



Staffing Roles for Digital Collection Building

There are many roles, providing different skills and abilities, that work together to build a successful digital library collection. Some roles may be filled by the same person, while other roles may require multiple people. Every project has different requirements, and every organization may choose to emphasize different roles for each project, particularly as an organization's digital library initiative matures.

There are three strategies for an organization to accommodate the different roles and skills needed for a digital library project. These three strategies are generally used in combination by successful digital collection projects:

- **In-house staffing.** The benefits of in-house staffing are many, including maximum control of quality and quantity; the ability to set and manage timetables; the ability to postpone or abandon a project if necessary; and the ability to completely customize the project to support the needs of your organization and its users. The major drawbacks are expense, scalability and tradeoffs in staff expertise and overall quality. An organization may find that it does not have the necessary expertise in house for a digital collection that meets prevailing digital library standards and offers a sophisticated, engaging web interface. Tradeoffs in quality, functionality and appearance may be the result. Digital library collection building is very labor intensive. An organization will often find that an in house digital library initiative requires diverting staff from other ongoing responsibilities—a decision that may be difficult to sustain over time.

■ **Outsourcing.** There are many vendors who can provide components of digital collection building. Common elements that are outsourced include:

- **Creation of digital files.** Analog source materials may be sent to a vendor, with specifications representing the organization's requirements to which the vendor must adhere. The vendor will digitize the source materials, generally for a per-item fee.
- **Metadata.** Increasingly, metadata creation (cataloging) can be provided by vendors. Vendors will probably require a cataloging utility, such as a database (Access, FileMaker Pro, MySQL), etc. or access to a web-based utility, such as the New Jersey Digital Highway's WMS. You will want to provide the vendor with good training and metadata templates, since metadata creation is not as straightforward as digitizing.
- **Website.** There are many excellent web designers that can provide an engaging web presence for displaying your digital collection. These designers are often programmers, or work in tandem with programmers, to attach your database of metadata records to the web, using PHP, Perl or other programming language. They can also apply a search engine to your metadata records, to enable search and retrieval of digital objects in the collection.
- **Consulting.** In addition to digital service providers, you may want to consider hiring consultants for other elements of the project, such as digital project planning, staff training, copyright analysis of the collection and project evaluation.

■ **Collaborative Development.** Another way to fill some of the requisite roles and expertise is to engage in collaborative development with a consortium or organizational partner. The benefits of this strategy include the development of long-term partnerships; gains in scalability, expertise and economies of scale; as well as a richer collection, more likely to appeal to a range of users. Negatives can include loss of flexibility, control and the ability to customize to the unique needs of your users. NJDH is a collaborative digitization initiative that provides a sophisticated repository, digital preservation services, training and support, a tool for creating metadata, and a website for sharing the collaborative collection. Future developments

include the ability to attach a dynamic search page to your organization’s website, with searching initially limited to your collection but expandable to NJDH. NJDH’s goal is to provide the expertise and economies of scale available in a collaborative environment together with individual organizational access and customization options, for “shared access, local control.”

Staffing Roles

Staffing roles are provided in a chart, with an explanation of skills and recommendations for filling the roles:

Role	Description and Skills	Recommendation
Project Planning	Identifies steps, milestones, staffing, budget. Identifies funding source(s). Provides oversight, vision and guidance for project team. Oversees cost-benefit analysis for the project.	Fill In-House with a senior staff member. Supplement with consultants, as needed, particularly if no one on staff has digital library project experience.
Budget Management	Manages the project budget. Issues RFPs for vendors and large equipment and purchase orders, as needed. Provides cost analysis for each step. Accounting/bookkeeping expertise needed.	Fill In-house with business manager or accounting staff.
Project Management	Insures that milestone deadlines are met, coordinates activities of all the other participants	In-house staff—may be permanent position or temporarily funded. May be the same person as the project planning role—depending on the needs of the project.
Grant Writing	Prepares grants to specifications of granting agencies. Works with staff to conduct research to justify need, coordinates contributions from project management and staff.	In-house or consultant. There are many grant-writing consultants. Be sure to select a consultant who has written successful grants to the agencies that interest you.

Role	Description and Skills	Recommendation
Collection Curation	Selects the collection and provides overall collection stewardship. Identifies copyright status of objects. Sets handling standards. Provides provenance and descriptive information to catalogers. Represents the intellectual and physical needs of the collection.	In-house staff. May be supplemented by consultants, faculty, etc. with subject expertise, who can provide additional provenance and intellectual content description.
Server Management	Manages access to the collection, as well as long-term storage of digital archival files. Installs and maintains the web server, performs file management, back up, online, nearline and offline storage of files.	In-house staff, unless this is provided as part of a collaborative project. Outsourcing to an ISP is possible, but not recommended, since the robust long-term storage will be lacking.
Digitization management	Manages the digitization process, including selecting file formats, setting parameters, establishing file names, overseeing digitization staff, developing specifications for outsourcing, selecting and overseeing the work of digitization providers. Selects equipment and lighting. Responsible for setting and meeting digitization targets. Provides training to digitization staff. Photographic expertise is highly desirable.	In-house staff or hired for the project. In collaborative projects, formats, standards and targets will be collaboratively established. Training may be outsourced to a consultant or training provider.
Digitization Staff	Digitizes files to project requirements. Meets digitization targets set by the manager.	Outsourced, in-house or hired staff. May be students or volunteers.
Metadata Design	Selects metadata schema(s) to describe and manage the collection. Establishes customized profile and controlled vocabularies. Works with the programmer to develop a cataloging utility.	In-house staff or collaborative activity. Supplement in-house staff with consultant, if in-house or collaborative expertise is lacking.

Role	Description and Skills	Recommendation
Metadata Management	Work with the metadata designer(s) and the programmer to develop a cataloging utility. Set targets, develops workflows, provides training to metadata staff.	In-house staff or collaborative activity. Training may be outsourced to a training provider.
Metadata Staff	Catalog resources according to standards and workflows established by management	In-house or outsourced. The more carefully the metadata interface is crafted, with controlled vocabularies and limited choices, the less control and lower level the staff that perform the work. Tight control over input fields works better if you are outsourcing or using students/volunteers.
Database Programmer	Develops the database and interface ('cataloging utility") for metadata creation. Attaches the metadata database to the web.	In-house, collaborative or consultant. May be the repository developer, particularly if the repository includes the metadata database. For consultant, identify ongoing support and development strategy.
Web Programmer	Provides the web services and utilities to make the collection accessible, including the search engine, user customization ("MyPortal"). May implement a CMS or other database-driven elements. May also develop streamlined, web-based workflows for digitization and metadata creation. Applies a statistics package to the website.	In-house or collaborative staff.
Web Designer	Designs the web presence, including the home page design, logos, navigation, search and display screens.	In-house, collaborative, consultant or outsourced
Webmaster	Provides ongoing maintenance and enhancements according to the webmaster's designs. Maintains site policies and statistics	In-house, collaborative or outsourced.

Role	Description and Skills	Recommendation
Marketing	Publicizes availability of digital projects to users. Issues press releases. May create brochures, make presentations to targeted user groups, etc.	In-house, collaborative, or outsourced.
Educational Specialist	Develops lesson plans, adjunct materials, markets to teachers. Develops and tests in-class activities. Provides training for educators. Important for collections with an educational focus.	In-house or outsourced. This is often an outside consultant from the education community, such as a K12 teacher.
Public or User services	This role mediates the collection for the organization's users. Assists patrons with use of the digital collection. May incorporate the collection in user guides. May develop interactive activities that utilize the collection.	In-house staff
Evaluation	Assesses the usability and impact of the digital collection. May need assistance from programmers to develop web survey instruments or to organize controlled laboratory assessments. Should be skilled in developing surveys, interpreting results and performing general statistical analyses on results	In-house, consortial or outsourced. It is recommended that initial evaluations be performed by an outside consultant, particularly to insure objectivity and fresh insights from an outside point of view. Include training for ongoing assessment in your contract with the outside evaluator, so that you can maintain this critical activity. Project management may want to perform a cost-benefit analysis, however.