Factors in Selecting a Digital Asset Management System:

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Overview

- Collected vendor names for list to send RFI
- Sent RFI to 60 vendors
  - Integrated Library Systems (ILS)
  - CMS (Content Management Systems)
  - DAM (Digital Asset Management Systems)
  - CDN (Content Distribution Networks)
  - Integrators
- 32 vendors responded
- Analyzed vendor responses as well as open source products
- Sent RFP to 10 vendors
- 5 vendors responded
- Selected vendor with experience in industry, but not in libraries or academia

External Factors

- Dotcom explosion
- Dotcom implosion
- Knowledge management

Dotcom explosion

- Software market
  - Creation of software to manage Web sites, digital assets and share content over the Internet
  - Lots of companies with highly specialized software
- Academia
  - Perceived competition from content sites and Internet universities
  - Desire to move content to the Web to facilitate access; OAI
  - High salaries outside of academia cause brain drain

Dotcom implosion

- Software market
  - Megers/bankruptcies
  - Blurring of distinctions among vendor products
  - Increased competition for new accounts
- Academia
  - Layoffs make stability of academia attractive to corporate IT managers
  - Loss of dotcoms makes academia an attractive market to software vendors

Internal Factors

- University’s strategic plan
- Merger of libraries, academic computing, student information systems, telecommunications
- Technologies favored
- Legacy system
- The RFI/RFP Process

University’s strategic plan

Content creation for digital archives focused on university’s urban initiative

- Collections to support study of Los Angeles as an urban center; mostly images
- Proposed geo-spatial browser as one search interface to provide spatial context for content
- Collaboration with external agencies seen as important in gaining access to this content

The Merger

- Leadership and staffing changes
  - Influx of staff who had worked in industry
  - Influx of professional managers both on IT and library sides of the house
  - Key vacancies left knowledge gaps
- Changes in organizational philosophy
  - “Buy” not “build” shop
  - Look to broader range of vendors for software
  - Change in definition of “ large customer base”
  - Emphasis on formal project management structure

Structural challenges

- Changed reporting lines for digital information management
- New people in key positions
- Lack of consensus on whether “library” is collaborator or customer among IT staff
- Low-profile of digital library projects within ISD
- Competition with other projects

Favored Technologies

- Sun Solaris as OS
- Oracle as RDBMS
- Apple OS for scanning
- Windows for cataloging
- Java
- XML
- Tiff as storage
- Mr.Sid as large image viewer

Legacy System

- SIRSI Unicorn using BRS and Z39.50 server to create database for metadata
- Use WebCat for search & display
- FTP images and series of programs creates derivatives & metadata
- One developer responsible for everything and he’s retiring

Vendor categories

- Integrated Library Systems (ILS)
  - Endeavor, Innopac, SIRSI
- Content Management Systems (CMS)
  - Broadvision, Interwoven, Vignette, Percussion, Stellent
- Digital Asset Management Systems (DAM)
  - Documentum, Artesia, FileNet
- Content Distribution Networks (CDN)
  - Akami, Digital Island
- Integrators
  - Accenture, Deloitte Touche, Cap-Gemini

Integrated Library Systems

- Database schema structured for library standards out of the box (MARC and Dublin Core)
- Z39.50 searching
- Awareness of emerging library standards like the OAI
- Web-based search interfaces for public use
- Support of library functions such as:
  - Acquisitions
  - Cataloging
  - Circulation
  - Inter-library loan
- Built with authority control in mind

ILS Strengths & Weaknesses

- Strengths
  - Use of “library” standards
  - Focus on library community
  - Library personnel are familiar with the vendor
  - Low cost if adding to an existing system
- Weaknesses
  - Proprietary databases & architectures
  - Can’t route content
  - Small user base
  - Slow to adopt new technologies
  - Limited customization possible

Content Management Systems

- Content reuse & templating (banners, text, buttons)
- Manage Web pages and their relationship to each other and directory structure
- Manage and control approval processes for content
- Link management
- Upload new and edited pages to the Web server
- Retrieve content from a repository and present it dynamically or deploy it as a static Web page
- Search a repository for content
- Personalization

(Boiko 2001)

CMS Strengths & Weaknesses

- Strengths
  - Templates for data entry and display
  - Routing with workflow approval process
  - Easy to move content from the desktop to the Web
  - Emphasis on newer technologies and open architecture
- Weaknesses
  - Authority control and the capability to define and use metadata
  - Not designed for search and retrieval of content

Digital Asset Management Systems

- Asset capture and digitization
- Asset management
- Access control including security tools and digital rights management
- Flexible storage that allows assets to be reused
- Distribution to the appropriate individuals internally and externally
- Publication to the Web or other channels

(Trippe 2001)

DAM Strengths & Weaknesses

- Strengths
  - Flexible database schema, some flexibility in interface configuration
  - Security & digital rights management are key components
  - Capability to route content for review
  - Large install base outside of academia with a variety of needs
- Weaknesses
  - Complex
  - Different standards used
  - Designed for intranets
  - Authority control is an add-on

Content Distribution Networks

- Functions related to the publication/broadcast of content
- Transport protocols for pushing content
- Protocols for harvesting content
- Security protocols to enable transport and harvesting
- Network connectivity, caching and load-balancing

(Mears 2002)

CDN Weakness

- Narrow set of functions that assume that the content has been created and is being managed using something else.

Integrators

- Consulting firms that build systems for customers from existing software to fulfill a specific set of requirements.
- Roots in financial systems consulting

Integrators Strengths & Weaknesses

- Strengths
  - They build what is specified and customize software to meet specific needs
- Weaknesses
  - Expensive
  - Recommend software based on what they know, not on how well it fits with your needs

The RFI/RFP Process

- Challenges with the process
  - Favors selection of commercial software over open source
  - Favors vendors who are better organized and better staffed
- Challenges with the evaluation
  - Level of granularity in requirements
  - Involving the right decision makers in the process
  - Prioritization of requirements

RFI Showstoppers

Requirement	Factor
Workflows and approval processes	Collaboration with external agencies; University Strategic Plan
Flexible templates for data entry and display	Collaboration with external agencies; University Strategic Plan
Capability to allow external applications to search and retrieve content	Dotcom explosion

RFI Showstoppers

Requirement	Factor
Referential integrity	Legacy system
Management of derivatives	Legacy system
Operating system	Favored Technologies; Sun OS
Client platform	Favored technologies; Use of Apple OS & Windows
XML support	Favored technologies; XML

RFI Showstoppers

Requirement	Factor
Database support for Oracle 9i	Favored technologies
Versioning and rollback	Legacy system

Open Source and/or University Created

Looked at ADL, DLXS, Cheshire II, D-Space, DLESE, Greenstone, Perseus, Virtual Data Center

Generally found:

- Extensive customization requiring commitment of developer to meet our requirements
- Public documentation insufficient for decision making
- Lack of “reliable” support model if software does not function as promised

Scores for these packages were comparable with vendors whose software required excessive customization

Challenges moving forward

- Docu who?
- Complexity of new system
- Lack of resident expertise
- Interpretation of requirements
- Interpretation of design document
- Finishing this before we start something else

Future Uses

- Institutional Repository
- Course Management
- Virtual Collections

Institutional Repository

- Means to allow faculty to store and retrieve content they have created for research purposes
- Rights management functions
- Push content to other systems
  - E-journal publication
  - Reference works
  - Course management systems
  - University Web site

Course management

- Route readings and syllabus through curricular committees
- Route thesis and dissertations through appropriate committees
- Route student work to appropriate teaching assistants and faculty
- Place all content in a life cycle; expire content at the end of a semester; archive student work

Contact Information

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