Hyku for Consortia - Toolkit Template
Hyku Operational Model and Business Model Scenarios Template

Overview

Vision

For collaborating libraries to have agency in repository platform selection and management to effectively support both local and shared institutional and scholarly communications needs at scale.

Mission / Objective

Together, we will develop and offer an affordable, open-source, and collaborative repository solution based on the Samvera Hyku platform.

The Need

[Define the stated need for repository solutions within your organization(s).]

Value Proposition

The multi-tenant Samvera-based Hyku platform, developed in part by the Hyku for Consortia project, represents a unique opportunity to serve a multitude of participating libraries with a community-owned, multi-purpose solution by leveraging scale and cost-savings achieved through shared administrative and technical infrastructure. Hyku strikes a balance between repository functionality, usability, and affordability, while also maintaining the flexibility to innovate and improve or change solutions as needed.

Values

This collaborative repository will be operated in alignment with the following stated principles and values:

- **Cost-effective**, with a sustainable and controllable cost structure
- **Multi-tenant**, with individual branding, theming, and search per participant
- **User-friendly** to users of all types (librarian, faculty, student, etc.)
- **Open source**, and promoting open access to information
- **Community-owned** and supported by a diverse community of developers and service providers
- **Cooperative**, allowing collaborative management and decision making
- **Scalable** for use by groups and participating institutions of varied sizes and types

- **Interoperable** and allows free-flow of data with easy import and export
- **Flexible** in design and workflow
- **Customizable** based on a shared and user-centered approach to development
- **Comparable** in features with commercial repository solutions
- **Improvable**, allowing developments to be contributed back for community benefit
- **Future-facing** and not rooted in old technology structures

Selecting a Hyku Business & Service Model

Goals for discussion:

- Consider the needs of each partnering consortium / library
- Consider whether two or more consortia may collaborate to share costs, resources, expertise, services/support, and other infrastructure to offer cost-effective repository solutions to members.
- Consider and test the financial feasibility of offering Hyku services under a variety of potential service and funding models

Example Model Scenarios:

Scenario 1: Deep Collaboration : Consortial Partnership for Hyku Administration & Management

a. Role for Consortia -- Two or more consortia administer and co-manage an instance of Hyku to offer consortia IR services via the Hyku platform
b. Hosting -- Consortia could choose to:
    i. self-host, or
    ii. contract for hosting and/or software/technical support, depending on cost-effectiveness and staffing/technical capacity available from each consortium
c. Staffing -- Consortia could
    i. collectively support a shared position to manage IR services and service provider relationships, or
    ii. each consortium could support their own membership base
d. Funding -- Consortia could select the funding method determined by local need:
    i. Cost-recovery, or revenue-generating payment for services; or
    ii. Centrally funded venture
e. Anticipated Costs:
    i. AWS / Web hosting
    ii. Support and Maintenance: Hosting/Software/Technical
    iii. New Development (e.g., worktypes)
    iv. Repository staffing at consortium level to manage shared aspects of the Hyku instance
f. Cost Share Model:

i. Evenly shared cost of shared technical maintenance and support by commercial service provider or in-house developer
ii. Hosting costs shared based on % of costs attributed to use of AWS
iii. Staffing costs shared or split, dependent on shared model v. individual consortial staffing/or teams depending on the needs of the consortia
iv. Development costs for shared initiatives split

g. Considerations/Risks
    i. Hyku's limited metadata worktype management means collaboration could result in less customization / options for individual libraries, which could equal less value to libraries
h. Potential Benefits
    i. Greater ability to split costs, especially administrative, development, and staffing costs -- potentially the least expensive per institution
i. Evaluation criteria:
    i. Willingness to pay for Hyku measured at each consortium through pilots and needs analysis
        1. Need for service
        2. Adoption / # of members participating
        3. Customization needs
    ii. Development needs
    iii. Availability of other funding sources -- e.g., OER clearinghouse

Scenario 1 - Sample Budget

	Annual Total Costs	**Notes**
AWS / Other Server Storage & Processing Costs	30,000	These costs vary depending on storage and processing; May want to consider ideal file types and use cases
Technical Support & Maintenance	30,000	Bug fixes, Hosting support, upgrades, etc.
Software Development	30,000	Estimated development needed above and beyond hosting; Buffer as issues come up that require development efforts
Optional Add-on Services	Custom / Add-on cost	Examples include DOI services, Preservation services, other discovery integrations
Staffing	50,000	Time spent by consortial staff (salaries + benefits) to manage the service; accounting/finance; contracts
Total costs	**$140,000**	

Scenario 1 - Sample Cost Share Models (Rough estimates only, estimated conservatively)

	Consortium 1	Consortium 2	Notes
AWS / Other Server Storage & Processing Costs	Split based on actual use	Split based on actual use	May split based on actual use of storage (used 50/50 split for estimating purposes); Consider possibly allowing unlimited use up to 1-3 TB to avoid dicincentivizing use
Technical Support & Maintenance	$15k	$15k	Split evenly
AWS / Other Server Storage & Processing Costs	$15,000	$15,000	Split evenly
Staffing	$25,000	$25,000	Half-time support coordinator; half-time project manager; community liaison; finance and administrative support May be in-kind contributions that are shared based on expertise
Total Costs	$70,000	$70,000	
Funding Models	Central funding	Cost-recovery based on participation	Alternatively total costs may be distributed via a cost share formula for all participating institutions, regardless of consortium affiliation
Estimated # Institutions	24	15	
Estimated ave. cost per institution	$2,920 per institution	$4,667 per institution	

Alternative Scenarios:

2. **One Consortium as Service Provider : One consortium providing services to one or more other consortia**
    a. One consortium takes responsibility for all aspects of hosting, administration, support, and development efforts, whether in-house or outsourced
    b. Offers repository services to other consortia to generate cost-recovery / net-revenue opportunities
    c. Option to staff at the consortium level or contract for staffing
    d. Considerations / Risks
        i. Consortial Service Provider bears more risk should others not adopt the service
    e. Benefits
        i. Opportunity to create revenue, support staffing through generation of services
        ii. Opportunity to offer to multiple consortia with less governance / shared decision-making

Scenario 2 - Sample Cost Share Models (Rough estimates only, estimated conservatively)

	Consortial Service Provider	**Consortial Customer**		**Notes**
AWS / Other Server Storage & Processing Costs	$30,000	Split across participating institutions		Based on use; could do additional cost recovery for high use by customers (e.g, >1 TB per repository)
Technical Support & Maintenance	$30,000	Split across participating institutions		
AWS / Other Server Storage & Processing Costs	As needed	As needed		
Staffing	$50,000			Dependent on rates/salaries, 2 Part-time or 1 Full-time *May apply a service fee or other cost recovery mechanism
Total Costs	**$110,000**			Services could be offered to more than 1 consortium's members; Revenue generated helps to offset risk and benefits the hosting consortium
Funding Models	Cost share	Cost share + plus service fee		
# Institutions	24	10	Total repositories : 34	Any institutions brought on would reduce the costs to the host provider
Est Ave. Cost per institution	$3,236 per library	$3,236 + Service fee		Estimated cost for service provider is total cost of running the system; Revenue from consortial customers would reduce cost to service providers over time and could generate revenue positive results, depending on # of libraries buying service

3. **Commercial Service Provider : Contractual relationship with a vendor to fully support the open source platform and services**
    a. One service provider takes responsibility for all aspects of hosting, administration, support, and development efforts, with consortia contracting either jointly or separately for Hyku instances

b. Option to staff at the consortium level or contract for staffing with other consortia
c. Considerations / Risks
    i. Commercial Service Provider controls costs
    ii. Likely more expensive
    iii. Consortial staff will still need to retain expertise
d. Benefits
    i. Service provider may offer added scale / coordination with other groups using the service