## Harvard Library Lab

## Shifting Tool Project

Interim Report #3: September 1, 2013

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*Overview:* The Shifting Tool Project is an effort to create a software tool that can inform library staff of the time and resources required for a shift of materials, the relocation of books and other items housed in library stacks from one area to another. The project team envisions a user interface from which librarians can enter a call number range, and get back a measurement of linear footage. With the further input of the time it would take to physically move the materials from point A to point B, it is intended that the tool can then provide a time estimate to complete the job, expressed in person-hours; that resulting estimate could be customized by changing various parameters available for the task. For example, a shift that the tool determines would take 200 person-hours to achieve could be handled by one person working 200 hours, 2 people working 100 hours, four people working 50 hours, etc., giving librarians options regarding the amount of resources to devote to a project in order to complete it within a given time-frame or budget.

Please refer to the project interim report of 6/1/2013 for development progress as of that date.

Technical Requirements: Berkman developers report that much of the coding is finished, and a development environment is in place. A simple web app is running on a development machine, employing the conceptual graphic interface created for this project. It runs queries, returns results, and does some simple graphing of the data. The biggest issue at this time remains the most significant constraint experienced to date: getting data about what is actually on the shelf. Test data is not accurately reflecting the true linear footage of collections on the shelf within the specified call number range, with the vast majority of error introduced when trying to find all the records in the call number range. The number of records returned by LibraryCloud (see the previous interim report) is about ten times what it should have been, so there is more work ahead figuring out where and how to get good data. Once a reliable, working source for that data is identified, a skeleton app is ready with which to use it. The development team identifies next steps as providing project leaders with the development environment so it can be tested, while the developers continue to work toward refining the source of shelf data.

*Financial Update:* From an overall grant award of \$15,000, \$11,000 has been allocated for the Berkman Center, funding the technical work of the application developers. At this time, it is unclear, but becoming likely that, unless the developers discover an accurate

source of data soon, permitting completion of the application before 10/31/13, this project will need to apply for an extension beyond that date (further discussion of this issue follows). The remaining \$4000 of the original grant, designated for administrative, promotional, and overrun purposes, remains unspent, but will be available for potential costs incurred bringing the application to fruition once the development stage has concluded.

Process and timeline: In the last interim report, we speculated that the project should meet program deadlines. Since that report, and with the difficulties experienced in securing accurate source data, that optimism has been thrown into a certain degree of doubt. As reported in June, progress toward completion was contingent on the development team achieving its goals of data accuracy, and, to date, that goal has not been reached. There is no reason to believe, from this vantagepoint, that progress toward our deliverable will not be swift once that obstacle has been overcome, but the pace of solving that problem has been slow, and is not yet within reach. Still, with good data, the basic framework and test environment for the tool are now in place, giving the project team the needed infrastructure for completing development. The project team will continue to monitor progress closely, and the team remains pleased with the work of the developers. We look forward to the time that we can begin to field test the application, and present a beta deliverable to the Library Lab. As the October deadline approaches, the team will keep the Library Lab apprised of progress, and should the deadline require an extension, we will discuss it with the Library Lab staff, in order to plan a way forward toward fulfillment of the grant.

As always, the project team is indebted to the Library Lab staff, as well as the Arcadia Fund, for supplying the support and resources needed to develop this project.

Respectfully submitted,

Andrew Wilson, Project Manager