Angela Fullington Ballard and Susan Teague-Rector

Building a library Web site

Strategies for success

At the North Carolina State University (NCSU) Libraries, we kicked off a Web site redesign project in late January 2010 and launched our new site in mid-August. We started our project the way most of us had seen it happen before—with a committee of

15 people. In the first meeting of that group, at least two people told horror stories about prior redesigns, and warned that we should establish some ground rules for conflict resolution up-front. We were determined that this did not have to be a tedious and contentious process and began to strategize about how to keep it positive while still moving quickly.

Before beginning any design or development, we decided to determine the scope of the project,

outline goals and objections, and articulate a clear vision. The existing Web site had grown up organically through the years, and there was a strong desire to create a fresh, modern, and welcoming Web presence, with a clear personality brand for the library. The libraries also wanted to highlight its core search tools and support the most common research and course-related tasks.

The last major redesign had been done in 2005. The previous information architecture divided the site into six very limiting categories

of library-related homepage links. More than 27 subsites had evolved their own internal navigation systems, siloed content, and in some cases, distinct visual designs. Our users had also become dependent on more than 15 popular Web-based applications that were not integrated

visually or functionally with the site.

Redesigning a site of this scale and scope is no small feat. However, during the seven-month process, we documented a series of best practices that helped make our redesign run smoothly and efficiently. The following are project management techniques and organizational factors that we feel led to a successful project and a positive process that was even fun at times. These strategies for suc-



NCSU Libraries Web site before the redesign. Visit this article online for detailed images.

cess could apply to any library Web project, from major redesigns to mobile product development to digital library initiatives.

1. Make redesign an organizationwide priority. Rather than jumping right in to speculation about navigation or talk-

Angela Fullington Ballard is Web services and training librarian, e-mail: angie_ballard@ncsu.edu, Susan Teague-Rector is Web design project librarian, e-mail: susan_teague_rector@ncsu.edu, at North Carolina State University

© 2011 Angela Fullington Ballard and Susan Teague-Rector

C&RL News March 2011 132

ing about design wish lists, we spent some time articulating the goals for the new site, the overarching principles that would drive the process, and the scope and nature of the work involved. The entire organization made a commitment to prioritize this project. Web site redesign was identified as one of the 15 top strategic initiatives for the library for 2010-11.

2. Clearly articulate vision and goals.

Once everyone agreed about the priority and resources for the project, we spent time clearly articulating vision and goals. As Donna Spencer notes, it's important to "know the context [your design] sits within. You need to know what you're trying to achieve, what a successful outcome is and what you have to get you there. . . . "1

In our case, we identified four organiza-

User Experience Guiding Principles

Planning components.

tional priorities. We knew we wanted to:

- 1. create a fresher. more modern, and welcoming site, with a clear personality brand for the library;
- 2. streamline homepage access to search functionality and core user tasks:
- 3. create a Web site that accommodates a dynamic, con-

tinually updated online presence, with a clear emphasis on innovative library initiatives; and

Organizational

Priorities

4. move to a Web site infrastructure that is flexible and nimble-making later iterations or redesign more agile.

In addition to organizational goals, we explicitly recognized trust, relevance, and consistency as guiding principles for optimizing user experience (UX).

In industries that serve large populations of online users (e.g., large-scale ecommerce enterprises, online banking, Web-based news services), UX models have evolved such that users trust they will find the features, tools, information, and support they expect. In a good UX model, users can also trust that features and tools will be arranged, labeled, and grouped in predictable ways.

In the most successful online enterprises, users are not distracted by a site's design. The design, messaging, and the ways users can choose to interact with a site all convey the impression that the site is relevant to their lives. When a user is confident, productive, and feels at home on a site, the UX design is successful. We really wanted to contribute to helping define a user experience model for academic libraries.

In addition to a UX strategy and core organizational priorities, we then went a step further and defined an overall design strategy for the project. This consisted of conveying credibility with design quality and consistency, focusing on core user needs, using clear and consistent language in labeling to increase user

confidence, and promoting intangibles such as the energy and personality of the library through visual design and messaging.

3. Hire a project manager. In order to make sure we stayed true to our vision and goals, we hired a project manager for 18 months to get us

through the visual Web redesign project and the transition to a CMS. We clearly defined a strong role for the project manager and reiterated throughout the project that the core project team was accountable to her. At first people were nervous about losing control to a project manager, but they quickly came to trust her experience and feel more secure with the process.

If you can't hire a project manager, then assign someone in-house to this task, preferably full-time for the project's duration.

4. Charge a core implementation team.

As an organization, we quickly grasped that a large-scale redesign could not be done by committee. The initial 15-person group

March 2011 C&RL News

Overall Design

Strategy

stepped back into the role of reaction panel and met all together only four times during the seven-month project. We defined a core implementation team of four who met in daily morning meetings and included the project manager, the Web services manager, a developer, and a technician.

We also had an executive team that involved two administrators; our deputy director and communications director met weekly with the project manager and Web services manager to help manage scope and staff communications. Throughout the proj-

ect, our administrators understood the need to ensure that the implementation team could get the work done.

5. Keep the process transparent. Of course, trusting the work to a small team only works if the process is very transparent throughout the project. We developed and pub-

licized a communications plan for the project very early in the process. We also delivered presentations to staff around scheduled milestones and shared user research throughout the project.

In addition, we started a public blog² to capture the progress and artifacts of the Web redesign process and promoted it as the goto source for updates on Web site redesign.

6. Commit to user-centered thinking. In addition to communications, defining a team and setting out goals and priorities, we found that the entire organization has to be committed to a user-centered process early on to make the project successful.

Before you start a redesign project invest time in training, virtual seminars, discussions, etc., to cultivate true UX thinking throughout the organization. We purchased the UIE Webinar series³ to educate the redesign team throughout the project.

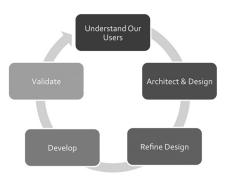
Additionally, ensure that throughout the project you share findings from user research with staff and the public. We did several open

sessions to communicate the process we were using, as well as findings from user research and testing.

During the discovery phase of the project, we hired consultants to do a series of interviews with undergraduates, graduates, faculty, and staff across NCSU. The interview results were compiled, and personas, or archetypes/composites of users, were created.

The process of interviewing and creating the personas gave us a better understanding of the motivations, priorities, and interests of our end-users.

> Getting to know our personas and framing discussions around them also helped keep everyone on the larger team focused on the end user. When the discussions started to devolve into personal preferences about design, we were able to reference the personas and underscore



User-centered process.

user needs and priorities we had identified through the process of developing them.

7. Set expectations for an iterative process. From the beginning of the project, we stressed the importance of having an iterative process. The core implementation team worked with select members from the 15-person reaction panel in both the information architecture (IA) and design phases of the project.

We discussed proposed IA and design comps in multiple small groups rather than with the full 15-person reaction panel so as not to have detailed design discussions before IA was fully fleshed out. We also limited the number of options for discussion to three wireframes and two design comps.

8. Conduct quick testing with prototypes. During the discovery phase of the project, we did testing of early prototypes of our proposed navigation schemes and search models. Our advice is to be creative in how you implement testing. In two rounds of guerilla testing, where participants were re-

C&RL News March 2011 13

cruited on-the-spot in the library, completing only two-to-four tasks each, we were able to test a total of 60 participants over the course of the project. A total of 228 navigation and search tasks were completed by participants, providing us with a large amount of data to use in site design.

9. Fight the urge to design too early. With many redesign projects, staff jump in early with design mockups. Resist the urge to do this. We did not develop design comps until we had completed a large amount of user research—looking at personas and Web

site usage analysis and patterns. We also conducted an extensive review of our content. We set expectations for this approach from the beginning in our project plan.

If you're working with a larger committee, don't let discussions devolve into arguments or recom-

mendations about the design itself at the beginning of the project. In a 2005 article, "Good Designers Redesign, Great Designers Realign," Cameron Moll underscores the importance of waiting to design:

Too often, look and feel, color scheme, layout, and identity are presented as solutions to problems discussed in these conversations long before regard is given to other less-aesthetic issues that may very well be the root of the problem.⁴

10. Commit to understanding your

content. Last but not least, commit to understanding your content. Quite often the content of your site is lost to discussions around link color, background images, and so on—decide early on that you're going to focus on the content as well as the design.

During the user research phase of the project, we created a content inventory and content analysis of the first three levels of the site. The content inventory helped us prioritize content for the redesign and set the scope of the project.

Conclusion

Web site redesign can be one of the most sensitive and resource-intensive projects a library undertakes. Setting expectations for how the redesign process will go, investing time and human resources in the early work of analyzing content, and truly understanding user priorities can take longer than the later design and development phases, but it is well

worth the time. A great deal of design and implementation time can be saved when everyone trusts that IA decisions are being made based on user data. That kind of trust is cultivated through conducting user research throughout the project and consistently



The redesigned site.

reporting the results. Finally, when goals are clearly stated and reiterated, stakeholders can see the ways those goals are being met in wireframes and design compositions, making it easier to hold discussions around how well we're meeting our organizational goals and our users' needs rather than whether or not personal preferences are incorporated.

Notes

- 1. Donna Spencer, 2010 "There's No Right Answer. 52 Weeks of UX," 52weeksofux.com/post/694599232/theres-no-right-answer (accessed January 7, 2010).
- 2. The public blog can be found at news. lib.ncsu.edu.
- 3. The UIE Webinar series can be found at www.uie.com/events/virtual_seminars.
- 4. Cameron Moll, 2005, "A List Apart Articles: Good Designers Redesign, Great Designers Realign. A List Apart," www. alistapart.com/articles/redesignrealign/ (accessed January 7, 2010). ₹

March 2011 135 C&RL News