**Library application collaboration, development tools and resources**
Chris Jeris, Senior Software Engineer, HCL ITS
Bobbi Fox, Digital Library Software Engineer, HUL OIS

*Changes from the submitted draft: Reviving abcd-library will be one of the collaboration mechanisms we consider. We request funding for lunch meetings.*

**Summary**
We propose to conduct research and discussions among the library application development community at Harvard (and possibly MIT or other appropriate institutions) in order to answer the following independent but connected questions:

1. **Connecting and collaborating.** How can we improve internal collaboration among the library application development community, including more effectively connecting development ideas with existing or planned projects?
2. **Ongoing support and sustaining engineering.** How can we more effectively provide ongoing support and sustaining engineering for library application development projects, including successful Library Lab projects that are past their incubation period?
3. **Specialized support services.** What specialized development support services would be useful to the library application development community, and how can they be effectively and efficiently delivered?

**Background and rationale**

1. **Connecting and collaborating**
While the existence of Library Lab addresses the issue of our many independent, sometimes sclerotic project pipelines by helping to get new ideas into the open, some of these proposals could be well served by connecting them to existing projects or just to existing development groups.

This proposal was inspired in part by the following events:

- After the “Communities of Knowledge” proposal was made in the first round, it became clear through discussions with Sue Kriegsman that HCL’s Interactive Bibliography tool is likely to meet at least 80% of the specifications. The author of that proposal has been added to the interactive bibliography project group
- The proposers of the funded “extraMUROS” project originally only knew about OIS’s VIA API through a chance encounter at an ABCD talk.

These are rather roundabout paths to discover that solutions to some problems already exist.

We envision a collaborative project discussion mechanism, whether human, online, or both, that facilitates the matching of needs and ideas with applications already available, being developed,
or in the queue to be developed. In particular we will consider how re-establishing the sometime ABCD Library Technology subgroup might fit into such a mechanism. In this way, we can foster cross-library cooperation and avoid carrying out redundant projects.

2. Ongoing support and sustaining engineering
For those innovative projects that succeed and are worthy of surviving their initial incubation period, the question of connection to existing development groups is also germane with respect to ongoing support, maintenance, and further enhancements. While Library Lab expects each proposing organization to arrange for ongoing lifecycle support of its project, this may be an elusive hope in the face of changing Harvard Library priorities, budget, and organization. The Library may want to consider instead the eventual use of centralized development resources for ongoing support. This might include using tools and services that are already available, making new tools available, and explicitly allocating sustaining resources.

3. Specialized support services
Finally, there are some common services which would be useful to everyone in the library application development community, but which a development shop of one or a few people in a single library often cannot support on its own. Some of these services are technologies which empower developers, such as shared source control, bug tracking, wikis for documentation, and project management software. Others are human expertise: we envision having a consulting group available with specialists in quality assurance (QA), usability and assessment, accessibility, knowledge management, and information architecture, so that we can effectively treat these concerns as we bring a successful concept to maturity.

University CIO Anne Margulies has stated in her presentations that our IT staff is made up mostly of generalists due to the decentralized structure of Harvard, and that we need to become “more specialist, less generalist.” Providing these support services in common (whether at the library level or university-wide) would effectively extract a specialist need that we all have sometimes.

Action plan
Over the next three months we would meet with members of the library application development community to discuss these questions. We hope that community members and Library Lab would also assist in connecting us with members of the application customer communities, such as submitters of Library Lab projects, to get their input on models of application development and collaboration. At the end of this time we will write a report of our findings for the library transition team.

Support
This proposal would benefit from Library Lab’s experience, assistance, support, connectivity with other groups and a small portion of people's time to share their ideas with us. As for financial support, we request $1000 to fund catering for lunch meetings. (Crimson Catering
quotes $260 for 20, so this will cover three 20-person meetings with some room for extra attendees.)

**Conclusion**

In making this proposal we are guided by recommendation 2 from the LIWG Technological Infrastructure Report:

*We recognize the need to have high levels of systemic integrity in core systems, but we need, too, to provide substantially greater support and investment in experimental efforts. The Library Lab initiative is much on the right track but it should be a starting point and not an end-point. Where possible, this experimentation in innovation should take place in a collaborative manner across the Library system and with partners, such as MIT.*

We propose to explore the space of alternatives by which our growing investment in experimental efforts can more easily yield results consistent with our desired high levels of systemic integrity. Fundamentally we want to extend the discussion on inspiring and nurturing innovation in library application development that the Library Lab project began, to go beyond the greenhouse of startup projects to a permanently sustainable garden.