Electronic Content Management Workshop

Workshop Objectives
- Introduction and understanding of an ECMS
- Understand the potential capabilities
- Selecting the right ECMS
- Managing records within an ECMS

Agenda
- ECMS overview & benefits offered
- ECMS functionality
- What to know up front
- Types of ECMS and the vendors
- First steps towards implementation
- Last words of advice & wrap up
OVERVIEW & BENEFITS

How can an ECMS provide benefits to me?

What’s an ECMS?

• Central technology platform used to capture, manage, store, preserve, and deliver electronic content
  – Central repository for storing electronic records
  – Manages records in many formats

What’s in a Name?

• Electronic Content Management Systems (ECMS)
  – Imaging system
  – Primarily focused on scanning paper-based documents
  – Electronic Document Management System (EDMS)
  – Scanning and electronically generated documents (e.g., MS Office formats, e-mail, etc.)
  – Electronic Records Management Systems (ERMS)
  – Includes records management, retention & disposition scheduling, as options in above
  – Enterprise Content Management System (ECMS)
  – Also includes dynamic intranet/Internet site content mgmt. & publishing
Primary Benefits

- Faster access to documents
- Reduce paper volume
- Central repository for records of all formats
- Tool to address compliance requirements
  - Records retention; security; authenticity
- Process improvement
  - Improve collaboration & streamline workflows

Your thoughts?

In what application areas do you want to use an ECMS?
When to Consider an ECMS?

• High record retrieval rate
• High ‘value’ to your documents
• Multiple user access
• Need to share documents
• Need to improve work processes
• Storage space considerations

When Not to Consider an EDMS

• Low volume
• High volume with no retrieval needs
• Low value to documents
• No one to support system and its administration

Consider TCO

• Total Cost of Ownership (TCO)
  – Upfront ECMS software
  – Scanner hardware
  – Potential cost of infrastructure upgrades (e.g. servers, storage space, workstation upgrades, etc.)
  – On-going maintenance and support costs
  – System administration
  – Conversion costs
  – Proper training (upfront and on-going)
Other Considerations

- Determine which depts. need it and which don’t
- Purge & organize records first
- Establish proper policies & procedures
- Determine system administrator
- Determine system support

ECMS FUNCTIONALITY

How to can I use an ECMS?

ECMS FUNCTIONALITY

Functional Components

1. Scanning & digitizing
2. Managing born-digital documents
3. Email management
4. Records management
5. Electronic forms & workflow
7. Other integration functionality (e.g. GIS, CAD, etc.)
Scanning Paper Records

- Going from paper to digital image
- Most popular feature
- Documents must be indexed
- Optical Character Recognition (OCR)
  - Allows searching for text within a page
  - Do not depend solely for finding a file
    - 99% accuracy = ~ 20 errors per page

Using Digital Copiers/Scanners

- Benefits
  - Multi-function devices with scanning capabilities
  - Sometimes offer own limited ECMS type software
- Cautions
  - Does not provide same functionality, speed and quality as dedicate document scanner
  - Unmanaged scanning (additional storage space, quality control, duplicate storage)
- Need policy to address these devices

Managing Born-digital Records

- What if your records are already digital?
  - Example: PDF, spreadsheet, Word doc, photo, etc.
  - Capture electronically without printing
- More flexible searching capabilities
- Helps reduce file copies with a single repository
Managing Born-digital Records

- ECMS integrated with office productivity applications (e.g. MS Office)
  - Save menu displays ECMS dialog box
  - Some metadata pre-filled/defined

Managing Email

1. Email presents volume & storage space issues
   - Used as a file manager, not communications tool
   - Attachments create duplicate copies
   - Users create ‘archive’ files (i.e. PST files)

2. Enterprise performance issues
   - Slow performance, up-time reliability

3. Can’t find older e-mails in the ‘haystack’

ECMS Email Management

- Integrated within email client (e.g. Outlook, Notes)
- User drags & drops onto ‘records’ folder
- Classification dialog box opens
  - Metadata fields mostly filled out
  - To, From, Subject, date, user name, department, etc.
- Email is filed with related documents
- Puts onus on the user to file (similar to paper)
Other Email Approaches

1. Rules using functionality within email system
   – Use features offered within existing email application

2. Purchase an ‘email archiving’ solution
   – Dedicated software/device to manage email

Email Rules Approach

- Can help organize email into big buckets/folders
  – Personal (non business) folders
  – Business folders (records and non records)
  – Reference (newsletters, announcements, listservs)

- Reduces clutter in primary inbox
  – Less to look through to file
  – Not adequate for retention management

E-mail Archiving

- High interest & high visibility in IT industry
- Addresses space, performance, and search
- Not addressing root cause of the problems
  – ‘Moves’ the problem
  – Does not apply retention based on actual content
  – Rules-based approach not realistic in all cases
  – May not be ‘filed’ with other e-records
How are you addressing email currently?
What plans do you have?

Records Management

- Retention/disposition not typically in basic ECMS
  - Basic ECMS focused on ‘capturing’ only
  - Usually a separate software module

- Retention schedule integration
  - Schedules apply regardless of their format!

- Access controls
  - More granular security, audit trails, redaction & more

Hiding Complexity
Workflow Needed?

<table>
<thead>
<tr>
<th>Routing/Alerting</th>
<th>Workflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Simple tasks</td>
<td>• More complex</td>
</tr>
<tr>
<td>• Out of the box functionality</td>
<td>• Decision making</td>
</tr>
<tr>
<td>• Leveraging index values</td>
<td>• Work validation &amp; checking</td>
</tr>
<tr>
<td>• Great starting place</td>
<td>• Communication with other systems</td>
</tr>
<tr>
<td></td>
<td>• Expensive</td>
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Electronic Forms

• Can replace paper-based forms
  – Allows users to complete forms online
  – More than just filling out a MS Word-based form
  – Includes data validation & addition/subtraction

• Usually linked with workflow
  – Allows decisions to be made based on information entered into the form
  – Form data becomes searchable

ERM/COLD

• Goes by two names:
  – Enterprise Report Management (ERM)
  – COLD (Computer Output to Laser Disc)

• Great for large computer generated reports
  – Allows data to be written directly to ECMS
  – Automatically indexed with no manual intervention
Other Functionality

• GIS integration
  – Link documents real-time to spatial maps/views

• Computer Aided Design (CAD) integration
  – Good for larger engineering departments

What functionality is most important to you?

Which is least important?

How begin and where you should start!

WHAT TO KNOW UP FRONT
What We Will Discuss

• Popular ECMS applications
  – How others are using an ECMS

• What to do first – before looking at vendors

  *Don’t buy and then figure things out!*

How *Not To Do It*

• Just scan everything!
  – Moving forward without defining needs
  – Wastes time and money

• Looking before you know what you need
  – Calling vendors for demos without some basic knowledge about what you want to do

Most Popular Applications

• Scanning & digitizing
  – Finance (payroll registers, general ledgers, audits)
  – Administrators (contracts/agreements, subject files)
  – Engineering (project files)
  – Human Resources (personnel files)
  – County Clerks (land records)
  – Town Clerks (minutes, resolutions, ordinances)
  – Sheriff/Police (incident/arrest reports, inmate files)
  – Social Services (case files)
  – Building Dept files (permits)
Opportunities Beyond Scanning

• Electronic document storage management
  – Native e-document storage: MS Office documents, digital photos, PDF, Web site capture, etc.

• Computer report management
  – ‘Greenbar’ reports (e.g. financial report, payroll reports, etc.), tax bills, tax rolls, internal copy of invoices & PO’s, W-2’s, and more

Opportunities Beyond Scanning

• Procurement process
  – Electronic form submission, workflow and approval

• Personnel
  – New hire process, annual reviews, benefit information

Have your thoughts on where to use an ECMS changed?

Any additional areas you are now considering?
Where to Begin?

• Clearly define the issues
  – What is driving the need to change?
  – Is the problem worth the effort?

• Perform business process analysis
  – Put technology to the side & assess current situation
  – Define current cost structure
  – Identify records used, formats, volumes

Where to Begin?

• Re-design process
  – Are there any unnecessary steps?
  – Are we keeping documents we don’t have to?

• Consider all available options
  – Don’t try to be perfect
  – Keep current staff in mind

Now what?

• Now that you understand the real issues:
  – Requirements definition (feeds into an RFP)
  – Technology identification
    • Match functionality with your business problem

More to follow later ...
What Else to Consider?

- Return on Investment (ROI)
  - Analyze the costs/impact of the "problem" upfront
  - What is the cost of not taking any action?

- Know total cost of ownership
  - Additional licenses, administration, support, maintenance, future growth, etc.

Start Small & Simple

- Plan for future, but buy for first year’s needs
- Be realistic given available resources
- Pilot application/department
- Plan for checkpoints to revisit/revise application

Any thoughts on your pilot installation?
TYPES OF ECMS & THE VENDORS

ECMS Types

- On-premise solutions
  - Standalone/small, midrange, enterprise

- Cloud-based solutions
  - Many commercial vendors & pure-play vendors

- Open Source solutions (both on-premise & cloud-based)
  - Free or minimal cost to acquire; no or paid support

Who are the ECM players?

On-premise - small & midrange systems

- Hyland’s OnBase
- Laserfiche
- Docuware
- EMC’s ApplicationXtender
- Microsoft’s SharePoint
- PaperVision
- FileBound

- HP’s Trim
- Oracle’s UCM
- Xerox’s DocuShare
- Westbrook’s Fortis
- Ever Team’s
- EverSuite
- Perceptive
- Newgen’s OmniDocs
Who are the ECM players?

- On-premise – large enterprises
  - EMC’s Documentum
  - Open Text
  - IBM/Filenet
- Open Source
  - Alfresco, Nuxeo
- Cloud-based
  - Most commercial & open source vendors
  - Some cloud-only providers: SpringCM, Box

Microsoft’s SharePoint

- Not an out-of-the-box implementation
- Needs add-ons & customization
  - e.g. no native scanning capability
- Relatively low software costs
- Well integrated with other Microsoft products
- Highly customizable (requires specialization)

Resellers

- Manufacturer’s often market through resellers
- Evaluate reseller and manufacturer independently
  - Good reseller, but just an ‘ok’ product
  - Not so good reseller, but a great product
Applications with Imaging
(Non ECMS software)

• Many existing departmental or enterprise applications are adding ‘imaging’ functionality
  – Not as robust
  – Limited access to current users
  – More difficult to transfer images out if needed
  – Rarely include RM functionality

What type of ECMS do you think is best for you?

Have you already looked at any systems?

THE FIRST STEPS

Determining requirements, getting quotes, then selecting
Start Simple

- Electronic file cabinet approach
  - Scan, store and retrieve documents

- Consider workflow & other enhancements later

Reasons for Failures

- Project scope not well defined
  - What problem are you trying to solve?

- Inadequate project management
  - Who is the project lead?

- Inadequate training
  - Basic PC knowledge; unable to absorb all features

- Poor communication to all participants
  - What do users know about project?

Suggested Steps

1. Write up requirements (short term/long term)
2. Issue RFI or RFP
3. Select vendor
4. Plan pilot installation
5. Training (Initial training; refresher training)
6. System/process refinement
7. Pilot expansion
8. Continuous monitoring, coaching, refining
Know your Requirements

• Do you know what you do?
  – Much more than high level understanding of process

• Have you mapped out your current workflow?
  – How are records or files created?

• Business Process Analysis
  – Don’t expect technology to fix broken processes

Know your Requirements

• How you want to retrieve the file?
  – By date, last name, subject, project name – or all of the above

• When is it best to ‘capture’ the documents?
  – When to scan a file?
  – Are some records received electronically?

• Processes will change, so prepare your people!
  – Keep current staff skills in mind!

Basic Requirements

• Process description
• Targeted records (get samples)
• Index values
• Volumes (backfile and day forward)
• Scanners
• Software functionality
• Current IT infrastructure (servers, desktops, applications, etc.)
• # of users
Flow into RFP

- Take requirements as basis for an RFP or RFI
- Identify potential vendors
  - Use NYS Archives website
  - Talk to peers
  - Do your own research
- Develop evaluation criteria

RFP Additions

- Specify application-specific documentation
- Initial and follow up training
- Plan on additional PC training for users

And the Rest of the Story...

- Project implementation planning
  - Identify project tasks, durations and resources
- Training plan
  - Initial and follow up training
- Pilot installation
  - Include 60-90 day review into RFP
- Set realistic multiple year roll out plan
  - Annual review and refinement periods
What Else to Consider?

• Spend time designing the capture process
  – Consider techniques ease process & accuracy
    • Document preparation; document separators; barcodes; pulling data from existing systems

• “True” processing throughput
  – Scanner speed is only small part of process

Proper Index Development

• Are there too many index fields? (or not the right ones)
  – Is it a document mgmt system or something else?
• With too many fields to key in:
  – There’s a greater chance of a mistake
• Can you leverage other existing systems’ data?
  – Import invoice index data from finance system
• What metadata is contained in born-digital files?
  – e.g. date created, creator, location, etc.

Retention & Disposition

• Consideration for retention requirements
  – Date alone will not suffice
  – Can you add your specific retention schedule?
  – Is disposition review & approval process included?

• Retention management module needed
  – If not able to acquire, include document type, document date, disposition date
Defining Roles & Responsibilities

- **Project leader**
  - Pilot implementation & on-going expansion
- **System owner**
  - Who is in charge? (CEO, Records Manager, Clerk, etc.)
- **Application administrator**
  - Index dev.; retention administration, 1st line of support
- **Technical systems administrator**
  - Technical/backend support (servers & database tuning)
- **Training** (In-house or vendor?)

Policies & Procedures

- Are there defined policies & procedures?
- What must be changed as result of new process?
  - How are you going to incorporate into the training?

Disaster Protection

- Valid copy of data
  - Is the ‘right’ data backed up and off-site?
- **Address Business Continuity**
  - What do we do if....?
  - Written, tested, and communicated plan
- **Accessibility**
  - How soon after a disaster can we access records?
LAST WORDS OF ADVICE

Think!

• Don’t automate just to automate
  – The awe of technology can lead to wrong buying decision

• Impact of culture & change management
  – Develop communication plan
  – Getting ‘end user’ feedback early on & throughout project
  – Coaching & education (beyond the initial training)

Keep Momentum Going!

• Need attention after training is completed

• Provide refresher training
  – Ask users what features they like and dislike

• Define continuous refining/updating process
  – Encouraging & monitoring of new solution
Summary

- Understand what you do now
  - Understand how information comes in
- Develop requirements
  - Do preliminary justification upfront
- Integrate into daily work processes
  - Know technology alone is not the answer
- Don’t overlook basic RM principles!

Electronic Content Management Systems

Thank you!

For more information:
www.archives.nysed.gov