Digital Content Life Cycle Revisited in 2010: A Review, and Recommendations to the University Librarian and the Library Executive Committee for Immediate Action

Report prepared by Beth Sandore, Tim Cole, Sarah Shreeves, Bill Mischo

The New Service Models program charged the Digital Content Life Cycle Management Group in Spring of 2008 to recommend the most effective ways for the University Library to manage, preserve, and provide access to Library-created digital content. Overall, the DCLCM report sought to identify ways to support these overarching principles:

§ Build highly usable and accessible digital collections to make resources available to as wide a range of University of Illinois researchers and students as possible;

§ Integrate discoverability of our digital collections with other library collections and services, particularly with the Library’s licensed/purchased content;

§ Coordinate activities centrally where possible and reasonable, enabling all units in the Library to take advantage of the available digitization services;

§ Continue to emphasize the important role that selectors and departmental units play in the entire process of digitization and digital content stewardship;

§ Provide collection-appropriate descriptive and technical metadata to enhance discoverability of digital collections and materials;

§ Adopt and apply standards and best practices consistently across all areas engaged in the creation, management, and long-term access to digital content;

In its October 2008 report, the DCLCM made specific and detailed recommendations in 6 areas. The principles articulated by the DCLCM remain valid today; however, over the course of past fifteen months since the Digital Content Life Cycle Management Report and recommendations were issued, the Library’s digital content management and access activities and needs have evolved and matured. The Library now has different points of need and a different set of resources to support and guide the work of digital preservation, digital access systems and services, and scholarly communications technologies, A review of the DCLCM recommendations (attached document) suggests that the Library has made limited progress toward supporting this evolving technology environment as it continues to produce and store an average of 2TB of locally-created digital content annually.

Updated Recommendations:

To substantially advance our progress on several of the specific recommendations of the DCLCM report and in order to further solidify the ways in which the Library works on digital library technologies to support services and systems Library-wide, we make the recommendations listed below.

As we move forward in our thinking, we feel it is important to put the groups, assignments, and responsibilities in place to support these critical aspects of the Library’s mission. It is important to move with a shared sense of direction that works well within the Library’s current organization
structure. Several of us have put our heads together to propose the title changes, the groups that need to be formed, and the ways in which those groups are envisioned to work within the Library’s current structure to achieve the goals of preserving and providing access to digital content, and building systems that support the access and scholarly communication commitments of the Library on behalf of the Urbana campus. Many professionals within the Library have invested thought into the suggestions that we present below. However, we understand and welcome the opportunity that broad review provides to identify, organize, and strengthen the proposed solutions to support the Library’s forward-looking goals. These solutions are dependent on sustained and collaborative technology support and development. The future of this development will require more effective use of limited resources. This proposal recognizes these real constraints by drawing on expertise from professionals already in permanent positions, and by forming groups that perform the desired work, and groups that guide that work with Library-wide input.

This document proposes that the Library’s Executive Committee review and approve several actions that seek to enable significant progress by doing the following:

1. Approve the revised charge (EC approved original charge in 2009) for a Repository, Scholarly Communications and Access Technical Team within the Office of Library IT (revised scope of work attached). This is a functional group of Library faculty and technical professionals who are focused on developing and supporting the systems and technologies that provide digital preservation and curation tools, management of Library digitized content, and access to that content.

2. Approve the requested title changes for several Library faculty and academic professionals whose scope of work includes significant contributions to technology development and support, and involves leadership roles in institutional research that is focused on access and preservation. The recommended title changes and responsibilities, and their involvement with various Library units and groups, are outlined in this document.

3. Approve the establishment of the Repository, Scholarly Communications and Access Services Advisory group as an advisory group that reports within CAPT. We understand that there is overlap between this new advisory group described below and the reconstituted CAPT, but we envision that the role of the advisory group will be focused specifically on repositories, digital content access, and support for scholarly commons applications and services.

Relationships:

It is important that the relationships across and among these groups and other groups and units in the Library be both clear and transparent Library-wide, so that it is well understood how direction is established, and how decisions are made.

Within the Office of Library IT there are several units and groups that develop and support Library technologies. The functional areas of Library IT comprise these activities:

- Development and support of production systems (i.e. SFX, ORR, IDEALS, ETD’s, BibApp, Voyager support, Library Gateway, Easy Search, Illinois Harvest, etc.)
- Development and support of experimental and research systems that are initiated with local or external support (includes partnerships with other Library units and campus/external collaborations). This includes MONK, OAI Registry and harvesting services, Archon, IMLS
This includes both Main Library and Grainger activities, regardless of the reporting relationships.

What is important is that the Library is in a position to establish an effective and efficient structure to provide successful, high-quality services and tools that address patron needs and the University’s mission. From an organizational standpoint, it is critical that the groups who are responsible for the production, development, and support aspects of Library IT have clearly-articulated goals, project plans, and reporting channels. This clarity of mission can provide both the Library and the AUL for IT with the evidence of their efforts, and the ways in which their contributions contribute to achieving critical Library priorities (as agreed upon by the AUL for IT working with the appropriate group for making a decision on the activity--ITPRWG, CAPT, or the Library Executive Committee). The work and decision-making in these proposed areas is guided by the IT Prioritization and Review Working Group (ITPRWG)—for individual and unit requests; the Library Executive Committee—for personnel and group appointments and charges; CAPT,—for Library-wide technology access needs; and the Library Budget Group—for budget-related needs.

Establishing Groups:

Digital Library Access, Repository, and Scholarly Communication Services Technical Team

In 2009 the Office of Library IT established a Repository and Scholarly Communication Services Technical Team. We would like to revise the scope of that team to include “digital library access” because at this point the development path for both digital preservation and access are on similar tracks. Further, the Library does not have sufficient numbers of IT staff or Library faculty to fill out two teams—one focused on repositories and one focused on access.

Background: The team’s original focus as approved by the EC in late 2009 was to provide the technical leadership and personnel to design, implement, and support a digital preservation repository for the Library’s digital content. Midway through the 2010 academic year it became clear that technical support was required for the Library to manage the workflows and the access to the digital content that it has been creating now for almost a decade (nearly 2TB annually). The Library needed to upgrade its digital content access systems (CONTENTdm) and make decisions about migrating content in other systems (e.g., DLXS) to systems that the Library could support. Concurrently, the Library committed to a partnership with the College of Fine and Applied Arts to aggregate visual resources for teaching and learning into a campus-wide digital visual resource collection, using ArtStor’s new image cataloging and management subsystem, Shared Shelf, which is slated to ease the local burden of supporting a digital content access and management systems as collections grow (long sentence). In spite of prudent planning and requests for appropriate staffing, it was clear that the Library did not have sufficient professionals to fill out a group to focus on digital content access and management, as we had originally planned. Further, we identified distinct overlaps between digital preservation and digital content access and management, especially at this development point for the digital repository, that suggested we combine the existing Repository and Scholarly Communications Services Technical Team with the rapidly depleted digital content access group to work together. Unfilled staff vacancies have left
unsupported the systems and the workflows for managing and providing access to Library digitized content. Tim Cole (Mathematics Librarian and formerly Interim Head of the Digital Services and Development unit) has provided leadership for this work on a time-permitting basis, providing guidance to Camilla Fulton (Assistant Web Services and Digital Content Access Librarian) and Zoe Chao (Visiting Illinois Harvest Librarian). In conversations with the stakeholders of these services, we evolved to the proposal for a Digital Library Access, Repository, and Scholarly Communication Services Technical Team. The Team is proposed as a functional group within Library IT, with the members of the team focused on development, implementation, support of and experimentation with digital content access systems, digital repositories, and scholarly communications systems and technology services. This functional team would also be responsible for supporting the technologies and the data capture and analysis to enable the usability research (regardless of which unit or librarian initiates the assessment) on these systems in order to enhance their functionality for the Illinois community of scholars at all levels. The Team is currently intended to work in close conjunction with the proposed Digital Library Access, Repository, and Scholarly Communication Services Advisory Group: (below), and it will also likely work in close partnership with the Scholarly Commons Coordinator and leads, as services in the SC develop.

The proposed Digital Library Access, Repository and Scholarly Communication Services Technical Team is intended to provide the technical leadership and staffing for the development, implementation, and ongoing maintenance of the infrastructure need to provide access to digital content, a production repository(s) for the preservation and management of digital assets and of the technical infrastructure needed to support scholarly communication services in the Library.

This group would be responsible for:

→ Maintenance, development, and implementation of the infrastructure for access to digital content including CONTENTdm, DLXS, and other systems as appropriate;

→ A production repository(s) for the preservation and management of digital assets in the Library;

→ Continued development and support of IDEALS and the Electronic Dissertation and Theses system;

→ Management of the technical interactions with external repositories like the Hathi Trust;

→ Development and support of the technical infrastructure for tools such as BibApp and the eScholarship tools developed at Grainger;

→ Investigation of and development of emerging technologies and infrastructures to support access to digital content, data curation, preservation of digital content, and scholarly communication services.

This group would be focused in large part on production Library-wide systems, but should routinely allocate a reasonable percentage (up to 15-20%) of time to involvement in the more research-
oriented and experimental work done within the Library and GSLIS around digital repositories and services (especially until a production system is up and running).

This group would be made up of the following staff:

→ A technical architect to provide leadership for the team and high level planning for the repository efforts and other technical infrastructure; would also participate in development. This position—Technical Architect for Repositories and Scholarly Communication Services—would have a reporting line to the AUL for IT Policy and Planning. (suggested 60% of Tom Habing’s time towards this)

→ A repository developer (Tim Donohue’s position—proposed as a permanent position) to provide the main development support for the repository infrastructure. This position would report to the Technical Architect.

→ A scholarly communication services developer (the visiting EScholarship and Data Curation position) to assist with the development support for the repository infrastructure with a special focus on the associated services such as BibApp and the eScholarship tools. This position would report to the Technical Architect.

→ The Research Programmer for Visual Resources

→ Digital Services and Development staff (the percentage of Camilla Fulton’s time devoted to this work)

→ The Metadata Librarian

→ A member of Library IT Infrastructure and Software Development

→ Participation from other areas of Library IT as appropriate

Formal and informal coordination and communication are needed, and will be sought by the members of this team as part of individual and group responsibilities. The individuals who have technical lead and program lead responsibilities for specific projects within the group are responsible for developing work plans and time lines, and communicating progress and performing critical path analysis for projects, including experimental as well as production work across Library IT and across units involved in technology development. For example, the work of Library IT-ISD on the BibBuilder bibliographic citation database system is germane to the work of this team, and it is natural for communication and coordination between the technical lead(s) for projects to interact on a regular basis. The Archon archival finding aid system, as well as the work on the ArchivesSpace project to develop a Next Generation Archival Management system is an important aspect of content access management that would naturally be an area for collaboration and coordination between University Archives, and the units in Library IT (IT/ISD and this team) that are engaged in the creation and production of Archival finding aids, the support of Archon and the development of its successor system.

→ In addition, this team would need to work closely with a range of individuals in the Library. The chief stakeholders, at least initially, would be: the IDEALS Coordinator, the Preservation Librarian, the Digital Content Access Librarian (Tim Cole), the Head of Digital Content Creation, a
representative from the Archives, the Manager of Library IT Infrastructure and Software Development and the Information Systems Research and Development Librarian (William Mischo). These stakeholders, particularly the IDEALS Coordinator, the Preservation Librarian, and the Head of Digital Content and Creation, would have the largest stake in the technical services provided by the team, the team, or at least the technical architect will need to work with these stakeholders regularly. It would be expected that this wider group (with others added as needed) would be responsible for setting the policies and guidelines necessary for the implementation of a digital access and preservation management plan. The team will report regularly to this group and the AUL for IT Policy and Planning on goals, progress, and accomplishments, and will be expected to complete an annual unit report as do other IT units.

Digital Library Access, Repository, and Scholarly Communication Services Advisory Group:

We recommend that EC approve the direction, and that CAPT establish the Digital Library Access, Repository, and Scholarly Communication Services Advisory Group --- a stakeholder group that guides the operational work of the Repository, Scholarly Communications, and Access Technical Team. This advisory group is responsible for setting priorities for the Digital Library Access, Repository, and Scholarly Communication Services Technical Team.

There is potentially a significant overlap in responsibilities between this advisory group and CAPT. We recognize that having both groups runs the risk of reinforcing the issues surrounding the existence of multiple groups of visionaries and not enough implementation people. Implicit in our recommendation to form this advisory group is the desire to identify a group focused on identifying operational priorities and guiding the work to completion.

The proposed advisory group would consist of the following individuals:

- Interim Head of Preservation (Jennifer Teper)
- Head of DCC (Betsy Kruger)
- Head of CAM (Michael Norman)
- IDEALS and Scholarly Communications Program Coordinator and Scholarly Commons Coordinator (Sarah Shreeves)
- Manager of Software Development (Tom Habing)
- Representative from Archives (Chris Prom)
- Representative from Library IT Infrastructure Management and Support (IMS) (Jason Strutz)
- Information Systems Research & Development Librarian (Bill Mischo)
- Digital Content Access Librarian (Tim Cole)

We note again that the recommended membership of this group has significant overlap with CAPT, and we believe it should be incumbent upon CAPT to recommend a workable solution to support this need. We note one further point that became apparent as we developed this proposal. While the chairperson of the Scholarly Communications Committee is a member of the proposed advisory group, there may need to be a stronger connection between this advisory group and the Scholarly Communications Committee, which plays substantive role in shaping the programs and services of the Scholarly Commons. One potential remedy to this situation would be to add another member of the Scholarly Communications Committee to the advisory group.

Assessment of the effectiveness of this structure
The University Librarian and the Library’s Executive Committee have requested that an assessment of the effectiveness of this structure be conducted at the end of one year. The leads of the technical team and the advisory group will work with the AUL for IT Planning and Policy to identify the areas for assessment and to conduct assessment and evaluation with stakeholders from the areas that are served by these teams. The assessment should be completed and submitted to the University Librarian by August 15, 2011.

**Proposed Title changes:**

*Normalizing ad hoc technical support for scholarly communications, digital content access and repository development, and ongoing systems research & development*

The proposed added assignments and job title updates listed below recognize ad hoc work arrangements that have been necessitated by the implementation of new services (e.g., EasySearch), accelerated pace of digitization, and Library participation in internal and external digital library initiatives (Google Books, ArtStor Shared Shelf, I3).

**Information Systems Research & Development Librarian (Bill Mischo)**

Responsible for design, implementation, and testing (including user studies) of designated Library public facing search and discovery systems. Includes Easy Search and associated discovery systems. Participates in the Digital Library Access, Repository, and Scholarly Communication Services Technical Team. Works closely with AUL for IT to identify and coordinate digital curation research opportunities, and the design and implementation of new user-focused digital systems.

**Half-time.** (Adds to existing assignment as head, Grainger Engineering Library)

**Manager of Software Development (Tom Habing)**

has overall responsibility for planning, implementation, and testing activities connected with development and implementation of Library's scalable digital repositories; works with all stakeholders to insure that technical and functional requirements are met. Participates in the Digital Library Access, Repository, and Scholarly Communication Services Technical Team.

**Full-time.**

**Digital Content Access Lead (Tim Cole)**

manages systems used by end-users to access locally digitized Library collections (e.g., CONTENTdm). Participates in the Digital Library Access, Repository, and Scholarly Communication Services Technical Team. Works closely with the Head of DCC, the Information Systems Research & Development Librarian and the AUL for IT: supports the Library's digitization initiatives, including experimentation and testing of new protocols and content management technologies; coordinates and facilitates Library faculty and staff pursuit of digital library research opportunities; supports delivery of digital access services and systems.

**Half-time.** (Adds to existing assignment as head, Mathematics Library)

**Digital Content Access Librarian (Camilla Fulton)**

Collaborates with DCAL to manage systems used by end-users to access locally digitized Library collections; identify, develop, and test new content management systems; support Library faculty and staff seeking to implement and develop new digital collections. Participates in the Digital Library Access, Repository, and Scholarly Communication Services Technical Team.

**Half-time.** (Replaces half-time assignment as Assistant Digital Services Librarian)
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<tr>
<th>Recommendation Area</th>
<th>Specific Recommendations</th>
<th>Current Priority</th>
<th>Implementation Status</th>
<th>New Cost</th>
<th>Implementation Team</th>
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<tbody>
<tr>
<td>1. <strong>Digital Content Selection</strong></td>
<td>a. Immediately, selectors and units with collection responsibilities, especially those holding unique or special collections, should be encouraged by Library Administration to develop and put on file written, forward-looking plans and recommendations (including clear rationales and justifications) prioritizing materials they feel ought to be digitized from their collections. This will facilitate planning and help the Library better comprehend the scope of future digitization needs.</td>
<td>Yes</td>
<td>Some progress</td>
<td>$TBD?</td>
<td>Tom Teper, CDC, Head of DCC, selectors</td>
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<td></td>
<td>b. Over the course of the next 6 months, the Office of Collections and the Head of Digital Content Creation, working with the advice and input of selectors, the Collection Development Committee, and campus groups such as the Illinois Digitization Initiative, should coordinate selection of content to be digitized from Library collections. This will help ensure better continuity and consistency in prioritizing and expending digitization resources.</td>
<td>Yes</td>
<td>Some progress</td>
<td>n/a</td>
<td>AUL for Collections; Head of DCC, selectors</td>
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<td>2. <strong>Digital Content Creation</strong></td>
<td>a. Over the course of the next 6 months and under the leadership of the Head of DCC, the Library should develop and promulgate internally standards and best practices for digital capture (internal and outsourced). Best practices will mandate a high and consistent level of digitization quality, adequate to support broad use and re-use of digital content and avoiding the need to re-digitize content in the future.</td>
<td>Yes</td>
<td>Some progress</td>
<td></td>
<td>Head of DCC, LSDWG</td>
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<td>b. As part of budget planning for FY10, the University Librarian, with the advice of the Library Executive Committee, should identify stable funding for DCC to support ongoing digitization. As soon as possible (i.e., even before start of FY10) this should include hiring or re-allocating another permanent senior civil service staff member to DCC (this person would be responsible for preparing materials being digitized at the OCA scanning center in Oak Street and being outsourced to vendors; regularly updating the OCA tracking database; upgrade bib and holding record information as needed; search copyright renewal records; assist the unit head in preparation of files for the print-on-demand program, and other duties as described in the position description being submitted now to the Budget Subcommittee), establishing annual DCC budgets for a consistent level of outsourced (e.g., OCA) digitization, for supplies, equipment</td>
<td>Yes, with revisions -- i.e., scaled back given the current budget climate.</td>
<td>Incomplete; DCC still operates largely on soft money.</td>
<td>UL &amp; EC</td>
<td></td>
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maintenance and replacement, and for undergraduate and/or graduate student assistants. The 33% GA currently assigned to IT-DSD could reasonably be reassigned to DCC effective 1 January 2009.

c. Longer term (i.e., in FY10, 11, or 12), the University Librarian, with the advice of the Library Executive Committee, should authorize through new hire or internal reallocation and retraining assignment of an individual to become a permanent static media digitization expert. This individual would be a counterpart (for different media) to the Media Preservation Coordinator (Emma Lincoln). The Library needs a professional with understanding of how to scan still images, photography, artwork, etc. with color correction, to adjust lighting conditions, etc., so as to create the best digitization result feasible. If the position were filled now, the logical placement would be in the DCC. However, if the position cannot be filled for some time, the Team leaves open the question of organizational assignment of this individual (e.g., to DCC, Preservation, or elsewhere).

Yes, pending significant revision to account for departure of Lincoln and changes in budget climate

On hold.

UL & EC -- i.e., academic staffing request

d. Starting immediately, DCC should commit time and effort on an ongoing basis to seeking external funding for digitization, collaborating with faculty both inside and outside the Library. This will leverage and enhance the Library’s ongoing investment in digitization.

Yes

Limited progress

Head of DCC, AUL for Collections, AUL for IT

e. Cost: Make permanent DCC’s FY’09 budget at $200k allocated for this fiscal year; static media digitization position (fill at the civil service or academic professional level): $35,000 - $45,000, new appointment of an Academic Professional, or re-assignment of existing personnel with funds allocated for backfill as needed;

No, needs to be reconsidered given current budget climate

On hold

UL & EC -- i.e., academic staffing request

f. On an ongoing basis, where it makes sense, the Library should look to consolidate digital capture under DCC; pursuant to this objective, effective 1 January 2009, the Library should move digital capture activities currently in Library IT Digital Services and Development (DSD) into DCC. Concentrated ongoing digitization insures the critical mass of work necessary to develop and maintain a critical center of expertise.

Complete

Head of DCC w/support from AUL’s

3. Coordination of Units Involved in Digital Content Life Cycle

a. Immediately, the University Librarian, with the advice of the Library Executive Committee, should charge a functional group—the “Digital ISCC (Integrated System Coordinating Committee)”—to be responsible for coordinating the digital

No, replaced by DCLC WG & DLAR&SC Team

Not adopted.
content and systems that exist to manage and deliver locally held and digitized digital content. This is necessary to coordinate aspects of digital life cycle beyond initial selection and capture (e.g., access, management, bibliographic control, preservation, etc.). The Digital ISCC should be set up as a functional working group of CAPT.

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<tr>
<th>Proposals</th>
<th>No, since Digital ISCC recommendation was not adopted.</th>
<th>Not adopted. Initial search failed with recommendations; now moot since Digital ISCC proposal is no longer recommended.</th>
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b. Appoint a Coordinator of the Digital ISCC who is also responsible for helping to oversee and define the processes and workflows necessary to accomplish the digitization and management of digital content from the Library and University’s assets. An individual invested in understanding and coordinating the end-to-end digital content life cycle is needed to keep digital content moving through the pipeline. A consensus was not reached on whether this should be a faculty or AP position, whether visiting hire, internal reallocation, or added duty, nor as to whether the role was full or part time. Peggy Steele is currently working with the unit heads directly involved to do a short-term assessment of the workflow coordination overall needs. **Cost:** New appointment of an Academic Professional, or re-assignment of existing personnel with funds allocation for backfill as needed; $46,000 – $55,000.

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<th>Structured for Technology Development: Digital Library Access, Management and Stewardship</th>
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<tr>
<td><strong>a.</strong> Over the coming year, Library IT should develop and implement a more inclusive and distributed approach to technology services that enables task-focused groups of IT professionals, Library staff, and faculty to concentrate on accomplishing strategic institutional priorities. This matrix approach to developing effective digital management, access, and preservation services for the Library. This approach is being used increasingly as the Library adopts New Service Models, and seeks to work more flexibly across the confines of existing unit boundaries to accomplish strategic goals. Recommendations <strong>4b, 4c,</strong> and <strong>4f</strong> call for such functional teams to be constituted immediately. <strong>Yes</strong></td>
<td><strong>Yes</strong></td>
<td>Significant progress. Partially satisfied by title and assignment changes proposed here &amp; results of RTG facilitated Library IT review. Additional changes still required</td>
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<tr>
<td><strong>b.</strong> By January 1, 2009, the AUL for Library IT and the Head of the Grainger Library should develop a formal plan for integrating the spectrum of technology activities of the Grainger Digital Library Initiative fully into the mainstream of Library IT operations and development. The current Grainger DLI team (which currently manages the production systems of Easy Search, Journal and Article Locator, and Illinois Harvest) should have responsibility initially for managing the production systems for digital content access, including CONTENTdm, DLXS, CWIS and similar systems now managed by DSD. This team will form the basis for the Library’s digital content access and management group, <strong>Yes</strong></td>
<td><strong>Yes</strong></td>
<td>Some progress, but slowed by deferred staffing; IT fee funded visiting positions will help speed transition and help us better understand long term needs.</td>
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including support for mass digitization. The Library should fill the Digital Library Research Programmer position (previous incumbent Matt Cordial) on a permanent basis, with a home base in this team and with strong links to IT-ISD. This position is being re-cast so that it supports mass digitization and digital access management systems. The Assistant Web Content and Digital Services Librarian, 50% in DSD, should be assigned to be a member of this team for the 50% time currently committed to DSD. Staff who are now part of the Grainger Digital Library Initiative will continue to report to their assigned supervisors. The alignment of services, priorities, and budgetary resources will occur with leadership from across the various functional groups in IT with vision and priorities set through the Office of IT. This will help build a better and more streamlined foundation for this group as part of a matrix Library IT organization mentioned above. As this team is set up, this will allow DSD to dissolve at the end of 2008 when the interim head steps down. (The DSD 33% GA should be assigned to DCC, as mentioned above.)

c. Change titles, held by Tim Cole, Chris Prom, and Bill Mischo, to reflect their involvement in and contributions to Library IT and digital library advancement.  

| Yes | Cole & Mischo addressed in this recommendation; still need to review job title & assignment of Chris Prom (and possibly others). |

d. The IDEALS program within Library IT should assume responsibility for the planning and development of a Library-wide digital content repository solution, as well as the scholarly services that will support long-term digital asset preservation and serve as a backbone for digital content access and management systems. IDEALS will work closely with and will include in these efforts a diverse team of stakeholders, including staff from Preservation, IT-ISD, the Grainger Digital Library Technology Group, collections and public services librarians, and campus stakeholders such as CITES, LAS, I3 and iCHASS. The Scholarly Commons service programs will have a strong dependence on the success of these efforts. Initially, the Library can support this work with a 2-year visiting research programmer hire, with expectation that this position will need to be made permanent. This work is critical to protect our already substantial investment in locally held and digitized digital content. The Team recognizes that IT-IDEALS is the best-suited area to initiate this activity, and also recognizes that as this effort evolves, elements more suited to Preservation may

| Yes, with revisions | Some progress; more pending outcome of this recommendation. Revised implementation plan, combining digital content access and management and digital preservation repository efforts; The group under formation is a combination of the Repository and Scholarly Communications implementation team and a nascent Digital Content Access Librarian, IDEALS and Scholarly Comm. Coordinator; Information Systems R&D Librarian; Technical Architect for Repositories & Schol. Comm. Svs.; working in consultation with AUL for IT |
be moved to that area, and the technology service development components may be amplified after the repository effort is addressed.

| e. | The AUL for IT should use the RTG facilitation process as a catalyst for the Library to evolve toward functional teams that collaborate on technology development, production, and support. The goal of this work is to prepare a large cross-section of Library faculty and staff to better support emerging new service models. | Digital Content Access and Management team. | Complete |

| f. | The Library should form an eScholarship Technology Services Group to provide online scholarly services and to involve the Library in the emerging eScholarship initiatives locally and with peer institutions. This group should draw its membership from CAM, University Archives, Preservation, Library IT, the Grainger Digital Library team, the emerging Scholarly Commons team, and other pertinent areas. This initiative will advertise the benefit of digital services and will help bring new and more robust digital services directly to our users. This initiative should coordinate closely with the emerging Scholarly Commons group. There is not full agreement on the role and the title of this group, and any ambiguities need to be worked through before this type of group can get off to a productive start. It is clear from the Team’s conversations that there is a concrete need for this kind of work to be organized in a functional cross-cutting group. The RTG process should include planning and discussion of this group and its role in collaborative technology development. | Yes, with revisions. | Delayed, pending revisions. This idea has morphed from the original recommendations, but nevertheless the thinking is moving in a positive direction, but slightly different, as group in 4d organize their work, and Scholarly Commons Coordinator & Leads launch programs in the SC. | ???? |

**Cost:** Fill the Digital Library Research Programmer position: $50,000-$55,000; Re-allocate the remaining two years of IDEALS funding from the Provost to hire a Repository Developer (programmer) position; re-allocate percentages of current technical staff time to this effort to form both groups mentioned in “b” above; Examine and re-define, if necessary, current technical and preservation roles to form a cohesive digital preservation team; Long-term: establish at least one new technical professional position dedicated to repository development and ongoing support.

<p>| Yes. | Progress anticipated soon. Addressing thru Vis. Res. Programmer BUT this is temporary funding (3 yrs.); Need to re-group in 24 mos. and determine long-term need/solutions. | AUL for IT in consultation with DCLCM group/CAPT |</p>
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<th><strong>5. Metadata Creation and Enhancement</strong></th>
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<td><strong>a.</strong> Before the start of FY10, the University Librarian and Executive Committee should authorize hiring a second metadata librarian (as originally planned) to better coordinate and advance metadata creation, remediation, and enhancement efforts. Without this additional support CAM, which must serve as the Library's primary coordinating body for metadata standards and best practices, will not be able to keep pace with the growth in digitization and amount of locally held digital content.</td>
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<td><strong>Cost:</strong> Second metadata librarian position: $46,000 – 55,000.</td>
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<tr>
<td><strong>Yes, but deferred and revised in recognition of current climate</strong></td>
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<tr>
<td><strong>Some progress pending this recommendation and visting programmer positions; Revisit before end of visiting programmer appointments</strong></td>
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<tr>
<td><strong>AUL for IT, ISR&amp;D Librarian, UL &amp; EC in consultation with CAPT and other stakeholders</strong></td>
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<th><strong>6. Digital Preservation</strong></th>
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</thead>
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<tr>
<td><strong>a.</strong> Immediately, the University Librarian and Executive Committee should authorize a search for a new Head of Preservation. An effective digital content preservation program cannot come into being with this critical position unfilled.</td>
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<tr>
<td><strong>Yes</strong></td>
</tr>
<tr>
<td><strong>No progress</strong></td>
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<tr>
<td><strong>UL &amp; EC, Head Content Access</strong></td>
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| **b.** The new Head of Preservation should be tasked to develop in collaboration with Library IT and other stakeholders a phased plan for putting in place a digital preservation plan appropriate to quality and significance of our digital holdings, present and anticipated. This plan will leverage the digital repository work mentioned in 4d and will describe a way to get from where we are now to where we should be, identifying resources and critical dependencies. |
| **Yes.** |
| **In process, post NEH DP workshop in April 2010** |
| **Head of Preservation; Repository Implementation Team** |

| **a.** Cost: $55,000 to $70,000 |

Other costs are $0 for now; by FY ’10, however, there will be better-defined needs for technical development to support ongoing programs that are not currently defined (data curation, scholarly communications service tools and support applications; e-science applications development; media support and management); long-term, these efforts may require the re-allocation of current resources mixed with new lines to support up to five new professional positions that are focused on technical development to support digital library services.