No More Design by Committee: Strategies for Building Lean Mean Web Project Teams

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Introduction

Libraries need web sites that are relevant to users and responsive to changing technologies. Web projects in modern libraries require technical skills, user research, and organizational buy-in. In most libraries, success requires a team approach. Academic libraries have long used standing committees to guide website development, but have been challenged to find the right structures to increase participation and buy-in while remaining agile and effective.

This paper will first present survey results about web project teams in libraries—their responsibilities, their composition, their effectiveness, and their challenges. Based on these results, a review of the literature, and personal experience, strategies will be offered for assembling effective temporary web project teams. By using lean mean project teams, libraries can accomplish web development with both agility and expertise.

Methodology

A 24-item survey was approved by JMU's Institutional Review Board and distributed to several library listservs on June 9, 2008, with a response deadline of June 30, 2008. Only some of the questions related to web project teams, and these will be the focus of this article. These questions sought to understand the groups—departments, temporary teams, and committees— dedicated to web projects. The invitation asked anyone who "ever tried to coordinate a web-related project" to fill out the survey. The survey was anonymous, and received 121 responses by the deadline. Survey responses were analyzed using Qualtrics reports, Microsoft Excel, and Microsoft Access.

Results

When asked "what types of web project management groups does your library use," the majority of respondents (76%) indicated they used temporary web project teams that are formed on a project-by-project basis. In addition, standing committees were used by 59% of the respondents, and organizational units or departments were used by 46% of the respondents. The respondents were nearly as likely to manage web projects with a combination of temporary project teams, committees, and departments (23%); by combining temporary project teams and committees (21%); or with temporary project teams alone (21%).

Sixty-six respondents contributed details about how members are selected for web groups. Eighteen percent of the responses mentioned skills as a determining factor for membership on a project group or for assigning an existing group to a project. Seventeen percent of the responses indicated that those working on a web project

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were selected because they were stakeholders or had an interest. Eleven percent of the responses indicated that projects were assigned to individuals or groups based on the size of the project or perceived impact.

The survey also asked respondents specifically about standing web committees. Table 1 shows the range of responsibilities given by the forty respondents who provided information about their standing committees, for a total of 58 standing committees (some reported on more than one committee). Most institutions (70%) used only one committee; 20% used two; and an additional 10% used three or more web committees. Some had responsibilities for the majority of the website; others focused on one area of the website. Web committees with oversight responsibilities only—no reported hands-on responsibilities—accounted for just 29% of the 58 standing groups.

TABLE 1 Responsibilities of Standing Committees	
Scope of standing web committees	Proportion Reporting (n=58) (%)
Identifies new projects	81
Sets strategic directions	64
Designs usability tests	64
Prioritizes multiple projects	62
Conducts research & development	62
Approves website content and/or graphics	53
Enforces standards (style, accessibility)	53
Manages individual web projects	48
Web maintenance (broken links, etc.)	45
Writes website content	45
Creates website graphics	33
Final approval for completed projects	31
Programming	29
Teaches colleagues how to publish	22

The survey asked respondents to indicate the composition of each web committee. Eighty-three percent of the 58 groups included "representatives from throughout your library" and 67% included "technical and design professionals." Fifty-three percent of the groups included both representatives and professionals, 29% included only representatives from throughout the library, and 14% included only technical and design professionals.

Respondents were asked to comment on the ways in which each group was effective or not effective. All responses were tagged for positive and negative content; some received both tags. If the comments contained neither positive nor negative content, or no comments were offered, they were tagged as neutral. Among all types of groups and all compositions of those groups, more positive comments (45%) were offered than negative (31%) or neutral (24%). The groups composed only of representatives received about the same number of positive comments (48%) as those composed of both representatives and technical and design professionals (42%).

Contributions and input from across the organization was the most-cited factor for committee effectiveness. Respondents also mentioned members' technical knowledge and inclusion of the responsibility in the member's job description as reasons for effectiveness. Among the challenges of standing web committees were problems of authority and resources: the group might have great ideas, but no resources or authority to implement them.

Although it was not directly related to teams, the question "In your opinion, what are the top 3 to 5 factors or variables MOST likely to create challenges in managing a web project at your academic library?" prompted responses that suggest ways teams can help with the overall process, as well as important considerations when forming teams. Sixty-five respondents answered this question. Top challenges listed were a failure to set clear priorities (or changing priorities) by upper administration and inadequate staffing, followed by the need to build consensus, including difficulties getting people to provide input and getting people to agree.

Discussion

This survey's results suggest that academic libraries are using a combination of project teams, departments, and standing committees to get the work done, and no one combination of groups, responsibilities, or membership is the standard. This paper argues that temporary web project teams formed for specific projects may offer great advantages to libraries, whether used in combination with standing committees and departments or on their own. The remainder of this paper offers strategies for creating temporary web project teams, based on the survey results, a literature review, and the authors' experience.

Establishing Authority with a Project Sponsor

The survey results showed one of the top challenges to web groups is lack of authority. To start a project off right, first identify a project sponsor—the person or people who have the authority to sign off on the project plan as well as the end result. For high-profile projects, this could be a dean or associate dean. For a department-specific project, like a new digital collection's home page, it could be the department head or simply the person who is responsible for that area. All projects should have a project sponsor clearly and publicly identified. When the team confers with the project sponsor while working on the project, the team inherits the authority of that project sponsor.

Identifying the project sponsor can also help with some of the additional challenges mentioned in the survey. The project sponsor, for instance, can work with upper administration to set clear priorities, and assist with building consensus and collecting input.

Describing the Project

Comments from survey respondents suggest that the ideal committee is clear in purpose. Document and share what the project sponsor hopes to accomplish in a project overview. Write a brief description of the project along with prioritized objectives to clarify what the project sponsor wants to achieve. If the project is in direct support of organizational strategic plans or university policies, define these project justifications with the project sponsor. Outline a rough timeline of earliest start date and hoped-for completion dates.

Finalize the documented project overview with your project sponsor before creating a project team. Some project managers will even require that that project sponsor sign this document to confirm that it represents the project accurately. Then use the project overview as a tool for inviting team members, for kicking off the project, and to communicate about the project with the team and the organization.

Identifying Stakeholders

Survey respondents also indicated that getting input and buy-in for web projects was a major challenge. Use the project description to start to anticipate the stakeholders—the individuals or groups you will want to communicate with throughout the project. Remember that stakeholders include both end users and colleagues.

You may include one or more representative stakeholders on the project team. Beware, though, that individuals rarely are representative of their entire stakeholder group. For organizational buy-in, the team still needs to gather input from units as a whole, rather than selected individuals from the unit.

Identifying Team Members

Effective web project teams are staffed by active participants who bring specific knowledge of technology, design, users, content, or institutional goals. Identifying the skills needed for the project at hand is critical to a well-formed team. This paper offers several examples of roles which may be required, but not all will be needed for every project. The project sponsor or key stakeholders may be prepared to perform some of the work—writing content, creating graphics, soliciting input from users, marketing, and training—even if they are not on the project team. One person may also be able to fill multiple roles.

- Project manager: the person who "directs the execution of a web-related initiative through its lifecycle, including defining the project, collaborating with stakeholders and team members, facilitating meetings, managing the timeline and deadlines, and overseeing all aspects of communication among the technical team and within the organization."[1]
- Project Sponsor: described above. Placing the project sponsor on the team provides timely support for decisions throughout the project without the need for separate meetings specifically for that purpose. A project sponsor from among the top-level administrators in your library may choose to be largely absent from team meetings, preferring to be involved only for pivotal decisions. The project manager would then keep that person informed of progress, summarizing dilemmas and possible solutions objectively when tough decisions arise.
- End users: These may be library colleagues, students, faculty, or others. Student employees within the library can be convenient and insightful participants, even though they may be biased by their library training and work experience. If you are unable to include end users on the team itself, include them in selected activities such as co-design sessions

and usability testing. If your library has a usability expert, involve them in your project as either part of the team or as a consultant. If you do not have a usability person, consider asking someone to serve as your team's user input coordinator.

- Webmaster: This is the person who handles day-to-day maintenance of your website; they will tie the project into the rest of the website and ensure that the end product meets accessibility and branding standards. The webmaster will have insight into relationships between the current project and existing content and file architecture.

- Library application manager: In projects involving systems such as the library catalog, include an expert on those systems to provide expertise with interaction with other systems, data standards, and vendor support. This person will also be sensitive to how the project will affect maintenance and other projects involving these same systems.

- Graphic designer: It takes someone with design skill to come up with a clear layout, harmonious colors, and individual graphics such as buttons, logos, and photographs. This person will also consider page layout issues such as balancing white space with content. Many academic libraries do not have a dedicated graphic designer, but you should still designate someone responsible for this role so that design choices are consistent with an overall plan rather than pieced together by committee.

- Interaction designer: Whether the project involves a simple task such as filling out a form or a complex task such as playing an animated game, someone needs to design what happens at each step of the way. The interaction designer may create storyboards or flowcharts of every possible sequence of events.

- Information architect: This is the person who focuses on the organization and labeling of content. They review content chunks on individual pages, devise labels users will understand, and design navigation through multiple pages. Examples of deliverables that information architects create include blueprints of how different pages interact, wire-

frames laying out groupings of content on a page, content inventories, and lists of controlled vocabulary. Both designers and librarians can be natural fits for the role of information architect on your team.

- Programmer / database designer: Library websites frequently provide large amounts of similar data that lends itself to database-driven pages. Examples of projects that may use databases include staff directories, research guides, and listings of research databases. For any web project that includes dynamic content—pulling content from another source into a web page or writing complex interactions—one or more programmers will provide critical input from the beginning, assist in writing specifications, and implement the final decisions.

- Specialty programmers: Some projects require skills which are limited to just one application or need, such as Flash programming or media player interaction.

- Content editor: The content editor creates new content, re-uses existing content, and enlists others to create content. They may pull together the expertise of others in the organization, perform final checking, monitor adherence to style guides and controlled vocabulary, and recruit proofreaders.

- Video/audio content editor: Tasks for this expert include things like reformatting files for streaming, setting up web cameras for live feeds, or arranging for videotaping presenters. This person will likely rely on the content editor to write scripts and identify speakers.

- Testing organizer: Often referred to as quality assurance testing, this is separate from evaluating usability and is intended to find bugs, dead ends, and other errors. The organizer gathers users (or surrogate users) together, preferably more than once in the process, and ensures clear and consistent error reporting. As bugs are fixed, the tester follows up and double-checks each issue. A testing script or checklist can facilitate an organized and consistent approach.

- Marketing coordinator: Towards the end of the project, a marketing coordinator plans the marketing push to both internal and ex-

ternal users. This person may work with existing marketing committees or staff within the library, or be responsible for all aspects of promotion for the finished product.

- Training coordinator: If a project has administrative interfaces for staff or interactive systems for users, this person creates, organizes and/or conducts training and materials, and assists the content editor in writing help documentation for external users. This role is easy to forget or shortchange after working on a lengthy project. Assigning someone to follow through on training will pave the way toward a positive reception of the project by your users and colleagues.

Establishing a Small Core Team

Keeping teams small and including web responsibilities in job descriptions were also offered as positive factors contributing to web committees. Despite the lengthy list of skills to look for in your team members, it is still possible to create a *core* team that is a manageable size. Peter-Paul Koch, Ashley Friedlein, and Glenn M. Parker suggest that the optimal team size is four to eight people.[2] The literature on team size varies, in part, because of the different types of teams. Some of the opinions about team size are based on the technical and design side of a team alone, not one that includes end users and project sponsors. Other

size recommendations focus on permanent work groups rather than temporary project teams. Richard Whitehead, in *Leading a Software Development Team*, suggests a range somewhere between two and 15 but highlights an important distinction in how one sets the size of the team: "it's the size of the 'core' of the team that matters."[3]

The potentially large team described above has a smaller team composed of technical and design staff members at the core. The core team will likely be working on this project full time throughout the project, while the rest of the team will be contributing regularly, but less intensely. Depending on how many users the end product will affect, the complexity of the project, and available resources, the team may exceed ten people. When that is the case, break them into smaller sub-teams for some of the work, and bring them all together for other aspects.

Securing Resources

The survey results showed one of the top challenges to project management was inadequate staffing. Discuss the needed skills with the project sponsor. If the project sponsor is not a member of upper administration, also be sure to review the project with someone at the top. Armed with the project overview and a clear understanding of the team's resources, now is the time to review priorities and ask for additional resources if needed.

FIGURE 1 Decision-making Tips for Creating your Team	
Scenario	**Advice**
If many different colleagues can provide a needed skill. (Example: content editor)	Then consider recruiting a colleague who brings multiple skills. Use this opportunity to recruit someone with the needed skill who has expressed frustration about being outside the process in the past.
If a small number of colleagues can provide the skill. (Example: graphic designer)	Then your skilled colleagues may be in high demand. Consider timing the project to fit within their schedules.
If no colleagues can provide the skill. (Example: Flash programmer)	Then consider outsourcing the skill to colleagues on campus. The campus IT department or marketing office may be able to assist with technical or design skills. Or: • Consider outsourcing the skill to an outside provider. • Ask academic departments at your institution if your needs match a class assignment or if they can recommend a student with the skills. • If neither budget nor time allows these alternatives, rethink the project. If you expect to need this skill again, consider training or hiring for the skill.
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Many team members will do double duty. The graphic designer and interaction designer may be one and the same. An end user may create training documents. As the project manager, you may also be the information architect. The project sponsor may lead the marketing and training. The list above, therefore, is not a list of people who need to be recruited, but a list of roles that need to be assigned to the people that you have. Figure 1 lists some decision-making tips for creating small and efficient teams.

In an academic library, the web project team will likely contain more roles than people. That makes selecting team members critical for the web project manager. Think carefully about which people in your library will be able to contribute to the project and which skills your library may need to find outside its walls.

Conclusion

Web-savvy professionals work in libraries and they use the library website daily in the process of doing their jobs. Strong, informed opinions abound. The approach we suggest in this paper is a relatively small design and technical core team working side by side with internal and external end users in a larger project team. This temporary project team can be used with or without other standing groups such as web committees and departments.

Notes

1. Fagan and Keach, *Web Project Management for Academic Libraries*.

2. Koch, "The Ideal Web Team (Part 1)"; Friedlein, *Web Project Management: Delivering Successful Commercial Web Sites*, 20; and Parker, *Cross-functional Teams: Working with Allies, Enemies, and Other Strangers*, 156.

3. Whitehead, *Leading a Software Development Team: A Developer's Guide to Successfully Leading People and Projects*, 117.

Bibliography

Fagan, Jody Condit, and Jennifer A. Keach. *Web Project Management for Academic Libraries*. Oxford: Chandos Press, 2009.

Friedlein, Ashley. *Web Project Management: Delivering Successful Commercial Web Sites*. New York: Morgan Kaufmann, 2001.

Koch, Peter-Paul. "The Ideal Web Team (part 1)." April 10, 2003. *Digital Web Magazine*. http://www.digital-web.com/articles/the_ideal_web_team_part1/ (accessed January 10, 2011).

Parker, Glenn M. *Cross-functional Teams: Working with Allies, Enemies, and Other Strangers*. Jossey-Bass Management Series. San Francisco, CA: Jossey-Bass, 1994.

Whitehead, Richard. *Leading a Software Development Team: A Developer's Guide to Successfully Leading People and Projects*. New York: Addison-Wesley, 2001.