

White paper



Customer Engagement

Print and digital communications

The electronic vault advantage

Instant access to customer communications
for a competitive edge



It's time for a different document storage strategy.

Dramatic shifts in how organizations communicate with customers require a new way of thinking about document storage. It's no longer merely a record-keeping exercise. Customer care and digital self-service both demand an agile, interactive archive that simplifies access. It's also essential to preserve and easily access each document in its native format. This supports demand for a seamless customer experience across touchpoints, and growing regulatory requirements.

There are competing approaches to electronic document storage. However, only one choice combines high performance with low total cost of ownership to provide instant, effortless access via existing portals.



Understand the evolution of document archiving technologies and you'll see how electronic vault technology offers greater agility and a more satisfying customer experience.

Store and access customer communications without being locked into a single format.

Your company generates many thousands, perhaps even millions of customer communications each day, transforming data-driven print streams into personalized statements, invoices, policies and other business-critical documents. Traditionally, most of these have been printed and delivered by mail. Often, they are your most consistent and valuable touchpoints with customers.

The evolution of electronic document storage

Companies searching for a more effective and efficient way to store, access and deliver these critical communications have seen different technologies emerge over the years.

Microfiche became the industry standard for document archiving in the 1960s, enabling companies to dramatically reduce their document storage requirements and storage costs. Access, however, was manual and cumbersome.

Portable Document Format (PDF) technology was introduced in the early 1990s. Suddenly it was possible to share documents electronically even with someone who did not have access to the original application.

Enterprise Content Management (ECM) systems arrived in the early 2000s. These large-scale applications manage documents throughout the entire document lifecycle. They often include many extended capabilities beyond storage and retrieval.

Electronic vaults are the latest addition. These high-speed repositories maintain print streams in their native format and store documents exactly as they were created. Designed to work seamlessly with existing systems and portals, electronic-vault technology offers several important advantages, including ease of deployment and fast, efficient access. It complements existing technologies and can bring new agility to organizations already using ECMs.

Efficient access is more important than ever.

Customer communications are a valuable and necessary resource, and digital transformation means many more people need fast, easy access to more customer communications for many different purposes.

Customer care	Customer service representatives need to access and view the exact documents that the customer sees.
Self-service	Customers want to find, view and download communications from their own devices.
Compliance	Exact replicas of customer communications must be readily accessible.
Legal	In the event of litigation, organizations must provide accurate documents for discovery.
Marketing	Combining document access with personalized content and targeted offers can boost cross-sell and upsell.
Billing and collections	Securely shared documents provide transaction and billing history.

Accelerate deployment, improve customer experience and minimize costs.

ECMs: The shortfalls

ECMs are powerful, highly versatile solutions. However, these complex and powerful tools take time and careful planning to implement effectively. They also tend to carry a relatively high price tag; and, there are applications for which they're not ideally suited.

The most obvious example is web content. While ECMs are prepared to handle a wide range of document types and workflows, web content management systems (WCMS) are optimized to handle HTML, XML and images, with authoring through a web browser, for eventual publication on the Internet.

ECMs are also designed for internal use. They can become cost-prohibitive when you need to extend access to millions of customers. Typically, their principal purpose is not archiving and retrieving customer communications; and they're not well-equipped to rapidly handle high-volume print streams.

ECMs: The benefits

Organizations run on information, and most of that information is stored in documents. ECMs support diverse departments and goals with functionalities such as collaboration, version protection, workflow, analytics and more. They do store, distribute and manage documents across the document lifecycle. It's also not unusual for organizations to mandate that all documents be archived in an ECM.

ECMs and electronic vaults: Complementary technologies

Unlike the ECM multi-functional workhorse, single-purpose electronic vaults bring greater agility, higher performance, rapid deployment and lower total cost of ownership to archive and retrieval. Most important, electronic vaults work seamlessly with a wide range of existing systems including ECMs. This means no rip-and-replace, just increased value.

Six "must-have" characteristics of high-performance storage technologies

Document repositories need to offer far more functionality than a static "filing cabinet". Here are several key considerations as you weigh your options.

01. Integration	Seek seamless integration with enterprise applications, including CRM, billing, ECM, digital self-service and mobile apps.
02. Open standard	Avoid being tied to a specific programming language.
03. Agility	Solutions that don't require a relational database will let you deploy faster and adapt more easily to changes.
04. Compatibility	If you choose a solution that works with existing portals, you'll have no need to retrain customer service representatives on a new interface.
05. Reach	Provide secure document access within and outside your organization with a single solution.
06. Deployment	Roll out in weeks rather months, without disrupting operations.

Vault technology advantages

Designed to address today's high volume archiving challenges, electronic vaults can easily scale to support billions of communications online with no loss of document quality and no performance degradation. Advanced technology improves archiving efficiency and accuracy while lowering costs for storage hardware, maintenance and support.

High speed: Electronic vaults can ingest up to 2.5 million pages per hour, with no disruption to operations. The technology supports multiple presentment formats and local printing options including HTML, GIF, XML/XSLT and PDF, and documents are available in real time. Customer service representatives and customers can access documents much sooner, often within hours of a production run.

Document quality: Electronic vault technology uses advanced compression to reduce storage space requirements. Images are not down-sampled to lower resolution and fonts are not substituted. Print streams that are compressed on ingestion can be easily decompressed, so that documents can be quickly restored to their original, high-resolution quality.

Exceptional performance: With electronic vaults, there is no performance degradation as the repository grows. A more efficient ingestion process creates a more scalable solution.

- It enables exceptionally efficient search by document type, date or customer.
- Users can instantly retrieve and view the exact page they want, no matter how old, no matter how many pages in that print stream, no matter how many pages in the customer document.

Flexibility: Electronic vaults fully support multiple print and file formats. Users have almost unlimited flexibility to enhance, modify, combine and engineer print streams. Because they are not tied to rigid relational databases or specific programming languages, vaults can be easily integrated with accounting, billing and customer care systems or web applications. Shared repositories provide access to both documents and data sources to support any type of analysis, web presentment, customer care or self-service application that users may wish to deploy.

The business case for electronic vaults

Electronic vault technology is ideal for telecommunications, utilities, financial services and other companies that generate high volumes of communications per cycle. Electronic vaults can ingest millions of pages per hour, making bills and statements ready for online viewing and presentment much faster than they can be printed and mailed.

Many customers are turning off print; they prefer and expect instant document access via a self-service portal. Now you can easily create a universal repository that can capture virtually any document, including emails and interactive communications, and support thousands of concurrent users with no additional cost.

Deploy quickly.

Seamless integration with business applications makes it possible to achieve critical business goals in less time with less effort.

Improve customer experience.

Vault enhances satisfaction by providing real-time access to exact replicas of any document, no matter what format or how old.

Ensure compliance.

Vault maintains documents unmodified from their original format for as long as needed.

Reduce costs.

Digital access reduces your need to reproduce and redeliver customer communications.

Get instant, effortless access to customer documents via your existing portals.

While electronic vaults offer many advantages for archiving customer communications, the Pitney Bowes solution offers additional benefits that can significantly improve performance. This high-speed, high-volume, high-performance repository provides “anytime, anywhere” access to critical communications through virtually any interface or application. It can make your company more agile and efficient, increasing customer satisfaction while driving down costs.

EngageOne® Vault gives you the power of real-time indexing combined with state-of-the-art compression, storage and retrieval of documents. Now you can quickly archive years’ worth of customer communications in their native formats. Integrate Vault technology with your call center, websites and partner networks, and you can deliver a consistently superior customer experience for thousands of concurrent users, all in a matter of weeks.

**The Portable Vault:
Secure sharing, simplified**

New portable vault technology lets you excerpt just the information you need and easily create a fully indexed and searchable subset of your archive. Securely share those documents, and only those documents, with outside entities that need them. You’ll save on time, effort, and printing and delivery costs.

Collections. When it’s necessary to sell bad debts, a portable vault solution gives you the ability to provide all necessary invoices, agreements and notices in electronic form to third-party credit collection agencies.

Litigation discovery. Lawsuits can involve volumes of paperwork and documentation. Portable Vault is ideal for eDiscovery, because the required documents can be produced quickly and delivered electronically, eliminating the high cost of printing and shipping.

Field agents. Agents can readily access a customer’s policy, quotes and other communications to provide answers on the spot.

Financial advisors. Provide quick access to documents within an advisor’s portfolio of customer statements and financial history to help to develop a more personalized investment strategy.

EngageOne Vault: A superior solution

Index architecture	EngageOne Vault organizes and stores communications for quick, simple retrieval.
Customer-centric view	Most vaults are document-centric. With EngageOne Vault, users can search for the correct customer, then simply browse the entire document list for that individual.
Content Management Interoperability Service Connector	This optional component connects Vault to the Enterprise Content Management systems.
Powerful rendering engine	<p>Vault’s high speed rendering engine allows users to integrate the document display function into an existing web server environment.</p> <ul style="list-style-type: none"> • Java, COM DLL, Perl, PHP, modPerl, Apache, etc. • Full customization and seamless integration into the corporate web environment for personalized “look and feel” • Custom integration with presentment and payment options • No client software or browser plug-ins required

Put the EngageOne® Vault advantage to work for your organization.

Hundreds of companies around the world are realizing the many advantages of EngageOne Vault.



A telecommunications firm that serves more than 10 million customers now enjoys fast access to two years of exact replica documents using EngageOne Vault. The time it takes for CSRs to fetch line item details has been reduced to less than three seconds.



A utility company uses EngageOne Vault to store native print stream files and convert them to a variety of viewable formats. The technology has reduced the cost of customer calls by 20 percent and halved the time it takes to provide a customer with a copy of a bill.



An insurance company loads over 2.5 million pages per hour and handles 1,000 concurrent look-ups and retrievals per minute with EngageOne Vault. With the ability to store two million impressions on a single gigabyte, the company can now archive seven years of documents on a single server.



Case study: Vault in action

Challenge

A major financial institution needed to store 8.5 billion customer communications, including print streams and Binary Large Objects (BLOBs) such as images, audio or multimedia files. They already utilized a leading Enterprise Content Management solution but found it would take a full year to provide document access through their proprietary CSR application, mobile app and Secure Messaging Portal.

Solution

Instead, they chose to integrate with EngageOne Vault from Pitney Bowes. They were able to roll out their applications in a matter of weeks instead of months. They were also able to save more than \$50K per month in mainframe costs: Vault advanced-compression technology allowed them to store more than two million print stream pages per gigabyte.

Results

Issues can be resolved more quickly because customer service reps no longer need to switch systems to view customer documents.

Customers enjoy a more seamless digital experience:

- Instantly accessing up to seven years of statement history via the digital self-service portal.
- Using a mobile app to view statements on tablets and handsets.
- Receiving sensitive information via a secure messaging app that includes proof of delivery.

Vault has dramatically reduced the cost of sharing customer documents with individuals outside the organization.

The client uses the innovative Portable Vault to create a fully searchable archive of relevant documents and deliver them electronically as needed, instead of printing and shipping.

Vault is designed for quality expense management, customer service and management of compliance risk. It is part of the EngageOne suite of solutions from Pitney Bowes, an innovative modular platform that transforms everyday communications into profit-building digital and physical engagements.

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