



Automated Records Management

Transformation through Partnerships

DocMan Electronic Content Disposition System (eCDS)

Steve VonVital, DOE EERE CIO April 16, 2012





Electronic Record Challenges

- Many agencies have ineffective "print and file" policies in place that do not account for different types of media.
- Email poses significant challenges to meeting federal record keeping obligations.





Electronic Record Challenges

- Records are typically stored on email servers, public drives and on the end user's local drives. The result is replicated and redundant files stored across multiple locations.
- Without the ability to organize and categorize this massive amount of information, IT departments <u>cannot delete</u> any electronic files for fear of legal or regulatory repercussions.

Federal Computer

By Alice Lipowicz

Thursday, March 3, 2011

Agencies admit to bad records management

"Many agencies do not ensure that e-mails are preserved consistently and do not monitor compliance. Furthermore, many agencies use inappropriate preservation strategies, such as using system backup as a means of preservation, or printing e-mails on paper."

elec

resources dedicated for that P NARA said.

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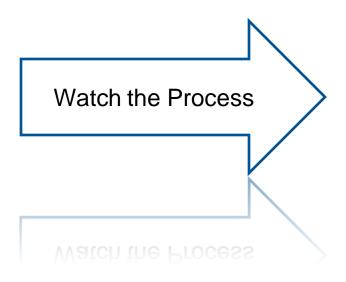


INFORMATION DocMan Solution — 3 Components Management Conference

1. Content Management

2. Records Repository

3. Automatic Categorization





Content Management





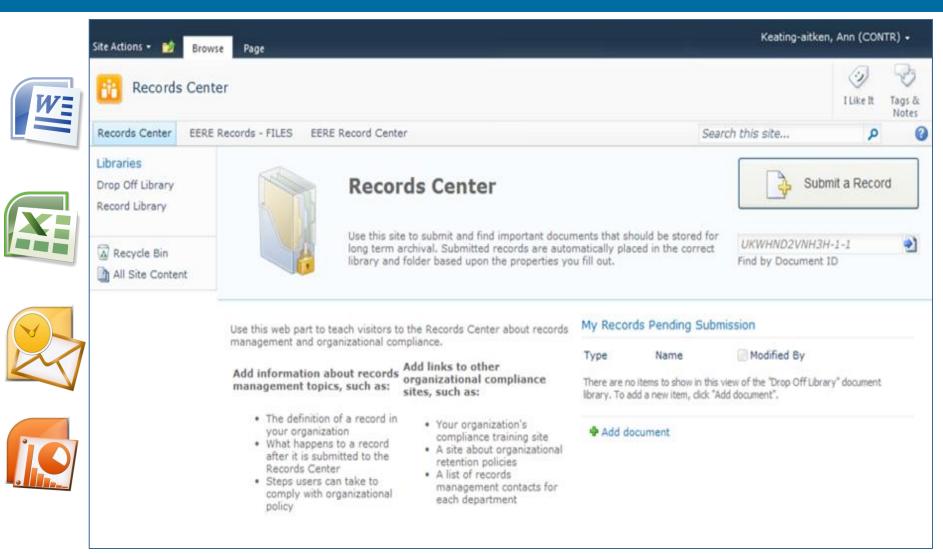








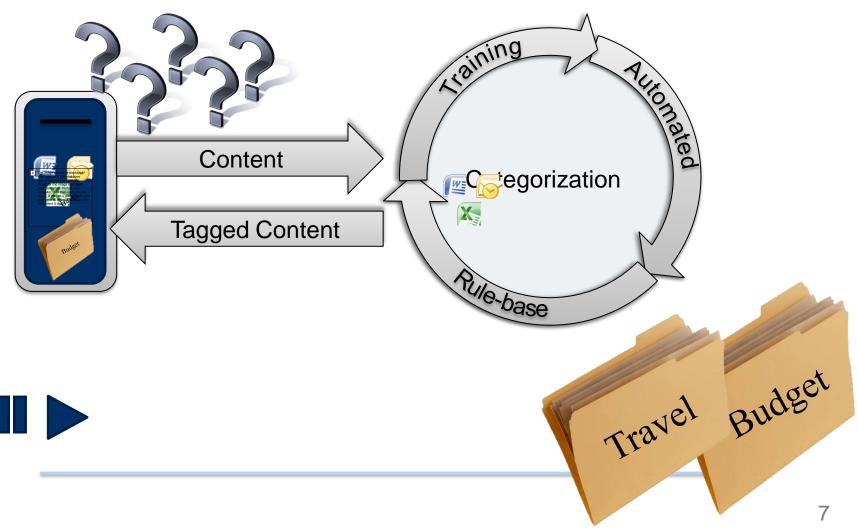
Records Repository







Automatic Categorization







Component #1 Content Management

- SharePoint 2010
 - ✓ Email Utilize Exchange 2010 Journaling
 - ✓ SharePoint Sites and Content
 - ✓ Shared Drives (Future)
 - ✓ Local User Drives Migrate content to external storage & SharePoint My Sites (Future)



Component #2 Electronic Records Repository

- Electronic emails and files are automatically routed to the SharePoint Records Center and categorized by Recommind.
- Simple for Records Managers to learn and use.
- Record Managers can configure multi-phase disposition schedules.



Component #3 Automatic Categorization

- Allows thousands of newly-created electronic records to be classified daily.
- Ensures that emailbased information is properly tagged and categorized with <u>no</u> <u>impact</u> on busy professionals.





Decisiv Categorization

SECOMMIND.

- Machine learning offers the highest potential for automatic categorization accuracy (as more records are added the accuracy increases).
- Recommind uses a patented algorithm known as Probabilistic Latent Semantic Analysis (PLSA).
- Decisiv identifies and structures relevant concepts and topics within record training sets.



Categorization Training Process

PHASE I

Record Collection

PHASE II

Record Training

PHASE III

Ongoing Training and Testing



Categorization Testing

CATEGORIZATION RATE

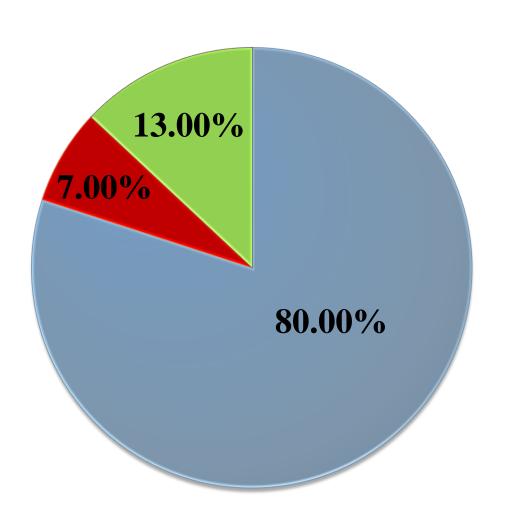
- > Percentage of total files categorized.
 - Monitor production system.

CATEGORIZATION ACCURACY

- > Precision
- > Recall
 - Controlled test groups on sandbox.



Email Categorization Rate



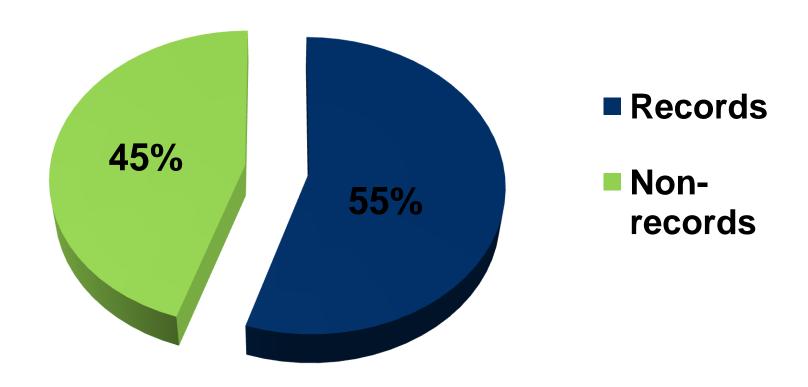
Categorized Records

Uncategorized Records

Uncategorized
 SPAM,
 Transitory &
 Non-Records

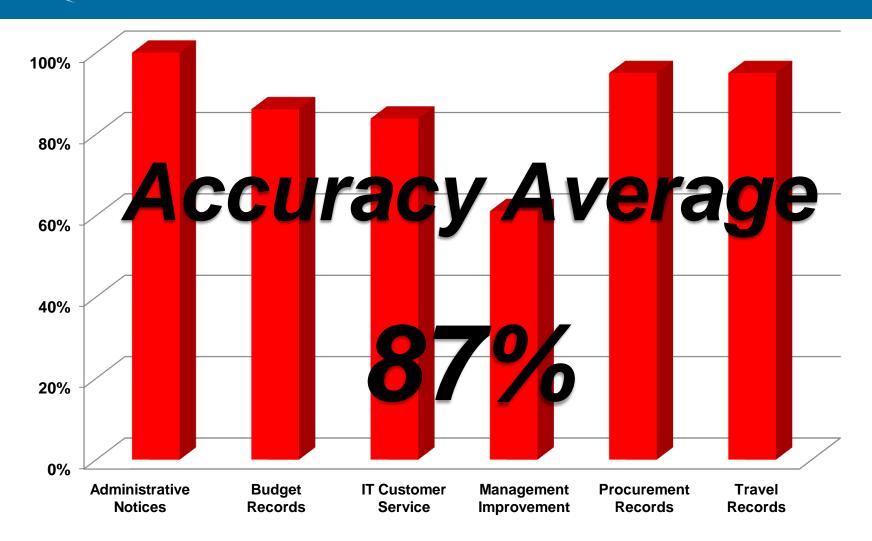


Categorized Email





Email Categorization Accuracy







Shared Drive Categorization

- Over 1 million files (1.6 TB).
- 30% categorized and audited during Phase II.
- Average accuracy is 82%.
- Legacy data is the biggest challenge.



By John Markoff Friday, March 4, 2011

Armies of Expensive Lawyers, Replaced by Cheaper Software

"The computers seem to be good at their new jobs. Mr. Herr, the former chemical company lawyer, used e-discovery software to reanalyze work his company's lawyers did in the 1980s and '90s. His human colleagues had been only 60 percent accurate, he found."

Some programs go beyon finding documents with relevant terms at computer speeds.

powerful software programs replace work once done by legions of logic designers and draftsmen.

"There is no reason to think that technology creates unemployment," Professor Author said.



Current Status

- 800+ users at headquarters are submitting email through the system.
- Over 30,000 email messages are categorized daily.
- Shared drive categorization is currently in Phase II.





- Migrate local drives to SAN for categorization.
- Convert paper records to electronic files for categorization.
- Use Recommind Axcelerate for FOIAs and e-Discovery.
- Implement additional Recommind modules:
 - > File collection from multiple data sources.





Next Steps - Governance

EMAIL

- Official records are maintained in the SharePoint Records Center.
- Email stored on Exchange servers will be deleted after one year.
- Legacy email to be collected and categorized in the Records Center.

SHARED DRIVES AND SHAREPOINT SITES

- Records on the shared drives are crawled and categorized.
- SharePoint content will be locked down in place after one year of inactivity. Records will be transferred to Record Center and categorized at appropriate time.







U.S. Department of Energy

(Office of Energy Efficiency and Renewable Energy)

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