



BEYOND EMAIL ARCHIVING: Introducing Email Intelligence

A Technology White Paper

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Source: National Law Journal,
Socha-Gelbmann Electronic Discovery Survey

II. The Email Conundrum: New Challenges and New Opportunities

Email is clearly the fastest growing communications medium. But perhaps even more important than the volume of email is the shift in its usage and scope at enterprises worldwide. With the vast majority of a company's intellectual property contained in the messages and attachments sent through its email system, email has become the de facto corporate record repository.

This has created new challenges and new opportunities for business and IT executives. To name just a few, these executives struggle to:

- *Respond to regulatory audits and investigations with speed, confidence, and accuracy.* In the wake of corporate scandals at Enron, MCI and elsewhere, businesses are under greater scrutiny than ever before. The Federal government has become increasingly aggressive in enforcing regulations. According to the SEC, enforcement actions have increased by 27 percent and fines and disgorgements have increased 600 percent since 2000. Companies are struggling to find the right balance in responding to Federal regulators. Providing too much information can result in more exposure to risk; and providing too little information can result in excessive fines and penalties. For example, in 2002, the SEC fined five brokerage firms \$8.24 million each for failure to retain emails. And in 2004, Bank of America was fined \$10 million when it failed to turn over emails to the SEC in a timely fashion—within 36 to 72 hours.
- *Fulfill legal requests to search and retrieve specific email message(s) in a cost effective way.* A survey of 50 enterprises conducted by Clearwell reveals that companies spend on average \$175,000 per e-discovery request. According to The National Law Journal (August 12, 2004), the cost of e-discovery preservation, collection, and production in U.S. commercial litigation is projected to increase more than 150 percent, up from \$700 million in 2004 to \$1.8 billion in 2006. Furthermore, the inability to retrieve all relevant emails can result in compensatory and punitive damages in the millions of dollars.
- *Analyze all relevant customer information, identify and use product feedback communicated via email.* While customer relationship management, sales force automation and customer service management are critical to accelerating sales and enhancing customer service, they fail to take into account the vast amount of information contained in corporate email systems. By overlooking their email repositories, companies are not tapping into the primary source of communication with customers, making it impossible to enhance customer service at every stage of the customer lifecycle and missing valuable cross-sell and up-sell opportunities.
- *Reduce the burden on IT.* With increasing pressures from compliance and legal executives, IT departments—already resource-constrained—are nearing the breaking point as they try to fulfill complex requests for emails in shorter periods of time, while staying on top of their core IT functions.

SOLUTION REQUIREMENTS

As a result, compliance, legal, customer management and IT executives need new solutions to help them address these challenges and capitalize on new opportunities:

Compliance Executives: Need a solution that makes it easier to proactively track key compliance issues, lower discovery costs, and reduce risk and financial exposure. As an example, Constellation Energy spent more than 45,000 hours responding to over 225 requests in 2005 alone. Specific compliance challenges include:

"Email has become the de facto system of record within the enterprise and contains valuable information not found in any other systems. Enterprises of all sizes need to analyze this data to drive better performance across business functions such as lowering the costs of regulatory audits and legal discovery requests, enabling faster and more accurate early case assessments and rapidly addressing customer issues."

Michael Osterman
Principal Analyst
Osterman Research

I. Executive Summary

Email has become the de facto communications medium for businesses worldwide.

Not only is the volume of email traffic growing over 30 percent per year, but so is the value of the data it captures. Analysts estimate that nearly 70 percent of a company's business-critical information resides in the messages and attachments sent through its email system. As a result, corporate email systems have evolved to become the repository of record for a company's intellectual property.

The emergence of email as a corporate record repository raises a host of new challenges, particularly in this age of increased emphasis on regulatory compliance and legal discovery. How do businesses store, organize and manage the staggering volume of email information generated each day? How can companies exploit this vast repository of data to satisfy increasingly stringent regulatory requirements? How can IT leverage the investments they have already made in their email infrastructure to analyze literally millions of messages? How can corporate executives quickly identify and extract the specific, important data they need, when they need it, in response to legal requests?

Along with these challenges, the emergence of email as a corporate record repository also presents new opportunities. For the first time, businesses are able to distill valuable customer information as it comes to them via email.

Email Archiving solutions have taken a first step towards addressing these challenges and capitalizing on the opportunities by ensuring the storage of all emails. But it does little good if enterprises don't have the ability to analyze this information and extract actionable intelligence from it. Enterprises need "Email Intelligence," a new class of analytical solutions that discover, organize and analyze the information contained in corporate email systems. Just as business intelligence products like Cognos or Business Objects enable executives to extract intelligence from the data captured in databases, Email Intelligence solutions do the same for corporate email systems.

A robust Email Intelligence solution, as dictated by customers and analysts, must go beyond keyword search tools or legal discovery products. It must provide a single interface into all email repositories—Exchange Servers, PST files, Journaling Servers and Archives. It must provide sophisticated analytics capabilities such as discussion threads, the ranking of email search results based on relevance, and dashboards with drill-down capabilities. The solution must scale to analyze terabytes of data and must be easy to use, deploy and maintain.

Clearwell Systems, a pioneer in Email Intelligence, is transforming the way enterprises analyze the information contained in corporate email systems to drive better business performance. Several industry-leading companies have realized lower discovery costs, reduced risk and improved field productivity within days of their production deployments.

“Electronic discovery requests are by far the most daunting tasks that I face on a regular basis. Every time we get one, I know my team will be spending an enormous amount of time tied to our servers searching for an elusive group of emails, and even more time analyzing the results after we’ve found the right information.”

Eric Rosenberg
Director of Information Technology
Gunderson Dettmer

- Identifying relevant emails across all data stores—Exchange Servers, PST files, Journaling Servers and Archives
- Analyzing trends and proactively identifying critical business issues
- Understanding how one email connects to another, quickly identifying all the participants, and who knew what and when
- Providing review and workflow capabilities with the ability to categorize, print and export the results
- Enforcing robust privacy and security policies

Legal Executives: Need to perform early case assessments, confidently fulfill legal requests, and lower e-discovery costs. A large technology company had a 35-person team analyzing its email to fulfill information requests for over 300 cases. The cost? Approximately \$25 million a year. Specific legal challenges include:

- Quickly discovering all pertinent emails—dynamically placing messages in their proper context, linking messages to one another and identifying all participants
- Reducing duplicate and near-duplicate emails and attachments, suggesting related terms to analyze to ensure a comprehensive response
- Providing comprehensive review and workflow capabilities with the ability to categorize, print and export the results (for import into other tools)
- Conducting early case assessment quickly and accurately to drive more informed settlement strategies
- Collaborating across multiple internal and external groups during an investigation

Customer Management Executives: Need to extract and distill valuable customer information impacting their businesses while it is happening, not after the fact when it might be too late to act. Underwriters at a financial services firm negotiated contracts with brokers over email, some of which were not captured in the final contract. When responding to customer disputes, the firm had no easy way to go back and review what was agreed upon over email, resulting in lower customer satisfaction or unwarranted liabilities that threatened its business. Customer management executives face these unique challenges:

- Rapidly discovering critical customer interactions occurring in email and identifying collaboration opportunities across groups
- Organizing feedback across customers and quickly addressing the most important and common issues and concerns
- Capturing product and service advice being exchanged across the field, eliminating repetitive questions and redundant effort
- Distilling intelligence without viewing a single email—extracting intelligence from email and respecting privacy issues
- Understanding the key topics being discussed throughout the company and ensuring alignment between the field and strategic corporate priorities

IT Messaging/IT Security Executives: Need to eliminate the time-consuming back-and-forth between business and IT for each request, and reduce IT’s effort to extract and retrieve emails across multiple data sources. A reinsurance company spent several days retrieving emails based on a keyword inquiry. Each time the regulator returned with a new keyword request, an entirely new search had to be initiated, adding several more days to the task. IT teams face these distinct challenges:

- Reducing IT personnel required for discovery requests, enabling them to focus on more strategic projects
- Empowering business executives to analyze email without IT involvement
- Discovering emails across all data stores—exchange servers, PST files, and archives
- Minimizing product training and ensuring rapid user adoption from a simple, intuitive user interface
- Providing minimal risk to the current email infrastructure and lowering total cost of ownership
- Delivering comprehensive administration capabilities and enforcing robust privacy and security policies

III. Existing Solutions Focus on Solving Different Problems

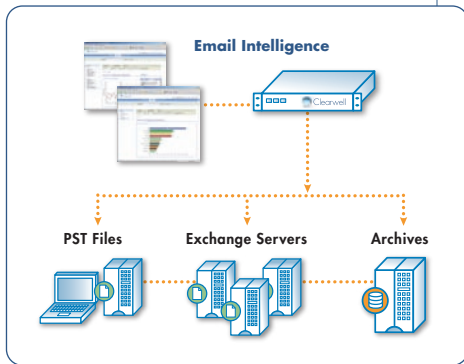
Today's legal and regulatory environment requires companies to secure and store email. As a result, many companies have invested heavily in storing email data via Exchange Servers, PST files, Journaling Servers and Archives. But little has been done to analyze the data they are securing and storing. Keyword search tools return tens of thousands of irrelevant results. Vertical legal discovery solutions analyze emails from a few mailboxes in response to a subpoena or lawsuit. However, they don't offer a proactive, comprehensive solution that enables enterprises to analyze all emails across the enterprise.

EMAIL ARCHIVING

Archiving is an important initial step to ensuring proper email information management. While archiving is critical for reducing storage and IT costs, it does little good if enterprises don't have the ability to analyze email and extract actionable intelligence from it. The archiving vendors focus primarily on email storage, relieving the burden on servers and making it easier to search for emails than on tape backups. While archive vendors provide the ability to search and retrieve large volumes of emails in their archives, that still leaves teams of people spending days manually reviewing emails and attachments in response to regulatory audits and investigations. Driven by customer demand for best of breed solutions, such as Email Intelligence, archiving vendors are committed to building an ecosystem of partners with value-add solutions that can be easily integrated with their products.

LEGAL DISCOVERY VENDORS

A group of niche vendors provide legal discovery products and services to analyze emails and attachments. These providers typically analyze only a small number of mailboxes at a time, ranging from 20 to 50, versus 10,000—making this approach costly and difficult to scale for medium and large enterprise requirements. Legal discovery vendors also require enterprises to copy the data onto their servers, creating yet another redundant data store. Furthermore, because this approach does not analyze all emails across the entire enterprise, it provides little or no value for proactive early case assessments. Worse yet, some of the vendors offer their solution as services, forcing enterprises to send confidential and proprietary information outside of the company.



Email intelligence discovers, organizes and analyzes email stored across all data sources.

IV. A New Class of Solution: Email Intelligence

If storing email is the first step, what other capabilities do enterprises need? As outlined above, customers are demanding the ability to analyze email information, and derive intelligence from it while respecting privacy and security. This capability is what the industry is beginning to define as “Email Intelligence.” Many industry analysts now believe it should be a mandatory component of any enterprise messaging and collaboration strategy. In the same way that business intelligence solutions have fueled thousands upon thousands of users in all types of industries and enabled them to do their jobs better, Email Intelligence solutions will enable business and IT executives to lower discovery costs, reduce fines, grow revenue and improve customer satisfaction.

EMAIL INTELLIGENCE CAPABILITIES

Clearwell’s definition, as validated by our customers, is that a true Email Intelligence solution must provide the following six key capabilities:

- **Single View into all Email Repositories:** Most companies that have implemented an archive don’t have all of their emails in the archive. Historical data continues to remain on information stores and exchange servers, and most companies only archive emails from select groups. Therefore, a robust Email Intelligence solution must integrate with and provide a single interface to all email data sources—Exchange Servers, PST files, Journaling Servers and Archives.
- **Discussion Threads:** Once a troublesome email is found, enterprises often struggle to identify all the participants who may have been involved in the discussion, who knew what and when. An effective Email Intelligence solution must dynamically link all related messages together into threads and provide a chronological thread of the entire discussion, including all replies and forwards.
- **Email Relevance Ranking:** Keyword searches return tens of thousands of irrelevant results, resulting in wasted time and cost. Much like Google, which analyzes the unique properties of the Internet to display the most relevant Web pages first, an Email Intelligence solution must analyze the unique properties of email and apply email-specific algorithms to display the most relevant emails first. Just like you would never search the Internet without page rank, why would you settle for searching email without email relevance rank?
- **Dashboards and Analytics:** An Email Intelligence solution must go beyond search and retrieval, and extract intelligence from emails and attachments using sophisticated algorithms. It must deliver a scalable data mart which can be used to analyze trends via powerful dashboards with drill-down capabilities. It must proactively identify and notify issues in violation of company and industry policies. Furthermore, it must provide these capabilities while respecting privacy and security.
- **Scalability:** An effective Email Intelligence solution must provide a scalable architecture that can handle an enterprise’s entire email corpus across all email data stores. It must handle terabytes of email and process millions of new emails everyday.
- **Ease of Use and Ease of Deployment:** Corporate email systems are the backbone of a company’s operations. An Email Intelligence solution must not impact email systems, it must not sit in line and interrupt the flow of email. It must be easy to deploy and be up and running within minutes. The interface should be simple, intuitive and achieve rapid user adoption with minimal training. Lastly, the product needs to be easy to maintain and operate, providing a very low total cost of ownership to the enterprise.

"Clearwell's Email Intelligence solution stands apart from other business intelligence products. It provides corporations with the ability to tap the valuable information captured in corporate MS Exchange systems, Personal Outlook Folders, and related email archives for the first time. Clearwell's world-class team has created a technically superior product, and I look forward to advising the company through its next phase of growth at the forefront of the emerging Email Intelligence market."

Dr. Bill Coughran
Vice President of Engineering
Google.

V. Introducing Clearwell Systems—Delivering Email Intelligence™

Clearwell Systems provides a new class of Email Intelligence solutions, revolutionizing the way enterprises discover, organize, and analyze information captured in email to drive better business performance. Clearwell enables enterprises to meet compliance and regulatory requests, lower discovery costs, reduce fines, grow revenue and improve customer satisfaction.

Complementary to archiving solutions, Clearwell is easy to use, install and maintain—delivering an immediate ROI and lowest total cost of ownership to the enterprise. And several key differentiators set it apart:

- the single view it provides into all email repositories
- the sophistication of its analytics—discussion threads, email relevance rank and dashboards
- the massive scalability of its platform
- ease of use, deployment and maintenance

Unlike current solutions that simply index and provide search capabilities, the Clearwell Email Intelligence Platform™ offers a deeper level of intelligence. By analyzing the unique properties of email (such as recipients, replies, forwards, CC's, subject header, etc.), and combining it with organizational data, Clearwell dynamically derives email-specific communications patterns. The company then applies its proprietary, patent-pending linguistic and statistical analysis algorithms, known as Dynamic Content Analysis™ to extract intelligence from emails and attachments.

Clearwell delivers the power of Email Intelligence without being in the path of email, without creating a separate information store, without moving mailboxes and without installing any software on desktops or servers, making it very easy for an organization's IT group to deploy and maintain.

Large energy companies, major financial institutions, leading high-technology companies, and global consulting firms—have realized immediate and significant value within days of their production deployments. Some of these benefits include:

- Email analysis in minutes vs. days—up to 90% reduction in costs to organize and analyze emails for regulatory audit and legal discovery
- Early case assessments performed 80% faster
- Reduced corporate risks from proactive identification and analysis of critical issues
- Significant improvement in field productivity and reduction in response times to address critical field issues
- Rapid user adoption, lowest total cost of ownership

VI. Conclusion

As enterprises rely more and more on email as a source of critical business information, they will increasingly require the ability to analyze and extract intelligence from the email—while respecting individual's privacy and security. Defined as Email Intelligence, these capabilities are considered by many industry analysts and customers to be a mandatory component of any enterprise's legal or compliance strategy, in addition to the email archive. In the same way that business intelligence solutions have ushered in a new era of business performance management, Email Intelligence will allow business and IT executives to lower costs, reduce fines, mitigate risk and grow revenue, enabling their companies to achieve a new level of corporate performance.

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