

University Libraries of Notre Dame Website Strategic Plan

Introduction

This is a strategic planning document. It outlines the why's and wherefores of the University Libraries Of Notre Dame Web presence. It answers questions like "What is the purpose of the website, and how does it fit within the totality of the Libraries services and collections?", "Who are the website's primary audiences and what do they need, want, and desire?", and "What does the website contain?" It also outlines a number of implementation issues.

This document tries to make many of the Libraries implicit assumptions about a Web presence explicit. It is an attempt to articulate the consensus of University Libraries faculty, staff, and patrons about what our University website is supposed to accomplish. By going through this process and articulating these assumptions the Libraries is better able to evaluate the website's usefulness. Thus, this strategic planning document is also intended to be a sort of standard used to measure the effectiveness of present and near-future implementations.

Listed below are the answers to the questions in a nutshell:

1. The purpose of website mirrors the purpose of the University Libraries: to help facilitate learning & teaching, to assist in scholarship, to supplement access to collections and service, and to facilitate communication. The role the website plays regarding collections and services is very much like the role a table of contents plays in a book; the website provides an overview and access to the information in and about the University Libraries.
2. The primary audiences of the website are the students, faculty, and staff of the University of Notre Dame. These people expect the website to help them facilitate their learning, teaching, and scholarship.
3. The content of the website is not very much different from the content of traditional, physical libraries, and therefore it contains tools to access bibliographic information, access to digital library services and collections, instructions for pedagogy, and last but not least, access to people who can help with all these processes—librarians. The website is not designed to be comprehensive list of resources. Instead, it is designed to highlight the most significant resources and provide starting points for learning and research. The content of the website is very much like the content of traditional library pathfinders.

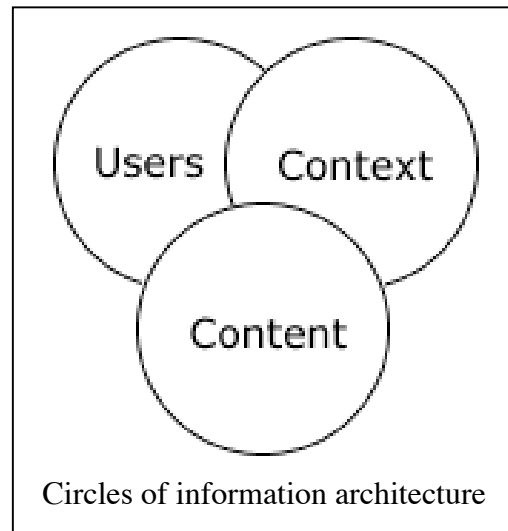
It should be noted the things articulated in this Plan were not conceived of arbitrarily. Analysis of existing strategic planning documents, extensive focus group interviews, surveys, usability tests, and many discussions with as many people as possible have all

played a significant part in the creation of this document's content. Much of this work was done by Team Redesign, the group of people responsible for the present redesign process: Aaron Bales, Carole Pilkinton, Elaine Savely, Eric Lease Morgan (Leader), Jim Gosz, Joni Warner, Linda Sharp, Scott Van Jacob, Sherri Jones, and Sue Dietl.

The balance of this text fills in the details outlined above. It answers questions about the purpose of the website (context), who is the intended audience (users), and what content it contains (content). Finally, the document outlines implementation issues.

Context, content, and users

The Libraries website is built on the “three circles of information architecture.” These three circles represent context, content, and users. They make up the ecology of an architecture where context is the purpose of the website's existence, content is the data/information a website has to communicate, and users are the intended audience of a website. In order for a good architecture to be manifest, a concrete understanding of a website's purpose, data/information, and audience are necessary. Just like the architecture for a home, an understanding of who is going to live there, what the building is for, and where it will be located needs to be articulated before a usable website can be built.



What is the purpose of the website and who does the work? - Context

The Libraries website is built within the context of its hosting institution. It reflects the mission, objectives, and resources of the University Libraries. In order to create/design an accurate reflection, a website plan for the Libraries must explicitly answer questions like:

- What is the mission of the Libraries?
- What skills are necessary to create and maintain a website?
- Who does the work?
- How much time are personnel willing to spend creating and maintaining website content?

The purpose of the University Libraries website mirrors a few of the Libraries' goals in the Strategic Plan (i.e. learning, teaching, and scholarship). It emphasizes access and communication. Thus, the purpose of the website is to:

- facilitate the University's mission of learning and teaching
- assist with the processes of research and the pursuit of truth
- supplement access to the Libraries' collections, services, and staff
- improve information literacy
- provide a communications channel for the Libraries and its audiences

The website as pathfinder and finding aid

The library catalog plays a very large role in providing access to collections, but its role is fundamentally different from the website. The catalog is essentially an index, a list of items owned or licensed by a library with pointers (call numbers and URLs) directing patrons to the locations of these items. Catalogs are the core of integrated library systems where the integrated library system provides services against items in the catalog: acquisitions, cataloging, circulation, renewal, reserves, etc.

The website has a broader and at the same time narrower scope when compared to the catalog. It is broader because it includes content that is not necessarily owned or licensed by a library. Hours of operation, the names of librarians, links to Internet resources, and descriptions of library departments are just some examples. A website's scope is narrower than a catalog's because it is not an exhaustive list of information resources. Nobody wants to duplicate efforts, and the catalog already does a good job in this regard. Thus, the library website is more akin to a finding aid or library pathfinder, and working in conjunction with an integrated library system, the website facilitates additional access to library services and collections. Without stretching the analogy too far, if a library were a book, then the website would be its table of contents, and the catalog would be its index. The website and the catalog compliment each other providing functionality the other doesn't.

Who does the work?

The Libraries requires a large complement of skills in order to create and maintain its website. Listed in no priority order, these skills include: the ability to listen and communicate effectively throughout the University community, an understanding of the purpose and goals of the University Libraries, and a knowledge of how to implement and maintain Web (HTTP) servers and their related technologies (i.e. relational database applications, CGI scripting, HTML/XML document creation).

The Digital Access and Information Architecture Department will lead the effort to maintain the University Library website with a whole lot of help from students, faculty, staff, and Libraries employees of the University. For example, students, faculty, and staff will be regularly enlisted for the purpose of focus group interviews and usability studies.

Subject specialist librarians, with the required knowledge of the University's curricula and an understanding of the goals of the Libraries, will be asked to provide lists of materials for inclusion in the website. Many people throughout the Libraries will be expected to write content and help maintain the lists. For the most part, these people

already exist in departments across the Libraries. They require the ability to write for the Web, as well as fundamental computer skills such as the ability to read and write files from a networked file system. They also require a knowledge of the goals of their particular department. A knowledge of how the Web works and HTML/XHTML is desirable but not necessary.

The Digital Access and Information Architecture Department will help coordinate the efforts of all of these people. It will also be responsible for maintaining the hardware and software used to host the website. Consequently, the Department also requires graphic design skills, the ability to write CGI scripts, as well as the ability to provide systems administration services. The Department currently possesses these skills.

It is difficult to measure the time, money, and effort the Libraries wants to spend on its Web presence. In terms of money, the costs are low. Right now there is no need for hardware. There are no licensing fees, and the purchase of additional copies of HTML editors may be all that is required.

Who are the website's primary audiences and what do they need, want, and desire? - Audience

The Libraries must have good understanding of it's audience before it can be re-created, redesigned, and maintained. This requires a knowledge of what it's users need and desire. Questions such as the following are apropos:

- Who are intended audiences of the website?
- What are the audiences' needs, desires, and expectations?
- What sorts of technical tools do they have at their disposal?

The following tiers of users have been enumerated and ranked as the website's primary audiences with the understanding that services and collections created for lesser tiered audiences should not detract from the functionality and usability of services and collections of higher tiered audiences:

1. students, teachers, scholars, and staff of the University community
2. students, teachers, and scholars of MALC and academe in general
3. alumni
4. prospective students, teachers, and scholars
5. everybody else

A number of methods were used to determine needs, desires, expectations, and the availability of technical tools including on-going focus group interviews, observations of librarians and staff, a resent survey generating close to 900 responses, and on-going Web server log file analysis.

After doing things like focus group interviews, facilitating Web Advisory Group meetings, and conducting surveys we've learned that patrons use our Web presence mostly to find books and journal articles. They say it can be improved through:

- better organization of materials
- implementing a flatter hierarchy
- providing more recommendations
- providing more self-service services
- improving the website's search interface
- making as much content available in full-text formats as possible

The students, faculty, and staff of the University see the Libraries' website as a means to an end; it is a tool enabling them to accomplish some other task. These tasks usually take the form of creating lists of materials on specific topics or retrieving known items. In the former case, a student might use the Libraries' website to create a list of books on or about Milton. In the later case, a faculty member may have had a particular journal article brought to their attention, and now they want to retrieve that article. Many times the first scenario leads to the second. "What books does the library own that were written by Thomas Kuhn, and now that I have created this list, I want to get the third item."

The same thing holds true for journal articles, except there is oftentimes more than one possible index to search, not just the library catalog. Thus, the Libraries' website must make it easy for the students, faculty, and staff to: 1) select an appropriate citation (or full-text) index, 2) create a list of articles satisfying their information need, and 3) retrieve specific items from the resulting list.

With the advent of globally networked computers, Internet indexes such as Google, and electronic commerce sites such as Amazon.com, people's expectations about the nature of information and information retrieval are drastically changing. Globally networked computers enables us to communicate with large numbers of people who are separated by great spans of space and time. Google searches, while not necessarily comprehensive nor scholarly, make it easy to find information on just about any topic under the sun. People trust Google's search results. They like it's "Did you mean?" service and simplistic interface. Amazon.com makes it easy to find and get (buy) books and other items. In addition it harnesses the large number of people using its site to make services like "Based on your recent purchases, you may be interested in.." or "Read reviews of this item" realities. Furthermore, people are willing to spend a few extra dollars to have selected items shipped to them the next day, and there is always a tracking number assigned to these items so their locations can be accounted for.

People are increasingly expecting these same sorts of services from the Libraries. It behooves the Libraries to make efforts to meet these expectations. People spend time and energy, some of their most valuable resources, using the Libraries website. If their perceived return on this investment appears smaller than their return when using other websites, then people will be reluctant to use the Libraries website, even if its content is more authoritative and more scholarly. Implementing search services like Google's might

be something the Libraries wants to do. Recommending the use of other bibliographic indexes based on past usage and user reviews, like Amazon.com, might be another way to meet expectations.

What does the website contain? - Content

While there are many types of websites, it is safe to assume the Libraries' website is primarily information and task driven as opposed to purchasing and entertainment. To this end we must explicitly articulate the answers to questions about website's content, content facilitating information gathering. Such questions include:

- What sort of content do we want to communicate to our audience?
- How is this content different from the content in the catalog?
- To what degree is the sum of the content intended to be comprehensive, scholarly, authoritative, historical, and/or up-to-date?
- How often is the content to be re-evaluated?
- How will the content be integrated with the University's content?

The content of the website will be much like the website's existing content and includes links for finding information, links for getting information, links for getting help, links to services, and links to information about the Libraries. The types of content made available on the Libraries website includes access to:

- books, journals, articles, maps, images, statistics, and other media
- catalogs, bibliographic indexes, dictionaries, encyclopedias, directories, and other finding tools
- descriptions of library departments
- digital library services such as document delivery, current awareness, electronic reference, and book renewal
- digitized collections and exhibits
- employment information
- hours
- information about scholarly communication and copyright
- Internet-accessible websites
- library policies
- pedagogical information
- public relations information
- the Libraries' newsletter, Access

With the advent of the Internet and the World Wide Web, increasing amounts of popular, trade, and scholarly information can be found and retrieved without going through a library. Because of the dynamic nature of Internet resources, many of these things are not explicitly described in the Libraries catalog. Items in the catalog are, for the most part, things the Libraries has purchased or licensed. At the same time, many of these Internet resources are items facilitating the learning, teaching, and scholarship of the students, faculty, and staff. Therefore it behooves the Libraries to include links to Internet resources in its website, but since it is impossible to "catalog" the entire Internet, it will be necessary to outline a collection policy for these items. The policy, however formal or informal, ought to enumerate the qualities and quantities of selected resources. Qualities might include ease-of-use, comprehensiveness, currency, and authority. Quantities might

be limited considering the University's curriculum and/or the amount of time and energy the Libraries is willing to spend on such an effort.

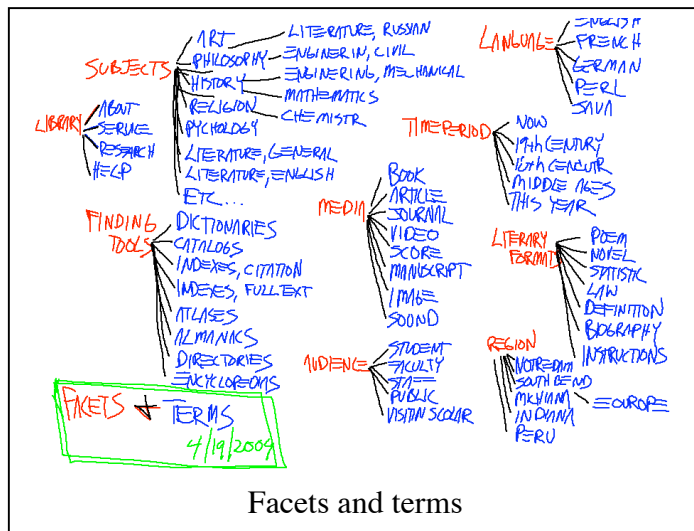
How are we going to make it happen today? - Implementation

Now that the groundwork has been laid, and questions of context, content, and users have been addressed it is possible to tackle how the work is going to be done. What techniques and technologies will be employed to make the website a reality?

By definition, the website will be hosted by an Hypertext Transfer Protocol (HTTP) server and its contents will be designed to be primarily accessed via desktop-based Web browsers such as Microsoft Internet Explorer or any of the Mozilla-related Web browsers. Contingencies should be made for other display devices and mediums such as PDA's, cell phones, and printed documents.

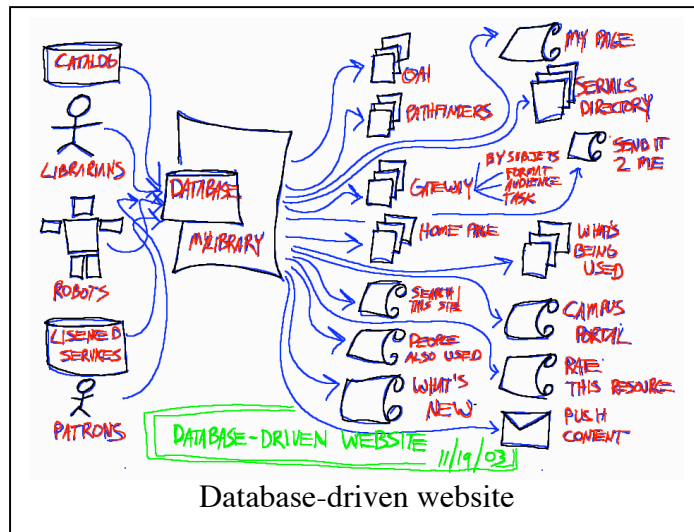
Whenever possible, the data transferred from the Web server to the browser will be in the form of XHTML documents. By adhering to the XHTML standards the Libraries will reap all the benefits of XML, namely, separation of presentation from content, compatibility with future Web standards, and the ability to reformat content for different purposes and reading devices.

A database application will be used to manage the majority of the website's content. The vast majority of the website's content is made of lists of information resources. Lists of citation databases. Lists of journals. Lists of catalogs. Lists of dictionaries, encyclopedias, manuals, instructions, directories, websites, etc. Each of the items in these lists can be "cataloged" in a number of ways with titles, locations (call number and/or URLs), and narrative descriptions. Each of these items can also be classified with one or more facet/term combinations such as subjects, mediums, finding tools, audiences, or any number of other qualities. Subject terms might include astronomy, philosophy, or music. Medium "terms" might include book, journal, or article. Finding tool "terms" might be dictionary, encyclopedia, or index. Audience "terms" might include undergraduate student, graduate student, faculty, or staff. Other qualities the Libraries might want to use to classify information resources might include softer facets such as authoritativeness, usability, comprehensiveness, cost, or currency.



In a computerized environment, the way to manage lists of things is through the use of relational database applications. It would be entirely possible to create and maintain the content of the Libraries website by writing XHTML files and saving these files to the Web server's file system, but since any information resource might appear on multiple lists (lists by subject, lists by finding tool, etc.) maintaining hand-written lists is not a scalable solution. When the URL or description of a particular item changes it would be necessary to edit many files. Things would get quickly out of date and require an extensive knowledge of XHTML editing abilities.

On the other hand, when these same items are described and classified using database technology it is entirely possible to create "reports" from the database in the form of XHTML documents. These reports will be lists of resources organized by the selected facets such as subject, medium, finding tools, audiences, etc. The ability to create these reports requires a greater degree of computer competency by the Libraries as an institution, but it does not require this skill of a great many of individuals.



Consequently, a database application will be used to manage the lists of information resources. Many, if not most, of these information resources will come from the Libraries catalog. On a regular basis (daily or on demand) a dump of MARC records will be created from the catalog. This set of records will be the set of records owned or licensed by the Libraries and deemed important enough to be included in the website. These records will then be imported into the website database with their descriptions intact, and this data will be used to re-create the content and functionality of the existing E-Resources Gateway.

Since the website is destined to include information resources not necessarily in the catalog, there will also be an administrative interface to the database allowing library personnel (faculty and/or staff) to add, edit, and delete additional information resources. These resources are the resources typically found existing in other sections of the Libraries website such as the subject librarians' home pages and the Virtual Reference Desk. Once these items are integrated into the underlying database, the functionality of the subject librarian home pages and the Virtual Reference Desk will be retained but their content will be administrated centrally and consistently. This will enable the content to be reformatted and syndicated in the same way the "gateway" resources are reformatted and syndicated.

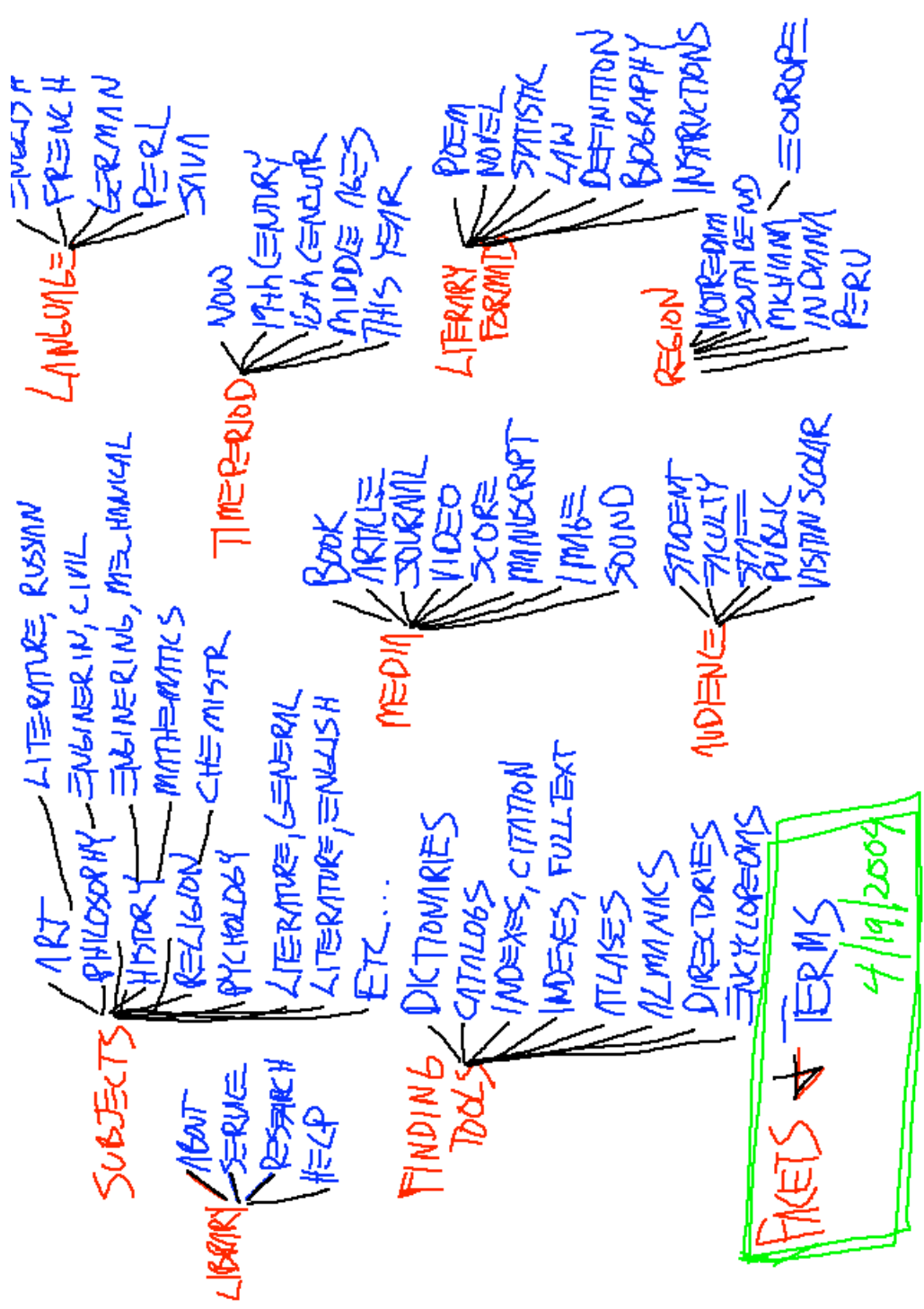
One of the goals of the present redesign process has always been to build on the good work already done by the Libraries. Therefore it is important to implement the existing functionality of the Gateway, Reference Desk, and librarians' home pages. By managing content in a database, the Libraries will be empowered to create services increasingly expected by patrons. These services include things like reviews of resources, search results ranked by popularity, and personalized pages.

Not all of the website's content is lists of information resources. Some of the content is in the form of narrative texts or interactive forms. This form of content is not ideal for database applications. Instead it is most efficiently created and maintained with a plain-text editor or a specialized HTML editor. The Libraries is not going to mandate the use of one editor over another, but it will mandate adherence to the XHTML standard and the use of agreed upon templates for graphic design. Presently the Libraries endorses the use of an HTML editor called Macromedia Contribute. This cross-platform application removes all the complexity of HTML markup and the need to know anything about usernames, passwords, File Transfer Protocol, or AFS file systems. If content is created and maintained using Contribute, then the content will almost undoubtedly be XHTML conformant and appear to the user in the agreed upon layout. Library employees who use other editors such as NotePad or Dreamweaver will be responsible for making sure their pages are compliant.

Summary

The goal of the Team Redesign is to build upon the great work already done on the Libraries' website and implement a sustainable process for maintaining a cohesive, synergistic, and usable Web presence into the foreseeable future.

Eric Lease Morgan and Team Redesign
May 6, 2004



FILES & TERMS
4/19/2009

