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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*

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.

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8 Secrets of an Effective Content or Records Management Implementation



[Note: The AIIM methodology is built upon the [MIKE2](http://mike2.openmethodology.org) open source implementation framework. Details on the MIKE2 implementation framework can be found at <http://mike2.openmethodology.org>.]

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 InranetFocus.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 they 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](http://www.aiim.org) 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.

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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.

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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 than 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.

- 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.

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.

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.

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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.

6 -- A Secure, State-of-the-Art Document Processing Facility.

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.]

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8 Ways to Reduce your Storage and Bandwidth Costs for Document Imaging Solutions



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SharePoint. He can be reached via [email](#) at lou.franco@atalasoftware.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.

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8 Things to Consider when Looking at ECM Consultants



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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!

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8 Steps to Avoid Process and Organizational Problems when Implementing an ECM System



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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-user -- 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 task 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.

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8 Things to Remember When Managing Enterprise Content Management Applications



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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 forgot 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.

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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!

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