

Beyond the Silos of the LAMs

Collaboration Among Libraries, Archives and Museums

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Beyond the Silos of the LAMs: Collaboration Among Libraries, Archives and Museums
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Introduction

The Community Debate Surrounding LAM Collaboration

Collaboration among libraries, archives and museums (or LAMs, as we will call them for the purpose of this report) has been a popular panel topic and conference theme. Two examples are: the 2005 RLG Forum, *Libraries, Archives & Museums—Three-Ring Circus, One Big Show?*¹ and the 2006 Rare Books and Manuscripts Section (RBMS) conference *Libraries, Archives and Museums in the Twenty-First Century: Intersecting Missions, Converging Futures?*² As indicated by the question-mark at the end of each conference title, both events were exploratory and, as such, they provide a valuable snapshot of the state of community discussion.

Among the indicative insights from the RLG Forum was Ken Soehner's (Metropolitan Museum of Art) admonition that we carefully choose our words when describing interactions between LAMs. He differentiated between coordination or cooperation and behavior that amounts to deep collaboration. In Ken's words (inspired by the circus-themed forum title), collaboration engenders "a transformational change that is akin to letting go of one trapeze in midair before a new one swings into view,"³ and that transformative impact on participating institutions distinguishes it from the more "additive" nature of coordination/cooperation. As you will see in the section, *Collaboration Continuum* (p. 10), this report extrapolates Ken's useful observation into a continuum of possible LAM interactions with increasing transformative power, risks and rewards.

To answer the question in the title of the RBMS conference, speakers offered ideas on different opportunities for LAMs to pull more closely together, as well as projects exemplifying fruitful interactions. Deborah Wythe (Brooklyn Museum of Art), an archivist working in a museum setting, remarked that libraries and archives could learn more from museums about education, while museums could take a page from libraries in providing better access to collections.⁴ Michael Fox (Minnesota Historical Society) expressed a similar sentiment during the RLG Forum: "I continue to argue that good museums need to become more like research libraries and archives just as good libraries and archives ought to adapt certain characteristics of the museum experience."⁵ While "learning from each other" was presented as an opportunity, "lending to each other" was established as a real-life example of LAMs working hand-in-hand. RBMS speaker Marcia Reed (Getty Research Institute) elaborated on this theme in her discussion of several successful cross-institutional exhibits involving library and archive material in the Los Angeles area. While eminently

worthwhile and commendable, exhibitions do fall short of Ken's measure for true collaboration: no essential institutional processes or practices had to be altered to create the exhibit.

Both the RLG and the RBMS programs crossed the threshold to deep collaboration when speakers from organizations with LAMs under the same roof came to the podium. Bob Sink from the Center for Jewish History chronicled his institution's quest for an integrated solution to managing library, archive and museum collections within a single vendor-based system. While his story (anti-) climaxed in the purchase of two systems: one for library and archival materials, and one for museum objects—clearly the aim had been for a transformative solution creating economies (the reward) and dependencies (the risk). During RBMS, Michele Doucet (Libraries & Archives of Canada) described the user experience at Libraries and Archives Canada as supported by “an integrated, one-stop access layout, with a reference model that basically works like a triage system in an emergency room. All visitors come to one location where their specific request and level of need are quickly assessed.”⁶ This one-stop shopping in the physical world is made possible by the transformative legislation which combined the National Library and the National Archives of Canada into a single institution, and the policy decisions which flowed from it.

The RLG Forum and the RBMS conference staked the territorial boundaries of the contemporary discussion surrounding LAMs, and surveyed the increasingly well-rehearsed arguments about collaboration. LAMs can better serve their users by working more closely together (the “users don’t care who manages the stuff, they just want access to it” argument), while stretching lean funds by jointly shouldering investments around common functions (the “economies of scale” argument). However, tensions were also evident, as exemplified by perceived incompatibilities in areas as elevated as mission, and as granular as descriptive practice. Museums in particular emerged as the odd-man-out, while libraries and archives were portrayed as more closely aligned. An RBMS attendee from the museum community articulated the defensive position museum professionals sometimes found themselves in: “The sentiment that libraries are correct, and museums might not have as much to offer, definitely seemed to be a pervasive one.”⁷ While few of the inter-institutional working relationships highlighted in either conference crossed the line from coordination to collaboration, some of the intra-institutional efforts squarely aim at transformative collaboration.

The program “Library, Archive and Museum Collaboration”⁸ was conceived as the next chapter in an ongoing community conversation whose rough contours have been traced above. Active participation in this conversation over the years has led us to believe that the time for exposition of commonality, difference and potential has passed, and that the next step must involve collaboration-minded subsets of LAMs defining a concrete common vision. It was anticipated that those most predisposed to crossing the threshold from being collegial to being deeply engaged would be LAMs that are part of the same organizational structure. Because of the perceived

imbalance in the relationships between LAMs, a neutral convener and facilitator was offered to help them articulate their vision and incubate first steps towards it, maximizing their chances of success.

Based on these assumptions, an outcome-oriented one-day workshop for LAM professionals in campus and campus-like environments was designed, and Diane Zorich was contracted to facilitate the meetings and synthesize the findings. The workshops surfaced existing LAM working relationships at our visited sites, and served as a catalyst for new collaborations. Attendees clearly relished the opportunity to lay out their ideas in a diverse forum ranging from grassroots staff to senior managers. The day's flow (identifying existing collaborations, stating incentives, acknowledging obstacles, no-holds-barred visioning, planning concrete projects) worked so well that the day's agenda, as well as a presentation used to set the scene, has been made available for others to try⁹. More detail about the workshop methodology also can be found in *Appendix I: Project Methodology*.

It was gratifying to learn that some current RLG Programs initiatives address common roadblocks that prevent deeper LAM collaborations. The Museum Data Exchange¹⁰ project, generously funded by The Andrew W. Mellon foundation, will help make museum data more fluid. The project creates a tool which exports data out of museum collections management systems so it can be shared with trusted partners such as library and archive collaborators. Once data from different LAM sources flows together, the Terminology Services¹¹ project can help to bridge the gap between sets of data cataloged with diverse data content standards. This Web-based service for controlled vocabularies, currently a prototype engineered by OCLC Research staff, can respond to a query with broader and narrower terms from different source authorities, a feature which can be leveraged to optimize searching across heterogeneous data.

As LAM collaborations start maturing, RLG Programs will watch out for more opportunities to grease the wheels for innovative ideas. While this report marks the end of our workshop activity, RLG Programs will continue to serve as a catalyst in the LAM space. In the coming year, we plan to hold a forum on LAM convergence to broaden the conversation among the RLG partnership. Furthermore, we're organizing a series of panels for the American Library Association (ALA), the American Association of Museums (AAM) and the Society of American Archivists (SAA) annual conferences in 2009, backed by an endorsement from the Committee on Archives, Libraries and Museums (CALM)¹². The panels will provide a platform for workshop participants to share their progress in collaborative ventures to a wide audience. We're also looking forward to the coordinated issues of *The Library Quarterly, Archival Science and Museum Management and Curatorship* on the topic of LAM convergence, slated to be published in the fall of 2009¹³. We plan to contribute, and we encourage our workshop participants to submit. As the conversation about LAM convergence continues, we hope that it will be more and more infused by the kinds of collaborative work described in this report.

Günter Waibel, Program Officer
RLG Programs, OCLC

Project Synopsis

“The increased focus on our collections leads to more and more demands for easily-accessible information about the collections and easier access to the collections themselves. How can we be sure that our projects lead to sustainable collaborations and sustainable systems that truly create the kind of integrated research and teaching resources that we are seeking?”¹⁴

The project that forms the basis of this report began in 2007, when RLG Programs initiated work on the program, *Library, Archive and Museum Collaboration*.¹⁵ The goal of the program was threefold: to explore the nature of library, archive and museum (LAM) collaborations, to help LAMs collaborate on common services and thus yield greater productivity within their institutions, and to assist them in creating research environments better aligned with user expectations—or, to reference this report’s title, to move beyond the often-mentioned silos of LAM resources which divide content into piecemeal offerings.

At the heart of the program was a series of workshops designed to be both exploratory and outcome-oriented. Workshop participants were asked to identify motivations and obstacles in the collaborative process and plan new collaborative projects and programs that addressed needs at their own institutions.

Five RLG Programs partner sites were selected to participate in the workshops: the University of Edinburgh, Princeton University, the Smithsonian Institution, the Victoria and Albert Museum, and Yale University. These institutions were chosen from among a group of candidates sites because they met the following project requirements:

- Their LAMs were part of a single organizational structure, such as a university or other campus-like institution.¹⁶
- The sites were further along the collaboration continuum than most peer institutions, so their staff would likely possess the experience and insights that could help clarify the collaborative process.
- Each site was eager to move its own collaborative activities forward and was willing to commit time and energy toward doing so.

- Each site had a local “champion” for the effort who served as the primary liaison between their institution and RLG Programs.
- Each site was available to participate in the project during RLG Program’s timeframe (October 2007–April 2008).

RLG Programs staff conducted one-day workshops at each of the five sites using the same agenda (see *Appendix III: Institutional Profiles*). The workshop process began with broad discussions and a free flow of ideas, and then narrowed to the creation of scenarios for collaborations and ultimately focused on the identification of discrete projects proposed by workshop attendees. By the end of the workshop series, ten projects had been proposed by the five sites. (For details, see the section, *Collaborative Projects*, p. 16.)

While the workshops were the central mechanism for gathering information about collaboration and promoting collaborative opportunities among LAMs, they were not the sole source of insight into the collaborative process. Detailed discussions on this topic also were held with thought leaders and with other RLG Programs partners who were at various stages of LAM collaborations (see *Appendix IV: Beyond the Workshops*). The findings presented in this report represent information, ideas and perceptions gleaned from all these sources.

More detailed information on the project methodology and workshop approach can be found in *Appendix I: Project Methodology*.

Collaboration Continuum

“Within our professional competencies, there is...an ethical requirement for us to be thinking about the future. I don’t think I’d consider myself a good librarian if I wasn’t actually thinking about collaborations across boundaries.”¹⁷

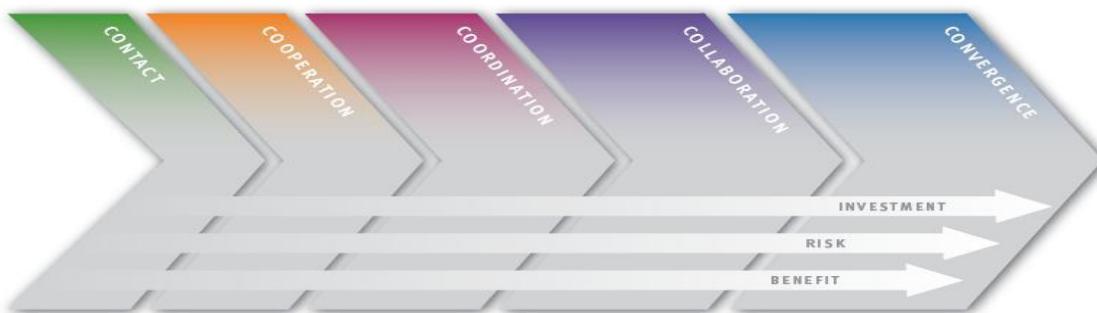
The conversations during and in conjunction with the workshops revealed that the concept of “collaboration” has many disparate aspects and is used in inconsistent ways. Broadly speaking, collaboration refers to a process in which two or more groups work together toward a common goal by sharing expertise, information and resources. In the context of LAM activities, it has become an over-arching rubric, covering everything from simple interactions (such as informal meetings) to highly intricate LAM activity (such as integrating information systems). However, characterizing such diverse endeavors by a single term masks important distinctions. The level of effort, aspiration and expertise required for the former is far less than what is needed for the latter.

To examine collaborative processes and behaviors in a more uniform manner, it is useful to view collaborative activities on a continuum (see *Figure 1: The Collaboration Continuum*). As LAMs move from left to right on this continuum, the collaborative endeavor becomes more complex, the investment of effort becomes more significant, and the risks increase accordingly. However, the rewards also become greater, moving from singular, “one-off” projects to programs that can transform the services and functions of an organization.

The various points along the continuum mark significant shifts in the collaborative process, and as a result of the LAM interactions witnessed in the course of this project, it was helpful to define them as follows:

The continuum starts with *contact*, when groups first meet to open up a dialogue and explore commonalities in activities and needs. No joint efforts or projects emerge at this stage, but there are investigative discussions about potential activities, and the “get to know you” nature of the meeting leads to the development of interpersonal relationships that build a foundation of trust and allow groups to proceed further along this continuum. Someone at a university, for example, extends an invitation to other campus LAMs to attend an exploratory meeting, or a small group of LAMs might meet in the context of a university activity and decide to reach out further to other campus LAMs.

Figure 1: The Collaboration Continuum



The next major point on the continuum is *cooperation*. At this stage, LAMs agree to work informally on an activity or effort that offers a small, yet tangible, benefit. Often this benefit is nothing more than sharing information, or undertaking an activity on behalf of the other partners. For example, a group of LAMs may agree to share their security plans as a way for each individual library, archive or museum to learn about how other collecting units address security needs (and perhaps help them in revising their own security plans). Sometimes the cooperation is one-way—an archive may offer to assist a museum with its manuscript preservation when needed, or a museum may lend some of its objects to a library for an exhibition.

Coordination marks the next major point on the continuum. When cooperative activities move beyond a stage where they can be undertaken on an “as needed” or ad hoc basis, a framework is required to organize efforts and ensure that everyone in the group understands “who does what, when and where.” Efficiency becomes more critical, and activities must be planned in concert with schedules and staff availability in order to proceed smoothly. Calendaring, distribution lists, meeting reports and other communication tools emerge at this stage and support this framework. Prime examples of LAM projects at the coordination stage are cross-domain advisory committees or topical working groups. These groups might address areas such as digital assets, metadata practices or collections policies across campus. They benefit from scheduled meetings, planned agendas and other reporting and accountability in order to move their agendas forward.

Cooperation and coordination rely on informal or formal agreements between groups to achieve a common end. The next point on the continuum, *collaboration*, moves beyond agreements. It is a “...process of shared creation: two or more [groups]...interacting to create a shared understanding that none had previously possessed or could have come to on their own.”¹⁸ Information is not just exchanged; it is used to create something new. In collaboration, “something is there that wasn’t there before.”¹⁹ That “something” is not just a new idea, but a transformation among the

collaborating institutions. As Ken Soehner, Chief Librarian at the Metropolitan Museum of Art Thomas J. Watson Library, noted:

“True collaboration...devises a new vision for a new way of doing things. It inevitably and fundamentally involves change. Collaboration is transformational and the elements, institutions and individuals involved in collaboration must change. That’s why it occurs so infrequently.”²⁰

The intellectual and creative nature of collaboration—and the change required among the participating parties—is more ambitious than cooperation and coordination and much harder to develop and sustain. For example, a collaboration in which campus LAMs agree to utilize a central trusted digital repository to safe-guard digital assets for the long-term creates deep dependencies as well as tangible economic rewards. As units reorganize their workflows and policies around the shared capacity, they discover new ways in which to leverage their combined assets, and over time realize the transformational quality which is the hallmark of deep collaboration.

The endpoint of the collaboration continuum is *convergence*, a state in which collaboration around a specific function or idea has become so extensive, engrained and assumed that it is no longer recognized by others as a collaborative undertaking. Instead, it has matured to the level of infrastructure and becomes, like our water or transportation networks, a critical system that we rely upon without considering the collaborative efforts and compromises that made it possible. As part of the convergence process, the common function is assumed by other campus departments or outside organizations that make it part of their mission and distinctive competency to fulfill it.

For campus-based LAMs, instances of convergence might vary from a centrally-managed, campus-wide security force to a centralized, routine system for exposing all LAM collections to all Web denizens. While these activities appear seamless, at some time in the past various campus groups collaborated to make them possible. LAMs are the beneficiaries and, having been relieved of the burden of supplying these services themselves, can focus their energies more productively on tasks only they are qualified to do. Rather than precipitating a loss of identity, creating shared services around shared functions helps to reinforce that which is most distinctive, valued and unique about each of the benefitting libraries, archives and museums.

The findings in this report address the nature of LAM collaboration in the sense of a shared and transformative creation that addresses common needs. The challenge for today’s campus-based LAMs is to move further along the collaboration spectrum—beyond cooperation and coordination—towards true collaboration and, as appropriate, a convergence of common services and functions.

An Ideal World

“Part of my motivation is my son. I don’t want him to grow up thinking that Google and Wikipedia and sources like that are the authoritative sources of information for him to do his research when we have the capability [to provide better resources]. We’re sitting on what could be a trusted digital repository that we could make available for every student, researcher, the general public to take advantage of. For me, personally, I feel that there are very few times in life when you’re in a position where you feel like you can make a real difference not only for the organization you’re working for but for your country, and for your child. And I feel I am in that particular role right now and have the opportunity to make those kinds of differences.”²¹

During the workshops, participants from the five campuses articulated a vision of an ideal world, free of obstacles and constraints. They often started by identifying a number of ways to improve internal workflow and processes from their perspective as LAMs operating within the structure of a parent organization, but quickly transitioned to a user point of view, thinking about improved services and outcomes. What follows is not so much a consensus in which all workshop participants shared, but a bricolage of commonly held views interspersed with some of the more interesting, if less common, ideas.

The Vision

The ubiquity of online access inspires a vision of a single search across *all* collections, without regard for where the assets are housed or what institutional unit oversees them. A “Google-like search across our collections” showcases the compelling body of materials, extending the status of “leading” and “foremost” collections in a particular area or discipline from the physical into the virtual world. Incorporating other resources such as lectures, course content or educational materials into the single search “promotes intellectual connections.” Searching by “my term, not your term” yields satisfactory results for every interaction, while result sets including “forest” (broad) and “tree” (specific) views allow multiple paths into the resources. Any desirable unit of information is never more than “two clicks away,” allowing easy navigation through resources.

While pooled campus information offers end-users more seamless search experiences, it also yields benefits in the day-to-day operations of LAMs, improving workflow and staff productivity through integrated access. Creating exhibitions with campus materials, for example, will no longer rely on a

“person-to-person” process that depends on “knowing who to call.” A digital work environment facilitates processes associated with activities such as exhibitions, conservation or publications, “making things flow internally.” Research and development “sandboxes” for experimentation yield spin-off activities leading to further areas of convergence.

Users add their knowledge to information resources through mechanisms such as social tagging or community annotation. These social systems enhance the utility of the materials presented, while enriching and supporting the institutional descriptive effort by “absorbing community knowledge.” Innovative and evocative means of user engagement enables the capture of “the associative responses *to* collections, not just the facts *about* them.” This engagement preserves the moment of inspiration, the emotional response, the enthusiasm or the reminiscence generated by interactions with collections, thereby demonstrating the ability of collections to inspire creativity and forge connections around the human experience. “cultural commons” clusters information around subjects, objects and people to create “a more holistic approach” that integrates the physical and virtual user experience.

New services arise within institutions to manage all information resources in a more streamlined fashion. A centralized backend support system for all digital assets ensures that digital production is consistently maintained, serviced and made available. Such a system could “separate the file system from services,” allowing the storage of data in a single environment, while all LAMs can manage the data in whatever system or interface they prefer.

With the ever-increasing acquisition of born-digital materials, traditional boundaries begin to blend. Staff is seconded from one department to another to share expertise. Digitization is mainstreamed as part of normal processing activities. There is a learning and access officer for every collection to help integrate collections into teaching. Students and faculty have the assistance they need to create and disseminate new works of scholarship. All the information the institution produces and publishes is harnessed, made accessible and preserved. Metrics are available to identify what is important to users. The institution is a destination for civic information.

In the physical world, a “unified reading room” where users can access all campus collections and that has shared exhibition space and adjacent classrooms streamlines use, while uniform collections access and registration guidelines promote a sense of predictability and openness. Shared spaces for conservation, storage, research and high-end and specialized digitization leverage investments in expertise and space for all LAMs.

The Vision and Network Trends

The “ideal world” discussions evoked in the above composite successfully framed more concrete conversations about collaborative possibilities. Envisioning the ideal information landscape quickly focused thinking on how LAMs could better support users. Participants elevated their thinking from their own LAM unit to a campus level.

The information environment that emerged in the visioning exercise reflects a world in which LAMs make their campus Web presence more compelling through collaboration, which they hope will allow them to operate at the “center of the information commons.” Yet even as participants discussed this scenario, they acknowledged that the traffic and engagement they would like to foster locally has increasingly moved elsewhere on the Web, and may be impossible to recapture. As one participant acknowledged:

“In the meantime, the outside world is largely unaware of what [we have] because they’re not hitting it through the search engines. They’re not stumbling across it in the way that they work, which is to start from Google rather than say, oh, I must go to [this campus] Web site.”

LAMs are increasingly aware that they are not primary Web destinations and that most users are directed to resources through search engines or through portals specific to their areas of interest. They also see that much of the social interaction they hope will take place on their sites now occurs in community networking spaces such as Flickr® and Facebook.

While some LAMs are trying to ameliorate this situation by putting their content where the users are (for example, by adding links to Wikipedia pages or placing images on Flickr), these efforts are exploratory and have not yet altered the fundamental strategy for collection access or the primacy of the campus Web site. The discussion exposed an underlying tension between the vision of seamless collections access and community engagement on local Web sites, and the shift in online user behavior where access and engagement now occur at a broader network level.

Collaborative Projects

“I’m just realizing the motivation [for LAM collaboration] we haven’t mentioned yet, which is just knowledge, just knowing what you’ve got as a curator...There [is] no way I can find out what we we’ve got quickly.”²²

After discussing their vision for an ideal information environment, each of the workshop sites proposed long lists of projects that would help them move toward their particular collaborative vision. These lists included projects as diverse as creating a digital media production center to providing consistent advice on rights for reuse of materials from the collections. From their lists, each campus selected one to three projects that they wished to take forward, and identified the essential steps (such as identifying project leaders, tasks, milestones and timeframes) needed to begin the projects. The selected projects are described below.

University of Edinburgh

Workshop participants identified a collaborative future where existing LAM roles and activities are further refined and where broad and comprehensive access to collections are enhanced. Their recommendations focused on two collaborative areas that build on existing efforts but that will propel them forward in significant ways:

- *Exploration of a federated search model.* The University will undertake a systematic analysis of its current federated search efforts, explore models that offer different approaches to the problem of cross collection searching (e.g., federated search, harvesting, combined approaches), and identify partners who can help them develop a successful strategy for cross collection searching.
- *Enhancement of the Acquisitions Program.* LAMS will work together to identify their common acquisition needs and concerns, and articulate a unified vision for collection development. They will identify ways to promote this vision and position it appropriately so that the University will consider collection development a priority in its next round of fundraising.

Princeton University

Workshop participants articulated a vision for enhancing access to University collections and providing new services to support management and preservation of their digital assets. The collaborative projects recommended were:

- *Creation of a single back end to support all digital management (“One Store”).* As University collections, research, administrative records, teaching and scholarship move into digital form, it is increasingly important that these assets remain viable for the long-term. To address this challenge, the University needs a central “store” where digital products (ranging from simple text files to complex multimedia objects) are held and made available to the systems used by researchers, students and staff. This centralized back-end management will yield enormous efficiencies throughout the University, allowing administrative needs such as backup, preservation and data storage to be centrally addressed across campus.
- *Development of a high functioning federated search of all University image resources.* The University’s high quality image resources are underutilized for teaching and research because they are difficult to access. A system is needed for searching across these resources to help faculty, students and staff find images anywhere on campus and to reduce the redundant efforts spent creating digital images that already exist in a campus collection. A survey of campus image resources could be undertaken as part of this project and current campus image search efforts could be examined and built upon.
- *An investigation of social tagging and its potential for making University collections more accessible.* The University has identified many projects that could benefit from social tagging, but needs to investigate this area further to identify how it might best be applied in the Princeton environment. A working group will investigate this area and make recommendations on how the University might wish to proceed. Its findings will yield practical insights that can contribute to the collaborations noted above.

Smithsonian Institution

Workshop participants articulated a vision of a “Digital Smithsonian” where users have easy and comprehensive access to SI collections online. To achieve this vision, the representatives agreed that individual SI units must collaborate more fully in internal and external endeavors. Workshop attendees recommended two pan-institutional collaborations to move the institution closer to this goal:

- *Development of a comprehensive digitization and access program for unencumbered photographic collections²³ at the Smithsonian.* This effort significantly scales up the digitization of assets at the SI by addressing a large segment of holdings that currently exist in analog formats, many of which are at risk of disintegrating. The project has pan-institutional appeal because it addresses a collection type (photographs) that is ubiquitous across units and covers cross-disciplinary subject themes that appeal to many audiences. Equally important, the project addresses the increasing public demand for access to SI photographic holdings.
- *Creation of an internal single point of access to all Smithsonian collections information for staff.* An intranet-only prototype will allow the Smithsonian to explore the range and breadth of data, metadata distinctions, standards diversity and other areas that may affect one-stop access. By providing a tangible representation of how “one-stop” access to collections might appear, the prototype will help focus internal policy discussions around the vision of a “digital Smithsonian” and advocate for the strategic investments (e.g., enhancements and additional cataloging) to make this information publicly accessible.

Victoria and Albert Museum

Workshop participants reaffirmed the importance of gathering, creating and sharing resources among V&A staff, researchers and audiences as vital to the institution’s mission. To accomplish these activities effectively, a strategic approach to digitizing collections was deemed necessary so that information can be accessed more broadly and readily for research, enrichment and innovation. Staff perceive the Web site as a critical destination for these activities and want to position the V&A on the Web as the leading virtual museum of art and design. Two collaborative projects were identified to move the V&A closer to this goal:

- *A large-scale digitization effort (referred to as the “Ground Floor Plan”).* Workshop attendees recommended that the Museum digitize all the objects on the ground floor of the building. These items represent collections from many different departments and are among the objects most frequently requested by visitors. Once digitized, these materials will offer the V&A the critical mass needed to develop broader and richer digital resources across collecting areas, furthering collaborations within the Museum and allowing for greater engagement with the V&A’s audiences.
- *Innovation on the Web.* Workshop attendees recommended that the Museum develop innovative uses of content in a Web environment to encourage creativity in art and design

and build community among users. They will explore ways to offer novel experiences to their virtual audiences and begin planning and testing preliminary ideas.

Yale University

Workshop participants agreed that a more strategic advocacy approach was needed on behalf of Yale collections. They recommended the following:

- *The creation of an entity—tentatively named the “Yale Federation of Collections.”* This entity will have an advocacy role of identifying priorities for collections and serving as the voice of a collaborative vision on how best to use collections to fulfill the educational mission of the University. By advocating on behalf of collections, the Federation will help create a sustainable environment for collaborations that enhance access to and use of collections by users across campus and throughout the world.

Workshop attendees recommended that the Federation’s early efforts should coalesce around two areas:

- identifying ways to share physical facilities and services (such as collections storage, processing and cross-collection object classrooms), and
- planning a shared information architecture for cross-collection services (such as digital preservation and integrated access to collections information) that enables rationales for locally developed services (such as a departmental digital asset management system).

As a first step, the Federation should develop a strategic plan that identifies goals, objectives and priorities in these areas.

When Good Ideas Are Not Enough

The final projects described above were selected after long and considered discussions. In the end, each site made their choice based on achievability, necessity and relevance to their vision of an ideal information environment.

The reasons why certain projects were *not* pursued are also enlightening because they illustrate the local circumstances that override good (even great) ideas. Some of the most frequent reasons for exclusion were:

The idea was not of great enough importance.

Some highly regarded ideas were trumped by ideas that addressed more imminent concerns. Social

tagging, an idea proposed during several workshops, was not pursued at most sites because more pressing issues could be addressed by other projects. Similarly, a proposed LAM internship program was dropped from consideration at one site in favor of projects that addressed deeper needs confronting the campus's LAMs.

The idea was premature.

Highly valued projects were sometimes thought to be premature in a local context. One site, for example, chose not to pursue a research and development project (to analyze a mixed collections data environment) because they felt it could best be undertaken *after* they had more fully assessed an extant federated search project.

The idea will be developed in another context.

Certain ideas were excluded because they were receiving attention at another level of the organization and were likely to be addressed at that level. For example, a proposal to examine and redesign all Web sites at a particular institution was scuttled when it was determined that an institution-wide analysis of Web sites was already underway with an eye toward eventual integration. Similarly, an idea to pursue various metadata efforts was excluded when it became apparent that such efforts were likely to be undertaken by the institution's formal metadata committee.

The idea was not within the purview of LAMs.

Some ideas reflected aspirations that were so large that they could not be addressed by LAMs alone. For example, the creation of new spaces or buildings, or the formation of new departments, requires greater input, buy-in and resources than LAMs possess.

The idea was too overwhelming.

The basis for some ideas were so overwhelming that LAMs decided not to pursue them, despite what appeared to be a common and urgent need. One proposed collaboration to clarify the intellectual property rights environment at an institution was so mired in issues (confounding even the campus legal experts) that the LAMs decided they could not begin to articulate a project that they could collaboratively pursue.

In discussing project ideas and deciding whether to reject or pursue them, the workshop participants revealed many factors that can foster or undermine a project.

Collaboration Catalysts

“The vice-president of the university has called a task force together about digital dissemination, so we’re all getting this as a mandate...not just from our own line managers or provosts, but much farther up, that we are to disseminate our digital information out there, so it’s become much more urgent in the last year...Sustainability will become more possible because of the mandate...from someone far more powerful.”²⁴

The exploration of collaborative opportunities that occurred in the RLG Programs workshops suggests that there are no hard and fast rules for ensuring success in LAM collaborations. However, there are circumstances that make it more likely, or unlikely, for collaborations to flourish. What follows below is a discussion of the catalysts, derived from the RLG workshops and related conversations, which can help LAM partners find greater collaborative opportunities.

1. Vision

Discussions around collaboration often start with the question: “What can we do together?” This question usually leads to concrete suggestions, which quickly get tempered by the specter of perceived or real obstacles in making the idea a reality. **For a collaborative idea to succeed, it has to be embedded in an overarching vision all participants share which makes it worth the effort to overcome the inevitable obstacles.** Focusing on a vision first shines a light on all that is to be gained in working together, while also ensuring that any concrete ideas are held up and evaluated against the greater good of this vision. Collaboration, often seen and portrayed as a good in and of itself, then becomes a means to a very desirable end.

Having an articulated vision provides context for collaboration, and a framework for both successful and unsuccessful attempts to realize it. If a collaborative effort succeeds, it becomes another step closer to the vision. If a collaborative effort fails, the vision itself still remains and the parties involved can regroup to strategize about a new attempt. Collaborative efforts based on a vaguely articulated purpose (e.g., “let’s talk about our collections’ needs”) are likely to lose momentum and become inactive over time. Similarly, collaborations around a narrowly scoped issue (e.g., “let’s do something together for this event”) will usually disband after the task is accomplished, failing to build on the collaborative which they started to develop.

If, however, LAMs begin their conversations about collaboration with a discussion of the broad vision they want to achieve, they can identify desired outcomes and develop projects that will help them achieve these outcomes. Collaborations that emerge from a shared vision are more strategic, productive and long-term. More importantly, they have the ability to significantly transform services and functions they provide to their user communities. As Alice Prochaska, University Librarian at Yale University, notes in her discussion of the Yale Collections Collaborative, “the program of convergence at Yale starts from the proposition that an alliance between the different collection-based units will add a new dimension to the service that all can bring to the University.”²⁵

In some instances, it might be difficult for LAMs who previously have not worked together to create a shared vision out of whole cloth without going through some of the preliminary stages that lead up to true collaboration (e.g., contact, cooperation and coordination—see the section, *Collaboration Continuum*). As one discussant noted, “if the initial goal [of our collaboration] was to get together to talk about greater efficiencies, not many people would have come to the table. There were so few relationships to build on that [participants] needed first to develop an understanding of each other.”

2. Mandate

Mandates are powerful catalysts for collaboration, and come in many different forms, ranging from the soft (expressions of support) to the hard (mandates enforced by metrics.) A **mandate, expressly conveyed through strategic plans or high-level directives—as well as less formal modes of encouragement—can kindle and direct staff enthusiasm for collaboration.**

Among the more formal mandates are those imposed by government entities that may have jurisdictional authority over certain LAMs. National institutions and state universities, for example, are subject to such mandates, which often take the form of funding programs or restrictions that foster or force collaborations. Because these types of mandates not only authorize but *require* institutions to act (via strict standards of compliance that are legally enforceable), they are more “stick” than “carrot,” serving as a powerful motivating force for organizations that fall within their purview.

Even at workshop sites where great strides in LAM collaboration had been made, workshop participants sometimes seemed unclear about whether they truly had an administrative mandate to work together more closely. In some instances, the expressions of support offered by senior administrators eased the way towards making bold plans. Participants at one campus found the following statement of support, issued by the senior administrator who opened the workshop, to be particularly encouraging of their efforts:

“I’m...looking for a few really good ideas that will...help us advance the mission and take [us] forward. [If you] come up with a really creative, innovative vision that is at the intersection of

these institutions and will help our mission, and you help me frame it, I'm more than ready to...carry it forward."

The mere presence of supportive words was a key motivator at another workshop sites. One participant, reporting on post-workshop progress made by his institution, felt that the effusive welcome addresses delivered by senior administrators to workshop participants was a tacit approval to proceed with the collaborative projects they identified. When support or a mandate meets grassroots enthusiasm, collaborations can move quickly.

3. Incentives

Collaborations nurtured by incentive structures reward both individual and collective efforts undertaken on behalf of the collaboration. Staff evaluations and departmental assessments should include collaborative activities in their appraisals, and make it possible to support these efforts with promotion, monetary incentives and public recognition of collaborative work.

Unfortunately, incentive and reward structures for collaborations are largely absent in most institutions. More strikingly, existing incentive structures often position LAMs so they compete with one another in ways that discourage collaboration. For example, when performance plans use metrics that focus on the success of *individual* departmental efforts and activities, departments will naturally promote their own activities to the exclusion of all others. One of the workshop participants succinctly summed up this conundrum as follows:

“We have spoken long about cross-institutional collaboration. The reality has been though...that we are measured against each other and then you do take naturally a possessive attitude.”

When metrics are tied to budget allocations or fund-raising, departments become even more incentivized to promote their own activities in order to secure favorable funding for their departments in the next fiscal year.

The absence of incentive and reward structures also affects staff morale. Individuals may not be motivated to participate in collaborative activities if they receive no personal benefit for doing so. In addition, any efforts they do invest in collaborative activities may be seen as distracting from work that *is* being assessed in the evaluation process. Thus collaborative activity brings them no credit, and may do them harm.

The absence of incentive structures for collaboration inadvertently fosters competitive behavior in other areas as well. For example, the proprietary sense of ownership of collections and databases that exists among some LAMs is perpetuated in an environment where collaboration is not promoted through an incentive system.

4. Change Agents

Collaborations sometimes have problems getting launched. Once launched, they can lose their momentum and stall, or may get stuck because of parochial concerns. Sometimes they “lose steam” and need an injection of fresh ideas. **At every stage, collaboration can benefit from the presence of a “change agent”—a trusted individual, department or program that keeps the effort alive, injects it with a dose of resources (ideas, technology, staff) at the right time and keeps participants focused on the overall vision they are aiming to bring to life.** Change agents think beyond red herring issues and offer possibilities for advancement. They are usually neutral parties whose ability to anticipate needs and present new ideas is highly valued. These characteristics are borne out in the sentiments of one workshop participant who represented a “change agent” department (information technology):

“[The information technology department’s] very mission is collaboration. We collaborate with everyone on campus—that is our job. We have no inherent mission *other than* supporting and collaborating...Sometimes our motivation is to create new possibilities. We look into our crystal ball and anticipate.”

Among the workshop sites, information technology and educational technology departments frequently played a change agent role, as did individuals whose enthusiasm, tenacity and belief in the collaborative effort motivated them to push the collaboration forward in new directions. The library, often the most well-endowed unit in terms of technology, staff and overall funding, sometimes finds itself a de-facto change agent. However, being a major stakeholder in the process, it may not be neutral enough to be effective in fostering on-going, mutually beneficial collaboration.

5. Mooring

The long-term sustainability of LAM collaborations depends on their placement within an organizational structure. **Collaborations thrive and survive when they have an administrative mooring or home base from which they can conduct operations, communicate with others and incorporate their efforts into the broader mission of their institution.** In large campus environments, however, individual LAMs are often diffused across the organizational chart. Their dispersal puts them under the jurisdiction of different administrative divisions (e.g., the Provost’s Office, the Office of Finance and Administration, academic departments, etc.), with different reporting relationships. These multiple reporting lines make collaborative decision-making more difficult: LAMs must navigate a maze of administrative entities to garner the support and approval they need to move forward.

Collaborations that operate on the periphery of their institution’s administrative structure have a difficult time situating themselves among existing committees or programs, and find it hard to get

their voice heard among a cacophony of competing interests. One workshop participant called these “isolated collaborations” because they operate outside known frameworks, exclude potential partners and miss out on larger opportunities to leverage facilities, expertise and funds. Communication among the collaborating units as well as communication with the rest of the campus becomes even more difficult without a home base for the effort.

Collaborations that do not have a distinctive place in their institution’s organizational structure jeopardize their long-term sustainability. The resources that support collaborations during their formative stages often are ephemeral: startup monies run out, grants expire and partners in the collaboration may pull back on their participation because they cannot sustain the time investment. Collaborations that are not tethered to some existing organizational structure, or made part of a new structure that operates within the framework of their parent institution, face a continuous struggle as an ad-hoc effort.

Collaborations that *do* find a home within their institution’s administrative structure can represent their needs in a unified manner and incorporate their efforts into the broader mission of their parent institutions. This latter aspect is particularly important: institutions that are aware of a collaboration’s value to their organization have a vested interest in ensuring that the collaboration continues to thrive.

Campus environments offer many different options for situating collaborations. Integrated departments that manage different LAM collections under one administrative unit (such as the Word and Image Department at the Victoria and Albert Museum, Historic Collections at the University of Aberdeen or University Collections at the University of Edinburgh) are one possibility. A high-level campus committee also may take a collaboration under its wing if its activities fall within the committee’s mandate. The workshop attendees at Princeton, for example, placed their proposed collaborations under the auspices of the University’s “Digital Assets Group” (a cross-domain committee of staff who manage digital assets) because the collaborations fall within this committee’s purview, the committee can act rather independently, and its membership of LAM and IT professionals has the broad expertise needed to conduct collaborative activities. At the Smithsonian, the Digitization Office, created in part to oversee many collaborative activities underway at that institution, became the natural home for the projects incubated during its workshop.

Workshop participants at Yale explicitly addressed the challenge of finding a home base to sustain, grow and expand their existing collaborative efforts. The proposed “Federation of Collections” (see *Appendix III: Institutional Profiles*) would be a new entity that serves as a basis for operations and advocacy on behalf of all the University’s collections.

6. Resources

Collaborations cannot function on “collaborative will” alone. They need tangible resources such as infrastructure, funding, human labor and expertise in order to succeed.

Technology

A stable information technology (IT) infrastructure and a supportive IT department can emerge as foundation and catalyst for LAM collaborations. The impact of a stable IT infrastructure on LAM collaborations is frequently underestimated. At one workshop site, where IT operations moved from an unstable environment to a new state of the art facility, the impact transformed perceptions and opened up opportunities around the institution:

“[The repositioning of IT] has given all units more confidence in [our] technology infrastructure. Because [it] is more reliable, [they] now feel confident about their ability to collaborate on projects which depend on a technological infrastructure.”

Conversely, when IT infrastructure is unstable or chronically underfunded, LAM collaborations often are adversely affected. One institution felt that staff was not motivated to participate in digital collaborations because the IT infrastructure couldn’t be trusted and did not have the capacity to support digital assets that would be created in collaborative projects. At another institution where IT resources were prevalent but poorly integrated, LAMs were assuming IT roles on their own, adding to their already sizeable workloads—and the proliferation of systems and tools.

Funding

The efficiencies produced through collaboration can attract funding from donors, administrators, grant agencies and foundations. As one participant noted:

“We should recognize that efficiencies and finances go together in the following way: if you can prove efficiencies or argue that there are efficiencies in collaborating, oftentimes it can attract money...that you might not be able to attain making the case for a [unilateral] project.”

Creating an environment in which collaborative ventures have stable funding streams ensures that good ideas can lead to innovative projects, and that innovative projects can grow into sustainable programs. However, LAM collaborations in campus-based environments often cannot take advantage of certain funding opportunities because of limitations imposed upon them by their parent institutions. Fundraising activities may be restricted by competing capital campaigns or by centrally-managed fundraising priorities. Terms of endowments and budgets tied to specific departments, projects or programs may prohibit using existing funds for collaborative purposes. This situation makes it particularly difficult to find successful models for long-term sustainability. In some instances, projects are precluded by the funding structure and policies of their parent organizations.

In some campus environments, LAMs are exploring ways to repurpose baseline funding. One campus reported that it was not unusual for highly resourced departments to use some of their funds to ensure that poorly resourced departments can participate in a collaboration. A participant from another campus proposed a similar scenario, but on a larger scale. Upon considering the huge budget disparities among her institution's various collecting repositories, she suggested that small amounts of money could be reallocated from the budgets of highly resourced collecting departments to collaborative activities that would benefit *all* the institution's collections.

"[Archives and museums are] very much at the margins...Because [library services/IT] has its eye on big, big projects, sometimes we can forget that very small amounts of money will do a lot of incentivizing. We did a collections review and one of the recommendations is the notion that the big materials budget actually does need to be available to special collections to lubricate the kind of stuff that we're talking about; [amounts that are] relatively 'small beer'."

Staffing:

LAM collaborations require dedicated teams of staff who are committed to the effort and who are willing to incorporate the work of the collaboration into their regular assignments. This situation is made easier when department and senior administrators are cognizant of the commitment involved, and consider rearrangements of duties and the deputization of staff to support a collaborative effort.

"In collaboration, you can come up with the greatest idea, but if people see themselves as having to be stretched, stretched, stretched beyond some of these areas that are actually counted and measurable, then they may well put it on the back burner."

However, even when everyone agrees about the personnel and efforts required, sustaining staff commitments to collaborative activities is increasingly hard to do. One institution identified several local challenges that undercut their collaborative efforts: years of zero staff growth, an increasing number of "term" (versus permanent) appointments, and LAMs that are already stretched beyond their limits. Without changes in these circumstances, and in the absence of sufficient incentives and rewards, collaborations will have a difficult time retaining the human resources they need to thrive.

7. Flexibility

Professional flexibility is a distinct advantage in LAM collaborations, where domain boundaries often must be crossed to reach a common goal. **LAM professionals who understand issues surrounding different types of collections and collecting institutions, and who are not rigidly wedded to their own professional traditions, bring an open-mindedness that allows them to embrace ideas from other professions in the interests of the collaboration.** Traditionally, LAMs tend to work independently of one another, and LAM professionals are schooled, trained and work within their respective fields. When brought together, their discussions often focus on the

distinctions—rather than the commonalities—among their various domains. This focus severely limits collaborative opportunities—instead of bridging professional chasms, it deepens them.

Both the literature²⁶ and the experiences borne out at the five workshop sites suggests that professional flexibility can be achieved by making concerted efforts to learn from one another, by respect for the value and traditions of each domain and by environments where LAM professionals work in close proximity with each other.

“We don't leverage some of the expertise in ways that we could. In manuscripts and archives, we're primarily a bunch of archivists who come from that background, yet...we have lots of books and serials and we also have a pretty big...object collection, and we have no expertise in either of those and maybe don't do as good a job as we could. There are lots of opportunities to take advantage of [and] expertise to help us grapple with these things...This kind of sharing happens, but only serendipitously.”

In integrated departments where many types of LAM collections are managed, professional crossover of this type might be easier to achieve by virtue of proximity. According to a member of one such department, the daily “close interactions among LAM staff help demystify the processes of one profession to another.” This “demystification” was so profound among staff at one campus that they hesitated to identify themselves as librarians, archivists or museum professionals. Although they were trained in one of these traditions, some of their current roles were in other domains and some crosscut them all.

LAM professionals who are distributed across different departments face a far greater challenge. While campuses may promote mutual respect among all LAM traditions, they often offer little time and few opportunities to learn about what one participant called the “the cultural microclimates of various professional activities.” Under these circumstances, professional flexibility may be harder to achieve. At one workshop site, a participant suggested providing cross-domain training for cultural heritage professionals to educate a new generation of professionals who will see the LAM (and not just one of its parts) as their domain.

8. External Catalysts

Audience

Users are among the most important catalysts in LAM collaborations. Successful LAM efforts clearly define their audience and create collaborations that serve their distinctive needs. A workshop site that narrowly defines its audience as its “university community of faculty, students, researchers, alumni and staff” proposed collaborations designed to identify resources and streamline services for this largely local community. Sites that characterized their audience more broadly as “anyone who comes to us for access to our assets” proposed collaborations to provide access to digitized collections to greater numbers of users.

While it is important to think of projects in terms of their impact on users, even better are projects that *arise* from end-user needs, desires, or expectations. Some of the most poignant and memorable moments in the workshops were the anecdotes offered by attendees about the frustration of being unable to locate a resource for a user. What follows are two exemplary quotes:

“Working in the frontline in reading rooms, when people come in and say ‘I want more information about this museum object’ we actually find that strangely difficult sometimes to answer because the systems are all separate...When you’re aware that you’re not doing something very well that you should be able to do very easily, that is motivation to do that better.”

“The story a lot of people hear me tell is: my five-year-old came home from kindergarten [with an assignment] and, unlike everybody else doing their research, we don’t start with Google. Mommy makes them start with [a campus resource]. Now my five-year-old’s phrase is always: ‘Just Google it, Mom!’ because he knows that’s where we’ll end up eventually.”

In both instances, the frustration of being unable to locate a resource that is *known* to exist turns into a compelling motivation to collaborate.

As mentioned earlier, LAMs are aware that no matter how they define their primary audience, their actual and potential users include the vast, undifferentiated group of people who use the Internet. They are also aware that their audience spends most of their online attention on popular search engines and social networking sites. Individuals in every workshop were eager to find a new paradigm for delivering content at the network level, as exemplified by the following quote:

“We all have audiences within [our institution]: graduates, undergraduates, faculty, scholars, etc., but I think by and large we’re all working toward meeting the external demands in a more vigorous way, as well. So our goals are all very similar...and yet we need to go to the next level to find new opportunities to bring our virtual worlds together.”

While individuals voiced their desire to explicitly expand the target audience beyond local users, the campus and its LAM units largely remained focused on their own Web site as the place to reach their defined audience as well as anybody else who has an interest in their materials. The incentives for taking the leap into the networked space were not yet perceived to be clear and compelling enough, but raising the collections to the campus level is an important step in the process of moving LAMs to the network level.

Peer institutions

LAMs are keenly aware of what their colleagues are doing at other institutions. Peer (institution) pressure makes LAMs want to be on par with one another. Participants at workshop sites frequently referenced how their LAMs measured up against “Institution X” or “Institution Y”. This sense of competition with one’s peers may influence the choices and directions of LAM collaborations.

Funding organizations

Granting agencies and foundations strongly influence LAM collaboration. These funding sources increasingly require collaboration as a condition of funding, and expect the collaborations they do fund to be sustainable beyond the period of the grant award. LAMs want to ensure that their collaborations are not “one-off” projects, but struggle to identify just how to make their collaborations sustainable.

Professional organizations

Professional organizations or consortia can influence LAM collaborations. RLG Programs staff found themselves in the roles of external catalysts by virtue of organizing and conducting the LAM workshops. In post-workshop interviews, several participants reported that the opportunity to meet under the auspices of a neutral third party rekindled their collaborative inclinations and jump-started activities in new directions. It also strengthened relationships with current and prospective partners across the campus, opening up new opportunities for collaboration.

9. Trust

Trust is foundational to any collaborative relationship. If the essence of collaboration is to enter into an interdependency which leaves neither of the parties involved in complete control, then trust is a prerequisite to entering into such a relationship. As the stakes in terms of rewards and risk get higher along the collaboration continuum (see *Collaboration Continuum*, p. 10), the trust the parties have in each other must equally grow before they can enter into agreement. From this perspective, moving along the points on the collaboration continuum from left to right can be seen as an exercise in building up trust from the first handshake all the way to combining common functions. When present, trust is the lubricant which eases the way. One of the senior administrators who introduced one of the workshops said:

“The one secret ingredient we have here is that we all get along really well together; we all like each other. Everybody in this room is talented and knows what they’re doing. If collaboration can thrive anywhere, I believe it will here.”

Conversely, lack of trust can delay or derail projects. When the discussion turned to sharing descriptive data at one of the workshop sites, many participants were eager to open up their information systems to other units on campus, while others maintained that their units would not likely be convinced to take that step. Exposing what was considered “dirty data,” even if only to campus peers, required a leap of faith some units were not prepared to make. At another site, when discussions around digitization projects stalled, one of the participants acknowledged that the lack of trust in the present state of information technology infrastructure made it hard to envision a way forward.

All of the above catalysts are affected by issues of trust in subtle as well as obvious ways. Is the “home base” for the collaborative effort situated in a way that all parties involved have faith in unbiased progress? Do staff feel that campus-wide mandates are substantiated with appropriate funding and incentives? Is a potential change agent seen as a neutral and trustworthy by all parties involved? One workshop participant used the phrase “elephant in the room” when referring to issues of trust, an apt description for the powerful and often unexpected impact trust has on all aspects of collaboration.

The Catalysts in Play...

The catalysts discussed above are important for successful collaborations, but not all of them are required for every collaborative activity: one or two can be sufficient to move things forward. However, when a number of catalysts come together in positive ways, they can have a significant impact on LAM collaborations. For example, LAMs at several workshop sites had a shared vision, a supportive mandate from upper administration, a sophisticated IT infrastructure and a change agent who brought them all together to explore potential opportunities. These influences created a promising collaborative environment that encouraged the LAMs to identify and implement collaborative undertakings.

But even when conditions seem favorable, the absence of a *particular* catalyst can affect the collaborative inclination of an institution. For example, a campus may be poised for great collaborative activity, but get mired in issues such as local cataloging and legacy systems that prevent it from initiating any meaningful collaboration. Such an institution could greatly benefit from another catalyst, for instance a change agent, to give the collaboration the momentum to move forward.

When embarking on collaborations, it is useful for LAMs to consider which catalysts exist within their environment and can play to their strengths. It also is critical to identify which catalysts are needed to move the collaboration forward. For example, one campus recognized that their shared vision, institutional mandate and strong sense of “collaborative will” positioned them well for converging certain LAM functional areas. However, they recognized they lacked an administrative structure that would allow them to do so in a sustainable manner. Having found no obvious extant structure they could tether their work to, they identified a new model that could serve as an umbrella for all their collaborative activities. Their identification of a critically needed catalyst—and their creativity in proposing a model that addressed this need—put their collaboration on stronger footing and allowed them to move further along the collaboration continuum.

The RLG Programs workshops helped all the LAM participants identify the key catalysts at play in their own campus environments, and inspired them as they discussed potential projects. These

LAMs are poised for meaningful collaborations that will significantly benefit their institutions as well as their users. It is hoped that the workshop methodology used in this project, and the findings that are outlined in this report, will inspire other LAMs to embark on new collaborations (or rethink existing ones) armed with insights to ensure greater collaborative success.

Coda: Lessons Beyond Campus Collaboration

The scope of the investigation detailed in this report was limited to LAMs in a campus environment or, in other words, LAMs which come together under a single administrative umbrella. LAMs in this environment are affected by a powerful underlying influence: a parent institution which binds them together with a mission and purpose that unites and focuses their individual interests. Yet even for LAMs in a campus environment, a combination of the catalysts described in this report is crucial for joint efforts to flourish and move from coordination to collaboration and beyond.

Arguably, these catalysts apply not only to campus environments, but can also be used to assess the potential for collaboration among independent LAMs “in the wild.” A brief impressionistic view of how some of the catalysts play for LAMs outside of a single administrative structure highlights what is needed to encourage collaboration among independent LAMs.

- A general *vision* for national and international LAM collaboration, particularly in the area of discovery, has been articulated in many different contexts, and most often by those not affiliated with collecting institutions. This vision transcends campus discussions about integration, broadening the possibilities to a potentially unlimited number of participating LAMs. In the US context, probably the best exemplars of strides toward realizing the vision of independent LAMs coming together have been state-wide digitization projects.
- While many independent LAMs can easily articulate a broad and compelling vision of network-level access to their resources, by definition they generally lack the unifying influence of a *mandate* that would propel the LAM community toward that vision. Governments can play a role in setting mandates for LAMs, especially in countries where significant funding for cultural heritage organizations comes from government departments, such as the Department for Culture, Media and Sport in the UK. In Canada, the Canadian Heritage Information Network, a Special Operating Agency of the Department of Canadian Heritage, provides an umbrella structure for Canadian cultural heritage institutions to collaborate around mass digitization and online access to collections.²⁷ No equivalent government entity exists in the US.

- Mandates must be funded. Governments and other entities can have a significant impact in realizing a more collaborative environment through strategic investment. In Taiwan, for example, LAMs are working under the auspices of a government program called the *National Digital Archives Program* that provides both a mandate and funding for digital cultural heritage.²⁸ With funding from the eTen program²⁹, the European Union has launched MICHAEL, a multi-lingual discovery environment for LAMs in Europe. In the US context, the Institute of Museum and Library Services (IMLS) promotes cross-domain initiatives through its funding guidelines.
- Beyond funding, the staff *incentives* to partake of the sweeping vision of LAMs at the network level remain unclear. Local staff are rewarded for achievements with local impact, and as this report has shown, the implicit definition of “local impact” determines the nature of collaborative initiatives and disincentivizes collaborative efforts in broader LAM communities.

On an international scale, the highly successful Global Biodiversity Information Facility (GBIF) provides an interesting case-study of a cross-domain international collaboration: the *vision* of how science could be advanced with an integrated dataset of biodiversity information led to a *mandate* from an international coalition of governments, expressed in a “memorandum of understanding between countries, economies, or organizations.”³⁰ This memorandum provides *funding* for GBIF activities and headquarters in Copenhagen (DEN), the institutional *mooring* for the effort to openly share biodiversity information. Since its founding in 2001, GBIF and its partner organizations have created standards and a clearly articulated information architecture, as well as integrated access to biodiversity information. Staff routinely get seconded to work on GBIF projects, since they (and their institutions) perceive being part of a large international effort as a compelling *incentive*. In this manner, GBIF has moved a vast community (including many LAMs) far to the right side of the collaboration continuum.

GBIF, however, is the exception. The absence of the unifying, orchestrating and directing impetus of a single administrative entity emerges as a systemic handicap in this cursory look at collaboration among independent LAMs. Without many of the catalysts at play, it is difficult to imagine deep, long-term collaborations among independent LAMs. It requires extraordinary motivation, committed resources over a long time horizon and significant changes in institutional perspective and behaviors. Each institution’s sense of primacy would need to yield to efforts that focus on a larger, extra-institutional goal. While the LAM units in our campus workshops seemed poised to move from coordination to collaboration, the challenge for independent LAMs consists of moving from the far left of the collaboration continuum toward the middle.

LAMs might consider the advice of one workshop participant who felt it was time “to start focusing energies on making rare and unique materials a valuable part of the information landscape.” While

the inclination expressed by campus-based LAMs was to do so by focusing on delivery and access through their individual Web sites, current patterns of user access and engagement increasingly take place at a broader network level. Users accustomed to using the Internet for the majority of their information needs will soon stop thinking about resources that are not indexed by Google and other search engines. Web analytics show where the users are and LAMs need to respond. This very real requirement may motivate cross-domain collaborations aimed at increased access to cultural heritage collections.

Appendix I: Project Methodology

The *Library, Archive and Museum Collaboration* program is part of the RLG Program’s work agenda designed to deepen the working relationships among libraries, archives and museums (LAMs). The effort described in this report—to actively further dialog and collaboration among libraries, archives and museums—is one project within this program. The goal of this particular project was threefold: to explore the nature of LAM collaborations, to help LAMs collaborate on common services and thus yield greater productivity within their institutions, and to assist them in creating research environments more aligned with user expectations.

As part of RLG Programs work agenda theme “Managing the Collective Collection,” this project examines ways to create shared capacity and new opportunities for engagement among LAMs in RLG Programs partner institutions. By identifying the elements needed for successful LAM convergence and offering a tangible method for identifying concrete ways to pursue this convergence, the project offers RLG Programs partners and others a model by which they can find commonalities in services, data, and expertise that can enhance productivity and improve services to users.

Methodology

Different avenues were explored to discover the widest range of issues involved in LAM convergence, and to identify ways these issues might be addressed to enhance meaningful collaborations that lead to greater LAM productivity and services. These avenues included:

- A review of the literature on LAM collaboration and convergence (see *Notes*).
- Discussions with key thought leaders (see *Appendix IV: Beyond the Workshops*) that took place before and after the workshops. Pre-workshop discussions addressed the LAM collaboration landscape, the RLG Programs project, and the workshop agenda (See *Appendix II: Workshop Agenda*). Post-workshops discussions focused on the findings and how they might be interpreted in a larger analytical framework.

- Discussions with individuals from different RLG Programs partner institutions who are in the early stages of collaborative activities. These discussions offered insights on how “start-up” efforts are initiated and developed.
- Workshops designed to enhance and deepen LAM collaboration at five campus-based institutions. The workshops brought together key LAM professionals at each site to discuss collaborative needs and opportunities and to identify new projects or programs to pursue in the near term.

The workshops are the focal point of the project and their findings form the core of the discussion in this report, though they are supplemented with information gleaned from the other sources.

Selection of Workshop Candidates

In July of 2007, RLG Programs issued a call for expressions of interest among partners to participate in an all-day workshop designed to further and deepen collaborative opportunities across LAM domains at their organization. The following criteria were used for site selection:

- The presence of libraries, archives and museums within single organizational structure (e.g. a university or campus-like institution).
- At least one area of established LAM collaborative activity (e.g., digitization, preservation, systems, etc.).
- An interest in discussing collaborative areas beyond the established activity.
- Strong local motivation and long-term commitment to achieve greater LAM convergence both at the administrative and grass-roots level.
- The presence of a well-positioned local contact and supporter who would be responsible for on-site arrangements and who would champion the effort within the organization, before, during and after the workshop.
- The presence of established and motivated LAM professionals.
- Availability during the project timeframe (October '07–April '08).

The sites selected were:

Princeton University
Smithsonian Institution
University of Edinburgh
Victoria and Albert Museum
Yale University

Profiles of each site, and the projects they identified during their workshop, are provided in *Appendix III: Institutional Profiles*.

Some of the sites that were not selected for the workshops, but that had a history of (or interest in) LAM collaboration were asked to participate in conference calls (see *Appendix IV: Beyond the Workshops*) to discuss LAM collaborations in the context of their campus environment. These discussions helped set the stage for the workshops and added breadth to the findings.

Sponsoring Committees

Once sites were selected, the local site contact was asked to organize a small Sponsoring Committee to help with planning and to serve as a point of contact between the institution and RLG Programs. Prior to each workshop, RLG Programs staff and the Sponsoring Committees held a conference call to clarify the project's goals and objectives, to identify motivations for participating in the workshop, to learn about existing collaborations and potential opportunities and to discuss logistics such as timeframes and attendees. The Sponsoring Committees also provided RLG Programs staff with background documents on their LAM collaborative projects and with organizational charts for their institutions. After the workshops took place, the committee members served as the initial reviewers of their RLG Programs-issued workshop report.

The Workshop Attendees

The selection of participants was critical to each workshop's success. Sponsoring Committees were responsible for selecting the individuals to participate in their workshop. RLG Programs staff suggested the following guidelines:

Characteristics of the Participants

Participants should represent a mix of decision makers and grassroots staff. Each participant should be a representative of their community, willing to collect information and ideas from their peers prior to the meeting, and distribute information afterwards. To encourage inclusive and manageable discussions, the number of attendees should be between twelve to sixteen participants per workshop.³¹

Each site should have at least one senior administrator to address the workshop attendees. The selected administrators should be ardent supporters of LAM collaboration and their welcome addresses should set a positive, encouraging tone—making all participants aware of the support they have among their senior administration.

Local Needs

Sites should select individuals best suited to discuss issues of concern to the institution. For example, if a site wants to deepen collaborations in the data and systems integration realm, they should identify the appropriate people who can make decisions in this area. If a site wants to engage a wider group in their collaborative activities, they should invite individuals from outside their usual collaborative circle to help foster this wider dialog.

The five workshops included a total of 91 participants, with the number of participants per site varying from eight to twenty-three individuals. Eight of the participants were senior administrators who presented welcome addresses; some of these administrators participated in all or a portion of the day's activities. Other characteristics of the participants included:

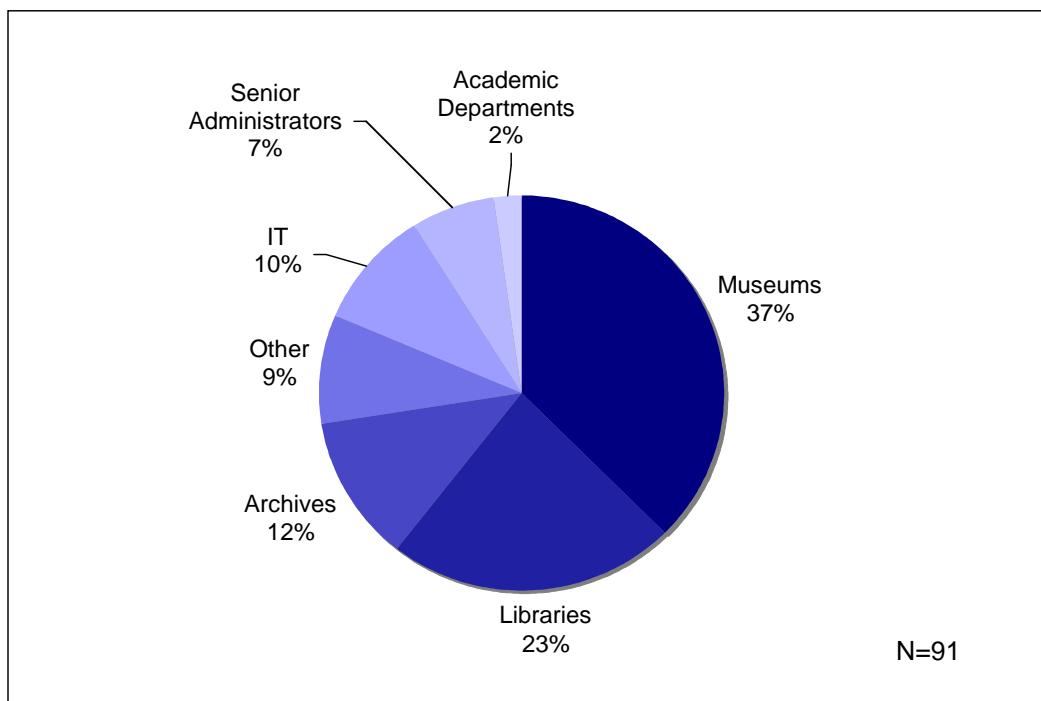
Departmental Representation

Sites had representatives from each of their institution's LAMs. Many also had representatives from other departments that collaborate with LAMs, such as academic departments, information technology and special programs and project offices. The representation by department breaks out as follows:

Professional background

Participants represented many different professions. Museum representatives included directors, associate directors, curators, registrars, collections data specialists and cataloguers. Library professionals included directors, senior librarians, special collections librarians, cataloging and metadata staff and digital librarians. Representatives from archives included directors, project archivists and technical services staff. Information technology professionals included chief information officers, humanities database specialists, educational technologies and digital content management specialists. Managers of special projects and programs (e.g., a photography initiative, a national collections program, etc.) also were in attendance. The senior administrators who addressed workshop participants included a provost, an acting director/secretary, a university librarian, a chief information officer, a museum director, a head of rare books and manuscripts collections, and a director of museum collections.

Figure A-1: Attendees



The Workshop Structure

The workshop was conducted by an external facilitator. Attendees included participants selected by the Sponsoring Committees, RLG Programs staff,³² and specially invited senior administrators (see *Appendix III: Institutional Profiles* for a complete list of participants at each workshop). All five workshops followed the same agenda (see *Appendix II: Workshop Agenda*), which was carefully designed to be outcome-oriented, yielding substantive new collaborations for each site and startup plans for carrying these collaborations forward. To achieve this end, the meeting moved from broad discussions and a free flow of ideas toward a narrowing of scenarios for collaborations and, ultimately, towards the identification of substantial projects that workshop attendees would embark upon after the workshop.

The morning portion of the workshop began with a “scene setting” presentation (developed and given by RLG Programs staff) that provided historical background on the emergence and evolution of LAMs, the benefits of collaboration and what it can offer to LAMs, and some tools for objectively assessing collaborative ideas.³³ Following this presentation, participants discussed their existing collaborations (to bring everyone up to date on the range and status of LAM collaboration underway at the site), the motivating factors that led to these collaborations, and challenges or obstacles that hinder collaboration at their institution.

During the afternoon session, the focus of the workshop moved from discussions of the current landscape to considerations of future collaborative opportunities. Participants were led through a brainstorming component (“visioning”) in which they were asked to identify the ideal information landscape at their institution. If resources were unrestricted and opportunities limitless, how would participants like things to be? What functions and capabilities would they like to make available or have access to? From this idealized scenario, participants identified possible projects that would bring them closer to their ideal. Participants were then asked to focus on the projects they felt were most desirable and feasible to pursue. This subset was discussed in depth and further winnowed down to no more than three collaborative projects. Participants then developed “start-up” plans for these projects, identifying the groups and individuals who would lead them, outlining the initial tasks needed to get them underway, and proposing timeframes for undertaking various tasks.

Shortly after the workshop, each site received a summary report that provided a written record of the day’s discussions and decisions. Each site reviewed its report and suggested changes to make it a more effective document for their internal purposes. Sites were urged to share the report with their campus colleagues and to use it strategically within their institutions for purposes such as garnering local support or updating senior administrators.

The Workshop Aftermath

Several months after the workshops were completed, RLG Programs staff contacted each of the five institutions for a workshop assessment and a status update on the projects they identified during their workshop day. Information from these calls has been incorporated into the findings of this report.

Appendix II: Workshop Agenda

Library, archive and museum collaboration

A workshop to further dialog and collaboration among libraries, archives and museums, hosted by RLG Programs.

The hosts:

Günter Waibel and Ricky Erway, Program Officers, RLG Programs

Diane Zorich, Cultural heritage consultant

[Names of individuals serving on the local sponsoring committee:]

The idea:

Bringing together library, archive and museum staff to discuss the convergence of their goals, practices and services.

The goal:

Concrete suggestions for how collaborations can be deepened and sustained.

9:00–9:30am

Gathering/coffee

9:30–10:00am

Welcome/introductions

Goals, objectives and agenda logistics; RLG Programs staff address the group; participant introductions

10:00–10:15am

Welcome by _____

10:15–10:45am

Setting the Stage—*A short presentation providing context for the meeting (RLG Programs staff)*

10:45–11:00am

– Break –

11:00–11:45am

The Present – *Identifying existing collaborations*

11:45am–12:15pm

Carrots & Sticks—*Identifying the motivation and pressure for libraries, archives and museums to integrate*

12:15–1:15pm

– Lunch –

1:15–2:15pm

Visioning—*Identifying the ideal information landscape libraries, archives and museum would like to collaborate on*

- 2:15–3:15pm Taking Collaboration to the Next Level, Part I—*Exploring how the collaborations discussed during the "visioning" exercise can be realized*
- 3:15–3:30pm – Break –
- 3:30–4:30pm Taking Collaboration to the Next Level, Part II—*Exploring how the collaborations discussed during the "visioning" exercise can be realized: putting flesh on a concrete plan*
- 4:30–5:00pm Wrap-up—*Review goals and accomplishments of the meeting; review post-meeting plans*

Appendix III: Institutional Profiles

University of Edinburgh

The University of Edinburgh's collections are largely under the purview of the Division of Library and Collections, a section of the University's Information Services Group.³⁴ In 2003, the University created a new section in this Division called University Collections to bring together several departments that hold object, archive and special collections.³⁵ University Collections provides managerial, administrative and curatorial support to these collections, as well as to the many collections housed within academic departments (e.g., anatomical and geology collections, chemistry, etc.) that are used largely for departmental teaching.

The University will soon open the Centre for Research Collections (CRC), a dedicated space in the Library for study, conservation, exhibition and storage of unique LAM holdings. CRC also will house administrative staff for these collections and offer a digital infrastructure that complements and extends the collections' use.

Five years into their organizational realignment, and on the cusp of the opening of the CRC, the University wanted to participate in the RLG Programs LAM project to reflect on their successes, articulate areas of collaboration that need strengthening, and identify future directions. On March 3, 2008, nine members of the University community met at an RLG Programs LAM workshop to explore these issues.

The workshop participants identified a collaborative future where existing LAM roles and activities are further refined and broad and comprehensive access to collections are enhanced. Their recommendations focused on two collaborative areas that build on existing efforts but will propel them forward in significant ways:

- *Exploration of a federated search model.* The University will undertake a systematic analysis of its current federated search efforts, explore models that offer different approaches to the problem of cross collection searching (e.g., federated search, harvesting, combined approaches), and identify partners who can help them develop a successful strategy for cross collection searching.

- *Enhancement of the Acquisitions Program.* LAMs will work together to identify their common acquisition needs and concerns, and articulate a unified vision for collection development. They will identify ways to promote this vision and position it appropriately so that the University will consider collection development a priority in its next round of fundraising.

University of Edinburgh Workshop Attendees

Welcome Address by:

Jeff Haywood Vice Principal of Knowledge Management, CIO, and Librarian to the University

Participants:

| | |
|------------------------|--|
| Sheila Cannell | Director of Library Services |
| John Scally | Director of University Collections |
| Jacky MacBeath | Museum Development Manager |
| Arnott Wilson | Special Collections Manager and University Archivist |
| Darryl Martin | Curator of Musical Instrument Collections |
| Frances Abercromby | College Librarian, Humanities and Social Sciences |
| Elizabeth G. Stevenson | Electronic Resources Librarian |
| Laura Brouard | Lothian Health Services Archive, Assistant Archivist |

Princeton University

Princeton's collecting units are housed and administered under several different University divisions such as the Library (e.g., Rare Books and Special Collections, Graphic Arts), individual academic departments (e.g., Art and Archaeology) and the University Provost (e.g., Art Museum, Library). Over the last few years, the University's LAMs have been engaged in what they describe as "building block" collaborations. Some high profile examples of these collaborations include the creation of a Metadata Subcommittee to survey metadata practices in collecting repositories across campus, and numerous projects with the University's Office of Information Technology to develop teaching resources or tools for collections digitization and access.

The University wanted to participate in the RLG Programs LAM project to identify ways to move these efforts forward in a strategic fashion. Twenty individuals from various campus LAMs participated in the RLG Programs workshop on April 1, 2008, where they articulated a vision for enhancing access to University collections and providing new services to support management and preservation of their digital assets. The collaborative projects recommended by workshop participants were:

- *Creation of a single backend to support all digital management ("One Store").* As University collections, research, administrative records, teaching and scholarship move into digital form, it is increasingly important that these assets remain viable for the long-term. To

address this challenge, the University needs a central “store” where digital products (ranging from simple text files to complex multimedia objects) are held and made available to the systems used by researchers, students and staff. This centralized backend management will yield enormous efficiencies throughout the University, allowing administrative needs such as backup, preservation and data storage to be centrally addressed across campus.

- *Development of a high functioning federated search of all University image resources.* The University’s high quality image resources are underutilized for teaching and research because they are difficult to access. A system is needed for searching *across* these resources to help faculty, students and staff find images anywhere on campus and to reduce the redundant efforts spent creating digital images that already exist in a campus collection. A survey of campus image resources could be undertaken as part of this project and then current campus image search efforts could be examined and built upon.
- *An investigation of social tagging and its potential for making University collections more accessible.* The University has identified many projects that could benefit from social tagging, but needs to investigate this area further to identify how it might best be applied in the Princeton environment. A working group will investigate this area and make recommendations on how the University might wish to proceed. Its findings will yield practical insights that can contribute to the collaborations noted above.

Princeton University Workshop Attendees

Welcome Addresses:

| | |
|---------------|--|
| Karin Trainer | University Librarian |
| Betty Leydon | Chief Information Officer |
| Becky Sender | Acting Museum Director, Art Museum |
| Ben Primer | Head of Rare Books and Special Collections |

Participants:

| | |
|------------------|---|
| Lisa Arcomano | Manager of Campus Collections, Art Museum |
| Joyce E. Bell | Cataloging and Metadata Services Director, Firestone Library |
| Marvin Bielawski | Deputy University Librarian, Firestone Library |
| Sandy Brooke | Librarian, Marquand Library of Art and Archaeology |
| Frances Chen | Librarian, School of Architecture Library |
| Cathryn Goodwin | Collections Data Specialist, Art Museum |
| Serge Goldstein | Associate Chief Information Officer and Director, Academic Services, Office of Information Technology |
| Trudy Jacoby | Director, Visual Resources Collections, Art and Archaeology |
| Ben Johnston | Humanities Database Specialist, Academic Services Office of Information Technology |

| | |
|------------------|--|
| Bryan Just | Assistant Curator, Art of the Ancient Americas; Lecturer in Art and Archaeology, Art Museum |
| Dan Linke | University Archivist and Curator of Public Policy Papers, Mudd Library |
| Christine Lutz | Princeton University Archives Project Archivist, Mudd Library |
| Julie Mellby | Graphic Arts Librarian, Firestone Library |
| Mark Ratliff | Digital Repository Architect, Academic Services Office of Information Technology |
| Dan Santamaria | Assistant University Archivist for Technical Services, Mudd Library |
| Rick Sieber | Visual Resources Curator, Architecture, Architecture |
| Jon Stoop | Digital Library Specialist, Firestone Library |
| Janet Temos | Director, Educational Technologies Center, Academic Services, Office of Information Technology |
| Don Thornbury | Head, Technical Services for Special Collections, Firestone Library |
| Clifford Wulfman | Digital Initiatives Coordinator, Firestone Library |

The Smithsonian Institution

The Smithsonian Institution (SI) has nearly 137 million objects and specimens housed in over two dozen collecting units. Collecting units generally report to their larger organizational entity (e.g., a Museum), and these entities report to various undersecretaries (in Science; History, Art and Culture; and Finance and Administration). Collecting units collaborate in many areas, but operate largely independent of one another.

The Smithsonian strives to achieve a balance between areas and activities that are best coordinated on a pan-institutional level and those most effectively undertaken by individual units. Technology infrastructure is seen as one of the former, and in recent years the organization has made great strides in consolidating various aspects of this infrastructure. As this consolidation continues, institutional discussions are now focusing on digitization. In August of 2006, the SI formed a Digitization Steering Committee which has served as the touchstone for several initiatives (a digitization survey, conference, and fair; a newly created central digitization office; a digitization strategic plan) and has successfully raised the profile of digitization throughout the institution.

The Smithsonian's LAMs wanted to participate in the RLG Programs project to take this momentum in new directions. When twenty-three SI representatives met for an RLG Programs workshop on October 29, 2007 to discuss new possibilities for collaboration, they focused on content collaborations that would leverage their technological infrastructure to enhance access and delivery of content across the institution and beyond.

The group articulated a vision of a "Digital Smithsonian" where users have easy and comprehensive access to SI collections online. To achieve this vision, the representatives agreed that individual SI units must collaborate more fully in internal and external endeavors. Workshop attendees recommended two pan-institutional collaborations to move the institution closer to this goal:

- *Development of a comprehensive digitization and access program for unencumbered photographic collections³⁶ at the Smithsonian.* This effort significantly scales up the digitization of assets at the SI by addressing a large segment of holdings that currently exist in analog formats, many of which are at risk of disintegrating. The project has pan-institutional appeal because it addresses a collection type (photographs) that is ubiquitous across units and covers cross-disciplinary subject themes that appeal to many audiences. Equally important, the project addresses the increasing public demand for access to SI photographic holdings.
- *Creation of an internal single point of access to all Smithsonian collections information for staff.* An intranet-only prototype will allow the Smithsonian to explore the range and breadth of data, metadata distinctions, standards diversity and other areas that may affect one-stop access. By providing a tangible representation of how “one-stop” access to collections might appear, the prototype will help focus internal policy discussions around the vision of a “digital Smithsonian” and advocate for the strategic investments (e.g., enhancements and additional cataloging) to make this information publicly accessible.

Smithsonian Workshop Attendees

Welcome Address by:

Cristian Samper Acting Secretary, Smithsonian Institution

Participants:

| | |
|---------------------|--|
| Carolyn Carr | Deputy Director and Chief Curator, The National Portrait Gallery |
| Merry Foresta | Director, SI Photography Initiative |
| James Gardner | Associate Director, Curatorial Affairs, National Museum of American History |
| Tom Garnett | Program Director, Biodiversity Heritage Library, SI Libraries |
| Nancy Gwinn | Director, SI Libraries |
| Christine Hennessey | Chief, Art Info Resource, American Art Museum (& SIRIS) |
| Martin Kalfatovic | Head, New Media Office and Preservation Services, SI Libraries |
| Alan Knezevitch | Associate Director, Operations, Facilities and Administration, African American Museum |
| Roger Launius | Curator, Space History, National Air and Space Museum |
| Robert Leopold | Director, National Anthropological Archives |
| Carol Neves | Director, Office of Policy & Analysis |
| Tom Orrell | Research Biologist & ITIS Program Manager, National Museum of Natural History |
| Nancy Pope | Historian/Curator, The National Postal Museum |
| Jane Sledge | Associate Director, Museum Assets and Operations, National Museum of the American Indian |
| Jeff Smith | Assistant Registrar, Collections, Freer/Sackler |
| Ann Speyer | SI Chief Information Officer, Office of the Chief Information Officer |
| Katherine Spiess | Director, Central Digitization Office, Office of the Chief Information Officer |

| | |
|---------------------|--|
| Beth Stern | Senior Data Architect, Office of the Chief Information Officer |
| Hans Sues | Associate Director, Research and Collections, National Museum of Natural History |
| Mary Augusta Thomas | Associate Director, Reader Services Strategic Plan, SI Libraries |
| Bill Tompkins | Coordinator, National Collections Program |
| Anne Van Camp | Director, SI Archives |
| Karen Weiss | Information Resources Manager, Archives of American Art |

Victoria and Albert Museum

The Victoria and Albert Museum (V&A) houses approximately 1.5 million objects and another 1.5 million bibliographic and archival materials located in various departments. In 2000-2001, the V&A's director initiated a reorganization across the institution. As part of the reorganization, a new department, Word and Image (WID), was created to encompass the National Art Library, the archives, and the prints, drawings, paintings and photograph collections.³⁷ WID administratively integrates these collections and their various public service components (such as reading rooms), but the collections themselves remain distinct in terms of documentation and disclosure practices. The Museum also has other collecting departments (e.g., Asian; Furniture, Textiles & Fashion; and Sculpture, Metalwork, Ceramics and Glass) which also have archival and bibliographic materials, but these departments do not have separate library or archive staff managing these portions of their holdings.

The Victoria and Albert has embarked on a Core Systems Integration Project (CSIP), which aims to provide single-search across archival holdings, museum collections and the National Art Library catalog. The V&A expressed interest in the RLG Programs LAM project because it wanted to "take stock" of where they are in terms of collections integration. WID, in particular, is keenly aware of the value of collaboration, especially in the area of information delivery and community engagement over the Internet, and wanted to encourage others in the Museum to think more broadly about collaboration.

On February 28, 2008, sixteen individuals from various collecting areas of the V&A attended an RLG Programs LAM workshop where they reaffirmed the importance of gathering, creating and sharing resources among V&A staff, researchers and audiences as vital to the institution's mission. To accomplish these activities more effectively, a strategic approach to digitizing collections was deemed necessary so that information can be accessed more broadly and readily for research, enrichment and innovation. Staff perceive the Web site as a critical destination for these activities and want to position the V&A on the Web as the leading virtual museum of art and design. Two collaborative projects were identified to move the V&A closer to this goal:

- A large-scale digitization effort (referred to as the “Ground Floor Plan”). Workshop attendees recommended that the Museum digitize all the objects on the ground floor of the building. These items represent collections from many different departments and are among the objects most frequently requested by visitors. Once digitized, these materials will offer the V&A the critical mass needed to develop broader and richer digital resources across collecting areas, furthering collaborations within the Museum and allowing for greater engagement with the V&A’s audiences.
- Innovation on the Web. Workshop attendees recommended that the Museum develop innovative uses of content in a Web environment to encourage creativity in art and design and build community among users. They will explore ways to offer novel experiences to their virtual audiences, and begin planning and testing preliminary ideas.

Victoria and Albert Workshop Attendees

Welcome Address by:

Beth McKillop Keeper, Asian Department, and Director of Collections

Participants:

| | |
|---------------------|---|
| David Anderson | Director of Learning and Interpretation |
| Bernadette Archer | Acting Senior Librarian, Onsite Access, Word & Image Department |
| Julius Bryant | Keeper, Word & Image Department |
| Douglas Dodds | Head of Central Services, Word & Image Department |
| Gail Durbin | Head of Online Museum Department |
| Martin Flynn | Head of Access, Word & Image Department |
| Claire Hudson | Head of Collections Management, Theatre Collections |
| Elizabeth James | Documentation Manager, Word & Image Department |
| Christopher Marsden | Senior Archivist, Word & Image Department |
| Beth McKillop | Keeper, Asian Department, and Director of Collections |
| John Meriton | Deputy Keeper, Word & Image Department |
| Keith Percival | Head of Administration, Word & Image Department |
| Gill Saunders | Senior Curator, Prints, Word & Image Department |
| Alan Seal | Head of Records & Collections Services, Collections Services |
| Geraldine White | Head of Remote Access, Word & Image Department |

Yale University

Yale University’s twenty-two LAMs report to the University Provost’s Office and a subgroup of its deputy provosts, with additional “dotted line” reporting tracks to other departments and committees. In 2004, the University formed the Collections Collaborative, a Mellon-funded effort to “enhance access to and use of the museums, galleries and library special collections across the university.”³⁸ The goals of the Collaborative are threefold: to develop systems that provide access to

collection across repositories; to provide staff training about the collections and ways for users to discover them; and to create methods for sharing resources across repositories which will expedite collections processing and access. To achieve these goals, the Collaborative has created programs such workshops, symposia and forums, and re-grants awarded to inter-University projects that collaboratively address collections access and use of collections across campus.

The University also recently acquired a significant tract of land (the “West Campus”) that offers new possibilities for physical storage, display and preservation space for collections. As a result, significant collaborative opportunities may emerge in the sharing of physical facilities among the various collecting repositories.

Yale wants the projects initiated through Mellon funding to evolve into long-term programs of collaboration. The RLG Programs LAM workshop offered members of the Collections Collaborative an opportunity to explore sustainability models in greater depth, and to raise awareness of sustainability issues among campus decision-makers.

Sixteen individuals participated in the workshop on October 31, 2007. During their discussions, they agreed that a more strategic advocacy approach was needed on behalf of Yale collections. They recommended:

- *The creation of an entity, tentatively named the “Yale Federation of Collections,” to oversee this advocacy role by identifying priorities for collections and serving as the voice of a collaborative vision on how best to use collections to fulfill the educational mission of the University. By advocating on behalf of collections, the Federation will help create a sustainable environment for collaborations that enhance access to and use of collections by users across campus and throughout the world.*

Workshop attendees recommended that the Federation’s early efforts should coalesce around two areas:

- identifying ways to share physical facilities and services (such as collections storage, processing and cross-collection object classrooms), and
- planning a shared information architecture for cross-collection services (such as digital preservation and integrated access to collections information) that enables rationales for locally developed services (such as a departmental digital asset management system).
- As a first step, the Federation should develop a strategic plan that identifies goals, objectives and priorities in these areas.

Yale Workshop Attendees

Welcome Address by:

Andrew Hamilton Provost

Participants:

| | |
|--------------------------|--|
| Meg Bellinger | Associate University Librarian, University Library |
| Emmanuelle Delmas-Glass | Collections Catalogue Specialist, Center for British Art |
| Carol DeNatale | Director Collections & Technology, University Art Gallery |
| Larry Gall | Head of Computer Systems Office; Curatorial Affiliate, Peabody Museum |
| Melissa Gold Fournier | Associate Registrar, Center for British Art |
| Pamela Franks | Curator Academic Initiatives, University Art Gallery |
| Bill Landis | Head of Arrangement, Description, & Metadata Coordinator, University Library |
| Julia Marciari-Alexander | Associate Director Exhibitions & Publications, Center for British Art |
| Susan Matheson | Chief Curator/Molly & Walter Bareiss Curator of Ancient Art; Lecturer Classics, University Art Gallery |
| Bill Piel | Associate Director, Peabody Museum |
| Thomas Raich | Associate Director IT, University Art Gallery |
| E.C. Schroeder | Head of Technical Services, Beinecke Library |
| Martha Smalley | Special Collections Librarian & Curator, Divinity School Library |
| Christine Weideman | Deputy Director Manuscripts & Archives / Deputy University Archivist, University Library |
| Tim White | Assistant Director Collections & Operations, Peabody Museum |
| Stephen Yearl | Digital Systems Research Archivist, University Library |

Appendix IV: Beyond the Workshops

The following individuals discussed LAM collaborations with the project team by phone or in person. Their insights contributed to the planning of the workshops and identification of issues described in this report.

Discussions of LAM collaborations—Thought Leaders:

- Clifford Lynch, Executive Director, Coalition for Networked Information
- Chris Batt, Chris Batt Consulting Ltd; former Chief Executive, The Museum, Libraries and Archives Council, UK
- Robert Martin, Professor & Lillian Bradshaw Endowed Chair, School of Library and Information Studies, Texas Woman's University; former director of the Institute of Library and Museum Services
- Margaret Hedstrom, Associate Professor of Information, School of Information and Faculty Associate, Institute for Social Research, University of Michigan

Discussions of LAM Collaborations—Institutions:

Indiana University

Patricia A. Steele, Ruth Lilly Interim Dean of University Libraries
Carolyn Walters, Executive Associate Dean

Metropolitan Museum of Art Ken Soehner, Chief Librarian

University of Aberdeen

Alan Knox, Manager of Historic Collections
Wendy Pirie, Library Services Manager, Library and Historic Collections
Iain Beavan, Keeper of Rare Books
Siobhan Convery, University Archivist and Head, Special Collections and Archives
Neil Curtis, Senior Curator, Marischal Museum
Mike Arnott, Technology Support Officer, Applications Support
Sheona Farquhar, Technical Services Manager, Library and Historic Collections, Library
Robin Armstrong Viner, Cataloguing Manager, Library and Historic Collections, Library

University of Washington Lizabeth (Betsy) Wilson, Dean of University Libraries

Notes

¹ For the RLG Forum Web page with slides and speaker notes, see <http://tinyurl.com/66me4q>.

² For the RBMS Preconference Web page, see
<http://www.rbms.info/conferences/preconferences/2006/>.

³ Soehner, Kenneth. July 14, 2005. "Out of the ring and into the future: the power of collaboration." Paper presented at the 2005 RLG Members Forum: "Libraries, Archives and Museums—Three Ring Circus, One Big Show?" p. 10. <http://tinyurl.com/67evlv>.

⁴ See Wythe, Deborah, New Technologies and the Convergence of Libraries, Archives, and Museums. IN: Dupont, Christian (guest editor), *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*, Volume Eight, Number One, Spring 2007.

⁵ See Fox, Michael, *Three in One: Archives, Libraries and Museums under One Roof*, p. 11.
<http://tinyurl.com/5ek6xy>.

⁶ Doucet, Michelle, 2007. "Library and Archives Canada: A Case Study of a National Library, Archives and Museum Merger," in *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*, Christian Dupont, Guest Editor, Volume Eight, Number One, Spring 2007, p. 63.

⁷ A conference attendee as quoted in Dupont, Christian, p. 16.

⁸ See the project page online at
<http://www.oclc.org/programs/ourwork/newmodes/relationships/default.htm>.

⁹ See www.oclc.org/programs/ourwork/collectivecoll/relationships/LAMworkshop.htm for tips on organizing your own workshop, a sample agenda and the scene-setting presentation.

¹⁰ See the project page online at
<http://www.oclc.org/programs/ourwork/collectivecoll/sharecoll/museumdata.htm>.

¹¹ See the project page online at
<http://www.oclc.org/programs/ourwork/infrastructures/newservice/terminologies.htm>.

¹² See the CALM Wiki online at <http://wikis.ala.org/CALM/>.

¹³ All three issues will be guest-edited by Dr. Paul F. Marty, College of Information, Florida State University. See the Call for Papers online at http://marty.ci.fsu.edu/misc/cfp_digitalconvergence.pdf.

¹⁴ The unattributed quotes that are used throughout the narrative are from workshop participants, who were promised anonymity to ensure candid and open discussion.

¹⁵ Initially, this program surfaced under the name “Organizational and Service Relationships on the LAM.”

¹⁶ For the purposes of this report, we refer to these large organizations as campuses. A campus may be a university, or a large organization with multiple departments, units and sections, such as the Smithsonian Institution or the Victoria and Albert Museum.

¹⁷ See note 14 above.

¹⁸ Schrage, Michael. 1990. *Shared Minds: The New Technologies of Collaboration*. NY: Random House, p. 140.

¹⁹ Ibid.

²⁰ Soehner, Kenneth. July 14, 2005. “Out of the ring and into the future: the power of collaboration.” Paper presented at the 2005 RLG Members Forum: “Libraries, Archives and Museums—Three Ring Circus, One Big Show?” p. 7. <http://tinyurl.com/67evlv>.

²¹ See note 14 above.

²² See note 14 above.

²³ Photographs that are free of copyright, privacy, cultural or donor restrictions.

²⁴ See note 14 above.

²⁵ Prochaska, Alice. 2008. “Libraries and Convergence at Yale.” In *Convergence and Collaboration of Campus Information Services*. CT: Greenwood Publishing.

²⁶ Yarrow, Alexandra Barbara Clubb and Jennifer-Lynn Draper for the Public Libraries Standing Committee. *Public Libraries, Archives and Museums: Trends in Collaboration and Cooperation*. IFLA Professional Reports, No. 108, p. 35. <http://www.ifla.org/VII/s8/pub/Profrep108.pdf>.

²⁷ Canadian Heritage Information Network. Overview.

http://www.chin.gc.ca/English/About_Chin/overview.html.

²⁸ Hsueh-hua Chen. “Digital Library Projects in Taiwan.” *TCDL Bulletin*. Current 2006, Volume 3, Issue 1, <http://www.ieee-tcdl.org/Bulletin/v3n1/chen/chen.html>.

²⁹ http://ec.europa.eu/information_society/activities/eten/index_en.htm.

³⁰ <http://wiki.gbif.org/gbif/wikka.php?wakka=MoU>.

³¹ Some sites had to exceed this number in order to ensure proper representation for all the collaborative partners.

³² The project was overseen by RLG Program Officers Günter Waibel and Ricky Erway. Consultant Diane Zorich served as meeting facilitator.

³³ The scene setting presentation, “PowerPoint Presentation for a LAM Workshop” (2,914K/19 pp.), is available online at

<http://www.oclc.org/programs/ourwork/collectivecoll/relationships/LAMPresentation.ppt>.

³⁴ The Information Services Group is one of six units reporting directly to the University Principal (i.e. the equivalent of a Provost in the US university system).

³⁵ Key collections within this section are the Talbot Rice Art Gallery (which houses the University’s fine art collections), the historical instrument collections, the Lothian Heath Services Archive, the University Archives and the Department of Special Collections.

³⁶ Photographs that are free of copyright, privacy, cultural or donor restrictions.

³⁷ These collections had historical associations, having been separated out from the National Art Library into different departments at various times in the 20th Century.

³⁸ See Yale Collections Collaborative online at http://www.yale.edu/collections_collaborative/.

Bibliography

RLG Resources

Erway, Ricky, Weblog: "The Quest for the Single, Simple, Successful Search." *Hanging Together*. RLG Programs/OCLC, April 22, 2008. <http://hangingtogether.org/?p=410>.

"Libraries, Archives, & Museums—Three-Ring Circus, One Big Show?" 2005 RLG Members Forum. St. Paul Minnesota (July 12, 2005) and New York City (July 14, 2005).
<http://digitalarchive.oclc.org/da/ViewObjectMain.jsp;jsessionid=84ae0c5f8240b42e3a50115644bbb7a4f49a90cac2ac?fileid=0000070504:000006277563&reqid=7>

RLG Programs/OCLC. *Conducting Your Own LAM Workshop*.
<http://www.oclc.org/programs/ourwork/newmodes/relationships/LAMworkshop.htm>.

Waibel, Günter, Weblog: "Libraries, Archives and Museum Hanging Together?!" *Hanging Together*. RLG Programs/OCLC, July 23, 2007. <http://hangingtogether.org/?p=240>.

Waibel, Günter, Weblog: "Organizational & Service Relationships on the LAM." *Hanging Together*. RLG Programs/OCLC, July 30, 2007. <http://hangingtogether.org/?p=242>.

Waibel, Günter, Weblog: "LAMS—A Work in Progress." *Hanging Together*. RLG Programs/OCLC, August 20, 2007. <http://hangingtogether.org/?p=251>.

Waibel, Günter, Weblog: "The LAM Hits the Road." *Hanging Together*. RLG Programs/OCLC, November 29, 2008. <http://hangingtogether.org/?p=324>.

Waibel, Günter, Weblog: "Libraries, Archives and Museum Convergence." *Hanging Together*. RLG Programs/OCLC, May 21, 2008. <http://hangingtogether.org/?cat=5>.

Other Resources

Calimera (Cultural Applications: Local Institutions Mediating Electronic Resource Access): *Guidance on Digital Collaborations Between MLAs*. <http://www.calimera.org/tool-kit/guidance.htm>.

Dempsey, Lorcan. 2000. "Scientific, Industrial, and Cultural Heritage: A Shared Approach," *Ariadne*, Issue 22, January 12, 2000. <http://www.ariadne.ac.uk/issue22/dempsey/>.

Doucet, Michelle. 2007. "Library and Archives Canada: A Case Study of a national library, Archives and Museum Merger," in Dupont, Christian (guest editor), *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*, 8(1), Spring 2007, pp. 61-66.

Dupont, Christian. 2007. "Libraries, Archives, and Museums in the Twenty-First Century: Intersecting Missions, Converging Futures?" in Dupont, Christian (guest editor), *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*, 8(1), Spring 2007, pp. 13-19.

Gibson, Hannah, Anne Morris and Marigold Cleeve. "Links Between Libraries and Museums: Investigating Museum-Library Collaboration in England and the USA." *Libri* 57.2 (June 2007): 53-64. <http://librijournal.org/pdf/2007-2pp53-64.pdf>.

Hedstrom, Margaret and John Leslie King. 2004. "On the LAM: Library, Archive, and Museum Collections in the Creation and Maintenance of Knowledge Communities." Written for the *Organization for Economic Cooperation and Development Mapping Innovation: Six Depth Studies*. <http://www.si.umich.edu/~jlking/OECD-LAM-published.pdf>.

Heron, Peter and Powell, Ronald R. 2008. *Convergence and Collaboration of Campus Information Services*. CT: Greenwood Publishing

"Libraries, Archives, and Museums in the Twenty-First Century: Intersecting Missions, Converging Futures?" 47th Annual Meeting of Rare Books and Manuscripts Section Preconference, Austin, TX 2006. <http://www.hrc.utexas.edu/rbms2006/>.

Marsden, Christopher. 2001. "Sectors and Domains: Some Reflections on Co-operation and Integration." *Journal of Society of Archivists*. 22(1): 17-23.

Martin, Robert S. 2007. "Intersecting Missions, Converging Practices." *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*. 8(1): 80-88.

Martin, Robert S. 2003. "Cooperation and Change: Archives, Libraries and Museums in the United States," *World Library and Information Congress: 69th IFLA General Conference and Council*. 1-9 August 2003, Berlin. <http://www.ifla.org/IV/ifla69/papers/066e-Martin.pdf>.

MLA. Museum, Archives, Libraries, London. *Cross-Domain/[Case Studies]*. <http://www.mlanondon.org.uk/partnership/index.cfm?NavigationID=151>.

Olsen, Steven L. 2008. "Both Sides Now: The 'Something Lost' and 'Something Gained' in Museum, Library, and Archives Collaboration." Paper presented at the Society of American Archivists Annual meeting, San Francisco, August 28, 2008.

Prochaska, Alice. 2008. Libraries and Convergence at Yale. In *Convergence and Collaboration of Campus Information Services*. CT: Greenwood Publishing.

Rayward, Boyd and George A. Miller. 1998. "Electronic Information and the Functional Integration of Libraries, Museums and Archives," in *History and Electronic Artefacts*, edited by Edward Higgs.

Oxford: Clarendon Press, pp. 207-226. Also available online at:
<http://people.lis.uiuc.edu/~wrayward/museumslibs.html>.

Wythe, Deborah, 2007. "New Technologies and the Convergence of Libraries, Archives and Museums," in Dupont, Christian (guest editor), *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage*, 8(1) Spring 2007, pp. 51-55.

Yarrow, Alexandra Barbara Clubb and Jennifer-Lynn Draper for the Public Libraries Standing Committee. 2008. *Public Libraries, Archives and Museums: Trends in Collaboration and Cooperation*. IFLA Professional Reports, No. 108. <http://www.ifla.org/VII/s8/pub/Profrep108.pdf>.