprises and major ISPs – the biggest processors of email – will do nothing more to combat spam than what they have already done, or that their efforts will be unsuccessful.
- That vendors of spam-blocking solutions will not continue to develop new and better ways to defeat spam.

While the first assumption is largely correct, the last two simply are not. First, the penetration of spam-blocking technology in the enterprise and elsewhere is nowhere near its saturation point. While 70% of organizations currently have some level of spam-blocking technology in place, much of this capability consists of first-generation systems that are relatively easy for spammers to circumvent. IT investments in 2003 and 2004 will dramatically improve the average performance level of the installed base of spam-blocking systems as older, less effective systems are replaced with newer and better systems.

Spam-blocking technologies are rapidly improving, as are the number of vendors that provide them. Consequently, organizations that wish to deploy spam-blocking capabilities have an ever broadening choice of systems from which to choose with performance that is continually getting better.

Osterman Research anticipates that by the end of 2007, the vast majority of organizations of all sizes will have deployed spam-blocking technology.

**Penetration of Spam-Blocking Technology in the Enterprise
2003-2007**

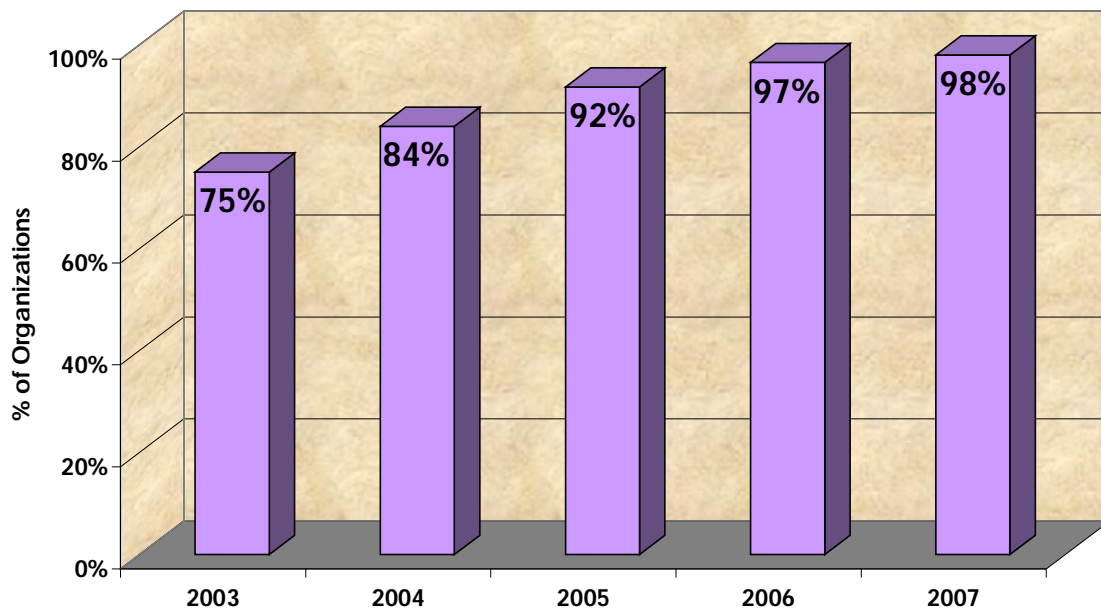


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About Osterman Research

Osterman Research, Inc. provides market research, cost modeling, benchmarking and related services to vendors of technology-based products and services.

We help vendors, IT departments and other organizations make better decisions through the acquisition and application of relevant, accurate and timely data on markets, market trends, products and technologies. We also help vendors of technology-oriented products and services to understand the needs of their current and prospective customers.

Among the things that make us unique is our market research panel: a large and growing group of IT professionals and end-users around the world with whom we conduct our research surveys. This allows us to conduct surveys quickly and accurately.

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