To Plone or Not to Plone?

The Asthma Files, 2012

Our move from a wiki to a (open source) Plone CMS was motivated by its potential for enhanced security, more nuanced workflow pathways, and more intentional relationality amongst files and primary material. In the last year, we have re-evaluated our CMS choice and after careful consideration and comparison, we have decided to remain with Plone. A chart in Appendix 3 summarizes how we compared Plone to Drupal. Erik Bigras (Ph.D. student in our group, with a background in both anthropology and computer science) provided this narrative report:

- Creating pages in Drupal is very easy; its "block" structure makes it easy to configure the look of a page, and allows users to simply move objects around by allocating them to pre-defined spaces on the page.. With Plone, visual modifications often require modifying CSS style sheets.
- Installing Drupal is easier than installing Plone. Drupal only requires Apache and PHP, which most servers already offer. Plone requires a VPS, which inserts a layer of required administration and expertise that is absent from Drupal. So on these two points, Drupal would be a better platform for anyone trying to display information on a simple site.
- However, part of the goal of *The Asthma Files* is to create a work space through which collaborators can create, analyze, and share their materials. With this goal in mind, Plone becomes a more interesting platform.
- Drupal gains much flexibility through the use of user-created add-ons – essential because Drupal itself is rather stripped bare. For example, media and file management is accomplished through add-ons or through FTP access to the server. Plone, however, offers a way to manipulate and access files within the platform directly upon installation. Plone mimics an online file management system in which users can manipulate the material. Because one goal of *The Asthma Files* is to explore new paths for scientific collaboration, having all the functionality pre-installed in Plone greatly reduces the amount of work needed for collaborators to be able to have a functioning workspace. There is no need to search for add-ons, and make sure that everyone has compatible ones, because everything is included already in Plone.
- Accessibility: Plone is compliant with section 508 of the Americans with Disabilities Act; Drupal is not. While it is possible to ensure that Drupal sites are fully accessible to users identified as 'disabled,' Plone makes such accessibility issues easier because it already includes all the necessary parameters that must be fulfilled.
- Security also is an important issue for *The Asthma Files* because of the IRB protected materials that are stored in and shared through the platform. As a platform, Plone has issued less security advisories than Drupal, which makes Plone a front-runner in terms of security. However, the way in which Plone and Drupal handle secure access to files also is different. Drupal's security mainly espouses a philosophy of anonymity; something on Drupal is secure if no one knows that it is there. For example, Drupal appears to differentiate between public (unsecured) and private (secured) pages. Public pages are those pages available for everyone to see. Private pages, on the other hand, are available in a different folder on the server, and are only available if 1) one knows the URL to the page, or 2) one has FTP access to the server. Plone, on the other hand, allows individual Plone folders to be password-protected so that the material inside can only be accessed by the users with the appropriate permissions. Plone security is not contingent on the existence of a space beyond the platform. It is created within the platform.
- How Drupal handles security makes it difficult to share IRB protected material through the platform. Because Drupal creates a single private space in which all protected materials are stored, anyone with access to the folder can access all the materials. So if the audio files from interlocutor A and interlocutor B are both in the private space, interlocutor A will potentially be able to see interlocutor B's files when he or she goes to access his or her materials for review. With Plone, this is impossible unless interlocutor A also knows the password to interlocutor B's folder. Also, because Plone's security is handled at the level of the platform, interlocutors are not required to install any kinds of software on their own system (such as FTP clients).

Plone/Drupal Comparison

	PLONE	DRUPAL
Ease of Hosting:	Requires VPS	Easy to host on any standard servers
Setting up Simple Site:	Requires command-line access	Easy because of pre-packaged options
Setting up Complex Site:	High learning curve, but more options available out-of-the-box	Complex templates and requires coding knowledge
Ease of Content Editing	Clear interface	Clear interface
Ease of Site Administration:	Out-of-the-box file and media management	Third-party media and file management
Graphical Flexibility:	Updates done in Plone	Updating templates requires FTP access
Accessibility:	508-compliant	Not 508-compliant
Structural Flexibility:	Cross-website sharing	Cross-website sharing
User Roles and Workflow:	Detailed workflow configuration is possible	Draft or published modes only
Community/Web 2.0 Functionality:	Allows user-submitted content	Allows user-submitted content
Extending and Integrating:	Python and many add-ons available	PHP and many add-ons available
Security:	6 security advisories from 2007-2010	23 security advisories from 2007-2010
Support/Community Strength:	Community helpful to newcomers	Large user base

1) Administrative functions are a bit more difficult in Plone.
2) Site management also a bit more difficult in Plone.
3) Plone has more functions hard-coded right into the CMS so depends less on add-ons and third-party interventions.
4) From a user's perspective, both Plone and Drupal behave somewhat similarly.
5) For IRB purposes, Plone's architecture is less vulnerable to intrusion.
6) Plone's built-in workflow and publishing options allow for potentially more flexibility when it comes to creating a peer-review process.
7) Plone is 508-compliant out-of-the-box.
8) Python vs PHP: Python's tighter syntax structure makes for a more robust platform (most mistakes will be picked up during the programming as opposed to during the use), but PHP is more widely used. It's possible to have a robust product with PHP, but it requires more attention to the code. So if we have someone write customized add-ons or modules for us (or we use someone else's custom modules and add-ons), there's a bigger chance that Python will produce a result that will be easily portable across platforms/projects.

Comparing Content Management Systems

December 1, 2011

http://themobiusnetwork.com/pdfs/idealware_os_cms_2010_1.pdf
COMPARING OPEN SOURCE CONTENT MANAGEMENT SYSTEMS: WORDPRESS, JOOMLA, DRUPAL AND PLONE (p21)

> Drupal is not as strong as Plone in workflow, and may not be the best choice for organizations that want to have many different people with different roles and ownership over content.
>
> Plone is a powerful and robust system suitable for organizations with very complex needs. It's used by major newspapers and huge businesses, and it shows. The system offers a huge degree of flexibility and control, and it supports almost infinitely complicated workflows. And since the content admin tools are well laid-out and friendly, it's easy for non-technical administrators to update body text, images and sidebar areas. Plone's functionality is as strong, or stronger, than the other three systems in every area we reviewed except for one—Web 2.0/Community support, where Drupal came out on top.
>
> Its main downside is in system installation and configuration. Plone requires a customized hosting setup (as opposed to a typical Linux/Apache/MySQL/PHP environment). Adding existing graphic themes and add-in modules, creating custom themes and setting up the site structure is all more complex than the other systems. Many seasoned technologists will ikely want training to understand the system. Learning Plone to build a single website doesn't make much sense—you'll want to hire a consultant who's already familiar with it. And since Plone is written in Python (unlike the more familiar PHP of the other systems), it may be harder to find someone to extend the system through custom code.

http://wiki.python.org/moin/ContentManagementSystems
What are the "inherent advantages" referred to here?

> Python-based products, although in the minority in the larger market of CMSs, possess several inherent advantages. Python's Unicode capabilities, for example, make its derived products particularly popular in continental Europe and Asia, as compared to those based on PHP, Ruby, and so on.

http://en.wikipedia.org/wiki/List of content management_systems
Lastest release of Plone (4) was 8/11; just a little before lastest release of Drupal