

CHAPTER 1 PROJECT PLANNING

These guidelines provide a detailed examination of the many aspects of creating and maintaining a digital project. Many of the components of a digital project need to be discussed before the scanner is turned on, the tripod is set up, a single element of metadata is written, or a reference question is answered. Project planning forms the core of a digital project because it addresses each aspect of digitization and its impact on your institution. This chapter will provide an overview of the issues that need to be considered in project planning, with specific references to more detailed information provided in other sections of the *Guidelines for Digitization*.

Before the selection process, the purchasing of hardware and software, and the assignment of staff, planners of digital projects must do just that -- plan! And planning for digitization projects involve an assessment of several factors as well as much foresight as can be gotten. Know your strengths. Know your weaknesses. Determine where your opportunities lie and how you can best take advantage of them, adapting where you can to meet the project's challenges. Know thy own self, but also know thy users, their expectations, and their needs. There are several points to consider that will provide more assurance of success:

- Understanding the institution's goals and missions and where the digital project fits into those goals and missions
- Envisioning exactly what the digital project is envisioned to be, what are the component parts, are there areas that can be developed now versus things developed later?
- Assessing an institution's existing resources against those that need to be acquired
- Establishing the standards that will be adhered to in conducting the digitization project
- Beginning the documentation process to assure that decisions are well-communicated
- Planning the implementation of the project, including milestones and a timetable
- Monitoring, evaluating, and providing in-project direction

This chapter will help you in this process by discussing these seven general areas that should be addressed in a digitization project's planning process: goals, objective and scope of project; definition of intended audience; analysis of collection materials; needs analysis; cost assessment and impact on institution; development of standards and processes; and project evaluation.

Goals, objectives, and scope of the project

You have to know where you are going in order to get there. An explicit statement of a project's goals ensures that all personnel share the same "destination" and can measure their accomplishments. Determining the scope of a project gives it focus and guarantees greater impact and more efficient use of resources. The first part of this process is to develop a keen understanding of the overall goals and mission of your institution. Digital projects divert a great deal of resources and require a lot of attention. If a digital project

will not help your institution to meet with those goals and objectives, then it may not be the right choice at this time.

Once you have determined that the digital project is going to be part of the overall institutional goals, you want to determine the individual project's goals and objectives. Your project may have a specific, single goal, such as the development of a Web site to support a special exhibit or event, or the content presented in the digital project may be used for a variety of purposes and applications. The latter, "use-neutral," approach assumes that future use of the material will be varied. Use-neutral digitization aims for longevity, high quality, and as many uses as imaginable. For example, a use-neutral digitization project would include the creation of Web sites to support the interests of scholars, hobbyists, and schoolchildren. It also would provide digital, master duplicates for future Web projects or traditional publishing. While the use-neutral approach to digitization can be more costly at first, requiring more planning, more training, and more storage space, it may be the most cost-effective strategy in the long term. It is certainly the best approach for the preservation of sensitive originals (in that the originals do not have to be re-handled or re-scanned for each new, specific digital creation). Use-neutral digitization is one aspect of a "scan once methodology" discussed in the chapter on **Digital Production**.

These goals and objectives will allow you determine the scope of this particular project. Even if you determine to establish a use-neutral approach to your digitization project, you should not try to do everything at first. Determining the scope of your project will allow you to undertake an achievable digital project that will serve as a foundation for a digital program (for more on transitioning from digital projects to digital programs, see **Final Thoughts**).

Determining the Audience

Part of the goals and objectives and scope of the project is to identify the dimensions of your intended audience is. In the use-neutral project described above, it is clear that even a small digital project can be geared toward several different audiences. Outlining the intended audience(s) will provide elementary information in the planning of the project as it impacts both the selection of what to digitize (see **Selection**) and design of the online presence of your digital project (see **Presenting your Digital Project**).

Identifying potential users will help to define your digitization strategies. This is not something that should be determined in isolation. The project leader should gather information and feedback from various members of an organization, patrons and experts will help you to identify and make decisions regarding a digital project. It is also clear that this audience determination will be guided by your institution's goals and objectives. It may be that the decision to move toward digitization is an attempt to expand your user-base beyond your traditional patrons. Or it could be to better serve the existing patron-base. All of this should be clear in both your institution's mission and the project's goals and objectives.

In thinking about the audience, it is important to think not only of intended users of the digital project, but to make note of potential ones. One of the most important lessons learned early on by digital project producers is that while you may intend to reach a specific audience, that by placing digital material on the Web, there are a number of unpredicted users as well. The impact these unpredicted users may have on an institution can be lessened by giving some initial thought to who those users might be and how they will be handled as they begin to make contact with the institution.

Analysis of collection materials

Planners will want to survey their holdings to determine which of their collections will best meet the goals they have established. This initial survey may be made with the help of questions such as the following:

- Will we choose documents, photos, slides, negatives, objects, or oversized materials to digitize?
- Will the materials be a mixture of formats (such as manuscripts, maps, photographs, etc.)?
- How much material will need to be captured to a digital format?
- What is the condition of the material?
- Will items require special treatment or handling?
- Will the material be digitized from the original or from a surrogate (e.g., a photograph of the object or photocopy of the fragile manuscript)?
- Does the material have a physical relationship to something (e.g., to a mount, an album page, or a pedestal)?
- How much time will be involved in physical preparation of the material to be digitized?

Combining both the project goals and this analysis will provide an assessment of the selection process that is discussed in more detail in the chapter on **Selection**. It should also be noted that this analysis will affect decisions of hardware and software purchasing and other associated costs in preparing the materials for digitization.

Needs Analysis

Once these overview aspects of the digitization project have been established, and it is clear that a digital project will meet your needs and an audience has been determined, the next step in planning a digital project is to take stock of your environment and resources to assess needs. Typically, this kind of analysis achieves several goals. These include but are not limited to:

- determining funding sources,
- assessing staffing required, and
- examining the extent and type of technical support needed.

To conduct this analysis, it is helpful to ask specific questions such as:

Equipment:

- Do you have the hardware to digitize?
- Do you have the software to digitize?
- Do you have adequate storage for master digital images?
- Do you have the software and hardware to provide access to the digitized collections and documents?
- Will your equipment provide the speed of access needed for large files?
- Will you be able to upgrade equipment as newer technologies come online?

Materials documentation and conventional practices:

- Do you have sound materials documentation, or will you need to substantially re-work your collection data?
- Do you have appropriate metadata for the collection or can it be derived quickly from previous work on the collection? (i.e., do you have document identification, acquisition records, provenance information, indexing?)
- Do the formats for the digital capture, storage, preservation, metadata, and access meet institutional, state, national, and international standards?

Administration and staffing:

- Have you considered the scale of the project and how it will affect routine work flow?
- Does the cost of the digitization project fit within the planned budget? Is the project worth the cost? Will additional funds be needed to complete the project?
- Do you have enough time to complete the project?
- Do you have sufficiently skilled staff (including those who understand the technical needs of digitization) to effectively complete the project?
- Do you have the means to train staff and keep their training current?

Audience and patrons:

- Will the digitized materials meet your audience's needs?
- Will the impact that increased access to some materials have an effect on your institution's public services? How will you handle increased interest?

By conducting this kind of analysis, you will be able to refine the project's goals and objectives. These questions also allow you to avoid some of the common pitfalls to embarking on a digitization project.

Cost analysis and impact on institution

Digitization projects are exciting to undertake. Often times it represents a change of pace from the day-to-day work that you do, and there is a lot of room for creativity! However, it is important to understand up front what a digitization project "costs" and what the impact on your institution will be. Below is a table that covers the different kinds of "costs" that exist with digitization projects. Many of these expenses will be things that you already have, as discovered in your needs analysis. However, remember that resources that are allocated to a digital project are still an expense because they are diverted from their current work. This is especially true with staff time, which is often overlooked as a "cost" for a digital project.

Category	Cost specifics	Comments/Options
Hardware	Digital capture equipment, computer, and storage	Will you use existing or purchase new?
Software	Digital capture, image manipulation, design, and access	Will you use existing or purchase new?
Staff wages	Project management, selection, preservation and conservation, digital capture and image processing, metadata creation, web design, quality control, and evaluation	Staff wages should include not only those new staff that are hired but an estimation of the allocation of existing staff time devoted to the project. <i>In particular, don't forget the administrative details that the project manager will need to do, this is often a "hidden cost."</i>
Training costs	Trainer and staff time in training	Training primarily has to do with the time spent by both internal staff and new staff; the project manager should be trained at all aspects of a project while new staff can be trained for specific roles.
Presentation and preservation costs	Server space, data migration and long term preservation	Assess how much server space is available and will be needed to host the digital project; can you use existing or purchase new? Migration and long term preservation is also a cost that needs to be assessed.
Material costs	Preparation for digitization, conservation	Typically expressed in time, but conservation work may need to be outsourced and there can be associated supply costs.

Adoption of standards and processes

The determination of image capture specifications is one of the first considerations addressed by digital image managers. It is also one of the most complex decisions to be made, affecting the ultimate size of the digital collection, and influencing all decisions

concerning equipment, storage, presentation, and staffing. Many of the standards are addressed in other sections of this guide, such as **Digital Production** and **Metadata**.

Planners will want to explore the actual processes involved in the project. This will assist them in developing a workflow plan and help understand the impact that following standards for digital production and metadata will influence the time and ultimately the cost of the project. As standards and best practices are adopted and as the processes and workflow are refined, project managers need to be flexible. Digitization requires constant adjustment to keep pace with changing technology and standards of practice. Be prepared to be "under development" indefinitely.

Documentation

The importance of making all these decisions will be lost if they are not recorded in the planning phase to provide the backbone of the documentation of the digital project. Documentation allows be managed and worked effectively and efficiently. It also prepares the project for later migration and sustainability issues that are faced with electronic resources of all kinds. The continuity provided by documentation will be of benefit throughout the life-cycle of the project, as staff come and go, and in planning future projects. Individual tasks should be clearly defined, and documentation should provide that information.

Aspects that need to be included in the documentation are:

- Project goals and missions
- Selection criteria to be used and items selected
- Digitization and metadata standards chosen
- Workflow and tasks to be performed

How will you document your project? Documentation strategies are an essential aspect of the planning process, as details and decisions made during the planning process can guide the project. Documentation ensures that decisions are recorded to avoid repetition or conflicting solutions. This documentation will also guide you in the sustainability of the project over the long term (see **Digital Preservation** for more information).

Evaluation

The last step of the planning process should include an outline of how you will evaluate the digital project against your goals or objectives. From the very beginning, digitization planners will want to think about assessment and evaluation, asking:

- How will the project be assessed?
- Should that assessment tools be built into the project?
- Can a quantitative as well as qualitative assessment be taken throughout the project?

This evaluation stage will allow you to re-examine your choices made in the planning process for necessary adjustments and to leverage the lessons learned to more successful implementation of digitization the next time. Thorough evaluation of the project -- throughout and at the end -- will provide ways to refine your current project as well as inform you on future projects (see **Project Evaluation** for more information).

Conclusion

Even the best-laid plans can be upset by unexpected obstacles and problems. No amount of planning will cover every exigency, so plan and be prepared to re-plan. At some point, all plans must lead to the creation of that first digital image for the work to actually begin.

Successful digitization projects are the products of successful planning. While it is tempting to plunge right in, a more methodical approach will save time, effort, and resources in the long run. It will also help make certain that projects maintain focus. By maintaining focus, projects will more than likely meet their goals. Planning certainly will help when it comes time to choose which materials should be digitized.

Further Reading

Colet, Linda Serenson. "Planning an Imaging Project," prepared as one of the *Guides to Quality in Visual Resource Imaging*, July 2000 for the Research Libraries Group (RLG) and the Digital Library Federation (DLF), <http://www.rlg.org/legacy/visguides/visguide1.html>.

NDLP Project Planning Checklist, National Digital Library Program, Library of Congress, available at: <http://lcweb2.loc.gov/ammem/prjplan.html>

Planning Digital Projects for Historical Collections in New York State, New York Public Library, available at: <http://digital.nypl.org/brochure/>