It Takes a Village: Open Source Software Models of Collaboration & Sustainability

LYRASIS proposes a six-month National Forum project to convene stakeholders from open source software initiatives that serve cultural heritage organizations to discuss various forms of sustainability models and document current, best practices for sustaining initiatives at different phases in the software lifecycle, including risks and costs. A written report will document key aspects of and different approaches to sustainability and produce recommendations for current and potential users and stakeholders to assess and strengthen sustainability based on such factors as budget, resources, goals and desired direction. The forum also will increase and promote communication among diverse open source initiatives. LYRASIS requests $100,000 from IMLS to support the national forum under the National Digital Platform project category.

National Need and Relevance

Over the past ten years, open source software (OSS) has become a mainstay of the academic and cultural heritage communities, in particular for describing, accessing and managing collections, both digital and analog. Libraries, archives and museums have come to depend upon OSS programs for integrated library systems (Evergreen, Kuali OLE, Koha, etc.), collections management (ArchivesSpace, CollectionSpace, Specify, etc.), digital repositories (DSpace, Islandora, Hydra, Avalon, etc.), search and discovery (VuFind, Blacklight, etc.), content management (Drupal, Omeka, Joomla, etc.), and other functions (ConservationSpace, Zotero, etc.). Much has been learned regarding different models for developing software, fostering adoption, and engaging stakeholders. Some OSS initiatives have been very successful in creating widespread adoption, engaged communities and robust products, while others have struggled to figure out what strategies will work once grant funding ends or when significant, costly upgrades are needed. Programs successful initially might struggle later as other projects evolve to offer new features and functionality, diverting stakeholder support.

There are many OSS sustainability models currently operating in the cultural heritage sector, each designed to satisfy different needs of the community and impacted by where the program/project is in its lifecycle. One OSS model does not fit all. Initiatives choose different pathways to build community, develop the software, govern the program, and raise funding. In many cases, this "special sauce" is a unique mix of variables that is fine tuned to the community the project serves. Through a national forum, LYRASIS proposes to bring together leaders from 20-25 key cultural heritage OSS initiatives to discuss the "special sauce" that makes their initiative sustainable and how that formula has or may change over time to meet the dynamic needs of the communities they serve. Documenting the variables, models, and approaches to sustainability in practice will foster deeper understanding of how variables work in different contexts and communities, support stronger sustainability planning through OSS lifecycles, and inform both potential and current user communities about how to assess and strengthen the sustainability of the OSS products upon which they depend.

Sustainability is an ongoing concern for all OSS users, and it emerged as a common topic in LYRASIS' recent Leadership Forums, a series of 12 half-day community discussions with members held throughout the U.S. between January and June 2016. The desire for better documentation regarding current "business" models also was recommended by OSS program managers invited to an earlier conference hosted by LYRASIS in 2014 on management and community engagement for OSS within cultural heritage organizations. Both the Leadership Forums and 2014 conference were supported by grants from the Andrew W. Mellon Foundation. While individual OSS programs may convene their own communities, and programmers convene through Code4Lib, to the best of LYRASIS' knowledge, there has been no other broad and inclusive convening of OSS program leadership beyond the one LYRASIS held in 2014. IMLS support for the proposed national OSS forum will enable a group of field leaders that does not otherwise convene to meet for meaningful discussion about an issue important to all. In addition, more communication between OSS leaders will strengthen the entire community by fostering deeper understanding of both the commonalities and distinctions among their programs.

Work Plan

LYRASIS proposes a one-day, invitational national forum on OSS sustainability for leaders to discuss models, lifecycles, factors affecting sustainability and lessons learned. LYRASIS anticipates inviting 60 program/governance leaders, community leaders (users), and technical leaders from approximately 20-25 OSS initiatives used nationally and internationally by cultural heritage organizations. The forum will include a keynote speaker, potentially from outside the cultural heritage sector, panel discussions, and breakout discussions for smaller groups to focus on specific issues. Invitations will be issued in July 2017 for an October 2017 event to be held in a convenient location for national travelers, such as Chicago or Atlanta. Project Principal Investigator (P.I.) Laurie Gemmill Arp (Director, Collections Services & Community Supported Software at LYRASIS) and consultant Michele Kimpton (former CEO of DuraSpace) will draft an agenda for the forum and circulate it to invited OSS program leaders for input on content and structure (July-August 2017). Questions could include such as: What is the governance structure and how was it determined? How are decisions made? What financial resources are backing the project and how are they managed/used? What is the makeup of the community supporting the project and how are they involved, how do they contribute? How does development get done? What are the risks, issues, and opportunities the program is currently facing? What lessons learned can you share with the larger community?

The forum itself will be preceded by an opening reception the evening before, to promote informal dialogue. A professional facilitator will assist with setting a final agenda for the forum, manage forum discussion sessions, and track reports from breakout sessions. Logistics will be managed by the project's P.I. and a LYRASIS administrative assistant (travel arrangements, facility arrangements, food and audiovisual requirements for the forum, collection of participant evaluations, etc.). Notes will be compiled into a report and circulated to all participants for review and feedback (November 2017). The notes will serve as the basis for a forum report that will document key aspects of and different approaches to sustainability and include recommendations for assessing and strengthening sustainability. The report will be issued in an openly accessible, web-based format by December 2017. One or more follow-up webinars will further disseminate recommendations and highlight the key outcomes of the forum. The project period is anticipated at July through December 2017. Forum participant evaluations will be gathered to assess the event, as will evaluations from webinar participants. LYRASIS will feature the forum, report and webinars (events and recordings) in its website and news/blog postings, all of which allow for community comment. Outcomes also will inform the agenda and discussions held at LYRASIS Leadership Forums throughout 2018.

Project Goals and Outcomes

The goal of the proposed forum is to provide an adoption and sustainability roadmap for new and existing OSS initiatives and a way to measure sustainability and risk for those evaluating OSS. The published report will include a matrix/template that provides a path for stakeholders to assess sustainability and health of their OSS to determine areas that need to be strengthened. It also will include a resource allocation model for each phase of an OSS project's lifecycle as a guide to the types of resources and investment required for success at different stages. The discussions, report and webinars will increase knowledge among OSS leaders and communities of past and current practices. The proposed forum will have lasting impact by raising awareness of the requirements for OSS sustainability, the variety of potential models, and factors that influence sustainability planning at various stages of a software's lifecycle.

Budget

The total cost of the forum is $100,000 based on 65 participants, including relevant LYRASIS staff, a keynote speaker, and a professional facilitator. 7% of the total budget is for staff salaries, 1% for staff benefits, 12% for consultants, 39% for travel for all participants, 7% for event catering, 2% for meeting room and audiovisual expenses, and 30% for indirect costs based on LYRASIS' current negotiated rate with NEH.