

# If you build it, will they come?

Courtesy: [www.stress-free-move.com](http://www.stress-free-move.com)



## Issues in Institutional Repository Implementation, Promotion and Maintenance

Karen Bjork, Digital Initiatives Librarian  
North Dakota State University Libraries

# WHAT

- An institutional repository is:  
Formally organized and managed collections of digital content generated by faculty, staff and students at an institution.

# What

The content of an institutional repository is:

- Institutionally defined
  - Captures the original research and other intellectual properties created by the university's population across many fields
- Scholarly
  - Examples include: pre-prints, peer-reviewed articles, monographs, teaching materials, conference papers, theses and dissertations, works of art, photographic and video recordings
- Open Access
  - Providing no or low barrier access to the University's intellectual products.

# WHY

As an organizational commitment to stewardship of materials created at an institution

It provides:

- long-term preservation – persistent identifier
- as well as organization
- access or distribution

# How?

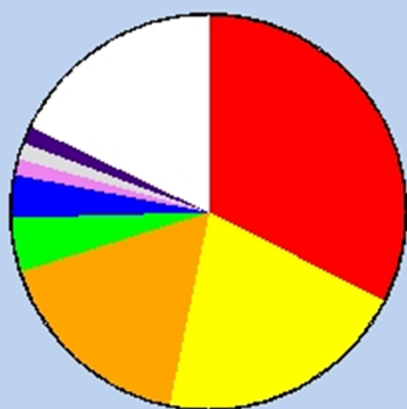
- Roll your own (Community Support and Open Source)
  - Dspace, Fedora, Eprints
- Use a pre-made package (Vendor Support)
  - CONTENTdm, Digital Commons

# Roll Your Own vs. Packages

- Roll Your Own
  1. Ultimate control
  2. High staff requirement for support and maintenance
- Pre-made Package
  1. Easier setup, maintenance
  2. Clearer future
  3. Less control over features
  4. Most popular option

# Market share

Usage of Open Access Repository Software  
Worldwide



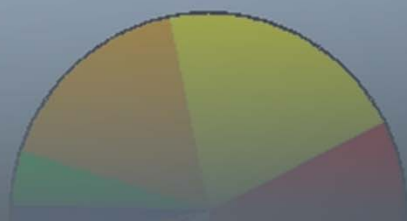
- DSpace (522 = 33%)
- [Unknown] (335 = 21%)
- EPrints (268 = 17%)
- Digital Commons (73 = 5%)
- OPUS (55 = 3%)
- Diva-Portal (23 = 1%)
- HTML (23 = 1%)
- Mildfire (23 = 1%)
- [65 Others] (282 = 18%)

Total = 1604 repositories

OpenDORR 11-Mar-2010

OpenDORR 11-Mar-2010

Total = 1604 repositories



- [65 Others] (282 = 18%)
- HTML (23 = 1%)
- Diva-Portal (23 = 1%)
- OPUS (55 = 3%)

# Major Packages

- DSpace
- EPrints
- Digital Commons
- Fedora/Fez
- CONTENTdm

# Points of Evaluation

- Technical skill requirement
- Ease of setup
- Customizable workflow
- Controlled vocabulary
- Data Access

# DSpace

MIT's DSpace is an open source platform that enables capture and submission of works, distribution of those works, and long-term preservation.

- Required: XML, XSLT; Java, SQL helpful
- Setup is easy, customizations tricky, large & helpful user community.
- Workflow: infinite customization
- Controlled vocabularies via XML
- Data Access: Z39.50, OAI-PMH, RSS, XML objects

# EPrints

EPrints is designed to manage disciplinary or institutional print collections, rather than digital collections.

- Minimal requirements; Perl helpful
- Easy to set up, large user community
- Customizable workflows; geared toward e-journals
- Controlled vocabularies: XML authority files (seems limited)
- Data Access: RSS, OAI-PMH

# Digital Commons

Hosted repository platform, helps institutions to collect, showcase and preserve scholarly output.

- No technical skill requirement
- Quick vendor supported setup
- Customizable workflow
- Controlled vocabulary limited to a provided “discipline” taxonomy
- Data Access: RSS, OAI-PMH, XML gateway

# Fedora/Fez

The Flexible Extensible Digital Object and Repository Architecture (Fedora) is a foundation for developing interoperable digital libraries and institutional repositories using XML and Web Services. Fez is the web interface to Fedora

- Technical skills: XML; PHP, SQL helpful
- Ease of setup: not bad; helpful user group
- Workflows infinitely configurable via XSD files.
- Controlled vocabularies via XML
- Data Access: OAI-PMH; well defined web services API

# CONTENTdm

Hosted digital collections management software that allows for upload, description, management and access of digital collections.

- Technical skill requirement: HTML; PHP helpful for customization
- Ease of setup: easy, comes with sample content out of the box
- Customizable workflow: no
- Controlled vocabulary: plain text lists
- Data Access: OAI-PMH; Z39.50

# Our Architecture

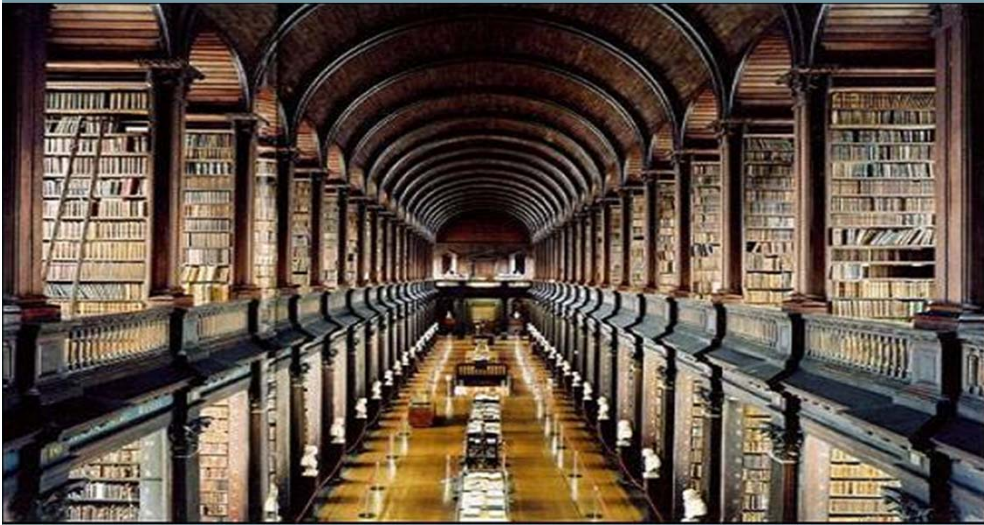
- DSpace with a Manakin XMLUI
- Some elements generated by PHP
- DSpace/Web site interoperability

<http://library.ndsu.edu/repository/>

# Beyond Creation

## Challenges and Strategies to Grow an IR

Courtesy: [www.forensic-professionals.com/member/](http://www.forensic-professionals.com/member/)



# Challenges / Strategies

- Where do you start?
- Develop Collections / Find a need
- Funding / Buy in from campus
- Confusion and uncertainty about intellectual property / Education

# How Should You Proceed?

- Select key decision-makers
- Early “small wins” with individual academic departments.
  - Architecture and Landscape Architecture department
  - Agricultural and University Extension
  - Center for Heritage Renewal
- Develop standards and procedures for managing disciplinary and institutional collections.
- Develop a marketing plan

# Developing Collections / Find a Need

- Digitize or born digital objects?
  - Theses and dissertations
  - State of the University Address
  - Publications
  - Conferences and Workshops
- What metadata will be used?
  - Default or customize
- Who will submit the digital objects?
  - Person who created the item or library staff member?

# Recruitment

*Challenge: The February 2007 Census of Institutional Repositories in the United States* reports that “operating repositories have had limited success in recruiting voluntary deposit of content”

<http://www.clir.org/pubs/reports/pub140/pub140.pdf>

*Solution: Most success with personal solicitations that include an offer to assist with the submission process*

# Funding

- How do you sustain your IR?
  - Pay Once, Store Forever (POSF)
    - Princeton University Model
- University / Department Funding
- Aligning the Repository with Your Provost's Mission
  - Support from the top will allow you to have campus wide support

# Intellectual Property

- Creative Commons - allow creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators. (<http://creativecommons.org/>)
- Integrate license in metadata
- Provide author's right information
  - To find publisher policies, consult the [SHERPA/RoMEO](http://www.sherpa.ac.uk/romeo/) (<http://www.sherpa.ac.uk/romeo/>) site, which provides copyright policy information of approximately 100 major scholarly publishers
  - *Author Addendum*: It is a legal document that modifies the publisher's agreement SPARC Author Rights ([http://library.ndsu.edu/digital-collections-guidelines/files/2009/11/SPARC\\_AuthorRights2006.pdf](http://library.ndsu.edu/digital-collections-guidelines/files/2009/11/SPARC_AuthorRights2006.pdf))

# NDSU Activities

- Every year we will be adding Architecture / Landscape Architecture student theses
- Working towards adding theses and dissertations
- Library events
- Agriculture publications

# Questions

- NDSU Digital Repository: <http://library.ndsu.edu/repository/>
- Karen Bjork
  - Karen.bjork@ndsu.edu