

# Content Management in Enterprise Portals

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# Agenda

- Portals and Content Management - definitions & details
- Document and Records Management
- Database Content
- Maturing Content and Knowledge Management Technologies

# Portals are coming!

- Portals are coming and will soon be common
- Content management is key
- New thinking about content management will be required

# Portals

- The Yahoo model
- Browser-accessible single point of access (SPOA)
- Access to everything
- Search engine + categories
- Personalizable
- Adapting from internet to enterprise

# Enterprise Portal Functions

- Information access
- Unified corporate desktop with personalized view of organizational information
- Collaboration environment conducive to sharing information
- Universal in-box
- Horizontal or vertical
- Application set for managing and delivering content

# Enterprise Portal Capabilities

- Access to structured business intelligence and unstructured document-based information
- Ability to search across all organizational information sources
- Allow users to publish and share information
- Control user access to information
- Integration with applications
- Workflow/business process support

# Enterprise Portal Layers

- Presentation
- Personalization
- Collaboration
- Process
- Publishing and Distribution
- Search
- Categorization
- Integration

# Enterprise Portal Benefits

- Access to relevant information
- Save users time
- Increase user productivity
- Enable better, faster decision-making
- Enable more efficient communication with employees
- Create and maintain competitive advantage



# Enterprise Portal Definition

*The Big Rock Candy Mountain*

# Content Management

- “Traditionally” automates the presentation of information on a web site.
- Versioning
- External source or entered in CM application
- Metadata in standard database
- Creates and manages TOC’s, indexes, and links
- Review and authorization process

# Document Management

- Usage tracking and audit trail of access
- Security
- Version control
- Metadata
- Excellent search capability
- People-powered

# Document Management

- An essential component for highly secure, highly managed document-based content
- A good basis for publication procedures, especially if routing/workflow services are available
- Enterprises that have deployed document management can easily leverage the investment for portal content management
- DM metadata extremely useful in portal deployment

# Records Management

- Records are a special category of documents
- Records constitute the corporate memory of actions, transactions, decisions
- Created to support daily business operations in anticipation of disputes
- Essential for protection and support in litigation
- Retained to meet legal, regulatory, and tax requirements

# Records Management

- Records have specific life-cycle requirements
- Destruction of records may be as important as retention
- Well-managed and documented record management may be of tremendous value in legal discovery process
- Impetus for RM deployment may be from legal department

# Records Management

- Documents become records according to specific criteria
- Ownership is transferred from the author or submitter to the organization
- Records are assigned to a well-defined file plan specifying and documenting its life-cycle
- Records must remain accessible, but protected from change, as reliable proof of what happened

# Records Management

- Formal records management may be a largely paper-based process
- Electronic records management is increasingly being adopted to deal with the expanding volume of paperless documents
- Imaging technologies are often an essential component of records management



# Database Content

- Access to information in data warehouses, data marts, and RDBMS systems is increasingly important, and often easy to deploy
- Query and reporting applications turn data into content
- Often referred to as Business Intelligence
- BI solutions meet the needs of most users. Few users actually enter the world of OLAP

File Edit View Insert Format Tools Table Window Help

Normal Times New Roman 12 B I U

satellite telemetry information in direct communication with primary stations. This eliminates the issue of a single primary EWAC gateway being the only point of contact for the data.

### Login Results

LOGIN-4.20.04-283: This utility could not get the preferred Directory Services name or connection ID.

Exploring - L


Microsoft Exc

### Inbox - Microsoft Outlook

File Edit View Go Tools Compose Help

Outlook Inbox

### Windows Networking



The following error occurred while reconnecting G: to \\MAXTORPC1\VOL3\USERS\M\_CLARKE

Permanent connection not available.

OK


### Application Error



Exception EAccessViolation  
Access violation at address:

1  
2  
3  
4  
5  
6  
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10  
11  
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19

### Dial-Up Networking



Cannot access  
\\MAXTORPC1\VOL3\USERS\M\_CLARKE

Your computer is either not configured for the local network, or not connected to a running network.

Do you want to connect by using Dial-Up Networking instead?

Don't prompt to use Dial-Up Networking to establish a connection.

Yes No

Mapisp32  
fast  
ask  
wd32  
ray  
ysalrt

WARNING: Pressing CTRL+ALT+DEL again will restart your computer. You will lose unsaved information in all programs that are running.

End Task Shut Down Cancel

own right, the key concept behind the industry solutions group is the ability to address the entire business process cycle from information creation and distribution through to retirement. Based on this value proposition and the importance of fully integrated solutions, PC DOCS/Fulcrum's future depends on its ability to addressively formalize, promote, and support this "new" strategy.

# Making it *Matter*

- Providing access to information is just the beginning
- It's important to adapt to how people look for things
- Keyword, or full-text, searching is necessary, but not sufficient.
- People need categories

# Making it *Matter*

- It is impossible for every user to gather, assimilate, and discuss the most current and relevant info
- The Enterprise Portal must deliver content that matters
- Actionable information is what matters
  - Take care of the customer
  - Respond to a competitor
  - Save money
  - Innovate

# Making it *Matter*

- Conventional content management is doomed to fail in the face of tidal waves of information and the limits of human attention
- Computers don't have attention. They have access to incredible volumes of information, and are developing the capacity to assess it.
- DM, BI, and KM technologies are converging on the problem of content management

# Judging what matters

- Categorization is the first step
  - Documents with similar words are more likely to be about the same thing
  - Documents with words that have similar meaning are more likely to be about the same thing
  - Meaning depends on context
  - From words to context to concepts to clusters of documents, according to what they are about
  - ‘Concept taxonomy’, human and/or machine created

# Judging what matters

- Documents are likely to be about the same thing if they share properties such as:
  - Same author
  - Written by people in the same workgroup
  - Written by people with similar interests
  - Passed from one person to another as something of interest
  - Stored in a particular folder with other documents
  - Similar information provided by the author on a a form indicating what they are about

# Judging what matters

- Categories are indispensable. So how do we know what categories are useful?
  - Have people look at things and categorize them, a la Yahoo! (good, but impractical)
  - Ask people to tell you what they are interested in (generally unreliable, and requires co-operation)
  - Observe their behavior!



# Judging what matters

- What do they search for?
- What do they click on?
- What do they save?
- What do they forward to someone else?
- What categories do they browse through?
- What do they write about?
- Do they read details, or just summaries?
- What permissions do they give to what they contribute?
- What do they say they are interested in?

# Making it *matter*

- Observe content and usage patterns
- Identify and encourage communities of interest
- Identify the experts and observe and encourage them
- Identify preferences for viewing (functional area, workgroup, database view, folder system)
- Learn from user behavior and deliver increasingly more fine-tuned results

# What you need

- Search engine
- Document and records management
- Query and reporting tools
- Categorization engine
- Personalization engine
- Common authentication
- Scalable platform

# In closing

The Enterprise Portal provides a formidable list of services:

- Provides access to all major business information sources
- Provides security and enforces permissions
- Keeps information up-to-date through versioning
- Supports management of content through analysis and automatic categorization
- Personalizes content for individual interests and preferences
- Provides a variety of views of content

# In closing

- Delivers information in a variety of ways, from email to web to wireless device.
- Identifies experts in the organization
- Identifies communities of interest
- Learns from user behavior to provide better, more *meaningful* results
- And, possibly the most important: provides a basis for metrics of what is important and who is important in achieving the goals of the organization

# Sources

Much of the material presented here is based on white papers that can be found at

<http://www.hummingbird.com/whites/>

Additional perspectives are taken from David Weinberger, editor of the Journal of the Hyperlinked Organization. More can be found at

<http://www.hyperorg.com>

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