Digital Projects Work Group Recommendations

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Charge: Develop recommended organizational policies and procedures relating to the creation and management of digital projects that provide for the preservation of and/or access to NMSU Library collections. Recommend to the Dean an organizational foundation that would make the building of digital collections from a number of sources uniform, integrated, and sustainable.

See Appendix A for a Definition of digital collections and lists of Present digital projects, Potential types of content for projects, and What the Library needs in order to build and manage digital collections.

Work Group Recommendations

1. The Digital Projects Work Group will recommend a digital content management direction that will support the desired levels of indexing, searching, retrieval, and display with which to build the Library’s digital collections and make them accessible to users.

The Digital Projects Work Group has reviewed commercially available and open source alternatives for digital content management and has learned what the Library Systems staff can develop locally.

- The Work Group recommends the purchase of CONTENTdm.

CONTENTdm would support the desired levels of indexing, retrieval and display for all of the Library’s existing projects and help the Library to get started quickly on a number of new projects. Other alternatives include the use of DSpace, or utilizing the expertise of existing Library Systems staff to locally develop the functions and capabilities needed to provide users with the indexing and search and
retrieval functions required to make our digital collections useful to patrons. With CONTENTdm, Library Systems staff would work closely with each Digital Projects Team in setting up the database and determining needed search/retrieval and display features.

See Appendix B for a brief description of CONTENTdm and other alternatives.

2. The Digital Projects Work Group will adopt recognized international standards to ensure permanence and portability of the data, and compatibility among different metadata schemes and systems.

There are numerous industry standards that would need to be kept in mind including Unicode, Z39.50, Qualified Dublin Core, VRA, XML, JPEG2000 and OAI-PMH.

See Appendix C for a description of these international standards.

There are also features that are necessary for a content management system.

See Appendix D for a list of content management system features

3. The Digital Projects Work Group will develop a procedure by which all projects will be reviewed and approved. That procedure will require that each proposed project be clearly outlined with proposed outcomes, personnel assignments and responsibilities, timeline with targets, and projected costs that include personnel and supplies.

See Appendix E for a draft DIGITAL COLLECTION PROJECT REQUEST FORM

4. The Digitization Projects Work Group recommends that a standard web presence to be used with each digital project be developed. This standard will be reviewed by the department heads and approved by the Dean. Customization will occur as needed for each project. The standard will provide for a template for use with each digital project web page that briefly describes the project and acknowledges donors and/or funding agencies/sources as needed.

First Priority: Complete or Initiate the Following Digital Projects

- Board of Regents Minutes – Database is created. Need to establish a project work group. Need to determine search and display functions and develop the launch page.
Round Up - Database is nearing completion. Need to establish a project work group. Need to determine search and display functions and develop launch page.

Centennial Project – Completed.

Streaming music - Files are created. Need to establish a project work group. The Library should proceed with this project utilizing Variations, an open source software program from Indiana University.

Domenici Project-Political Archives

Potential Projects
The following are examples of new projects that can be created for a processed collection, a collection being processed, or a part of an existing collection such as Photographs. In addition to being prominently displayed on the NMSU Library website, each project could be harvested by web crawlers and discovered with Google, etc., making these unique NMSU resources visible worldwide.

- EBID –RGHC
- Pickens Collection - RGHC
- Astronomy Collections – Walter Haas and others - RGHC
- Casad Family History– RGHC
- Esther Chavez Cano Social Justice –RGHC
- Amador Family –RGHC
- Dime Novels – Special Collections
- Oral Histories - Collaboration with Farm and Ranch Museum
- Historic New Mexico Maps – Gov Pubs and Archives
- Retablos Digital Project – NMSU Museum

Next steps

With this report, the Digital Projects Work Group will have completed its charge. We recommend that a Digital Projects Management Team be formed to review proposed projects and guide the further development of the Library’s digital projects. Suggested membership: Ingrid Schneider, Christopher Landt, Cassie McClure, Kristina Martinez, and Dave Baldwin.

The Digital Projects Work Group would be happy to meet with you discuss these recommendations.
Appendix A

Definition of digital collections

A digital collection consists of all digital objects managed by the Library as part of its mission to meet the information needs of the NMSU community. It requires an integrated set of services for capturing, cataloging, storing, searching, protecting, and retrieving information. It is not just the information itself, but the organization, structure, and presentation of that information, that give a collection its value. Digital reformatting of the Library’s collections can enhance their value by making them more accessible, better integrated with the other collections, and more likely to be used. Well thought out and executed digitization projects will contribute to the local, regional, and national reputation of the Library and provide benefits that far outweigh the costs.

Present digital projects:

- Board of Regents Minutes
- Round Up
- Centennial Project
- Streaming music
- Rocky Mountain Online Archives
- Photographs
- NMSU Dissertations

Potential types of content for projects:

- Resources that have been reformatted
- Resources harvested by or deposited with Archives and Special Collections
- All other resources for which the library has accepted responsibility for long term management and continuing access
- Freely available Internet resources

In order to build and manage digital collections, the Library needs:

- Leadership and organizational accountability for digital preservation.
• To assure that the costs and capacities necessary for digital preservation and metadata creation are considered as part of the library’s overall budget to ensure that these collections will be sustainable and accessible over time.
• To make digitization initiatives an integral part of collection-building activities.
• To ensure that library faculty and staff have the knowledge and skills needed to manage digital collections in a rapidly changing technological environment.
• To commit adequate institutional resources To establish clear lines of authority, explicit rules, accountability mechanisms, and transparent workflows.
• To establish standards for digitizing collections. Standards are important for creating and maintaining collections and digital objects, allowing access to collections, preserving collections, and allowing collections to interoperate with one another. Without standards, inconsistency creates problems and prevents the digital library from scaling as it should.
• To ensure that the development of digital collections takes place in the context of a comprehensive collection management plan that is focused on the present and future needs of students and scholars.
Appendix B - Brief description of CONTENTdm and other alternatives.

- **OCLC's CONTENTdm** is the most heavily used digital collection management software in libraries (more than 2,000 installations). Of all the options considered, CONTENTdm provides the highest level of out-of-the-box functionality for digital collection management. The NMSU Library has experience in using it with the Centennial Project. There is a high level of formal and informal technical support available through OCLC and the user community. Recommended.

- **DSpace** is an open source software option for digital collection management. DSpace also has out-of-the-box functionality, but would require more in-house customization than CONTENTdm to suit NMSU’s needs. It would be essential for an individual on the Systems staff to learn about DSpace and provide internal support. DSpace is often used by Libraries for institutional repositories, although most Libraries using DSpace have CONTENTdm for non-repository digital collections.

- **Library Systems option** Systems staff would use their expertise with proprietary software and open source programs and plug-ins to develop and maintain the indexing, searching, retrieval, and display functions for digital collections. Technical support for this option would be provided by the Library Systems staff and extensive documentation of the system would be required.

- **PastPerfect Webshare**, while relatively inexpensive, is designed for a specialized clientele in museums and archives. There are several databases that have been created in Archives and Special Collections utilizing PastPerfect software and those databases can be used by other programs. The public interface is not satisfactory. Not recommended.

The Work Group also evaluated **Variations** which is specialized open source software designed by Indiana University for streaming music which will work with the existing music files. Variations also provides innovative music study functionality; including the ability to bookmark certain passages within a piece of music, diagram sections of the music, and view available scores while listening to the music. We recommend that the Library proceed with the streaming music project utilizing Variations and the existing music files. This should be one of the first projects to use the new procedures and policies.
Appendix C - International standards.

- **Unicode**—An industry standard that allows computers to represent and manipulate text in most of the world's non-Western languages, including Chinese, Japanese, Korean, Greek and Hebrew, among others.

- **Z39.50**—A protocol for retrieving information from a remote computer database. CONTENTdm can be made Z39.50 compatible through a free open source software application called ZContent developed by the University of Utah Marriott Library.

- **Dublin Core and VRA Core**—Metadata schemes. Use of Dublin Core and VRA (the Visual Resource Association) Core allows for a common language when describing objects and searching metadata across collections. Use of Dublin Core is mandatory for OAI-PMH compatibility.

- **OAI-PMH**—(Open Archives Initiative Protocol for Metadata Harvesting). Protocol for the interoperability standards necessary to make an institution's metadata open for harvesting. The software chosen for digital collection management should support OAI-PMH to provide greater dissemination of information about the Library's collections.

- **XML**—(Extensible Markup Language), encoding standard. XML should be used for all internal metadata and structure description for greater compatibility with local catalog systems and other applications.
Appendix D - Content management program features

- Field specific searching
- Security protocols
- Multiple points of deposition
- Can handle multiple formats including compound objects, audio and video streaming
- Content approval
- Boolean logic searching
- Access restrictions
- Database reporting
- Multi-language support
- webDAV/ftp capable
- Statistical reporting
- Granular privileges
- Templating
- Image manipulation functionalities – zoom, rotate, etc.
- Bulk import and export capabilities
- Multiple administration points
- Page caching
- Style and setup guidance
- Watermarking or other method to auto generate ownership
- Easy ability to cross-walk data (i.e. xml to Dublin core)
- Ability to move sequentially from one image to the next in a result set without returning to result set
- Folder capability to allow users to select items and easily return to them at a later time
- Shopping cart to allow users to purchase
- Audit trails
- Multi-lingual content integration
- Link management
- Multi-site deployment capabilities
- Pluggable API
- Project tracking
- News feeds
- PDF generation
- URL rewriting
- Friendly URLs
Appendix E

Draft DIGITAL COLLECTION PROJECT REQUEST FORM

Proposed Project Name:
Requestor:
Date submitted:
Project description:

Target audience:
Proposed outcomes:

Proposed project team:
_____ Metadata Librarian
_____ Systems person
_____ Content person/Project leader

Responsibilities of each team member:

Timeline with targets:

Projected Cost – Personnel:
Projected Cost – Supplies:

Total Projected Costs:

Funding sources:
___ Grant:
___ Endowment:
___ Donor:
___ Account:
___ Other outside funding:
___ Library funds:

Signatures:
Requestor: __________________________________________________
Department Head: ____________________________________________
Chair, Digital Projects: ________________________________
Dean of the Library: _________________________________________
NEW MEXICO STATE UNIVERSITY LIBRARY
DIGITAL INITIATIVES PROJECT PROPOSAL
CRITERIA CHECKLIST

The following criteria will assist NMSU staff in developing and evaluating digital project proposals, help in prioritizing activities, and establish a strong rationale when requesting support from internal or external sources. The criteria, organized by broad category, will help document the merits of project proposals and promote an analytical approach to project selection. Criteria are not listed in order of importance; depending on the project, some will be more important and others may not apply.

Complete this checklist and submit it with the Project Proposal Form.

Mission: Rank on a 1-5 scale with 5 being the highest

____ The project addresses one or more of the Library’s strategic goals.
____ The project provides measurable support for NMSU’s teaching and research efforts.
____ The project may generate further digital library projects and funding.
____ The project has local or regional importance.
____ The project represents an effort that is unique to NMSU.
____ The project moves library services in a direction consistent with the Library’s strategic plan.

Rights: Check one

____ Source materials are in public domain, or
____ Owned by NMSU Library, or
____ Copyright holder is willing to transfer rights to NMSU, or
____ Use of the material for can be justified under fair use guidelines

Non-Duplication

____ There is no identical or similar digital product that can reasonably meet the expressed needs. (The Library will not digitize an object for which a digital surrogate already exists and can be reasonably obtained.)
Value: Rank on a 1-5 scale with 5 being the highest

_____ Project would have significance to University areas of excellence
_____ Materials would complement existing collection strengths
_____ Rareness or uniqueness of source materials or content
_____ The project addresses material that is deteriorating.
_____ Source materials or content have high artifact value
_____ Important for the understanding of the relevant subject area
_____ Broad or deep coverage of the relevant subject area
_____ Potential for enduring value in digital form
_____ Have potential to develop into larger grant opportunities
_____ Have sufficient subject or discipline knowledge and expertise for project
_____ Likely to generate new or increased use of the material
_____ Provides for integration of a variety of formats or related material

Enhancement of intellectual access: Check all that apply

_____ Would enhance intellectual control through the creation of new finding aids, links to bibliographic records, and development of indices and other tools
_____ Would improve the ability to search widely, manipulate images and text, and study disparate images in new contexts
_____ Would improve the quality of image, e.g., through improved legibility of faded or stained documents

Demand: Check all that apply

_____ Users are now consulting the proposed source materials?
_____ Digitization would increase use.
_____ Potential to create new audiences or improve scholar access
_____ Would provide support for current high priority activities or areas of interest
_____ Likely to be of long term use within the academic community
_____ There is an active, current, good-sized audience for the materials
_____ There is advocacy for the project from the University community
_____ Likely to generate new types of use or significantly increased use of existing resources

Collaboration/Relationships: Check all that apply

_____ The project has library, faculty, donor, or other advocates
_____ The project creates or enhances a collaborative partnership

Preservation: Check all that apply

_____ Project will result in a reduction in handling of fragile material.
_____ Project provides access to materials that cannot otherwise be easily used.
_____ Project protects materials at high risk of theft or mutilation.
Condition of materials allows them to be safely digitized.
Condition of originals requires conservation.
Possibility of scanning photographic intermediaries rather than originals.

**Intellectual access: Check all that apply**

Source material has a coherent organizational scheme.
Cataloging and/or descriptive metadata work is complete.
Project will require descriptive cataloging/metadata work.

**Resources/funding: Check all that apply**

The project can be completed with available funding resources.
The project can be completed using existing staff resources.
The Library has sufficient staff and resources to support programming, user interface design, or other technology intensive tasks.
The project has the potential to generate funding through grants, donors, or other external fund sources.
The project has the potential to save money over the long term, e.g., by eliminating the need to acquire resources, freeing up staff time, etc.

**Technical feasibility: Check all that apply**

The digital version can sufficiently represent the full content of the original.
Access and authentication can be provided using current institutionally supported technologies.
The Library has sufficient knowledge and expertise required for project development and ongoing maintenance.
The project will capitalize on existing technical infrastructure and capabilities.
The project will adhere to or contribute to the development of national digital library standards.
The project has potential to expand our technical knowledge and expertise.

Adapted from the University of Arizona's Digital Library Initiatives Group’s *Digital Project Development Checklist* (http://digital.library.arizona.edu/documents/development/checklist.rtf) and from the Brown University Library's *Digital Projects Selection Checklist* and Syracuse University Library’s *Digital Library Project Proposal Criteria Checklist*. 