

DIKTUON: Drupal – CMS and Beyond

By James Marion Darlack

Libraries are continuing to broaden and develop their online presence. Patrons are no longer satisfied with static web pages detailing hours of operation, staff contact information, and services. Libraries have employed various tools to meet the ever-evolving needs of patrons. One such tool is the all-so-common “Content Management System” (CMS), with the most popular system known as Drupal (<http://www.drupal.org>). Simply stated, “Drupal is a free software package that allows you to easily organize, manage and publish your content, with an endless variety of customization” (<http://www.drupal.org/about>). Drupal was first developed by Dries Buytaert at the University of Antwerp in 1999 and was released into the open-source community under the name “Drupal” (an Anglicization of the Dutch word *druppel* or “drop”). Though Drupal is commonly referred to as a CMS, it is actually a “content management framework,” and, as such, it allows for extensibility and scalability through the addition of various user-created modules that build upon its core framework.¹ Libraries have been employing Drupal in a number of ways, including managing the library’s web presence, extending the functionality of their online catalog, and providing a framework for digital collections.

WHY DRUPAL?

Drupal’s low cost, extensibility, and collaborative user community make it an attractive choice for those seeking to manage a library’s web presence.

COST

Drupal was released in 2001 as open source software, and as such there is no cost for licensing. Thus, the costs involved with running a Drupal site usually involve only the hosting costs and the expense of development and maintenance. Installation requirements are fairly inexpensive: a server running Apache 2.x, a database server (typically MySQL), and PHP (<http://drupal.org/requirements>). Apache, MySQL, and PHP are all open source and can be easily installed using the “prepackaged” installers such as WAMP (<http://www.wampserver.com>) or MAMP (<http://www.mamp.info>).

EXTENSIBILITY

A Drupal installation is comprised of three basic parts, the “core,” “user contributed modules,” and “themes.” The “core” refers to the basic group of modules that make up a standard Drupal installation. User contributed modules allow for nearly limitless customization of any site’s functionality, and the themes allow developers to adapt the “look” and “feel” of a site to the organization’s (and users’) needs. Evidence of the wide variety of functionality and appearance possible with Drupal is available at Dries Buytaert’s list of Drupal-run websites (<http://buytaert.net/tag/drupal-sites>). Sites listed include the Whitehouse (<http://whitehouse.gov>), the Louvre (<http://louvre.fr>), and ING Financial Services (<http://ing.us>).

¹ Robert J. Townsend and Stephanie S. Pakrul, *Foundation Drupal 7: Learn How to Use the Drupal Framework to Quickly Build Feature-rich Websites* (New York: Springer Science+Business Media, 2010), xix.

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USER COMMUNITY

Drupal has an active user community that is continually developing modules, and themes that are open to anyone to incorporate into their site. Drupal has an active open-source technology community with over 630,000 users and developers (<http://www.drupal.org/about>), and librarians have joined this user community. The Drupal Libraries Group (<http://groups.drupal.org/libraries>) offers tutorials, presentations, snippets of code, modules and other helps for libraries employing Drupal to manage their content.

DRUPAL IN LIBRARIES

CONTENT MANAGEMENT SYSTEM

Drupal is most commonly employed as a CMS in libraries. Kenneth J. Varnum's recently published book *Drupal in Libraries*, covers many of the issues involved with building and maintaining a library website using Drupal.² Matt Ostercamp recently described the implementation of Drupal as a CMS at Trinity International University's Rolfling Library.³ Ostercamp's article in the *ATLA 2010 Proceedings* provides an excellent overview of Drupal's potential. In addition to providing the standard hours, location, contact information, and staff listings, the Rolfling Library was able to regularly publish library news and featured items, update the community automatically when new journals and books were added to their collection, and highlight online content generated by the university's staff and faculty.

EXTENSION OF THE ONLINE CATALOG

Several libraries are using Drupal to extend the functionality of their online catalog. In her article "Drupal Done Right," Karen Coombs highlights libraries using Drupal in such a way.⁴ The Ann Arbor District Library (AADL) developed SOPAC (Social OPAC). In essence, this module seamlessly integrates the library's catalog with the library's website. Besides adding catalog content to the library's website, SOPAC also provides "next-generation" features to the catalog, such as "facets, tags, book covers, reviews and ratings."⁵ SOPAC has been released to the public as a Drupal module (<http://thesocialopac.net/>) and is available for anyone to use.⁶ Coombs also highlights the library-related modules developed by the XC Organization (eXtensible Catalog Organization — <http://www.extensiblecatalog.org/>). The XC Drupal toolkit "integrates searchable library metadata, ILS circulation services, repository content and the library website content into a feature-rich web user interface" (<http://drupal.org/project/xc>).⁷ The Tecnológico de Monterrey library used a "screen scraper" to harvest information from its MARC records. They then used Drupal's native taxonomy to transform subject headings into categories, tags, and facets.⁸

² Kenneth J. Varnum, *Drupal in Libraries*, Tech set 14 (Chicago: ALA TechSource, 2012).

³ Matt Ostercamp, "A New Way to Create a Website: Using Drupal to Create a Dynamic Web Presence." *American Theological Library Association Summary of Proceedings* 64 (2010): 139-147.

⁴ Karen Coombs, "Drupal Done Right," *Library Journal* 134, no. 19 (November 2009): 30-32.

⁵ Coombs, 30.

⁶ Varnum, 115.

⁷ Coombs, 31.

⁸ Alejandro Garza, "From OPAC to CMS: Drupal as an Extensible Library Platform," *Library Hi Tech* 27, no. 2 (2009), 257.

DIGITAL LIBRARY PLATFORM

Libraries have also begun using Drupal as a platform for their own digital collections. Jonathan Weber, in his article “Shoestring Digital Library,” notes that if existing digital library software does not meet the needs of a particular organization, software such as Drupal can be used to build a digital library from the ground up.⁹ “Out-of-the-box,” Drupal does not support metadata standards (e.g., MARC, Dublin Core, OAI-PMH), but here the extensibility of Drupal shines. The Libraries Drupal Group has prepared a list of modules that help integrate metadata standards with Drupal (<http://groups.drupal.org/libraries/modules>). The “Views OAI-PMH” module opens up digital library holdings to metadata harvesters (http://drupal.org/project/views_oai_pmh), while the Biblio module can be used to import and manage bibliographic records in various formats, including BibTex, RIS, and MARC (<http://drupal.org/project/biblio>). Standard Drupal modules (not necessarily related to the library world) can also be used to effectively build a digital library. Matthew Kirby has developed a helpful tutorial on how to plan and build a Drupal library.¹⁰ Kirby’s tutorial focuses on developing a library of digital images, but the planning process and concepts involved could be applied in many situations.

EVALUATION

As mentioned above, the lack of licensing cost is a huge selling point for Drupal. However, it should be noted that while “open source” software is “free,” the term “free” has a wide range of meaning. There’s quite a difference between “free drinks” and a “free puppy.” Drupal is free, like the “free puppy,” as it will require an investment in maintenance for the life of the site that includes hiring or training staff with knowledge of PHP and MySQL.¹¹ That being said, Drupal can be a powerful platform for building a library’s web presence, extending the usability of its online catalog, or even developing a digital library.

⁹ Jonathan Weber, “Shoestring Digital Library,” *Library Journal* 131, no. 12 (July 2006): 30-32.

¹⁰ Matthew Kirby, “How to Build a Drupal Library: A Guide for Drupal 7” <http://anothermyth.com/wp-content/uploads/2013/02/How-to-Build-a-Digital-Library-Matthew-Kirby.pdf>.

¹¹ Marshal Breeding, Abram Stephen, and Karen Schnieder, “ULTIMATE DEBATE: Open Source Software – Free Beer or Free Puppy?” (panel discussion at the American Library Association 2010 Annual Conference, Washington D.C., June 28, 2010), <http://www.librarytechnology.org/ltg-displaytext.pl?RC=14863>.

