# Making Content Easy to Find

DC2010 – Pittsburgh, PA
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AIIM



### Who is AIIM?

The leading industry association representing professionals working in Enterprise Content Management (ECM). We offer a Membership Value Program Focused On:

- Market Education
- ☐ Peer Networking
- ☐ Industry Advocacy
- □ Professional Development



### About AIIM Standards

- ANSI Accredited
- ISO TC 171, Document Management Applications Secretariat
- ISO TC 171, Document Management Applications, SC2, Application Issues – Secretariat
- U. S. TAG (Technical Advisory Group) to ISO TC 171 Administrator
- Industry Standards Developer AIIM Recommended Practices (ARP)
- Open Source Standards for Document Management
- Liaison Relationships



### What is ECM?

The tools and technologies used to:

- Capture move content (in any form) into your repositories for reuse or retirement
- Manage move it around the enterprise to drive key applications and processes
- Store put it in a logical place for easy access
- Preserve long-term archival and storage
- Deliver get to the right audience on the right device
- ...documents and content related to organization *processes*.



#### What is content?

- Content comes in a variety of formats:
  - Unstructured content such as
    - Office files (e.g., word processing, e-mail)
    - Imaged documents
    - Media files
    - Complex documents (e.g., CAD files)
  - Structured content (often referred to as "data") stored in database tables
    - Or increasingly, XML
  - Semi-structured content such as HTML



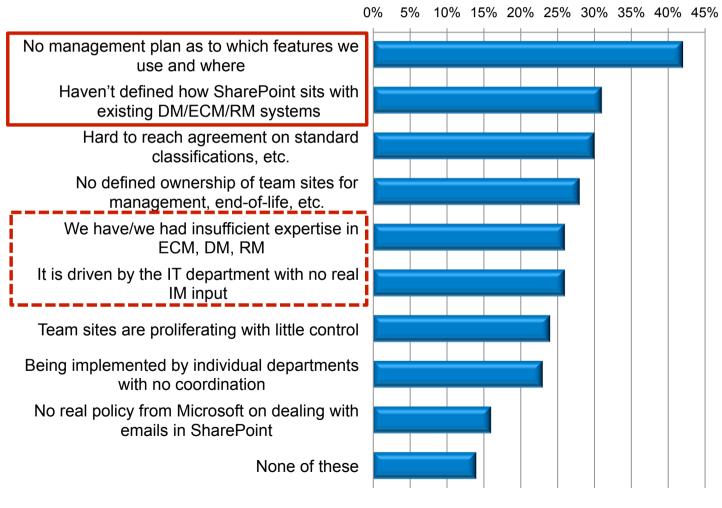
# What is Expected?

- Information should be easy to discover or locate
- Information access is about helping users find documents that satisfy their information needs
- Remember, someone may be looking for something they've never seen or touched before
- Information should be easy to tag or assign the metadata



# Organizational issues

Which of the following organizational issues have you experienced with your SharePoint implementation?



40+% no planning or strategy

26% lack of information management expertise



N=362 SharePoint using or implementing

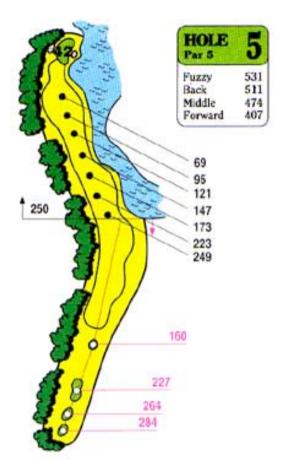
#### **Know What You Have**

- In order to improve information access, you need to know
  - How much content you have
  - What types of content you have, and its relative value
  - What content needs to be archived, retained, or deleted
- In order to undertake a successful ECM/WCM/RM/Search implementation or improvement effort you need to know:
  - What documents you possess
  - Who "owns" the content in order to determine proper security, roles and permissions
  - Who or what creates content in order to properly tag/index and otherwise contextualise and enrich content
- Ultimately, you need to create an overall Content Model



### What is a Content Model?

- Components or "elements" that make up a body of content
  - The folder or "meta"-structure of a repository or enterprise information set
  - The document types
  - Associated metadata
  - Elements within a (structured) document
- A framework applied to content to create relevant information
  - Making those related pieces useful to the people who need it



This is how you need to see and think about co.



# What is a Metadata Strategy?

- Identification and understanding of different metadata types and their purpose
- Synchronisation and adoption across a department, project, and ultimately the entire enterprise;
  - Agreement on terms, labels, and meanings
- Understanding of people, processes, and systems applying and interacting with metadata and vocabularies
- Understanding who owns various metadata and structures
- Planning for maintenance and changes



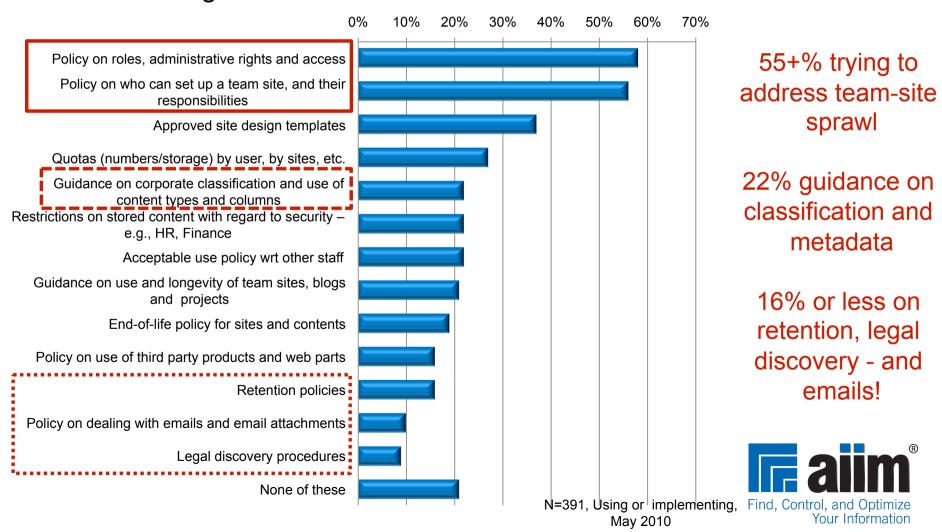
# **Benefits of Strategy**

- Consistent use of metadata structures across the enterprise makes the metadata more powerful
  - Information and systems become more interoperable
- Lesser chance of ambiguous terms when metadata and its purposes are defined, helping to ensure quality in the metadata
- Understanding of how metadata changes can affect downstream processes
- Identification of gaps in what should have more metadata
- Communication of metadata information to others who may find uses for the content outside its original area
- Realistic appreciation for level of effort to "tag" or "index" content
- Establishment of someone or some group with centralised knowledge of the metadata processes



### Governance

Which of the following governance policies do you have in place for SharePoint usage?



# Why?

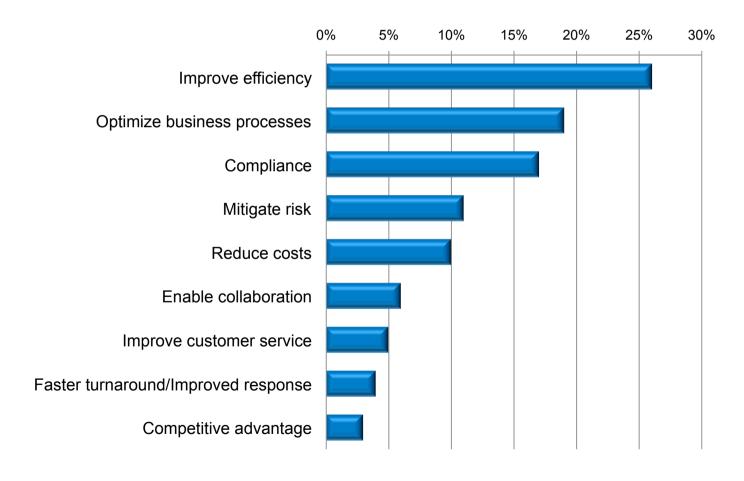
- Digital content is expanding at almost unmanageable rates
  - New information worldwide has been increasing on average 30% a year (doubling every three years)\*
  - Getting access to the right information is an increasingly acute challenge for enterprise employees and customers alike
- Better Information Organisation leads to better Access







ECM Drivers
When you consider your document and records management projects and priorities, what is the most significant business driver for your organization? (Check only ONE)



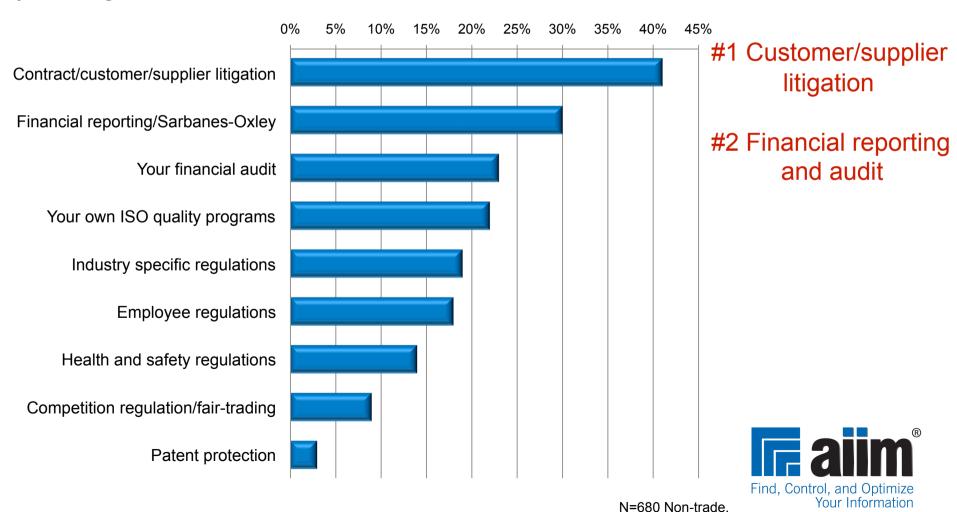
Efficiency and business process: 45%

Compliance and risk: 28%



# **ECM Drivers**

Thinking about the compliance benefits of ECM and Records Management, which of the following are the TWO most important compliance drivers in your organization?



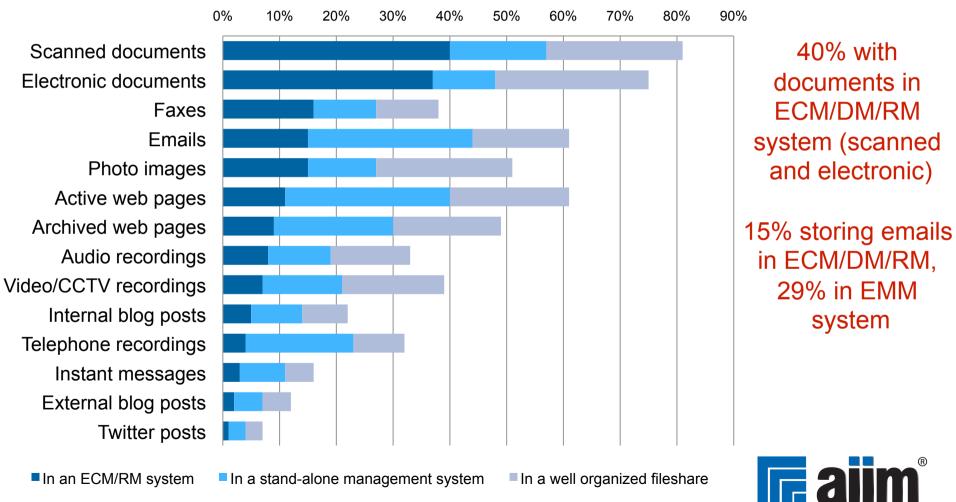
#### Metadata and ECM

- Metadata often acts as a "great unifier" in the area of content technologies and enable them to work together
- Many content management systems depend on solid library and categorisation services order to add significant value
  - Essential for organising any large content corpus
  - Required for meaningful records management
  - Critical to effective findability
- How you choose to design the repository, and how the system you choose can use certain repositories and content structures, greatly influence the business value you can realise



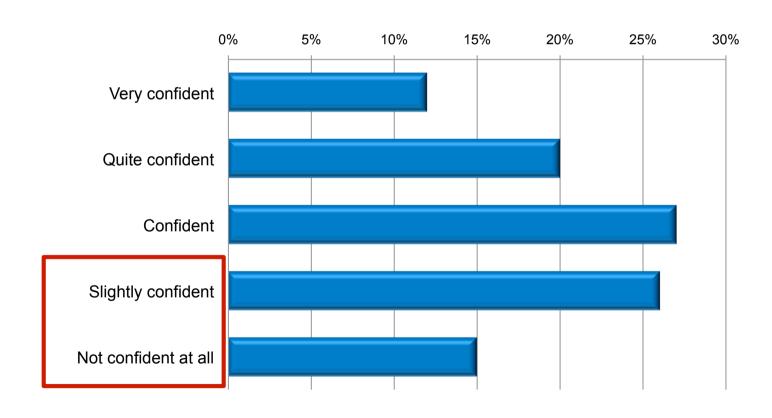
# ECM Drivers – content types

How are the following content types managed and archived in your organization?



# ECM Drivers - Electronic

How confident are you, that if challenged, your organization could demonstrate that your electronic information (excluding emails) is accurate, accessible, and trustworthy?



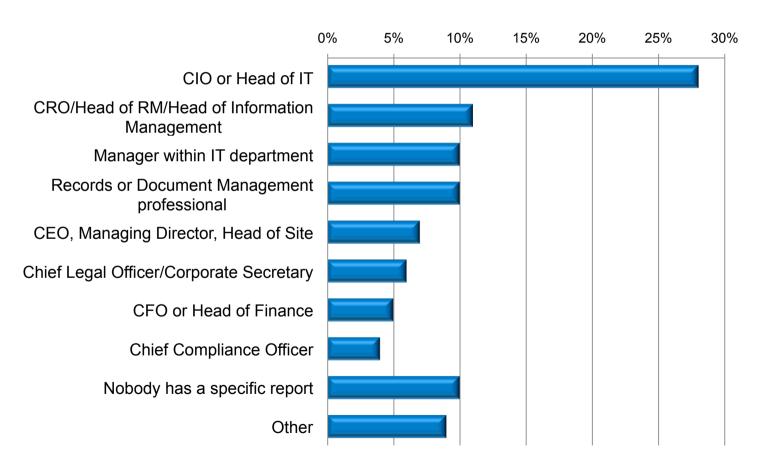
Electronic (not emails)

41% Slightly or not at all confident



# **ECM** Governance

Who is the highest person in your organization who has specific reporting authority, or management ownership, of document and records management?



28% have a CIO who really is a CIO

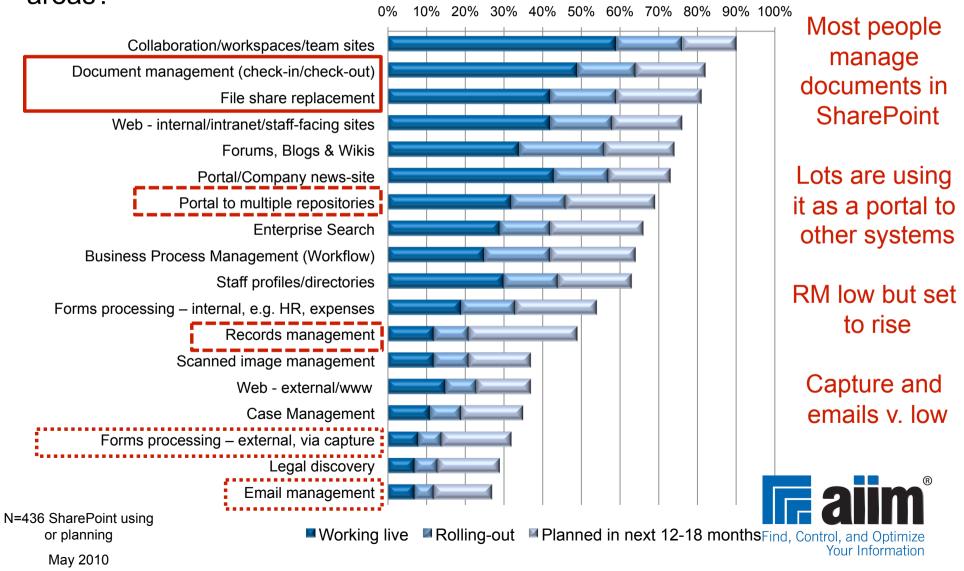
Plus 11% with a CRO

39% have no board-level ownership



# SharePoint - Use

How would you describe your use of SharePoint in the following ECM areas?



# ECM DC Use

- Many content technologies are now offering Dublin Core standard repositories and content formats out of the box
- SharePoint uses Content Types
  - Tied to business process or document type
  - Shared across site collections
- DC is used with file formats PDF and PDF/A



# So, what happens with no metadata?





#### Context to the Problem

#### For humans, adding metadata means work

- Taggers may not see the ultimate benefit of metadata themselves
  - Benefits tend to accrue to the enterprise and content consumers
- To be sure, clerical staff can be forced to index
  - In some imaging systems, it is a specialised skill
- In other cases: "Not my job"
- Sometimes humans provide incomplete or inaccurate metadata

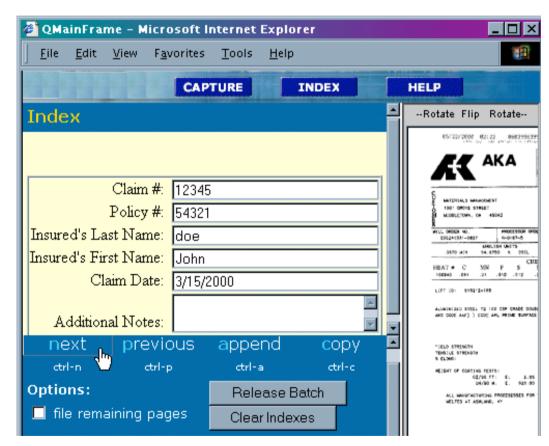
#### So a question arises:

Is there a way to get machines to add metadata for us?



# Indexing a Scanned Image

- A person adds data to the record of a scanned document
- That data is (typically)
   stored in a separate
   database, associated with
   the image file
- Later, the scanned document can be retrieved by *number*, *name*, or *date*
- The Notes field will likely need to be indexed by a text search engine to become searchable.



Source: QMainFrame
Find, Control, and Optimize
Your Information

# **Capturing Metadata**

Booking Form 1 Properties				
General Sum	mary Statistics Contents Custom			
Name:	Client Date completed Department Destination Disposition Division			
Туре:	Date 💌			
Value:	Link to content			
Properties:	Name Value Type  Owner AIIM Text Purpose Register fo Text Language English Text Date co 3/1/2008 Date			
	OK Cancel			



#### **PDF** and Metadata

- General information about the document, i.e., title, author, creation and modification dates
- Used to help search for documents in external databases
- PDF metadata may be stored in document information dictionary or a metadata stream



#### PDF/A Metadata

- Requires the use of Extensible Metadata Platform (XMP)
  - Proprietary, but open format soon to be ISO
  - Used for metadata creation, processing and interchange
  - Based on restricted form of Resource Description
     Framework (RDF) W3C standard
  - Fosters re-use, re-purposing across domains
  - Enables metadata capture, preservation, and propagation across devices, applications, file formats
  - Not limited to a specific schema



# **Document Information Dictionary**

- Title
- Author
- Subject
- Keywords

- Creator
- Producer
- CreationDate
- ModDate

Metadata entries are optional and are deleted if not provided.



# DocInfo – XMP Crosswalk

Document information dictionary		XMP	
Entry	PDF type	Property	XMP type
Title	text string	dc:title	Lang Alt
Author	text string	dc:creator	seq ProperName
Subject	text string	dc:description["x-default"]	bag Text
Keywords	text string	pdf:Keywords	Text
Creator	text string	xmp:CreatorTool	AgentName
Producer	text string	pdf:Producer	AgentName
CreationDate	date	xmp:CreateDate	Date
ModDate	date	xmp:ModifyDate	Date



#### Metadata Nomenclature

The following are examples of metadata tags:

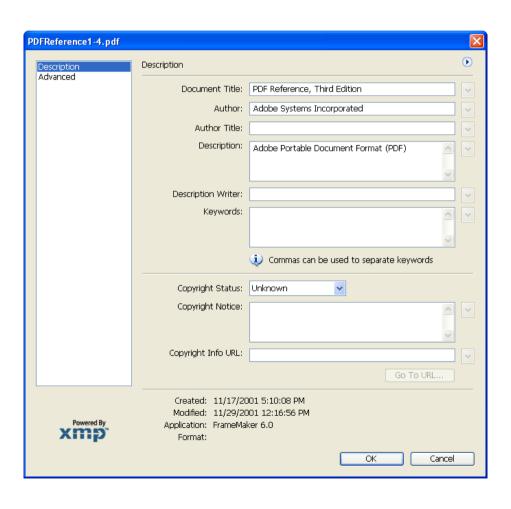
```
<dc:element>Content</dc:element>
```

<pd><pdf:element>Content</pdf:element></pd>

<xmp:element>Content</xmp:element>

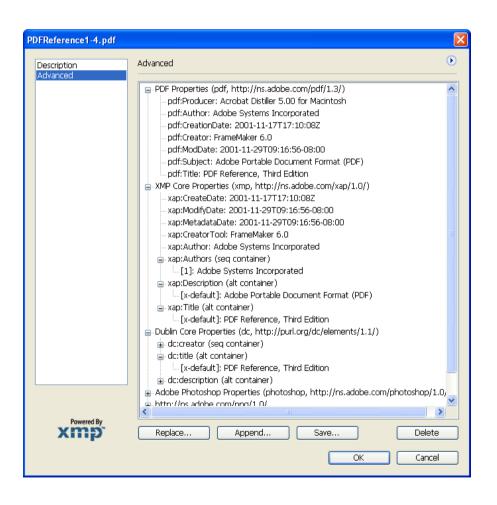


# **Example of Description Metadata**





# **Example of Advanced Metadata**





# **Future**

- IDC, Digital Universe Report
  - By 2020, 25 quintillion information containers
- How will we find the information we need when we need it?



# Questions/Contact

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