Choosing the Correct Technology Solution for Electronic Document Management Systems
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Initial Observations

- This technology area, EDMS or ECM, or RM, or BPM is getting even more complex with
  - New laws
  - New companies
  - Newly merged companies
  - New business applications coming down the pike that will require RM capabilities (DAM contracts & copyright)

- In addition to the above, many companies with RM needs are complex entities with different applications spread across many different business units
Which Technologies do What?

- Document imaging
- Electronic document management (EDM)
- Workflow technologies
- Enterprise report management (ERM)
- Enterprise content management (ECM)
- Intranet (or Internet) content management
- Knowledge management (KM)
- Records management (RM)
- Business Process Management (BPM)
Picking a Technology for Your Needs

ECM?

EDMS?

RM?
Document Imaging

Document Imaging = Techniques for capturing, recording, processing, storing, transferring and using images of paper documents electronically

Imaging Technologies...

- Capture
- Index
- Distribute
- Store
- and Retrieve
Basic System Components

Input

View / Edit

Storage
Optical or Magnetic

Output

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Typical Imaging Need
Classic Benefits from Imaging

- Gets rid of the paper
- Gives storage space back
- Fewer lost documents
- Parallel use of documents
- Disaster recovery
- Can have an effective ROI & be a great application for a business process
- ??What else
Basic Problem with Imaging Systems

- They do not typically meet/incorporate the classic RM rules such as classification, enforced retention, audit trail, some access control, no distinction between records and non-records.

- While better than a simple backup system they do not meet requirements for such things as e-mail, IM, etc.
Workflow Technologies

Workflow = The automation of a business process, in whole or part, during which documents, information or tasks are passed from one participant to another for action, according to a set of procedural rules. (WfMC)

Workflow Technologies…

- Distribute
- Route
- Track
- Manage
Workflow Technologies

High Value Business Process

Low Value Business Process

Production

Collaborative

Administrative / Ad Hoc

Repetitive Processes

Unique Processes

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Typical Workflow

Receive Resume

Match resume to current job listing and criteria

Resume qualifies?

YES

Send resume to hiring manager for review

Hiring manager reviews resume

End Process

NO

Return resume, request "no thank you" letter

End Process

NO

Resume qualifies?

YES

Match resume to current job listing and criteria

Resume qualifies?

YES

Send resume to hiring manager for review

Hiring manager reviews resume

End Process

NO

Resume qualifies?

YES

Request interview with candidate

Setup interview times with appropriate department personnel

Interview candidate

Go to C

Send resume to hiring manager for review

Hiring manager reviews resume

End Process

NO

Resume qualifies?

YES

Request interview with candidate

Setup interview times with appropriate department personnel

Interview candidate

Go to C

Send resume to hiring manager for review

Hiring manager reviews resume

End Process
Classic Workflow Benefits

- Computer control of a work process
- Auto routing of designated documents
- Auto tracking of individual designated documents
- Prioritize work according to rules and to re-prioritize on-the-fly
- Collect and report tracking data
Basic Issue with Workflow Systems

- “Workflow” as a technology is not a store and retrieval system
- Workflow is an electronic routing system used for specific work, not necessarily documents....
- Workflow, as a technology, offers very little in terms of RM and compliance
- But, coupled with RM systems can be useful in kicking off events such as destruction schedules
Electronic Document Management (EDM)

Electronic Document Management = Techniques for capturing, indexing, processing, storing, transferring and using electronic documents such as MS Word, Excel, etc.

Electronic Document Technologies…

- Automated Capture/Save
- Index/ Version Control
- Distribute/Check-in/Check-out
- Store
- Retrieve
Basic System Components

User 1

View / Edit

User 2

Output

Storage
Classic Benefits of Document Management

- Centralized file control
  - Check in/out
  - Version control
- Remote retrieval
- Parallel processing
- But no real RM capability
Basic Issue with EDM

- EDM is one part of the equation
- In the early days of EDM (Saros? PC Docs? & Documentum) they were sometimes thought of as RM systems but suffered many of the same problems as imaging systems
- Today, EDM systems incorporate RM features by adding 3rd party software or buying 3rd party software and reengineering (Documentum + TrueArc, IBM + Tarian)
- Still not “good” with e-mail, IM, DAM, etc
Enterprise Content Management

Enterprise Content Management = Techniques for capturing, indexing, processing, storing, transferring and using electronic documents

Enterprise Content Technologies…
- Automated Capture/Save
- Index/ Version Control
- Authoring
- Distribute/ Check-in/Check-out
- Store
- Retrieve
But, what is ECM?

- Document management
- Corporate content management
- Intranet content management
- Internet content management
- All of the above???

“But wait, it you buy now....”
Basic System Components

User 1

User 2

Network
Intranet
Internet
Output

View / Edit

Storage

Input

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ECM Benefits

- Centralizes/consolidates content
- Allows for better management
- Provides library services
- Content creation and management
- Publish directly
BPM is about the reality that business processes are complex, dynamic and intertwined throughout an organization – and, beyond the firewall, to its partners and customers. To effectively automate and manage cross-functional processes requires a new approach and supporting tools that reflect this reality – BPM is that approach. BPM allows processes to be modelled and then dynamically maintained as business requirements are refined or modified, in the light of new information on how users work or changing business needs.

Business Process Management (BPM) is a change management and system implementation methodology to aid the continuous comprehension and management of business processes that interact with people and systems, both within and across organizations.

It is a methodology based on the following assumptions:
- Business processes are ever-changing and developing
- Processes cross-cut each other
- Processes must flow between multiple organizations and interested parties.

[Source: Aberdeen Group]
Enterprise Report Management (ERM)

ERM = Techniques for capturing, recording, processing, storing, transferring and using data (also COLD, computer output to laser disk)

ERM Technologies…

- Capture
- Index
- Distribute
- Store
- and Retrieve
Enterprise Report Management (ERM) or (COLD)

1234 Main St.
Anytown, USA

456 Any St.
Anytown, USA Acct: 123456

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Dental Insurance

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ERM Benefits

- Paperless reports
- Frees computer time
- Data accessible reports (can copy and edit the data)
- Data rich report environment
- Easy access to older data
Records Management

The planning, controlling, directing, organizing, activities of records creation, records maintenance, and records disposition whether the record is paper, data, or an electronic document

Electronic Document Technologies…

- Automated Capture/Save
- Index/ Version Control
- Distribute/ Check-in/Check-out
- Store
- Retrieve
RM Components
RM Benefits

- Control and tracking of designated records
- Retention periods defined
- Records purged on schedule
- Ensures legal and regulatory compliance
- Minimizes legal risk
Knowledge Management

Is this a technology or a business application using many and varied technologies – technologies change depending on the use and application and the individual interpretation of what KM is
Document Input Subsystems

- Specialize front-end systems to handle just the input of paper into the system
- Have become inter-mixed with other technologies such as forms capture and processing, OCR, ICR
- Kofax, Input Accel (Captiva)
Related Technologies

- Optical Character Recognition (OCR)
- ICR (intelligent character recognition)
- Forms Recognition
- Mark Sense Recognition
- Forms processing
Outsourcing and ASP Models

- Newest model in EDMS is to give the paper to an ASP and let them deal with it.
- Can give them the paper (and be done with it???)
- They can do it on-site – outsourced management of your resources.
- Jury is still out on this - many pros and cons.
Optical and Magnetic Storage

- Optical storage – coming or going
- Magnetic storage – cheap, fast, but legal?
- Optical seems to be a shrinking market and technology, will DVD unify the technology and finally become an accepted archival media?
- Does this storage issue affect basic records management?
  Yes it does, but how?
The Need for RM!!

- Paper Files
- Microfilm
- Local Drives
- File Systems
- e-Mail Servers
- Document Repositories
- Imaging Repositories
- Web Servers
- Business Systems
- Photographs
- Video Libraries

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The Need for RM

- Need to accurately store and retrieve business documents to run a business
- Need to comply with a variety of regulations
- Need to mitigate potential litigation
- Need to mitigate cost of litigation when it happens
- Others?
Technology Justifications &
Decision Factors

- What are we buying?
  - A document management system
  - A records management system
  - A CYA system for any record type and legal situation

- When do these areas converge and when do they not?

- What about paper? What systems currently manage paper and who ties this together?

- Who is in charge of the records? IT, IM, RM?

- What perspective does each group bring?
Where did I go Wrong?

Findings of a 1995 Department of Defense Software Study

The Standish Group Study

http://www.standishgroup.com/sample_research/chaos_1994_1.php
Some Recommendations

- Decide on what is being purchased
  - ✓ Imaging for local paper storage
  - ✓ RM for the enterprise
- Don’t jump into an RFP immediately!
- Do a ballpark analysis of what problem you are solving
- Use the analysis to get buy-in for the project
- Establish goals, objectives, critical success factors
How are We Buying It?

- Develop a potential list of vendors and...
  - ✓ Invite them in for presentations
  - ✓ Invite them in for demonstrations
  - ✓ Invite yourself to their company for tours
  - ✓ Ask them to informal help guide you with directions
  - ✓ Attend user meetings, conferences,
  - ✓ Visit other companies with the same “problem”
- Verify, through education, that your assumptions are correct
- Do a benchmark survey of peer companies
How are We Buying It?

- Now think RFP or RFI if still not sure
- As part of the purchase cycle
  - ✓ Ask short listed vendors to present to you
  - ✓ Ask for a full-day demonstration with a target database that you supply
  - ✓ Ask of a “live test demonstration” in which you run the software for 30 days in a controlled test mode
- Ask how the vendor will remain current with emerging technology
- Ask what is the emerging technology and how they will help you avoid the sinkholes
How are We Buying It?

- This is a huge (potentially) step, take your time and
  “measure twice, cut once”
Conclusion & Questions

Finally!

Questions?