

Applying Electronic Records Management in the Document Management Environment:

An Integrated Approach

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Introduction

Two major trends in the world of document and content management have become intertwined, the result being that records management and records management systems have moved to the top of every corporation's short list. The first is the continued explosive growth of electronic records – as originally created in an electronic record format and as paper-based records converted to electronic form. The second trend is the increasing number of statutory requirements, legislations, and supporting business practices needed to maintain control of these records and remain in compliance with legislation.

In view of these trends, companies are assessing their current records management programs and have found:

- Records management can no longer be a centralized back-office activity managed by a small group of professional records managers and clerks. Records management is being implemented on the frontlines of business by thousands of knowledge workers. These are the people who increasingly need to make records management work within a company.
- An electronic records management system is the only viable way to gain control over the number of records in existence and those being created on a daily basis. The physical records file room, while still in existence, is being replaced by the virtual records file room, which is actually thousands of desktops, network storage devices, and portable media.
- An electronic records management system, by itself, is only a tool – to be successful, the system has to be user friendly and must be easily extended to all people who create documents and records.

A modern day electronic records management (ERM) system must be capable of supporting a diverse number of statutory laws, be flexible enough to adapt to new rules and regulations, handle the continued tremendous growth in electronic records, and be accepted by the user, who has to actually use it. As many companies have learned, if a system of any type hinders, rather than helps the user, that system may simply not be used.

While enabling compliance with federal and state regulations, and supporting internal business practices is absolutely required, an ERM system must also make solid financial sense to the company. Most financially savvy companies will base their purchasing decision not only on the technology, but also on the cost to implement the system and on-going maintenance costs. Compliance is a strong justification for a new ERM system but, if the system does not make business sense, the purchase may be shelved for another time.

Why Records Management is Important

Business documents are how organizations process and record their daily activities. Records become the official version of those business documents and become corporate assets used to document actions, decisions, and outcomes. Official document versions are records that must meet legal and regulatory laws as well as corporate operational obligations.

Today's corporations and government agencies are creating and receiving records at an astonishing rate. The volume of records is not only staggering but the records also come in a variety of formats such as:

- word processing documents
- emails
- faxes
- instant messaging
- text messaging
- digital images – scanned paper documents
- new media types such as blogs and wikis

and these documents may reside on a variety of media:

- personal hard drives
- network drives
- backup tapes
- CDs and DVDs
- flash drives

and some documents may also be created and reside temporarily on remotely attached devices like personal digital assistants (PDAs) or memory sticks.

Given the volumes of documents, combined with the diverse number of formats, companies are finding it nearly impossible to effectively manage their documents and records without an electronic records management system.

Why Records Management?

Records management is important because it:

- **Reduces litigation risks.** When documents are managed according to a records management plan that is applied throughout an organization, records are more defensible if and when they become part of a legal action or audit. Because the records are in a controlled environment, an organization can demonstrate that the records presented are valid, they have not been altered, and that any records destroyed were destroyed in the normal course of business.
- **Provides Regulatory compliance.** All organizations today must comply with governmental rules (federal, state, county, and city) and may have to demonstrate this compliance at some time. A records management system can help a company demonstrate its compliance for areas such as privacy (HIPAA), security (DoD 5015.2), and financial reporting (Sarbanes-Oxley). Organizations that cannot demonstrate compliance with the rules that govern their particular industry may be sanctioned for non-compliance and/or may be fined.
- **Protects corporate assets.** Daily business records and vital company records must be protected from alteration or destruction. Records management systems secure records properly allowing only authorized operations and actions against them.

The Document Lifecycle

Documents are created by everyone – from the President of the company to a delivery person recording a shipment. Documents, whether created internally or externally, are typically created, received, and shared by knowledge workers. Once created, a document may be revised repeatedly before it is declared a record; or, in the case of the delivery person's shipment document, declared as a record immediately.

The proactive management of a document through its entire lifecycle allows for business continuity, supports collaboration, ensures legal and regulatory compliance, and reduces overall costs. A document and records management system that works together will provide for better document and record lifecycle management while simplifying the access to critical information within the organization.

While there are many different opinions as to a document lifecycle model, below are the basic stages in a document's lifecycle:

- **Capture** – Document may originate within an organization or be received from outside of the company. Documents may be in any form, electronic or paper, and may be on a variety of media such as a CD. Documents at this stage are not necessarily records and may never be declared as a record.
- **Manage** – Once a document is created or received, it may become a record and will be classified, declared, and managed within the records management system. An ERM system is a software application that implements an organization's records management plan.
- **Store** – Once a document becomes a record, it is important to store it in a secure manner such that it cannot be altered or destroyed. Records must also be accessible and available on-demand, which means that adequate indexing must be applied prior to committing the document to a storage system.

The storage system and storage media must not be subject to media decay or become obsolete, which would endanger the status of the record itself. Storage will most likely involve migrating records periodically from one storage system to another as technology changes. The records management system must allow for this.

- **Deliver** – Once identified and stored in a secure location, records must be available to workers for use in the normal course of business. However, the records management system will be responsible for ensuring that a record is not altered and cannot be deleted before its scheduled disposition.
- **Disposition** – Most business records can be destroyed within a designated period of time according to the records retention schedule. Common business letters may be legally destroyed at the end of 3 years, for example, while other records may be designated as permanent records, in which case they will never be destroyed.

Why not just keep all records all the time?

While you may feel safer, and many companies do, by never destroying a record, it is not the best long-term strategy. The most obvious issue is storage space and costs for both paper documents and electronic documents. However, potential legal problems and costs may be a more persuasive reason for not keeping records past their designated retention period.

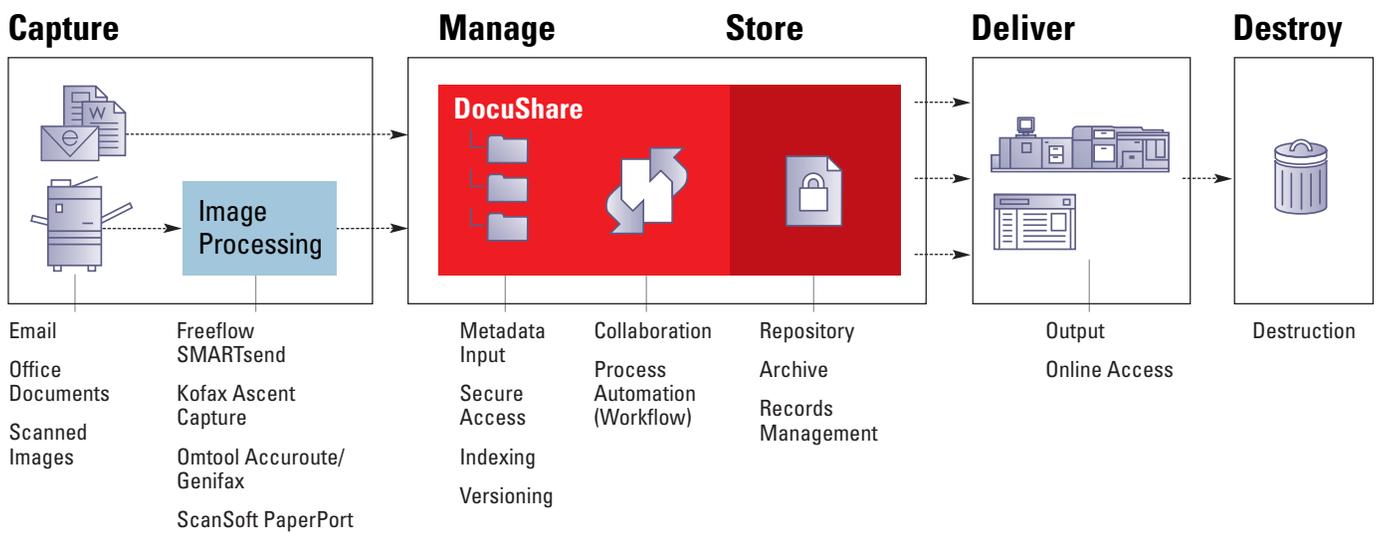
If records are never destroyed, everything is discoverable. Even documents that should have been destroyed will have to be produced. This increases the cost of discovery as there may be double or triple the number of documents that normally would be available had records been destroyed on time. Even more problematic is the fact that documents that should have been destroyed may actually be useful to the opposition. In addition, because there will most likely be many versions and renditions of a record, it will be difficult to determine which document is the final version of a record.

An ERM system will lower the overall storage and maintenance costs for records by ensuring they are destroyed on time according to the records retention schedule. Destroying records on time will also reduce the legal risk of keeping documents past their scheduled destruction date.

Finally, records should be destroyed according to their retention schedule. It must be noted that a record of the destruction is created by the record management system and this destruction record demonstrates that the record was destroyed as part of the normal records management process.

The records management system is responsible for each of these activities except for the creation and capture of a document.

A typical document and records management lifecycle



Records Management Requirements and Functions

In the past, paper records were filed in a records center and the records clerk would declare and classify the record and manage any activity against the record including its final disposition. All the creator of the record needed to know was where to drop off the record and the rest was taken care of by the records clerk.

With the advent of electronic documents and records, all of that has changed and the burden of classifying and declaring records has moved, by necessity, from a dedicated records clerk to the knowledge worker – who may think that records management activities are important but may place it at the bottom of the daily activities list.

In order to have an effective records management program without requiring a large dedicated staff of records clerks, administrators, and managers, the RM system has to distribute the basic records management functions amongst the knowledge workers creating the content. A records management system must include at least the following functions. The knowledge worker typically performs the first two, while the remaining are part of the system administration and overseen by records managers.

Creation. Documents are created at all levels within an organization— from the executive to the clerical worker as well as being received from outside sources. These documents may be any physical or digital object such a paper contract received in the mail or a contract created in a word processing program. While newly created or received documents are not necessarily records, the RM system must be able to work with all of the applications that create documents or produce information. These applications may include:

- MS Office products such as Word, Excel, PowerPoint
- Scanning and Imaging applications – Paper may be scanned and digitized by an imaging system and this digitized document may become the official record
- Email is ubiquitous and is increasingly used to conduct business operations
- New media/content types (wikis, blogs, IM, text messaging, etc). An ERM system must be able to accept all types of digital content from any source if it is determined to be a record
- Rich Media information that consists of any combination of graphics, audio, video and animation

Paper will most likely always be with us and an RM system must be able to manage paper, and other physical documents, when they become records. Paper may be created internally or received from outside sources.

Declaration. It is becoming increasingly difficult for enterprises to effectively identify all the potential records in their organizations, due to the volume and diversity of content being created. Therefore, a records management system has to distribute the records declaration function out to the people who create the records. The two basic functions of declaring a record are:

- Classify – where does the record belong in the records retention plan
- Declare –declare the document as a record

The acts of classification and declaration are subject to many different methods depending on the implementation of the RM system.

Retention. Once a document has been declared a record, it must be retained according to corporate policies, state and federal rules, and industry standards. Key characteristics of a record are:

- Authenticity – a record must be what it purports to be and have a documented audit trail
- Reliability - records must accurately reflect the transactions that they document
- Integrity – the integrity of a record refers to its being complete and unaltered
- Usability – A record must be able to be located, retrieved, presented, and interpreted

Disposition. A final, and very important part of a records management system is to provide for the managed disposition or destruction of a record. Because of the enormous numbers of records being stored, the records management system may employ batch tools to accelerate the process. For example, it may provide a list of records that are past their retention period to the appropriate records management administrator, who can review the list and authorize the destruction of the records by the system. The records management system documents this activity in a log for future reference. Records that have been destroyed may retain a database entry or “stub” to show that the record was present at some point but destroyed according to established business processes.

The Benefits of an Integrated, Easy-to-Use Electronic Records Management System

Only in the last several years have organizations realized that document management systems and records management systems must work together seamlessly to be effective. Early electronic records management systems were “add-ons” or “plug-ins” to document management systems and were so complex and demanding that end-users often either avoided the RM task or classified all records under the same classification.

Two key lessons emerged from the early pairings of document and records management systems:

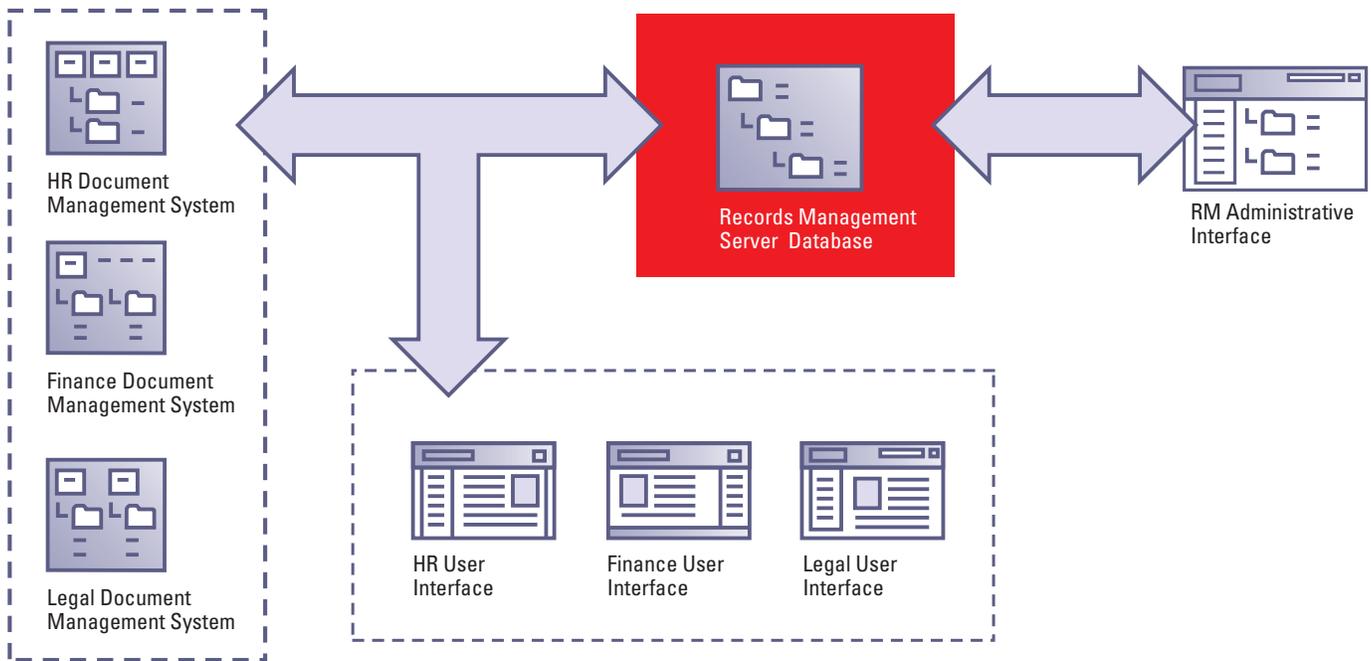
- When the records management function (classification and declaration) is distributed out to the knowledge worker, it must be simple and intuitive requiring little or no training and it must not impede normal work.
- The document management system and the records management system must be truly integrated at the content level, not two systems working separately. Otherwise it creates significant additional work for both knowledge workers and the Information Technology (IT) department.

In recent years, there has been a consolidation of document management and records management vendors, resulting in better-integrated systems that truly address the needs of the knowledge worker, records management professional, and IT. As customers look to acquire integrated ERM/DM systems, they should focus their attention on these second-generation document and records management systems, which frequently incorporate the following:

- Centralize administration and management of the system. A central server should handle all of the records management functions.
- Ease of deployment. Since usage of the RM system is concentrated with the knowledge worker, the system must be deployed quickly and require minimal training by the users. Systems should be deployed as Web-based applications causing zero disruption for the worker.
- Using the system must be intuitive and fit in with the normal work routine of the user. For a large organization, with thousands of users, it is not feasible to deploy a system that requires extensive training and extensive help desk support.
For example the system should integrate seamlessly with all of the user’s desktop applications including email, and be easily accessed from within the application’s main menus and interface.
- The system must be flexible enough to quickly be adapted to changes in the user population. For example, it should be very easy to add or remove user privileges from the system as employees change roles in the organization or new employees come on-board.

- The two systems (document management and records management) should be able to access and share data between them such that a user's metadata and the document's metadata would be available to the records management system without additional keystrokes.
- The system must be extensible to accommodate new document technologies and document types as they become available, such as IM, text messaging, and other emerging technologies.
- The system should be capable of sharing and transferring audit trail data to ensure a document/ record authenticity.

A single records management server should be able to handle multiple application servers.



Investment Considerations for Records Management

The legal and cost benefits of a records management system are undeniable. When we compare the potential cost of litigation, against the comparatively simple act of classifying, declaring, and managing a record, it would appear that the return on investment (ROI) is obvious for a records management system. Yet many organizations are still challenged to build an effective business case for an ERM solution.

When considering the potential ROI for a records management system, several areas are self evident, while others are not so obvious. Below are key areas that may provide the highest potential return:

Automation of Records Management. A records management system can significantly reduce the physical labor involved in the classification and declaration of records. Many records can be classified with a simple mouse click, and records of a repetitive nature, such as an accounts payable document, can be classified automatically.

One of the primary cost areas in records management is the time it takes for a knowledge worker to determine either how to classify a record or whether a document should even be declared as a record. If these activities take too long, the knowledge worker may simply not bother to declare documents as records, or may do so inconsistently or incorrectly.

Hold Orders. Without a records management system, it would be impossible to completely identify and protect a series of electronic records that are subject to a hold order. The cost of manually identifying and separating electronic records that are being placed on hold would simply be prohibitive, if it could be accomplished at all.

Records that should be on hold could be changed or destroyed prematurely if the system does not support a hold order function. If a record is changed, the record is no longer a valid legal document and sanctions, penalties, and fines may be imposed as a result. Prematurely destroyed records, also called spoliation, may also cause a judge to impose sanctions. It should be noted that legal cases, in which documents are placed on hold, may continue for 10 or more years – a time that may exceed the document’s normal retention period. Documents on hold are kept from being destroyed during the normal course of events by the records management system.

Discovery Costs. Records management systems have revolutionized the discovery process by allowing companies to quickly and easily locate records that are being requested using full-text or metadata search tools. Additionally, timely, system-driven destruction of content ensures that only the current, pertinent documents are identified. Once identified, the records can be inexpensively copied to other media and provided to the requestor. This has significantly lowered discovery costs at all levels.

Can you cost justify a records management system?

Many of the potential investment considerations mentioned in this document are primarily centered around cost avoidance and may not be considered as hard dollar savings. Hard dollar savings can be determined in certain areas when considering a records management system. For example, if an organization has no records management system and knowledge workers must file all potential records in a central file room, it may require the knowledge worker to print the record, take it to the file room, complete a records declaration request, and then review the record with a clerk. All of this activity may take as much as 10 minutes of elapsed time to file a document manually.

Let’s assume that this same task may be accomplished in less than 30 seconds using an ERM system. We can estimate the savings by calculating the following:

Assume that a professional knowledge worker has a fully burdened annual salary of \$50,000. This translates to approximately \$25/hr. If this person files 6 records a day, taking 10 minutes per record, it would cost the company \$25 per day for this activity. If the company had 1000 knowledge workers each filing 6 records per day it would cost the company \$25,000 per day or, with a work year of 252 days, \$6,300,000 per year. If we were off by 50% in determining the time required to file a record, the savings would still amount to \$3,000,000.

If the same filing process can be...

Cost of paper storage. Many companies still receive and print an enormous amount of paper as part of their daily operations. As these paper documents are declared as records, the accumulated paper storage can be a major expense item, especially when a third-party company stores paper off-site.

Paper that is not properly classified and declared can be problematic when it is time to determine which document is the last version and which document is the actual document of record. Paper, unlike an electronic document, has no definable audit trail that can provide metadata to determine author, date of creation, etc. A records management system should include the ability to handle paper based documents as well as other physical objects that are records.

Cost of electronic document storage. By using a records management system that provides for the legal destruction of records on a regular basis, there should be less demand for new storage hardware than would otherwise be the case. Also, as a record represents the final version of a document, fewer convenience copies of documents may exist due to version control and the automatic deleting of previous versions. A records management system will help control duplicated and replicated records found in backups by raising awareness for regular cycling or deletion of backup media.

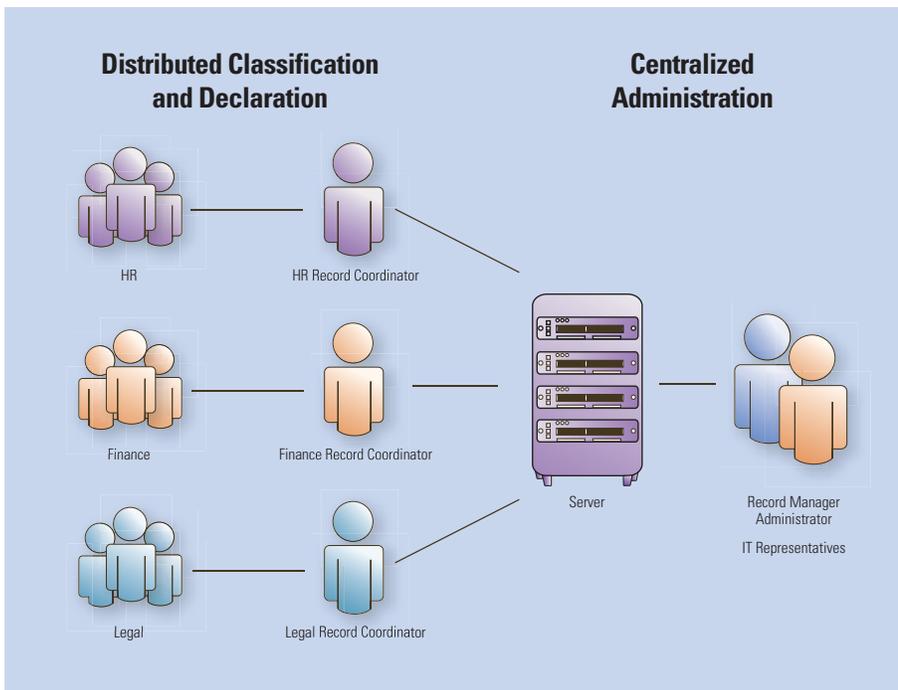
Reduce IT costs and involvement. By combining the document management and records management systems and automating many of the RM functions at the user level, overall IT support requirements should be reduced.

...accomplished in 30 seconds or less using an ERM system, the cost would be negligible compared to the manual cost. This type of reasoning can be applied to determine the actual hard dollar savings when considering the purchase of a new system.

Xerox DocuShare Records Manager

A key challenge facing many corporations is to balance the needs of departments to create, modify, import and export, and share content during normal business operations, but still be able to easily identify, classify, and declare those documents when they become records. Document management systems are essential productivity tools that allow documents to be created and shared on a corporate network but do not typically include records management functions. Records management systems, on the other hand, frequently remove or restrict access to content that has been declared a record, or the systems require a separate, expensive access license to enable users to access their content.

Designed to work specifically with Xerox DocuShare Enterprise Content Manager and Xerox DocuShare CPX Enterprise Content and Process Manager, Xerox DocuShare Records Manager centralizes records administration for the RM department, while allowing classification and declaration to be distributed to knowledge workers and managers. DocuShare specifically addresses user acceptance issues by tightly integrating the RM user interface and making the records management functions part of the normal work processes. Knowledge workers can perform all RM activities from within the DocuShare interface.



Xerox DocuShare Records Manager allows distributed records management functions.

Contributors and Coordinators

The distributed user role is a key feature to user acceptance in Xerox DocuShare Records Manager. A knowledge worker, or Contributor, may decide that a document is ready to become a record and will “classify” that record, which means that the document is assigned indexing data in the RM system but it has not become an officially declared record. The document continues to “function” as required for that business process – new versions can be added, ownership reassigned, workflows executed, etc. Once a document is marked “Ready to Declare”, it moves to the person designated as a Coordinator.

The Coordinator will review the document and decide whether it should be declared a record or not. (A Coordinator may be a manager, a domain expert, or a departmental records manager) This distribution of work allows the knowledge worker to continue to work while allowing the Coordinator to determine if the document is in fact ready to be declared. For example, a knowledge worker may finish work on a contract and classify it not knowing that there is a change to the terms and conditions sections. The Coordinator who manages that group may review the contract and discover some required changes. At this point the Coordinator can and either update it with the new material information and declare it as a record, or return it to the knowledge worker for the needed revisions.

By distributing this function, DocuShare Records Manager prevents users from prematurely declaring a document a record, creating multiple versions of...

Records Manager is tightly integrated with DocuShare to provide users with a seamless content management and records management experience. DocuShare Records Manager differentiates itself by providing the following key features:

- End-user acceptance – DocuShare Records Manager focuses on the end-user experience, providing an intuitive interface that enables the average knowledge worker to correctly and easily classify and declare documents as records with very little training.
- Distributed user roles – A key out-of-the-box feature is distributed RM functions with a tiered user model that suits different work roles:
 - Administrator – Usually a member of the RM department in a dedicated role, creating and managing file plans and record types, creating new users and setting up access permissions.
 - Contributor – Average knowledge worker who creates or handles documents as part of his or her day-to-day work. Contributors can be limited to classifying documents only but they can also be allowed to declare documents.
 - Coordinator – Performs the same tasks as Contributors, as well as reviewing and declaring classified objects as records. Coordinators are typically managers or some other designated person assigned to ensure documents have been correctly classified by the Contributor.

Coordinators and contributors do not have to be trained in the intimate details of the Records Manager application, nor understand the corporate retention policies or file plan hierarchy.

- File plan Auto Presets – Associated with a User, Group, or DocuShare Collection, Records Manager Auto Presets allow for the automation of specific, frequently repeated, or complex declarations by pre-defining the record metadata values to use. For example, presets enable auto-classification of a document or email simply by placing it in a specific location, or selecting a preset from a pull-down menu.
- Declare-in-place – Even when content is declared a record, it remains accessible to all business processes and users within DocuShare. URLs are unchanged, metadata and search key words are preserved, and, unless superseded by RM rules, all security protocols and access permissions remain intact.
- Leverages existing infrastructure – Utilizes existing databases, file storage plans, user and group directories, and desktop clients to reduce costs and speed implementation.
- Ease of deployment – once a DocuShare Records Manager server has been implemented, any additional DocuShare servers can be connected to the core Records Manager server, and deliver RM capabilities to all designated users.

...the record, or declaring a record under the wrong file plan location. This also provides all users of the records management system with the checks and balances that allows them to continue to work but get a second opinion when needed.

- Incremental growth – DocuShare Records Manager can grow as time and budget allow. Implement Records Manager on a department-by-department basis while maintaining centralized control of the records retention plan.
- Zero footprint – DocuShare Records Manager is completely Web based and requires no client software on the desktop. Users and administrators may access and use Records Manager from any network-connected workstation.
- Low cost – All of the above features of DocuShare Records Manager result in one of the lowest cost products and installations available in the industry for a complete and fully compliant records management system.
- DoD 5015.2 Certification – This is a standard set of requirements that all records management systems must comply with if they are to be used by any department within the Department of Defense. Many commercial companies have adopted 5015.2 as a starting place for evaluating records management systems for their own use.

DocuShare responds to the most pressing challenge that the records management industry faces today: user acceptance. If a user will not use the system because it is too complex, adds work to an already busy workday, or makes the worker feel he or she is at risk for making a “records management” mistake, the user will simply not use the system as intended.

Many records management systems are too complex and function outside of the normal work routines of the average knowledge worker. DocuShare was built to be an extension of existing applications and commands and provides users with a familiar interface. Classifying and declaring records is quickly assimilated into the knowledge worker’s normal work routine.

Future Trends for ERM Systems

It is safe to say that the volume of documents and records within a company will continue to grow because electronic technologies make it exceedingly fast and easy to create new documents. New technologies also help companies retain their competitive edge and are quickly adopted by knowledge workers, even while corporate IT lags behind. Blogs, text-messaging, and instant messaging (IM) are good examples of technologies that have not been fully accepted into the IT architecture but are increasingly used by knowledge workers.

Also on the horizon, and being recognized by records managers, are the application service providers (ASPs) that will “rent” you applications and storage via the Web. Serious questions exist as to the ownership and liability of these files when stored on a third-party site, or created using applications that cannot guarantee fidelity of structure, fixed date-stamping, or other critical RM ‘keys.’

Formats for documents are also changing as Adobe’s PDF is evolving into PDF/A, or PDF Archive, for long-term archiving and future readability. Not to be left out, Microsoft has released its own open document format, XPS, aimed at long-term archiving and readability. XPS may be competing with PDF/A as the “standard” format for storing records that require long-term storage.

Beginning to compete with Microsoft and Adobe are a number of companies that produce open standards-based products that are platform independent such as Sun’s Open Office. Companies are beginning to adopt these products and use them instead of Microsoft products in an effort to avoid proprietary document formats and ensure long-term access and readability.

This seemingly endless advance of technology will all need to be managed and controlled by a records management system. New document types, as well as formats, will need to be captured, classified, declared, and stored according to a records retention schedule. Electronic records management systems will become even more important to a company’s overall document management strategy and be more tightly integrated with the tools and systems used by knowledge workers.

Along with the growth of technology, document types, and formats, will come new government rules and regulations that evolve in an effort to control technology itself. Parts of HIPAA, for example, were specifically directed at limiting the exposure of patient data on electronic systems and require additional security and confidentiality for health records. IM has gained the attention of the SEC and now security firms are required to log and archive IM messages that pertain to business transactions. Existing regulations such as Sarbanes-Oxley will most certainly change over time and records management systems must be able to quickly adapt to new rules as they appear. A key criteria for any records management system will be flexibility, adaptability, and extensibility (to new data types). In terms of compliance with legislation, records management systems are not passive keepers of archived documents but are actively involved in helping companies manage their compliance needs.

Conclusion

The RM process in the enterprise will continue to be characterized by change in the years ahead, for both the knowledge worker and the professional records management administrator. As the person who creates the original document, the knowledge worker is increasingly responsible for complying with basic records management guidelines. The records management professional will be charged with ensuring that the records management system keeps up with all of the changes within the enterprise, while still being compliant with the laws.

Given this potential for change, it is easy to see that records management systems must increasingly be flexible, user friendly, and must be adaptable to a changing environment. As a part of the DocuShare ECM environment, DocuShare Records Manager offers advanced capabilities that make it an exceptional ERM solution that is easy to install and easy to use. DocuShare provides integration of collaborative and workflow processes with records management functions by enabling end users to classify and declare records at any point in the document-management process.

Xerox DocuShare or DocuShare CPX, with Xerox DocuShare Records Manager, provide both ECM and ERM functionality, leveraging servers and systems to keep administration simple and costs low. Overall, the DocuShare family of products provides cost-effective solutions that allow organizations, large or small, to engage in sophisticated ERM that can quickly scale up to include more newer ERM capabilities as technology changes or requirements grow.

Porter-Roth Associates

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