While teaching a workshop on digital project management at last year’s Association of College and Research Libraries conference in Seattle, I began by asking the participants to describe to the class a project for which they were responsible. One librarian explained that her supervisor asked her to design a library website. I asked her to relate any prior experience she had in designing websites, training that she had received in web design, and whether she possessed any design-related skills or knowledge. The serious look on her face as she explained that she had barely any experience at all designing websites was telling. Furthermore, she said that she was "uncertain where to even begin," but that she felt "a workshop on project management is a logical place to start." I agreed and then moved on to the next person in the room.

A film repository archivist said he was given an assignment to lead a project that involved digitizing a collection of production scripts for a film archive. He explained that his biggest challenges were managing the vast amount of copyright and intellectual property issues for the materials and gaining consensus among the stakeholders about selecting materials to digitize. He described to the class how difficult it had been to gain buy-in from the owners of the materials, much less getting them to agree to make the scripts accessible to the public. His purpose for participating in the workshop, he said, was to gain a greater understanding of how to proceed, especially given the fact that he worked alone.

A third workshop participant explained that her job

Managing Digital Projects

"Accidental" project managers can benefit from following these useful tips

by Ira Revels
within the library involved working with faculty to integrate library resources into course syllabi. Her goal for participating in the workshop was to gain a greater awareness of available project management tools. As each of the workshop participants related his or her project and purpose for being there, I listened intently.

By the end of the exercise, it was clear that what these “accidental” project managers needed was to understand basic elements of project management. The workshop participants can be described as accidental project managers because they were assigned to lead a project, but none of them had any prior formal project-management training. The workshop inspired me, because by the time it ended many of the participants expressed gratitude for what they learned and confidence in their ability to begin properly carrying out their projects. Several people explained that they felt better prepared to plan and organize their work, identify areas where they needed assistance, and apply the tools and resources that I recommended to get their projects underway.

Furthermore, this experience informed my definition of digital projects within libraries and cultural heritage organizations. As a result of the workshop, I formed a broader understanding of digital projects. My experience in academic libraries for the past 10 years has been confined to digitization efforts or instructional design activities. However, I learned that digital projects encompass myriad activities designed to address the preservation, access, and dissemination of information resources in an online environment. Managing digital projects requires the use of information and communications technologies and the application of basic project management skills and techniques.

What is a project?

To understand the importance of project management in libraries, museums, and other cultural heritage organizations, let’s first step back for a moment and define the term project. Each assignment the workshop participants described in the examples above had a scope, a time frame, and was designed to solve a particular problem. Their projects required such resources as time, money, and staff. Each project required a plan, which is the road map that guides how resources are put into use over a specific period of time. All projects, whether they involve designing a website, a curriculum, or planning a digital library system, have similar needs.

The Project Management Institute (PMI), the leading body of project-management professionals, defines a project as “a temporary endeavor undertaken to create a unique product, service, or result.” All projects share three common characteristics:

First, a project has a definite beginning and an ending date. It is temporary; it might last for one month or one year, but it eventually ends once the objectives have been met. By describing a project as temporary, you might think that I am referring to the project timeline. Let me be clear: Once a project’s objectives have been met, the project will cease to exist, or at least it should. In this case a project has a finite time frame in which to operate. At the end of a project the product or service exists and the team members are dismantled or reassigned.

What happens when they linger?

Yet sometimes projects can linger. For example, often software-development projects within libraries tend to morph into an ongoing activity. At least two ongoing activities result from software-development projects: ongoing system maintenance and the addition of product features. Instead of ending, these projects continue without a formal plan or schedule.

This may occur for several reasons. One reason is that project closeout procedures were not properly followed. It is possible that no one has signed off on the deliverables. Perhaps the project scope was not properly defined during the initiation phase. Moreover, although the product was delivered to the client the leadership has not made a formal decision about creating a new project that involves the ongoing maintenance of the system. If there is no project to address system maintenance, then the project may end up costing the organization more money in the long run.

System maintenance will ultimately involve staff time to make server upgrades, to implement features, and—if the initial project was poorly documented—to remember or learn what programs were used to build it in the first place.

A second characteristic of a project is that it produces some result. Whether you are responsible for designing a website or an online course, once that product or service is delivered the project is finished. Besides the resulting product or service generated by project activities, the project also produces artifacts.

Artifacts are outcomes or documents that are a result of the project team’s work. For example, a digitization project develops new knowledge, such as a procedure for scanning documents or creating metadata, that can be shared with individuals who may be assigned to contribute more materials to the digital collection at some point in the future. Artifacts are unique in that they would not otherwise exist if the project did not exist.

A third and final characteristic of a project is that it progresses in unique phases. Each phase is necessary in order to advance the project to the next. Phases must be carefully thought out and coordinated in order for a project to come to a successful close. As a project progresses
Before starting a project, it is of the utmost importance for the manager to understand its scope and purpose.

From one phase to the next, uncertainty, risks, and resources must be carefully managed. In essence, a project is unlike ongoing activities within an organization, such as supervising employees or operating a department or business unit.

Before starting a project, it is of the utmost importance for a project manager to understand a project's scope and purpose. I mentioned earlier that a project is a solution. Understanding why a project is necessary will enable you as project manager to determine whether you have the skills, knowledge, and resources necessary to accomplish the project's goals. If you do not have all of the requirements to carry the project to successful completion, then you will have to find those resources, knowledge, and skills or the project may fail.

What are the core management principles that define a project? Core management principles are the tools, methods, and processes a project manager will use depending on the project's scope and purpose. These principles are applied throughout each of a project's five phases:

- **Phase 1: Initiate the project.** Projects take place within organizations for any number of reasons. As with any new undertaking, you want to know why you are devoting time, energy, and money to it. The need for a project may occur as a result of a change in work or processes within an organization. When a need is defined for the project, several people may be involved in the decision-making process to initiate a project. These people may include organizational administrators, managers, and other supporters. The project manager is usually identified at this point to lead the project to completion.

- **Phase 2: Plan the project.** A project is a solution. Perhaps the most important phase of developing a project involves proper planning. This process can involve a number of people within and beyond an organization, and while the initiation process may not involve the project manager, the project manager must be involved in the planning phase. One reason for this requirement is to identify the people who will be involved in the project, including the project team and its stakeholders. Developing a solution involves stakeholders—the people who will be impacted by the project. Stakeholders are individual users of your product or service, organization staff, funders, or project staff. Perhaps they also include the clients who receive project deliverables.

- **Phase 3: Execute the project.** Detailed work is performed by members of the project team. Resources are allocated, and other tasks are carried out here. Resources are necessary to accomplish project objectives and activities. Resources are staff, equipment, software, and any necessary tangible item required to carry out project tasks. To help organize efforts during this phase, set aside time early to focus, then list in detail task and resource requirements. During this phase, a project manager will work with necessary groups—the IT department, for example—to identify and define tasks and such resources as hardware and software.

- **Phase 4: Control or monitor the project.** Once you define resources, add dates to it; then you have a control schedule. As project manager you will make assignments to the project team identified in the control schedule. The tasks and staff who are assigned to complete them have a set of resource requirements. Resources may take the form of training materials, equipment, software, IT support, or simply space. Communicating resource needs is as important as communicating project status, milestones, and other concerns. Regular communication is paramount to maintaining control over a project.

Control activities involve following up on activities, containing costs within the parameters of the budget, monitoring changes, and managing risks. Although you might not be able to identify all risks early in the planning process, it is necessary and helpful to define as many as possible. This careful planning will better prepare you to handle challenges that arise during the project.

- **Phase 5: Close out the project.** During closeout, numerous activities occur. Closeout involves ensuring project deliverables are within the parameters agreed to during the project initiation phase. Other key components during this phase include assessing project outcomes, closing accounts payable and receivable, and evaluation. Project closeout procedures are the activities that are required to bring a project to a successful conclusion.

With some practice in following established project-management techniques, librarians, archivists, and other cultural heritage workers can be successful managers of digital projects. Although digital projects encompass a wide variety of activities, managing them is no different from managing most types of projects. We are more than accidental project managers. With each experience managing digital projects, we learn how to apply our knowledge, skills, and tools to project activities to meet project requirements. Careful attention to each of the five phases described above can lead to success.

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