INFORMATION SYSTEMS & HIGHER EDUCATION

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Indicators of Successful Info Systems

- Structurally apparent
- Intuitive navigation
- Findable information
- Meets user needs + organizational goals

Information Architecture
Information Architecture (IA)

Components that form the human logic of networked digital information products

- Organization
- Search
- Navigation
- Metadata
- Labels
Information Architecture Method

IA process informs the design of digital information systems\(^1\)
IA Research

Identify relationships between:

• users (audience/needs)
• content (documents/objects)
• context (organizational goals)\(^1,2\)
IA Strategic Development

Using research findings, plan strategies for…

- Administration
- Technology integration
- Organizational hierarchy
- Labeling (terminology)
- Navigation
- Content models
- Metadata

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IA Design

From strategies, communicate & implement design

- personas & scenarios
- content inventories
- content models
- wireframes
- metadata scheme
- vocabularies

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IA Challenges in Higher Education

• Diverse Users (competing tendencies)
  • *Instructors*…
    • produce strong search queries
    • slow to embrace new tech
  • *Students*…
    • embrace new technologies
    • struggle with search queries
  • *IT & Library personnel*…
    • are technically oriented
    • require advanced functions
IA Challenges in Higher Education

- Silos – Users must navigate multiple architectures
  - Administrative Management Systems
  - Content Management Systems (webpages)
  - Learning Management Systems
  - Online Public Access Catalog (info resources)
  - Digital Asset Management Systems
  - Journal Databases

Research across many systems is exceedingly difficult
Students/Scholars are Producers

- IA stops at the borders of each system, no lifecycle support across…
  - Communication and project management
  - Asset Acquisition (copyright considerations)
  - Storage (local, network and cloud)
  - Retrieval (effective description)

- Data
  - Preservation, security and management

- Third-party solutions…
  - often fall short (one-size fits all)
  - do not yet exist
How Academic Libraries are Helping

- Open source asset management systems provide support of scholarly output and learning resources
- Multiple & extensible repositories, one architecture!

- **Hydra Project** (Fedora Repository Platform)
  - Institutional Repositories
  - Media/Image Libraries
  - Project/Workflow management
  - Archives
  - Applications
Asset Management Model (example)
How Academic Libraries are Helping

- **Data Curation Services (Data Management Plan)**
  - Libraries describe, preserve and make accessible raw datasets
  - Ensures authenticity/data integrity
  - Datasets typically reside in Institutional Repositories
  - DMP Required by some funding agencies
  - DMP Tool (UC)
  - DMP Tool (Purdue)

- **ICPSR** (inter-university data consortium - UMich)

- **Use librarians as research collaborators**
  - Manage data, assets and communication through research lifecycle
Think like an Information Architect.

For related info see:

- Advancing Digital Repository Services for Faculty Primary Research Assets: An Exploratory Study

References
