What Is Enterprise Content Management and ...

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and Why Is It Important in the Federal Government?
... Policy “Currents” ... plus Responsibility and Information Technology
Topics / Questions

- Content management
- Demographics
- Federal policy
- Technology fly by

Section 1

Content Management
Information Explosion--Wow

“More information will be created in the next three years than in the history of time.”

(Berkeley School of Information Management, 2002)
93% of all new information is created in digital form.

Source: UC Berkeley School of Information Management and Systems
What’s Content?

- Textual information about products, people
- Binary files (audio, video, programs, pictures)
- Electronic mail with text and rich media
- Facts—structured in database tables or unstructured text
- Numeric information—static or dynamic tables, visual representations
- Metadata — information about information
CMS Is ...

- Creation
- Production
- Management
- Distribution
- Delivery
- Promotion of:
  - Text
  - Audio
  - Video
  - Images

Content ...

- The fuel for knowledge work
- Threatening to overwhelm
  - Individuals
  - Decision making
  - Government agencies
  - Even the Internet
Content Mgmt Vendors

- Documentum
- Ektron Inc.
- IBM
- Microsoft Corp.
- Oracle Corp.
- Stellent
- Vignette

Checklist of CM Drivers

1. Awareness expanding: upwards (management), downwards, and outwards
2. New users want rich media, caching exploding
3. Solutions, not separate programs
4. Integration with existing ERP applications
5. Intense price competition, conflicting claims
6. XML -- mandatory technology
7. Wireless, pervasive access
Starbucks-ification

The Devices...
Blackberry 2003

Updated design supports e-mail and provide phone service

Motorola (Moto A835)

Camera, PDA, and GSM phone
Nokia 3300

An MP3 player plus phone

NTT Dual Processor Phone

Multifunction, including streaming video...
Multimedia / Rich Media: Tablets

A collaborative laptop... write or use keyboard

Section 3

Policy Momentum
Enterprise Content Mgmt Challenges

Chronic Problems
- Silos or “islands of automation”
- Fads
- Good government management requires technology
- Communication gap between IT and lines of business
- Lack of enterprise architecture

Digital Problems
- 5,600 G2B, G2G, & G2C transactions to be put online
- About 1,000 intra-governmental transactions to be put online
- 70 million Web pages operational across the ~40,000 Federal government Web sites
- Process integration and leveraging redundant investments

Source: Mark Forman, OMB, 2002
Framework for Citizen Services

Federal Initiatives

- **CIO Council**: “Develop standards for XML data definitions so the information we create can be shared and accessed easily regardless of its origins.” (Sent endorsement on Dec. 16, 2002)
- **E-Government Act**: “Address the integration of the data elements used in the electronic collection of information within databases”
Tiered Development

Source: Norm Lorentz, June 2002

From This ...
To This...

Different Views of the Same Source

Style sheet: Bids Sorted by Price

Style sheet: Bids Sorted by Bidder
Section 4

Technology Fly By

- 1990s
  - Web standards appear e.g., HTTP, HTML, XML, RosettaNet

- Pre-1990s
  - Application integration standards appear e.g., EDI

- 1980s
  - Custom static B2B integration

- 2000+
  - Web application standards = Web Services
Snap Together… Reusable

Lego blocks can be used to build different things by snapping the standardized pieces together...

The Framework “Concept”

- CMS services
- Accounting / Financial analysis
- Work flow / Business rules
XML... Enabling “Teflon”

- **XML and search:**
  - Search is now invoked by inputting data into HTML forms and sending the data to Google
    
    http://www.google.com/search?q=Skate+boots&btnG=Google+Search
  
  - **XML is a better way to send the data:**
    
    <SOAP-ENV:Body>
    <s:SearchRequest
    xmlns:s=www.xmlbus.com/SearchService>
    <p1>Skate</p1>
    <p2>boots</p2>
    <p3>size 7.5</p3>
    </s:SearchRequest>
    </SOAP-ENV:Body>

Integrated Content Tool

Content Authoring/Composing Interface

Source: Statistical Abstract, 2002

Source: Jen-Shin Hong, 2003
4. Summary

Wrap Up

Characteristics of a “Real Time Enterprise”

- Available to every employee or authorized user
- Superior Information availability
- Streamline business processes using the Web via communications plus content
- Lower costs via analytics
- Enter data once
- Single interface

Source: Ray Lane, General Partner, Kleiner Perkins, 2001
This Presentation

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