

# Corporate Open Source

How companies large and small can leverage open source software to deploy a corporate web site that is smarter, faster, and cheaper. Get to market quicker with a lower Total Cost of Ownership (or TCO) and a higher Return on Investment (or ROI) by prudently adopting open source software as the right tool for the job.



## Rapid Iteration

Get your message out to your market more quickly and efficiently using open source.

## Collectively Intelligent

The open source community approach allows you to leverage the benefits of the collective intelligence that is built into the more popular open source offerings for free.

- **Voting** – the more popular and viable open source publishing organizations such as WordPress, Fresh Meat, Source Forge, and OS Living (just to name a few) all provide the ability for users to rate and review their catalogs of open source software. This gives you insight into which technologies are the most popular which serves as a good starting point for coming up with a short list of candidates to evaluate.
- **Expert Evaluation** – most successful open source projects follow the Linux model where almost anyone can submit patches but only a select few of the smartest and most trusted developers can evaluate and either approve or reject each patch. This is a very effective form of quality control for open source.
- **Transparency** – Almost all of these projects are developed by geographically disparate teams whose philosophy can be summed up as follows. Information yearns to be free. This means that most communication amongst team members has been archived and is available through the web indefinitely.

## Software Maturity

The more popular, long term projects are already very stable which allows you to avoid wasting a lot of time fixing bugs and researching work-arounds.

- **Many Eyes** – there is a famous quote from Eric Raymond, early open source advocate and author of the essay “The Cathedral and the Bazaar,” which goes like this. Given enough eyeballs, all bugs are shallow. What that means is that the chances are very high that any bug or defect you may encounter while using a popular open source technology has already been discovered, documented, and fixed.
- **Popularity** – if there is only one thing that you get out of this report, it should be this. The key to reducing TCO and increasing ROI in deploying a corporate web site lies in both the amount of transparency and degree of popularity of the underlying technology. Choosing an obscure open source project may be just as free in terms of licensing and acquiring costs as choosing a popular open source project but the TCO will be higher because your organization will be the first to find the many bugs and problems that come with any software development project. Here is the software industries dirty little secret. In the long run, early adopters always pay more than the mainstream. You are, by definition, an early adopter when you pick an obscure open source technology.



## Affordable

You will benefit with a lower TCO by deploying the more quality open source projects. Here's why.

## Community Oriented

Leveraging a popular open source community permits you to benefit from its many smart and dedicated workers without any drag on payroll.



**WordPress:**  
6,241 plugins  
and 933 themes

- **Passionate Work Force** – most open source projects get started by founders who are “scratching their own itch” so to speak. That means the people who develop the software also use it and have a vested, personal interest in the problems that the software solves. Nothing achieves quality higher or faster than personal motivation and deep commitment.
- **Leverage Reciprocity** – many participants in an open source project are “giving back to the community” because that project benefited them personally in the past and they are motivated primarily by feelings of reciprocity. There's nothing like an “attitude of gratitude” to motivate people to be their personal best.
- **Value Orientation** – money alone is rarely an effective and direct motivator or driver towards higher quality. Open source developers tend to value abstract qualities such as freedom of information over the more mundane quest for the personal bottom line. Also, developers of proprietary software rarely get personally promoted along with the software. They are not personally identified or linked socially with the software so they are more likely to let quality slip over time.

## Vendor Neutral

Open source helps you avoid the costly pitfalls of vendor lock in.

- **Standards Based** – most open source offerings are standards compliant. These standards (HTTP, HTML, XML, SOAP, SQL) help keep the TCO for these projects within line in the long term. Standards mean a larger body of workers are already trained and available to participate. Higher supply always drives down costs.
- **Open Orientation** – open source developers shun such attitudes as “security through obscurity” so it is much less likely that any costly silos of information get formed over time. Costly mistakes are much more likely to be avoided or mitigated if all information associated with a technology is readily available.
- **Commodification** – as a corollary to their belief in the freedom of information, most open source organizations want their software to be treated as commodities. This obviously benefits those organizations who consume open source software in the form of lower licensing (usually free, actually) and deployment costs.



**Drupal:** 4,657  
modules and  
550 themes

## Web Server Friendly

A large number of the more successful web hosting service providers make it very easy to deploy the more popular open source solutions which lowers your barriers to adoption.

- **Ubiquity** – as of the time of this writing, I have run across the easy installation and maintenance of the following open source applications through Fantastico, GoDaddy, or Network Solutions; b2evolution, Coppermine, CubeCart, DotNetNuke, dotProject, Drupal, Geeklog, Help Center Live, Joomla, Lifetype, LimeSurvey, Magento, Mambo, Mantis Bug Tracker, MediaWiki, Moodle, Noah Classifieds, Nucleus, OS Commerce, OSTicket, Owl, PerlDesk, PHP-Nuke, phpAdsNew, PHPauction, phpBB, phpCOIN, phpCollab, phpESP, phpFormGenerator, phpFreeChat, PHPlist, PHProjekt, phpWCMS, phpWebSite, PhpWiki, reBlog, Serendipity, SiteFrame, SMF, TikiWiki, TWiki, TYPO3, WebCalendar, WordPress, Xoops, xrms, and Zen Cart.



- **Price Competitive** – with so many web hosting service providers in the market, it is now a common, industry standard practice for them to offer a LAMP (Linux, Apache, MySQL, PHP) capability for a starting price of anywhere from \$5 to \$10 per month.

## Agile

Respond to changes in the marketplace faster and more effectively with open source software.

## Read/Write Web

Removing process barriers to marketers and content providers empowers them to get their message out quicker and easier.

- **Low Overhead** – most of these open source offerings reduces or eliminates the need for such IT positions as web

developer, web designer, or web master.

You don't need your content providers to either have HTML skills or to have to turn their content over to web jocks when they can publish the content directly on the web site with a WYSIWYG editor. The GUI is not unlike any office productivity word processing application so the learning curve for most knowledge workers is low.



- **Immediate Satisfaction** – outside of any moderation oriented workflow that prudent application in your industry requires, there is no need for content providers to wait while their content gets incorporated into static HTML files. The ability of content providers to self service the publishing of their own content closes the feedback loop (so they learn their markets faster) and demonstrates to customers how quickly you can address their needs.

## Collaboration

Establish authentic communications between customers and highly motivated workers using open source technology focused on enterprise collaboration. Please note that we are referencing Dion Hinchcliffe's model for enterprise collaboration in enumerating how open source can help in this arena.

- **Freeform** – CMS systems like Drupal, Joomla, and Plone all present WYSIWYG editors (either TinyMCE or FCKEditor) for rich text editing with graphics and media.
- **Linking** – Wiki systems like TikiWiki and Twiki automatically convert what are called wiki words into links. The WYSIWYG editors mentioned above also permit the explicit insertion of links in content.



**Plone:**  
2,809  
add-ons

- **Authorship** – All of these open source applications permit the uploading of UGC or User Generated Content. The author is identified with the content. For registered users, the name is typically a link to that user's profile within that system. Unregistered users tend to get the chance to provide an URL that will serve as the link.
- **Tagging** – WordPress permits the author to tag each blog entry. Tags are searchable and can be used to categorize content.
- **Network Oriented** – All of the open source applications under consideration here are web applications. Typically, these applications extend the open source web server apache and are intended to be used by web browsers over the Internet. Many of the more popular offerings, such as Drupal, Plone, Joomla, and WordPress, publish content that is addressable in a RESTful way as SEO friendly URLs (sometimes called permalinks).
- **Extensions** – The more popular systems such as Drupal, Plone, and WordPress foster a thriving community of developers who extend the base system through either plugins or modules (extending functionality) or themes (skinning the look and feel of the web site with a customizable GUI).
- **Search** – Most of these system provide search functionality, both internally and externally. Internal search means that a

search box is included in the GUI for the app. External search is where the application provides access to search engines, either through a public, standards based API such as OpenSearch or through content syndication methods such as RSS or ATOM feeds.

- **Social** – Many systems, such as Drupal and Moodle, feature discussion board style forums and personal blogs. Through extensions to Drupal and WordPress, you can integrate with third party systems such as Intense Debate and DISQUS.
- **Emergence** – most of these systems are customizable enough such that new ways to use the tools emerge quite unexpectedly.
- **Signals** – The more popular systems such as Drupal, Plone, and WordPress all support moderation oriented workflows and contact forms with email based notifications. Extensions to Drupal and WordPress are also available to send notifications of new content to popular social sites such as twitter, delicious, and facebook.

## Case Study

We here at Dynamical Software, Inc are planning the 2009 Make Over of our corporate site. See what open source technologies that we are deploying and how it benefits our ROI.

### Drupal

Using this popular Content Management System is how to publish most of the brochure-ware content.

- Use the mobi module for making the site cell phone friendly.
- There is a google\_analytics module for integrating with Google Analytics
- There are modules for friend feed and twitter integration.
- There are modules for spam filters and captchas.

## WordPress

Blogs are great at putting a human face on a corporate message. WordPress is a great choice for managing the total blog site user experience for both bloggers and the public.

- The analyticsator plugin is great for integrating with Google Analytics.
- Wordpress mobile edition makes your blog site cell phone friendly.
- The Sociable plugin automatically adds links on your posts, pages, and RSS feed to your favorite social bookmarking sites.
- There are lots of integrations with third party vendors such as Intense Debate, Poll Daddy, and DISQUS.

## Moodle

Employing this popular Course Management System is a great way to educate customers, and the public at large, in how best to use the products and services that the organization offers.

- There is a google analytics block for integrating with Google Analytics.
- The topics course is best suited for online tutorials.
- There is support for a rich variety of educational resources including web pages, word processing documents, and videos.

## Next Steps

Consider and evaluate deploying your next corporate site make over using some of the more popular open source software packages. Leverage Dynamical Software's knowledge base and expertise to help you make smarter decisions in your next release.

**Glenn Engstrand, President and Founder**  
**Dynamical Software, Inc. August 2009**

- Blogging, discussion boards, and wikis are also available.

## Zen Cart

It is important to make it as easy and convenient for a customer, who is ready to make a purchase decision, to start the commitment process. This is a great e-commerce technology dedicated to just that purpose.

- There is a module for integrating with Google Analytics.
- Similar to OS Commerce but more customizable.
- Support for banners, templates, custom pages, layout options.
- Lots of options for back end processing come out-of-the-box such as authorize.net and paypal.
- Extend more options for back end processing such as Google checkout and checkout by Amazon with additional modules.
- Rudimentary bulk email capability

