

Enhancing Hyku Platform Sustainability: Applying New Models for Community Coordination and Stakeholder Collaboration

The Partnership for Academic Library Collaboration and Innovation (PALCI) as lead applicant, in partnership with the Private Academic Library Network of Indiana (PALNI), requests an IMLS National Leadership Grant for Libraries for \$248,600 to fund a 24-month project to address the current challenge of coordinating the work of multiple user communities and developers to ensure a sustainable, robust open source community and efficient development of the Samvera-based Hyku repository software. The project will result in a replicable model for community-led software development across projects and organizations and the development and integration of highly desired features into base Hyku for the betterment of the software for all. The project will address NGL-L Goal 3: Improve the ability of libraries and archives to provide broad access to and use of information and collections; and Objective 3.1, Advance digital inclusion, broadly defined.

Project Justification - Consortia and libraries increasingly adopt Hyku as an affordable, multi-tenant digital repository solution. The Hyku for Consortia Project launched its repository service in July 2023 with implementations across four library consortia (roughly 40 libraries), and the project team networks with an active community of other implementers external to our project. Previous user-driven enhancements to the platform, funded through IMLS Hyku for Consortia grants and other projects, have made the software an attractive option to provide repository services at scale. The current challenge is connecting the work of multiple user communities and developers to ensure a sustainable, robust digital environment and efficient development of this vital digital infrastructure. To continue to improve the ability of libraries to access affordable repository services and thus open access to and use of information and collections, several needs should be addressed.

First, additional developers need to be trained to work in the Samvera environment to provide development at the scale needed to support the growing user base. And, although Hyku users frequently meet formally at conferences and interest groups and informally at monthly “watercooler” sessions to share progress and ideas, there is a need for increased efficiency in roadmap development. There are feature gaps and enhancements that are desirable across our communities. Similarly, while most project-specific development is eventually added back to the Hyku code base, there is an opportunity to develop efficiencies in how work around commonly desired components is planned and implemented. There is a need to establish processes to further collaborate on development priorities as a community rather than tackling gaps in a piecemeal, project-by-project approach. Siloed development frustrates Hyku adopters who want to implement similar features immediately.

Project Work Plan

1. Create Collaborative Development Infrastructure. The first six months of the grant period will be focused on the development of a sustainable organizational infrastructure and strategy to streamline cross-project development, drawing on research and previous practice in this area. Procedural elements of this will include the following: 1) Identify shared needs, 2) Build a human-readable feature roadmap, 3) Map out specifications, 4) Development, 5) Quality assurance, and 6) Deployment to Hyku core. Additionally, we will develop a community funding pledge drive structure to ensure product sustainability by pooling funds across projects for development. Building on what we’ve learned collaborating across the PALCI and PALNI consortia, with our institutions, and in the Samvera space, this work will be carried out by PALNI and PALCI project staff in the roles of product/project manager, support and development liaison, and user liaison, in collaboration with

co-primary investigators Jill Morris and Kirsten Leonard, as well as partnering Hyku users. A contract-based project community coordinator will lead project management in this area. Potential partners include the Adventist Digital Library, Amigos, Atla, the British Library, MOBIUS, and the University of Louisville.

2. Complete Community-Focused Software Development. Next, we will employ that infrastructure to support functions within the Samvera governance to effectively carry out five community-focused development sprints for Hyku over a period of 12-14 months. These will be needs shared across projects, such as improving analytics, search engine optimization, and metadata configurability; likely “bigger lifts” that no single project has the capacity to invest in alone, and needs that have already been identified in previous gap analyses and user studies. The community coordinator and product/project manager will provide oversight for development plans. Staff in the role of user liaison will lead communication with users during specification building. Development will be carried out by the developers we train and [Software Services by Scientist.com](https://www.softserv.com/) (SoftServ). User support, training, and quality assurance for new development will be provided by the support and development liaison.

3. Train Developers and Model Shared Staffing. Simultaneous to the software development process, in year one we will identify developer training opportunities, recruit attendees, and fund attendance for four developers. In year two, the project will contract with one part-time junior developer to implement their learning by assisting our shared development structure and Hyku at large. Tasks include ticket tracking, code maintenance, and updating documentation. We will model inter-project staffing through shared developer and community coordinator roles, and provide a proof of concept for coordinating in this way.

Reporting will occur throughout the project, with a particular focus on that activity during the second half of year two. Strategic communications staff will work on formal announcements and web design, and the staff in the operations manager role will track the project’s progress in consultation with the rest of the project staff.

Diversity Plan - Our project will engage a broad range of stakeholders across Hyku implementations, of varying sizes and types. We will continue to be a part of the open, welcoming Samvera community, and prioritize development needs that support Hyku as an inclusive space.

Project Results - The project will result in a replicable system for community-led development of Hyku across projects and organizations. This model will be adaptable to other open-source projects, and will improve efficiency of development and code integration for highly desired features. We will document and share the system widely with relevant stakeholders and add it to our existing toolkit for repository collaboration. We will model and document the outcomes of using a shared developer and community coordinator across projects to support development needs and platform sustainability. Highly desired features will be developed and integrated into base Hyku, meeting needs around shared development gaps across the Hyku user base. These deliverables will be accessible to other institutions and communities through the open-source code repository. In addition, developers will be trained on the Hyku code base, adding to the pool of expertise the community can draw upon for development needs.

Budget Summary

The total budget requested is \$248,600. We estimate: Contract expenses for development, support, training, and project management at \$221,000; Travel - \$5,000; and indirect costs at 10% or \$22,600. We anticipate significant staffing, hosting/maintenance, travel, and other in-kind contributions.