



Exposing the True Cost of Email Management



THE KILLER APP

An application so successful it is now seen as a utility. Without a doubt, email is the most compelling reason for the use of computers the world over. However, its very success has created potentially overwhelming problems due to the accumulation of a vast volume of information that grows at an exponential rate.

To the average person, email is a universally accepted form of communication that is no more remarkable than the telephone. In fact, email has largely replaced traditional business tools such as the telephone and paper correspondence. Office workers default to using email when they want to move documents down the hall or across the globe. The asynchronous and persistent nature of email allows office workers to collaborate as if they were sitting next to each other, instead of half way around the world.

As businesses become more reliant on the benefits of email, they become more exposed to its risks. Email records have been used as an investigative and prosecutorial tool for many years, but few cases illustrate this risk more powerfully than the Microsoft anti-trust lawsuit and the financial settlements brought about in the wake of Enron's collapse. Although Microsoft emerged relatively unscathed from the United States Government's lawsuit, its reputation was tarnished and it was found to be a monopoly—opening the door to future lawsuits and regulations. The fallout from the accounting scandal at Enron led to the collapse of Arthur Anderson, and the subsequent scandals at WorldCom and Tyco cost financial services companies like Citibank and JP Morgan Chase billions of dollars in legal settlements and lost productivity. In an attempt to prevent future accounting scandals, the U.S. Government enacted the Sarbanes-Oxley Act, bolstering already existing regulations aimed at industries as diverse as the financial services and pharmaceuticals.

Customers can use pre-packaged AXS-One solutions, adjust AXS-One solutions to meet specific business requirements, connect existing systems with AXS-One, or build completely new solutions in-house, supported by AXS-One products. Interoperability choices include real-time and batch web services interfaces, XML documents, reports, email, faxes, images, relational database systems, even web sites.

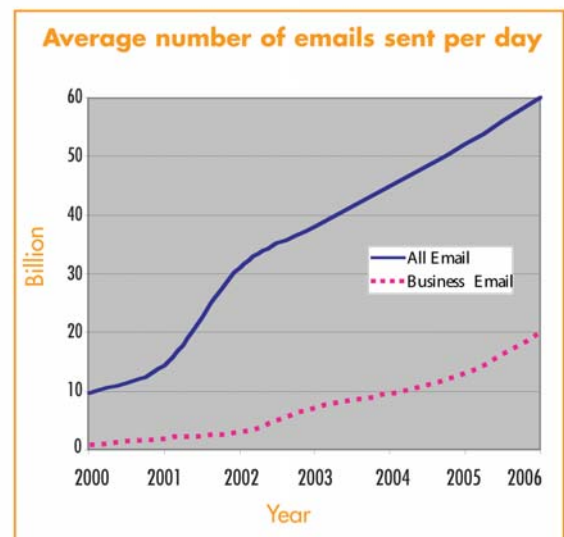
After the Sarbanes-Oxley Act, CEOs can no longer claim ignorance as a defense against charges of financial impropriety.

Immediately after the passage of the Sarbanes-Oxley Act, companies raced to have their CEOs certify their most recent financial statements, and the media watched and speculated with eager anticipation to see which companies would delay their certifications or reissue their financial statements. This level of intense scrutiny will continue in the future.

Email's power to embarrass and blemish is not limited to major corporations and multi-million dollar deals. Personal emails transmitted through company networks become the responsibility of the company, leaving the company open to litigation and theft. Apple Computer went through a period of several months in 2001 where new product details were prematurely leaked to the public by contract employees. Apple sued and settled out of court. Gillete experienced a similar problem with a contract employee attempting to sell stolen plans for the Mach 3 razor. Ultimately, email's risk is magnified by a reluctance or inability of businesses to recognize that email is not just an ephemeral means of communication, but a record that is just as tangible an asset as last month's invoices. Accepting email as a tangible asset and choosing to manage it will enable companies to begin to mitigate these risks. Risk is just one of the obvious forces driving the cost and complexity of email systems. Let's look more closely at the costs involved in using and maintaining this critical business tool.

THE HIDDEN COST OF LOST PRODUCTIVITY

An employee using the telephone incurs two costs. The obvious cost is the fee imposed by the telephone company and the duration of the call. This is accepted as part of the overall cost of running a business. However, if the caller is nonproductive while on the telephone, this is the hidden cost of lost productivity. Email systems incur similar costs with their unique hidden lost productivity costs.



Businesses rely on their email infrastructure as a primary method of communication and collaboration because email is still the best way to move information efficiently within departments, between departments, and between businesses and their clients.

And because email is persistent, it functions as a knowledge store, allowing employees to research work already performed by others and avoid duplicating effort.

However, email as a knowledge store place fails when there is no cohesive management strategy. IDC is projecting that the number of emails sent daily will increase from 31 billion in 2002 to 60 billion by 2006. With 166 million corporate email boxes expected in 2003, IDC expects that email generated daily by corporations will reach the 7 billion mark in 2003 and over 9.4 billion by 2004.

Without a central storage facility and a global email management policy, employees will quickly spend more and more time trying to maintain their own local email filing cabinets, taking time away from other business-critical tasks. According to Ferris Research, email processing consumed an average of 6% of an employee's work time in 2000.

Can you afford a 6% loss in productivity across your senior management team?

Clearly companies that lack an automated and efficient email management system are absorbing the hidden costs of email inefficiencies and employee productivity.

Another possibility is that the employees will choose not to manage their email. This works until they have to find last year's proposal or make sense of a conversation with a remote colleague that dragged on for a month under several different subject headers. Now these employees have to take a significant amount of time away from business critical tasks to find the needle of appropriate information in the haystack of un-filed email. And there is no guarantee that this search will find everything--sophisticated search tools won't find the information that you don't remember you have and don't recall how to locate. For example, a search for "contract" will not find the email from your friend with the subject line of "re: Where is it?" to which he added his revisions to the contract. Finally, unless these employees now choose to organize their email, they will have the same problem next year, except that the volume of email to be searched will be even larger, with a corresponding increased loss in



productivity.

Any company that chooses not to implement a cohesive strategy for managing their email infrastructure loses both the ability to easily access the accumulated knowledge recorded in one employee's email and the opportunity to analyze the company's communications in context, thus identify future business trends.

Employees with 10 years on the job accumulate too much useful information in their email for it to be unavailable when they are on vacation or lost when they retire. A company that routinely sends out three emails after each fulfilled order would realize that its customer service costs were rising—due to inadequate installation instructions—if it instituted an email management system that related to the follow-up emails to the initial orders.

This is the second hidden cost of lost opportunity: the more time it takes to recognize and fix a problem or identify new business processes, the more costly it is for the company. And it becomes harder to fix a problem as more time passes between the initiation and the attempted resolution.

THE HIDDEN COST OF INFRASTRUCTURE

It's hard to hide an elephant. Yet many businesses do not realize the hidden costs of their email infrastructure, or they assume that there is no way to realize significant cost savings.

Email servers are not cheap. The cost of an email server is driven by three factors: the server, the software and the storage. Since email is a mission-critical business tool, companies require it to be available 24 hours a day, seven days a week, 365 days a year. To meet this requirement, many companies choose to deploy their email infrastructure across redundant servers with hot-swappable parts to minimize downtime, while other companies choose to live with the risk that their email may have significant period of downtime. Software is licensed on a per-CPU or per-server basis, and upgrades must be purchased regularly. Storage requirements are driven by the massive amounts of email and attachments sent daily. More than-two thirds of all attachments may be duplicates and revisions of the original item.

An enterprise with 500 employees could expect to pay between \$6,000 and \$25,000 for the hardware needed to deploy an email system with redundant servers and enough disk space to store all employee email.

As additional employees are added to the system, the company will need to purchase additional servers and storage—due partly to practical limits in the number of mailboxes that one server can manage.

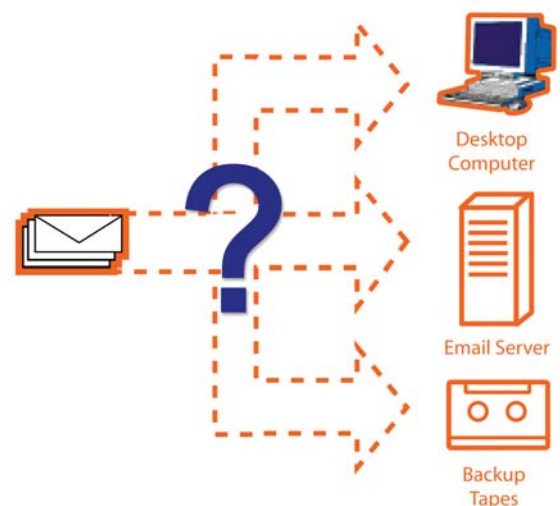
Some businesses choose to limit the amount of storage by individual email mailboxes. While this may help control the need for additional disk storage, it places the responsibility for email management on the individual; this is not an efficient use of their time as reviewed earlier. Furthermore, by splitting each individual's email between the server and his or her local archive, it becomes harder to effectively use email records as a knowledge store. And Microsoft Exchange turns off the send and receive services for individuals when they exceed their storage quota—adding aggravation to the email management process. When a mailbox has exceeded its storage limits, many individuals will forsake any semblance of email management and aggressively delete emails in order to re-enable send and receive services.

Another cost incurred when a business maintains its email infrastructure is the cost of the support staff. Typical tasks performed by an email administrator include regularly backing up all of the corporate email, recovering archived messages and attachments for individuals, and monitoring the operation and security of the servers. Email administrators spend an average of two full days per week managing email server backups and one full day per week recovering archived messages and attachments for end users.

As the size of the email infrastructure grows to accommodate the increasing volume of email and new users, the size of the email administration staff also increases. Time demands for the email administrator increase 25% every time the number of users doubles, driven primarily by the need for more support staff to respond to a larger population of end users. Finally, since the email infrastructure must be available 24 hours a day, seven days a week, 365 days a year, the cost of the support staff does not stop at 5 PM.

THE HIDDEN COST OF COMPLIANCE

The response to the pharmaceutical company Wyeth-Ayerst to the discovery phase of a lawsuit in Massachusetts over the weight-loss drug combination of “fen-phen” is a well-known example of the hidden cost of compliance. Wyeth faced the possibility of having to recover email from up to 823 backup tapes. An analysis of its email archiving process



led Wyeth to conclude that it would spend between US\$1.1 million and \$1.7 million to retrieve individual mailboxes and emails. Faced with this high cost and the possibility of losing the lawsuit, Wyeth chose to settle.

A poorly organized archive may expose defendants to additional costs if a judge allows opposition lawyers to search all of the defendant's email for relevant information. Email recently sent and received by the defendant may be stored on the server and the defendant's computer, while older email that is not on the server may be found on server backup tapes, removable disks used by the defendant to take work home, or tucked away on the defendant's computer in a "misnamed" folder. Searching each of these locations is time-consuming, and this time is magnified when the desired email is on a backup tape. By their nature, backup tapes are optimized for fast storage, not fast retrieval. Retrieving information from a backup tape requires that the entire server be restored before any search can be executed--an expensive operation as Wyeth found. In addition, a thorough search through all of the defendant's email could result in the disclosure of proprietary information that could embarrass the company or aid its competitors. NASA has been embarrassed by email revealed during the recent space shuttle tragedy, and Bayer was likewise embarrassed by email indicating that executives were aware of problems with Baycol even as the company continued to market the drug.

Compliance is concerned with information retention, disposal and auditing according to specific industry regulations, such as those imposed by the SEC, NASD, Sarbanes-Oxley Act and the Patriot Act.

It is not enough to minimally satisfy the requirements specified by these regulations because regulations change and new regulations are written all the time. Businesses must put in place policies, procedures and the infrastructure to automate these procedures. With a robust set of policies and automated procedures, businesses can easily adapt to the changing regulatory landscape, ensuring compliance now and in the future.

INTRODUCING OPERATIONAL EMAIL MANAGEMENT

Operational email management products address the risks, lost opportunities and hidden costs of maintaining an email infrastructure. These products typically consist of:

- **Centralized storage facility**
- **Storage server that manages recording, indexing, long-term archival and access to the storage tiers**

- **An email capture module**
- **Index value and full text searching**
- **Business Process Management**

These products are built on highly scalable architectures designed to handle not only today's volume of email but also future increases.

By offering a unified, archive server-based approach to file storage, operational email management products guarantee that global email policies are aligned with business objectives through the use of automated enforceable policies for all users, and that email management does not become a time sink hole. Centralized storage coupled with a powerful search and visualization engine that shows how messages are related to each other—even if subject lines or recipients change—encourage the use of the email archive as a knowledge store and help to mitigate risk from compliance regulations.

By off-loading email storage from the email servers and compressing and eliminating duplicate attachments, operational email management products can reduce the amount of disk space required to handle a company's current volume of email by up to 90% with aggressive archiving while at the same time reducing the required number of servers by over 50%. Such a significant reduction in hardware will enable the company to reduce the size of email administrative staff or redeploy them to other business critical tasks.

When selecting an operational email management product, beware of the hidden costs of installation. A product that requires little or no customization and is fully compatible with your existing infrastructure can pay for itself in as little as three months. On the other hand, a product that requires many consultants to perform several months of custom development prior to installation and ongoing maintenance after activation will add additional costs and delays.

Finally, remember that the government drives the creation and adoption of many compliance regulations. A well-designed operational email management product will be adaptable to future compliance requirements and may introduce new opportunities as more of your information mingles in the central data store. A poorly designed product will require costly add-ons and may ultimately prove unable to meet requirements.

THE SOLUTION

Fortunately, one operational email management product, AXS-One Email and Instant Messaging Management Solution offers all of these benefits.

The AXS-One solution is built around the industry leading high-volume, high-capacity archival technology that is widely used in the financial industry as the solution of choice for preserving and managing company communication and transaction records for over 15 years and awarded industry recognition for best of class.

AXS-One offers a product that compliments existing email infrastructure, enables companies to meet their legal and regulatory obligations, improve their email storage management systems, and improve their email-based business processes.

AXS-One Email and Instant Messaging Management Solutions Offers:

Storage

- Can be configured to archive all or selected mailboxes
- Can be configured to archive based on timed frequencies to specific criteria
- Irrefutable capture of all internal and external emails, automatically archiving all email and attachments--in original electronic format--before they are delivered to a user's inbox
- Conserves storage space through the use of compression techniques and the removal of duplicate messages and attachments
- Can be configured to archive based on timed frequencies to specific criteria
- Stores messages with different retention periods on separate physical media
- Automatically deletes expired items and provides a report of items deleted from the repository
- Information Management Lifecycle migrations of data
- Permits extension of expiration date to indefinitely delay message destruction to meet corporate and legal requirements

Search

- Restricts access according to authorization levels defined by an administrator
- Provides the ability to search across multiple mailboxes
- Provides the ability to create single or multiple sender and recipient queries
- Provides the ability to search across all data in the archive--including messages, attachments, reports and statements--in a single query
- Supports field, date range, full-text, variant spelling and stemming-based search for keyword and phrases

Compliance

- Preserves email, instant messages and other information in non-rewritable, non-erasable format
- Automatically verifies the quality and accuracy of the archiving process
- Generates an audit log of the archiving process and user access
- Captures inbound, outbound and internal emails
- Protects against unauthorized access
- Establishes user-defined organizational access hierarchy
- Establishes compliance department defined organization access tree for surveillance and review functions
- Legal Discovery process creates compliance 'packages' for review and distribution

Integration

- Integrates with your enterprise mail servers' environment and supports High Availability and Disaster Recovery architectures
- Operates in Microsoft Windows and UNIX platforms
- Supports heterogeneous storage environments, including Content Address storage systems (EMC Centera and Network Appliance), WORM media (tape, CD/DVD, magneto-optical), Hierarchical Storage Management, online, near-line and off-line
- Open integration into other systems through Web Services
- Integrates with Lotus Notes and Microsoft Exchange servers as well as standard UNIX, SMTP and POP3 servers, and Bloomberg Mail archiving
- capture and review for AOL, MSN, Yahoo, Reuters, Sametime, etc.
- Provides end-user access to archive through Notes and Exchange mail clients as well as standard HTML browsers

Ease of use

- Seamless access is provided to archive via Notes and Exchange clients
- Attachments can always be displayed in the original format
- Archiving process is server-based and controlled by IT staff and is transparent to end-users requiring no desktop software installations

ABOUT AXS-ONE

AXS-One offers information managements software for organizations to extend collaboration between employees, partners, customers and suppliers. AXS-One's award winning technology allows customers to rapidly create world-class solutions to address critical needs. The AXS-One business solutions optimize the assets that make up your financial value-chain--the mission-critical business processes that directly affect the overall performance of your enterprise.

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