

Best Practices in Email Security

How to Handle the Rising Threat

Jeff Brainard

July 2005



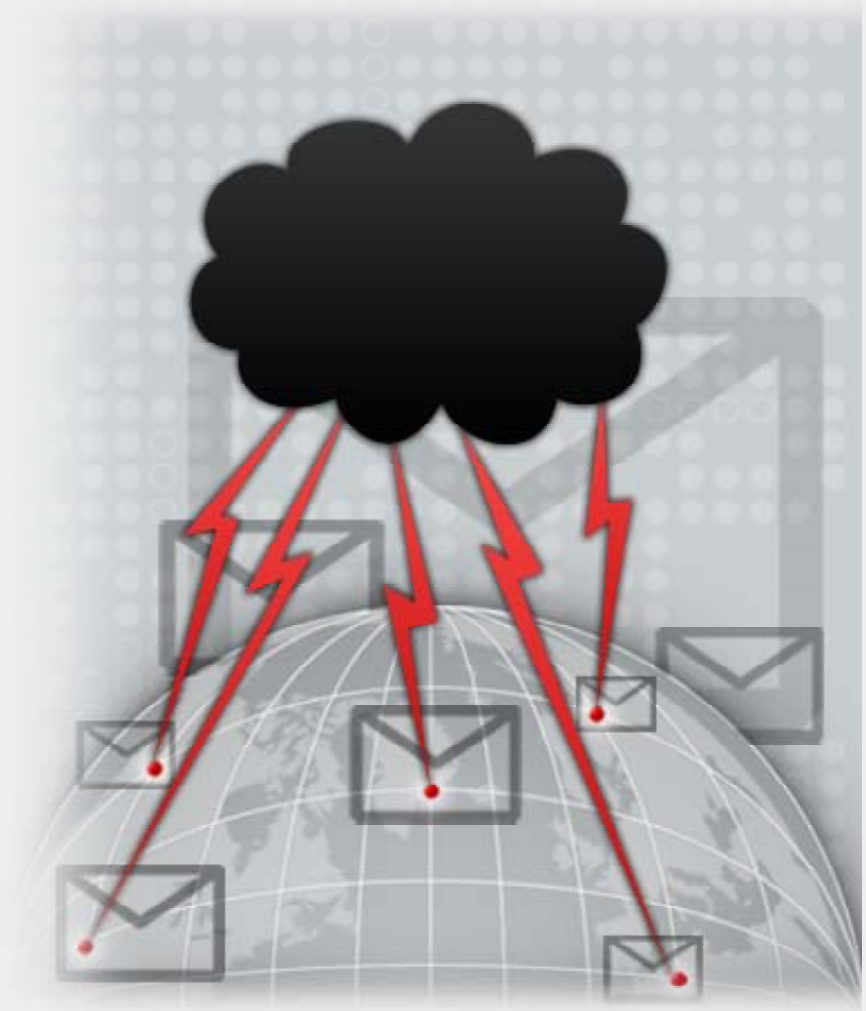
Email is Under Attack!!!

External Threats:

- ♦ Viruses & Hackers
- ♦ Spam & Phishing
- ♦ DOS & Password attacks
- ♦ Directory harvests
- ♦ Business continuity

Internal Threats:

- ♦ Zombies
- ♦ Harassment & Abuse
- ♦ Email floods & Flames
- ♦ Information leaks
- ♦ Compliance & Discovery



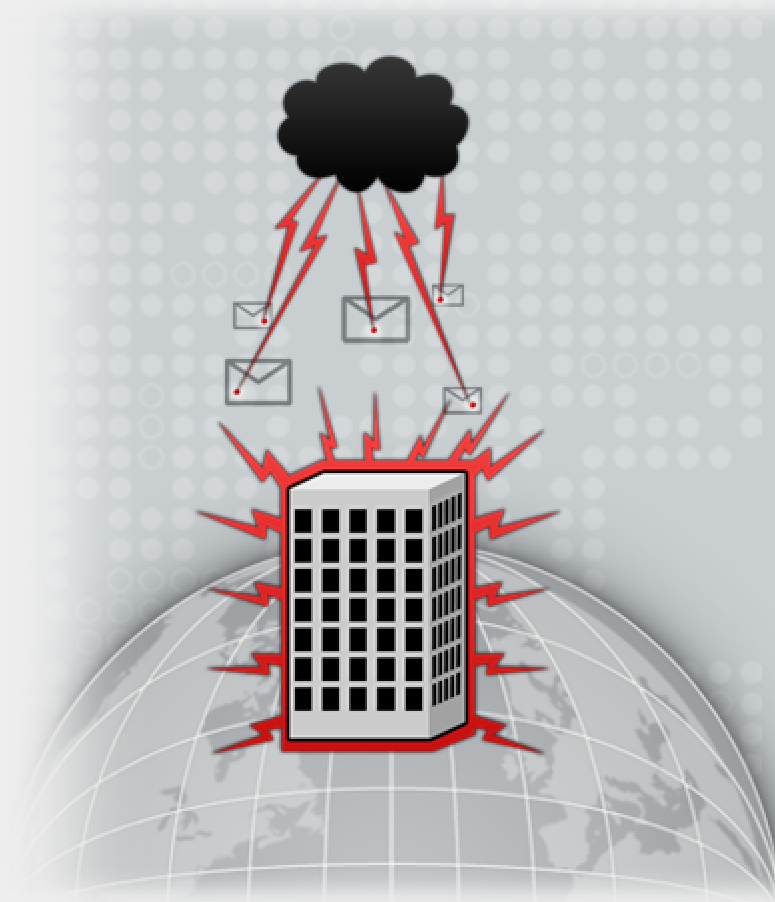
Threats = High Business Expense

EXTERNAL THREATS:

- ♦ 80% of viruses enter customers' networks via email with typical infection costing up to \$500,000—Gartner
- ♦ About 450 viruses are discovered each month—IDC
- ♦ In 2004, more than 8.8 billion spam messages were sent every day—IDC
- ♦ Spam will cost companies \$198 billion by 2007—Radicati Group
- ♦ The Nigerian 'prisoner' scam, which asks people to invest money to transfer millions of dollars supposedly trapped in overseas bank accounts, extracts \$200M from its victims a year—FBI

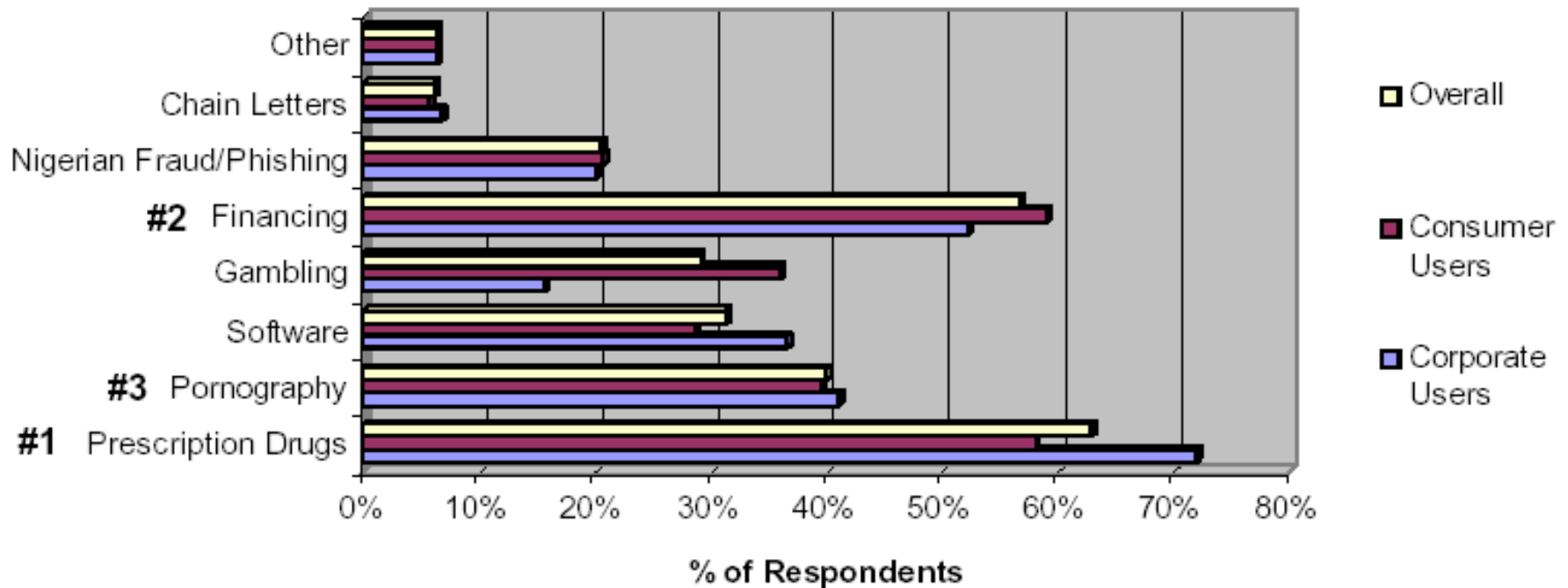
INTERNAL THREATS:

- ♦ 51% of users have received pornographic spam messages—Queens University
- ♦ Chevron settled an email harassment case for \$2.2 million that was based on sexually offensive messages including a "joke" sheet titled "reasons why beer is better than women"—Osterman Research
- ♦ 70% of all Internet porn traffic occurs during a 9-5pm workday—NFO Worldwide
- ♦ Phishing accounted for \$2.4 billion in fraud, or an average of \$1,200 per victim, during 2004—Gartner
- ♦ In March 2004, Bank of America was fined \$10 million by the SEC for failure to keep email records—Boston Globe



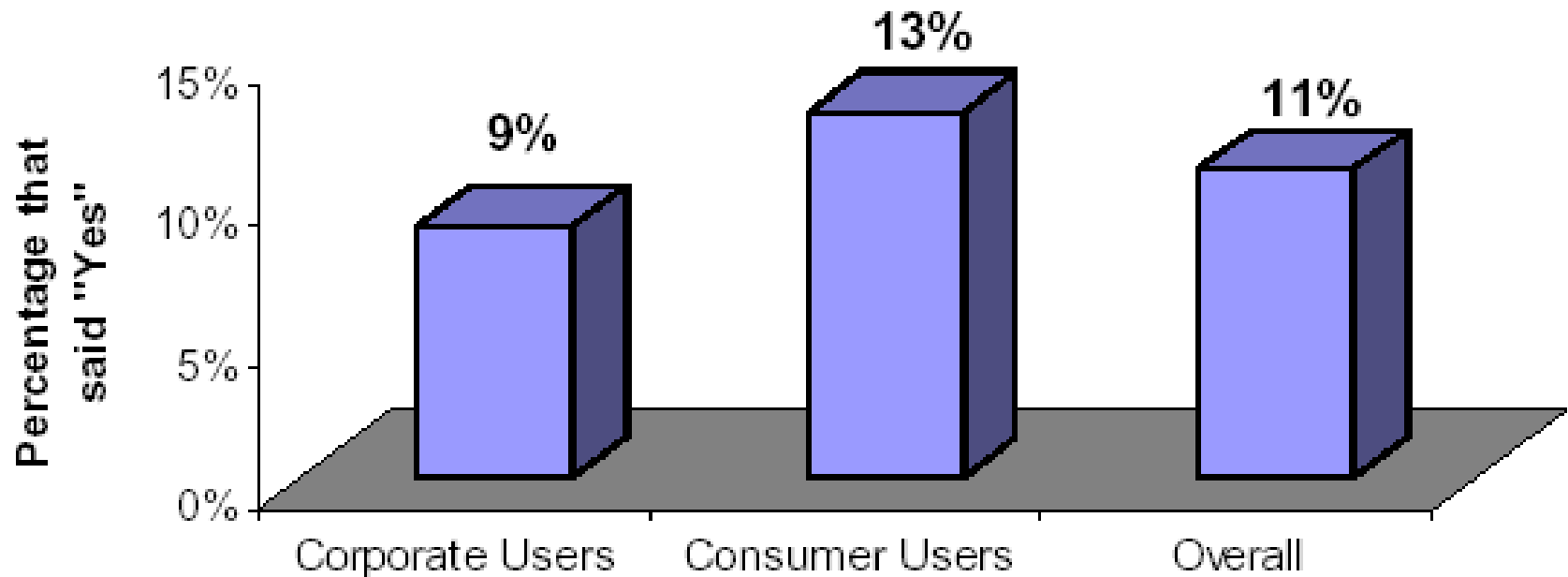
Spam, Spam, Spam...

What Type of Spam do You Receive the Most? (Choose up to 3)



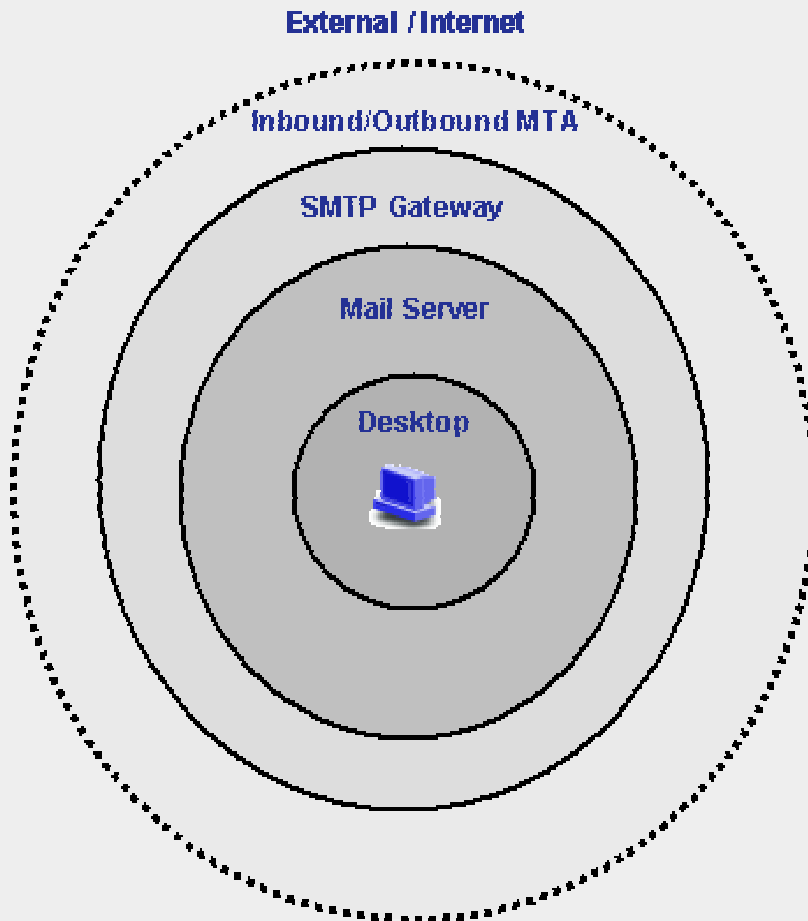
Top spam = Drugs, Money & Sex!

Has Spam Led You to Use Email Less?



Spam has measurable impact on email usage!

Hidden Cost of Threats



Inbound/Outbound MTA:

- Bandwidth
- Outages

\$

SMTP Gateway:

- Processing
- Latency

\$\$

Mail Server:

- Storage
- Management

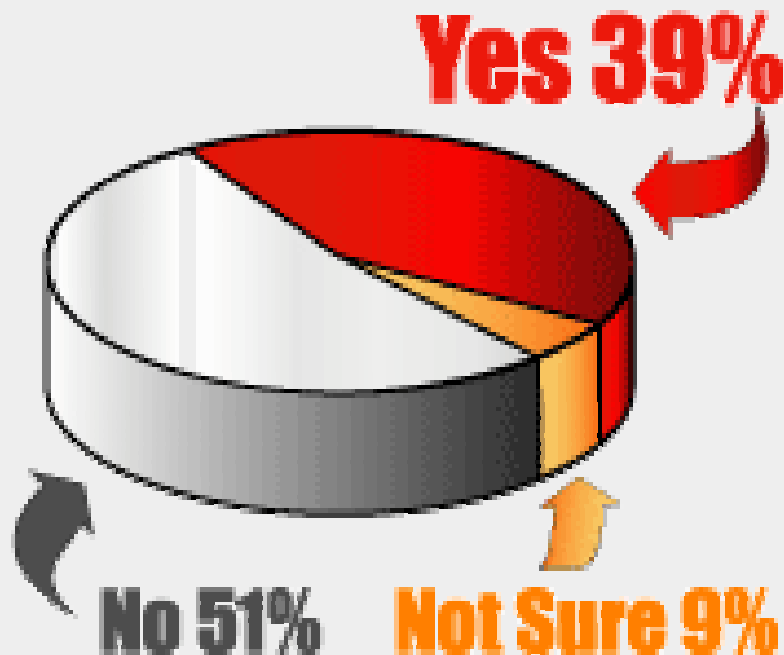
\$\$\$

Desktop:

- Productivity
- Liability

\$\$\$\$

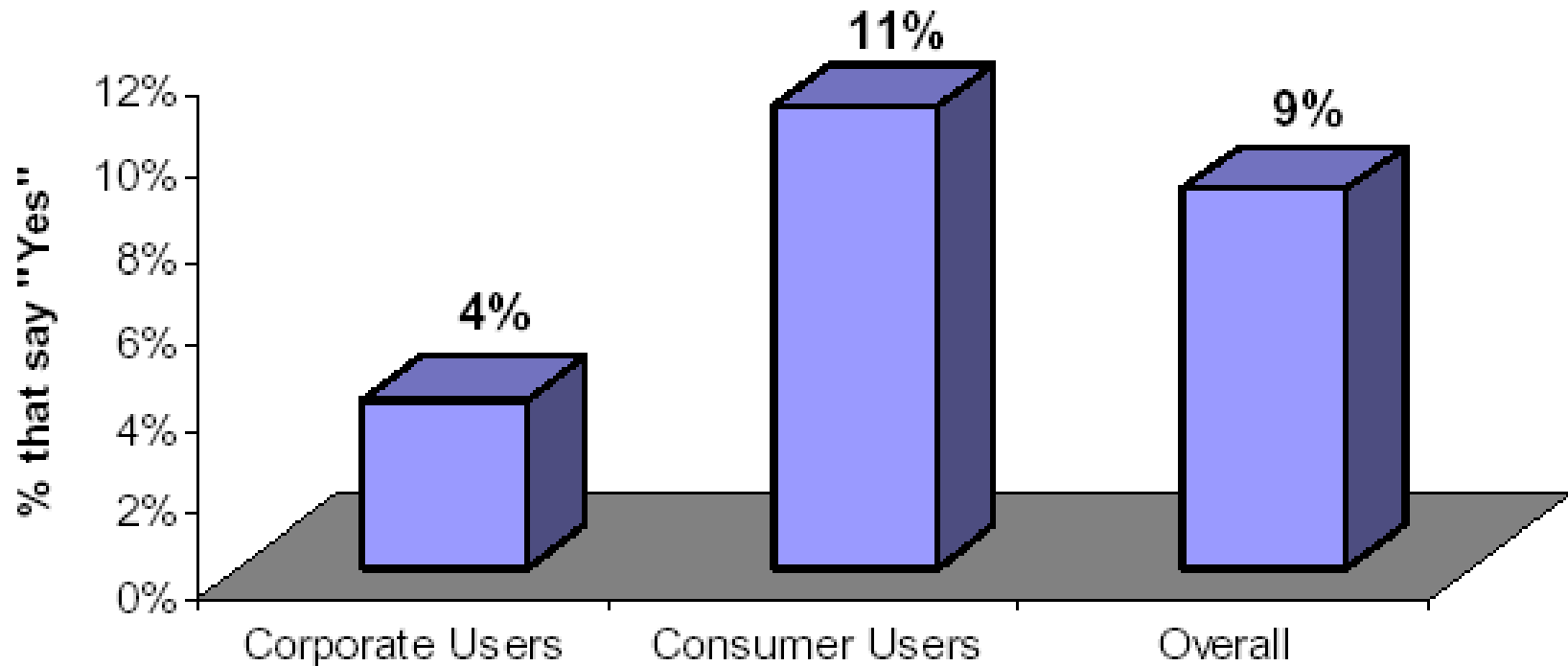
Have You Ever Clicked on a Link within a Spam Message (other than unsubscribe)?



Source: Radicati Group & Mirapoint survey, March 2005

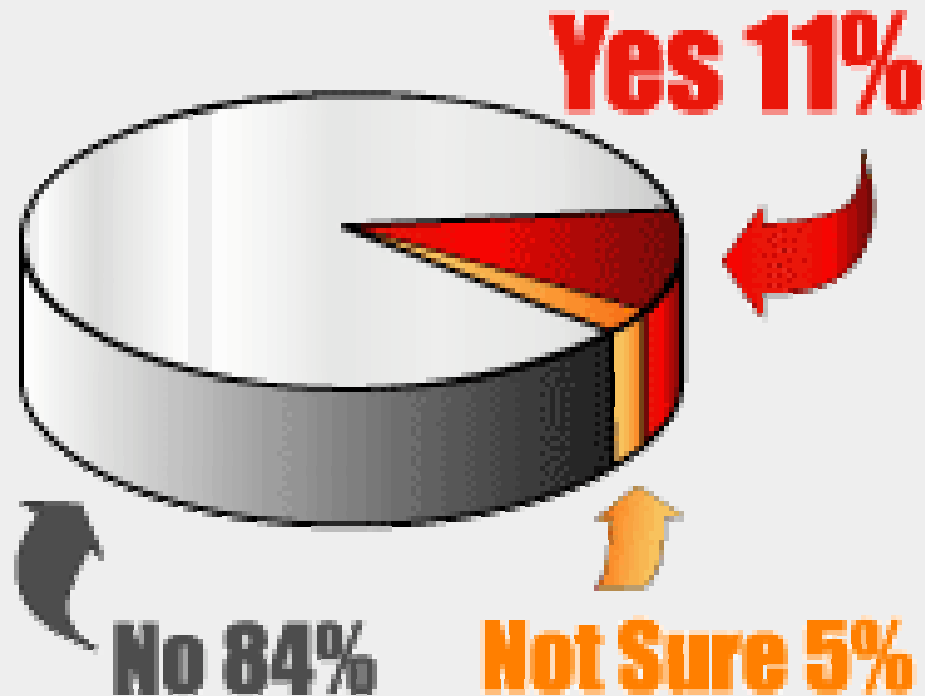
- ♦ Reveals active email inboxes & generates more spam
- ♦ Creates future risk from phishing, DOS & other attacks
- ♦ Links can be source of viruses & malicious code
- ♦ End-user policy documents critical

Have You Ever Lost Money to an Email Scam?



Roughly 10% of users have lost money in email scam!

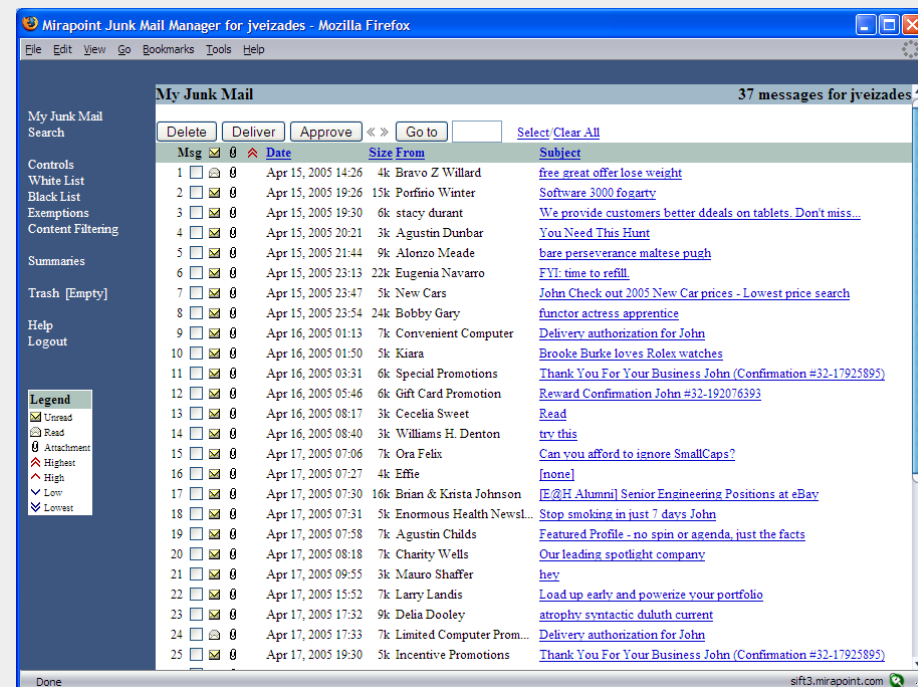
**Have You Ever Purchased a Product or Service
as a Result of Spam?**



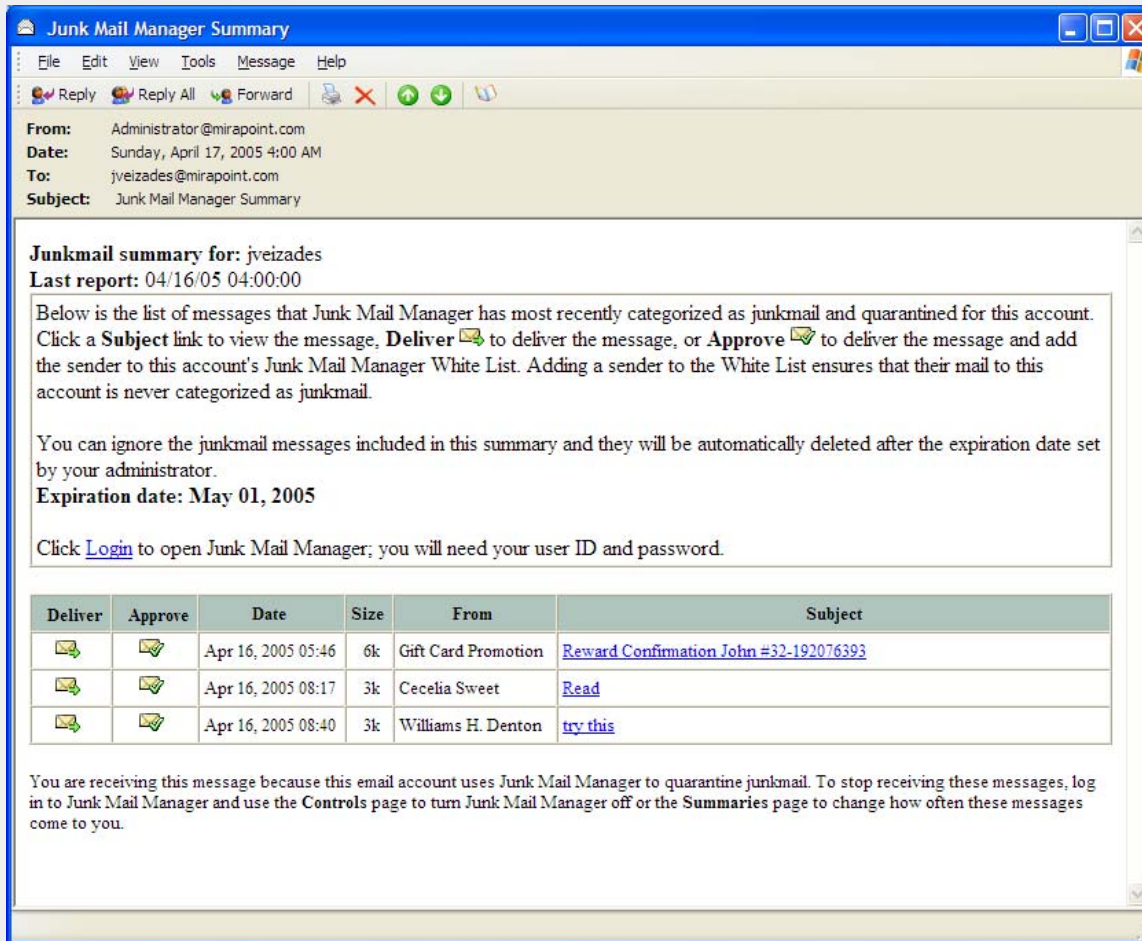
Source: Radicati Group & Mirapoint survey, March 2005

- ◆ **In addition to random text used to thwart Bayesian filtering**
- ◆ **Spammers have learned new tricks with HTML**
 - ◆ Exploiting HTML with table columns to separate characters or using 'off-shade' colors to bypass filters
 - ◆ Embedded images with single links
 - ◆ Using well-positioned text to create 'ASCII art'
- ◆ **What's a durable solution?**
 - ◆ More than rigid & reactive CPU-intensive rules-based filters
 - ◆ Proactive approach that can adapt to shifting spam threat

- ◆ Address evolving spam landscape & 'false-positive' factor
- ◆ Mirapoint's Junk Mail Manager provides individual quarantine mailboxes on edge security appliance; keeps spam out of inbox
- ◆ Reduces load on core mail server & increases performance
- ◆ Helps IT manage bandwidth, storage & administrator resources
- ◆ Integrated per-user controls for white/black lists & content filters
- ◆ Automatic message aging available to auto-delete questionable email



Integration to Desktop Client



- ♦ **Junk Mail Manager digest feature sends summary to inbox (ie. Outlook)**
- ♦ **Users can view messages captured as spam & self-manage traffic to their inbox**
- ♦ **Easy-to-use web-based interface**
- ♦ **Secure quarantine access via login/password**

Coordinated attacks count for **80%-85%** of global spam

Average attack volume: **+100 million** messages

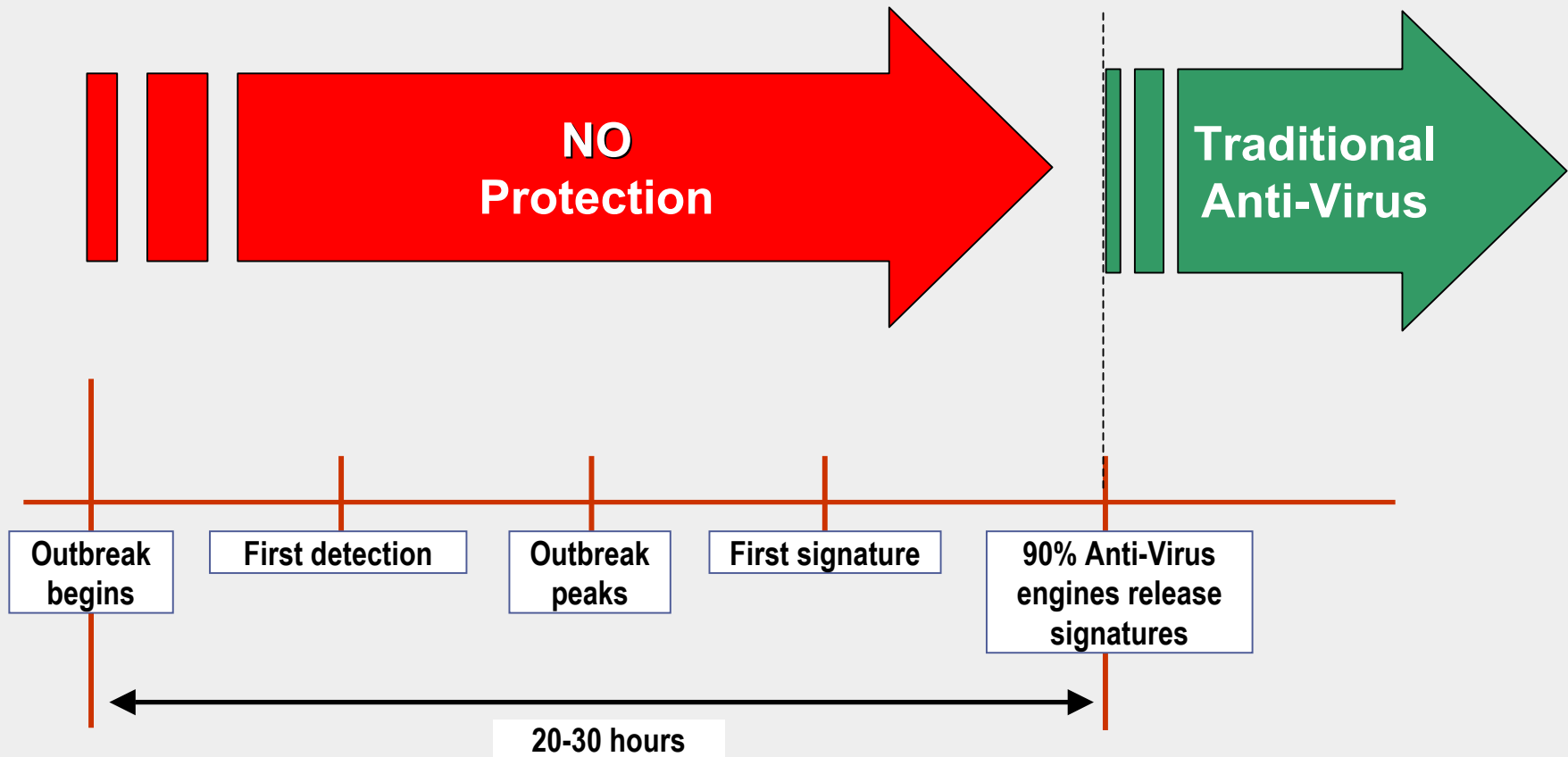
Distribution sources: **>1000**

Average duration: **6-8 hours**

Detection within 2 minutes = **over 99.5%** coverage

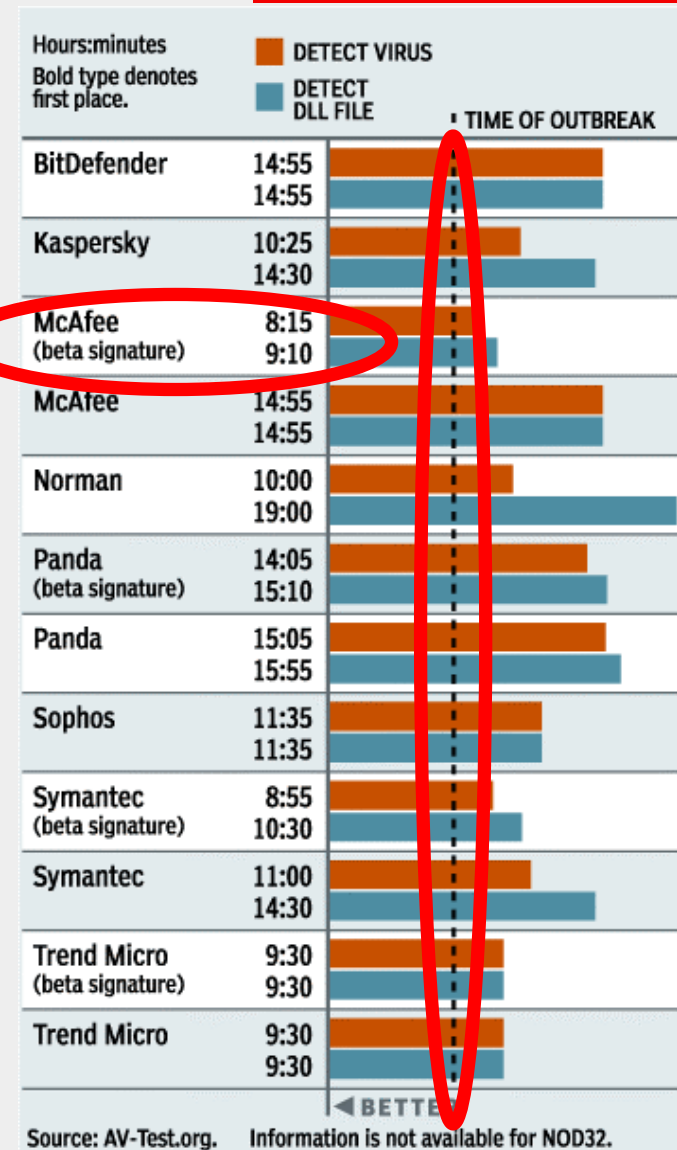
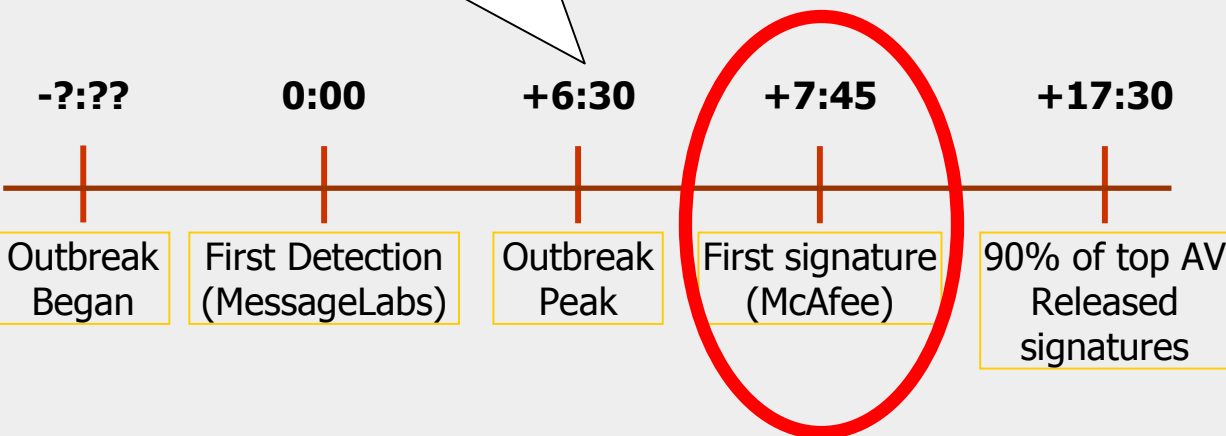
1 hour lag in detection = **14% missed** (or more)

Emerging Virus Threat Window



Interwoven Threats – MyDoom

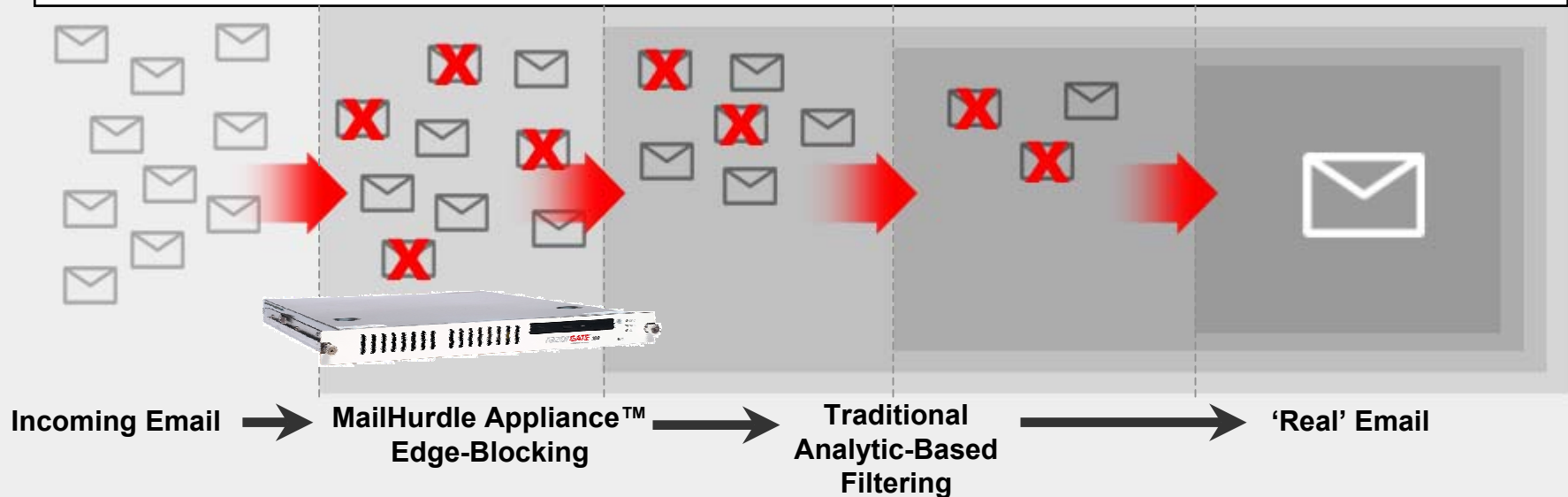
**Largest 2004 outbreak –
No protection through
MyDoom peak!**



Evolution of SMTP

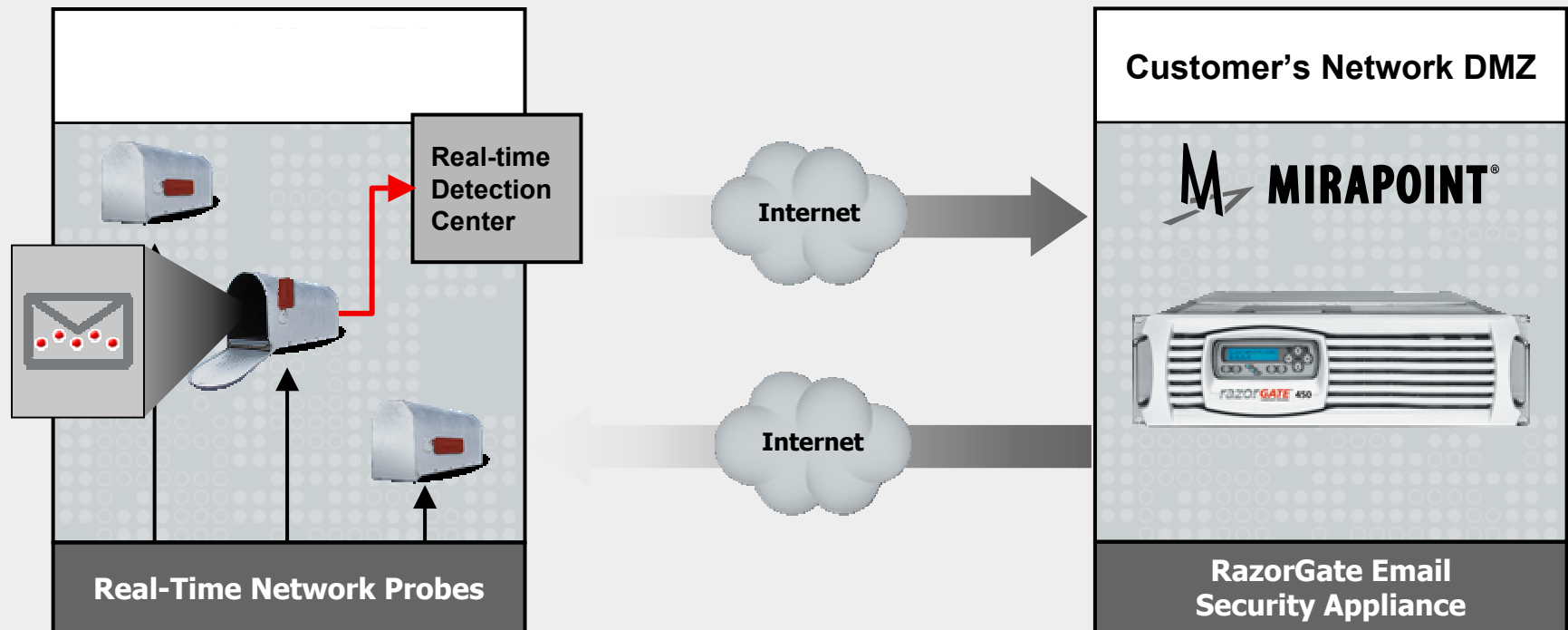
- ◆ Uses existing SMTP standard, Mirapoint's MailHurdle™ edge-blocking technology complements existing spam & virus filtering investments
- ◆ Blocks up to 80% of spam & many viruses at SMTP-connection layer to conserve bandwidth, storage & administrator resources

Blocks up to 80% of spam & viruses at network edge



Real-time Security Protection

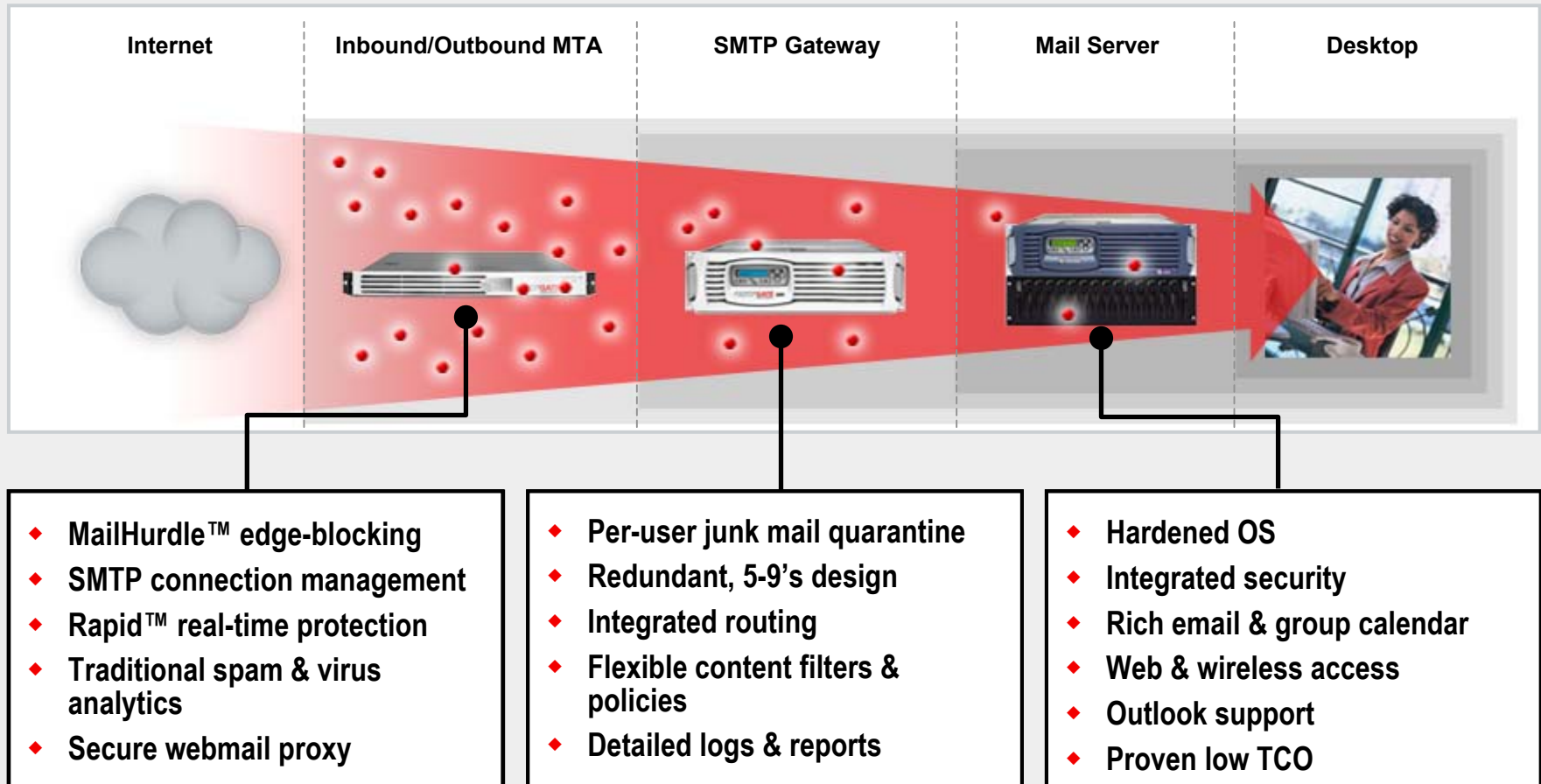
- ◆ Powerful Rapid Anti-Spam & Anti-Virus™ technology – Uses information from network-based probes to identify & block threats for day-zero protection
- ◆ Complements Mirapoint's existing signature-based virus scanning engine
- ◆ Part of Mirapoint's Full-Spectrum™ multi-layered email security technology



- ◆ **Flexibility for implementing any policy**
 - ◆ Support for site-wide, domain or user-specific policies
 - ◆ Easy-to-configure via web-based interface by administrators, managers or end-users
- ◆ **Example policies include:**
 - ◆ Wiretaps
 - ◆ Blockage list
 - ◆ Rejection filter
 - ◆ File Type filter
 - ◆ Specific Words filter
 - ◆ Objectionable Words filter
 - ◆ Quarantine filter



Complete Message Network Security



Tiered approach to complete & scalable security protection

Mirapoint - the messaging expert

- ◆ **Company focus since 1997**
- ◆ **Leadership in appliance approach**

Only vendor with complete email & security solutions

- ◆ **Addressing today's security pains, plus solutions for more reliable email**
- ◆ **High-quality, field-proven products for Enterprise, Service Provider, Education & Government customers**



FREE MIRAPPOINT EVALUATION

Contact us now!

Arthur Young, Mirapoint Country Manager for AU & NZ

Email: ayoung@mirapoint.com

Or call: +61-2-9802-8444

