Innovative CMS Implementation in an Academic Library
The Transition from Static to Dynamic Pages on the Middlebury College Library Web Site

Context: Old Site – New Site
The Middlebury College Library recently had to bring its entire site into a content management server along with the rest of the College. This presented many challenges, but also many opportunities for improvement of the Web site from a user’s point of view as well as from a content provider’s point of view.

Many of the problems with the previous Web site consisted of duplicated effort among the Content Providers (mostly librarians), and searchability of the large static documents. Documents were not very easily searchable because they were large static documents. These problems were all innovatively solved through the information architecture we implemented fully utilizing the functionality of the Microsoft Content Management Server (MS CMS).

How We Proceeded
The navigation bar in the CMS is dynamically generated from the file structure, so the first thing to fix was the hierarchy of the site.

Old Site

New Site

Document Templates and Rendering Scripts
In the CMS, documents are dynamically generated. How the system pulls together elements from the database is based on a "page" basically depends on the interaction of two things:

- Document Templates
- Rendering Scripts

Document Templates
1. Text with Print (default)
2. Sections like staff Web page
3. Subsections like from CMS resource gallery
4. Link to External Site
5. An often used for cross-reference
6. Used for search function
7. Can only be used with rendering script #1
8. Can be used to create "master link lists"
9. Link with Blurb
10. Can be used with rendering script #1 or #2
11. Can be used to create "master link list"
12. Staff Listing
13. Generates sortable list of employees

Rendering Scripts
1. list_channels.xml_postings.aspx
2. list_channels.xml_postings.aspx
3. staff_listing.aspx

Analysis
The decision to use the set of templates and rendering scripts above came out of a needs analysis of the Library’s sub-site. The need for a site that was easy to maintain, with links to frequently used resources, was determined. The Link with Blurb document template and its corresponding rendering script arose out of combination of the Webmaster and the Electronic Services Librarian.

Innovative Points
In many parts of our site, we had long lists of links which also had accompanying blocks of text which could also link to indexes or images. These static documents, consisting of individual content blocks, were often duplicated across the site on different pages. This represented a drain on the Content Providers’ time and caused people to duplicate effort. We created a special CMS document template called Link with Blurb. This document template allowed us to put each link and associated text block into an individual document (posting in Microsoft CMS lingo). Once these were broken down into individual entities, they only had to be created once and could then be shared. This was tremendously helpful during our migration from the old Web site to the CMS.

This in also allowed us to do several other things:
1. Through the use of various rendering scripts, the link-blurbs can be "linked and matched" into different dynamic documents as needed.
2. Using rendering scripts, we allowed documents built on other document templates to combine with the link-blurbs in various manners.
3. Our central list of databases became an effective master list for most of the links in the "Web-Kiosk" Open Documents.
4. This not only allowed us to easily keep those links up to date across the site, but also enabled us to change large URLs of our databases (important when URLs contain usernames and/or passwords).

Some of these things are possible with existing applications such as Dreamweaver. However, implementing them was extremely cumbersome for a population of users who only infrequently update their content and thus never maintain the required software proficiency level to implement such features.