

Whitepaper

Sponsored by



Written by Info-Tech Research Group



Meeting Changing Information Management Needs with Next-Generation Email Archiving

Introduction

Email archiving is evolving beyond pure storage to form the backbone of an overall information management strategy. In a business environment where content is created at an increasingly rapid pace, the need for archiving is more important now than ever. Email archiving solutions are changing to accommodate the new realities of the digital workplace. The scope of corporate communications is growing to encompass technologies including, but not limited to IM, social media, and fileshares. Today, organizations are beginning to see the importance of not only archiving these data sources, but making it easy for users to locate that data in the future.

As the corporate information environment evolves and expands, so too do the needs of organizations seeking solutions to manage that content. This whitepaper provides a research-backed analysis of the email archiving industry as it stands today and addresses features present in next-generation email archiving solutions. While each organization has differing factors driving their push for information management, many of the same common elements must be considered.

Market Overview

Market History

- Archiving capabilities that were once cutting edge become default as the market evolves to encompass information management
- Expanded regulatory oversight has put pressure on organizations to control and audit the corporate owned information sources
- Especially in the case of email archiving, rapidly accessing information has become more crucial to an organization than merely storing it

Market Trends

- Archiving vendors are adding encryption to their offerings to allow organizations to securely store content in the cloud
- Employee-owned storage of corporate information becoming commonplace – this is a compliance nightmare.
- Customers are looking to vendors to provide an integrated set of storage and information management tools to control content growth.

Vendor Landscape

In their review of the email and content archiving marketplace, Info-Tech Research Group categorized vendors as either Emerging Players, Market Pillars, Innovators, or Champions (Figure 1). See the Appendix for more information on the evaluation criteria.

Figure 1: Info-Tech Vendor Landscape



Table Stakes and Advanced Features

Table Stakes

Table stakes represent the minimum functionality that a vendor must deliver through its email archiving offerings. The four base requirements of any email archiving solution are:

- **Exchange archiving:** journaling and the option to delete email from the database for Exchange on premise.
- **Full email search:** the ability to search email content, based on using full text searches as well as MIME fields.
- **Additional content types:** support for archiving other content, including social content
- **Storage control:** the ability to tier content and automate the disposition of low value content

Advanced Features

There are a number of advanced features above and beyond the three table stakes that are found in many next-generation solutions. While not always necessary from a pure email archiving standpoint, these features allow an organization's archiving solution to become an integral part of its information management strategy. The ten advanced features that Info-Tech evaluates can be seen in Figure 2. These next-generation offerings will become more commonplace as archiving requirements grow in complexity for many organizations.

Figure 2: List of advanced features

Advanced Features	
Feature	What we looked for:
Content Archive	The ability to intelligently archive additional file types such as fileshares, social, and SharePoint.
Storage Management	Ability to manage additional off-site storage locations as part of the archive storage.
eDiscovery tools	A portal that can be used by Compliance team to own and perform all aspects of eDiscovery.
Classification tools	Granular control of email and content to control duplicates and access during eDiscovery.
Metadata reuse	The ability to take advantage of existing metadata from standard metadata types.
Advanced search	The ability to perform full text search as part of a larger search-based ranking.
Application integration	The ability to enable a consolidated archive for typical applications (CRM, ECM, ERP, WCM).
Storage tools	The content is managed within the archive storage based on value and/or expiry.
Archive tools	Granular control of content compression and versioning for at least email.
Content Analytics	Tools to manage compliance and storage needs including archive size and capacity projections.

Aligning Archiving Strategy to Special Requirements

Regulation and Litigation

Any information generated within an organization may be subject to regulatory or litigation requests. Especially in the last decade, public and political pressure has driven finance reform and privacy requirements in jurisdictions around the world. Enterprises may even be responsible for employee-owned communications when subject to litigation or a regulatory inquiry. As a result, organizations are developing robust plans for the deletion and retention of enterprise controlled information. Next-generation email archiving solutions need features above and beyond simple storage and search. In the modern regulatory and legal landscape, information must be:

- **Findable** – confidently find or prove that a document doesn't exist
- **Immutable** – not corrupted by human error
- **Traceable** – know who has accessed each file

Due to the changing requirements around regulation and litigation, features that enable journaling, indexing, and advanced search are becoming the industry standard. Both emails and their attached documents must be indexed and searchable by internal compliance and external regulatory and legal bodies. The key to compliance in the modern landscape is auditability; organizations must ensure an audit trail and metadata so that information is available to satisfy any internal or external eDiscovery request.

Information Governance

Developing a set of coherent information governance policies is crucial in ensuring that the archiving solution meets the organization's needs, especially those of regulation and litigation. By managing the people, processes, and technology associated with data, information will be handled consistently throughout the organization. Policies can be created that facilitate easy access to corporate-owned data, especially once the needs of end users are understood. When information is readily available, users are less likely to have secondary stores of potentially sensitive corporate-owned information.

Information governance has a wide variety of applications to an organization. But in the case of archiving, there are three core benefits:

- **Value creation:** data used for regulatory compliance, litigation, and business reporting is accurate and easily accessible by the right people
- **Operating cost reduction:** decreases the time and manual effort required by IT and legal to perform eDiscovery requests
- **Risk mitigation:** improves regulatory compliance, and sets appropriate security access levels

While IT may lead the archiving implementation, information governance cannot be an IT-only endeavor. The business owns the data and must be involved in the creation of policies governing its use. The goal of governance is to create workable definitions and business rules that address the needs of individual stakeholder groups. Coordinating data owners across different lines of business will ensure a common understanding of the policies created. Ideally, these will be the final voice when changes to data processes and data definitions are required. Therefore, any email archiving solution will need to adhere to the definitions and rules created. This increases the likelihood of business buy-in for the solution that is chosen.

Beyond establishing the basis for implementing an archiving solution, information governance is key for compliance with pertinent regulations. By building a set of policies that deliver consistency and accuracy, an organization can ensure that its data is **findable, immutable, and traceable**.

eDiscovery

The formalized process for satisfying information requests from regulation, litigation, or negotiations over intellectual property is known as eDiscovery. The grey boxes in Figure 3 demonstrate where an archiving solution can aid in the eDiscovery process once legal and IT have defined the principal documents to be archived and the policies governing their use.

By building eDiscovery into the email archiving solution, internal IT and legal departments can save both time and money in fulfilling information requests. Figure 4 illustrates the cost savings that can be achieved when performing eDiscovery through a dedicated archive and search process rather than manual review. As technology comprises a greater percentage of the discovery process, the total costs decrease dramatically.

Any request for information about employees or business transactions should be handled through an eDiscovery request. When selecting an archiving solution, organizations should consider the three main sources of information requests:

Regulatory: There is no flexibility in responding to regulators; there must be proof that proper procedures were followed. Requests can be made for communication and documents from all sensitive departments (e.g. HR, Finance, R&D, Legal, etc.). At a minimum, look for archiving solutions with audit quality reporting, encryption and search for all data sources/repositories.

Legal: Especially for organizations with multiple lawsuits each year, a system that can archive files as well as email is crucial. Maintain all attachments associated with emails in the archiving tool to ensure the completeness of corporate information.

Internal: Internal investigations are often initiated by HR when there is a need to terminate an employee *with cause*. In these cases, corporate ownership of email is crucial. By prohibiting personal storage of communications, internal compliance departments can limit risk. For internal investigations, basic email archiving functionality should suffice.

Figure 3: Sample eDiscovery process

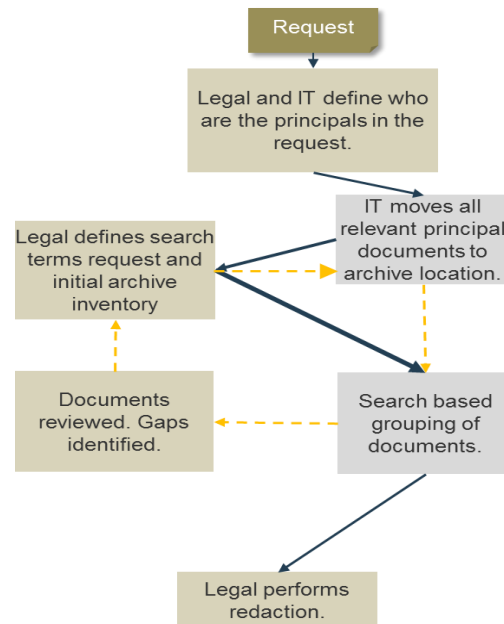
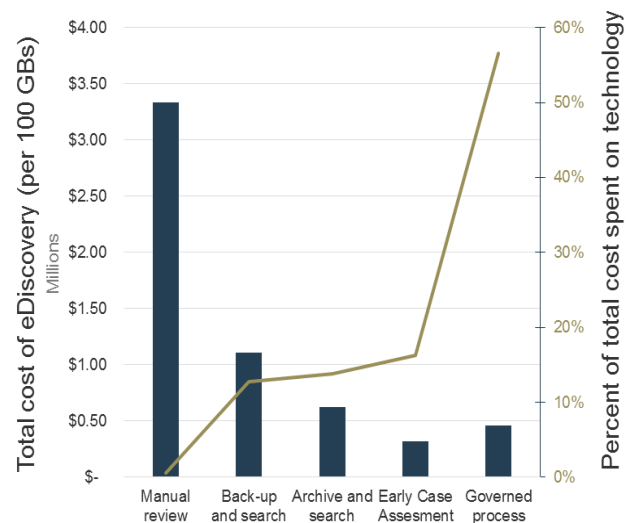


Figure 4: eDiscovery Costs



The starting point of any request is to find the author(s) of the original communication. Since most discovery requests will center on people; what they knew, what they communicated, and what they did, the core pieces of information being requested are data logs, audit trails, and document access. Even if the requests go beyond the “who” of a document, author names are often the most unique feature that can be searched against. At the very least, archiving metadata should contain as much information about the author(s) of a document as possible.

The final key element to consider when utilizing the eDiscovery elements of an archiving solution is information security. When corporate-owned documents are being sent out for external review, an approval process must be put in place to ensure that all parties are aware that their documents have been reviewed. Taking advantage of electronic approval functionality decreases cycle time for IT and provides an audit trail of changes made to a document. Often, documents being reviewed externally are of a sensitive or privileged nature. Redaction allows an enterprise to disclose a higher percentage of sensitive documents to external legal or regulatory bodies, thus expediting the process.

Considerations and Common Issues

Content Growth

In its simplest form, email archiving is driven by the rapid growth of user generated content outpacing the cost and capability of local storage solutions. This explosion in data has created a need, now more than ever, for improved content archiving. Especially in the case of email, archiving is often ad hoc and employee owned. Organizations who have, or are in the process of implementing stricter information governance policies must seek out corporate-owned storage solutions. In this case, storage capacity is key. Organizations must calculate storage growth and plan against existing/future capacity when implementing any archiving solution.

Storage and Security

Once an organization assesses its storage capacity needs, it must evaluate the method by which this information will be stored. Traditionally, storage has been handled internally which can be expensive and cumbersome. However, cloud-based storage solutions are becoming increasingly prevalent. In adopting a subscription-based service model, organizations avoid a large capital outlay, converting storage to an operating expense. Once in the cloud, many providers will use multiple redundant sites, giving better uptime and disaster recovery than most customers could otherwise afford. Longer term, cloud storage allows organizations to adjust user licenses upwards or downwards to appropriately scale for content growth.

A potential drawback of cloud storage is the loss of local security and physical control over corporate-owned content. This requires organizations to be fully confident in the service provider and comfortable with their security strategy – including ownership of encryption keys. For many organizations, this loss of control is a big ask and may be difficult to reconcile for business and IT leaders. By outsourcing storage infrastructure however, IT leaders will be able to turn their focus to other strategic initiatives. This freedom alone may make cloud storage an attractive option, at least from an IT standpoint.

The first and perhaps most important cloud storage consideration is meeting IT and end-user expectations. If cloud storage cannot deliver on stakeholder requirements, then its adoption is a moot point. Closely following that are technology concerns; how well cloud interfaces with the existing environment. If the organization recently made a large storage investment or feels it cannot integrate with existing systems, then cloud storage may be less than ideal. Lastly are security concerns, which come down to a matter of trust. Can the organization trust the service provider to meet its security needs? Only when each of these concerns are met should an organization move forward with implementing cloud storage in its archiving solution.

Storage Analytics

Emails often come with attachments representing the “content” side of a communication. In these cases, archiving the attachment is as important as archiving the email itself. The true value of an archiving solution comes from the ability to establish a cross-functional link between communication (email) and content (attachment). Together, these documents should form a cohesive whole with defined access and disposal parameters for end users.

Storage analytics allow all elements of a communication to be grouped together and findable by end users, be they employees, internal compliance officers, or external bodies. Searching for an email will turn up any related pieces of content along with it. When easily discovered, the original attachment becomes the single version of truth for the organization. This mitigates the risk associated with multiple versions of a piece of content existing within the organization.

From the standpoint of litigation and regulation, storage analytics give an organization peace of mind about corporate-owned content. End users can determine what content exists within the organization before a discovery request is submitted. Meanwhile, a consistent set of rules are applied to all archived content wherein retention and disposition records of emails are linked to their attachments. An audit trail is created while deleting a communication ensures that all elements of that communication are deleted.

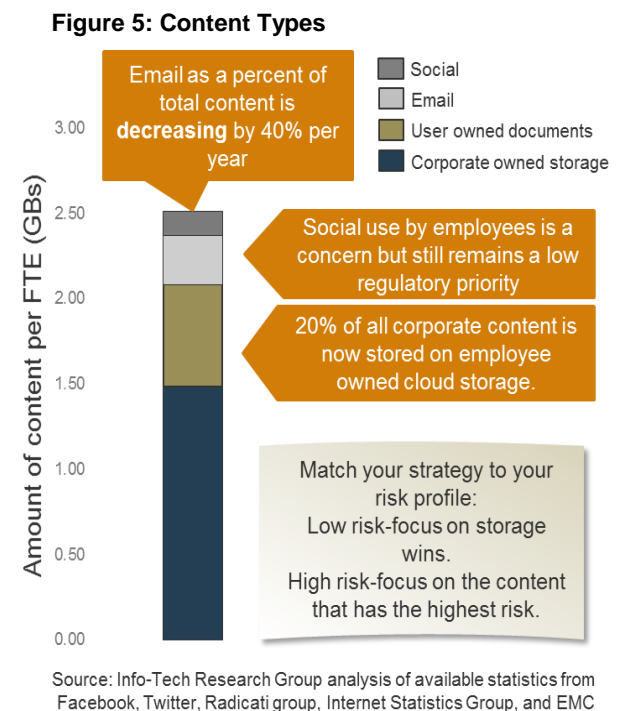
Content Archiving

Most content archiving solutions are capable of handling a number of different information sources including:

- Email (both Exchange and cloud)
- Files (local, network, SharePoint)
- Instant messaging (Skype, Lync, AIM, etc.)
- External social media (LinkedIn, Twitter, Facebook, etc.)
- Internal social media (Yammer, Chatter, etc.)

Archiving these content sources may be useful or even necessary from an eDiscovery standpoint. They can be relevant to litigation and may be subpoenaed. Organizations who cannot present this information can face legal consequences. The archive strategy must account for each of these content sources as a form of enterprise communication.

Adding to the importance expanding the scope of content archiving is the fact that email is no longer the fastest growing content type. As can be seen in Figure 5, the sprawl of fileshares represent the biggest storage and information governance concern. Employee-owned cloud storage tools are decreasing corporate visibility into what information is outside of the corporate walls. If an organization truly wishes to mitigate enterprise risk, content archiving will need to expand beyond email.



Applications

While email is still at the core of many organizations' archiving strategies, archiving applications are evolving to handle an increasingly complex variety of tasks. Ultimately, archived content needs to be replicated and accessible across the organization, tied into analytics, and searchable. All of these requirements need a suite of information management applications.

When adding regulatory compliance into the mix, it becomes clear that a basic solution is simply not viable for most organizations. Next-generation archiving applications offer a broad range of capabilities that can deliver on a wide variety of use cases. In today's environment, a content archiving solution must be able to solve an organization's key content archiving pain points.

Software Offerings

The more comprehensive email archiving offerings are usually not a single program, but a suite of related software that together address an organization's archiving needs. Given the broad range of offerings on the market, it is difficult to decide on the exact mix of software that is right for an organization. While the exact product mix will vary from solution to solution, the basic features that need to be addressed are the same. This is why it is important to assess a solution holistically when deciding on an archiving solution.

A more detailed analysis of vendor and software offerings in the email and content archiving marketplace can be found in Info-Tech's *Content and Email Archiving Vendor Landscape Storyboard*.

Conclusions and Recommendations

Conclusions

The specifics of the archiving solution will vary between organizations. Exact product mix, could vs. local storage, types of content to be archived will depend on your needs. These decisions require a deep understanding of your organization's specific business requirements. This whitepaper provides a lens through which to assess your organization's needs as they pertain to the overall email archiving landscape.

- Especially in mature businesses, email represents the bulk of communications into and out of an organization; archiving this communication remains a priority.
- As email archiving tools evolve to form the basis of a more comprehensive communication information management strategy, they must offer an ever growing selection of advanced features.
- Information governance policies are the key to ensuring that the information to be throughout the organization is **findable, immutable, and traceable**.
- This initiative should extend beyond IT and involve all business stakeholders that generate or need to access data on a regular basis.
- Regulatory, legal, and internal groups increasingly require access to corporate-owned data logs, audit trails, and other documents.
- By building eDiscovery functionality into the email archiving solution, internal IT departments can save time and money when fulfilling such requests for information.

Recommendations

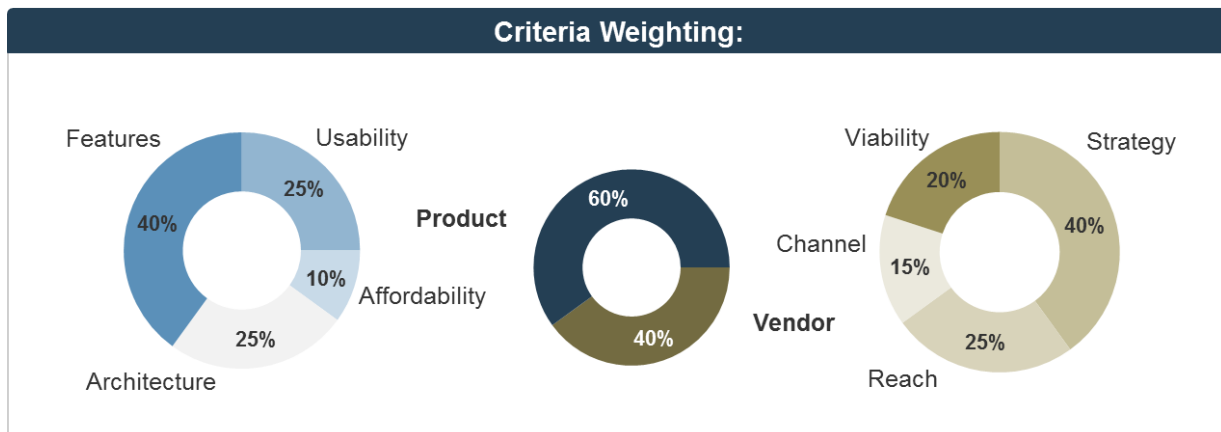
When evaluating the implementation of an email archiving solution, carefully consider the topics discussed in this whitepaper. Once you thoroughly understand the archiving needs of your organization, take a look at Info-Tech's *Content and Email Archiving Vendor Landscape* in order to assess the most appropriate vendor.

When you are finally ready to implement a solution, Info-Tech recommends the following steps:

- 1. Prepare:**
 - a. attend product demos and pilot the solution with your IT and Helpdesk teams
 - b. Do one last back-up and purge the emails and other content that you don't need
 - c. Ensure that employee owned email and content stores will be migrated to the archive
- 2. Policy Creation:**
 - a. Document and codify the Information Governance policies relevant to your archiving solution
 - b. Create rules in the system that adhere to your governance policies
 - c. Execute and test the rules to ensure that they work
- 3. Train:**
 - a. Promote universal adoption of the solution through training
 - b. Select your training methodology (in-house, vendor, third party, etc.)
 - c. Build training materials for the end users that have special features (Discovery team, personal archives, etc.)
- 4. Deployment:**
 - a. Select a deployment methodology. Will you use in-house resources or vendor services?
 - b. Integrate the solution with your email server
 - c. Migrate all relevant emails to the archive system
- 5. Expand** the deployment to other content types:
 - a. Take advantage of pre-built integrations with other systems
 - b. Choose high risk content types over storage types
 - c. Migrate the data to the archive system

Appendix

The findings in this whitepaper are based on objective third party market research drawn from the following Info-Tech Research Group reports: *Content and Email Archiving Vendor Landscape*, *Ease Compliance through Repeatable Processes*, *Effectively Manage Data Governance*, and *Content Archiving Guided Implementation*. The vendor evaluations in Figures 1 and 6 are based on the following weighted criteria:



About Info-Tech

With more than 30,000 active members worldwide, Info-Tech Research Group (www.infotech.com) is the global leader in providing research and analysis in practical, tactical Information Technology. With seventeen years of history in delivering quality research and analysis, Info-Tech is the fastest growing full service IT firm in North America.

Info-Tech's products and services combine practical and tactical guidance and ready-to-use tools and templates that cover the full spectrum of IT concerns. Our practical approach is designed to create a clear and measurable positive impact on the bottom line of our member organizations.

About CommVault

A singular vision – a belief in a better way to address current and future information management needs – guides CommVault in the development of Singular Information Management® solutions for high performance protection, simplified management and universal access to business critical information. CommVault's exclusive single platform architecture gives unprecedented control over data growth, cost and risk. More companies every day join those who have discovered the unparalleled efficiency, performance, reliability and control only CommVault can offer. More information can be found at www.commvault.com. CommVault's corporate headquarters is located in Oceanport, NJ, in the United States.