PROJECT CHARTER
KUALI OLE (Open Library Environment)

October 2009

I. MISSION

The mission of this project is to develop a sustainable Kuali system that provides academic library management services for higher education. It will use the legal umbrella of the Kuali Foundation, adhere to the Kuali licensing guidelines, and use the Kuali middleware, infrastructure, tools and processes.

This Charter shall provide overall guidance for the project and any changes must be approved by the Kuali OLE Project Board.

II. OBJECTIVES and SUCCESS FACTORS

A. **Objectives**

1. Develop and deliver a system that delivers functionality as defined in the scope section of this document. The system is intended to focus on needs of academic libraries within higher education, for all Carnegie class institutions, including those with medical schools, professional schools, and consortial library management arrangements.

2. Create a governance structure based upon other Kuali projects that manages scope, resources, and timelines effectively.

3. Design the system so that the components are modular and interoperable. These modular components may then be implemented as a complete system, integrated with other systems, or phased in over time.

4. Ensure the system is sustainable over time. Consider and work to develop enhancements that governing institutions will desire.

5. Provide a healthy ecosystem for commercial partners to become successful either as integrators or providers of services for the Kuali OLE Project.

6. The system will be designed in such a way it facilitates the changing requirements and environments of higher education institutions without requiring major programming changes and frequent complete version releases.

7. Kuali OLE will use previously existing components as much as possible, including the Kuali Rice middleware modules, documentation that is created by Kuali partners, and open-source discovery interfaces.

B. Success Factors

1. Delivery of releases, in scope and timeline, as agreed upon by the Board, Functional Council, Technical Council, and Development Team.

2. Implementation of library acquisitions, electronic resources management, and discovery interface broker by at least five institutions within two years after release of Kuali OLE 2.0.

3. Business model for Commercial Affiliates (CAs) that allows a healthy ecosystem for inclusion of enriched data service feeds from a variety of library and other commercial vendors. The system will be designed in such a way that it can be adopted by a broad set of customers in higher education and can scale down to meet the needs of any Carnegie Class Institution and will, therefore, be constructed in such a way that it can be supported as a Cloud Computing service or as a Software as a Service (SaaS) model by Commercial Affiliates (CAs).

III. SCOPE and TIMELINE

A. Scope

The overall scope of this project is to develop and sustain a Kuali Open Library Environment (OLE) for enterprise-wide support for academic library management services for higher education. Because the boundaries of a typical library management system are not always clear, the below modules are considered key components.

It is recognized that many institutions currently have enterprise-wide financial management systems in place that operate with or in parallel to their library management system financial module. Kuali OLE will be designed to have core integration with enterprise-wide financial systems. However not all institutions who implement Kuali OLE will implement Kuali Financial System (KFS). It is our expectation that the default back-end for financial processing for Kuali OLE will be the Kuali Financial System.

The below are listed in phases according to expectations for timeline of delivery. Phase 1 is being constructed to focus primarily on the actions required to implement the Acquire, Describe, and Delivery Entity functions needed to replace many current library management systems in use at partner sites; these will be specified and prioritized by this project's Functional Council.

This is a modular system, utilizing the Service Oriented Architecture (SOA) based Kuali Rice Enterprise Service Bus technology components, both current and future. These currently include Kuali Enterprise Workflow, Kuali Service Bus, Kuali Identity Management, Kuali Enterprise Notification, and Kuali Nervous System. It is this SOA based design that will enable libraries to choose to use certain modules or not, and also possibly phase in their implementation over time.

The full scope is listed in Appendix A of this document. The detail list of functions for Phase 1 is listed in Appendix B.

B. Timeline

It is expected that from project kick-off to the delivery of the Phase 1 scope should be no more than 2 years. This timeline is dependent upon the number of investing partners, the level of

resources provided by those partners, the ability to enable the governance structure in a timely fashion, securing matching funding from outside the partnerships, and the time required to get the build specifications to the outsourced developers.

IV. GOVERNANCE AND ROLES

As with other Kuali Projects, the following roles will be filled and will provide governance for this project.

1. Project Board. Each founding partner shall have one seat on the Project Board. The Board will provide overall guidance to the Project, ensure that the elements of the Project Charter are met, and assist when issues arise which cannot be addressed by the Project Manager, Technical Council, or Functional Council. A Chair and Vice-Chair shall be elected by the Board. The Chair, or the Vice Chair in the Chair's absence, shall convene meetings, manage agendas, hold votes as needed, and ensure communication transparency. It is recommended that the lead for each council as well as the Project Manager serve as ex-officio members of the board in order to provide adequate communication between the board members and the overall management of the project.

2. Lead School. This is the institution that will take the lead in moving the project forward to the Kuali Foundation Board, and be the lead in advocacy for the project and recruiting additional partners and resources if needed. If possible, the Project Manager should be an employee of the Lead School.

3. Functional Council (FC). Each founding partner shall have one seat on the Functional Council. The Functional Council will be responsible for scope details, prioritization, and detailed specifications. They convene small-targeted subject matter expert (SMEs) groups as needed to inform the build specification plan. A Chair shall be appointed by the Board, and will convene meetings, manage agendas, hold votes as needed, and ensure communication transparency. The Chair shall also work closely with the PM to address resource and scope issues.

4. Technical Council (TC). The Technical Council will have one member from each founding partner institution. The Technical Council will be responsible for the technical architecture and implementation of the detailed functional specifications that are created by the Functional Council and the subject matter experts. The Technical Council can convene small-targeted sub-groups as needed to deliver the technical specifications needed for the project. A Chair shall be appointed by the Board, and will convene meetings, manage agendas, hold votes as needed, and ensure communication transparency. The Chair shall also work closely with the PM to address resource and scope issues.

5. The Project Manager (PM) is responsible for task and resource management. The PM works closely with the FC Chair to address resource and scope issues. The PM is a committed resource paid for from Kuali OLE funds and should come from the Lead School if possible.

6. Committed Resources. These resources would include Development Managers, Developers, QA Managers and Testing Coordinators, Business Analysts, Functional and Technical Documenters, etc. All of these resources are committed 100% to the project by investing partners in the two-year development phase of this project; however, for long-term sustainability many of these positions may revert to or become part-time committed positions from any or all of the Kuali OLE Partners during or after the two-year development phase of this project.

7. <u>Tendered Subject Matter Experts (SMEs)</u>. These functional resources are assigned on a part-time basis by investing institutions to do requirements analysis, complete specification documents, and perform functional testing. Some investing partners may tender more SMEs for certain areas and less for others, but on balance, it should be fairly equal among investing partners.

8. It is expected that because this project will be a significant enterprise wide application within the Kuali Foundation, that the Kuali OLE Board will receive and reciprocate shared representation on Boards, Committees, Working Groups and other governance entities. The Kuali OLE Project will work with the Kuali Foundation to determine if and when there should be representation by Kuali OLE on Boards, Committees, and Working Groups such as:

   --Kuali Rice Technology Roadmap Committee, and associated subcommittees
   --Kuali Rice Application Roadmap Committee, and associate subcommittees
   --Kuali Rice Board
   --Kuali Foundation Board
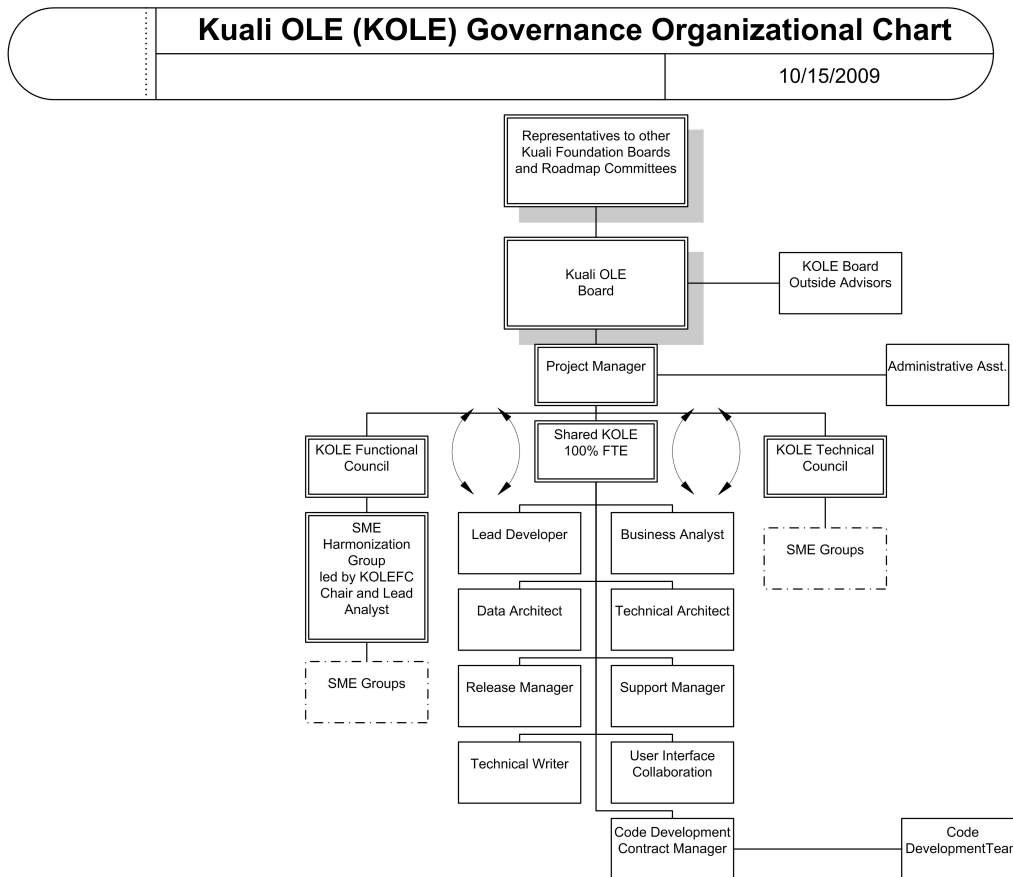
Figure 1. Kuali OLE Governance Organizational Chart

V. FOUNDING PARTNERS

In the same model as with the Kuali Coeus Project, Kuali OLE intends to have founding partners provide committed resources and cash contributions to the project; however, the main component of software development will be outsourced to a software development company. The founding partners consist of the following organizations (Indiana University, Florida Consortium (University of Florida (lead), Florida International University, Florida State University, New College of Florida, Rollins College, University of Central Florida, University of Miami, University of South Florida, and The Florida Center for Library Automation)), Lehigh University, Triangle Research Libraries Network on behalf of Duke University and North Carolina State University, University of Chicago, University of Maryland, University of Michigan, and the University of Pennsylvania). Six founding partners will contribute $319,638.00 in cash resources and equal amounts contributed staff time to the project over its two-year period, except for the Triangle Research Libraries Network Consortium which will contribute $419,638 in cash contributions and equal amounts part-time FTE and the University of Michigan who will contribute a cash-only investment of $200,000.00 (as part of this arrangement the University of Michigan will be an equal partner in all aspects of this project except that they will be a non-voting member of the board). The total developer years for the investing partners listed below would be 38 person years. Cash contributions will be a primary component of the committed resources; outsourced developer and analyst salaries will be set at a "standard rate" that is consistent with the outsourced software development that will be handled by a trusted commercial development firm. Founding partners must also contribute significant functional resources in addition to the technical staff. Functional resources are required for doing business process analysis, writing specification documents, doing testing, doing user documentation, etc. It is expected that the overall functional contribution will be nearly the same FTE as the technical contribution, but neither will require full-time staff outside of the jointly hired shared positions which will be funded from direct cash contributions.

> **Founding Partners are:**
> --**Indiana University (Lead School)**
> --**Florida Consortium (FC)** (University of Florida (lead), Florida International University, Florida State University, New College of Florida, Rollins College, University of Central Florida, University of Miami, University of South Florida, and the Florida Center for Library Automation)
> --**Lehigh University**
> --**Triangle Research Libraries Network** for Duke University and North Carolina State University
> --**University of Chicago**
> --**University of Maryland**
> --**University of Michigan**
> --**University of Pennsylvania**

A letter of intent will be executed by all founding partners to describe their individual commitments to this project (See Appendix D). In addition, each founding partner whose institution is not currently a member of the Kuali Foundation will join at the respective member rates (http://www.kuali.org/about/members.html).

The two-year development phase of this project will be supplemented by funding from The Andrew W. Mellon Foundation. The overall budget for that two-year period follows in Figure 2.

Project Costs		Year 1		Year 2	Total
OLE Project Total		$1,894,581		$3,032,993	$4,927,574
Mellon Foundation Contribution		$932,088		$1,458,022	$2,390,110
Partners Investment in OLE Project		$962,493		$1,574,971	$2,537,464

Budget Revenue from OLE Project Partners					
Founding Partners	**Partners**	**Year 1**	**Partners**	**Year 2**	**Total**
Indiana University	1	$111,728	1	$207,910	$319,638
Lehigh University	1	$111,728	1	$207,910	$319,638
Triangle Research Libraries Network	1	$111,728	1	$207,910	$319,638
University of Chicago	1	$111,728	1	$207,910	$319,638
University of Pennsylvania	1	$111,728	1	$207,910	$319,638
University of Maryland	1	$111,728	1	$207,910	$319,638
Florida Consortium (FC)	1	$111,728	1	$207,910	$319,638
Founding Partners' Contribution	**7**	**$782,096**	**7**	**$1,455,368**	**$2,237,464**

Founding Partners	Partners	Year 1	Partners	Year 2	Total
University of Michigan	1	$100,000	1	$100,000	$200,000
Triangle Research Libraries Network	1	$50,000	1	$50,000	$100,000
Founding Partners' Contribution	**2**	**$150,000**	**2**	**$150,000**	**$300,000**
Total Partners Investment		**$932,096**		**$1,605,368**	**$2,537,464**

Figure 2. Kuali OLE Two-Year Development Budget

VI. SUSTAINING THE KUALI OLE COMMUNITY

Sustaining the output of the Kuali OLE project beyond the two-year development phase will be a critical aspect of the community commitment to and adoption of Kuali OLE both as a library management system and as a collaborative community source organization. The ongoing resource needs of Kuali OLE will require a business model that can provide support to ease adoption and migration by new adopters, that can generate and coordinate development efforts to enhance and extend the Kuali OLE software, and that fosters discussion, shared understanding, and solutions within the community of practice. To achieve this sustainability, a significant effort by the founding partners will be marshaled over the life of the Kuali OLE build project to develop high quality software, robust and actionable documentation, and significant integration with enterprise, domain, and other library specific systems needs. These characteristics will make for software that is compelling and attractive to potential adopters, and provide solutions to business issues faced by universities and research institutions and their libraries. But building innovative software alone will not guarantee a sustainable effort. The viability of Kuali OLE depends on addressing the

originating motivations for the Kuali OLE project – low vendor-driven innovation rates, inflexible workflows, maintenance costs, lack of enterprise and domain integrations, and relevancy to the needs of academic and research libraries – and on incubating a community of libraries to adopt, support and extend the Kuali OLE software. Therefore, Kuali OLE Founding Partners must ensure that appropriate and sufficient funding and resources are available to continue the Kuali OLE software and to extend its community governance model to other academic libraries. This objective will be a high priority for the Kuali OLE Board.

What would a Kuali OLE community look like? It would be a growing number of partners and adopters implementing the Kuali OLE software, creating and operating library services, and contributing to the strength of the code and the direction of the software. This community would be a strong advocate for widespread adoption of community developed standards and practices and the tight, but loosely coupled, integration that they enable. Furthermore this community would enjoy the benefits of these efforts and would participate in the governance of their direction. The Kuali OLE community would support these efforts by infusing cash resources and dedicated staff into the project to leverage quality delivery and enhancement of software, support for wider adoption of that software within the academic and research library community, and to promulgate the innovation of implementing partners. The Kuali OLE Board will need to consider and pursue options to fulfill these ambitions that may include additional grant funding, fees from extended adopters and partners outside of the founding members, coordination of staff from partner sites to focus on Kuali OLE development and support, as well as additional external funding options.

The challenge for the Kuali OLE community will be in extending the Kuali OLE community to current Kuali Foundation Members and other interested academic libraries. The Kuali OLE Board and the Kuali OLE Project Manager will be active in identifying libraries as potential implementers and supporting their adoption, and would strongly advocate the benefits of the Kuali OLE community for solving business problems in library information management. In addition, the Kuali OLE community would provide opportunities for universities, libraries and other 3rd parties, including commercial entities, to provide development, support and integration services to the growing Kuali OLE community. This will be accomplished through the Kuali OLE Project Manager leading the support and extension of Kuali OLE through member-committed resources, as well as active participation in Kuali Days as the meeting of choice for Kuali OLE technical information sharing. These 'in-kind' efforts, missing from current proprietary integrated library systems solutions, would encourage the community to leverage the Kuali OLE framework to offer solutions to shared problems, to find new types of partnerships built on Kuali OLE services, and to contribute to the overall vitality and sustainability of the Kuali OLE efforts.

Sustainability therefore, is dependent on developing a capable framework of software and services, fostering financial and in-kind commitments from new partners, and on providing a framework for innovation and solutions in the management of academic and research libraries. The strong, core partnership of eight founding partners will be a catalyst of change within the library management systems community, with ample time to secure new partnerships and investments for long-term sustainability of the Kuali OLE community.

VII. GUIDELINES

As with other Kuali Projects, the following guidelines shall be followed.

1. <u>Licensing</u>. This project, as part of the Kuali Foundation, will use the Educational Community License V2.0, or its successor open source license as determined by the Kuali Foundation Board. The Educational Community License (ECL V2.0) consists of a set of copyright licensing terms that may be found at http://opensource.org/licenses/ecl2.php. The ECL was certified by the Open Source Initiative in April of 2007.

2. The Golden Rule: "those who bring the gold make the rules." Defined in the governance structure above, those founding partners who provide resources have seats at the table on the board and functional council.

3. Functionally Driven. The project is driven from functional needs. Technology supports the functional vision and functional deliverables.

4. Use of existing model(s) or system(s). As much as possible, the system is based upon existing systems or models, although specifications and technologies will need to be brought up to date and revised in order to meet functional needs.

5. Financials. All financial (cash) investment resources will be held in the Kuali Foundation accounting system, but will be used at the discretion of the project manager and project board.

6. Technology. The project will use the Kuali Rice Middleware, Fluid User Interface Toolkit, and associated components of the Collection Space Project including all tools, development standards, methodologies, etc.

APPENDIX A: List of Kuali OLE Functionality

The Kuali OLE Reference Model is an abstract representation of the Open Library Environment framework that was created under the auspices of a planning grant made possible by The Andrew W. Mellon Foundation. As such, it describes the high-level functional components that will form the basis for Kuali OLE. Each of these components is made up of a number of workflows and / or processes. A workflow is a series of activities that involve people, business processes, and software that achieve a library business goal. For example, the Kuali OLE component Describe Entity is comprised of the processes Obtain Metadata, Create Metadata, Modify Metadata, Delete Metadata and Expose Metadata.

Additionally, the reference model (figure 1. shown below) provides examples of third-party components that Kuali OLE will interoperate with. These are reusable services, not developed or supplied by Kuali OLE, that fulfill an OLE business process. The components that straddle the boundary between Kuali OLE and third-party components represent the functions that will be provided partly by Kuali OLE and partly by other Kuali software or third-party components.

The reference model includes the entities that have so far been identified as belonging in the Kuali OLE framework. These are resources, collections, persons, organizations, and services. Finally, the bottom portion of the Reference Model illustrates the software that will manage and connect Kuali OLE components. It is this middleware that will provide interoperability with third-party applications.
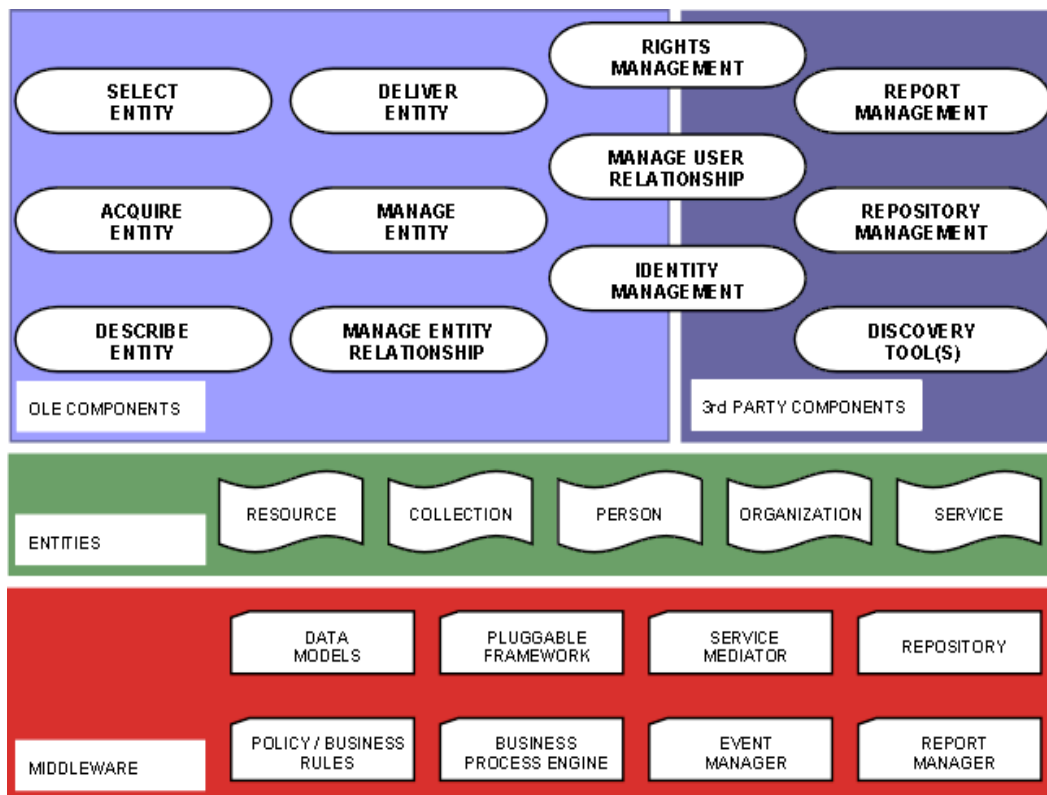
Figure 2. Kuali OLE Reference Model

Core OLE Components

1. Select Entity

Definition: Describes the processes that support the trial and/or acquisition of an entity. This may be for temporary or permanent inclusion in the environment. Metadata to describe the entity is created and/or obtained.

Select Entity is comprised of the following sub-processes that are described below:

- Obtain Metadata
- Create Metadata

Use Cases: Create list of potential resource needs, place in "shopping cart". Could contain gifts, approval plan items, firm orders, interlibrary loan requests, reserve requests, remote location requests, publication references, trial databases.

Sub-Process Title: Obtain Metadata

Definition: Process where metadata is obtained, when available. The metadata obtained will support the activity that leads to the decision to select or reject an entity for inclusion in the environment.

Use Cases: Metadata being obtained may include descriptive (e.g. a review of the entity), holdings (e.g. what is available and being considered for acquisition), authority, financial, or other types. The metadata may be harvested from or deposited by another system.

Sub-Process Title: Create Metadata

Definition: Process where metadata is created to supplement that which was obtained or when metadata is not available to be obtained. The metadata created will support the activity that leads to the decision to select or reject an entity for inclusion in the environment.

Use Cases: Metadata being created may include descriptive (e.g. a review of the entity), holdings (e.g. what is available and under consideration for acquisition), authority, financial, or other types. The metadata may be entered real-time.

2. Acquire Entity

Definition: Describes the OLE component whereby an entity is selected for acquisition. Associated license/registry terms are managed and documented within the system. The entity is described in the system and an order is created for acquisition. The entity is received and paid for upon receipt from the supplier.

Note: An entity order may include orders for multiple items and may be a blanket order or approval plan that is based on desired entity criteria. Entities may be acquired through donation. Entities may be acquired temporarily as on a trial basis within a set time frame.

Acquire Entity is comprised of the following sub-processes that are described below:

- Identify Supplier
- Manage Terms of Acquisitions & Use
- Manage Funds
- Commit Funds
- Order Resource
- Schedule Event
- Track Event
- Receive Resource

Use Cases: An entity is selected for the collection. A supplier for the entity is assigned. Funds for the purchased entity are encumbered. System schedules claiming cycles and allows re-encumbering of funds at the end of the fiscal year. System tracks the order status to fulfillment or allows for an aborted order request if entity cannot be fulfilled. The invoice process and payment activity may be executed manually or electronically and interface with institutional finance system. Payment may be made by using protocols such as: EDIFACT; ANSI X12, XML EDI.

Sub-Process Title: Identify Supplier

Definition: Describes the process whereby a supplier is identified for the purposes of acquiring an entity.

Use Cases: The supplier is assigned to an order request – could be an automated process when applied to the supplier registry or a manual process in which a new supplier is added or ingested into the systems supplier registry.

Sub-Process Title: Manage Terms of Acquisitions & Use

Definition: Defines the services required to manage acquisitions processes. Documents the review process for terms of agreement associated with the usage of acquired entities.

Use Cases: Metadata for entity is created with pending status. Tracking begins as negotiations and/or evaluation of trial take place. The final selection decision is recorded and pending status is removed.

Sub-Process Title: Manage Funds

Definition: Process supported by the system to make payment for a service or product. Included in this process is a log trigger and log response; the system records the usage of service or product for audit, reporting or billing purposes.

Use Cases: Invoice process and payment activity may be executed manually or electronically. Process whereby the invoice payment in the library system interfaces with institutional finance system. Payment made by using protocols such as: EDIFACT; ANSI X12, XML EDI. Therefore invoices may be received via EDI transfer to the library system and upon delivery be processed in the system. Print invoices received through email or mail may be processed manually in the system.

Sub-Process Title: Commit Funds

Definition: Describes the process of encumbering funds from the appropriate budget for the purchase of a selected entity. The process incorporates guidelines for fund assignment when ordering an entity.

Use Cases: Authorized user may encumber funds during ordering process.

Sub-Process Title: Order Resource

Definition: Obtain collection resources, with associated functions to manage providers. In the case of acquiring digital material it is a process whereby a system manages content in order to bring it into a collection. Note: includes orders for multiple resources and may be a blanket order based on policy/criteria; resources may be acquired by donation, firm order, approval plan, etc.

Use Cases: Obtain metadata for entity orders. Identify appropriate supplier for the requested entity. If the order is a purchase request, encumber the funds to cover payment for the entity. Determine appropriate means for distributing order request (EDI, email or mail).

Sub-Process Title: Schedule Event

Definition: Schedule event process based on policy implemented by the workflow engine. Provides check interval and deadline for certain actions within the Acquire Entity, such as claim and audit.

Workflow/Process Diagrams: There are no workflow/process diagrams because this process will be taken care of by the middleware.

Use Cases: Set claim cycle for outstanding orders; set cycle to re-encumber funds for outstanding orders at end of fiscal year.

Sub-Process Title: Track Event

Definition: Process that enables selectors to track where resources are at any given point in acquisitions workflow. Includes circulation internally or externally, as well as the movement of items for exhibition, preservation management or repository management purposes.

Use Cases: Manage entity through acquisitions process.

Sub-Process Title: Receive Resource

Definition: Describes the process of receiving, describing and paying for an entity that fulfills an order request.

Use Cases: Search system for order record. Confirm that the acquired entity fulfills the order request in the system. Obtain metadata for the entity if it is not already in the system. Logging receipt of an item in the system triggers the invoice payment/manage funds processes.

3. Describe Entity

Definition: The processes used to obtain, create, modify, delete, or expose metadata for an entity. Entities can include resources, collections, people, organizations, services, events, courses, facilities, finances, relationships, etc. Entities can be electronic/digital or physical. Entities can be held/maintained locally or remotely. Metadata will identify the entity, and can be descriptive, structural, technical, and/or administrative. Metadata can be entered in real-time, via a batch process or harvested from another repository. Metadata may change over the entity's life-cycle as additional information is gathered or the entity's use, role, or purpose evolves. Metadata will generally be encoded using XML and will generally conform to an identified metadata content standard. The Describe Entity Process is independent of application end point, resource, data object, or underlying communications protocols and service models.

Describe Entity is comprised of the following sub-processes that are described below:

- Obtain Metadata
- Create Metadata
- Modify Metadata
- Delete Metadata
- Expose Metadata

Use Cases: Metadata-related activities can occur for any resource within a collection, at any point of interaction with the entity. These may include:
- Identification and selection of a new resource into the repository either with or without existing metadata;
- Addition of harvested metadata in the repository;
- Activities or life-cycle changes involving an entity that require recording or modifying information about the entity (i.e. reformatting, conservation / preservation, additional holdings, expanded description, retention decisions, provenance information, removal of either metadata or an entity with associated metadata from the repository , etc.);
- Activities identified by other Process Use Cases that require creation of or changes to existing metadata.

Sub-Process Title: Obtain Metadata

Definition: The process used to acquire information about an entity. Entities can include resources, collections, people, organizations, services, events, courses, facilities, finances, relationships, etc. Entities can be electronic/digital or physical. Entities can be held/maintained locally or remotely. Metadata will identify the entity and can be descriptive, structural, technical, and/or administrative. Metadata can be entered in real-time, via a batch process or harvested from another repository. Metadata will generally be encoded using XML and will generally conform to an identified metadata content standard. The Obtain Metadata Process is independent of application end point, resource, data object, or underlying communications protocols and service models.

Use Cases: Metadata is obtained for resource discovery, supporting the management of entities by administrators or curators, ensuring the long-term maintenance and availability of entities, recording information such as provenance, ownership, copyright, access conditions, etc. Acquiring/obtaining metadata activities can occur for any entity being added to a collection, or to obtain additional/related information for an entity already within a collection. Activities may include:
- Identification and selection of a new resource into the repository either without existing metadata; for example adding a new e-book; adding a review of an existing book to link to

an existing descriptive metadata object; adding a new database; importing profile information about a new person to an organization, etc.
- Addition of harvested metadata in the repository;

Metadata can be imported through protocols such as EDI transactions, ftp transfer, OAI harvesting, etc. Metadata is captured/deposited, validated and saved in the repository. Metadata being obtained may include descriptive, holdings, authority, financial, structural, and administrative or other types of data.

Sub-Process Title: Create Metadata

Definition: The process used to generate information about an entity. Entities can include resources, collections, people, organizations, services, events, courses, facilities, finances, relationships, etc. Entities can be electronic/digital or physical. Entities can be held/maintained locally or remotely. Metadata will identify the entity and can be descriptive, structural, technical, and/or administrative. Metadata can be created in real-time or via a batch process. Metadata will generally be encoded using XML and will generally conform to an identified metadata content standard. The Obtain Metadata Process is independent of application end point, resource, data object, or underlying communications protocols and service models.

Use Cases: Metadata is created (using templates, extraction tools, mark-up tools, conversion tools) for: resource discovery (what is available, where it is located and how it is used), supporting the management of resources by administrators or curators, ensuring the long-term maintenance and availability of resources, recording provenance, ownership, copyright, access conditions, etc. Metadata being created may include descriptive, holdings, authority, financial, structural, and administrative or other types of data.

Sub-Process Title: Modify Metadata

Definition: The process used to alter information about an entity. Entities can include resources, collections, people, organizations, services, events, courses, facilities, finances, relationships, etc. Entities can be electronic/digital or physical. Entities can be held/maintained locally or remotely. Metadata will identify the entity and can be descriptive, structural, technical, and/or administrative. Metadata can be modified in real-time or via a batch process. Metadata will generally be encoded using XML and will generally conform to an identified metadata content standard. The Modify Metadata Process is independent of application end point, resource, data object, or underlying communications protocols and service models.

Use Cases: Metadata is modified for resource discovery, supporting the management of entities by administrators or curators, ensuring the long-term maintenance and availability of entities, recording information such as provenance, ownership, copyright, access conditions, etc. Metadata alteration activities can occur for any entity in a collection, to add additional/related information, or to delete incorrect or outdated information not needed for historical/audit purposes. Metadata can be added to or revised by creators/users at various stages in an existing metadata object's life-cycle. Metadata can be updated on an object-by-object basis or in batch processes modifying large quantities of metadata. Metadata being modified may include descriptive, holdings, authority, financial, structural, and administrative or other types of metadata.

Sub-Process Title: Delete Metadata

Definition: The process used to remove information about an entity. Entities can include resources, collections, people, organizations, services, events, courses, facilities, finances, relationships, etc. Entities can be electronic/digital or physical. Entities can be held/maintained locally or remotely. Metadata will identify the entity and can be descriptive, structural, technical, and/or administrative. Metadata can be deleted in real-time or via a batch process. Metadata will generally be encoded using XML and will generally conform to an identified metadata content standard. The Delete Metadata Process is independent of application end point, resource, data object, or underlying communications protocols and service models.

Use Cases: Metadata of any type is permanently removed, supporting the management of entities by administrators or curators. Metadata deletion activities can occur for any entity in a collection, to delete incorrect or outdated information not needed for historical/audit purposes. Metadata deletion occurs at the end of an entity's life-cycle. System should allow for metadata to be removed manually or in batch processes, removing either single metadata objects or large numbers of metadata objects. Metadata being deleted may include descriptive, holdings, authority, financial, structural, and administrative or other types of metadata.
For example, a library withdraws a portion of its serial print collection due to online availability. The metadata for the print collection is permanently removed from the system—item records are deleted, holdings records are deleted and bibliographic records are removed.

Sub-Process Title: Expose Metadata

Definition: Process where metadata has been made available for capture.

Use Cases: Metadata being exposed could be 1) financial, 2) information about physical resources (e.g. which computers are open for use; which group study rooms are open for use), or 3) information about your staff member's expertise. It could also include bringing information back into the system (e.g. a book description is exposed, patron adds a review which goes back into the system, and book description is re-exposed including the review.)

4. **Deliver Entity**

Definition: The Deliver Entity component describes processes that track the request and supply of a resource. It includes processes that initiate and receive the request, identify the user requesting the resource, check and verify the user's credentials, and determine availability and terms of use of the resource requested. A message is sent to the user whenever a condition is not met. The resource is supplied if all conditions are met.

Deliver Entity is comprised of the following sub-processes that are described below:

- Request Service
- Identify User
- Identify Terms of Use
- Supply Entity

Use Cases: Request being created will take into account the completeness of the request, user eligibility, and preconditions of use.

A user placing the request is authenticated and authorized. The user could be a person using a computer, the computer itself, or a computer program and could use protocols such as LDAP, Shibboleth, Secure Shell Keys, and Certificates.

The resource could be print or electronic, both returnable and consumable, an original or a copy, local, consortial, purchased on demand or external to institutional ownership, retrieved from the library and checked-out onsite or delivered to another location (library, office, desktop, off-campus site.)

The requested resource is checked for availability, access attributes, and usage fees. For example, do the resource attributes allow access by the requestor, such as enrollment in a course or membership in a university or consortium? Must the resource be returned within a specified timeframe or used in the library? Are there other preconditions such as copyright, usage fees, or limits on number of simultaneous uses?

Sub-Process Title: Request Service

Definition: Describes the process where a user submits a request for a service or resource. The user may submit the request in person at a circulation desk, directly from a metadata record in a licensed or open access database, or by filling out a free text web form.

Use Cases: A user is conducting research in a bibliographic database and identifies an article she would like to read. The full text of the article is not available online in the database. She clicks on a request button and submits a request for access to the entire article.

A professor recommends an article to a student. The student goes to his library's website, locates and fills out an interlibrary loan web request form, and submits a request for the article.

A student is searching his library's catalog and locates a book that's located in a remote storage facility. He clicks on a request button and submits a request to have the book delivered to his local campus library.

A student is searching WorldCat and locates a resource that is not owned by his college library. He clicks on a request button and submits a request to have another copy of the resource delivered to his local campus library.

A professor is searching a regional consortia catalog with holdings from other college and university libraries in his state. He identifies a copy of a resource owned by his university library but it is checked out to another borrower. He clicks on a button and submits a request to have another library's copy delivered to his local campus library.

A student is searching Google and discovers a restricted audio resource in another university's digital repository.   He clicks on a request button and submits a request to gain online access to the resource.

An alumnus pulls a book from his college's book stacks, takes it to the circulation desk, and asks to check it out.

Sub-Process Title: Identify User

Definition: Identify User describes the process where a user requesting a resource or service is identified and their credentials checked and verified. First, the user's identify is authenticated. Next the user is authorized to access an application or resource based on attributes tied to their identity.

The Identify Manager that maintains the user's credentials is also validated as a trusted system. The user could be a person using a computer, the computer itself, or a computer program and could use protocols such as LDAP, Shibboleth, Secure Shell Keys, and Certificates.

Use Cases: An alumnus visits his college's library and uses a public access computer to search a licensed resource (IP filtering).

At the beginning of a session, a student logs in with user name and password to access the complete range of resources offered by his library (LDAP).

A professor from a member library of a consortium that uses Shibboleth requests access to a licensed commercial video from a video repository. A student requests access to a lecture in the video repository. (Shibboleth)

An emeritus professor logs in with user name and password to use his university's interlibrary loan request service. (LDAP)

Sub-Process Title: Identify Terms of Use

Definition: Process where a resource that has been requested is checked for terms of access and preconditions of use. The resource's metadata or an attribute store is checked for rights and requirements, for example, copyright status; user attributes required to access the resource; licenses, contracts, or agreements for use of the resource; and controls such as time limits, number of simultaneous users, and fees.

Use Cases: A requested resource is checked for availability, access attributes, and usage fees. Do the resource attributes allow access by the requestor, such an enrollment in a course or membership in a university of consortium? Are there preconditions on use such as copyright, usage fees, or limits on number of simultaneous users?

Sub-Process Title: Supply Entity

Definition: Supply Entity describes the process where an appropriate entity is supplied to a valid requestor subject to conditions or constraints on use. Restrictions on use may be actively enforced by software applications, for example the ability to read, download, print; number of simultaneous users; a time limit; payment of a fee or royalty. Conditions may be determined by copyright, set by the author or by the rights holder.

Use Cases: Entity can be retrieved from the library for check-out onsite or delivered to another location (library, office, desktop, off-campus site).   Entity may be supplied by the local library, a consortial library, another institution, or a document supplier. Entity is delivered with conditions of use, for example it must be returned within a specified timeframe, the resource must be used in the library, the resource may not be duplicated, or there is a fee associated with use of the resource.

This applies to print and electronic items that are both returnables and consumables. May be local, consortial, purchased on demand or external to institutional ownership. Can be an original or a copy.

5. Manage Entity

Definition: Describes the processes that track the life-cycle of an entity including preservation, curation, evaluation, retention, relocation, duplication, version preference, rights management, binding, repair, reformat, replacement, and withdraw. Access and descriptive metadata may be normalized and updated in this process according to established rules.

Manage Entity is comprised of the following sub-processes that are described below:

- Preserve/Conserve Resource
- Manage Inventory
- Configure Metadata
- Manage Rights
- Reformat Resource

Use Cases: Management activities can occur for any resource within a collection, at any point of intersection with that resource (e.g. Deliver Resource). These may include 1) binding loose issues of a periodical or a paperback, 2) reformatting a resource so that the original is not subject to normal wear and tear, 3) repairing a damaged resource (physical or digital), 4) weeding, 5) relocation, 6) reformatting, 7) withdrawal, 8) convert analog to analog (photocopy), 9) convert analog to digital, 10) convert digital to digital (access copy, migration), 11) automated standardization of authority controlled metadata, 12) transforming metadata in one schema to another schema, 13) providing digital rights management, 14) rights clearance, or 15) informing authors of rights (e.g. upon submission to a depository).

Sub-Process Title: Preserve/Conserve Entity

Definition: Process that tracks the preservation and curation of an entity that needs attention in regard to preservation/conservation activities including evaluation, binding, repair, reformat, replacement, and withdraw. Access and descriptive metadata may be updated in this process. Determine whether the item should be relocated to archives/special collections.

Use Cases: Preservation/conservation activities can be activated for any resource within a collection, at any point of intersection with that resource (e.g. Deliver Resource). Preservation/conservation activities may include 1) binding loose issues of a periodical or a paperback, 2) reformatting a resource so that the original is not subject to normal wear and tear, or, 3) repairing a damaged resource (physical or digital).

Sub-Process Title: Manage Inventory

Definition: Process where entity is evaluated and tracked for retention and version preference. The entity may be considered for retention either in its current format or to be reformatted or might be withdrawn. Metadata may be modified to track its status through the process and to reflect decisions.

Use Cases: This service could be used in resource weeding, relocation, reformatting, or withdrawal. Space allocation is under consideration for a particular collection and those resources move through a process in which each is selected for withdrawal, relocation, and/or digitization.

Sub-Process Title: Configure Metadata

Definition: Process where metadata is normalized and processed according to established rules.

Use Cases: Automated standardization of authority controlled metadata; transforming metadata in one schema to another schema.

A resource is being lent to another institution via interlibrary loan. To accompany the resource, metadata is extracted in the MARC format which the borrowing library might use to load into their local system to enable lending to their user who requested the resource.

An authority record is entered in the system which includes references to the old version of the authorized heading. When metadata is found which matches the old version, they are upgraded to the authorized version.

Sub-Process Title: Manage Rights

Definition: Process where information is maintained (collected, stored, updated) regarding rights of entities. Information is consulted and disseminated as necessary.

Use Cases: Information maintained through Manage Rights supports activities throughout the organization including providing digital rights management, rights clearance, informing authors of rights (e.g. upon submission to a depository).

An author submits a resource to a depository and, during the process of registering the resource, the system displays the text of an agreement that informs the author of their rights regarding the submission. The author must check a box to confirm they have read and understood their rights. This transaction is recorded in the system.

A new subscription is initiated that provides online access to 100 journal titles. The license agreement is scanned and stored and information about rights and use are entered for access on demand.

A staff member receives a request through interlibrary loan for a journal article found in an online journal to which the library subscribes. After retrieving the journal title's entry in the system, the staff member is able to review the lending policy and complete the transaction.

A request is made to digitize a print resource for online availability. The system is consulted to confirm whether this is possible under copyright protections.

A professor wants students to see a film as a class assignment. Rights are verified regarding whether the film can be digitized for delivery as streaming media and the length of time this can be performed.

Sub-Process Title: Reformat Resource

Definition: Process where, after a resource is selected, it is retrieved and converted to a new format. The content is duplicated though the new format is different from the original. Access and descriptive metadata are updated to reflect the new resource.

Use Cases: A print resource cannot be replaced with an exact duplicate and so a photocopy is made to act as a replacement (analog to analog reformatting).

A print resource is scanned and TIFF files are created to store the scanned images. The print resource may be withdrawn with the new TIFF files acting as a replacement (analog to digital reformatting).

TIFF files are converted to JPG files. The TIFF files are retained for archive and the JPG files are used for an online exhibition (digital to digital reformatting).

6. Manage Entity Relationship

Definition: This module allows the creation, modification and deletion of relationships between any 2 or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Manage Entity Relationship is comprised of the following sub-processes that are described below:

- Create Entity Relationship
- Modify Entity Relationship
- Delete Entity Relationship

Use Cases: While this functionality is abstract, potential uses include:
- Creation of virtual collections. This would allow grouping of like resources whether they are a subset of a single collection or a grouping across multiple collections.
- This functionality could be used to link resources to academic courses managed in a learning management system.
- Bibliographic relationships. Create real, actionable links between bibliographic records. For example, these could be FRBR relationships or relationships expressed as linking entry tags in MARC21.
- Management of exhibitions. Manage exhibitions in an integrated way by linking resources, facilities and people.
- Relationships between people. For example, this would allow clients to be linked to experts.
- Circulating item. Create links between resources and the people who use them. These relationships could potentially be used in conjunction with bibliographic relationships to make recommendations to clients.

Sub-Process Title: Create Entity Relationships

Definition: Create a link between 2 or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Use cases:
1. Virtual collections
2. Link resources to courses
3. Bibliographic relationships (e.g. FRBR, Linking entries)
4. Exhibitions (resources, facilities, people)
5. Person to person (e.g. expertise)
6. Circulating item

Sub-Process Title: Modify Entity Relationship

Definition: Modify a link between 2 or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Use cases:
1. Virtual collections - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-collections/
2. Link resources to courses - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-courses/
3. Bibliographic relationships (e.g. FRBR, Linking entries) - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-bibliographic/
4. Exhibitions (resources, facilities, people)
5. Person to person (e.g. expertise)
6. Circulating item

Sub-Process Title: Delete Entity Relationship

Definition: Remove a link between 2 or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc

Use cases:
1. Virtual collections - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-collections/
2. Link resources to courses - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-courses/
3. Bibliographic relationships (e.g. FRBR, Linking entries) - http://oleproject.org/overview/ole-reference-model/manage-entity-relationship/manage-entity-relationship-create-entity-relationship-bibliographic/
4. Exhibitions (resources, facilities, people)
5. Person to person (e.g. expertise)
6. Circulating item

Sub-Process Title: Create, Modify, and Delete Entity Relationships

Use Case: Virtual Collections

Sub-Process Title: Create, Modify, and Delete Entity Relationships

Use Case: Link Resources to Courses

Sub-Process Title: Create, Modify, and Delete Entity Relationships

Use Case: Bibliographic Relationships

7. Manage User Relationship

Definition: Describes processes to handle CRM (customer relationship management) including a user's initiation for request of service to the fulfilling of that request.

Manage User Relationship is comprised of the following sub-processes that are described below:

- Request Service
- Schedule Event
- Track Event

Use Cases: A user submits a request for service in-person, via online form, or via real-time chat. The request is logged, triaged, and tracked for timely response. System will have automated methods to present user with a knowledge base of answers or to assign a service provider. If a service provider is assigned but a response has not been made in a predetermined amount of time, the service provider is automatically notified.

A user asks how to create an inter-library request. System logs and triages request and then automatically presents user with ILL documentation web page.

A user submits search queries for desired research materials. System recommendation function analyzes queries and presents user a list of other materials in similar research area.

A user wishes to be routinely notified of new resources acquired by the institution in their area of interest. System has automated methods to capture and store this information and respond with email or RSS feed listing new acquisitions.

A user has borrowed materials that are now overdue. System notifies user based on user's preference such as 1) paper notice sent via traditional mail, 2) electronic notice sent via email, or 3) electronic notification via automated phone call. Resolution of overdue materials including such things as overdue fines, replacement fees, and patron claims-returned are also tracked by system.

Sub-Process Title: Request Service

Definition: Process where user initiates a request for service and the request is filled.

Use Cases: Authentication may be optional, depending on factors such as service being requested or local policy. System may contact the user automatically when: 1. their need does not require immediate, or any, human intervention (a predefined response fills the need); 2. a human is not available to provide a direct response but some type of response is required.

Sub-Process Title: Schedule Event

Definition: Process that manages the scheduling of events based on policy implemented by the workflow engine. Provides check interval and deadline for certain actions within this process module.

Use Cases: Service requests not fulfilled in a predetermined number of days could be escalated to a separate process queue.

Sub-Process Title: Track Event

Definition: Process that enables service providers to track where service requests are at any given point in the workflow.

Use Cases: Service providers could produce report showing the state of outstanding service requests. Metadata attached to requests could be used to gather metrics on how quickly service requests are fulfilled.

8. Data Dictionary

3rd Party Component: a reusable service, not developed or supplied by OLE that fulfils an OLE library business process.

Acquire Entity: an OLE component whereby an entity is selected, obtained and the license/registry terms associated with the entity are documented; the entity is described and added to the collection.

Archive: governed by specific archival management policies, the process by which an entity or the copy of one can be stored or transferred to data storage.

Authenticate: process by which a system verifies the identity of a user. The user may be a person using a computer, a computer itself, or a computer program.

Authorize: process by which a system validates that a known individual or entity has the authority to perform specific actions within the system.

Business Process Engine: an OLE infrastructural middleware tool, the business process engine manages and executes library business processes defined by OLE

Business Process Modeling: a design approach used by OLE to document core library processes. The start and end points, step by step descriptions of how functions are performed, and contingencies are written down, and duplicate processes identified.

Capture: process by which exposed data/metadata from an agency/source is harvested or deposited into the collection

Collection: an OLE entity, a collection is a group of managed relationships. Collections are not necessarily formal library collections, and may be virtual collections, hierarchical relationships, relationships across formats, or a collection of people and services.

Commit Funds: process allows purchase price for entity to be encumbered from the appropriate fund; incorporates selector guidelines for assigning funds to order.

Component: a set of functional library business processes defined by OLE

Configure Metadata: process where metadata is normalized and processed according to established rules.

Create Entity Relationships: process that creates a link between two or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

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Create Metadata: Process where descriptive, structural, and/or administrative information about an entity is generated.

Data Models: OLE infrastructural middleware tools, data models define how data is represented, accessed, and exchanged. Data models are independent of OLE components and databases.

Delete Entity Relationship: process that removes a link between two or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Delete Metadata: process where descriptive, structural, and/or administrative information about an entity is removed

Deliver Entity: OLE component that tracks the request and supply of a resource including the resource availability, the terms of access, the preconditions of use, and whether the user requesting the resource has been identified and their credentials checked and verified.

Describe Entity: OLE component where metadata for an entity is obtained, created, modified and deleted

Discovery Tool(s): 3rd party components in OLE, discovery tools provide search and discovery functionality and may include features such as relevance ranking, spell checking, tagging, enhanced content, search facets. Discovery tools may be proprietary or open source.

Enterprise Level Integration: using a defined relationship, process by which a system allows linking of services and business entities across applications to promote unrestricted data sharing

Entity: OLE entities are resources, collections, persons, organizations, and services with separate identifies. Entities can be created, ingested, managed in relationships, described, and composed into a collection.

Event Manager: OLE middleware that analyzes and reports system event data, for example actions performed by users, changes in status.

Expose Metadata: process where metadata has been made available for capture

Identify Supplier: process that retrieves policy for contact with supplier and allows query of potential supplier list

Identify Terms of Use: process where a resource that has been requested has been checked for terms of access and preconditions of use.

Identify User: process where user requesting resource has been identified and their credentials checked and verified

Identity Management: process where user is identified and their credentials checked and verified. The users could be a person using a computer, the computer itself, or a computer program and could use protocols such as LDAP, Shibboleth, Secure Shell Keys, and Certificates. Identity management may be performed by an OLE or 3rd party component.

Inventory: process by which an entity is evaluated and tracked for retention and version preference, and access and descriptive metadata updated. May be used to manage weeding, reformatting, or relocation.

License: a right that gives a person or entity permission to do something that would be illegal if the person or entity did not have such permission. Usually the scope of the permission excludes ownership rights or privileges.

Manage Entity: OLE component that describes the processes that track the life-cycle of an entity including preservation, curation, evaluation, retention, relocation, duplication, version preference, rights management, binding, repair, reformat, replacement, and withdraw. Access and descriptive metadata may be normalized and updated in this process according to established rules.

Manage Entity Relationship: OLE component that allows for the creation, modification and deletion of relationships between any two or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Manage Funds: process supported by the system to make payment for a service or product. Included in this process is a log trigger and log response; the system records the usage of services or product for audit, reporting or billing purposes.

Manage Inventory: process where entity is evaluated and tracked for retention and version preference, and access and descriptive metadata updated.

Manage Rights: process where information is maintained (collected, stored, updated) regarding rights of entities. Information is consulted and disseminated as necessary.

Manage User Relationship: an OLE or 3rd party component that describes processes to handle CRM (customer relationship management) including a user's initiation for request of service to the fulfilling of that request.

Manage Terms of Acquisitions & Use: documents and manages acquisitions entities and associated information license terms (e-resources, gift, deposit, exchange, approval, etc.) selected for the collection; record is created with pending status; tracking begins as negotiations and/or evaluation of trial take place; final selection decision is recorded and pending status removed.

Metadata: 'data about data,' metadata defines, describes and manages information and may include descriptive, holdings, authority, financial, or other types of data.

Middleware: software that manages and connects OLE components and provides interoperability with 3rd party applications and components; consists of a number of functions that can be called upon by multiple components

Modify Entity Relationships: process that modifies a link between two or more entities. Entities can include resources, people, courses, facilities, organizations, finances, etc.

Modify Metadata: process where descriptive, structural, and/or administrative information about an entity is altered

Obtain Metadata: process where descriptive, structural, and/or administrative information about an entity is acquired.

Order Resource: obtain collection resources, with associated functions to manage providers. In the case of acquiring digital material it is a process whereby a system manages content in order to bring it into a collection.

Organization: an OLE entity, an organization is an administrative structure, for example a college or university, library, institution, society, consortium, or association.

Person: an OLE entity, a person is an individual represented in the environment. A few examples of persons include a user of a resource (such as a library user), a creator of a resource (such as an author), or a creator of metadata (such as a library staff member).

Pluggable Framework: OLE infrastructural middleware that allows separately installable software modules to interact seamlessly in the environment. This provides for increasing functionality of the system with components that are not built-in.

Policy/Business Rules: OLE infrastructural middleware, Policy/Business Rules modifies workflows based on locally defined policies

Preserve/Conserve Entity: process that tracks the preservation and curation of an entity that needs attention in regard to preservation/conservation activities including evaluation, binding, repair, reformat, replacement, and withdraw. Access and descriptive metadata may be updated in this process. Determine whether the item should be relocated to archives/special collections.

Process: a loosely coupled series of operations or activities that achieve a library business goal.

Receive Resource: process where a resource or service is received in response to request, for example an order request, a request for a service or resource, a gift.

Reference Model: provides an abstract view of how the environment functions and the relationships between the various components, entities, and middleware. The reference model provides a foundation upon which the architecture of the system, and the concrete details, will be built.

Reformat Resource: process where resource is selected, retrieved and converted; content is duplicated; access and descriptive metadata are updated.

Report Management: a 3rd party component to OLE that aids in the creating, viewing, and printing of reports. The software may provide an interface that will assist with the selection and extraction of data. This component may communicate with OLE through the report manager in the OLE middleware.

Report Manager: OLE infrastructural middleware reporting application that provides a connection between OLE, its data, and 3rd party report management software. The report manager may assist with the selection and extraction of data according to a particular type of report, as specified through the 3rd party report management software or through the policy/business rules middleware in OLE.

Repository: the OLE middleware that provides a registry of services. The repository manages the services to support their development, discovery, and use. Information about the services can be found here which could assist potential users with determining whether a service will meet their particular need, who maintains that service, etc.

Repository Management: an OLE 3rd party component that performs ingest, storage and basic integrity checks and preservation of entities stored in a repository.

Request Service: process where resource is requested from a resource provider or data source, or where a user initiates a request for service. The process will take into account whether the resource or service is available and can be requested by the user based on access and use policies.

Resource: an OLE entity, a resource is an item that may be collected and/or made available by an organization. Common examples of resources include books, journals, maps, and websites.

Rights Management: process where information regarding rights of entities is collected, stored, and updated. For example, the license terms of an entity that is acquired are reviewed, approved, and retained. Rights information is consulted and disseminated as necessary, for example, a resource that has been requested is checked for terms of access and preconditions of use. Rights management may be performed by an OLE component or 3rd party component.

Rules Engine: See: Policy/Business Rules

Schedule Event: process that manages the scheduling of events based on policy implemented by the workflow engine. Provides check interval and deadline for certain actions such as claim, audit, renew, review, deliver.

Select Entity: describes the processes where metadata for an entity that has been selected for acquisition or trial, either permanently or temporarily, are created or obtained.

Service: a well-defined, reusable set of operations, services are independent software pieces that are the building blocks used to assemble library business processes in OLE.

Service Mediator: as part of the OLE middleware, the service mediator aids communication between system-level service consumers and service providers. As consumers request services, the mediator negotiates between the consumer and the provider to manage the service request and its delivery.

Service Oriented Architecture (SOA): the design approach that will be used to develop OLE, Service Oriented Architecture provides for loosely coupled, reusable services, and methods for allowing different applications to exchange data. By using SOA design architecture, OLE will describe a system that is can add new functionality and communicate with other systems.

Service Taxonomy: an index and classification of the services used in OLE. The taxonomy provides definitions of the services, helping to build a common and accepted language among OLE users.

Supply Entity: process where an appropriate entity is supplied subject to conditions or constraints on use.

Track Event: process that enables tracking the status of an event, a resource, a request, or a task at any given point in the workflow.

Use Case: an example that illustrates the potential application of OLE, its components, and its processes. Use cases might be abstract or concrete. They help provide meaning to the functionalities of OLE.

Web Services: a software component that supports machine-to-machine transactions over a network, in particular, over the Internet.

Workflow: a series of activities that involve people, business processes, and software that achieve a library business goal.

Workflow Engine: See Business Process Engine.

APPENDIX B: Phase 1 Scope

1. Select Entity
2. Acquire Entity
3. Describe Entity
4. Manage Entity
5. Deliver Entity
    a. ILS-DI Support
6. Manage Entity Relationship
7. Manage User Relationship
    a. Kuali Rice KIM
    b. Shibboleth

APPENDIX C: Phase 1 Timeline

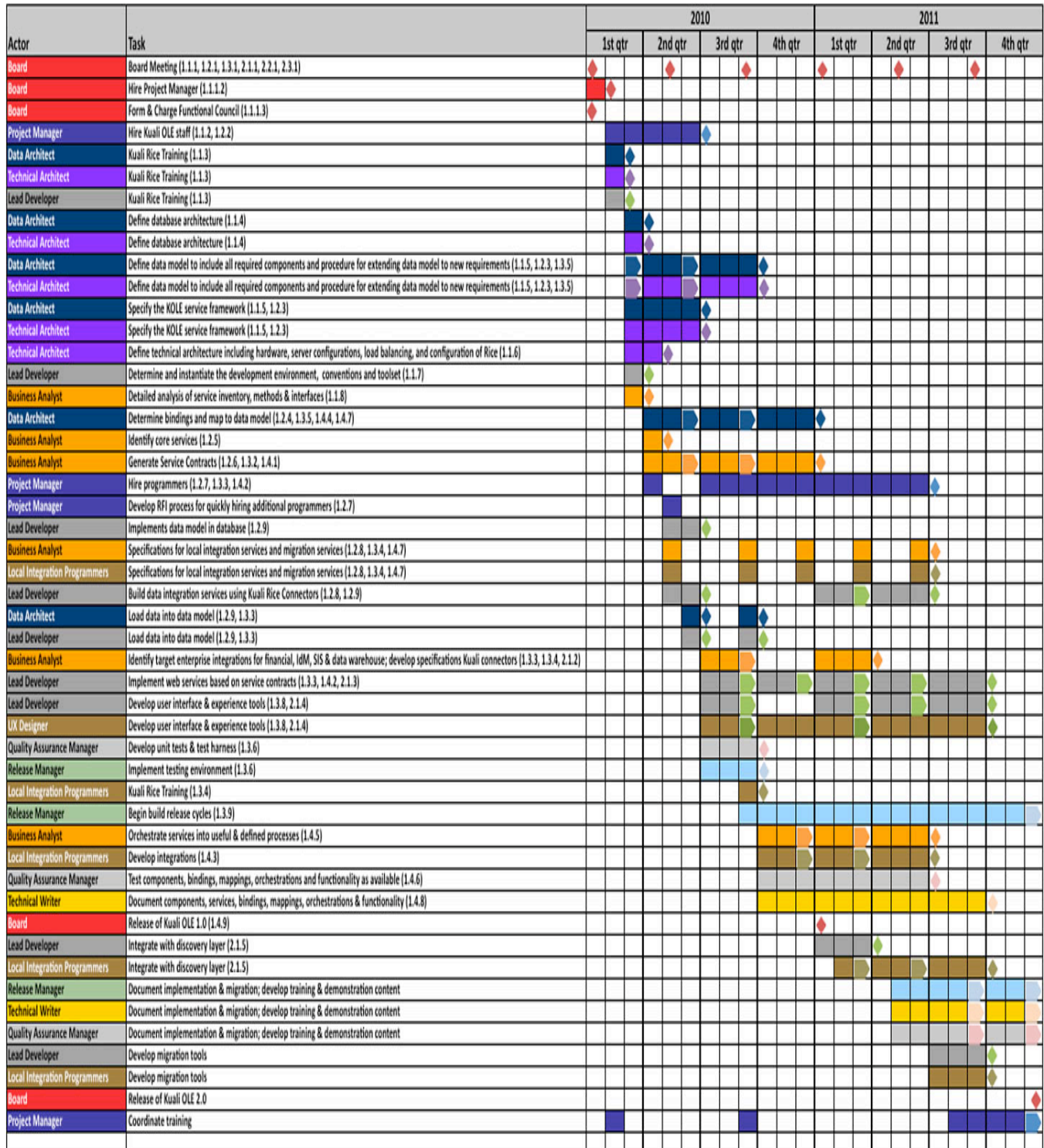Below is an overall timeline for Phase 1 of the project including a Gantt chart view, assuming a start date of 1/1/10.

Actor	Task	2010 1st qtr	2nd qtr	3rd qtr	4th qtr	2011 1st qtr	2nd qtr	3rd qtr	4th qtr
Board	Board Meeting (1.1.1, 1.2.1, 1.3.1, 2.1.1, 2.2.1, 2.3.1)								
Board	Hire Project Manager (1.1.1.2)								
Board	Form & Charge Functional Council (1.1.1.3)								
Project Manager	Hire Kuali OLE staff (1.1.2, 1.2.2)								
Data Architect	Kuali Rice Training (1.1.3)								
Technical Architect	Kuali Rice Training (1.1.3)								
Lead Developer	Kuali Rice Training (1.1.3)								
Data Architect	Define database architecture (1.1.4)								
Technical Architect	Define database architecture (1.1.4)								
Data Architect	Define data model to include all required components and procedure for extending data model to new requirements (1.1.5, 1.2.3, 1.3.5)								
Technical Architect	Define data model to include all required components and procedure for extending data model to new requirements (1.1.5, 1.2.3, 1.3.5)								
Data Architect	Specify the KOLE service framework (1.1.5, 1.2.3)								
Technical Architect	Specify the KOLE service framework (1.1.5, 1.2.3)								
Technical Architect	Define technical architecture including hardware, server configurations, load balancing, and configuration of Rice (1.1.6)								
Lead Developer	Determine and instantiate the development environment, conventions and toolset (1.1.7)								
Business Analyst	Detailed analysis of service inventory, methods & interfaces (1.1.8)								
Data Architect	Determine bindings and map to data model (1.2.4, 1.3.5, 1.4.4, 1.4.7)								
Business Analyst	Identify core services (1.2.5)								
Business Analyst	Generate Service Contracts (1.2.6, 1.3.2, 1.4.1)								
Project Manager	Hire programmers (1.2.7, 1.3.3, 1.4.2)								
Project Manager	Develop RFI process for quickly hiring additional programmers (1.2.7)								
Lead Developer	Implements data model in database (1.2.9)								
Business Analyst	Specifications for local integration services and migration services (1.2.8, 1.3.4, 1.4.7)								
Local Integration Programmers	Specifications for local integration services and migration services (1.2.8, 1.3.4, 1.4.7)								
Lead Developer	Build data integration services using Kuali Rice Connectors (1.2.8, 1.2.9)								
Data Architect	Load data into data model (1.2.9, 1.3.3)								
Lead Developer	Load data into data model (1.2.9, 1.3.3)								
Business Analyst	Identify target enterprise integrations for financial, IdM, SIS & data warehouse; develop specifications Kuali connectors (1.3.3, 1.3.4, 2.1.2)								
Lead Developer	Implement web services based on service contracts (1.3.3, 1.4.2, 2.1.3)								
Lead Developer	Develop user interface & experience tools (1.3.8, 2.1.4)								
UX Designer	Develop user interface & experience tools (1.3.8, 2.1.4)								
Quality Assurance Manager	Develop unit tests & test harness (1.3.6)								
Release Manager	Implement testing environment (1.3.6)								
Local Integration Programmers	Kuali Rice Training (1.3.4)								
Release Manager	Begin build release cycles (1.3.9)								
Business Analyst	Orchestrate services into useful & defined processes (1.4.5)								
Local Integration Programmers	Develop integrations (1.4.3)								
Quality Assurance Manager	Test components, bindings, mappings, orchestrations and functionality as available (1.4.6)								
Technical Writer	Document components, services, bindings, mappings, orchestrations & functionality (1.4.8)								
Board	Release of Kuali OLE 1.0 (1.4.9)								
Lead Developer	Integrate with discovery layer (2.1.5)								
Local Integration Programmers	Integrate with discovery layer (2.1.5)								
Release Manager	Document implementation & migration; develop training & demonstration content								
Technical Writer	Document implementation & migration; develop training & demonstration content								
Quality Assurance Manager	Document implementation & migration; develop training & demonstration content								
Lead Developer	Develop migration tools								
Local Integration Programmers	Develop migration tools								
Board	Release of Kuali OLE 2.0								
Project Manager	Coordinate training								

Figure 2. Gantt Chart Timeline

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1. **Year One**

   1.1. 1st Quarter Activities

   1.1.1. Kuali Library Board meets

       1.1.1.1.   The Board provides overview of project, governance and milestones.
       1.1.1.2.   The Board initiates the hiring process for the Project Manager that will reside at the Lead Institution.
       1.1.1.3.   The Board forms and charges the Functional Council and defines the structure for the SME Harmonization Group.

   1.1.2. Project Manager oversees hiring staff with assistance from Partners staff and administration from the Lead Institution.

       1.1.2.1.   Technical Architect
       1.1.2.2.   Data Architect
       1.1.2.3.   Lead Developer
       1.1.2.4.   Business Analysts

   1.1.3. Project Manager organizes Kuali Rice and other training for the Project Manager, Data Architect, Technical Architect & Lead Developer.

   1.1.4. The Data Architect and Technical Architect define the database architecture and technology.

   1.1.5. Data Architect and Technical Architect working from the OLE Design document, begin to define the data model and service framework to accommodate the classes of data types such as bibliographic, financial, people, facilities, license, and access data.

   1.1.6. Technical Architect, working with the OLE Design document and Kuali OLE staff, begins to define the technical architecture, requirements for Rice with Kuali Rice partners, and prepares an inventory of enterprise integrations.

   1.1.7. Lead Developer – articulate the development environment that programmers will engage including conventions for programming & the service registry, integration with the database, and orchestration services available in Kuali Rice. The Lead Developer selects development tools and support environment.

   1.1.8. Business Analyst reviews the OLE Design process models and prepares detailed analysis of service inventory, methods and interfaces.

   1.1.9. 1st Quarter Milestones

       1.1.9.1.   Critical staff are hired or assigned, starting with the Project Manager.
       1.1.9.2.   Preliminary training on Kuali Rice and other required technologies is provided to Kuali OLE Team.
       1.1.9.3.   Database technologies and configuration is determined.
       1.1.9.4.   Data classes and elements are articulated, critical data sources and schemas are identified, and service framework is described in detail sufficient to build prototype data structures.

1.1.9.5. Requirements for Kuali Rice are specified; technical architecture for the service inventory is described; development & database technologies are selected; build environment is specified, provisioned and instantiated.
1.1.9.6. Development environment for programmers is available & documented.
1.1.9.7. Preliminary analysis of the service inventory is complete.
1.1.9.8. Governance and operational structures are in place.
1.1.9.9. Kuali Library is prepared to begin development.

1.2. 2nd Quarter Activities

1.2.1. Kuali OLE Board meets to provide oversight of detailed project plan.
1.2.2. Project Manager hires Testing & Release Manager and Administrative Coordinator to Kuali Library Project Team.
1.2.3. The Data Architect and Technical Architect, working with the Functional Council, complete the data model, describe relationships between entity classes, and complete the service framework design.
1.2.4. The Data Architect working with the Functional Council determines critical bindings for data interoperation & integration, such as MARC, ERMI & EDUPerson, and maps these to the Kuali Library data structure.
1.2.5. Lead by the Business Analyst – the Lead Developer & Functional Council survey process models, identify core services & complete service contracts for these services. Core services include 'Describe' & 'Manage' and parts of 'Acquire', 'Deliver', 'Manage Relationship', & 'Rights Management' as described in the OLE Design Documents. Core services target metadata management for bibliographic & licensed entities. Further, core services include those concerning authorization & roles, and for loading metadata from external sources.
1.2.6. The Business Analyst completes service contracts for identified core services and provides a description of remaining services but contracts are not prepared at this time.
1.2.7. The Project Manager hires or contracts first set of programmers to work with the lead developer; develops an RFI for contract programmers from commercial firms or partner institutions, and working with the Lead Developer, begins defining task schedule for programming efforts.
1.2.8. The Business Analyst, working with local Subject Matter Experts, develops and delivers service contracts for local integration services for integration & interoperation with IdM and data warehouse services.
1.2.9. Lead Developer, working with programmers, implements data model in database, builds data integration services in Kuali Rice Connectors based on service contracts for bibliographic, license & person data, and loads data into prototype.

1.2.10. 2nd Quarter Milestones

1.2.10.1. Testing Manager & Administrative Coordinator are hired.
1.2.10.2. The service framework design is complete.
1.2.10.3. The data model is complete for bibliographic, license & person entities; the data model is in prototype.
1.2.10.4. Bibliographic & license data can be manually loaded from sources.
1.2.10.5. Core services are identified & service contracts for these services are complete; remaining service definitions are sufficiently described for publication to the community.
1.2.10.6. Kuali Rice is installed and available for development.
1.2.10.7. Service Contracts are used to develop initial data integration services code for bibliographic, license & person data. These services are deposited in the Rice Service Repository.

1.2.10.8.   RFI defining required programming services is available so procurement of programming efforts can advance as needed. Process for on-boarding and assigning programmers quickly & modularly is in place.

1.3. 3rd quarter Activities

1.3.1. The Kuali OLE Board meets to approve data model, service framework, and basic service matrix. The Board prepares for additional Mellon funding, on-boarding additional partners and other financial opportunities in year 2.
1.3.2. The Business Analyst, with the Functional Council & SMEs, continues generation of service contracts.
1.3.3. The Lead Developer, working with the Programmers, begins implementing web services for core functionality including ingestion tools, descriptive editor, license editor, SIS/DH integration, and loader services. Additional programmers are on-boarded as needed using the RFI process.
1.3.4. The Data Architect leads survey of target enterprise integrations for financial, identity, student information & data warehouse to determine Kuali connectors required to integrate or interoperate with Kuali OLE at Partner institutions. Local Implementation Programmers receive Kuali Rice training.
1.3.5. The Data Architect and Technical Architect, working with Functional Council & SMEs, continues definition of data models, bindings & mappings for financial & procurement (financial & EDI), access (rights & license), delivery (discovery & ILL), selection (EDI & ILL), & other data integrations.
1.3.6. The Testing Manager, working with the Release Manager, leads testing of core components of Kuali Library framework with SMEs at Partner sites. Testing protocols are established and include bug tracking and resolution.
1.3.7. The Project Manager hires or acquires user experience design (UX) expertise to assist in interface design; the Release Manager is hired to oversee packaging and implementation by Partners; the Technical Writer is hired to document the Kuali Library.
1.3.8. The Lead Developer, working with the UX staff & programmers, develops user interfaces for basic data integrations, CRUD operations, and other data management tools. Documentation on use is developed.
1.3.9. Kuali Library 0.x builds become available to Partners.

1.3.10.   3rd Quarter Milestones

1.3.10.1.   Service contracts continue to be completed, reviewed and vetted with the community.
1.3.10.2.   Requirements for Kuali Rice connectors are complete for targeted enterprise systems so that local integration programmers can provide connections to the Rice bus.
1.3.10.3.   Data model extends beyond basic bibliographic & license data to include financial, procurement, person, access and other data entities. SMEs at Partner sites vet the data model for completeness & appropriateness.
1.3.10.4.   Testing protocols are established with developers & Partners.
1.3.10.5.   Basic staff interaction tools are available to interact with bibliographic and license data; UX is vetted with Partners.
1.3.10.6.   Kuali Library 0.x builds are available and instantiated at Partner sites.

1.4. 4th Quarter Activities

1.4.1. The Business Analyst continues working with SMEs to complete service contract definitions.

1.4.2. The Lead Developer oversees continuing programming of web service inventory based on completed service contracts. Additional programmers are on-boarded as needed by the Project Manager.

1.4.3. Local Integration Programmers, working under the direction of the local project manager & using the Kuali Connector specifications, develops integration & interoperation with SIS, IdM , data warehouse & financial system.

1.4.4. The Data Architect working with SMEs complete the data model and considers protocols for how the data model can be extended to include additional metadata schemas, bindings & mappings.

1.4.5. Using Kuali Rice orchestration tools, services begin to compose into processes. Business analyst works with Functional Council to fulfill process models for core services.

1.4.6. The Quality Assurance Manager leads unit testing of functionality and orchestrations, data bindings & mappings, and integrations with local enterprise systems.

1.4.7. Business Analyst begins survey of other local, domain or networked integrations such as with proxy services, LMS/CMS, bibliographic utilities & document delivery services; The Data Architect develop bindings & mappings for data; The Business Analyst develops requirements for programmers.

1.4.8. Documentation of implementation and operation of Kuali Library system is written, tested and vetted. Demonstrations & training is developed by the Technical Writer, Implementation Manager & SMEs to support testing by Partners and the community.

1.4.9. Packaging and release of Kuali Library 1.0 is lead by the Release Manager.

1.4.10.   4th Quarter Milestones

1.4.10.1.   Kuali Library service contracts are completed and available to the community.

1.4.10.2.   Core services are complete and orchestrated into functional modules for complete bibliographic, license & person entities management. Enterprise integrations with SIS, financials, IdM & data warehouse for Partner implementations are complete.

1.4.10.3.   Complete data model that supports targeted services and that can be extended to incorporate new or modified data requirements is complete and available to the community.

1.4.10.4.   Testing confirms code completeness and integrations.

1.4.10.5.   Other integration targets are identified, vetted and approved by Partners.

1.4.10.6.   Documentation of the requirements, service inventory, implementation & operation of Kuali Library is complete. Demonstration & training is developed by Partners.

1.4.10.7.   Kuali Library 1.0 is available and implemented by Partners.

1.4.11.   Year One Deliverables

1.4.11.1.   A unified collection tool that integrates standard bibliographic, financial, identity and license data, Kuali Library 1.0, is available. These modules primarily provide functions for 'describe' and 'manage', but also includes relevant portions of 'acquire', 'deliver', 'manage', 'manage relationship', and 'rights'.

1.4.11.2.   Kuali Library framework is available for development including service registry, messaging, database, staff interaction tools, core services & orchestrations, documentation & training modules, and enterprise integrations.

1.4.11.3.   Service contracts are complete and published. Engagement with Kuali Library is established so that community efforts can be managed and local code can interoperate with the Kuali Library trunk.

1.4.11.4.   Documentation and training modules for Kuali Library core functionality and operation is complete.

2. **Year Two**

2.1. 5th Quarter Activities

2.1.1. The Kuali OLE Board meets to release KOLE v1.x and to approve plan for second year.
2.1.2. The Business Analyst working with the Functional Council surveys other integrations that are required including proxy, document delivery, EDI, bibliographic utilities, license data, collection management & other domain or institution services.   Working with the Data Architect, the data integration from these sources is modeled – protocols, bindings and mappings are developed.
2.1.3. The Lead Developer, Technical Architect, programmers & the Functional Council begin implementations of service contracts for 'select' & 'acquire' services – this includes interoperation with local ERP services & integration of order and fund accounting data.
2.1.4. The Lead Developer, working with programmers and the UX resource, begins development of staff tools for process orchestration, data mapping, and reporting tools. Additional programming and interface work is done on existing staff tools for description, licensing & data loads.
2.1.5. The Lead Developer, working with Local Integration Programmers and the Functional Council, identifies targets for discovery systems and specifies interfaces.

2.1.6. 5th Quarter Milestones

2.1.6.1.   Additional required integrations are identified and mapped to Kuali Library; specifications are complete so that programming of these services can begin.
2.1.6.2.   Early implementation and testing of ERP integration, fund accounting, and procurement services lead by the Testing Manager with the Implementation Manager and Partners.
2.1.6.3.   Staff tools expand and become more robust. Staff tools now consist of complete description, relationship, rights and mange tools; and early release tools for workflow, data mapping & reporting tools.
2.1.6.4.   Discover interfaces requirements are specified and ready for service programming.

2.2. 6th Quarter Activities

2.2.1. The Kuali OLE Board meets for update on progress and to begin planning post-funding operations, implementations, and governance.
2.2.2. 6th Quarter Milestones
2.2.2.1.   All required integrations are complete and tested.

2.3. 7th Quarter Activities
2.3.1. The Kuali OLE Board meets to approve final release of KOLE v2.x and to approve post-project issues.

2.3.2. 7th Quarter Milestones
2.3.2.1.   All development activities are complete. Remaining programming efforts are for bug fixes, code cleanup, documentation, and testing & implementation support.
2.3.2.2.   All process orchestrations are complete so that processes exist to replace targeted library business.
2.3.2.3.   A complete set of staff tools are available to configure, operate and support all library business processes.
2.3.2.4.   Migration tools & documentation are complete and ready to be tested by implementing Partners.

2.4. 8th Quarter Activities

2.4.1. Kuali Library framework migration to production begins. Partners target processes that Kuali Library will replace at each implementer's site.

2.4.2. Packaging models for distribution are specified and developed to include software manifest, documentation and QA requirements.

2.4.3. Documentation & training materials are completed.

2.4.4. On-going governance for post-funding operations is determined. Board prepares to on-board new partners and implementers. Kuali Library marketing and communications plan is developed.

2.4.5. 8th Quarter Milestones

2.4.5.1.   Kuali Library 2.0 is available to the community.
2.4.5.2.   On-going maintenance, support development capacities are assured by community governance model.
2.4.5.3.   Partners are actively migrating legacy library business functions to Kuali Library.
2.4.5.4.   Additional partners consider implementation and community membership.

2.4.6. Year Two Deliverables

2.4.6.1.   Kuali Library is an ongoing component in the Kuali Foundation and manages the development and distribution of Kuali Library software.
2.4.6.2.   Kuali Library 2.0 is available to the community.
2.4.6.3.   Support, documentation, and training services are being developed to enable wider adoption of Kuali Library.

APPENDIX D: Founding Partner Letters of Intent

October 9, 2009

Mr. Ira Fuchs
Mr. Chris Mackie
The Andrew W. Mellon Foundation
140 East 62nd Street
New York, NY 10065

RE: Memorandum of Intent to Participate as a Kuali OLE Founding Partner

Dear Ira and Chris:

This Memorandum of Intent defines the institutional commitment of Indiana University and the Indiana University Libraries for participating as a founding partner in the Kuali OLE Project. The $5.1 million dollar Kuali OLE Project's objectives and deliverables are aligned with the University's software sourcing strategy and the IU Libraries are pleased to leverage their fractional investment with the considerable investments of the other founding partners and The Andrew W. Mellon Foundation in order to make this project a reality. The University and the Libraries acknowledge the following five principles for Core Project Participation during the two-year effort.

1. Contribution of a total of at least $319,638 in cash investment to the Kuali OLE Project during the two year period of January 2010-December 2011 to fund development resources.
2. Contribution of necessary in-kind staff resources to the Kuali OLE Project during the period of January 2010-December 2011 in order to support necessary local development, testing and implementation of Kuali OLE products.
3. Participation in the OLE Board and Kuali Foundation governance entities that will direct the overall outcomes of project.
4. Use of the Educational Community License, or its successor open source license as determined by the Kuali Foundation Board, for all Kuali OLE work products from the founding partners.
5. Implementation of Kuali OLE software to further Library and University goals.

The IU Libraries are pleased to work as a Kuali OLE Project Founding Partner towards realizing the vision of a modular, flexible, community source library management system for use in academic and research libraries. The University is pleased to contribute to the development of a new library management system that will be implemented within the IU system-libraries.

The following outlines the specific participation of the IU Libraries in the Kuali OLE Project.

Project Scope

The IU Libraries understands the project will have a two year timeframe, within which the project will deliver software that enables core library processes and workflow, including resource acquisition, description, and dissemination, plus the processes necessary to control large-scale

inventories of print and electronic assets of the University, and also licenses, procurement records, and identity management for authentication and authorization purposes, and data flows necessary to statistical reporting.

Governance

The IU Libraries will appoint Carolyn Walters, Interim Ruth Lilly Dean of University Libraries as the voting member to the Kuali OLE Board and this appointment will remain in place for the permanent Ruth Lilly Dean of University Libraries during the course of this project. The IU Libraries will also appoint Bradley C. Wheeler, Vice-President for Information Technology and CIO, Barry Walsh, Associate Vice-President for Enterprise Software and Robert H. McDonald, Associate Dean for Library Technologies to serve as non-voting advisors to the Kuali Library Board. Other IU Libraries staff will be committed to governance structures, such as the technical and functional working groups as needed.

Resources

As specified in the Kuali OLE Project Plan, the IU Libraries agree to contribute $319,638 in cash contributions. These contributions, pooled with contributions from other Kuali OLE Founders and from The Andrew W. Mellon Foundation, will be used to fund staff and other expenses related to execution of the Kuali OLE project.

In addition to these centrally hired positions, the University agrees to contribute the work of University staff to accommodate commitments to Kuali OLE for local integration, testing and implementation. Staff included under this commitment will provide for project management, system administration, programming, testing and business analysis. Work of these partial FTE, will be supervised by the local advisors to the Kuali OLE Project specified by the Kuali OLE Project Governance. Local advisors, in their supervisory roles will address matters and policies pertaining to job performance. The local project staff will remain employees of the University and will be provided with a suitable place to work, necessary computers, and network functionality. The University may adjust which personnel are assigned in consultation with the Kuali OLE Board and in response to project needs. These adjustments will be made with timely notice to the employee.

The University agrees that all work products of the Kuali OLE Project – including all work done by University staff under the Kuali OLE Project – is subject to the Educational Community License, or its successor open source license as determined by the Kuali Foundation Board. The University affirms that this open licensing approach does not restrict commercialization of the Kuali OLE's products.

Sincerely,

Carolyn Walters
Interim Ruth Lilly Dean of University Libraries

Bradley C. Wheeler
Vice President for Information Technology & CIO

DATE: October 9, 2009

TO: Ira Fuchs/Chris Mackie
The Andrew W. Mellon Foundation

FROM: Judith C. Russell, Dean, George A. Smathers Libraries

SUBJECT: Memorandum of Intent to Participate as a Kuali OLE Founding Partner

This Memorandum describes the institutional intent of a Florida Consortium (FC) of colleges and universities to participate as one founding partner in the Kuali OLE Project. The FC partners are pleased to work as one Kuali OLE Founding Partner towards realizing the vision of a modular community source library management system for colleges and universities. Included in the FC will be the University of Florida, as the lead institution, along with Florida International University, Florida State University, New College, Rollins College, University of Central Florida, University of Miami, University of South Florida and The Florida Center for Library Automation. The Kuali OLE Project's objectives and deliverables are aligned with the institutions' strategic objectives.

The FC partners acknowledge the five principles for Core Project Participation.

1. Contribution not to exceed $325,000 in cash investment to the Kuali OLE Project during the two-year period of January 2010-December 2011.
2. Contribution of in-kind staff resources and related support to the Kuali OLE Project during the period January 2010-December 2011, as outlined below.
3. Participation, through the project's lead institution, Indiana University, in the Kuali OLE Board and Kuali Foundation governance entities that will direct those resources.
4. Use of the Educational Community License for all Kuali OLE work products from the founding partners.
5. The resulting library management system will be implemented by the FC partners as soon as is practical after software development is complete.

The FC partners will appoint Judith A. Russell, University of Florida Libraries, as the voting member to the Kuali OLE Board. Bill Covey, University of Florida Libraries, will serve as the partner representative to the Functional Council.

Resources

In accordance with the needs of the Kuali OLE Project Plan, the FC partners agree to collectively participate in one Founding Partner membership with a maximum cash outlay of $325,000 with additional staff time outlays (in-kind contributions) to the Kuali OLE Project between January 2010 and December 2011. Partner governance (Kuali membership), travel costs, and the partner contingency fund per year will be allocated.

In addition to the centrally hired positions that will be funded with the cash contributions of the investing partners, the FC partners will contribute the work of the staff positions summarized in the table below. Substantial fractional commitments of other staff serving on subject matter expert (SME) working groups are not included in the personnel totals reflected below.

Personnel	Months	Cost/Month	Total
IT Expert/Lead	24	$8,740	$209,760
Board member and other librarians	8	$10,575	$84,600
1 Staff/integration programmer	18	$5,912	$106,416
1 Staff/implementation and testing	18	$5,912	$106,416
Personnel subtotal			$507,192
Partner contribution			$325,000
Partner governance and contingency			$50,000
Total investment			$882,192

The FC partners agree that all work products of the Kuali OLE Project are subject to the Kuali Foundation's Educational Community License. The open licensing approach does not restrict commercialization of the Kuali Project's open source work products.

Implementation Intent

The FC partners commit to implement the resulting library management system as soon as it becomes viable.

Sincerely,

Judith C. Russell, Dean
University of Florida Libraries

LEHIGH UNIVERSITY.

Bruce M. Taggart
Vice Provost

Library and Technology Services
8A East Packer Avenue
Bethlehem, PA 18015-3170
(610) 758-3025
e-mail: bmt2@lehigh.edu
http://www.lehigh.edu/lts

To: Ira Fuchs / Christopher Mackie
The Andrew W. Mellon Foundation

From: Bruce Taggart, Vice Provost for Library and Technology Services
Lehigh University

Subject: Memorandum of Intent to Participate as a Kuali OLE Founding Partner

Date: October 6, 2009

Dear Ira and Christopher,

This Memorandum describes the institutional intent of Lehigh University and its Libraries (the "University") to participate as a founding partner in the Kuali OLE Project. The Kuali OLE Project's objectives and deliverables are aligned with the University's software sourcing strategy and the University is pleased to combine its investment with the investments of other university partners and the Andrew W. Mellon Foundation. The University acknowledges the five principles for Core Project Participation:

1. Contribution of a total of up to $325,000 in cash investment to the Kuali OLE Project during the two year period of January 2010-December 2011.

2. Contribution of in-kind staff resources to the Kuali OLE Project during the period of January 2010-December 2011 to support necessary local development, testing and implementation of Kuali OLE products.

3. Participation in the Kuali OLE Board and Kuali Foundation governance entities that will direct those resources.

4. Use of the Educational Community License for all Kuali OLE work products from the founding partners.

5. Implementation of Kuali OLE software for the University's central library management system.

The University is pleased to work as a Kuali OLE Founding Partner toward realizing the vision of a modular community source library management system for colleges and universities. The University is pleased to contribute to the development of a new library management system that will be implemented within the University's Library and Technology Services.

The University will appoint Bruce M. Taggart, Vice Provost of Library and Technology Services, as the voting member to the Kuali OLE Board. The University will also appoint Timothy M. McGeary, Team Leader of Library Technology and Roy A. Gruver, Director of Technology Management Services to serve as non-voting advisors to the Kuali OLE Board.

Resources

In accordance with the needs of the Kuali OLE Project Plan, the University agrees to contribute up to $325,000 in cash contributions and $442,700 in staff time outlays to the Kuali OLE Project between January 2010 and December 2011.

In addition to the centrally hired positions that will be funded with the cash contributions of the investing partners, the University agrees to contribute the work of the following staff positions and subject matter experts (SME). The staff members will be relieved of certain responsibilities for other University projects during the two-year project and their work will be supervised by the local advisors to the Kuali OLE Project specified by the Kuali Core Leadership. The local project staff will remain employees of the University and will be provided with a suitable place to work, necessary computers, and network functionality. Substantial fractional commitments of board members or council members are not included in the personnel totals reflected below.
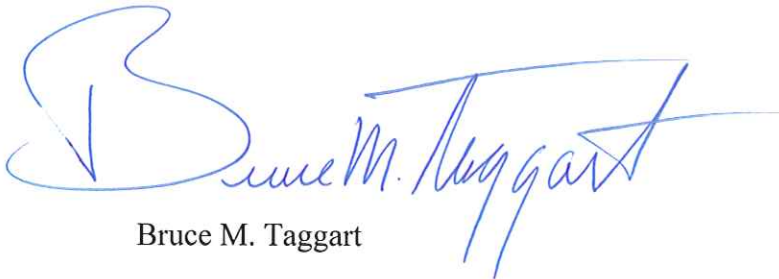
While the number of positions contributed will not change during the two years of the project, the University may adjust which personnel are assigned in consultation with the Kuali OLE Board and in response to project needs. For example, the project may need more work on data conversion up front and more user interface specialists towards the end. These adjustments will be made with timely notice to the employee and to the Kuali OLE Board.

The University agrees that all work products of the Kuali OLE Project – including all work done by University staff under the Kuali OLE Project Core – are subject to the Kuali Foundation's Educational Community License. The University affirms that this open licensing approach does not restrict commercialization of the Kuali Project's open source work products.

Implementation Intent

Lehigh University intends to implement the resulting Kuali OLE Software for its central library management system.

Sincerely,

Bruce M. Taggart

TO: Ira Fuchs/Chris Mackie
               Andrew W. Mellon Foundation

FROM: Mona Couts, Director, Triangle Research Libraries Network
               Deborah Jakubs, Rita DiGiallonardo Holloway University Librarian,
                    Vice Provost for Library Affairs, Duke University
               Susan Nutter, Vice Provost and Director of Libraries, North Carolina State
                    University
               Dr. James Siedow, Vice Provost for Research, Duke University
               Dr. Warwick Arden, Interim Provost, North Carolina State University

SUBJECT: Memorandum of Intent to Participate as a Kuali OLE Founding Partner

September 28, 2009

Dear Ira and Chris:

This Memorandum describes the institutional intent of Triangle Research Libraries Network (TRLN) to participate as a founding partner in the Kuali OLE Project. TRLN is pleased to work as a Kuali OLE Founding Partner towards realizing the vision of a modular community source library management system for colleges and universities. The Kuali OLE Project's objectives and deliverables are aligned with the TRLN member universities' strategic objectives.

Two TRLN member institutions, Duke University and North Carolina State University, will take the lead on behalf of the consortium during the two-year Kuali OLE build phase, as well as the subsequent implementation phase. TRLN acknowledges the four principles for Core Project Participation.

1. Contribution of a total of $419,638 in cash investment to the Kuali OLE Project during the two-year period of January 2010-December 2011.
2. Contribution of $427,377 in in-kind staff resources to the Kuali OLE Project during the period January 2010-December 2011.
3. Participation, through the project's lead institution, Indiana University, in the Kuali OLE Board and Kuali Foundation governance entities that will direct those resources; and
4. Use of the Educational Community License for all Kuali OLE work products from the founding partners.
5. The resulting library management system will be implemented in Duke University Libraries and North Carolina State University Libraries as soon as is practicable after software development is complete.

The TRLN partnership, led by Duke and NC State, will appoint Deborah Jakubs (Duke) as the voting member to the Kuali OLE Board. Kristin Antelman (NCSU) will serve as the partner representative to the Functional Council.

Resources

In accordance with the needs of the Kuali OLE Project Plan, TRLN participating institutions agree to contribute $419,638 in cash contributions and $427,377 in staff time outlays to the Kuali OLE Project between January 2010-December 2011. Cash contributions consist of the Founding Partner contribution to the Kuali Foundation.

In addition to the centrally hired positions that will be funded with the cash contributions of the investing partners, Duke and NCSU agree to contribute the work of the staff positions

CB# 3940, Wilson Library   Chapel Hill, NC 27514-8890
Voice Number (919) 962-8022   Fax Number (919) 962-4452   www.trln.org

Duke University   North Carolina Central University   North Carolina State University   The University of North Carolina at Chapel Hill

TRLN

TRIANGLE RESEARCH LIBRARIES NETWORK

Kuali OLE Personnel for TRLN participating institutions

Name	Title	Institution	Role
Kristin Antelman	Associate Director for the Digital Library	NCSU	Representative to functional council; technical project planning and coordination at NCSU
David Goldsmith	Associate Director for Materials Management	NCSU	Coordinator and/or leader of subject matter expert groups
Maurice York	Head, Information Technology	NCSU	Technical planning and coordination at NCSU
Emily Lynema	Associate Head, Information Technology	NCSU	Implementation and testing
Dawn Pearce	ILS manager	NCSU	Implementation and testing
Tim Mori	Librarian for Enterprise Operations	NCSU	Integration programming
Stephen Cole	programmer	NCSU	Integration programming
Lynne O'Brien	Academic Technology and Instructional Services, Perkins Library	Duke	Project planning and coordination at Duke University
Molly Tamarkin	Associate University Librarian for Information Technology	Duke	Technical planning and coordination at Duke
Jeff Fleming	Sr. IT Analyst	Duke	Integration programming
Dave Kennedy	Sr. IT Analyst	Duke	Integration programming
Gwyneth Duncan	Systems Librarian, ILS	Duke	Integration programming
Jim Coble	Head, Core Services, Library IT	Duke	implementation and testing
John Little	Integrated Library Systems Supervisor	Duke	Implementation and testing
Karen Newbery	IT Analyst, ILS	Duke	Implementation and testing

CB# 3940, Wilson Library   Chapel Hill, NC 27514-8890
Voice Number (919) 962-8022   Fax Number (919) 962-4452   www.trln.org

Duke University   North Carolina Central University   North Carolina State University   The University of North Carolina at Chapel Hill

summarized below and listed in detail on the attached document, Kuali OLE Personnel for TRLN participating institutions. Substantial fractional commitments of other Duke and NCSU staff serving on subject matter expert (SME) working groups are not included in the personnel totals reflected below.

Resource	Duke	NCSU	Total
cash outlays	$319,638	$100,000	$419,638
staff contribution	$154,429	$272,948	$427,377
total investment	$474,067	$372,948	$847,015

TRLN participating institutions agree that all work products of the Kuali OLE Project – including all work done by TRLN member institutions under the Kuali OLE Project Core – are subject to the Kuali Foundation's Educational Community License. TRLN participating institutions affirm that this open licensing approach does not restrict commercialization of the Kuali Project's open source work products.

Implementation Intent

Duke University Libraries and North Carolina State University Libraries commit to implement the resulting library management system as soon as it becomes viable. The goal of each institution is to cease operation of its existing Integrated Library System as soon as possible.

On behalf on the institutions participating in the project, Duke University and North Carolina State University,

Dr. James Siedow
Vice Provost for Research
Duke University

Dr. Warwick Arden
Interim Provost
North Carolina State University

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TRLN ▲

TO: Ira Fuchs/Chris Mackie
Andrew W. Mellon Foundation

FROM: Mona Couts, Director, Triangle Research Libraries Network
Deborah Jakubs, Rita DiGiallonardo Holloway University Librarian,
 Vice Provost for Library Affairs, Duke University
Susan Nutter, Vice Provost and Director of Libraries, North Carolina State
 University
Dr. James Siedow, Vice Provost for Research, Duke University
Dr. Warwick Arden, Interim Provost, North Carolina State University

SUBJECT: Memorandum of Intent to Participate as a Kuali OLE Founding Partner

September 18, 2009

Dear Ira and Chris:

This Memorandum describes the institutional intent of Triangle Research Libraries Network (TRLN) to participate as a founding partner in the Kuali OLE Project. TRLN is pleased to work as a Kuali OLE Founding Partner towards realizing the vision of a modular community source library management system for colleges and universities. The Kuali OLE Project's objectives and deliverables are aligned with the TRLN member universities' strategic objectives.

Two TRLN member institutions, Duke University and North Carolina State University, will take the lead on behalf of the consortium during the two-year Kuali OLE build phase, as well as the subsequent implementation phase. TRLN acknowledges the four principles for Core Project Participation.

1. Contribution of a total of $419,638 in cash investment to the Kuali OLE Project during the two-year period of January 2010-December 2011.
2. Contribution of $427,377 in in-kind staff resources to the Kuali OLE Project during the period January 2010-December 2011.
3. Participation, through the project's lead institution, Indiana University, in the Kuali OLE Board and Kuali Foundation governance entities that will direct those resources; and
4. Use of the Educational Community License for all Kuali OLE work products from the founding partners.
5. The resulting library management system will be implemented in Duke University Libraries and North Carolina State University Libraries as soon as is practicable after software development is complete.

The TRLN partnership, led by Duke and NC State, will appoint Deborah Jakubs (Duke) as the voting member to the Kuali OLE Board. Kristin Antelman (NCSU) will serve as the partner representative to the Functional Council.

Resources

In accordance with the needs of the Kuali OLE Project Plan, TRLN participating institutions agree to contribute $419,638 in cash contributions and $427,377 in staff time outlays to the Kuali OLE Project between January 2010-December 2011. Cash contributions consist of the Founding Partner contribution to the Kuali Foundation.

In addition to the centrally hired positions that will be funded with the cash contributions of the investing partners, Duke and NCSU agree to contribute the work of the staff positions

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Duke University   North Carolina Central University   North Carolina State University   The University of North Carolina at Chapel Hill

summarized below and listed in detail on the attached document, Kuali OLE Personnel for TRLN participating institutions. Substantial fractional commitments of other Duke and NCSU staff serving on subject matter expert (SME) working groups are not included in the personnel totals reflected below.

	Duke	NCSU	Total
Resource			
cash outlays	$319,638	$100,000	$419,638
staff contribution	$154,429	$272,948	$427,377
total investment	$474,067	$372,948	$847,015

TRLN participating institutions agree that all work products of the Kuali OLE Project – including all work done by TRLN member institutions under the Kuali OLE Project Core – are subject to the Kuali Foundation's Educational Community License. TRLN participating institutions affirm that this open licensing approach does not restrict commercialization of the Kuali Project's open source work products.

Implementation Intent

Duke University Libraries and North Carolina State University Libraries commit to implement the resulting library management system as soon as it becomes viable. The goal of each institution is to cease operation of its existing Integrated Library System as soon as possible.

On behalf on the institutions participating in the project, Duke University and North Carolina State University,

Dr. James Siedow
Vice Provost for Research
Duke University

Dr. Warwick Arden
Interim Provost
North Carolina State University

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TRLN ▲

TRIANGLE RESEARCH LIBRARIES NETWORK

Kuali OLE Personnel for TRLN participating institutions

Name	Title	Institution	Role
Kristin Antelman	Associate Director for the Digital Library	NCSU	Representative to functional council; technical project planning and coordination at NCSU
David Goldsmith	Associate Director for Materials Management	NCSU	Coordinator and/or leader of subject matter expert groups
Maurice York	Head, Information Technology	NCSU	Technical planning and coordination at NCSU
Emily Lynema	Associate Head, Information Technology	NCSU	Implementation and testing
Dawn Pearce	ILS manager	NCSU	Implementation and testing
Tim Mori	Librarian for Enterprise Operations	NCSU	Integration programming
Stephen Cole	programmer	NCSU	Integration programming
Lynne O'Brien	Academic Technology and Instructional Services, Perkins Library	Duke	Project planning and coordination at Duke University
Molly Tamarkin	Associate University Librarian for Information Technology	Duke	Technical planning and coordination at Duke
Jeff Fleming	Sr. IT Analyst	Duke	Integration programming
Dave Kennedy	Sr. IT Analyst	Duke	Integration programming
Gwyneth Duncan	Systems Librarian, ILS	Duke	Integration programming
Jim Coble	Head, Core Services, Library IT	Duke	implementation and testing
John Little	Integrated Library Systems Supervisor	Duke	Implementation and testing
Karen Newbery	IT Analyst, ILS	Duke	Implementation and testing

TO: Ira Fuchs and Chris Mackie
               The Andrew W. Mellon Foundation

FROM: Judith Nadler
               Director and University Librarian
               The University of Chicago Library

SUBJECT: Memorandum of Intent to Participate as a Kuali OLE Library Founding Partner

September 24, 2009

Dear Ira and Chris:

This Memorandum defines the institutional intent of the University of Chicago Library to join the Kuali OLE Library Project as a founding partner. We acknowledge five principles for participation in the project during the two year effort:

1. Contribution of no more than $325,000 in cash as a Founding Partner, to Kuali OLE Library to fund development resources.
2. Contribution of in-kind staff resources to Kuali OLE Library to support necessary local development, testing and implementation of Kuali OLE Library products.
3. Participation in the Kuali OLE Library Board and Kuali Foundation governance.
4. Use of the Educational Community License for all Kuali OLE Library products.
5. Implementation of parts or all of the Kuali OLE Library software to further Library goals as soon as practicable.

As a Kuali OLE Library Founding Partner, the Library looks forward to realizing the vision of a modular, community source library management system for colleges and universities. The Library is firmly committed to this multi-institution undertaking because it supports the strategic direction of library technology at Chicago, a direction that emphasizes the enterprise configuration of that technology and the open, community finance and governance of its development.

Project Scope

The Library understands the project will have a two year timeframe, within which the project will deliver software that enables core library processes and workflow, including resource acquisition, description, and dissemination, plus the processes necessary to control large-scale inventories of print and electronic assets of the librar, and also licenses, procurement records, and identity management for authentication and authorization purposes, and data flows necessary to statistical reporting.

Governance

The University of Chicago Library will appoint James Mouw, Assistant Library Director for Technical and Electronic Services as the voting member to the Kuali OLE Library Board, and Frances McNamara as representative to the Functional Council. Other Library staff will be committed to governance structures, such as the Harmonization Group, as needed.

Resources

As specified in the Kuali OLE Library Project Plan, the Library agrees to contribute up to $325,000 in cash contributions. These contributions, pooled with contributions from other Kuali OLE Library Founders and from the Mellon Foundation, will be used to fund staff and other expenses related to execution of the Kuali OLE Library project.

In addition to these centrally hired positions, the Library agrees to contribute the work of Library staff to accommodate commitments to Kuali OLE Library for local integration, testing, and implementation when practicable. Staff included under this commitment will provide for project management, system administration, programming, testing and business analysis. Their work will be supervised by the local advisors to the Kuali OLE Library Project specified by the Kuali OLE Library Governance. Local advisors, in their supervisory roles will address matters and policies pertaining to job performance. The local project staff will remain employees of the Library and will be provided with a suitable place to work, necessary computers, and network functionality. The Library may adjust which personnel are assigned in consultation with the Kuali OLE Library Board and in response to project needs. These adjustments will be made with timely notice to the employee. In addition to the staff of the Library, University IT staff will be available for consultation and design review as warranted.

We agree that all work products of the Kuali OLE Library Project – including all work done by University staff under the Kuali OLE Library Project – is subject to the Educational Community License used by the Kuali Foundation. We affirm that this open licensing approach does not restrict commercialization of the Kuali OLE Library's products.

Sincerely,

Judith Nadler

Director and University Librarian
The University of Chicago Library

UNIVERSITY OF
MARYLAND

OFFICE OF THE SENIOR VICE PRESIDENT
FOR ACADEMIC AFFAIRS AND PROVOST

1119 Main Administration Building
College Park, Maryland 20742-5031
301.405.5252 TEL 301.405.8195 FAX

September 30, 2009

Mr. Ira Fuchs
Vice President for Research in Information Technology
and
Mr. Christopher J. Mackie
Associate Program Officer
The Andrew W. Mellon Foundation
140 East 62nd Street
New York, NY   10065

SUBJECT: Statement of Intent to Participate as a Kuali Library Founding Partner

Dear Mr. Fuchs and Mr. Mackie:

This Statement makes clear the institutional intent of the University of Maryland and the University of Maryland Libraries to participate as a Founding Partner in the Kuali Library Project. The $4.9 million Kuali Library Project's objectives and deliverables are aligned with the University's and Libraries' software sourcing strategy, and the University is pleased to leverage its fractional investment with the considerable investments of other partners and the Andrew W. Mellon Foundation. The University and the Libraries acknowledge the four principles for Core Project Participation.

1. Contribution of a total of no more than $325,000 in cash investment to the Kuali Library Project during the two-year period of January 2010-December 2011;
2. Contribution of necessary in-kind staff resources to the Kuali Library Project during the period of January 2010-December 2011;
3. Participation in the Kuali Library Board and Kuali Foundation governance entities that will direct those resources; and
4. Use of the Educational Community License for all Kuali Library work products from the founding partners.

The University is pleased to work as a Kuali Library Founding Partner towards realizing the vision of a modular community source library management system for colleges and universities. The University is pleased to contribute to the development of a new library management system that will be implemented within the University of Maryland Libraries. The following outlines the specific participation of the University in these principles.

Resources

In accordance with the needs of the Kuali Library Project Plan and subject to the availability of funds and personnel resources, the University Libraries intends to leverage to the Kuali Library Project, with the contributions of other Founding Partners and the Andrew W. Mellon Foundation, its contributions of $319, 638 in cash between January 2010-December 2011 and a total personnel contribution valued at $188,000 between January 2010 and December 2011 allocated and assigned to the staff positions identified below:

Resource	Total Months	Value
UMD Developer	12	$100,000.00
Systems Librarian	12	$ 88,000.00
Staff Totals		$188,000.00
Cash Outlay		$319,638.00
Total Investment		$407,638.00

Substantial fractional commitments of board members, functional and technical council members, and other SMEs are *not* included in the personnel totals reflected above. While the number of positions contributed will not change during the two years of the project, the University may adjust which personnel it assigns and for how long after consulting with the Kuali Library Project Core Leadership to reflect project needs. For example, if the project needs more work on data conversion up front and more user interface specialists towards the end, these adjustments will be made with timely notice to the employee and to the board.

The staff identified above will be relieved of responsibilities on other local projects during the two-year project. Their daily assignments will come from the Kuali Library Core Leadership, but the staff will remain employees of the University of Maryland and a local University supervisor will continue to handle HR matters in accordance with University policies. Staff will be provided with a suitable place to work, necessary computers, and network functionality.

The University will appoint Patricia A. Steele, Dean of University Libraries, as its voting member to the Kuali Library Board, and will appoint Dr. Jeffrey Huskamp, Vice President and Chief Information Officer, to serve as a non-voting advisor to the Kuali Library Board. Carlen Ruschoff is appointed to the Functional Council.

The University agrees that all work products of the Kuali Library Project, including all work products developed by University staff under the Kuali Library Project, will be subject to the Kuali Foundation's Educational Community License. The University affirms that this open licensing approach does not restrict commercialization of the Kuali Project's open source work products.

Implementation Intent

The University has fully embraced the Kuali Foundation initiatives and is a full development partner for student learning tools, financial systems, and middleware. The University intends to implement the Kuali Library Software for its College Park campus libraries.

The University submits this Statement of Intent based on its understanding that neither this Statement nor the Project Charter for the Kuali Library Management System create or are intended to create binding legal obligations between and among the Founding Partners, the Kuali Foundation, and other participants in the project. The documents are intended to be and shall be deemed to be statements of intent only.
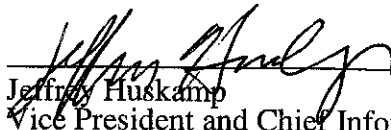
Sincerely,

Nariman Farvardin
Senior Vice President for Academic Affairs
and Provost

Acknowledged by:

Patricia A. Steele
Dean of University Libraries

Jeffrey Huskamp
Vice President and Chief Information Officer

cc: William F. McLean

Paul N. Courant

University Librarian and Dean of Libraries
Harold T. Shapiro Collegiate Professor of Public Policy
Arthur F. Thurnau Professor
Professor of Economics and of Information

818 Harlan Hatcher Graduate Library South
Ann Arbor, Michigan 48109-1205
734 764-9356   pnc@umich.edu

October 13, 2009

Ira H. Fuchs
Vice-President for Research and Information Technology
Christopher J. Mackie
Associate Program Officer for Research and Information Technology
The Andrew W. Mellon Foundation
140 East 62nd Street
New York, NY 10065

Dear Ira and Chris:

This letter defines the commitment of the University of Michigan Library as a founding partner in the Kuali OLE Project. The objectives and deliverables of the Kuali OLE Project are aligned with our software sourcing strategy, and we are pleased to join with the other founding partners and The Andrew W. Mellon Foundation in order to make this project a reality, and to realize the vision of a modular, flexible community source library management system for use in academic and research libraries.

The following outlines the specific participation of the University of Michigan Library in the Kuali OLE Project.

Project Scope
The University of Michigan Library understands that the Kuali OLE Project will have a two-year time frame, within which the project will deliver software that enables core library processes and workflow, including resource acquisition, description, and dissemination, plus the processes necessary to control large-scale inventories of print and electronic assets of the University, and also licenses, procurement records, and identity management for authentication and authorization purposes, and data flows necessary to statistical reporting.

Governance
The University of Michigan Library will appoint Paul N. Courant, University Librarian and Dean of Libraries and John Wilkin, Associate University Librarian for Library Information Technology, as advisors to the Kuali OLE Board. The voting membership for the Kuali OLE Board will be held by Indiana University which will represent the interests of the University of Michigan.

Resources
As specified in the Kuali OLE Project Plan, the University of Michigan Library agrees to make a monetary contribution of $200,000 to the project during a two-year time frame between January 2010 and December 2011. This contribution, pooled with contributions from other Kuali OLE

founding partners and from The Andrew W. Mellon Foundation, will be used to fund staff and other expenses related to execution of the Kuali OLE project.

The University of Michigan Library will be named as a founding partner of the Kuali OLE project, though its monetary contribution to the project will differ from that of the other founding partners.

The University of Michigan Library agrees that all work products of the Kuali OLE Project, including all work done by Library staff under the Kuali OLE Project, are subject to the Educational Community License used by the Kuali Foundation and affirms that this open licensing approach does not restrict commercialization of the Kuali OLE's products.

Sincerely,

Paul N. Courant

c: John P. Wilkin

Dear Ira and Chris:

This Memorandum defines the institutional intent of the University of Pennsylvania and its Libraries as participants in the founding of the Kuali OLE Project. The University and the Libraries acknowledge five principles for participation in the project during the two year effort:

1. Contribution of $319,638 in cash, a Founding Partner share, to Kuali OLE to fund development resources.
2. Contribution of in-kind staff resources to Kuali OLE to support necessary local development, testing and implementation of Kuali OLE products.
3. Participation in the Kuali OLE Board and Kuali Foundation governance.
4. Use of the Educational Community License for all Kuali OLE products.
5. Implementation of Kuali OLE software to further University goals.

As a Kuali OLE Founding Partner, Penn looks forward to realizing the vision of a modular, community source library management system for colleges and universities. The University is firmly committed to this $5.1 million undertaking because it supports the strategic direction of library technology at Penn, a direction that emphasizes the enterprise configuration of that technology and the open, community finance and governance of its development.

Project Scope

Penn understands the project will have a two year timeframe, within which the project will deliver software that enables core library processes and workflow, including resource acquisition, description, and dissemination, plus the processes necessary to control large-scale inventories of print and electronic assets of the University, and also licenses, procurement records, and identity management for authentication and authorization purposes, and data flows necessary to statistical reporting.

Governance

The University will appoint Carton Rogers, Vice Provost and Director of Libraries as the voting member to the Kuali OLE Board. To serve as advisor to the Kuali OLE Board, the University will appoint Michael Winkler, Director of Information Technology and Digital Development. Other Penn staff will be committed to governance structures, such as the Harmonization Group, as warranted.

Resources

As specified in the Kuali OLE Project Plan, the Penn Libraries agree to contribute $319,638 in cash contributions. These contributions, pooled with contributions from other Kuali OLE Founders and from the Mellon Foundation, will be used to fund staff and other expenses related to execution of the Kuali OLE project.

In addition to these centrally hired positions, the University agrees to contribute the work of University staff to accommodate commitments to Kuali OLE for local integration, testing and implementation. Staff included under this commitment will provide for project management, system administration, programming, testing and business analysis. Their work will be supervised by the local advisors to the Kuali OLE Project specified by the Kuali OLE Governance. Local advisors, in their supervisory roles will address matters and policies pertaining to job performance. The local project staff will remain employees of the University and will be provided with a suitable place to work, necessary computers, and network functionality. The University may adjust which personnel are assigned in consultation with the Kuali OLE Board and in response to project needs. These adjustments will be made with timely notice to the employee.

The University agrees that all work products of the Kuali OLE Project – including all work done by University staff under the Kuali OLE Project – is subject to the Educational Community License used by the Kuali Foundation. The University affirms that this open licensing approach does not restrict commercialization of the Kuali OLE's products.

Sincerely,

H. Carton Rogers
Vice Provost and Director of Libraries
University of Pennsylvania