WE ARE ALL THE WEBMASTERS:
NEW MODELS FOR BUILDING THE LIBRARY WEBSITE

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The role of the academic library website in the delivery of library information and services has never been more pronounced. As library websites have grown from simple informational brochures in the mid-nineties to evolving, comprehensive gateways to digital materials, instruction, and services in the present day, library managers are faced with new challenges in the way library websites are maintained and managed. These challenges present themselves within often complex contexts, including financial and human resource constraints, workplace politics, and staff skill levels. Over the past few years, new models for website staffing and management have begun to emerge. While each library offers unique cultural and organizational circumstances, recent data suggest the trend towards distributing web responsibilities across the organization is becoming more widely accepted. Libraries vary to the degree in which this model is being used, and, to be sure, a good deal of thought and planning is involved in the process. The purpose of this paper is provide an outline of the issues involved in the recent re-design of the library websites at the Illinois Institute of Technology (IIT). This project, not only involved design, technology, and content, but also a fresh approach to the way the new websites would be defined, managed, and maintained.

IIT Libraries

The Illinois Institute of Technology is mid-sized doctoral granting technical university with an undergraduate population of approximately 2000, and a graduate student population of approximately 4000. Leading programs include engineering, architecture, computer science, design, and law. The Paul V. Galvin Library is the university,s main library and is nationally recognized as an innovator in the integration of digital technologies in library services. Since 1993, IIT libraries have received over $2,000,000 in grant awards for an array of technology-related initiatives. The main library is responsible for providing direct technology support and related services (electronic reserves, online cataloging, circulation, online reference, unmediated inter-library loan, and digital content development) for three branch libraries and a number of community partners.

Background

In 1994, Galvin Library launched its first website. The site offered users such information as library hours, a smattering of subject and resource guides, a telnet link to the library catalog, and, later, a small collection of electronic reserves. Navigation was organized mainly around library terminology rather that top-level subject and informational categories. One librarian with rudimentary web skills was assigned responsibility for the site but, as was and is still common in most academic libraries, this

person retained additional library responsibilities as part of his job. In the ensuing years, the library‚s main website has expanded to over 30,000 pages and a variety of separate websites devoted to specialized digital collections, GIS, archives, and database authentication have also been implemented. In this time, however, while core technical support and server maintenance was provided by the library systems group, website content management, because of staff shortages and budgetary challenges, remained in the hands of a single staff member. Library websites developed in a piecemeal fashion, and often hurriedly to keep pace with user demand. Content such as subject guides, digital collections, gateways, and policy pages were often authored in non-web formats and passed on to the webmaster for HTML coding, review, and, eventually, placement on the website. Decisions and planning regarding website navigation and organizational structure were made with little input from an already overworked staff, few of whom voiced concerns in light of the circumstances. A culture of mystery surrounded the work of web design and management at IIT libraries. By the late nineties and early twenties, hits to the main website had stabilized despite the fact that new services, web-accessible databases, and other content had been added. User complaints regarding the design and poor navigational structure for the site began to rise. In addition, staff, namely new members of the library‚s Public Services unit (which includes the Reference Department), had begun to express frustration with the top-down model and demanded participation in library web design and content. An overhaul of the library website presented library administration with an excellent opportunity to address both web design and staff challenges.

Staff Criteria

The level and expertise required for the re-design envisioned by IIT library administration exceeded available in-house staff expertise and time. After some debate, it was decided that an established web-design firm be contracted to provide the core design work and leave the library with a model in which it could push day to day management of a the newly developed site across library departments as dictated by website content and existing areas of expertise (i.e., circulation services; subject specialties; OPAC; instructional services, etc.). In other words, before addressing design issues specifically, the administrative team set out to clearly define how the new website would be maintained across the organization. The result of this planning would represent significant changes in long established methods by which library units worked with one another. Perhaps most importantly, however, would be the eventual removal of the title „webmaster‰ from anywhere in the organization. After discussions with the existing webmaster as well as the library technical team, a series of opinions were gathered regarding the state of web technologies today vis-à-vis staff skill requirements for working with today‚s server and page technologies, which have over the past few years grown increasingly intuitive and user friendly. What was required therefore was not so much a set of core editing skills at the code line, but a certain level of comfort working current versions of web page editors, namely Microsoft FrontPage, which was the most commonly used editor at IIT libraries and integrated well into our MS network environment. Also required would be knowledge of network structures such as drive mappings, basic security, and directory structures. The library technology group devised

a program in which staff members could be taught these skills (although some, particularly our newer staff members recently out of library school already possessed a range of them) in a series of one-hour training sessions in the new library instructional facility. Librarians with no web editor training were enrolled in an eight module, online training program (Element K) to which the library was a subscriber.

Proposing this new distributed model occurred in a series of general staff meetings in which feedback was gathered and several concerns were addressed. Chief among these concerns was workload. Many staff members, particularly professional librarians who would be responsible for the bulk of management duties for the new websites, expressed concern that, while they were eager to be involved, would like clear explanations of exactly what would be required from them. The issue did not surround new skills sets, which most staffers were eager to obtain. Nor it did not revolve around technology skills per se but, rather, workflow, lines of authority, and inter-departmental communication. One common question concerned who on the staff would have final reviewing authority for web pages before and after they were posted. The library had experimented with a test server environment in the past, but delays in the review process as well as turf wars proved formidable obstacles. Another staff member asked if job descriptions would be re-written to reflect new duties. The answer to the first question involved an overview of the distributed workflow model. The web page review process would be streamlined and departmentally based according to areas of expertise and responsibility. Librarians were already devoting the time and energy to develop content, but they were not enabled to take the final (and not altogether time consuming step) of posting the material to the server(s). The vendor who we would eventually select to re-design the site would be required to provide a series of toolboxes and templates that would insure all content developers at the library would be working in a common, kick proof design environment that would insure consistent page formatting across the entire site. Review processes would therefore be content focused rather than design focused. And content, it was agreed, is what librarians do best. Removing technical obstacles by mandating certain design rules over which the staff member had no (nor wanted) control allayed many fears in this regard. The debate surrounding the re-writing of job descriptions was also answered in this respect: librarians and other content developers at the library were not becoming webmasters but, rather, being provided with a new tool to perform already existing job functions. To cite a somewhat simple example, updates to circulation policies could now be placed immediately on the server by the Access Services librarian without having to wait for review by a webmaster who, already burdened with numerous other reviewing duties (and not to mention additional, non-web related job responsibilities), many for content for which he had little expertise, was frequently unable to post this kind of time sensitive information in a timely manner. In general, it was agreed that, especially given the current suffering state of library website management and development, a distributed model would bring a new sense of library-wide ownership to the websites, as well as a more direct content delivery path between librarian and library user. Overall goals mirrored those identified by other libraries moving towards the distributed model: workload efficiency; departmental buy-in; improved development, publishing, and update times; and new skills development.

Design

Once a project team with members of the Library Technology Group, Public Services, and Circulation Services was selected, members of the library,s administrative team began the process of selecting a vendor to perform the core re-design of the library website. Key in this selection process was reminding ourselves of the demographics represented in the library user community, namely web-savvy undergraduate and graduate students who expect a high level of consistent, visually oriented, functionality in a website, especially a library website. In other words, a vendor that has the expertise and experience to „treat the web like the new medium it is‰ without being overly preoccupied with library jargon and out-moded nomenclatures that have little relevance in a digital environment. We wanted to accomplish a new design that would simplify access to the wealth of library services offered via our website, but without reducing the site to a hyper-visual cliché that one often finds in commercial sites today. Because of time pressures and a threat of losing funds we had set aside for this project, we were also unable to perform extensive, user-based evaluations during the development process. Thus, the need to select a vendor who had significant experience designing for educated, young adult audiences was crucial. We also required a vendor would be genuinely interested in the opportunity to work with a university library and excited at the prospect of learning how academic libraries serve their learning communities.

After meeting with several firms, Galvin Library selected chemistri, a nationally recognized web and interactive media company that is a subsidiary of the Leo Burnet and Starcom media groups. chemistri offered proven record of „connecting with Gen Y‰ and encouraged the library project team to review websites and integrated media initiatives developed for clients across a broad spectrum of commercial and not-for-profit enterprises. chemistri,s team consisted mainly of design professionals, not salesmen, and even project leaders and business contacts we spoke with and eventually worked with possessed a high level of design and technical expertise. Moreover, the designers at chemistri proved, at several initial meetings, that they brought a certain level of intellectual curiosity regarding the service, ethic, and function of the academic library.

A brief situation analysis drafted by chemistri and the library project team summed up the project,s goals‰

„While the site contains a great deal of useful information to students, teachers, and staff, it lacks unity in both design and navigation for the end user‰

Primary project objectives included providing a unified look and feel throughout the main website and subsidiary sites such as digital collections; the development of a simplified site architecture that intuitively delivers library resources to the end user; and the delivery of functional design templates for use by library web developers. Short term project success measurements were identified not only in terms of the site,s design success as perceived by the end user, by also, and perhaps equally importantly, in terms the level of management functionality as perceived by the library staff. By this, we mean that

chemistri, throughout its design process, worked not only creatively to insure a successful design, but also technically to insure that the website delivered would function within a distributed model of web management as we planned. HTML templates were provided for the first through third level navigation pages, insuring that, as librarians updated content, elements such as logos, drop down menus, and color palates would remain the same with no required editing or re-structuring on the librarian,s part, thus providing a consistent framework in which library content developers could work. Also critical was the fact that we expected the new site to not only offer navigational consistency vis-à-vis top level drop down menus on every page and level of the site, color coding, site indexes, and breadcrumbs, but also consistent library branding, particularly on the database pages. This was accomplished by using a Galvin Library branded HTML template that serves a constant frame around most database returns. The goal was to eliminate user confusion as to the provider (ultimately library on behalf of its patrons) of subscription based databases. Other considerations such as the ability to port chemsitri,s work seamlessly into a FrontPage/MS IIS environment; optimization for most browser versions at 800x600 pixels; style guides; re-design of web forms for a host of circulation and ILL services; the provision of a test site environment hosted by chemistri and from which the library team could constantly refer to for suggestions and comments as the work progressed; and comprehensive design documentation were also addressed successfully by the vendor.

Results

In late December 2001, the final design and all accompanying templates, scripts, and code were delivered to Galvin Library. A new web server directory structure that incorporated security and file access given the new distributed environment was implemented by the library systems group. The library project team, in conjunction with department heads, assigned migration projects to every person on the library,s twelve member professional staff, including members of library administration. The library support staff had the proof reading role which not only helped with catching spelling and some content mistakes, it also enforced the team sprit and ownership of the library website. Hence, distributed web management was introduced almost as soon as the templates and editing tools were provided. For the first two weeks of January 2002, the entirety of the old library main website as well as host of other related websites were migrated into the new structure. In all, over 96,000 pages were translated into the new format. In the ensuing weeks, branch libraries were also added. By March 2002, usage of the library website one or more levels beyond the main page had nearly doubled from the period same period in 2001.

Planning for a distributed model for web management via early staff buy-in and training along with consistent, re-usable design templates has ensured the projects short-term success. In the long term, we expect a variety of technical issues to arise. These will be addressed by library systems support professionals, who maintain the library networks and servers and, in doing so, keep the path clear for the distributed model to operate. More difficult challenges, however, will undoubtedly arise around the ongoing cultural changes that are associated with the distributed model, especially as librarians who for

many years had primary responsibility for web-oriented technical and design issues return to such tasks as content and collection development and library planning. Similarly, rank and file librarians face near term pressures as they adjust to their new roles as keepers of the new website. Library managers must also maintain a constant awareness of content for which they and their staff members are responsible without becoming overly territorial in relation to other library departments. Finally, as the library website continues to evolve, detailed usage data must be maintained and user-based assessments conducted in order to insure that the distributed model corresponds to continued improvements in web-based content and services for our patrons. In the end, of course, it is this measurement that will define our success.