Table of Contents

Best Practices for Electronic Records Management ................................................................. 2
Evolution of Records and Information Management ................................................................. 6
Principles of Real-world Records Management ........................................................................ 8
Automating Records Management with Artificial Intelligence .................................................. 11
A Records Management Maturity Model .................................................................................. 14
Records and Information Management Is a Team Sport .......................................................... 16

AllIM Market Intelligence

Electronic Records Management: Still Playing Catch-up with Paper ..................................... 18

AllIM e-Book

8 Secrets of an Effective Content or Records Implementation ............................................... 19

Webinars

Webinar: Information Preservation: Technologies that Work Today for Tomorrow ................. 20
Webinar: The State of Electronic Records Management ........................................................... 20
Webinar: Who’s Taking Care of Your Records? ...................................................................... 21

AllIM Knowledge Center Blog

What is Electronic Records Management? ................................................................................ 22
Best Practices for Electronic Records Management

Has your enterprise fully embraced this practice- or are you still relying on four-thousand-year-old methods to organize paper documents?

Records management is a process by which an institution organizes and manages its information assets. Formal processes have existed for at least some four thousand years, since Mesopotamians began using blunt reeds to press symbols onto clay tablets known as cuneiform documents to record land, grain, and cattle transactions.

Other than by virtue of scale and rudimentary improvements, however, the science of records management really did not leap forward by an order of magnitude until the latter half of the 20th century, with the wide-scale adoption of business computing and the miracle of electronic records management (ERM), which computers made possible. Prior to that time it improved only in increments: by means of better writing instruments, such as paper, typewriters, and the printing press; more robust storage mechanisms, such as file cabinets and microfilm; and methods of duplication, including the mimeograph and photocopy machines.

Sadly, many organizations today, both large and small, still have not fully realized the manifold benefits of ERM, despite the penetration of inexpensive and powerful personal computer into virtually every enterprise. This is because far too many records still consist of paper-based office documents, which are difficult to control, and because management has not made the commitment to invest in ERM and take the necessary steps to implement it.

Mind your “Four Cs”: compliance, cost, collaboration, and (business) continuity

Solutions fall into three main categories: Enterprise Content Management (ECM), ERM, and Email Management. With these three tools, we can address the key business drivers, or benefits, identified as “The Four Cs:” Compliance, Cost, Collaboration and (business) Continuity.

Properly employed, these three tools will help your company meet compliance goals for civil litigation and government regulations; reduce business costs; enable collaboration both within and without the organization; and help to ensure that the business can sustain the loss of key employees and other threats.

Take a holistic approach

For optimal productivity, organizations must take a holistic approach to managing their data. Policies and processes must address information across the entire enterprise. In recent years, we have seen technology often applied as narrow solutions: isolated efforts to scan paper records; capture emails; create isolated collaboration forums; and manage functional collections of information. This has lead to separate repositories of electronic “information silos” that hinder the sharing and proper management of data.

Assign responsibility at the top

To be successful, records management must start at the top. A senior executive must be held accountable. There is a growing, but not yet universal understanding of this fact within the business community. Management often shuns the term “records management,” opting instead for somewhat slippery descriptors such as “compliance and information” or “knowledge management.” Records management is not a dirty word; it is a precise, transparent term – it means what it says, and it says what it means – and it does not connote a lowly function. On the contrary, organizations that really get it assign responsibilities for records management to the chief information officer or senior legal executive.

Create a recognized, central discipline within the enterprise

Similar to the human resources and finance specialties, organizations must have information- and records-management professionals employed in a central function. These professionals should partner with legal staff and IT staff to ensure that information is managed in a way to achieve compliance and ediscovery requirements. Records-management professionals are also needed to support policy development and maintenance, to provide oversight of information management systems, perform legal research, coordinate ediscovery and disclosure demands, and to develop standards, procedures, and guidelines. They should also have direct oversight and responsibility for any physical (hard-copy) record repositories.
Create a common language and controlled vocabulary

To collaborate and share information, organizations must develop information management structures and terminologies that everyone can understand. This will promote a common understanding throughout the enterprise, support the retrieval of information from throughout the organization, and provide a user-friendly means of dealing with information.

Create classification schemes

An information and records-classification scheme is a management control structure that represents a controlled vocabulary structure. We have comparable devices in the human resources and accounting specialties. Think about your organizational chart and the chart of accounts. These two charts have been around for so long, and have been so widely accepted and understood for so long that we take them for granted. In an organization that truly understands the importance of records management, all employees will receive a chart detailing the flow of records and responsibilities for them.

Like the organizational chart and the chart of accounts, this classification scheme needs to be maintained and changes and improvements should be made as new concerns arise from employees, auditing staff, and external sources. A systematic approach is required. I like to use the analogy of wanting to hire a records management assistant. Clearly, if my organization has not approved a director of records management position, the chances are quite slim that they will approve this hiring effort.

Apply standard indexing terms across the organization via metadata

For decades before ERM, we have been applying indexing terms to hard-copy information and records. During this period, we were limited by the amount of information we could put on file folder labels and boxes and even the old four-by-six-inch index cards. Worse still, we had no means of rapidly searching through these indexing terms.

But today, we can employ “metadata” – essentially create “information about information” to categorize all of our electronic records, vastly increasing the speed and simplicity with which we can sort through them. Think about the labels you put on file boxes at home to describe the sort of information they hold – e.g. “health records,” “income tax records,” “photographs,” and so forth. That’s metadata in its simplest form.

Wikipedia describes the term as follows: “metadata [means] data about data elements or attributes (name, size, data type, etc), and data about records or data structures (length, fields, columns, etc), and data about data (where it is located, how it is associated, ownership, etc.). Metadata may include descriptive information about the context, quality and condition, or characteristics of the data.”

Keep it simple

With ERM, we have the ability to apply an unlimited amount of metadata to our information and records, but it’s important to limit the burden placed on company staff. The key is to identify what metadata can be captured from our computer systems and associated computer applications without the input of the users. Organizations need to develop a metadata model that will be used throughout the organization. A metadata model is a collection of approved names and descriptions that will be used to manage and retrieve information and records throughout the organization.
A wonderful feature of computer applications is that they can force the application of metadata and allow only the use of approved terms. Fields can be designed in the computer applications with drop-down menus and required checklists. Below are just a few standard metadata headings in use by many public and private concerns:

<table>
<thead>
<tr>
<th>Accessibility:</th>
<th>Identifier:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addressee:</td>
<td>Language:</td>
</tr>
<tr>
<td>Aggregation:</td>
<td>Location:</td>
</tr>
<tr>
<td>Audience:</td>
<td>Mandate:</td>
</tr>
<tr>
<td>Contributor:</td>
<td>Preservation:</td>
</tr>
<tr>
<td>Coverage:</td>
<td>Publisher:</td>
</tr>
<tr>
<td>Creator:</td>
<td>Relation:</td>
</tr>
<tr>
<td>Date:</td>
<td>Rights:</td>
</tr>
<tr>
<td>Description:</td>
<td>Source:</td>
</tr>
<tr>
<td>Digital signature:</td>
<td>Status:</td>
</tr>
<tr>
<td>Disposal:</td>
<td>Title:</td>
</tr>
<tr>
<td>Format:</td>
<td>Type:</td>
</tr>
</tbody>
</table>

**Train staff and hold them accountable**

For effective ERM, each employee must understand and appreciate the importance of information and records. Information and records cannot be considered merely as byproducts of office work but as essential components of compliance, business performance, strategic goals, and ethical standards.

Far too often records management is still carried out in a reactive mode. Office workers, for instance, often create work and then simply dump it on their C drives or shared drives, or let emails get buried in their inbox or sent folders. The result is that their work becomes lost or difficult to find, and they often waste substantial time and effort looking for this information later. Employees should work in a proactive way: When first creating or receiving information, they should do something with it quickly: either destroy it, if it has no value to the organization, or capture it in a repository where it will be properly managed and available for quick retrieval and use.

**Essential computer applications**

Effective records management cannot be achieved without the effective use of information and records-management software, including the following applications:

- Capture and scanning management
- Classification/file plan management
- Retention and disposition management
- Access and library management
- Storage management
- Email and other communication management

These programs can help you manage both electronic and physical records. They provide powerful search capabilities to locate information generated by you or stored in other locations and divisions and across all information formats.

Getting rid of what you don’t need or shouldn’t have is almost as important as saving and classifying what you do need. Thus information and records that have no value to the organization should be destroyed promptly, in the normal course of business. It’s also important to standardize on one ERM platform. It’s not uncommon to find organizations using a number of different records management solutions across their locations or divisions, resulting in different ERM repositories that do not allow information to be shared.
Institute training and change management

To achieve effective ERM, senior management must lay out a strategy and institute training and change management throughout the organization. They should begin by communicating the need for a culture of good governance and compliance. Employees must understand that the consequences of failure can even lead to jail time for individuals and substantial fines and sanctions against the organization, to say nothing of lost revenues and a tarnished company name.

Point out the positives

At the same time, however, employees need to be educated on the many positive benefits they will experience. Dealing with information and records in a structured way can make life a lot easier. If classification schemes and indexing are well-thoughtout, simple, and intuitive, individuals will not have to “reinvent the wheel,” wasting precious time and energy when creating records, accessing them, or storing them. Recently I was talking to a partner at a law firm that was introducing an electronic document records management system. His most telling comment was: “I just want to be able to find my records”. That’s the bottom line. Employees should be left free to concentrate on doing their jobs, instead of trying to decide what labels they should apply to records or trying to decide where they should be stored.

Avoid techie jargon

You should solicit users’ active input, however, when creating classification schemes and metadata, because you’ll want to know how they describe their daily activities to understand what terms make sense. Above all, avoid the seductive trap of “jargon”. Do not become over-impressed with your own intelligence and create terms and labels that only you can understand. That can be the kiss of death to even the best-intentioned records management program.

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Evolution of Records and Information Management

How did we get here from there? As rapidly as the world of IT changes, we often forget how recently nearly ALL business documents were paper. To understand where we’re going, here’s a brief look at recent history.

How did we get here? Despite the staunch efforts of AIIM, ARMA, and myriad practitioners, the Records & Information Management (RIM) world still wrestles with the progression of paper records to electronic records, not to mention the integration of the two media. Paper or plastic? Isolated or federated? Local or remote? The choices are endless. To successfully address these issues, it helps to know the back-story. How did we get here from there?

Until the mid-1980s, almost all business records were physical, that is, the medium that held the information was made up of atoms. Most of that was paper, which, by today’s standard, is an inefficient form for storage. The rest was mostly microform—pretty much the same idea, but denser. Paper had advantages. Reading required no power source, so long as a window was nearby. And file systems were straightforward. It’s not surprising that records management borrowed heavily from Library Science. To this day, most academic degrees in records management are conferred by schools of Library Science.

Toward the end of the 1980s, five necessary advances in hardware (and the software to control them) laid the grounds for the sea change we see today.

1. Digital scanning. Paper-image copiers of the 1960s-1980s used xerography, a photographic process. This contrasts with digital scanning, where each small patch, of a sheet of paper, that is, a bit of information, is identified as either black or white. The sequence of identities passed through a wire for either storage or remote reconstruction as a bit-mapped image. The first mass application of digital scanning was for facsimile (fax) machines.

2. Dense, low-cost digital storage. On the heels of the fax boom came optical disk storage. This used the newly popularized and finally affordable laser to burn disks with the sequence of white/black bits coming from the scanner. When the technology increased its capacity and lowered its costs, digital storage of images became practical. Users, effectively, faxed images to themselves and stored them for later use.

3. Computer speed. The bits of information that a scanner produces need control and direction, meaning they had to pass through a computer. In the mid-80s, personal computers had limited processing power, and mainframe processing was expensive. As the decade waned, however, prices for personal computers with Intel’s 80286 microprocessor lowered, and for the first time, the processing power to handle images was widely deployed.

4. Image Displays. Before the mid-80s, computer monitors generally showed only plain, alphanumeric characters. Any variations were indicated by markup language. The second half of the decade witnessed the release of increasingly sophisticated monitors that could display bit-mapped images as well as characters.

5. Laser printers. Early printers used wires to print dots in a matrix, with a resolution too low for most graphical applications. Character printers of the time essentially automated the capabilities of a typewriter. By contrast, in a laser printer, the image is actually directed by a digital sequence such as that which makes up a digital image. The first, mass-produced laser printer arrived in 1984, so it was ready when the other components came together.

6. These five technologies made possible electronic records, the boon and bane of today’s records managers.

Patrick Cunningham, esteemed purveyor and blogger of “Above the RIM” http://cunninghamAbovetheRIM.blogspot.com, suggests two software advances that led to the current state of Records & Information Management.

One is the productivity suite that brought word processing, spreadsheets, databases, and more to many office workers. This spread or democratized the ability and responsibility for records creation. “Where you once had a secretary or a word processing pool that would create documents (and file copies), you now had the anarchy of the user,” Cunningham writes.
Secondly, he cites email and the Internet as a sea change in managing records. The proliferation of distribution created radical new challenges to the traditional discipline of RIM. "Velocity and productivity radically changed," Cunningham opines.

There is no single solution to electronic records or media choices, but knowing context helps RIMers and ECMers craft their strategies to address current challenges. "Those who fail to learn from the mistakes of the past are doomed to repeat them." Let’s remember from whence we came.

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Principles of Real-world Records Management

Properly implemented and enforced, process-oriented records management can reduce business risk, increase operational efficiency, and save money.

Until recently, records management programs have been dismissed as back-office cost centers with little or no business benefit. However, the highly publicized failures and missteps of several notable companies have repositioned records management and corporate accountability to center stage. Industry and government regulations have been created or revised to provide “real teeth” for poor or inconsistent records management. Non-compliance can now lead to severe financial penalties and jail terms for CEOs and CFOs.

Even still, research shows the majority of organizations are not prepared to meet many of their current or future compliance and legal responsibilities.

In the interest of corporate risk management, companies must act now to implement a corporate records management program to satisfy legal and compliance requirements. On the upside, there are many advantages to be gained from implementing a corporate records management program. Properly implemented and enforced, records management can reduce business risk, increase operational efficiency, and save money.

New Realities, New Requirements

In the wake of today’s complex and stringent regulatory requirements, organizations must deal with both an overwhelming range of content and exponential growth of electronic records, while maintaining and enforcing overall policy compliance. Moreover, as companies encounter new regulations, new types of records, increased storage and retention requirements, and exploding electronic discovery costs, there is a growing need for cost containment and demonstrated return on investment in records management programs.

To satisfy both current and future challenges, organizations require a highly extensible architecture to capture, declare, classify, store, and dispose of both electronic and physical records according to their fiscal, legal, and regulatory requirements. Key to addressing these requirements is the ability to apply and enforce records information management (RIM) policies. WorldCom and Enron had business policies in place to properly care for their records. The problem was that these policies were overridden or ignored and records were altered or destroyed. These actions were not properly authorized - there was no enforcement! An electronic records management solution must employ process enforcement to ensure that records are destroyed (or archived) at the right time, for the right reason, and with the proper authorization.

Without policy enforcement, entire records management programs can be compromised. Records may not be captured and/or filed in the right place, RIM policies (retention, holds, disposition, etc.) may not be flowed across business systems (backup tapes, email, imaging, etc.), and records may be kept too long or destroyed too soon.

Key to enforcement is removing the human element from records management activities. In the past, companies have put the onus and the burden (not to mention risk) of making key decisions about records management on employees — a major deterrent to RIM policy enforcement. The majority of employees are ill equipped to make these decisions, because they are unaware of records management policies and/or the impact of their actions (or inaction).

Additionally, many records management systems have required such a high level of employee involvement and time that they have been largely ignored. As organizations struggle to get a grip on today’s compliance problems, one thing is clear: Records management policy should be enforced via process and technology — not people.
Reaching for ROI in Records Management

Today, leading organizations are ensuring records management initiatives aren’t just going with the flow and keeping up with demand, but are also delivering tangible return on investment (ROI).

A significant opportunity to generate ROI in records management is in the area of business process management and improvement. By automating records management processes, companies can not only eliminate the onus on business users to manually declare and classify records, they can dramatically reduce cycle time and error potential.

It is estimated that business workers take 5-15 seconds on average to declare a single record. If you figure the average employee declares 50 records per day, this equates to nearly 1 hour per day per employee of lost productivity! Records management consulting firm Cohasest Associates, Inc., projects annual savings or cost avoidance of more than $6.5 million per organization in mid-sized deployments of 1,000 users.

Additional ROI can be realized in the form of reduced potential discovery and storage costs. Records kept past their disposition dates are discoverable in a lawsuit - and can add a significant order of magnitude of cost associated with discovery. While data retention and backup have been a priority in recent years, in reality, very little information is actually needed for institutional memory and nearly all information (by most accounts more than 95%) should ultimately be destroyed. When records are kept only as long as they are required, and expired records are destroyed on time according to policy, records can be more easily found and produced, resulting in more efficient and less costly discovery processes.

A recent analysis of legal discovery practices within a Fortune 500 multinational corporation illustrates just how much time and energy is wasted by unwieldy discovery processes. In this particular case, out of the more than 75 million pages that were produced and reviewed for nine separate legal cases, 50% were found to have been retained past their legal retention period, resulting in an unnecessary cost of nearly $12 million!

Developing Records Management Strategies around Process

Industry analyst firms such as Gartner Inc., believe that Business Process Management is key to enforcing records management policies and lifecycles - typically the most challenging aspects of corporate records management programs.

The unification of content and business processes provides a platform upon which to support the entire records lifecycle, eliminate unnecessary end user participation, enforce compliance, and create a compelling return on investment.

Process-oriented records management offers critical capabilities to manage the lifecycle of critical records, enforce processes for records management compliance, respond to audits and inquiries, and demonstrate proof of compliance for legal and compliance requirements. This is a key requirement of the widely accepted ISO Standard 15489, Information and Documentation for Records Management. The industry best practice stresses the importance of having records management process and controls in place to capture transactional metadata to provide the necessary tracking and auditing. ISO 15489 also recommends that there be processes in place to manage records, but also that the link between the records and the business processes be clearly maintained to provide legal admissibility by proving record authenticity and integrity.

Leveraging business process management enables companies to achieve optimal results with their records management initiatives, thus meeting key objectives:

- Reducing the risk of litigation and providing business continuity
- Enforcing corporate compliance procedures without burdening business users
- Organizing, securely storing, and quickly retrieving essential company records
- Storing only records that are required for as long as they are required
- Ensuring expired records are destroyed in a legally acceptable manner
Process-based records management can help companies gain competitive advantage through increased operational efficiency and cost savings.

Key to delivering this value proposition is automated records declaration, classification, and administration. This enables records management to be integrated into daily work routines and invisibly enforced. Business process management and rules automation play an important role in the management of the full content and records management lifecycle. Pre-defined workflow operations (or components) can be used to automate records processes such as capture and disposition. This ensures that records are destroyed at the right time, for the right reason, managed and audited by the business process. Proof of compliance is established only by the ability to prove adherence to business policy and process.

As a result, processes, including those critical to records management and compliance, are tightly controlled. Additionally, all records processes should be easily modified and optimized, enabling companies to address new requirements as new compliance regulations come into effect, as well as reduce the ongoing costs associated with compliance.

Automated records declaration, classification, and administration ensures consistent records policy enforcement, and transparency to the business user. In this way, employees use the technology because it is integrated into their daily work routines and invisibly enforced.

By enforcing RIM policy and automating the most important and burdensome records management tasks, process-based records management offers reduced electronic discovery costs and new quantifiable cost savings.

**In Closing**

Today, the capture, control, storage, and timely destruction of records has more impact on the success and future of a business than ever before. Process-based records management can help companies manage risk, through effective, enforceable records management policy, for achievable and cost-effective compliance. And when properly implemented and enforced, records management can not only reduce business risk, but increase operational efficiency and generate compelling ROI.

Craig Rhinehart, Director for Compliance Markets and Products for FileNet Corporation.
Automating Records Management with Artificial Intelligence

How It Works - in Real Life – Today

Just as there are many definitions of intelligence as related to humans, there are also many definitions of artificial intelligence (AI) as related to computers. The Turing Test perhaps best defines the ultimate goal for artificial intelligence: a machine which is indistinguishable from expert humans. But, in more than a half century since the test was conceived by Alan Turing, the recognized founder of computer science, no machine has passed it. (Yes, this is the same Alan Turing – an eccentric British genius known for riding his bicycle with a gas mask to combat hay fever – who played a pivotal role in breaking the Nazi code during World War II.)

Still, there are contemporary scientists who believe that such machines are on the horizon. In The Singularity is Near, inventor and futurist Ray Kurzweil suggests that machines will pass the Turing Test within the next quarter-century.

Regardless of when (if ever) actual Turing-proven machines become available, there is expert consensus and empirical data to prove that some machines are already doing certain types of work as well as, or better than, humans today. Rather than debate the questions “What is AI?” or “Has AI yet been achieved?”, more than a decade ago, computer scientist and science-fiction writer Vernor Vinge proffered a more pragmatic notion of how machines amplify human intelligence, which he calls intelligence amplification or IA.

Vinge stated: “IA is proceeding very naturally, in most cases not even recognized for what it is by its developers. But every time our ability to access information and to communicate it to others is improved, in some sense we have achieved an increase over natural intelligence.”

From Fighting Wars . . . to Video Games?

There are many different branches of AI, each with many different applications. Dr. John McCarthy, an AI pioneer at Stanford, identifies the following branches: logical AI, search, pattern recognition, representation, inference, common-sense knowledge and reasoning, learning from experience, panning, epistemology, ontology, heuristics, and genetic programming. He also notes that AI applications include game playing, speech recognition, understanding natural language, computer vision, expert systems, and heuristic classification.

Both the branches of AI as well as the applications are interdisciplinary. That is to say that one branch could engage techniques from other branches – e.g., search might engage pattern recognition, while expert systems might use heuristics, search, and pattern recognition – all of which are integral to game-playing applications, even the video games your children are playing today. And this, by the way, is analogous to interdisciplinary fields such as policy science, economics, statistics and a host of others.

Before a machine passes the Turing Test, however, it will likely require mastery of techniques from all of the AI branches and integration of applications. One major area of work which is successfully advancing various AI branches and application techniques today is enterprise records information management.

Currently, interdisciplinary AI solutions are, with a high degree of accuracy, performing three foundational functions of records management: classification, extraction of structured data, and redaction of data. The following scenario illustrates how innovative records managers armed with the right tools are already integrating the various branches and applications of AI to achieve dramatic results.
How AI Works In Records Management

Assume you are a records manager. On your computer is a collection of millions of enterprise records of various vintage. You have no idea what all the records are. They could be medical records, legal documents, administrative documents, finance records, educational documents or a wide variety of documents from throughout your enterprise.

They could have fixed formats, such as forms labeled with organizational codes, e.g. IRS 1040. Or, they might have a partial format, such as a letter or an email. Or, they could have no format at all – just some sketchy information in a Word document, such as a task list. They could be single page or multi-page. They might or might not have page numbers. They could be electronically-generated documents, or poor-quality scans of hard-copy documents.

What is your task? It is to:

1. Classify these documents into a taxonomy which contains 1,000 different classification codes based on both document structure and content. The taxonomy requires content differentiation by both type and sub-types of content or various versions of the same form.

2. Extract structured data from the documents based on the document classification. From document Type 1, you are to extract the date the document was created. From document Type 2, you are to extract the name of the organization which created the document. From document Type 3, you are to extract the diagnostic phrases for a mammography. Note that there are typically multiple data extractions from each document.

3. Redact data from the documents based on the document classification. From document Type 999, you are to redact the name, social security number, and credit-card account numbers.

Training the Computer

Now, let’s break it down into something the computer understands. How do you approach these tasks? How long will it take you to classify 10,000 of these documents and extract/redact the correct data? How accurately can you perform these tasks?

First, the records manager creates an AI expert-system knowledge base. This knowledge base contains important and unique facts for each classification code in the taxonomy to complete Task 1: classification. In preparation for Tasks 2 and 3, the knowledge base also identifies the elements which are to be extracted or redacted for each classification code. The knowledge base includes customized lexicons for each element to be extracted/redacted as well as a set of logical rules. To create the knowledge base, lexicons, and logical rules, the records manager uses various AI and classical statistical techniques including searching, pattern matching, heuristics, and probabilities.

Second, the records manager uses sophisticated OCR technology – which itself employs AI pattern recognition techniques – to convert every document which was not already electronically searchable into electronically searchable text. The OCR technology provides critical metadata regarding each text element, including font type and size; location on the page; case and context.

Third, the records manager engages AI search and pattern-recognition techniques to match the text of each document to the facts contained in the taxonomy knowledge base. This process provides the best classification code for each document.

Fourth, once a classification code is determined, the records manager queries the knowledge base to confirm the specific data elements to be extracted or redacted. The records manager acquires the appropriate data element lexicons for this task, ensuring, for example, that the right date among the many on the page is extracted.

Fifth, once all the tasks are completed, the records manager provides the classification code and extraction/redaction information for each document in an appropriate format, such as XML, using classic data conversion techniques, if necessary. These results can then be transmitted to the appropriate points in an enterprise to facilitate a wide variety of enterprise content management (ECM) requirements.
**Wish You Were This Good?**

Using today’s average processors, once the knowledge base is established, steps 2-5 complete in 2-3 seconds per document – about the time it takes a human being to click on a page and begin to read it!

As processor speeds accelerate, this time will reduce to fractions of a second. Classification will be consistent because the same knowledge base is used for every classification decision. It’s difficult to get consistency when multiple individuals are completing classification tasks. But with AI, both extraction and redaction will be comprehensive and accurate – no tired eyes to miss an extraction or redaction element and no keying errors.

This is just one simple scenario of how AI works today. Coming uses will transform ECM and society at large in ever more dramatic ways. Even in its nascent stages, however, the benefits of AI technologies are already increasing human efficiencies and enabling mankind to address increasingly complex challenges.

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A Records Management Maturity Model

An MM that is not candy-coated chocolate, Mickey Mouse, a Detroit Rapper, Maris and Mantle, nor Mauer and Morneau (if you’re a Minnesota Twins Fan)

Last fall in Orlando, ARMA International announced GARP, its Generally Accepted Recordkeeping Principles. In my post to these pages, “The (Disney) World According to GARP,” I called it, “a significant contribution to the burgeoning field of information governance.” Further, I noted, “GARP is not a novelty as much as a codification of long-evolving recordkeeping ideals.”

Last week, ARMA released GARP’s companion, a Maturity Model that was still in beta last fall. The MM – although the content is anything but Mickey Mouse — evaluates Records & Information Management (RIM) programs on a five-point scale:

- Sub-standard
- In development
- Essential
- Proactive
- Transformational

Within the Maturity Model’s 40 cells (eight principles x five levels), an organization can objectively evaluate its RIM program, identifying areas that need strengthening and/or risk reduction. No longer need a records manager’s boss describe their program as “pretty good” or worse, “good enough.” With the new MM, a program can be designated, for example, as “60 percent of ideal” or “deficient in two key areas.” And those statements lead to telling questions: “Is that good enough?” “Are we OK with that?” and “Can we live with that level of risk?”

The Maturity Model is a tool, no more/no less. It doesn’t do the evaluation by itself, but it does make a serious evaluation simpler and more accurate.

There are ambiguities to be resolved. Cells contain between two and five statements, and in my first use, I found that a RIM program could stretch over three levels for a single principle. Using the Compliance principle, for example, an organization, simultaneously, could have a Level Two destruction-hold process, a Level Three recognition of “relevant laws and regulations,” and a Level Four training regimen for employees.

Further, RIM programs seldom are monolithic and internally consistent. An organization could have a sophisticated program for managing paper and microforms while its digital records are wildly unmanaged.

These are observations, not criticisms. A creative RIMmer will assign a point value to a particular situation to answer the questions, “Are we good enough? Is our records risk acceptable?”

The GARP MM is, in my opinion, the best evaluator currently available. The MM helps perform a current-state assessment, a prerequisite to a plan for improvement.

To plan an itinerary, one needs to know the starting coordinates. The GARP MM meets that need and points to where a RIM program wants to go.

GARP repackaged best RIM practices in a format that speaks volumes to top management. Similarly, the Maturity Model articulates what every good RIMmer already knows intuitively. Its value lies in quantifying quality and setting benchmarks for top management to accept, reject or authorize improvement.

It would be a mistake to minimize any tool that speaks truth to power. Gaining support from top management is always a critical strategy. When moving a RIM program forward, GARP’s MM offers significant help.

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Records and Information Management Is a Team Sport

A successful records and information management (RIM) program, like a successful Olympic athlete, requires a team of people working toward a common goal. Records managers cannot expect to create a policy in a vacuum.

After watching or reading about the Olympics for the past couple of weeks, it dawned on me that none of the athletes made it to the Olympic-level alone. Helping the athlete to refine their technique and provide feedback are the coaches and more senior-level athletes. Supporting the athlete from the very beginning are family and friends who make sure the athlete attends practices and is adequately equipped. It takes many people to get an athlete ready for the Olympics—athletes without support teams don’t get very far.

A successful records and information management (RIM) program, like a successful Olympic athlete, requires a team of people working toward a common goal. Records managers cannot expect to create a policy in a vacuum and then assume that the policy will be followed. To successfully create and implement a sound RM policy, a team is required. That team will consist of internal and, occasionally external, resources; all of whom will participate in the planning, design, and roll-out of the RIM program.

The roster for the RIM Team includes:

- Attorneys
- Business members
- IT teams
- Executive sponsor
- Records Manager

Attorneys are the first of the team members who assist in the drafting of the RIM policy. Their participation ensures that the legal obligations of the company are met. The attorneys provide valuable input on the governance documents that establish the rules and controls that employees will follow. The attorneys work with the Records Manager in identifying and developing the requirements that minimize the discovery or cost risks that many companies face due to over retention of records and information.

Also on the team are individuals from the business groups who own the records and information. Their records and information are evidence of their work, and they may need the information longer than the legal requirements identified by the attorneys. The Records Manager often plays the role in balancing the needs of the business with the risk-mitigation efforts of the attorneys. Finding the right balance is important for the mission of the organization.

Additionally, the next members of the team are the individuals who play a critical role in applying the controls or procedures to technology, the IT staff. These team members have the role in developing and supporting the technology for the business, and this role makes them the group most impacted by any new rules or requirements that are developed. They look at the rules from a “how are we going to make this work” point of view. Here the Records Manager must have an understanding of the technology infrastructure and architecture within their own organization. Writing rules that cannot be implemented only creates additional risk for the organization.

No team is complete without the coach, the person who has a seat at the executive table and who understands the need and value of developing and implementing a sound RIM Program. RIM Programs are usually developed and implemented years after an organization has been in business, millions of documents exist, and years of habits need to be transformed. Implementing controls and processes via good Records and Information Management means changing culture and behavior; the executive sponsor knows where the organization is going; the person who knows what obstacles need to be removed; the executive who understands the value to operations and the need to mitigate the risks that exist – this executive sponsor gets the ball rolling.
So where does the Records Manager fit into the team? The Records Manager can hold many roles:

- planning Program elements and drafting policy;
- operationalizing legal requirements;
- serving as the hub between legal, IT, and the business in collecting and analyzing all the needs to develop the right process; and
- further refining procedures to assure compliance.

It is the role of the Records Manager to align the vision and policy of the RIM Program to the mission of the company and provide that bridge between the legal requirements to the technology tools and vision.

Finally, the Records Manager serves the role as RIM Program champion. This is the person who understands what the end-game looks like. The Records Manager keeps an eye on the prize, knows what it takes to achieve a gold medal for a RIM Program and continually champions the small successes that occur for an organization. Sometimes the Records Manager is the coach that provides feedback that enables all the other employees to comply and be successful.

Getting to the Olympics takes a dream combined with discipline and continuous improvement. Similarly, for a RIM Program to reach Olympic-level quality and perform best-in-class, there must be a vision combined with a team of well-chosen players and a support system in place. Then you can go for the gold!

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_Helen Streck serves as records management consultant at Shook, Hardy & Bacon’s Tort Section._
In most organizations, electronic records are still taken less seriously than paper records. Responsibility for applying good records management practice to electronic records would seem to reside in the IT Department rather than in the Records Department, and even where good policies exist, they are often not monitored or enforced. In this report we have compared volumes, policies and effectiveness between the management of electronic records and that of traditional paper. Legal-discovery and litigation-hold have created a demand for specific e-discovery tools, so we looked at their take up. We have also looked at the integration issues across multiple records repositories and measured long-term archive strategies.
Electronic Records Management
- still playing catch-up with paper
About the Research

As the non-profit association dedicated to nurturing, growing and supporting the ECM (Enterprise Content Management) community, AIIM is proud to provide this research at no charge. In this way the education, thought leadership and direction provided by our work can be leveraged by the entire community.

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Process Used and Survey Demographics

While we appreciate the support of these sponsors, we also greatly value our objectivity and independence as a non-profit industry association. The results of the survey and the market commentary made in this report are independent of any bias from the vendor community.

The survey was taken by 768 individual members of the AIIM community between July 30th and August 18th, 2009, using a Web-based tool. Invitations to take the survey were sent via e-mail to a selection of the 65,000 AIIM community members.

Survey population demographics can be found in Appendix A. Graphs throughout most of the report exclude responses from organizations with less than 10 employees, and suppliers of ECM products or services.

Terminology within records management is subject to some variation. In particular we refer here to paper records and physical records in a largely interchangeable way.

About AIIM

AIIM (www.aiim.org) is the community that provides education, research, and best practices to help organizations find, control and optimize their information. For more than 60 years, AIIM has been the leading non-profit organization focused on helping users understand the challenges associated with managing documents, content, records and business processes. Today, AIIM is international in scope, independent and implementation-focused, acting as the intermediary between ECM (Enterprise Content Management) users, vendors and the channel.

About the Author

Doug Miles is head of the AIIM Market Intelligence Division. He has over 25 years experience of working with users and vendors across a broad spectrum of IT applications. He was an early pioneer of document management systems for business and engineering applications, and has been involved in their evolution from technical solution through business process optimization to the current corporate-level concerns of security and compliance. Doug has also worked closely with other enterprise-level IT systems such as ERP, BI and CRM. Doug has an MSc in Communications Engineering and is an MIET.
Introduction

Electronic Records Management (ERM) was originally developed as a stand-alone application, frequently managing physical items as well as electronic documents. It has subsequently become one of the key elements of any integrated Enterprise Content Management (ECM) implementation. It is the robust cornerstone underlying compliance and legal discovery, which increasingly call for electronic documents to be treated in the same way as paper documents. For this report, we have compared policies and effectiveness between the management of electronic records and that of traditional paper. Legal-discovery and litigation-hold have created a demand for specific e-discovery tools, so we look at their take up. We have also looked at the integration issues across multiple records repositories and measured long-term archive strategies.

Overall, our findings show that in most organizations, electronic records are still taken less seriously than paper records. Responsibility for applying good records management practice to electronic records would seem to reside in the IT Department rather than in the Records Department, and even where good policies exist, they are often not monitored or enforced. Having said that, an encouraging number of organizations are homogenising their electronic and physical policies and practices, and many are moving to an all-electronic model, linking their repositories together in order to improve the legal discovery process and enhance operational efficiency.

Key Findings

- The volume of paper records is still increasing steadily in 56% of organizations, but in 22% it is at last showing signs of decreasing. Meanwhile the volume of electronic records is “increasing rapidly” for 70%, and unsurprisingly, is not decreasing for any.
- Half of organizations are scanning newly received paper items and filing them electronically rather than manually, and a third of businesses are looking to go to all-electronic records-keeping.
- But for the other half, as well as manually filing inbound paper documents, 40% admit to routinely printing newly generated office documents and emails for the purpose of filing them as paper records.
- Electronic records are more than twice as likely to be described as “Unmanaged” than paper records.
- 71% of organizations have a procedure for legal hold of paper records in the event of litigation, but only 57% have one for electronic records.
- For 25% of organizations, legal discovery of paper records would take at least a month, whereas for electronic records this is 17%.
- There is a reliance on IT staff to carry out legal discovery on electronic records in the majority of companies, whereas records management staff or line-of-business staff deal with paper records.
- 13% of organizations are using dedicated e-discovery tools and a further 22% are planning to do so. 42% are utilising their ECM/ERM suites for e-discovery and 12% are using Enterprise Search.
- Of those organizations with no ECM/ERM system, 60% would not be confident, if challenged, that their electronic records have not been changed, deleted or inappropriately accessed.
- 38% of those polled admit that there is little or no enforcement of their records management policies and 55% set no guidance on dealing with important emails as records.
- 31% of organizations have 20 or more content repositories that could usefully be linked, with email as the highest priority content.
- 35% are using in-house developed links to join up repositories and a further 28% are using vendor custom-developed links. CMIS (Content Management Interoperability Services specification) has gained traction in just 15% of organizations as yet.
- Half of organizations would “possibly” store records in a local, identifiable outsource, but 77% state they would never use a public cloud (e.g., Google, Amazon or Microsoft) even if they were assured of an onshore storage location. However, 67% would consider a corporate or government cloud.
- Two thirds of organizations store a significant proportion of their records in native formats such as Word and Excel, although a third plan to converge to PDF-A over the next 3 years.
- Over 70% of organizations have made no plans or provision for long-term archiving of electronic records, with no policies for migrating to new media, translating formats, or virtualization of applications.
- Spending on Records Management systems and modules is expected to be up overall in the next 12 months. Consultancy Services show a slight net fall.
Paper versus Electronic

Despite the near universal move to electronic generation of documents, the volume of paper records is still increasing in the majority of organizations, although there are signs of stability in 23% and a decrease in 22%. Electronic records on the other hand are “increasing rapidly” in 70% of organizations, with none reporting any kind of slowing down.

*Figure 1: Is the volume of your paper/electronic records? N=656*

When asked about the degree of management that exists for paper and electronic records, around half of companies admit that even with their paper records, a significant proportion can be considered to be unmanaged. On the whole, however, electronic records are more than twice as likely to be unmanaged, with 44% reporting that the majority of their electronic records are unmanaged, compared to 21% for paper.

*Figure 2: What proportion of your records would you say are unmanaged? N=648*

As regards how paper records are managed, the highest scores go to manual management either in-house or in off-site warehouses. Of those that do manage their paper records electronically, they are as likely to be indexed in dedicated systems as to be indexed alongside electronic records in a combined system.
Figure 3: What proportion of your paper records would you say are: N=648 (weighted score: none, small proportion, significant proportion, majority, all)

When asked in more detail about management of electronic records, “managed in file-shares” scores highly – albeit that many would consider a file-share to be a somewhat unmanaged environment. Numbers are equally split between those with dedicated ERM systems and those using the records management component of ECM systems (including SharePoint).

Figure 4: What proportion of your electronic records would you say are: N=648 (weighted score)

Exploring those records produced by line-of-business (LOB) applications, we find around one third are likely to store them within the application - where they may or may not be readily searchable and lifecycle managed. A further third are printed and managed as paper, with the final third managed externally in a dedicated RM system or as part of an ECM system.
Some organizations are making good progress towards eliminating their paper records, with over 50% reporting that they generally scan newly received items and file them electronically. 29% are scanning paper records if they are pulled from the archive and 30% have a project to scan all of their paper records over time.

However, it is little wonder that the volume of paper records is still increasing given that 38% print off electronically generated documents are printed off for the purpose of filing them as records. Emails in particular by 44% of respondents. The fact that a third of organizations feel that paper records are required for audit purposes suggests that there is much education still to be done, particularly amongst the audit community themselves.

We can report good progress towards elimination of paper records in over a third of organizations, but in the remainder there is still a lack of appreciation that important electronic documents can and should have status as records and need to be retained as such. Where this is recognized, there is still a strong tendency to print them off and file them as paper.
Legal Discovery

The US FRCP amendment in 2006 clearly set down that electronic documents and emails were just as liable to pre-court disclosure as paper documents, and there are similar rulings in case law across most of Europe. This presents the records manager with two requirements: a legal discovery process to find out what relevant documents exist, and a legal hold to ensure that those documents, once found, cannot be deleted or altered.

Interestingly, 57% claim to have a legal hold procedure for electronic records, albeit that this is 14% less than the 71% who have a procedure for paper records. Emails are down further at 53% and the difficulty here is well documented in the previous AIIM report “Email Management, the good the bad and the ugly”. Web pages would seem to present an even greater challenge, particularly one of context for dynamically generated pages.

When broken down by organization size, we can see that larger organizations have made considerable progress since 2006.

As regards the time taken to carry out a legal discovery process, 25% of organizations are allowing a month or more for paper records compared to 17% for their electronic records. This difference is less than we would expect, and perhaps reflects the fact that most electronic records are still living in multiple, unconnected repositories, as we discuss later.
Figure 10: How long would a legal discovery search process take across your paper/electronic records: N=572

We also found that in most organizations, IT staff are being called upon to carry out the legal discovery process across electronic records, whereas Records staff deal with it for paper records.

Figure 11: Who would be responsible for doing the legal discovery search across your: N=572

As regards automating the legal discovery process, 19% of the largest organizations are already using dedicated e-discovery tools or modules, with a further 31% planning to do so. Even amongst mid-sized and smaller organizations, 17% are planning an investment. Meanwhile, around 40% are using the functionality of their existing ECM or ERM system. Investment in Enterprise Search has so far been twice as popular in larger companies, with 19% adopting it.
Finally in this section, we asked how confident respondents are that their electronic records would stand up in court. A worrying 37% are “not very...,” or “not at all confident.” This shows some improvement over the 44% result the last time AIIM asked this question in 2007. However, the 37% in this survey rises to 43% in organizations of over 5,000 employees. For organizations who have no records management or ECM system, it rises to 60%.

The conclusion we draw regarding legal discovery is that electronic records lag once again as regards formal procedures. IT staff rather than Records Management staff are being called upon to carry out important legal procedures. However, for those records that are properly stored and indexed electronically, elapsed legal discovery timescales can be reduced. There is increasing interest in the use of specialist e-discovery tools to optimize this saving, particularly from larger organizations.
Governance

Good records management is a combination of policies, systems and enforcement, backed up by knowledge of appropriate standards and compliance with them.

Figure 14: What use is made of standards in your organization for best practice records management? N=520 (multiple)

Larger organizations show a slightly higher attention to standards, but the differences are much less than one might expect, and intriguingly, mid-sized companies appear to be the laggards here, particularly with regard to ISO 15489. MoReq2 seems to be achieving traction, with 21% of European organizations citing it, and a surprising 8% of those in North America.

Homogeneous policies across electronic and physical records will be easier to understand and therefore easier to enforce. We are encouraged that 45% of organizations claimed to have a single set of policies for both types, with a further 16% putting a reasoned case for differentiated policies that are matched to record type, complexity, location, etc.
Somewhat surprising, on the other hand, is the fact that 16% of respondents in organizations with over 5,000 employees admitted to having only very basic records management policies.

Perhaps somewhat less surprising, but still worrying, is that in 38% of organizations there is no real enforcement of the policies they do have.
When it comes to staff training on dealing with records, there seems to be little difference between paper and electronic, with nearly half providing no training on either. Although 62% have guidelines on what constitutes a record, only 46% have guidelines on how to deal with emails as records.

**Figure 17: Does your organization:**

- Train new staff in how to deal with paper records
- Train new staff in how to deal with electronic records
- Update existing staff regularly on how to deal with paper records
- Update existing staff regularly on how to deal with electronic records
- Have guidelines on what constitutes a record
- Set guidelines on where or how it should be stored
- Set guidelines on how to deal with emails as records
- Enforce a standard fileplan/classification scheme

It is good to see that 36% set out to enforce a standard classification scheme or file plan across the organization, but coming to an agreement in the first place is a problem in many implementations, with 30% reporting it as a work-in-progress, or yet to be started.

**Figure 18: Regarding your file plan or classification scheme: (multiple)**

- We have an agreed scheme organization-wide
- We adopted a sector-specific scheme
- We have different schemes for different departments
- We are still working to agree a scheme
- We have yet to draft a scheme
- We have no plans to use a classification scheme

We also asked about retention schedules, finding that 36% are applying them consistently across all formats. Interestingly, there was a noticeable difference of 55% who require approval for destruction of paper records at the end of the retention schedule, compared to 32% who require approval before deletion of electronic records. This may reflect the level of staff or the external warehouse procedures involved for paper records.

An important part of governance is authority, and we were interested to find out where the highest level of responsibility lay. The result shows quite clearly that no matter whether traditional responsibility for paper records resides with records officers, finance, legal or line of business, responsibility for electronic records is pushed firmly towards the IT department – or in 13% of organizations, to no one at all.
Figure 19: Which of the following would best apply in your organization as regards the highest level of records management expertise and responsibility for paper/electronic records? N=553

We also asked which direction records management responsibility was likely to head in 3-5 years time. There was a general indication that IT should take less responsibility, and that there should be more executive or C-level officers prepared to take on the responsibility and acquire the expertise. Beyond that it seems equally split as to whether it will become the responsibility of the Legal/Compliance department, whether it will be devolved to the line of business units, or whether it will stay split as now between Finance, Legal, Records and IT.

Figure 20: Which direction do you think Records Management responsibility is heading in, say, 3-5 years time? N=546

In conclusion, it is apparent that the traditional keepers of records are moving towards a common set of policies for electronic and paper records, albeit that enforcement is somewhat patchy. However, when it comes to setting responsibility at the highest level, the traditional boundaries re-appear, with a heavy reliance on the IT department.
Linking Multiple Repositories

As we found in our State of ECM report earlier this year, although a third of organizations plan to migrate their multiple repositories to a single system, an equal number would prefer to link their existing systems together under a single sign-on and single-search portal. Ideally, they would like to achieve a “manage-in-place” scenario where consistent records management and retention policies can achieved across all repositories from a central set of policies.

In this survey, we found that 20% of organizations have 50 or more repositories that “could usefully be linked or managed in one place”, and over half have 10 or more. The highest priority is to link email systems, followed by existing document and records management systems, and also outsourced storage.

*Figure 21: Which repositories would you like to link or manage in one place? N=479 (“Not applicable” eliminated)*

Given the range and diversity of current and legacy systems, linking is likely to present some difficulties, with 62% using or considering some form of custom development.

*Figure 22: Which connection mechanisms are you using or developing to link repositories? N=479 (multiple)*

Given the difficulties, therefore, it is surprising how few organizations have looked into the potential benefits of CMIS, the Content Management Interoperability Services specification standard. Fully compliant records management functions are not as yet available under the standard, but they are targeted for future incorporation. Further details of each of these standards can be readily found on the internet. Open Source is not, of course, a standard as such, but it obviously has applicability in this area.
As a measure of success of the manage-in-place concept, we found that 30% of organizations have achieved single sign-on and search across at least 2 repositories, and 15% have extended that to hold, delete, retention, deletion and destruction. A pioneering 5% have achieved all of those functions across 5 or more repositories.

Going forward, it is important to prevent the proliferation of separate repositories by integrating enterprise systems with the records management system. The traditional link is from document management and imaging systems, but it is important to be able to declare a record within the email client. Beyond that, in most organizations potential records are created in finance, ERP, CRM, HR and Line of Business systems. Increasingly relevant are also Instant Messaging and Enterprise 2.0 systems. It is apparent that direct integration with these systems is in its infancy.

> Figure 24: From which of the following systems are you able to directly declare a record within your defined retention and classification schemes? (multiple)
In conclusion, we can say that there are active projects to link records repositories together in many organizations, and they are showing some success with the manage-in-place concept. However, the sheer number of repositories that exist in the larger organizations presents a challenge for integration software. Standards are moving in the right direction to help with this, but take up is low as yet.

Cloud and Long Term Archive

Archiving records in the cloud is probably one of the severest tests of one’s faith in the security and long-term availability of this concept. By “cloud”, we mean management and storage of records, off premise, and on an un-specified server.

We found that 54% of organizations would “possibly” store records in a local, identifiable outsource. But 77% state they would never use a public cloud (e.g., Google, Amazon or Microsoft) even if they were assured of an onshore storage location. However, if the cloud were provided within the corporation, confidence levels in the commercial sector would rise to 67%, and to 71% for a government organized cloud within the public sector.

Figure 25: In view of security considerations, would you store electronic records in any of the following:

In order to explore long-term archiving policies for electronic records, we first asked what the range of retention periods were. As can be seen, over 60% of all organizations are required to keep some of their records into the foreseeable future, even within the non-government sector.

Figure 26: Do you have electronic records which need to be retained for: (multiple)
Surprisingly, therefore, when we asked about policies and budgets for migration to updated media, translation to new formats, and coping with obsolete applications, 68% of organizations had no policy on any of these options. There was a slightly higher awareness of media migration and application obsolescence than of format translation. These results were consistent across both public and private sector.

Figure 27: Do you have a policy/budget for: (multiple)

We also asked about what formats were in use both within the existing archive, and for newly archived records. Over 60% of organizations admit to storing a significant proportion of their electronic records in the native application format such as Word or Excel.

Figure 28: Do you store a significant proportion of your records in the following formats? (Multiple)

Noting the slight increase in use of PDF-A (the open version of PDF optimized for archive), we asked if organizations have a plan to converge to PDF-A. We found that 8% already have, a further 28% plan to in the next 2 years, and a total of 54% will have done so within 5 years – a slow but positive movement.

Overall, therefore, we conclude that the battle being fought now is to bring electronic records into the records management regime. The issues of long-term archiving have largely been put on the back-burner for now. However, the number of organizations storing records in native application formats is of some concern. As regards storing records in the cloud, there is less resistance to the technique itself, more a lack of trust of using an external supplier, no matter how re-assuring the brand.
Implementation Issues and Spend

In our previous surveys, we have found that the drivers for records management investment are generally around the potential cost of failed compliance and the efficiency of litigation preparation. The litigation aspect is frequently considered from the negative viewpoint of successfully defending a case, but rapid production of related documents and records can significantly improve the success rate of pro-active legal action. Over and above that, there is an incentive to capture records electronically as part of improving corporate knowledge management and user access.

Records management systems can only improve compliance if they are used correctly. We asked users for their views on encouraging user adoption. They reported a balanced approach between making it easy to use the RM system, and making it harder to store documents elsewhere on local drives, file-shares and removable devices. Over and above that, regular training is considered a must.

Figure 29: Which four of the following would you say are the most important for encouraging user adoption of Records management? (multiple)
Finally, we asked users about their spending plans for the next 12 months.

Figure 30: How will your spending on Records management in the next 12 months compare with the previous 12 months? N=470 (“We don’t spend anything on this” eliminated.)

We see that net spending over the next 12 months is likely to be up in all areas except consulting services. Our other surveys this year have indicated maintained spending on software licences in most other areas of ECM, but a disappointing cut back in training. As regards records management, however, there seems to be a strong appetite for paid-for training. Interesting to note a continued spend on electronic systems for managing physical records, and strong representation of both Enterprise Search and Legal Hold.
Conclusion

The survey clearly shows that the spectrum of applied practice in electronic records management is now broader than it has ever been. There is a growing core of high-maturity organizations, representing 10 to 15% of our sample, that are removing paper from their business, have best-practice procedures aligned to standards, are linking their electronic and paper repositories together under common rules, and have a view to the long-term archive issues. At the other extreme there are still organizations, including quite large ones, who have rudimentary practices even for paper records, and simply no view that electronic documents and emails might represent records in any way, both as information assets and as potential liabilities.

In between these two extremes, there is a definite sense that in most organizations electronic records are playing catch-up. Compared to paper records, they are less rigorously managed and maintained, by less well-trained staff, and with less confidence in their authenticity were it to be questioned under litigation. The volume of paper records is still increasing, but much less so than electronic records. Responsible for much of the increased volume, emails might be considered a special case. But treating important emails as records and providing easy access to a suitable repository is crucial to maintaining a reliable and complete record set. At a much lower volume, but still important to include, are records generated within other enterprise applications and line-of-business systems.

We have found encouraging signs of continued investment in records management systems, both for electronic records and as electronic management of paper records. Electronic Records Management also seems worthy of specific training, with extra spend indicated here. The more recent developments of dedicated e-discovery and legal hold applications seem to be in tune with user demand, particularly in the larger organizations.
Survey Demographics

Survey Background
The survey was taken by 768 individual members of the AIIM community between July 30th and August 18th, 2009, using a Web-based tool. Invitations to take the survey were sent via email to a selection of the 65,000 AIIM community members.

Survey Demographics
Organizational Size
Survey respondents represented organizations of all sizes. Larger organizations over 5,000 employees represented 31%, with mid-sized organizations of 500 to 5,000 employees at 39%. Small-to-mid sized - 10 to 500 employees - were 29%. Organizations of less than 10 employees were excluded from all of the results.

Industry Sector
Local and national government made up 32%, finance and insurance 12%. Utilities oil and gas also 12%. The remaining sectors were evenly split. To avoid any bias, consultants and suppliers of ERM were removed from the report.

Geography
US 61%, Canada 12%, UK and Ireland 13%, mainland Europe 5%, rest-of-world 10%.

Job Function
Just over half of respondents were from Records Management, with nearly half as Head of Records, Compliance or Legal. IT made up 19% and project management, analysts and consultants 17%.

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About AIIM
AIIM (www.aiim.org) is the community that provides education, research, and best practices to help organizations find, control, and optimize their information. The AIIM community has grown to over 65,000 professionals from all industries and government, in over 150 unique countries, and within all levels of management including senior executives, line-of-business, and IT.

For over 60 years, AIIM has been the leading non-profit organization focused on helping users to understand the challenges associated with managing documents, content, records, and business processes. Today, AIIM is international in scope, independent, implementation-focused, and, as the representative of the entire enterprise content management (ECM) industry - including users, suppliers, and the channel - acts as the industry's intermediary.
8 Secrets of an Effective Content or Records Implementation

AIIM e-Book
8 secrets
of an effective
content or records management implementation

document management, records management, email management, enterprise 2.0, imaging, scanning, collaboration, BPM and ECM

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About this e-Book

My thanks to all the guest bloggers who contributed their work to this e-book.

The intention of this e-book and the other e-books in the series is NOT to provide a set of detailed technical requirements for how to create a strategy for managing information. There are other places for that -- the AIIM web site and the InformationZen site and AIIM training and AIIM webinars and seminars are good places to start.

Rather, the purpose is to increase awareness across a broad cross-section of organizations and industries about the kinds of issues you need to think about when you begin to adopt a more strategic approach to managing information.

So the purpose of this series is educational and evangelical rather than technical. You are free to share the link to anyone to download the book -- and we encourage you to do so.

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A production note -- this e-book is available in a variety of formats. The best one is the PDF one.
Thinking About Implementing an ECM or ERM Project?

*The secret to creativity is knowing how to hide your sources.*
Albert Einstein (1879 - 1955)

Well, if you've made it this far, I would imagine it's safe to say that you realize that you need a strategy for managing information (as opposed to just winging it) and that you have started to think seriously about what to do next.

[If you are not convinced about the need for a strategy, you might want to examine our previous e-book -- 8 Reasons You Need a Strategy for Managing Information -- Before It's Too Late.]

A comment about my choice of quotations to kick off this second e-book. The reason I selected it is that I am convinced that all of us (industry, consultants, and yes, folks like AIIM and ARMA) have not done all we can or should do to make it easier to actually implement a strategy for managing information.

A little over four years ago, we realized that when organizations finally enter the magic land of ECM and ERM strategy, it usually felt a bit like a Muggle stumbling into Hogwarts -- totally incomprehensible and dominated by a coterie of wizards speaking of and doing incomprehensible things. [Editor's note: For those who have been under a rock for the past decade, this is a Harry Potter allusion. See the Wikipedia entry on Harry Potter for details.]

In this world, there was little standardization of technique or approach or best practice. Vendor case studies were helpful, but they were not standardized to allow comparisons. The language and terms were cryptic and focused on communication among the insiders. There was no place to go online to ask questions and connect with others with similar problems. There was little industry data on what end users were actually doing with our technologies and few places that organizations could go to benchmark their own activities. But most importantly, there was no standardized training or methodology to allow users to follow a somewhat predictable path to implementing a content or records strategy.

Which brings me to my quotation. The net result of the above was that any organization with an actual information management strategy seemed to have access to some sort of secret elixir that none of the rest
of us had access to. It seemed like they must be hiding their sources. In short, the ability to share and standardize implementation approaches was simply non-existent.

So, we (AIIM) set out to do something about this. Case study standardization across suppliers is still an issue, and I'm afraid we haven't collectively made much progress on this front. We launched the InformationZen site, and that has gone a long way toward the goal of giving the industry -- users, suppliers, and the channel -- an on-line place to "hang out." We launched an industry research program, and now produce 4-6 highly-read industry studies per year -- and make them available for FREE to the end user community. We reconfigured EDOC magazine as Infonomics and refocused it around end user stories and successes.

But most importantly, we launched the AIIM Certificate program and created Educational Advisory Committees to oversee the program to finally begin the task of standardizing best practices and information related to ECM, ERM, E20, E-mail management, BPM, and Information Organization and Access. We made this content available via on-line courses, via public courses held around the world, and via private courses for individual organizations. And we kept the focus not on the bits and bytes, but on strategy and best practice.

My 8 secrets are drawn from this AIIM curriculum, in particular the ECM course. But they represent a standardized implementation methodology that can be applied to any document, content or records management project. Our goal with volumes like this and with our training is that these techniques shouldn't be secrets anymore!

And I should also stress that there is a lot more to an effective initiative than just reading the 8 secrets (hint, hint -- you should take our training!) This can be complicated -- but not impossible -- stuff.

The accompanying articles in this e-book look at specific aspects of an ECM implementation, and were written by experts in the field.

Table of Contents

- 8 Things You Need to Know about Content Classification and ECM by Josh Payne, IBM
- 8 Ways to Increase User Adoption of ECM and ERM Systems by Lynn Fraas, Crown Partners
- 8 Things to Look For In a Document Management Service Provider by Mitch Taube, Digiscribe
• **8 Ways to Reduce your Storage and Bandwidth Costs for Document Imaging Solutions** by Lou Franco, Atalasoft

• **8 Things to Consider when Looking at ECM Consultants** by John Klein, Redstone Content Solutions

• **8 Steps to Avoid Process and Organizational Problems when Implementing an ECM System** by Jim Wade, Performance Improvement

• **8 Things to Remember When Managing Enterprise Content Management Applications** by Brian DeWeyer, Reveille Software

• **8 Things You Always Wondered About Your Legacy Content, But Were Afraid to Ask** by Nic Archer, Vamosa
Before getting started with an implementation -- before even moving into the 8 secrets -- it is useful to begin by recalling why you are even considering this in the first place and by confirming there is indeed a commitment to proceed.

This kind of "strategic mobilization" should kick off any ECM or ERM project. To do this effectively, organizations should gather sponsors and stakeholders, identify the team that will lead the project, understand what the vision of the sponsor of the project is, and understand where significant gaps are likely to arise.

At its core, this is about defining 1) who needs to be involved, and 2) the scope of the project. Framing the initiative and confirming commitment needs a variety of key stakeholders: business, legal, executive, records, and IT.

And don't forget some representation from the people who will actually have to use all this technology!

In terms of scope, this will need to be done across a number of dimensions, including some or all of the following factors: 1) geography, 2) organizational, 3) legacy content, 4) information types, 5) information classes and 6) timing.

All of this should lead to a charter for the initiative. I will confess my bias in this area, which will carry over into some of the documentation described in the 8 secrets -- this document is better off being short and strategic and actually read than long and detailed and gathering dust on a shelf (or whatever the equivalent is in digital form). My friend Martin White from IntranetFocus.com has some good advice -- think Magna Carta, not a 100 page document.

Everyone still on board? Have a charter and sponsorship and commitment? OK, then, let's get going.

Here are the 8 secrets.
1 -- Build a Business Strategy and Blueprint.

A successful blueprint begins with identifying the critical success factors for the initiative, how they will be measured, and what the drivers will be (i.e., how will life be different after all this work).

A good business blueprint includes the following:

An Executive Summary that summarizes the key information contained in the business blueprint, and highlights the recommendations and decision required.

A High-Level Program Plan that provides a very high level plan showing a sequence of projects and approximate delivery schedule. This will likely include a series of tactical and strategic projects.

A series of Business Case justifications covering the multiple dimensions of any ECM or ERM project:

- The strategic case shows why the ECM-related project is required, and what business needs the project satisfies.

- The economic case contains the summary of costs and benefits. The economic case focuses on comparing alternative ways of implementing the ECM-related project.

- The funding case confirms that the available sources of funding are sufficient to implement the ECM environment and operate the ECM service.

- The commercial case describes plans for the procurement of any ECM services or technology from suppliers.

- The project management case describes the governance arrangement for the project and details of the project team.

A Future-State Conceptual Architecture illustrates the gap between the initial Current-State Conceptual Architecture, and what is proposed as the conceptual components of the solution to solve the concerns of the business.

2 -- Conduct a Technology Assessment and Create a Blueprint.

As its name implies, the technology assessment concentrates on the technical aspects of your strategy. The goal of the assessment is to develop a technology blueprint similar in scope to the business blueprint defined in Secret #1, but focused on technology.

There are 5 main stages in producing an effective set of
technical requirements for an ECM or ERM related initiative:

The first stage is to plan the work effort that is required to develop the technical requirements and blueprint. Sufficient time should be allowed to obtain consensus and agreement; this can often be considerable and often takes longer than those closest to the project anticipate.

The second stage is to gather requirements. This will involve obtaining needs from the key stakeholders and users.

The third step, after having gathered an initial set of requirements, is to analyze and understand the requirements.

The fourth stage is the documentation of the requirements. Documentation of the requirements is a powerful tool to achieving consensus on the end-state solution.

The fifth and final stage is to obtain agreement to the documented set of requirements. This will involve obtaining some kind of sign-off authority from each of the key stakeholders in the form of an actual document. [Again, recall the earlier advice -- volume doesn't score extra points!]

3 -- Think Through a Governance Structure and Approach.

Information governance is a set of formal and documented policies, procedures and rules that control how enterprise content will be managed potentially across its entire lifecycle, from the point of creation to ultimate destruction. Defining expectations, building a system that supports and enforces these expectations, and defining the role that end users have relative to those expectations is critical to an effective governance structure.

A sound Information Governance Framework will include the following:

Laying down policies that will govern behaviors.

Defining processes for all stages of the Information Lifecycle.

Setting standards that must be followed when carrying out a defined process.

Appointing specific people to be responsible for the information assets.

Providing tools and technology to enable staff to carry out the defined processes to the required standards.
Auditing the elements of the Framework regularly to ensure that the guidelines are being followed.

Again, it is important that all of this be incorporated into a governance document that is understood, endorsed, and supported by the key stakeholders in the organization. AIIM research indicates that many of the core problems encountered during an implementation have poor or ill-defined governance at their core.

4 -- Create a Roadmap and Project Plan.

A project plan will typically outline the following activities will be addressed: 1) Project management, 2) Testing and deployment, and 3 Issue resolution.

Project management as a structure, process and procedure based on the organization's preferred Project Management methodology. The role and responsibility of the Project Manager is to make decisions and balance resources across the entire program, and to make sure that all projects are working to a set of shared requirements. The project manager monitors plans and progress across all projects in the ECM project, to ensure coherence and integration across the whole program.

5 -- Build a Sound Foundation.

Organizations need to make sure that the appropriate software development environment exists for the project. Some of the questions to ask: 1) Is the configuration management environment set up, so that code and other artifacts can be checked in when they are completed? 2) Do the developers have a workable development environment? 3) Are the developers trained in the tools that will be used to build the system?

Another core foundational requirement is defining the enterprise information architecture. Some of the necessary tasks at this stage are: 1) Defining the enterprise master data model; 2) Defining the master data management architecture; 3) Defining when synchronization of content, data and information are required by different systems to meet their business-based information needs; and 4) Defining the master data definitions and business rules.

Taxonomy design and metadata development are also core elements in building a sound foundation. [A confession -- one sentence for these two very complicated items? -- obviously easier said than done!]
6 -- Design the Plan.

The design phase of a project typically includes the following activities:

Design of user support and operational procedures. The user support and operational procedures are intended to create the documentation and training program for all users and technical support staff as the relate to the project.

Security. Security design builds in the appropriate content security model, supporting security at each level of the system -- whether at the repository, folder/collection, document, element or physical levels.

Design of infrastructure management processes. Infrastructure management process design provides a set of requirements for the physical implementation of the information platform and its associated management functions. The target audience for the design documents produced by this activity is operations staff such as Systems Administrators and Systems Operators.

User collaboration. User content generated through increasingly powerful collaborative tools is a growing challenge in many ECM and ERM environments. A key element in designing the plan is to define how these tools will work in relation to the rest of the ECM environment.

User interfaces. The user interface design is specifically focused on the layout, information access and information presentation of the ECM environment.

7 -- Deploy the Plan and Cycle Through Phases of Assessment and Improvement.

Once you get to the point of deploying your solution, there are 4 main phases to consider: development, testing, actual deployment, and improvement. These phases typically recur as different versions and levels of functionality are introduced and improved.

Development -- transforms the design into working modules that can be tested. This includes development of operational documentation and training materials.

Testing -- focuses testing of the environment at many levels, from technical functioning through to testing of end-to-end processes.

Deployment -- delivers the new system into production. Includes setting up production environment, installing the new system applications, interfaces and repositories, publishing the system documentation, training users and initiating production operations.
Operation and continuous improvement -- focuses on delivering incremental improvements to existing functionality.

8 -- And Don't Forget Change Management!

AIIM research suggests that the main pitfalls for an ECM project stem not from technology but from a failure to anticipate change management issues.

Regardless of the kind of change -- whether technological, cultural, procedural, role-based, or any other -- organization must determine whether they are ready to face the change and adjust to it. Determining readiness is a big factor in the potential success of your ECM project.

Organizational change is always going to appear threatening to people as it is often linked to job security. Some enterprises freely disseminate information regarding strategy changes. Other firms are very secretive and feel that this is for senior management only. Practitioners should be as open and honest with staff about change as they possibly can. Typically, people will more readily embrace the change process if clear information is available.

The readiness of both management and affected workers to accept and adapt to change are the most crucial factors in the success, or failure, of your project. Management may be far more ready to change than the potentially effected workers, particularly if the idea for the proposed change is coming from management -- as it typically is. However, just because you have meetings with middle or senior management who are very enthusiastic about this new project, doesn't mean that the organization as a whole is ready to change.

Well, that about does it.

It can feel daunting, I know, and at this point you may be thinking, do I really want to do this?

Obviously, we feel the answer is yes. It wasn't easy for organizations to set up strategies and structures to manage money, people, and resources. But we all did it because these areas were deemed strategically important to organizational success.

Developing -- and implementing -- an information management strategy is hard work. But it's not impossible work.

AIIM research, training, publications, and events can help your organization understand and streamline the journey.
And the authors that follow will provide some useful tips for the trip.
8 Things You Need to Know about Content Classification and ECM

Josh Payne is responsible for product marketing and strategy for the IBM InfoSphere Classification Module, a part of the IBM Enterprise Content Management product portfolio. IBM ECM helps companies make better decisions faster by managing content, optimizing associated business processes and enabling compliance through an integrated information infrastructure.

Josh has over a decade of experience in enterprise software, most of it focused on information retrieval, enterprise search and content classification products and solutions. You can read more of Josh's thoughts on classification, ECM and the current state of the Boston Red Sox at twitter.com/joshpayne or his blog on ibm.com, The Classification World. Learn more about the IBM Classification Module at IBM's Compliant Information Management Resource Center.

1 -- Classification is key to realizing value from your content.

Why is classification important? Anytime you want to do something more than blindly storing your unstructured content, you need to classify and organize it to help those tasks along. Better-organized and classified information is more effectively searched, archived, managed as records or incorporated into business processes. There's a reason libraries classify and organize all those books.

2 -- Timing is everything.

We've been talking about it in the ECM community for some time, but automating the classification of information is now a necessary element of your ECM architecture. Why do I think automated classification's time has come? Well, that takes us to #3.

3 -- The volume and variety of information is driving adoption of automated classification.

John's blog is called "Digital Landfill" for a reason. There are ever increasing volumes of unstructured information created every day in our organizations.
Email growth continues worldwide. And the variety of communication and collaboration methods continues to expand. SMS and instant messaging are in the mainstream. Blogs and wikis are entering it. Twitter is the hot communication tool du jour. And the innovations continue, case in point, Google's recent announcement of its Wave product.

4 -- Our employees simply can't keep up.

With more and more information being generated, the number of employees is certainly not growing at the same rate. The human being as a source of all classification decisions simply can't scale. We need to automate the process of organizing this information if we're going to maximize the value we get from it, and manage its lifecycle cost-effectively.

5 -- Our employees are inconsistent.

Relying on our employees for these content-centric decisions is fraught with problems: they are inconsistent in their participation in these tasks; each employee uses different logic to make a decision; their logic is difficult to audit.

6 -- You can trust the folks with Ph.D.'s.

There are a variety of options for automating your content classification, ranging from simple rules to highly sophisticated, training based approaches. It's easy for the layperson to understand the simpler rule-based methods. It's not easy to understand the more advanced methods. But you should trust them because, guess what, those smarty-pants Ph.D.'s have automated classification methods that are proven to be more accurate and effective.

7 -- Automated classification will save you money.

Organizations typically take two approaches to classification. Let's take the email archiving problem as an example. One typical approach acknowledges that users shouldn't be trusted to determine what emails should be saved -- so they save everything. Rather than solve the problem, they avoid the classification problem altogether. Now they're simply saving everything, regardless of its value. Though disk is cheap, it's not free. Classification, for these organizations, will help you select only that information that merits being saved and save storage costs.
8 -- Automated classification will save you time.

The flip side to the email archiving argument above is that some organizations do trust their employees and ask them to select emails for archival and management. As we've established above, these organizations are likely to get inconsistent participation and as such low quality results. Why won't your employees participate? Because they understand the value of their own time. And dreary (though well intentioned) manual classification tasks are not well aligned to why they are being handsomely compensated. It's a poor use of their time, they know it, and are acting on that implicit ROI analysis.

Return to Table of Contents
8 Ways to Increase User Adoption of ECM and ERM systems

Lynn Fraas is a Director at Crown Partners, an international hybrid Software and Professional Services firm specializing in information management. Lynn is also active in the industry and is currently the Vice Chair/Chair Elect of the AIIM Board of Directors.

A consistent topic in ECM circles is low user adoption. We think of ECM as "mature" technology, however, most companies still struggle with broad user adoption. In implementing ECM technology we fundamentally change the way an individual or group does their job. Consequently, the business process and culture change associated with the technology is much more significant that the implementation of the technology itself.

Below are 8 things you can do to increase user adoption of ECM Applications:

1 -- Get top-level support.

This seems to be a "no brainer" but one that is consistently overlooked. ECM implementations often require significant changes to the underlying business process. A strong sponsor at the executive level can work to remove any organizational roadblocks the team may (or should I say will) encounter as you rollout applications across the organization.

2 -- Start small.

We have all heard the phrase "take one bite of the elephant at a time." Trust me; it is harder to do than it sounds. To start on the ECM journey, take a relatively straightforward business process and work with that first. Select a group that has at least one or two individuals who are champions for the new system. Get the first project over the finish line and in the winner's circle before you embark on project #2. Measure the results, celebrate the success and make sure the rest of the organization hears about the success. This will create a level of excitement that will drive other groups to "want" the new technology.
3 -- Be fanatical about internal PR and communication.

User adoption is driven by system acceptance. Become a PR and communication expert as they form the cornerstone of gaining organizational acceptance of the system. You must evangelize and spread your messages to executives, managers, information workers and outside vendors and suppliers. Build a PR/communication plan early in the project and incorporate different mediums to get the word out. A simple grid with audience (executives, managers, workers etc) on one axis and form of communication on the other axis will suffice. The key is identifying major stakeholders and messages and then planning the communication campaign to ensure all messages are delivered multiple times.

4 -- Use "personas" to understand how the new system will impact users.

Create a persona for your key stakeholder roles and ensure your system addresses their needs. The typical organization has multiple roles that will interact with any given business process and therefore the system. Each role has its own unique requirements (at least from their perspective). Understand who will interact with the system and what they need to be successful. Make sure you have them covered with the solution -- ultimately it is all about making their life easier. Understand the WIIFM (What’s In It For ME) for each persona.

5 -- Focus on the business process.

The business process that ECM technology will support should be the focus -- not the underlying technology. The business user wants to get their job done in the most straightforward manner. To the extent technology provides tangible benefits to the user -- adoption will follow. If you implement technology for technology sake -- you will probably struggle to get users to actually use the system.

6 -- Get users and business owners involved.

People love to be heard. Leverage that core human trait and get the users/business owners involved at the very beginning of the project. Other than the typical steering committee try these avenues for involvement:

• Have a representative from each group on the implementation committee and make sure they communicate regularly with the group they represent.
8 -- Training is more than just a class.

If I had a dime for every time I heard the words "companies did not plan for training" I would be on a sunny beach. You hear that training is often overlooked and that is a key piece of the user adoption puzzle. I also believe that in many cases training is conducted but it is ineffective. To be effective, training must be more than one how-to class. Here are some additional ways to ensure people make the jump to using the new system:

- Provide online or hardcopy step-by-step user guides with screen shots to help users the first few times they use the new system.
- Conduct a training session prior to use and then one week after implementation.
- Leverage the wiki or whatever collaboration tool you use to enable users to ask questions and get quick answers -- that can be review and used by others as you add to staff or bring different groups onto the system.
- Review the question and answer site to see if there are any trends indicating issues you need to resolve with the new system.

7 -- Leverage collaboration tools.

In the world of Web 2.0 it is very easy to create a dialogue with the broad user community. Check into leveraging an existing corporate intranet or wiki to engage the organization in the discussion around the new system. If you don’t have a corporate standard there are many ways to generate conversation with free web based tools such as Twitter, Yammer, Facebook and MySpace.

- Organize an occasional brown-bag discussion or whiteboard session to make sure you understand the process and how ECM will improve the process and the lives of the users (well at least their working lives!).
- Drive hands-on involvement by establishing a "model office". Use the model office to engage with users, conduct process "what if's" and to develop and test applications prior to their general release. The model office is also useful for ongoing training as you add to or change staff.
8 Things to Look For In a Document Management Service Provider

Mitch Taube is President and CEO of Digiscribe. Mitch is the principal founder of Digiscribe, which he formed in 2002 to provide companies of all sizes with cost-effective paperless office solutions. Mitch has served as Chairman and Committee Member of the AIIM Document Management Service Bureau Executive Forum. He speaks at various industry seminars and trade shows.

Not every document management company has the expertise and flexibility to meet your firm's needs. Follow these guidelines to choose a document scanning and document management service provider that will help your company operate more efficiently, improve your bottom line and strengthen your competitive position; now and as you plan for growth in the future.

1 -- Focus and Experience.

Choose the service provider with the most experience, and look for companies for which document scanning is their primary focus. You can purchase copiers elsewhere; you want a document imaging provider that has built its reputation on providing quality document scanning, document indexing, and document management services.

Make sure your potential document scanning provider offers strong references from firms in your industry or from firms using their services for similar applications. For example, if your company will be incorporating document scanning and electronic document management in the accounts payable department, do they have a reference from another firm doing the same?

2 -- Flexibility of Services.

Does the service provider offer several solutions for your document imaging and management needs? Steer clear of companies that require your firm to change its processes to fit their solutions. A top-notch document scanning firm works with every client to provide the services that best fit their current and future requirements. This means having the ability to seamlessly incorporate additional projects and people.
3 -- On-Site and Outsourcing Options.

One of the ways a professional document management company meets every client's needs is by offering both on-site and outsourced scanning options. Whether your documents must remain on-site, can be processed at an off-site document scanning facility, or a combination of both, your document imaging supplier should be able to meet your requirements. Additionally, document management software for the storage, retrieval and distribution of your documents should be available as a web-based repository, or as an in-house solution running on your internal infrastructure.

4 -- Reliability.

Whether you choose an in-house or outsourced solution, does the service provider deliver what it promises? A professional document imaging company should provide quick turnaround on document scanning, meet the deadlines set by clients, provide 99.9% uptime or better on its web-based document management repository, and be responsive to both service issues and additional needs.

5 -- Local Offices.

Look for a company within a 50-100 mile radius of yours to avoid interruption in your key business processes. Easily accessible production facilities and customer service teams promote peace of mind when you're handing over control of mission-critical documents. You should also visit the document scanning facility before you award a project to observe the integrity of their operations, quality control procedures and production process.


A well-run facility should be designed for unprecedented speed, efficiency and security, and certified by one of the leading document scanning manufacturers. A top-notch facility should offer:

- Massive Processing Capability
- Uninterrupted Service
- Failsafe Security
- Optimized Workflow
- Maximum Productivity
7 -- Client-Focused Services.

Scanning and indexing a document are only the beginning of a solution; look for a company that understands how your business works and the role that the document management solution will play in improving your business processes and bottom line. Client-focused services such as on-site staff training are standard when working with a professional document management company. Beyond training, there should be a single point of contact ensuring your complete satisfaction with the quality, accuracy and timeliness of every project.

8 -- Great Value.

While cost should not be the only factor when selecting a document-imaging provider, a company worth your business will offer cost-sensitive, expandable services that won't destroy your bottom line. Be wary of high-cost add-ons and vague promises of affordable services as you grow. A great document scanning company will spell out projected costs up-front, stand behind its commitments and show you a quick Return on Investment.

Document scanning can increase staff productivity, lower overall costs and position your company for expansion without growing pains. By carefully weighing service providers against the 8 guidelines above, you're assured of a document management solution that best fits your business plan and bottom line.

[Note: AIIM's Document Management Service Providers Executive Forum provides owners and senior managers in document imaging/conversion/preservation services with highly educational and vendor-neutral instruction. As an ideal peer-to-peer networking event, the Forum fosters mindshare to compare past experiences and ideas for future business development.]

Return to Table of Contents
8 Ways to Reduce your Storage and Bandwidth Costs for Document Imaging Solutions

Lou Franco is Director of Engineering at Atalasoft. Atalasoft publishes DotImage, a .NET Imaging SDK and Vizit, a Document Viewer for SharePoint. He can be reached via email at lou.franco@atalasoft.com, on Twitter (@loufranco) or via his blog.

Enterprise Imaging applications can be challenging to run efficiently. Unlike other data, document images are usually large, which means they take up a lot of memory, use a lot of disk storage, and take a long time to process or send over a network.

However, advanced image processing techniques can easily get you an order of magnitude improvement in size, speed or bandwidth. If you start using a few of these techniques, you'll see how easily you can reduce your hardware budget (which, incidentally, will reduce power consumption, maintenance, downtime, etc.)

1 -- Resample the image to a smaller size and adjust the DPI so that it prints to the same size.

A color scan of US letter size paper at 300 DPI is 2,550 pixels wide by 3,300 pixels long, for a total of 25MB. If you resample so that you cut each dimension in half, and then adjust the DPI to 150, your image takes up just over 6MB, or 25% of the original. This will reduce the storage size and the bandwidth needed to transmit the image over a network.

2 -- Convert to grayscale or black and white.

If your document is using 24-bit color, but you don't mind losing color, you can convert to grayscale, which uses about 33% of the space. If you can convert to 1-bit without losing meaning, your documents will be about 4% of the original size. This will reduce the storage size and the bandwidth needed to transmit the image over a network.

3 -- Use a better compression algorithm.

Advanced compression algorithms like JBIG2 and
JPEG2000 can result in smaller files without sacrificing quality. You might not have an easy way of viewing these images directly, but PDF supports them as a way to compress its images, so put them in a PDF and anyone with Acrobat Reader can view them. [Note, information on industry standards can be found at AIIM Standards.]

4 -- Use tiled formats.

If you often need just part of an image, use a tiled format, such as Tiled-TIFF, which makes getting regions of the image faster. If you have web-based viewers that know how to tile images before sending them, you'll use fewer server resources to tile the image.

5 -- Use automated border crop.

Some scans, especially of smaller items, like checks, have a large dark border around the edges. Use an algorithm that can detect and remove this, leaving you with just the important part of the image. Incidentally, this will save you ink if you print these documents.

6 -- Remove blank pages.

If you are scanning two-sided documents, you probably have some blank pages. Detect and remove them.

7 -- Remove unneeded metadata.

Images often carry around extra metadata that was put in by the device or software that created them. If you don't need it, remove it. You'll save storage and bandwidth. If you need the data, it might be better to extract it and store it separately.

8 -- Create thumbnails on the server, and send them on demand.

If you are preparing a web page of thumbnails, then make them on the server (don't use browser features to resize them). Detect if the thumbnail is viewable on the page, and request it on demand. This will lower bandwidth requirements and make the pages load faster.
Content Management outsourcing is gaining popularity, particularly due to the various options that are available to those who are seeking assistance -- such as project-based consulting or staff augmentation.

The outsourcing model offers access to skills, experience and resources that many organizations would not otherwise be able to obtain due to the financial commitment required to recruit, hire and train these specific proficiencies in-house. However, selecting the partner who can best meet your needs is not always as easy as you might think. The following considerations should be taken into account when assessing the outsourcing talent pool:

1 -- Experience

You certainly don't want your chosen provider to "cut their teeth" on your application. Thoroughly researching the four points below will provide you "peace of mind" as you embark on your project.

- Experience in your industry or vertical market
- Experience with your specific issue(s) or pain point(s)?
- Experience with your specific IT technology/product set(s) such as database and operating system
- Multiple references -- successful with implementations of similar size and scope?

2 -- Proven methodologies

It is not uncommon to ask to see representative examples of previous project or communication plans.
Additionally, your company has standards and methodologies that have been critical to your success. Will your outsource partner incorporate the good things that you typically like to include that have made previous endeavors successful in the past? Be sure to ask about:

- Project charter -- initiation and/or creation of project
- Project plan -- Scheduling, resources and commitments
- Project status update -- recurring, dependable communication plan
- Change order -- predefined process to manage scope creep
- Mutual Sign-off upon successful project completion

3 -- Ability to deliver the proposed scope on time/on budget

Unfortunately too many consultants come in and identify the problem, present a solution, but don't stay until completion or finish the job. As best as possible, clearly identify costs up front -- both initial and ongoing.

4 -- Stability and financial strength

Stability and financial strength are even more crucial with a specialized solution. Also consider whether your chosen provider would be willing and able to help you become self-sufficient once the project has been completed? Please explore the following:

- Will the chosen provider be around for the long term to support your solution or application?
- Will they offer a Service Level Agreement with Multiple support options (standard support? after hours support?)
- Will they provide end user and administrator training?
- Will they extend the current application (additional features/functionality) or create an entirely new application if/when requirements change?
- Has their staff been employed by the company for some time?
- Do they cross train so that more than one employee is familiar with your solution?

5 -- Industry Reputation

A good reputation within your industry or vertical market gives you confidence that your chosen provider...
better understands the issues you are facing.

- Have they won industry awards?
- Do they participate at industry conferences?
- Are they active in the online community?

6 -- Reputation and Relationship with Software Manufacturer

Assuming that your chosen provider is not the software manufacturer, are they "in the trenches" with the manufacturer? Do they participate in alpha or beta testing of new product releases? Do they know the short and long term product roadmap? Find out the following:

- Is the staff certified?
- Are the certifications current?
- Do they have relationships at various levels with the manufacturer (executive? product management? product development?)
- Are they a member of a Partner Advisory Council?

7 -- Comprehensive Documentation

Ask for representative examples to make sure the documentation will suffice and truly be a valuable resource when issues arise. Will the documentation that is provided at the end of the project detail your specific solution? When shown previous examples ask to be pointed to solution specific portions of the documentation. Watch out for "boiler-plate" style examples.

8 -- Good "fit" for your organization?

This is often unnecessarily overlooked. Are the people that you are talking to in a "pre-sales" capacity the same staff that will be assigned to your project? If not, ask to meet the project team. An area that is often overlooked is the culture compatibility with your own organization. This is very important if you desire to develop a long term, lasting partnership.

Outsourcing can be a wonderful alternative during times when maintaining budgets are more important than ever. If you select a competent partner, you will gain invaluable access to a wealth of skills, knowledge and experience on demand at a lower cost than it would typically cost for you to recruit, hire and train your own staff. Remember to seek a partner for the long term and good luck!

Return to Table of Contents
8 Steps to Avoid Process and Organizational Problems when Implementing an ECM System

Jim Wade is a consultant with Performance Improvement. He has been in the document management and business process management field for over 25 years. Jim utilizes a holistic, process centric approach to assist companies in understanding the strategic values that can be achieved from implementing an ECM system. Jim can be reached at jimwade@performanceimprovementcorp.com.

In a recent study conducted by AIIM the participants were asked, "Which 3 of these typical problems have affected your organization's document or records management implementation?"

The top response was "Underestimated process and organizational issues" (40+%). This indicates that these users did not follow a "process centric" approach in order to understand how end-users utilized the documents in the process. Following is an eight-step methodology to minimize this problem.

1 -- Identify the business problem.

This is a key component that is often overlooked. The business problem not only must be identified, the project sponsor must agree that this is the problem that he/she wants to be rectified.

2 -- Select and train your team.

It is extremely important to have key members of the process to participate in the rectifying the business problem. The most important member of the team is the end-user, without their participation in the analysis and design the possibility of failure is greatly increased. This does not minimize the need for technical advisors to be on the team as well (e.g., analyst, development, project manager, infrastructure, etc.). Once the team is selected they must be trained and educated on the project approach, the methodology that will be used and the capabilities of ECM technology so they can participate in the analysis.
3 -- Document the current process.

Each task of the current process must be documented in detail from the moment the process is initiated until it is completed. Gathering this much detail is often played down by some groups; they will argue that detailed information is not necessary and documenting the process at a high level will suffice. They seem to overlook the fact that each step in the process is important or they would not be being performed by the end-use -- if the documentation of the process seems to contain a large amount of detail it is probably because the process is detailed. Capturing what may seem like a trivial step in the process when it is being documented by an analyst can avoid hours/days of rework if it is identified in the initial documentation.

The initial documentation can be accomplished in multiple ways (e.g., narrative, graphical process maps, post-it notes, etc., or a combination of several of these methods can be used, depending on the complexity of the process).

The key items are the documentation must detail every step in the process and it must be simple enough that everyone on the team understands it.

It should also be noted that end-users, as well intended as they are, have difficulty detailing each task they perform in a conference room. In order to attain accurate information each task in the entire process must be observed as they are being performed at the workstation.

4 -- Verify the process.

The process must be reviewed by the end-users to verify each task and exception is documented. This accomplishes two things: 1) it assures that the process is documented accurately and 2) it involves the end-users in the analysis.

5 -- Conduct a process analysis.

Once the current process is accurately documented a process analysis should be performed. Each tasked is valued in order to identify the non-value added task. This step can either be performed by the system analyst(s) or in a session with the end-users. If the analyst(s) identify the non-valued added task there should be a session with the end-users to explain reasoning behind their logic and to obtain end-user feedback.
6 -- Define the new process utilizing the ECM system.

The new process can now be defined. This is a group session that is normally conducted by the system analyst. The key participants will be the end-users of ALL of the departments that participate in the process. It was noted in step #4 that it is difficult for the end-user to describe everything they do to complete a task, it is also unusual for end-user to understand that how they perform their task affects the person(s) that are performing subsequent tasks. The project manager and technical personnel should also attend to assure they understand the new process and can meet the requirements. This session requires that the leader of the session to understand the capabilities of an ECM system and assist the end-users with the design of the new process.

Having the end-users participate in the design of the new process helps insure the success of the ECM system installation.

7 -- Define the taxonomy.

By detailing each task of the process the process documentation should contain an accurate description of which role performs each task and what information they require to perform each task (i.e., data and documents). The process documentation should have also detailed the origin of each document. This information should provide a basis for determining a list of the document types, how they should be captured -- scanned or electronically, and who requires access to them (i.e., security). It is also recommended that the existing document repositories be inventoried to confirm/deny that all of the forms and documents were identified.

Once this information is identified a session can be conducted with the end-users to determine what indices will be required to retrieve these documents in a timely manner.

The final step is for the Records Manager to assign the record retention rules.

8 -- Create the final design document.

The system analyst now has all of the information that he/she requires to create the final design document. The entire new process has been documented which details each task in the process, which role performs each task and what information they require to
complete each task.

A document taxonomy has been developed that defined the metadata, security and record retention policies for each document.

This information can be used to select an ECM system or implement an existing ECM solution in a new application. At the conclusion of these eight steps all of the "process and organizational issues" and ECM software requirements will have been defined.

Return to Table of Contents
8 Things to Remember When Managing Enterprise Content Management Applications

Brian DeWyer is co-founder of Reveille Software. He has both large enterprise line and staff management experience, with a balanced exposure to vendor, consultant, and operational roles through participation in numerous ECM project implementations for Fortune 500 commercial and government clients. He is a past speaker at local AIIM chapter and AIIM conference events. Brian is burdened with eternal suffering from supporting Wake Forest sports in the land of ACC giants. Contact him at bdewyer@reveillesoftware.com.

Too often an ECM delivery organization is driven to focus on ECM application features and delivery dates. This unbalanced behavior results from the all powerful project schedule, senior management edicts, and business community pressures. To keep a balance of tactical and strategic objectives, common sense operating management principles tuned for ECM shared service organizations should be part of a manager's monthly 'accomplishments' list. My top 8 gleaned from conversations, observations, and backside arrow removals:

1 -- **Know if you're running a business-critical application.**

It can sometimes be difficult to decide if an application is truly business critical. An easy way to look at it is this...if your ECM business process or application is customer facing, drives revenue, satisfies major regulatory hurdles, or reduces major operational cost -- it's business critical. To determine just how critical it is, take a look at how business applications are rated for disaster recovery criteria -- i.e. Tier 1, II or III. If your application is Tier 1, treat the ECM portion in the same manner and then demonstrate/communicate the importance when budget season arrives.

2 -- **Know who owns the blueprint.**

Start by architecting an ECM plan. You can't just let the ECM strategy happen because of the selected ECM components or platforms. And you can't abdicate the technical competence to solely outside experts. Instead, spend consulting dollars on an experienced, business-
aware technical traffic cop employee(s) to keep everyone whole.

3 -- Know you don't operate in a silo.

ECM depends on many subsystems -- network, database, security, etc. Acknowledge these peer groups when communicating successes and, in return, they will help during fire drill events. Also, be sure to assess your IT culture to determine if it is protective ("we" vs. "they") or transparent ("us") -- and communicate appropriately with the peer groups.

4 -- Know your users' true service levels.

Users value consistent service levels and reliability -- not new, six-month in the making enhancements that are really just designed for one very vocal user. Plumbing (traditional on premise, cloud or hybrid designs) is important and demands continuous oversight. Otherwise your ECM pilots/early adopters will always be your success stories.

5 -- Know how you're doing.

IT management loves numbers -- especially when the numbers are accurate, directly measure ECM service levels and are communicated on a continual basis. So be sure to make your manager's conversations with his senior business peers easier, relevant and creditable. Rather than having the business community measure ECM service levels by emotional phone calls, urgent emails and surprise meetings at your office (as this is not effective) -- create a straightforward ECM scorecard (dashboard) that represents ongoing operational objectives (providing true valuable data).

6 -- Know your partners.

Partner with your main suppliers, and do not always select them by the cheapest 'best and final' priced sku. While this is easy to say, and difficult to do in these times, having a sound ROI case (which a partner should assist with) will contribute to your long term success -- don't forget the numerator part of the ROI business case. This will prevent a vendor transaction driven 'end around' play to your superiors when the partner hears 'no.'

7 -- Know what is next.

Maintain an ECM skunk works or lab to try stuff out, allow partners to show and tell, and keep relevance. Involve your champions from the business community.
Great for staff development - this small investment can be a shared area with a peer from point number 3 and help ECM visibility during an IT open house or tours.

8 -- **Know your timeline and ROI.**

As with any IT laden project, dates are circumspectly viewed by the business community. Surprise all (especially your project manager) and deliver on-time. Reduce application function to give credence to point number 4. If you can look in the mirror when setting a delivery date, you can be firm against the "it will not work without" uprisings. Holding fast to a delivery date is key to meet today's front end loaded ROI justifications.

[Return to Table of Contents]
8 Things You Always Wondered About Your Legacy Content, But Were Afraid to Ask

Since joining Vamosa in 2001, Nic has helped transform the company into a sector-defining software and solutions company specializing in the emerging area of Enterprise Content Governance (ECoG). Nic has led the expansion of Vamosa in the US, while continuing to work closely with the UK team on Vamosa's strategy and vision for the recently launched suite of products.

1 -- Your content is probably not in the best shape.

One of the reasons why you are implementing your new ECM system is that you want your content to be better managed than it has been up until now! You will need some "tough love!" -- you have to lay down the law. "Governance" is the watchword and it calls for the 4 Cs of content governance -- content needs to be clean, it needs to be classified, it needs to be correct and it needs to be credible.

2 -- You probably have a lot more content than you need.

Most legacy content stores are littered with duplicate content and with content that is no longer relevant to your business or contributing to the cause. But how do you work out what's "correct" and what isn't? You need to do content discovery to identify duplicates (and near duplicates, or versions) of web pages, Office documents, PDFs and images. You then need to establish what stays and what goes. This act alone can reduce your content volumes by 40%-60%. The benefits are significant costs savings and collapsed project timescales.

3 -- No matter how shiny your new CMS is, your content can trash it.

Your favorite systems integrator -- or maybe your best project team -- have been tasked with building this crystal cathedral to corporate content. Look at the project plans: where is the work plan to find out where the legacy content is hiding, what it consists of and who is using it? More often than not it is pretty far down the priority list -- many times it is an afterthought. Some pretty huge ECM implementations have looked great on paper, but have failed to deliver because they have overlooked the content they have to manage.
4 -- Your content authors are human -- and it shows!

The actual content may range in quality from A+ to an F. Plotted on a graph showing the content's quality score against corporate, technical and compliance criteria your legacy content might be lucky to get a C+. But that is worrying: if your content gets a pass, but only just, how prepared would you be for a real "content crisis?" If you were hit by litigation, a product recall, or a corporate scandal, would your content hold up to scrutiny?

At times like these you will wish you had implemented the content governance model you just didn't have time for in the project plan. Failing to cover content compliance (an establishing policy if you don't have one) when looking at your legacy content is simply replicating your existing problems in your new system.

5 -- We can do this the hard way or the easy way.

Do you really know what you actually have out there? What is published, what is stored, and what is "invisible" because it can't be found using the search engine? Similarly, how can you find out what is published and what is also being used, as opposed to just sitting there burning fossil fuels? Do you know what your existing metadata implementation covers (and more importantly what it doesn't)?

Short answer: you really need to carry out a thorough and in-depth analysis of it all -- content, storage, logs, metadata, information architecture, links -- the whole nine yards. You can't measure what you don't know.

6 -- Where are the tactics and what is the strategy?

This is where it can get really interesting. If your IT or project guy comes to you and says "I know how to get this content into the new system -- I want to build/buy a content migration tool," then you should start to prepare for that sinking feeling. Migration should be seen as being part of the governance thought process, not an excuse to acquire a "tool" to take content from one place and put it somewhere else. "Lift and shift" is the fastest route to replicating your current bad habits in your new system. Legacy content has to have new life breathed into it, and it has to be crafted to maximize the benefits afforded by the new system. Otherwise it's back to business as usual, and in another two years time you will be looking to move your content again.
7 -- Don't let the tail wag the dog - your legacy content can give you a great deal of insight into best practice.

In many instances, the old system can expose what you did right, and what you did wrong. Don't rely on default values for your system configuration. Default values may be the easiest choice, but they can be storing up a whole heap of pain for the future. For example, it may seem very reasonable that your new ECM has a default value of 60 characters for the content description metatag. But will that suit you? What if half of your existing content has a description field greater than that? Do you truncate? Do you break the description at the complete whole word before you hit the maximum? Do you ask your content owners what they want to do?

The answer is a quite simple "No" to the above -- you need to use ALL of these values at a level that suits your needs. Sounds obvious? You would be amazed at the number of international companies that get caught out by simple concepts such as this.

8 -- You may have got away with it up until now, but that was probably just dumb luck!

Your public-facing content is your shop window to the world -- the WHOLE world. You control it (you hope) and you have total responsibility for what it says -- in good times and in bad. Your web sites and all of your documents are indexed and maintained for internal use -- but when the lawyers call, you want to be prepared.

Under the federal rules of civil procedure (FRCP), the discovery process is there to ensure that the parties are not subject to surprises. What is actually sitting inside your legacy content could be a ticking time bomb. So try to eliminate the surprises by ensuring that this legacy content gets transformed in such a way as to make you litigation-ready, and (hopefully) there won't be any surprises!

Return to Table of Contents
Webinar - 1
*Information Preservation: Technologies that Work Today for Tomorrow*

Webinar - 2
*The State of Electronic Records Management*

Webinar - 3
*Who’s Taking Care of Your Records?*
Webinars

Webinar: Information Preservation: Technologies that Work Today for Tomorrow

Does your records management plan call for storing records and documents for 5 years? 10 years? More than that? In this world of all things instant and immediate, preserving your organization’s information for long-term use and access remains critical to so many industries: government, education, pharmacology, healthcare, insurance – just to name a few.

Various technologies exist to help you manage your preservation needs in today’s ever-changing technology and platform environments. This webinar will discuss various preservation technologies including digital imaging, the viable world of film, pdf/a, strategies for cross referencing digital and analog records collections, and more.

And if you’re maintaining film-based images in your archive, learn how this core technology has advanced and evolved to continue providing value to your organization.

http://www.aiim.org/events/eventarchive.aspx?id=398

Webinar: The State of Electronic Records Management

Did you know that over 70% of organizations have made no plans or provision for long-term archiving of electronic records, with no policies for migrating to new media, translating formats, or virtualization of applications? Join us for a discussion of the state of electronic records management—learn about trends and how they will affect your organization (or chortle in glee at the thought of your competitors following some of the “worst practices” we’ll describe).

Ediscovery. Risk. Email. Tweets? Lost data. By now, everyone understands that maintaining control of vital corporate records is a key element of organizational success and minimizing risk. AIIM research reveals current trends and points toward important issues for 2010 and beyond. Discover the trends that will affect managing records in the coming years and get ahead of the curve.

Even though not all content is an official record, all content needs to be managed and centrally governed. While the findings do indicate that management of electronic records lags behind that of paper records, an encouraging number of organizations are homogenizing their electronic and physical policies and practices. Join us to discover if your organization is leading or lagging.

Webinar: Who’s Taking Care of Your Records?

Every company generates electronic records. From masses of individual emails to the huge number of electronic records created by automated transactions, many (if not most) of them will fall by the wayside; unmanaged; a ripe store of legal exposure ready for picking in the case of litigation. In addition to the critical need to control risk and litigation exposure, properly managing your records increases productivity and organizational efficiency. To achieve both, someone needs to be in charge.

So who is — or should be — responsible for ensuring that records are managed in your organization? IT? Legal? Finance? The lines-of-business? Too often the answer is simply “Yes.”

With records being created by, and potentially impacting, every part of an organization, it’s critical to identify a single center of responsibility. This event will focus on identifying where that center should reside, discuss at what level employees should be responsible for managing the records they create, and how to foster a corporate records management “culture.”

AllIM Knowledge Center Blog

What is Electronic Records Management?
What is Electronic Records Management (ERM)?
AIIM Certificate Programs

**ECM**
Enterprise Content Management
Learn how to take control of your information assets.

**E2.0**
Enterprise 2.0
Learn best practices for using Web 2.0 technologies to improve collaboration across the enterprise.

**Search/IOA**
Information Organization & Access
Learn how to optimize findability and enterprise search.

**BPM**
Business Process Management
Learn how to improve your business processes.

**ERM**
Electronic Records Management
Learn how to take control of your electronic records.

**Email**
Email Management
Learn best practices for managing your corporate email.

[www.aiim.org/training](http://www.aiim.org/training)
<table>
<thead>
<tr>
<th></th>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Introduction to ERM</td>
</tr>
<tr>
<td>1.2</td>
<td>ERM Business Drivers</td>
</tr>
<tr>
<td>1.3</td>
<td>Capture, Metadata, Classification</td>
</tr>
<tr>
<td>1.4</td>
<td>Information Governance</td>
</tr>
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<td>1.5</td>
<td>ERM Technology Solutions</td>
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</tbody>
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The importance of records

- Most of today’s records start out in electronic form
  - Letters
  - Emails
  - Faxes
  - Web transactions
  - Other transactions
Growing awareness of importance of records management

Failures of governance

Increasing government requirements for retention and disposition
Question: Is ERM

- The electronic management of paper records?
- The management of electronic records?

Answer: Both
For each type of content, evaluate the degree of control that exists in your organization in managing it.

- Corporate records
- Paper correspondence
- Paper forms
- Computer reports
- Marketing materials
- Web content - current
- Web content - archive
- Faxes
- E-mails
- Instant messages
- Office docs (Word, Excel, etc)
- E-mail attachments
- Blogs and Wikis
- Pictures & Sound files
- SMS messages

All respondents (462)
<table>
<thead>
<tr>
<th>1.1</th>
<th>Introduction to ERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>ERM Business Drivers</td>
</tr>
<tr>
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<td>Capture, Metadata, Classification</td>
</tr>
<tr>
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<td>Information Governance</td>
</tr>
<tr>
<td>1.5</td>
<td>ERM Technology Solutions</td>
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What are the main business drivers?

Effectiveness  Efficiency

Compliance  Continuity
Driver: Compliance

- Laws
- Regulations
- Policies
- Standards
- Good practice
Driver: Effectiveness

- Not losing records
- Sharing records
- Finding records easily
- Getting the complete picture
Driver: Efficiency

- Accessing records quickly
- Space savings
- Reduced handling costs
- Other examples
  - Archival costs
  - Disposal of furniture
  - Consumables
Driver: Continuity

- Records are vulnerable to loss
- Businesses tend to fail if they lose their records
- Electronic storage may speed recovery from a disaster
The records lifecycle

Source: NARA
Fundamental principles

- Records are created, received, and used in the conduct of organisational activities.
- Organisations should create and maintain authentic, reliable, and usable records.
Access and usage principles

- Records should be accessible to authorised users
- Users should be able to search and access records in usable formats
- Records should be organised to support access and management
Retention principles

- Records must be managed through their lifecycle
- Records should be kept as long as required
  - Statutory requirements
  - Legal requirements
  - Business or operational needs
- Retaining records longer than required may increase organisational liability
Disposition principles

- Disposition is an accepted phase of the records lifecycle
  - Transfer/accession
  - Destruction
- Records should be disposed of at the end of the lifecycle
1.1 Introduction to ERM
1.2 ERM Business Drivers
1.3 Capture, Metadata, Classification
1.4 Information Governance
1.5 ERM Technology Solutions
What is ‘Capture’

ERM System

Capture
The purpose of capturing records

- Establish a relationship between the record and its context
- Place the record into a controlled environment
- Link the record to other related records
- Allow the record to be managed effectively
Why not capture everything?

- Hard cost of storage
- Volume of non-records to sift through
  - Operationally
  - For legal or audit requirements
- Increased liability for disclosing too much
So, what is metadata?

- Metadata = “Data about data”
  - For a document or record this means data such as its author, its title, the issue date, and other information which can usefully be associated with it
- Nothing new or unique
- Defined in terms of units called “Elements” or “Fields.”
  - Some support “sub-elements” or “attributes”
Perspectives on metadata

- Entering metadata is often called “indexing”
- Different users of an ERM system will have different views of what metadata can do for them, and what metadata is required
  - Business perspective
  - Records management perspective
  - User perspective
Automated metadata capture - 1

- Software can help
- Document templates can contain code to capture metadata
- Templates can also contain ‘bookmarks’, ‘fields’ and other features to ‘grab’ metadata
Software can also be used to look-up details of the user (as logged on)
- Author name and details
- Job title and department
- Other default values
- Automate if you can!
Classification scheme defined

Descriptive information for an arrangement or division of objects into groups based on characteristics, which the objects have in common

Classification Structure

- C – Functions & Activities
- F – Records Series & Files
Purpose of the classification scheme

- Any structure an organisation uses for organising, accessing / retrieving, storing & managing its information

- A business classification scheme (BCS) is a classification scheme based on an organisation’s business functions & activities
- Ease of use is key characteristic of a good classification scheme
- Time taken to save & declare records
- Time taken to retrieve relevant records
- Users will resist a scheme that is difficult to use
Search & retrieval are key ERM user activities.

Users can search a repository or location for records by:

- Metadata
- Content (full text) - e.g. text string
- A combination of content & metadata
- Browsing the classification structure
How a digital record is presented to the user

An ERM system may contain records with many different formats & structures

Generic viewing facilities are required

The main options are:

- Producing a representation on-screen
- Printing
- Playing audio and/or video
The ERM system must either:
- Have its own “viewer” for common file formats
- Or call an external application

Accuracy of presentation and rendition can vary
- Rarely a problem with “average” office records
- Check the system with your records
Why is access control necessary?

- Ensure ‘systematic control’ and ‘credible evidence’
- Ensure authoritative records
- Protect commercially sensitive information
- Protect personal information
- Limit access to protectively marked information
The objects of user access rights

- Provide or limit access to specific classes, files or records
- Provide or limit access to features
- Provide or limit access by security classification
- ‘Need to know’
Capturing a record implies need for retention
A record may be retained in different ways
- ERM system
- Software application
- Separate electronic media
- Paper
Retention periods - 2

- Records will vary in their intrinsic nature
- Some records may need to be retained for very long periods of time
- Other records will need to be retained for shorter periods
The benefits of destroying records

- Keeping everything forever is expensive
  - Storage costs
  - Search and retrieval
  - Discovery
- Courts have held that there is no requirement to keep everything forever
- Destroying records reduces risk
  - When it is done consistently and in accordance with the records program
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Introduction to ERM</td>
</tr>
<tr>
<td>1.2</td>
<td>ERM Business Drivers</td>
</tr>
<tr>
<td>1.3</td>
<td>Capture, Metadata, Classification</td>
</tr>
<tr>
<td>1.4</td>
<td>Information Governance</td>
</tr>
<tr>
<td>1.5</td>
<td>ERM Technology Solutions</td>
</tr>
</tbody>
</table>
What is information governance?

- Accountability for organisation’s information assets
  - Ensures compliance with regulations and legislation
  - Enables productivity improvements
  - Enables organisation to respond to change
- Sustains good information management practices
The information governance framework

- Policies
  - Procedures
    - People
    - Tools & Technology
  - Standards
    - Audit

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Implementing the framework

- Policy
  - Processes and standards for managing records
- Management
  - Governance roles and responsibilities
- Organisation
  - Groups and structures required to manage information
Records management policy

- Critical requirement for effective governance
- Provides broad policy statements
- Lots of references and examples available
  - Public sector
  - Model policies and templates
Records management procedures

- Procedures required to comply with the policies
  - Existing procedures updated for RM
- Specific to different departments, work processes, roles, and applications
- Records-related processes form the core of the Practitioner course
## Agenda

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<table>
<thead>
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<th></th>
<th></th>
</tr>
</thead>
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</tr>
<tr>
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</tr>
</tbody>
</table>
Records management applications

- Originally used to manage physical records electronically
  - Contents and locations
  - Records and boxes
- Or to create and manage records management instruments
Enterprise content management systems

- Technologies used to capture, manage, store, preserve, and deliver content
  - Imaging and document management
  - Workflow and BPM
  - Horizontal and vertical solutions
- Many include records management
- See the ECM Certificate Program
Electronic records management systems

- Provide comprehensive records management capabilities
  - File plan/retention schedule development
  - Records classification and storage
  - Access and retrieval
  - Retention and disposition
- May integrate with or be part of an ECM suite
- System Certification considerations
Basic content services

- Lightweight content management solution
- Generally less functionality than ECM or ERM solutions
- Lower cost to acquire and implement
- Deployed across the entire organisation
- May provide records management
- Often used as front end to ECM or ERM solution
Electronic preservation principles

- Durable media examples:
  - WORM media
  - Cartridge-based media

- Storage conditions examples:
  - Controlled temperature and humidity apply

- Disaster protection examples:
  - Fireproof vault, offsite storage
  - Some standards apply
The need for digital preservation

- Physical records need little or no technology
- Electronic records need a lot of technology:
  - Servers and networks
  - Disk drives
  - PC and operating system
  - Monitor
  - ERM system software
- Software and hardware evolve rapidly!
AIIM ERM Certificate Programme

ERM Strategy → ERM Practitioner → ERM Specialist → Case Study

ERM:\n\- \( e_r_m^p \) aiim practitioner
\- \( e_r_m^s \) aiim specialist
\- \( e_r_m^m \) aiim master

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