

Considerations for Electronic Records and the “Paperless” Office

The City has expressed a desire to explore greater use of electronic records in the conduct of its activities. Electronic records include paper-based information that has been scanned and converted to electronic format. Electronic records also include information created digitally and likely to remain so - such as documents, spreadsheets, presentations and electronic mail.

Like many businesses, the City’s interest in electronic records is to improve efficiency and reduce costs associated with paper-based records systems. Unlike private sector businesses, however, the City faces certain requirements unique to government entities. These include a mandate to preserve materials for future generations, and public right to know laws that provide for citizen access to public records.

The City is also bound by more general requirements regarding the privacy of constituent and employee information, as well as e-discovery laws that apply to production of electronic records in lawsuits.

Managing electronic records requires sound, practical policies and investment in appropriate technology. The commitment of time and resources is significant. For this reason, many organizations – public and private – are taking a risk-based approach to electronic records management to prioritize how these resources can be best used.

This document analyzes decision-making criteria for dealing with the City’s electronic records needs from a policy perspective to identify what is required, and from a technology perspective to identify what is possible.

Policy & Compliance Considerations

The City’s need to comply with various regulations and mandates has implications for specific functionality needed in any system selected to manage electronic records.

1. Electronic Discovery

- a. The Federal Rules of Civil Procedure have made electronic discovery a reality. Pennsylvania has not yet adopted the FRCP as other states have, but the Eastern District of Pennsylvania has issued “Order Governing Electronic Discovery,” which states that the court expects parties to reach an agreement on e-discovery.
- b. Electronic discovery costs are estimated at \$3,000 per gigabyte of storage (source: AIIM International). Highest cost is review of electronic materials for relevance and for attorney client privilege, which is usually done by attorneys.
- c. E-discovery highlights the need for:
 - i. A way to search for and find electronic documents relevant to a litigation

- ii. A way to place discovery-related electronic documents on hold so that they are not altered or destroyed
- iii. A way to contain potential e-discovery costs. This can be done by enforcing records retention policies in the normal course of business.

2. Privacy

- a. Concern for privacy of information that can be used to perpetrate identity theft is nationwide.
- b. Citizens who receive City services, taxpayers, landowners, and others are concerned that information such as name, address, birth date, and social security number be protected from disclosure.
- c. Health Insurance Portability and Accountability (HIPAA) mandates that personally identifiable health information be kept private, a concern for City employees as well as anyone who uses the City's District Health Centers.
- d. Privacy concerns highlight the need for:
 - i. The ability to redact – that is, block out – certain fields of information on any documents that may be made accessible to the public.
 - ii. The ability to impose security that limits employee and/or contractor access to private information held in electronic systems.

3. Public Right To Know Laws

- a. Expected to apply to all requests for information received after December 31, 2008.
- b. Presumes government records are public (with exceptions) and an agency must be able to show why any particular record or group of records is not public.
- c. Provides five days for initial response to request.
- d. Public Right to Know Laws imply that the City knows what records it has and highlight the City's need for:
 - i. A way to easily identify exceptions
 - ii. A way to quickly search for, find and produce requested records

4. Long-Term Preservation

- a. The Pennsylvania Historical and Museum Commission, the provider of guidance for government records in the state, requires that government records on electronic systems remain usable over time. The issue for electronic records is obsolescence of the technology needed to access and view them over time.
- b. PHMC stipulates that:
 - i. Electronic records retained longer than 10 years should be printed to paper or microfilmed so that they remain accessible and usable over the long term.
 - ii. Email is a record that should be kept according to retention policies based on the message content. According to PHMC, email should be copied to a records management system; storing email in personal folders is not considered sufficient.

- c. Long-term preservation concerns highlight the need for:
 - i. Microfilm capabilities for long-term retention
 - ii. An email archiving system that can apply records management policies to messages.

E-Records User Considerations

Aside from staff who create e-records as part of their departmental roles, others inside and outside the City have the need to access electronic information. For this reason, the needs of all potential users need to be considered in any technology decisions involving search, retrieval and access privileges. Fundamental needs by user type are:

1. **Primary users** are workers directly involved in a department's business process.
 - a. They need a system that can:
 - i. Capture, index, store, search and retrieve e-records
 - ii. Retain and destroy records according to City retention policies
 - iii. Limit system access to authorized users.
 - iv. Restrict access to sensitive information
 - b. Optional needs:
 - i. Version control for electronic documents that go through many drafts before being finalized
 - ii. Workflow so that electronic documents can be automatically routed to others in a process.
2. **Secondary users** are those who need to see documents for other purposes. For example:
 - a. **Law department** staff involved in disputes or legal claims need to search for documents that involve a specific event, person or topic. This implies the ability to:
 - i. Search the full text of a document or image
 - ii. Search across multiple stores of electronic information, for example, email systems and imaging systems.
 - iii. Produce reports for opposing counsel on what e-records are easily available
 - iv. Place relevant e-records on hold so that they are not destroyed or altered
 - v. Justify why a particular group of records is not available due to records retention policy enforcement
 - b. **The City Controller's Office** commonly needs to see documents as part of audit activities. This implies the ability to:
 - i. Search for specific document types within particular date ranges
 - c. **Partner organizations**, such as those who supply funding for City programs through grants, may have the right to inspect certain categories of records. This implies the ability to:
 - i. Either produce paper copies of requested documents or limit partner access only to pertinent e-records

3. **Public users** either want to access records pertaining to their own accounts or request public records. Public user needs imply:
 - i. A City policy decision on granting public users secure, authenticated web-based access to records stores.
 - ii. The ability to produce hard copies, redacted to block private or sensitive information, in response to public record requests.
 - iii. The ability to charge copying or printing costs to public requestors.

Available Technologies: Content Management

Content Management is a general term that refers to systems designed to handle electronic documents and images. All content management systems:

- a. Capture electronic documents and images, and store them in a controlled repository
- b. Capture meta data - such as author, title, date, document type, contract number, etc. - into a database
- c. Control how people work with documents through library services that
 - i. Allow users to electronically check documents into and out of the system. This prevents more than one person making changes to a document at the same time.
 - ii. Keep track of document versions
- d. Search, retrieve, display and print documents
 - i. The ability to search on any word in a document is an option
- e. Limit access to documents considered confidential
- f. Route documents to individuals in a work process
- g. Perform basic records management functions such as assigning retention rules based on the City's retention policies
- h. Provide audit trails that show who accessed the system and for what purpose

Content management systems divide roughly into three categories:

1. Basic Content Services
2. Enterprise Content Management
3. E-mail Archiving

1. Basic Content Services

Product examples:

Microsoft Office Sharepoint Server
Xythos
Oracle Records Manager
Xerox
Spring CM (SaaS offering)

Basic content services include document capture, library services, and the ability to build electronic filing systems. The systems offer some basic records management capabilities

and offer simple document capture and search capabilities. Products in this category deliver functionality by relying on the Web. Their main advantage is that they are relatively easy to deploy and are relatively low cost. The drawback is that such small, cheap systems can spread without any central control creating a compliance nightmare with regard to discovery, public records, privacy and preservation.

Basic content systems work best in situations where there is a need to:

- a. Bring process and structure to administrative functions
- b. Consolidate multiple sources of electronic documents

Their main drawbacks are:

- a. Very simplistic records management capabilities
- b. Limitations in environments that are highly distributed either geographically or departmentally
- c. Expensive to customize in environments where processes are highly complex or highly regulated.

Basic content management systems are also available as Software as a Service (SaaS), an alternative that removes the need to own the software, allowing the City to rent or pay for the system as it is used. Spring CM is an example of a SaaS offering.

2. Enterprise Content Management

Product Examples:

EMC Documentum
IBM FileNet
OpenText

This class of product offers document management and imaging services with complex workflow management and business process management abilities. These systems also provide full-featured records management capabilities. They offer collaboration tools targeted to authoring documents, and website content management designed for publishing material to websites. Many are beginning to offer electronic discovery tools as well.

ECM suites are highly customizable, but expensive – both for initial deployment and for ongoing maintenance. They also require skilled, in-house IT staff to support them.

These systems work best in environments where there is a need to:

- a. Collaborate on authoring and publishing electronic documents
- b. Use sophisticated methods to process high volumes of electronic content

The advantage of ECM suites is that they:

- a. Offer a comprehensive approach to managing content in a more integrated way
- b. Provide multiple software modules from a single vendor thereby reducing ownership and support costs

The disadvantage of ECM suites is that they:

- a. Can require replacing existing content systems that work just fine
- b. Have been put together through product acquisition, so all of their elements may not be as integrated as advertised

3. E-Mail Archiving

Product Examples:

Symantec Enterprise Vault
EMC EmailXtender
Zantaz Enterprise Archiving Solution
AXS One

E-mail archiving products capture all email messages entering and leaving the organization as well as messages between users. All messages are stored on an email server as unique, indexed records that can be searched. Email archiving repositories can be used independently or as part of a records repository for legal and business purposes.

The best solutions offer:

- a. Access to the email archive via the Web or via the email archiving product.
- b. Auditing capabilities to track access to the archived records
- c. Tools and options to eliminate storage of email messages outside the control of the archive system
- d. Records management capabilities to assure that messages are retained or destroyed according to retention rules.

Issues to be aware of:

- a. Many email archiving products work only with Microsoft Exchange. EMC EmailXtender and AXS One can work with the City's Lotus Notes Domino email environment.
- b. Email archiving systems arose from the financial industry's need to comply with SEC regulations. They vary widely in their ability to manage email messages as records based on each message's content (as required by PHMC), as opposed to simply keeping all messages for a defined period of time – such as six years, as the SEC requires.
- c. Email archiving products are priced per mailbox. Costs can rise rapidly if thousands of employees need email archiving.
- d. The biggest roadblock in implementation is defining the organization's requirements. Waiting for Law and individual departments to agree on messaging policy and defining retention rules can delay the selection and implementation process.