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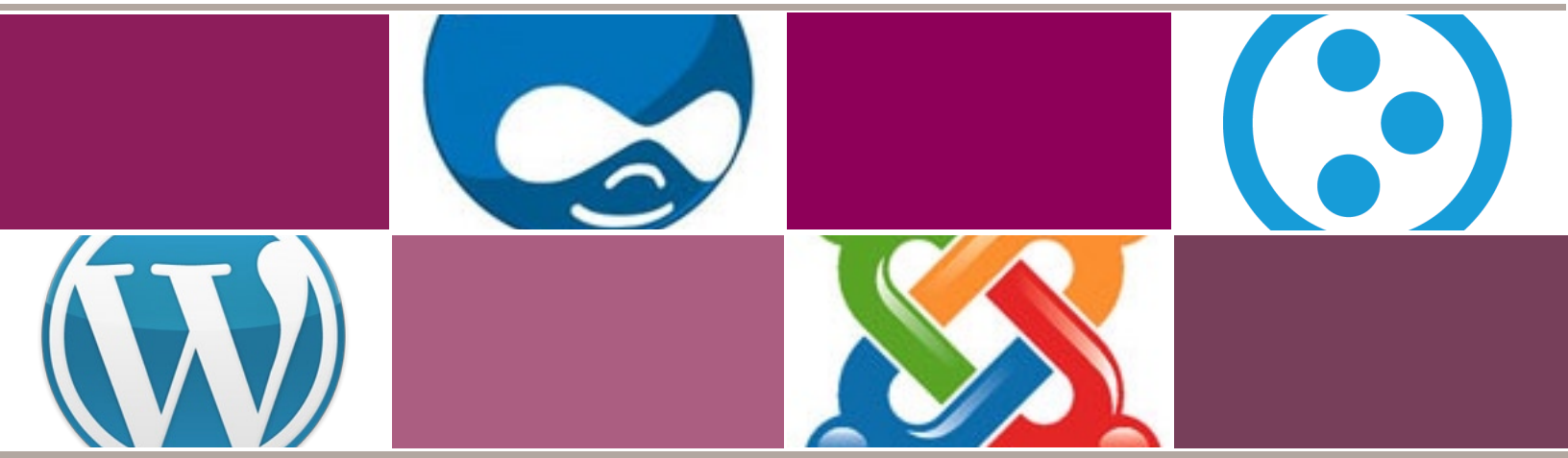
COMPARING OPEN SOURCE CONTENT MANAGEMENT SYSTEMS:

WORDPRESS, JOOMLA, DRUPAL AND PLONE



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About Idealware

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INTRODUCTION

A Web presence is critical for almost every nonprofit, but creating a Web site can be daunting. It can take a lot of time, money and technical expertise—things that are often in short supply. And just because you have a Web site up and running doesn't mean your work is done. You still need to keep up with maintenance, updates and desirable new features.

An open source Content Management System (CMS) can help. Generally speaking, a CMS is a software package that lets you build a Web site that can be quickly and easily updated by your non-technical staff members. These open source systems are created and supported by a community of developers, and can be downloaded without cost. Both their feature sets and their price tags make open source systems particularly attractive to nonprofits.

> "A Content Management System is a software package that lets you build a Web site that can be quickly and easily updated by your non-technical staff members"

In this report, we take a look at four different open source Content Management Systems—WordPress, Joomla, Drupal and Plone—and rate them on a variety of criteria, including system flexibility, features, ease of use and the availability of support. We chose these systems because they're the most popular four in the nonprofit sector today, according to our analysis (see Appendix C for more details on our market analysis). We also dig a little deeper into what open source is all about, and how a CMS can help streamline processes. We even take a look at some vendor-provided systems, along with a few other open source ones, in case you don't find what you're looking for among the four original choices.

We've done our best to balance out the language so it's relatively easy for someone with a non-technical background to understand—but not so basic that it won't be of value for the technically savvy. And we've tried to provide a detailed look at the important features and useful differences between the systems. Keep in mind, however, that a system is only one part of the equation. The person or firm that designs and builds your Web site is likely to be as important as what CMS you choose. In fact, if your needs are straightforward (for example, a hierarchically organized site that's less than 100 pages) and you're planning to hire a consultant, choose a great consultant and use whichever CMS he or she is familiar with. If your needs are more complex, though, it can be very useful to have a sense of the differences between the systems. Many consultants specialize in a particular CMS, which means you'll need to weigh both your comfort level with the consultant and the fit of the CMS for your needs to decide on the right person.

No report can answer all the questions that anyone might have. If you're planning to spend $100,000 or more on a Web site, get tens of thousands of visitors a day or have detailed questions about sophisticated functionality, you'll need to look beyond this report to get the additional information you'll need to choose from these four systems. But if you're a small to mid-sized organization, whether your needs are simple or sophisticated and your technical knowledge is shallow or deep, this report can provide you with a good overview. Taking the time to read through it carefully can save you a lot of work and money.

WHAT IS AN OPEN SOURCE CONTENT MANAGEMENT SYSTEM?

At its most basic, a content management system (CMS) is a software program that makes building and maintaining Web sites faster and easier. Let's say you're using a Web site without a CMS—if you want to post an event and have that event show up in five different places on the site, you have to perform the same activity five separate times on five separate pages. With a CMS, you only have to post the event once—and any staff member can do it, regardless of their technical expertise. How does this work? Content management systems store the actual content (text and images) in a database. The system can then automatically pull the content out and show it on the appropriate pages based on rules that you set up in advance. The ways you can organize it, and the types of rules you can use, depend on how structurally flexible the CMS is. This setup makes it easy for all your content administrators—the staff members who are writing and publishing the actual information on the site—to create content without worrying about technical issues, or even knowing all the places the content should go.

Content management systems also separate graphic design from the content itself. This is accomplished through the use of "themes"—graphic design layers that control graphic elements, font and navigation styles, and page layouts for each page on the site. You simply choose a pre-packaged theme for your site, or create a theme that's completely customized to your own look and needs.

> "The system can automatically pull the content out and show it on the appropriate pages based on rules you set up in advance."

The term "open source" is a key distinction. The term means the software's source code is freely available for everyone to see and change (as opposed the source code for MS Word, for example), but it has many wider implications. While proprietary software is created, distributed and maintained by a business, with open source software these tasks are handled by a community of developers and users (recently, for-profit consulting and development firms have also become important vehicles for support). Just how effective that community is at its job is an important consideration when choosing an open source CMS.

> "Open source systems are free in many ways"

Open source content management systems are free in many ways. They're free as in "free speech"—you can do what you wish with the product and the code behind it, extending and integrating it as you see fit. They're free as in "free beer"—there's no license cost for the software. Anyone can download them and install them on a Web server without cost (though you'll likely need to pay for the Web server, or someone to install the systems). And they're free as in "free kittens"—that is, an open source CMS takes work. You'll either need to put a lot of time into implementing and maintaining your system, or hire someone to do it for you. And no CMS will magically design and write your whole Web site for you—that's a job for humans.

Open source content management systems are also designed to be modular. When you download one, you get the set of features a group of developers decided ought to be the base level of functionality—called the "core" of the system. But there's a huge range of add-on modules that provide additional functionality for each CMS, and a rich network of developers working to create more. If there's something you want for your Web site that the core CMS doesn't already do, someone else has probably already built what you're looking for—and, if not, you can build your own or hire someone to build it for you.

> "An open source CMS takes work. You'll either need to put a lot of time into implementing and maintaining your system, or hire someone to do it for you."

There's a whole community of people around all of these open source CMS who create add-ons, modify source code, and ask for and offer support. When you decide to install an open source CMS you become a part of that community. But there's an expectation that when you ask a question, you have at least some knowledge of the system. They're not going to do the work for you. If you don't have someone with technical skills on staff, you may want to hire someone to implement the CMS. And as we've noted before, if you're planning on building a simple site, the person you choose to implement the CMS is considerably more important than the CMS itself.

An open source CMS certainly isn't a cure-all; it may not even be the best option. But for many organizations, it can offer useful savings in time, money and resources.

WHAT OTHER CONTENT MANAGEMENT SYSTEMS ARE AVAILABLE?

While the four tools we discuss in this report are appropriate for a wide range of organizations, they're not the only games in town. There are a number of other options that might be relevant, and several key reasons you might want to look beyond what we've reviewed:

- **You have a complex site with specific needs.** If you're going to spend $100,000 or more on Web site design and implementation, or are considering substantial customization, it's worth looking at other systems in addition to these four. While any of the four could work well for even very sophisticated needs, taking time up front to assess more options (and potentially purchase software) might save you money down the road. Other systems also provide compelling and useful feature sets in different combinations than the systems outlined here. In particular, if you require complex workflows (for example, different users being able to edit or publish things in specific ways), or integration into standard business systems (like Microsoft Active Directory), other systems could expand your options.

> "There are several important reasons you might want to look beyond these four systems."

- **You want a one-stop-shopping arrangement for your Web site, constituent data, email and online payment needs.** Some organizations prefer to have their Web sites tightly coupled with tools to handle constituent and donor tracking, broadcast email and online payments. While any of the four systems in this report can provide options for these features, there are a number of other integrated platforms that might be as compelling—or more so—for your needs.
- **You want to standardize on a .NET Framework or other infrastructure.** If you have established a set of IT standards, it's common to centralize on applications that are customized in a particular coding language. This way your IT team doesn't have to maintain lots of different systems. With the exception of Plone, which is programmed in Python, the systems in this report are programmed in PHP. If you've standardized on Microsoft .NET as your primary coding language, for example, none of these systems will fit within that standard.

There are a number of lower end vendor-provided content management systems that provide features comparable to the four systems reviewed. Hot Banana, Ektron, CommonSpot and Sitecore are all commonly used proprietary systems that might make sense for mid-sized to large sites. They generally start at about $10,000 as a one-time up-front purchase, with additional yearly maintenance fees. Hot Banana and another system, Crown Peak, offer hosted options, which allow you to pay with a monthly fee rather than an up front license cost.

If you want to tightly integrate tools for broadcast email, online payments and managing your constituents with a fairly straightforward Web site, you might want to consider nonprofit-specific integrated systems. Systems like WildApricot or Neon by Z2 may be of interest to smaller organizations, while Convio and Kintera by Blackbaud target larger ones.

Finally, there are other viable open source systems, which are not currently as widely used in the nonprofit community. DotNetNuke is built on Microsoft .NET, making it an interesting option for organizations standardized on a Microsoft platform. Movable Type offers interesting options for straightforward sites (or complex blogs) in a similar vein as WordPress. Typo3 and Xoops (or its new branch, Impress CMS) are feature-rich systems comparable to Drupal or Plone.

HOW DO THESE SYSTEMS COMPARE?

Enough with the background and context! How do these four systems actually compare? We took a detailed look at 12 different areas to see how the systems stack up.

Ease of Hosting and Installation

Any open source Content Management System requires the services of a Web host—a company that provides and maintain the servers on which the CMS resides. These companies also connect your Web site to the Internet safely and securely. But not every CMS can be hosted by just anyone. Technical requirements can have a big impact on how easy it is to find a Web host—and on your budget. Standard shared hosting (an inexpensive arrangement in which your Web site is one of many on the same server) costs from $5-$25 per month. A more sophisticated setup—to support higher traffic sites, or specific hosting needs—can cost $30 per month or more.

> "Not every CMS can be hosted by just any hosting company."

Once you have chosen a host, someone will need to download the package of code and files that make up the CMS and install it on the server. If you're hiring a consulting firm to build your Web site, ease of installation is not likely to be a concern, but it's worth considering if someone less technical is doing the job.

WordPress, Joomla and Drupal can all be installed easily on shared hosts, but Drupal is a bit more complex than the other two. You might want to have someone on hand who's familiar with shell access, which can make Drupal easier to install and administer.

Plone is in a somewhat different category. It requires a special and more expensive, although readily available, hosting environment. It also takes much more technical expertise than installing Joomla, WordPress or Drupal on a shared host—but if you're considering a more sophisticated hosting environment anyway to support more traffic or advanced needs, the difference in installation between the systems is minimal.

Ease of Setting Up a Simple Site

If you want to build a straightforward Web site quickly, it doesn't matter how feature-rich the CMS is. In fact, if you're hoping to build a site that's less than 50 pages or so, simple in structure and without a lot of extra features, it's a real benefit to not have to understand and navigate through a set of complicated options. Instead, you'll want a system that makes it easy to set up your pages, and provides everything you'll need to allow non-technical staff members to update the text and images on the site.

High quality, easy-to-install "themes" can help you build a Web site quickly. A theme is a graphic design layer that controls graphic elements, font and navigation styles, and page layouts. One theme can have many templates—you might have one that dictates the homepage look and the layout, and another that controls the article pages on the site. You can create your own theme, but there are many pre-packaged themes available for all four of these systems, meaning you can just choose one that works for your organization, install it into the CMS, and be ready to go.

Along with solid themes, look for systems that allow you to easily set up your pages and a simple navigation scheme. And if you'd like your site to include an events calendar or list of news stories, look to see if these are included with the basic CMS or will need to be installed separately.

WordPress excels in this area—even someone without a lot of technical experience can get a simple site up and running without investing a lot of time. While the other three systems are also relatively straightforward,

> "If you want to build a straightforward Web site quickly, it doesn't matter how feature-rich the CMS is."

each has a notable downside. Joomla offers many great themes but creating site structure and navigation isn't as intuitive as it could be, even for a Web-savvy user. Plone makes it easy to set up site navigation, and is the only one to offer an events calendar out of the box, but installing a new theme is technically complicated. Navigation and theme setup on Drupal is straightforward, but unless your staff members know HTML, you'll need to install a WYSIWYG (What-You-See-Is-What-You-Get) editor as an add-on module for them to edit text or images on the site.

Ease of Learning to Configure a More Complex Site

As you move from building simple sites to creating more complex ones, the learning curve becomes important—if you're going to build your own Web site. Many organizations will find it more effective to hire a consultant who already understands the CMS, as well as general best practices around building a Web site, rather than going it alone. If you're planning to hire a consultant, then this section isn't relevant for you.

If you're planning to learn the system yourself, though, you'll need to consider how long it will take to understand the administration tools, develop custom graphic themes, master more advanced features and understand the tools available to build a navigation structure. What resources are available to help? If you want to extend your site with add-on modules, how easily is it to find out what's available?

There is substantial documentation, including published books, on all four systems, but the complexity varies considerably. WordPress is the easiest to learn when it comes to creating themes and adding functionality. As a less complex system than the others, it does not take as long to master, and it's easy to find out about add-on modules on their Web site.

It requires a bit of a learning curve to understand Joomla's terminology and structure, but once you do, it's comparatively straightforward to set up even fairly advanced sites. Drupal is another step beyond in complexity—there's a huge number of options, settings and screens, and the flexibility of the system

> "None of these systems are difficult to use, but all four are likely to require a bit of training for less technically savvy people."

means it's important to think through the best way to accomplish what you want before diving in. The Joomla Web site lists and rates add-ons; you'll need to use the site drupalmodules.com to see ratings and reviews of Drupal add-on modules.

Plone is the most difficult system to learn by far—even professional technologists are likely to require training to master it. There's a complex set of options and settings within Plone, and for some more advanced configuration tasks, you must also understand

and configure the framework application that lies beneath Plone, called Zope. Plus, while add-on modules are listed on the Plone Web site, there are no widely-used ratings and reviews, making it more difficult to determine which will be best for your needs.

Graphical Flexibility

As the graphic design for your site says a lot about your organization, graphical flexibility is an important factor to consider. All four of these systems allow you to create a custom graphic theme, which controls the design, fonts, colors and layouts of your pages. Creating a theme isn't a trivial process in any of these systems; it takes a technically savvy person with HTML/CSS skills. But all four systems allow extremely granular control over look and layout, which means they can support pretty much any graphic design and layout that are possible using standard Web site scripting languages.

Content Administrator Ease of Use

When it comes to updating text and images in a CMS, simplicity is of paramount importance for many organizations. Can your non-technical staff members find and edit pages quickly? How hard is it to add a new page, or even a new section? How easy is it to add an image or a link to a document? Can they paste text in from Microsoft Word, or does that result in a big mess? Can visually impaired people use the administrative tools? None of these systems are difficult to use, but all four are likely to require a bit of training for less technically savvy people.

WordPress and Plone have the edge in this area. Both are relatively easy for your content administrators to learn, and both provide support for pasting text in from Microsoft Word. Drupal is the simplest for straightforward page editing (once you have installed an add-on module to allow editing without knowledge of HTML), but some more advanced editing tasks may require content administrators to venture into Drupal's formidable site setup interface—a training challenge. Joomla is the most polished and friendly looking of the systems, but requires a substantial learning curve to add new pages or to add new sections into the site navigation bar.

Structural Flexibility

The rubber really meets the road with Content Management Systems in how well, and in how many different ways, you can organize complex content. If all content has to fit into a simple hierarchical structure, you aren't going to be able to create as dynamic a Web site as you can with a CMS that's more structurally flexible.

Structurally flexible systems offer the ability to display some information—like a news story, or a description of an upcoming event—in different ways in various lists on the site. For instance, you could show the titles of your next two upcoming events on the homepage, a full list with descriptions for the next two months on the events page, and just the financial events in the finance section.

> **"The rubber really meets the road with CMSs in how well, and in how many different ways, you can organize complex content."**

Other complex features differentiate the systems. Can you manage lists or directories of unusual types of content, like schools where your programs are offered? Can you easily define custom forms to collect information from your visitors? Can you support a set of affiliated Web sites that share some pieces of content, but not others?

Both Plone and Drupal are strong in this area. They allow you to create custom content types and site structures, then granularly determine what content goes where on the page and on the site. Joomla

offers some flexibility, but is not as strong in determining what is shown where on your site, or in creating custom content types. And the Joomla core system only supports three levels of hierarchy: sections, categories and articles. WordPress is the weakest of the four. It is limited to two content types, blog posts and pages. The pages can be organized into parent/child hierarchies, and the blog posts can be categorized and tagged. Some additional content types can be added with plug-ins, but to create new content types, mix these types or granularly determine how and where they display on pages requires substantial custom coding.

User Roles and Workflow

If only a few people will be working with the content on your Web site, you don't need specific functionality to manage user roles or how content tasks flow from person to another. But if your site has a lot of complex, categorized content that's handled by multiple people, a CMS that can assign users permission to add, edit or publish content by site-specific criteria (for example, by type of content or by section) can be useful. For instance, you might want to say that any of 10 people can edit the pages in their own sections, but a central person must approve everything before it can be published. Similarly, it's often useful to be able to control who can view what on the site.

"A CMS that can assign users permission to add, edit or publish content by site-specific criteria can be useful."

It can also be helpful for your staff members to be able to easily see what needs to be done by whom and when—the ability to, for instance, get notifications from the system when something needs to be reviewed, or create a to-do list. And being able to roll back a page to a previous version can be a lifesaver if something goes awry.

Plone is the most powerful system of the group in this area. It allows the highest level of control of user roles, user permissions and detailed configuration of the flow of content through the system. Drupal also has a detailed and granular system for user roles and permissions. Site managers can define custom user roles and be very specific about what roles have what permissions. There are modules that also allow permissions by node (content unit) as well as by taxonomy (content category). But Drupal does not have Plone's out-of-the-box powerful workflow configuration.

Joomla and WordPress have a relatively small number of defined user types. You can't define different kinds of user roles, and users have access to either only their own content, or all content on the site—there is no way to limit permission to access content based on other criteria.

Community/Web 2.0 Functionality

Content Management Systems offer many options for organizations to interact with their constituents. Visitors can comment on articles or other site content and even publish blogs. They can subscribe to your site content through RSS feeds, or allow you to pull content from other sites via RSS and display it on your own.

For more advanced community building, social networking features—like the ability for visitors to create their own profiles on your site, and then link to other people or groups—can be useful. So can the ability to accept and post content (such as stories or photos) from visitors. A good Spam filter is important to keep blogs and comments useful, because when you open your site up to the world, you unfortunately open it up to Spam.

Drupal was designed from the ground up to be a community platform. It shines in this area, offering profiles, blogs and comments out of the box, with

enhancements available through add-on modules. WordPress is, at heart, a blogging platform, and so has many blogging and comment features, but not robust support for more advanced functionality in this area. Joomla and Plone offer fewer community features, but a number of add-on modules provide some support.

Extending and Integrating

You don't have to be looking for something very sophisticated to move past the core offerings of any of these systems. This isn't a problem—open source Content Management Systems are designed to be modular. A huge range of add-on modules enhance each system's functionality, and there's a rich network of developers working to create more.

If your needs are especially unusual, you may have to create your own add-ons. All four systems allow developers to program custom add-ons, but some are easier to work with than others. Drupal and Plone can both flexibly support a number of different kinds of site content and structures. This flexibility means they can support more unusual add-ons more easily. However, Plone add-ons are coded in Python, a less widely used programming language, making it harder to find developers to create those add-ons. WordPress—and to some extent Joomla—do not have as much flexibility in content types and site structure, meaning it may be more difficult to create specific add-on modules, particularly when those modules don't match up well with what the core system is set up to support.

In addition, many organizations want to integrate their CMS with other organizational systems, such as constituent databases, accounting systems, event registration or broadcast email packages. Joomla and Drupal have pre-existing connections to the constituent databases CiviCRM, Salesforce and Democracy in Action, while Plone has connections to Salesforce and Democracy in Action. WordPress does not have pre-existing connections with any of these systems. A CMS that already integrates with your database out of the box is the ideal choice, but all four systems offer robust custom data integration support to those with the programming skills to take advantage of it.

"A CMS that already integrates with your database is the ideal choice, but all four systems offer robust custom data integration support to those with the programming skills to take advantage of it."

Scalability and Security

Web site scalability isn't going to be an issue for most organizations. Unless you make it onto Oprah, it's unlikely that traffic to your Web site will ever exceed the capacity of any of these platforms. That said, all four systems handle caching (keeping site content on a drive instead of in a database so pages can be created more quickly) well. While you might want to investigate further if you expect your Web site to get tens of thousands of visits a day or more, they're all likely to meet the needs of the vast majority of nonprofits.

Security is a different story. All software by nature has vulnerabilities, so when you're shopping for a CMS, it's not a simple question of a secure versus an unsecure system—the ideal CMS is the one with the fewest identified, and fastest resolved, vulnerabilities.

Web sites can suffer four different types of attacks: SQL injections, which are designed to capture sensitive data like usernames and password; link hacks, which insert links (usually invisible) to Spam and/or pornographic sites; Denials of Service, which prevent visitors from viewing site content; and the defacing of site content through various means by hackers.

Dealing with these attacks is a bit of an arms race, as hackers are constantly on the prowl for vulnerabilities. The instant one is identified, it starts spreading around the hacker community. This makes it important to fix vulnerabilities immediately. And the more popular the CMS, the more important it is to fix those vulnerabilities fast.

Plone is the best of the bunch in this area: it has very few reported security vulnerabilities, and is immune to SQL injection attacks. It's difficult to compare the others—they've all had reported vulnerabilities, and all promptly issue updates to fix them. As the most widely used system of the four by far (given its popularity as a blog platform), WordPress is the most likely in practice to be targeted, so it's critical to keep up with security updates.

Maintenance

Content Management Systems are not, unfortunately "set and forget" kinds of things. The systems must be backed up regularly, so there's a copy on hand in case you need to go back to an older version. Without a backup, if your Web host were to suddenly go down, your entire site could be irrevocably lost.

> "Content Management Systems are not, unfortunately, 'set and forget' kinds of things."

Keeping up with system updates—which add features, address security issues and fix bugs—is another important task. Look for a system with an easy update process. Since major updates can break existing themes and add-ons, systems with a thoughtful release schedule with few changes to their underpinnings are best. Barring that, it's also useful for a system to continue to support old major "legacy" versions of the system with security updates, so you can opt out of a major update, at least for a while.

WordPress recently introduced automatic one-click upgrades, which makes upgrading sites painless. Plone is the most complex of the systems to upgrade, but it doesn't issue new upgrades very often. Joomla has also had only one major upgrade in the last year or so.

> "When choosing a CMS, it's critical to factor in the strength of the community. "

WordPress and Drupal issue more frequent feature upgrades, but both also support "legacy" versions with necessary bug fixes and security releases.

Support/Community Strength

In the past, support for open source software has come primarily from the community of developers and users of that software. More recently, for-profit consulting and development firms have also become important vehicles for support. When choosing a CMS, it's critical to factor in the strength of the community. How easy is it to get answers to questions? Can you hire someone who knows the system to help you? Are there enough add-on modules to meet your needs? And for all of this, how likely is it that the system will become less widely used and thus harder to support in the future?

All four systems have robust developer and user communities with lots of free support available from a variety of community-centered and third-party sources, such as forums, IRC and email discussion lists. And all four systems have a substantial network of developers, designers and consultants who provide paid support. Several good books about each system are available that are suitable for beginning users as well as developers. Help on each system is available now and into the foreseeable future.

THE COMPARISON CHART

That's a lot of considerations. How do they stack up across all the systems?

	WordPress	Joomla	Drupal	Plone
Ease of Hosting and Installation	Excellent	Excellent	Excellent	Fair
Ease of Setting up a Simple Site	Excellent	Solid	Solid	Solid
Ease of Learning to Configure a More Complex Site	Excellent	Excellent	Solid	Fair
Content Admin Ease of Use	Excellent	Solid	Solid	Excellent
Graphical Flexibility	Excellent	Excellent	Excellent	Excellent
Structural Flexibility	Fair	Solid	Excellent	Excellent
User Roles and Workflow	Fair	Fair	Solid	Excellent
Community/ Web 2.0 Functionality	Solid	Solid	Excellent	Solid
Extending and Integrating	Solid	Solid	Excellent	Excellent
Scalability and Security	Solid	Solid	Solid	Excellent
Site Maintenance	Excellent	Solid	Solid	Solid
Support/Community Strength	Excellent	Excellent	Excellent	Excellent

None Fair Solid Excellent

See Appendix A for detailed reviews of each system, and Appendix B for a description of how the systems were rated.

RECOMMENDATIONS

What CMS should you choose? It depends on your own needs and situation. All four are solid systems with robust communities and a huge amount of functionality that will allow your technical staff to update your site.

If your needs aren't very complex—that is, if you're planning to hire someone to build you a site that's less than several hundred pages, is generally hierarchically arranged and will be updated by only a handful of people in your organization—any of these systems will work fine. In fact, the person you hire to build the site will be the much more important choice. Look for someone who understands your needs and your organization; is responsive; can speak in a language you understand; and seems eager to work with you… and then use whichever CMS he or she recommends.

> "It's time-consuming to switch Content Management Systems once you're up and running"

If you're planning to build your site yourself, however—or if you're planning a site that requires complex cross-referencing of information, a number of owners and editors, or significant custom functionality—it can be worth carefully comparing the systems to choose the one that's right for you. It's time-consuming to switch Content Management Systems once you're up and running, so it's worth taking time up front to define an infrastructure that will work for the long run.

WordPress

WordPress is a great choice for straightforward, simply arranged Web sites. It's the easiest system to install and understand, and is easy to maintain and update, putting site setup within reach of anyone with a sense of technical adventure. There are many predefined graphic themes available, and adapting them to your particular needs is a relatively straightforward process for someone familiar with HTML and CSS. Updating and editing images and text is also quite straightforward, and multiple add-on modules are available.

However, WordPress won't scale to support complex sites as easily as the other three systems. It's designed primarily to support simple arrangements of two types of content—blog posts and pages—so if you'd like pages or posts to appear in many different places based on automatic rules, this is not the system for you. There is only limited support for differentiation of user roles, with no easy way to support permissions based on section or type of content.

Joomla

Joomla is a solid utility player, good for a variety of different situations. It's relatively straightforward to install and set up. The system is divided into three types of pages: Sections, Categories and Articles. There's a bit of a learning curve to understand how they work and interrelate, but once you've got it the system provides a strong infrastructure for straightforwardly creating useful site structures to support even very large sites. Add-on modules support a wide variety of functionalities, from shopping carts to community features, providing a solid base for many different kinds of sites.

Joomla is not the best choice for sites that will be edited by many different internal content authors, as it doesn't offer an easy way create a workflow based on section or type of content. And while Joomla sup-

ports more complex site structures than WordPress, it is not as flexible as Drupal or Plone. Each piece of content is typically associated with a single page. This makes the system more straightforward to understand, but limits very advanced structures (like structuring a site around a multifaceted taxonomy). It's not easy, for instance, to create your own types of content (for example, a directory of state schools that includes key information about those schools), and then show it in different views on different pages of your site. If you're not sure what any of this means, you probably don't need to worry about it—these are advanced considerations that won't apply to the vast majority of sites.

Drupal

Flexible and powerful, Drupal is a great choice for more complex sites. It supports a wide variety of site structures—you can define very detailed rules as to what content should be displayed where, and build your own custom content types. It has particularly strong support for Web 2.0 and community functionality, including group blogs and user-submitted content. It's also easy for your content administrators to find and update content.

But Drupal's power comes with complexities. Understanding what the system offers and how to configure it is more difficult than WordPress or Joomla. The administrative screens for configuring a site have a huge number of options and settings, making them harder to interpret. And the flexibility of the system means it's important to think through the best way to accomplish what you want before diving in. Most people will want to hire a consultant familiar with Drupal to help them set up a site rather than trying to go it alone.

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

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 text and images. Plone's features are 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. Even seasoned technologists will likely require training to understand the system. Learning Plone to build a single Web site 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.

Wrapping Up

While none of these systems is perfect for every organization, open source Content Management Systems work well for many nonprofits. They're community-minded, cost nothing to acquire and can put editing Web sites within the reach of even the most non-technical people. Use the community aspect to help you make your decision—do some online research, ask questions on message boards. Don't be afraid to take a CMS for a test run. If you don't find what you're looking for in a core system, it may well be available as an add-on. The time you take to make the right choice will be well worth it compared to what you'll save in resources over the long term.

METHODOLOGY

This report is based on two primary sets of data:

Interview data

From November 2008 to January 2009, Idealware conducted hour-long telephone interviews with 11 participants to investigate the primary factors that are important in selecting a Content Management System to build a nonprofit Web site. Four of these interviewees were consultants who implement more than one of the four systems covered; three were nonprofit staff members who had evaluated Content Management Systems and chosen to implement a particular system; and five were consultants who specialize in a single one of the four systems covered here. In February 2009, we interviewed another four people who had experience with multiple open source and vendor-provided systems to understand when organizations should look beyond those included in this report.

Software reviews

From December to February 2008, Idealware conducted detailed reviews of all four systems. We installed them, set up simple sites, evaluated the ease of use of the interfaces and investigated the answers to our research questions. Where answers were not readily apparent from the interface, we asked experts to demo the systems for us. At the conclusion of the research, the reviews were fact-checked by a wide variety of consultants and nonprofit staff members, including both those who specialize in a particular system and those who implement more than one.

For a list of report contributors, please see Appendix D: Authors and Content Contributors.

APPENDIX A: DETAILED SYSTEM REVIEWS

WORDPRESS

Version 2.7

Ease of Hosting and Installation: Excellent

- **Time to Install:** A user with experience installing systems (but not this one) can install the core package in less than 15 minutes.
- **Skills to Install:** Installation does not require technical knowledge beyond how to FTP and how to set up a database on your Web host.
- **Hosting Environment:** The CMS can be hosted on a standard (and inexpensive) shared Linux/Apache/MySQL/PHP environment.
- **Hosting Requirements:** The platform can run on a Linux, Windows or Macintosh OS; it requires MySQL as a database and PHP as a scripting language.

Ease of Setting Up a Simple Site: Excellent

- **Default Setup on Installation:** Upon installation, the platform includes one blog post, one page, one comment, some default blog-like widgets and two themes.
- **Availability of Pre-packaged Themes:** Many pre-packaged graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- **Ease of Theme Installation:** Installing an existing graphical theme is essentially a process of uploading theme files onto the server and then enabling that theme in the Web interface.
- **Completeness:** The core platform includes all typical components to create and administer a basic nonprofit site with a hierarchical page structure.
- **Setting Up Users:** Setting up administrative users is straightforward. The first user is set up during install; others can be easily added through the administrative tools.
- **Structuring a Simple Site:** Creating a simple 20-page site divided into four sections is intuitive. As you set each page up, you can define whether it should go into the navigation bar, or otherwise where it should fall in the site hierarchy.
- **Support for News Stories and Events Calendar:** The core platform includes features to support featured news stories, but you would need to install an events calendar as an add-on module.

Ease of Learning to Configure a More Complex Site: Excellent

- **Ease of Creating a Custom Theme:** Creating a custom theme requires HTML/CSS skills and understanding how to work with a set of templates. The theming process in WordPress is a bit more straightforward than in other systems; those with HTML/CSS skills are more likely to be able to tweak existing themes without the need to extensively consult the documentation.
- **Ease of Understanding What's Possible:** A technically savvy user is likely to be able to understand what the system can do and how to do it in an hour or two by looking through the options in the administrative interface, but

this is primarily because the system does not support many complex features and options compared to the other three systems.

- **Documentation:** Substantial documentation on how to use the system, including published books, is available from multiple sources.
- **Where to Find Info on Add-on Modules:** WordPress.org has a directory, ratings and reviews of add-on modules.

Content Admin Ease of Use: Excellent

- **Look of Admin Interface:** The interface for adding or editing content is polished and friendly-looking, with a useful "dashboard" of recent drafts and comments.
- **Ease of Finding What You Want to Edit:** An administrator can easily find the particular page or article they want to edit within the visitor view of the Web site, and then click a button to edit it, or they can browse or search through a list of all pages in the administrative interface.
- **Ease of Text Editing:** Editing the text of an existing page is straightforward. Text can be formatted using a standard, Word-style What-You-See-Is-What-You-Get formatting toolbar.
- **Integration of Advanced Options:** When editing a page, a number of more advanced options (for instance, the ability to assign a parent or assign custom metadata) are relatively prominent. This may distract a more novice user.
- **Pasting from Word:** There is a function that allows you to cleanly paste in text from Word.
- **Adding an Image or Document:** An image or document can be uploaded and added directly from the page editing form, without the need to add the image first through a different form. (However, the process to add an image to the page, as opposed to simply save it in the library, is less than intuitive.)
- **Advanced Image Manipulation:** Add-in modules support more advanced image management and manipulation features, if desired.
- **YouTube Videos:** YouTube videos can be embedded in a page by pasting the YouTube code into the provided HTML view of the page.
- **Adding a New Page:** The option to add a new page is not as prominent as the ability to create a new post, but can be accessed readily from the navigation bar. New pages are edited the same way as any other, and can be published into the site by picking a parent page.
- **Adding a Section to the Navigation Bar:** It is so easy to add a new section into the navigation bar that inexperienced users may find themselves adding sections by accident. You simply follow the process to add a new page, but do not define a parent page.
- **Accessibility of Admin Interface:** The administrative tools support the majority of accessibility standards, but are not specifically compliant with ADA 508 accessibility standards.
- **Admin Languages:** The administrative interface is available in 61 languages.

Graphical Flexibility: Excellent

- **Finding Pre-Packaged Themes:** Hundreds of pre-packaged graphical themes are available. The official CMS Web site includes both ratings and download statistics.
- **Creating a Custom Theme From Scratch:** Creating a custom theme involves creating several different template files, a style sheet, an information file and a screenshot of the theme.
- **Creating a Theme from an HTML Page:** Adapting an existing HTML page and style sheet to create a theme involves several steps: creating template files from the HTML page; creating a style sheet; including any images; determining where content and functional elements should go in the templates; and adding any additional necessary files.
- **Number of Templates Allowed:** Each site can use as many different graphical page templates as desired.

- **Design Flexibility:** This theming structure provides a huge amount of flexibility in site look and layout. It supports nearly any Web page that can be designed via HTML and CSS.
- **Site Accessibility:** Default themes and the theming system are designed to adhere to Web accessibility guidelines for users with disabilities. Care will need to be taken with any custom theme to ensure it remains accessible.

Structural Flexibility: Fair

- **Number of Pages:** There is no practical limit to the number of pages the platform can support.
- **Levels of Hierarchy:** Pages can be arranged into a hierarchy with as many levels as you like.
- **Displaying Content Automatically Based on Category:** Site posts, but not pages, can be placed in one or multiple categories. The platform automatically displays the posts in the appropriate sections based on those categories.
- **Support for Unusual Content Types:** The system is based around the idea of pages and posts. Supporting information that does not fit this model (like event listings or a directory of local stores) requires an add-in module or, for less common information, custom code in HTML and/or PHP.
- **Related Items:** Add-on modules are available to create a "related items" feature on a page. This will automatically display links to site information similar to that shown.
- **Custom Display Based on Automatic Rules**: Site administrators can define what article posts should go where on a site, in what order and what information should be shown with each post. However, the program doesn't easily support other content types or have much flexibility around how they are displayed.
- **Custom Data Collection Forms:** Site administrators can create custom forms to collect data from visitors, without coding, through an add-on module.
- **Page Printing and Referral Options**: Features to implement a "print-friendly" version, email a friend or allow site visitors to easily promote site content (like through a "Digg this" link) are available through add-ons.
- **Search Engine:** The system includes a search engine but it only searches pages on the site, not documents.
- **Multi-Language Support:** An add-on package helps manage site content that appears in multiple languages (for example, a news story with both English and Spanish versions).
- **Sharing Content Across a Set of Affiliated Web sites:** While you can define different graphic designs for different site sections, it is very difficult to define what data should be shown where in enough detail to support a set of affiliated Web sites that share some pieces of content but not others.
- **Support for Multiple URLs:** It is not possible to support sites with different URLs using the same deployment of WordPress without programming custom code. However, WordPress MU, a separate CMS in the WordPress family, supports this.

User Roles and Workflow: Fair

- **System Roles:** The system supports three administrative content roles—someone who can draft new content but cannot publish; someone who can draft and publish their own content; and someone who can edit and publish other people's content as well as their own. No other content administrative roles are possible. There are no add-in modules to provide more functionality for the current version of WordPress.
- **Possible Article Statuses:** Articles can only be in draft or published mode. More content statuses are available through an add-on module.
- **Notifications:** There is no notification system to flag and forward content.
- **Roll-Back Functionality:** Prior versions of posts and pages are stored. Changes can be rolled back.

- **List of System To-Dos:** Site content editors can see a list of content items that need their attention, such as drafts to be published, within the interface.

Community/Web 2.0 Functionality: Solid

- **Comments:** The content administrator can allow site visitors to post comments for any piece of site content.
- **Comment Moderation:** The system provides Spam filtering and detailed comment moderation support.
- **Blogs:** Blogs, including multi-author blogs, are supported.
- **Community of Blogs:** We were not able to with certainty determine if there is an easy way to allow visitors to create a blog through the front end of the site to support, for instance, a blogging community, but we think that there is not.
- **Publishing a RSS Feed of Your Content:** Full support for outgoing RSS feeds is provided.
- **Displaying Others' RSS Feeds:** A popular add-on module allows you pull in and display other RSS feeds on your site.
- **Visitor Profiles:** Public site visitors can create their own site profiles with a few standard fields. More full-featured profiles are available through add-on modules.
- **Social Networking:** A popular add-on module allows public site visitors to friend each other and create groups.
- **User-Submitted Content:** There is no easy way to allow public Web site visitors to submit content (like a story or photo) through the front end, and then manage that content like any other site content.

Extending and Integrating: Solid

- **Available Add-ons:** WordPress.org lists thousands of community-contributed add-ons available for download.
- **Installing an Add-on:** To install an add-on module, a site administrator simply locates the module in the admin interface and installs in a one-click process.
- **Integrating with Other Systems:** There are no existing add-on modules that manage integrations with common nonprofit Constituent Management Systems (such as Salesforce, Democracy in Action or CiviCRM.). Integrations are ad-hoc.
- **Likelihood that Custom Add-ons Will be Necessary:** As the system relies on add-on components to extend it beyond a basic page structure, those who want to add custom forms or content types beyond what's already available as an add-on may need to code custom add-ons.
- **Programming Language for Add-ons:** Add-on components are coded in PHP, a programming language widely used by Web programmers.
- **Customization Flexibility:** The tools available to programmers include access to modify or enhance all system functionality. However, as the existing functionality available to define custom structures and content types is more limited than in systems like Drupal or Plone, some customizations may require more effort or workarounds.

Scalability and Security: Solid

- **Support for Large Amounts of Traffic:** There are no practical limitations (beyond those imposed by hardware) on how much traffic the CMS will support. This is true up to at least up to tens of thousands of visitors a day; the scope of this report did not include investigating beyond that.
- **Caching:** WordPress internal cache stores infrequently changing data (like categories). A popular add-on provides page caching.
- **Security Vulnerabilities:** Security Focus (www.securityfocus.com) reported 26 security vulnerabilities in 2008.
- **Security Updates:** Security vulnerabilities are not published on WordPress.org. Updates occur frequently.

Site Maintenance: Excellent

- **Site Backup:** To backup the Web site, a site administrator downloads all the site assets (HTML pages, documents, images, etc.) from a single directory on the Web server, and then backs up the database either in PHPMyAdmin (provided by most Web hosts) or using simple commands on the command-line.
- **Upgrade Frequency:** There have been about six updates in the last two years; all include features, bug fixes and security updates.
- **Upgrades Which Affect Themes and Add-ons:** Major upgrades may break existing themes and add-on components. Over the past two years, two updates—both planned, major version updates—impacted many themes and add-ons.
- **Notification of Out-of-Date Version:** The CMS includes a notice to the administrator when they are using an out-of-date version of the system.
- **Options to Not Upgrade:** The CMS maintains legacy branches, one version behind the current, so those who choose not to make a major update (which might break themes and add-ons, for instance) can still get security updates.
- **Ease of Installing an Upgrade:** To install a new update, the administrator backs up the site, then uses an automatic upgrade utility in the Web interface.

Support/Community Strength: Excellent

- **History:** WordPress originated in 2003 as a continuation of another open source CMS, B2/cafelog.
- **Consultant Support:** The CMS is supported by hundreds of different independent consultants or firms in the United States.
- **Community Support:** There are a number of different helpful forums and discussion lists where anyone can ask questions about the system and receive answers. These communities have a reputation of being helpful to newcomers.
- **Available Books:** Several reputable books on the system are available.
- **System Governance:** WordPress is led and supported by the for-profit company Automattic. They provide the service WordPress.com.

JOOMLA

Version 1.5.8

Ease of Hosting and Installation: Excellent

- **Time to Install:** A user with experience in installing systems (but not this one) can install the core package in less than 30 minutes.
- **Skills to Install:** Installation does not require technical knowledge beyond how to FTP and how to install a database on a Web host.
- **Hosting Environment:** The CMS can be hosted on a standard (and inexpensive) shared Linux/Apache/MySQL/PHP environment.
- **Hosting Requirements:** The platform can run on a Linux, Windows or Macintosh OS; it requires MySQL as a database and PHP as a scripting language.

Ease of Setting Up a Simple Site: Solid

- **Default Setup on Installation:** Upon installation, you have the option to work with a set of sample data (such as news stories), or you may start from a blank slate. There are three themes to choose from.
- **Availability of Pre-packagedThemes:** Many pre-packaged graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- **Ease of Theme Installation:** Installing an existing graphical theme is essentially a process of uploading theme files onto the server, and enabling them through the Web interface.
- **Completeness:** The core platform includes all typical components to create and administer a basic nonprofit site with a hierarchical page structure.
- **Setting Up Users:** Setting up administrative users is straightforward. The first user is set up during install; others can be easily added through the administrative tools.
- **Structuring a Simple Site:** Creating a simple 20-page site divided into four sections is not immediately intuitive for a newcomer to the system. In order to add a page, a user must first decide whether it's a "Category", a "Section" or an "Article". The distinction between them is not obvious, and many users will need to consult the documentation to determine what to do. Once a page is created, it needs to be added into the navigational scheme with the "Menu Manager" in order to show up on the navigational bar.
- **Support for News Stories and Events Calendar:** The core platform includes features to support featured news stories, but you would need to install an events calendar as an add-on module.

Ease of Learning to Configure a More Complex Site: Excellent

- **Ease of Creating a Custom Theme:** Creating a custom theme requires HTML/CSS skills and understanding how to work with a fairly complex set of templates.
- **Ease of Understanding What's Possible:** The site terminology and structure is not immediately intuitive, but a technically savvy user should be able to understand what the system can do and how to do it in an hour or two by looking through the options in the administrative interface.
- **Documentation:** Substantial documentation on how to use the system, including published books, is available from multiple sources.
- **Where to Find Info on Add-on Modules:** Joomla.org lists and rates add-on modules.

Content Admin Ease of Use: Solid

- **Look of Admin Interface:** The interface for adding or editing content is polished and user-friendly, with an emphasis on icons.
- **Ease of Finding What You Want to Edit:** Administrators can easily find the particular page or article they want to edit within the visitor view of the Web site, and then click a button to edit it, or they can browse or search through a list of all pages in the administrative interface. Finding a particular page in the administrative interface requires an understanding of whether it is an "article," a "section" or a "category"—and there's no way to tell which type a page is by looking at it.
- **Ease of Text Editing:** Editing the text of an existing page is straightforward. Text can be formatted using a standard, Word-style What-You-See-Is-What-You-Get formatting toolbar.
- **Integration of Advanced Options:** When editing a page, the more advanced options (such as the ability to assign a publishing start date or define metadata) are effectively prioritized in a sidebar on the page. However, some will have to hunt to find particular options (for instance, a "Parameters (Advanced)" section includes a list of 17 options).
- **Pasting from Word:** The core system does not handle text pasted in from Microsoft Word well. Garbage tags appear on the final Web page unless they are deleted by hand, and the original font styles from Word (which are unlikely to match the style of the Web site) are preserved.
- **Adding an Image or Document:** An image or document can be uploaded and added directly from the page editing form, without the need to add the image first through a different form. (However, the button to add the image is at the bottom of the page editing form, making it difficult to find).
- **Advanced Image Manipulation:** Add-in modules with image management and manipulation features are available.
- **YouTube Videos:** YouTube videos can be embedded in a page by pasting the YouTube code into the provided HTML view of the page.
- **Adding a New Page:** The option to add a new article is prominent and obvious. A new article can be published onto the site by assigning it a section and category from a list of available options.
- **Adding a Section to the Navigation Bar:** To add a new section to the navigation bar, the administrator adds a new page, and then goes to the "Menu Manager" to add the page to the menu. Some users are likely to need training in how to add menu items—adding the section to the menu is not very intuitive, particularly for site structures where each section appears in the menu.
- **Accessibility of Admin Interface:** The administrative tools are not compliant with ADA 508 accessibility standards.
- **Admin Languages:** The administrative interface is available in 100 languages.
- **Automatic Logouts:** The administrative interface logs the user out by default after a shorter period of inactivity than other systems, meaning that a content admin who is multitasking is likely to have to re-log in more frequently.

Graphical Flexibility: Excellent

- **Finding Pre-Packaged Themes:** Hundreds of pre-packaged graphical themes are available. There is no official template repository, but many third-party sites offer templates.
- **Creating a Custom Theme From Scratch:** Creating a custom theme involves creating several different template files, a style sheet, a file which defines options and information, and a screenshot of the theme.
- **Creating a Theme from an HTML Page:** Adapting an existing HTML page and style sheet to create a theme involves several steps: creating template files from the HTML page; creating a style sheet; including any images; determining where content and functional elements should go in the templates; and adding any additional necessary files.

- **Number of Templates Allowed:** Each site can use as many different graphical page templates as desired.
- **Design Flexibility:** This theming structure provides a huge amount of flexibility in site look and layout. It supports nearly any Web page that can be designed via HTML and CSS.
- **Site Accessibility:** Default themes and the theming systems are designed to adhere to Web accessibility guidelines for users with disabilities. Care will need to be taken with any custom theme to ensure it remains accessible.

Structural Flexibility: Solid

- **Number of Pages:** There is no practical limit to the number of pages the platform can support.
- **Levels of Hierarchy:** The core system only supports a maximum of three levels of hierarchy: Sections, Categories and Articles. Add-on modules are available to allow a hierarchy with as many levels as you like.
- **Displaying Content Automatically Based on Category:** Site articles can be placed in one or multiple categories. The platform automatically displays the articles in the appropriate sections based on those categories.
- **Support for Unusual Content Types:** There are a few additional content types (such as news items and polls) beyond simple pages or articles. Add-on modules allow administrative users to create custom content types (event listings, a directory of local stores, etc.) and define what fields should be stored for each of them.
- **Related Items:** You can use the included "related items" module to automatically display links to site information similar to that shown, but the level of control is not as granular as with Drupal or Plone.
- **Custom Display Based on Automatic Rules:** Site administrators have a number of options to define what types of content go where on the site, in what order, and what information should be shown with each piece of content, but the level of control is not as granular as with Drupal or Plone.
- **Custom Data Collection Forms:** Site administrators can create custom forms to collect data from visitors, without coding, though an add-on module.
- **Page Printing and Referral Options:** Features to implement a "print-friendly" version, email a friend or allow site visitors to easily promote site content (like through a "Digg this" link) are available through add-ons.
- **Search Engine:** The system includes a search engine but it only searches pages on the site, not documents.
- **Multi-Language Support:** An add-on package helps manage site content that appears in multiple languages (for example, a news story with both English and Spanish versions).
- **Sharing Content Across a Set of Affiliated Web sites:** Different themes or page templates are directly connected to menu items, and it's difficult to granularly specify combinations of information to be shown in different templates without custom code. This makes it hard to support a set of affiliated Web sites that share some pieces of content but not others.
- **Support for Multiple URLs:** It is possible to support sites with different URLs by setting your Web server to point different domains to same the installation.

User Roles and Workflow: Fair

- **System Roles:** The system supports three administrative content roles: the ability to draft new content; the ability to edit existing content; and the ability to publish content. A particular user can be allowed to edit or publish only their own content or all others' as well. It's not possible to grant particular users permission to edit or publish based on section of the site or type of content.
- **Possible Article Statuses:** An article can be in draft, published or archived mode. More content states are available through add-on modules.

- **Notifications:** There is no notification system to flag and forward content.
- **Roll-Back Functionality:** No prior versions of pages or content items are stored; published changes cannot be rolled back.
- **List of System To-Dos:** No dashboard or list of content items that need attention is available.

Community/Web 2.0 Functionality: Solid

- **Comments:** Commenting is not available in the core system, but popular add-in modules supporting comments on any piece of site content are available.
- **Comment Moderation:** Popular add-on modules provide detailed comment moderation support and Spam filtering.
- **Blogs:** The CMS supports basic blogs, but there is no support for multi-author blogs.
- **Community of Blogs:** In order to post to personal blog, the author needs to be set up individually by a site administrator like any other content administrator on the site. There is no easy way to create a blog through the front end of the site, to support for instance a blogging community.
- **Publishing a RSS Feed of Your Content:** Full support for outgoing RSS feeds is provided.
- **Displaying Others' RSS Feeds:** Other RSS feeds can be pulled into the site and assigned to a menu item. However, you cannot moderate which of the items from those feeds you would like to display.
- **Visitor Profiles:** A popular add-on module allows public site visitors to create their own site profile.
- **Social Networking:** A popular add-on module allows public site visitors to friend each other and create groups.
- **User-Submitted Content:** Public site visitors can submit—but not publish—content (like a story or photo), which then can be managed by content administrators like any other site content.

Extending and Integrating: Solid

- **Available Add-ons:** Extensions.joomla.org lists thousands of community contributed add-ons avail-able for download.
- **Installing an Add-on:** To install an add-on module, a site administrator downloads the package, uploads it to a particular directory on the server and enables it through the administrative tools. Add-on modules can also be installed by URL or uploaded via the Web interface.
- **Integrating with Other Systems:** Add-on modules that manage integrations with CiviCRM, Salesforce and Democracy in Action are available.
- **Likelihood that Custom Add-ons Will be Necessary:** As the system relies on add-on components to extend it beyond a basic page or post structure, those who want to add custom forms or content types beyond what's available in existing add-ons may need to code custom add-ons.
- **Programming Language for Add-ons:** Add-on components are coded in PHP, a widely used programming language.
- **Customization Flexibility:** The tools available to programmers include access to modify or enhance all system functionality. However, as the existing functionality available to define custom structures and content types is more limited than in systems like Drupal or Plone, some customizations may require more effort or workarounds.

Scalability and Security: Solid

- **Support for Large Amounts of Traffic:** There are no practical limitations (beyond those imposed by hardware) on how much traffic the CMS will support. This is true up to at least up to tens of thousands of visitors a day; the scope of this report did not include investigating beyond that.

- **Caching:** Joomla pages are cached natively with a configurable lifetime—you can specify how long pages should be cached.
- **Security Updates:** Security vulnerabilities and updates are published on Joomla.org. Updates occur frequently.
- **Security Vulnerabilities:** Security Focus (www.securityfocus.com) reported 67 security vulnerabilities in 2008.

Site Maintenance: Excellent

- **Site Backup:** To backup the Web site, a site administrator downloads all the site assets (HTML pages, documents, images, etc.) from a single directory on the Web server, and then backs up the database either in PHPMyAdmin (provided by most Web hosts) or using simple commands on the command-line.
- **Upgrade Frequency:** There has been one major upgrade and nine security and bug-fix releases in the past two years.
- **Upgrades Which Affect Themes and Add-ons:** Major upgrades may break existing themes and add-on components. Over the past two years, one update—a planned, major version update—impacted many themes and add-ons.
- **Notification of Out-of-Date Version:** The CMS does not include a notice to the administrator when they are using an out-of-date version of the system.
- **Options to Not Upgrade:** The CMS does not maintain legacy branches. To get security updates, you must upgrade to the latest major version.
- **Ease of Installing an Upgrade:** To install a new update, the administrator backs up the site, and replaces the Web files on the server.

Support/Community Strength: Excellent

- **History:** Joomla originated in 2005 as a continuation of another open source CMS, Mambo, which existed as an open source project since 2001.
- **Consultant Support:** The CMS is supported by hundreds of independent consultants or firms in the United States.
- **Community Support:** There are a number of different helpful forums and discussion lists where anyone can ask questions about the system and receive answers. These communities have a reputation of being very helpful and gentle to newcomers.
- **Available Books:** Several good books on the system are available.
- **System Governance:** The community is governed by the nonprofit Open Source Matters foundation.

DRUPAL

Version 6.8

Ease of Hosting and Installation: Excellent

- **Time to Install:** A user with experience in installing systems (but not this one) can install the core package in less than 30 minutes.
- **Skills to Install:** Installation does not require technical knowledge beyond how to FTP and how to install a database on a Web host.
- **Hosting Environment:** The CMS can be hosted on a standard (and inexpensive) shared Linux/Apache/MySQL/PHP environment. Shell access is helpful, but not necessary.
- **Hosting Requirements:** The platform can run on a Linux, Windows or Macintosh OS, with MySQL, PostgreSQL or MS SQL Server databases. It requires PHP as a scripting language.

Ease of Setting Up a Simple Site: Solid

- **Default Setup on Installation:** Upon installation the platform is basically a blank slate, with six themes to choose from, and some text suggesting what should be done next to configure the system or add content.
- **Availability of Pre-packagedThemes:** Many pre-packaged graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- **Ease of Theme Installation:** Installing an existing graphical theme is essentially a process of uploading theme files onto the server, and enabling them through the Web interface.
- **Completeness:** The core platform does not include any way for non-technical content administrators to format site text or add an image without knowledge of HTML. In order for someone without knowledge of HTML to add any image or do any text formatting of any kind, you will need to install a What-You-See-Is-What-You-Get (WYSIWYG) editor as an add-on module. The core platform does include, however, all other typical components to create and administer a basic nonprofit site with a hierarchical page structure.
- **Setting Up Users:** Setting up administrative users is straightforward. The first user, a super-administrator, is set up during install; others can be easily added through the administrative tools.
- **Structuring a Simple Site:** Creating a simple 20-page site divided into four sections is intuitive. As you set up each page, you can define whether it should go into the navigation bar or within the site hierarchy.
- **Support for News Stories and Events Calendar:** The core platform includes features to support featured news stories, but you would need to install an events calendar as an add-on module.

Ease of Learning to Configure a More Complex Site: Excellent

- **Ease of Creating a Custom Theme:** Creating a custom theme requires HTML/CSS skills and understanding how to work with a fairly complex set of templates.
- **Ease of Understanding What's Possible:** Complex configuration requires parsing through and understanding how to work with more than 30 different configuration sections. Some of these sections are quite straightforward, while others have a substantial learning curve. Those without previous Drupal experience will likely require at least a day or two to familiarize themselves what the system can do and how to do it.
- **Documentation:** Substantial documentation on how to use the system, including published books, is available from multiple sources.

- **Where to Find Info on Add-on Modules:** Drupal.org has a listing of add-on modules but not reviews or ratings. Drupalmodules.com provides ratings and reviews of add-on modules

Content Admin Ease of Use: Solid

- **Look of Admin Interface:** The interface for adding or editing most content is not as polished looking by default as other systems, but is very stripped-down and simple, making it easy to use. However, more advanced editing tasks, such as updating sidebar content, may require the use of the separate Site Administration interface, which is considerably more formidable.
- **Ease of Finding What You Want to Edit:** An administrator can easily find the page or article they want to edit within the visitor view of the Web site, and then click a button to edit it.
- **Ease of Text Editing:** The core system does not include a standard, Word-style What-You-See-Is-What-You-Get formatting toolbar. However, a number are available as add-on modules.
- **Prioritization of Advanced Options:** The more advanced page editing options (the ability to allow comments, define an author, etc.) are handled nicely—the primary content is very prominent on the page, and there is a list of collapsed sections that can be easily expanded and edited.
- **Pasting from Word:** Text cannot be easily pasted from Microsoft Word without adding an add-on module to handle text formatting. As there are a number of different text formatting modules, we were unable to test how these modules handle text pasted in from Word.
- **Adding an Image or Document:** Some of the add-on formatting modules allow images or documents to be added directly from the page editing form, while others do not.
- **Advanced Image Manipulation:** Add-in modules with image management and manipulation features are available.
- **YouTube Videos:** YouTube videos can be embedded in a page by pasting the YouTube code into the provided HTML view of the page.
- **Adding a New Page:** The option to add a new page is prominent and obvious. New articles are edited the same way as any other. Depending on site structure, in order to display a new page the administrator may need to link it in by hand.
- **Adding a Section to the Navigation Bar:** To add a new navigation bar section, the administrator follows the process for adding a new page, and then defines where in the menu the page should go using the "Menu Settings" section of the page editing interface.
- **Accessibility of Admin Interface:** It is possible to theme the administrative tools so that they are compliant with the ADA 508 accessibility standards, but the default administrative interface is not.
- **Admin Languages:** The administrative interface is available in 54 languages.

Graphical Flexibility: Excellent

- **Finding Pre-Packaged Themes:** Hundreds of pre-packaged graphical themes are available. The official CMS Web site does not include ratings, but it does include download statistics.
- **Creating a Custom Theme From Scratch:** Creating a custom theme involves creating several different template files, a style sheet, a file which defines options and information, and a screenshot of the theme.
- **Creating a Theme from an HTML Page:** Adapting an existing HTML page and style sheet to create a theme involves several steps: creating template files from the HTML page; creating a style sheet; including any images; determining where content and functional elements should go in the templates; and adding any additional necessary files.
- **Number of Templates Allowed:** Each site can use as many different graphical page templates as desired.

- **Design Flexibility:** The theming structure provides a huge amount of flexibility in site look and layout. It supports nearly any Web page that can be designed via HTML and CSS.
- **Site Accessibility:** Default themes and the theming systems are designed to adhere to Web accessibility guidelines for users with disabilities. Care will need to be taken with any custom theme to ensure it remains accessible.

Structural Flexibility: Excellent

- **Number of Pages:** There is no practical limit to the number of pages the platform can support.
- **Levels of Hierarchy:** Pages can be arranged into a hierarchy with as many levels as you like.
- **Displaying Content Automatically Based on Category:** Site articles can be placed in one or multiple categories. The platform automatically displays the articles in the appropriate sections based on those categories.
- **Support for Unusual Content Types:** Administrative users can create custom content types (event listings, a directory of local stores, etc.) beyond simples pages or articles, and can define what fields should be stored for each of them.
- **Related Items:** You can use the included Taxonomy and Views modules to create a "related items" feature on a page. This will automatically display links to site information similar to that shown.
- **Custom Display Based on Automatic Rules:** Site administrators can define, in as much detail as they'd like, what types of content should go where on a site, in what order, and what information should be shown with each piece of content.
- **Custom Data Collection Forms:** Site administrators can create custom forms to collect data from visitors, without having to use or code an add-on module.
- **Page Printing and Referral Options:** Features to implement a "print-friendly" version, email a friend or allow site visitors to easily promote site content (like through a "Digg this" link) are available through add-ons.
- **Search Engine:** The system includes a search engine but it only searches pages on the site, not documents.
- **Multi-Language Support:** An add-on package helps manage site content that appears in multiple languages (for example, a news story with both English and Spanish versions).
- **Sharing Content Across a Set of Affiliated Web sites:** You can use different themes for different site sections, and define what data can go in each section using a variety of criteria. This makes it straightforward to support a group of affiliated Web sites that share some pieces of content but not others.
- **Support for Multiple URLs:** You can support sites with different URLs using the same deployment of the CMS

User Roles and Workflow: Solid

- **System Roles:** An unlimited number of user roles can be created. A default set of roles (Anonymous User and Authenticated User) is available by default, but others can be defined to create, edit, publish or delete content based on content type. An add-on module allows permissions based on content section (using the taxonomy function). Each role can be allowed to edit or publish their own content as well as others'.
- **Possible Article Statuses:** Articles can only be in draft or published mode. More content states are available through an add-on module.
- **Notifications:** There is no notification system to flag and forward content. However, a popular add-on module is available to provide this functionality.
- **Roll-Back Functionality:** Content administrators can track prior versions of each page and content item, and revert back to them as necessary.
- **List of System To-Dos:** You can create a "dashboard"—a list of items that need attention. For example, you can show each content administrator drafts that are awaiting publication

Community/Web 2.0 Functionality: Excellent

- **Comments:** The content administrator can allow site visitors to post comments for any piece of site content.
- **Comment Moderation:** The system provides detailed comment moderation support. Spam filtering is available through popular add-on modules.
- **Blogs:** Blogs, including multi-author blogs, are supported.
- **Blogging Community:** Registered site visitors can easily create their own personal blogs on the site, to support a blogging community.
- **Publishing a RSS Feed of Your Content:** Full support for outgoing RSS feeds is provided.
- **Displaying Others' RSS Feeds:** A popular add-on module allows you to pull in and display other RSS feeds on your site, and moderate which of the items from those feeds you would like to display.
- **Visitor Profiles:** Public site visitors can create their own site profiles. Profile fields are fully configurable by the site administrator.
- **Social Networking:** A popular add-on module allows public site visitors to friend each other and create groups.
- **User-Submitted Content:** Public site visitors can submit and publish content (like a story or photo), which then can be managed by content administrators like any other site content.

Extending and Integrating: Excellent

- **Available Add-ons:** Drupal.org lists thousands of community contributed add-on modules available for download.
- **Installing an Add-on:** To install an add-on module, a site administrator downloads the package, uploads it to a particular directory on the server and enables it through the administrative tools.
- **Integrating with Other Systems:** Add-on modules that manage integrations with CiviCRM, Salesforce and Democracy in Action are available.
- **Likelihood that Custom Add-ons Will be Necessary:** As the system allows administrative users to create custom forms or content types through the administrative tools, it's unlikely that writing custom add-ons will be necessary—except to integrate outside systems, or for unusual or sophisticated needs.
- **Programming Language for Add-ons:** Add-on components are coded in PHP, a widely used programming language.
- **Customization Flexibility:** The tools available to programmers include access to modify or enhance all system functionality. The system functionality is very flexible; it can accommodate almost any kind of customization.

Scalability and Security: Solid

- **Support for Large Amounts of Traffic:** There are no practical limitations (beyond those imposed by hardware) on how much traffic the CMS will support. This is true up to at least up to tens of thousands of visitors a day; the scope of this report did not include investigating beyond that.
- **Caching:** Drupal pages are cached natively with a configurable lifetime—you can specify how long pages should be cached. Blocks (areas of functionality) can be cached as well.
- **Security Vulnerabilities:** Security Focus (www.securityfocus.com) reported 26 security vulnerabilities in 2008.
- **Security Updates:** Security vulnerabilities and updates are published on Drupal.org. Updates occur frequently.

Site Maintenance: Solid

- **Site Backup:** To backup the Web site, a site administrator downloads all the site assets (HTML pages, documents, images, etc.) from a single directory on the Web server, and then backs up the database either in

PHPMyAdmin (provided by most Web hosts) or using simple commands on the command-line.

- **Upgrade Frequency:** There have been two major upgrades, and 25 security and bug-fix releases in the past two years.
- **Upgrades Which Affect Themes and Add-ons:** Major upgrades may break existing themes and add-ons. Over the past two years, two different updates—both planned, major updates—impacted many themes and add-ons.
- **Notification of Out-of-Date Version:** The CMS includes a notice to the administrator when they are using an out-of-date version of the system.
- **Options to Not Upgrade:** The CMS maintains legacy branches, one version behind the current, so those who choose not to make a major update (which might break themes and add-ons, for instance) can still get security updates.
- **Ease of Installing an Upgrade:** To install a new update, the administrator backs up the site, replaces the Web files on the server and then uses a Web update interface.

Support/Community Strength: Excellent

- **History:** Drupal has existed as an open source project since 2001.
- **Consultant Support:** The CMS is supported by hundreds of independent consultants or firms in the United States.
- **Community Support:** There are a number of different helpful forums and discussion lists where anyone can ask questions about the system and receive answers. These communities have a reputation of being somewhat less accommodating to newcomers than the other systems.
- **Available Books:** Several good books on the system are available.
- **System Governance:** The community is governed by the nonprofit Drupal Foundation.

PLONE

Version 3.1.7

Ease of Hosting and Installation: Fair

- **Time to Install:** A user with systems administration and software installation experience, but no experience with Plone, can install the core package in an hour or so.
- **Skills to Install:** Installation requires technical knowledge, including how to install complex packages from a command-line interface, and configuring Web servers.
- **Hosting Environment:** The CMS cannot be hosted on a standard (and inexpensive) shared Linux/Apache/MySQL/PHP environment. However, hosting is commercially available through man vendors at a price of $25/month and up.
- **Hosting Requirements:** The CMS can run on a Linux, Windows or Macintosh OS.

Ease of Setting Up a Simple Site: Solid

- **Default Setup on Installation:** Upon installation, the platform is basically a blank slate. Two themes are included, but only one is installed by default.
- **Availability of Pre-packagedThemes:** Many pre-packaged graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- **Ease of Theme Installation:** Installing an existing graphical theme is a complex process involving either using a command-line administrative tool to install the theme, or placing the theme in a specific directory on the server. In both cases, the administrator will need to then restart Plone, install the theme through the admin Web interface, and enable it.
- **Completeness:** The core platform includes all typical components to create and administer a basic nonprofit site with a hierarchical page structure.
- **Setting Up Users:** Setting up administrative users is straightforward. The first admin user is set up during install; others can be easily added through the administrative tools.
- **Structuring a Simple Site:** Creating a simple 20-page site divided into four sections is relatively intuitive. First the administrator creates each new section through the "Add New -> Folder" function. Once these section pages are added, sub-pages can be added by choosing "Add New -> Page" from within the appropriate section.
- **Support for News Stories and Events Calendar:** The core platform supports both a featured news stories function and an events calendar.

Ease of Learning to Configure a More Complex Site: Fair

- **Ease of Creating a Custom Theme:** Creating a custom theme requires HTML/CSS skills, understanding how to work with a fairly complex set of templates, and an understanding of how Plone products are packaged.
- **Ease of Understanding What's Possible:** Plone provides a very powerful but complex system for creating advanced functionality. The learning curve is steep and most people, even experienced technical staff, will require training to take fully understand the configuration options.
- **Documentation:** Substantial documentation on how to use the system, including published books, is available from multiple sources.
- **Where to Find Info on Add-on Modules:** Plone.org has a listing of add-on modules, but no widely used ratings or reviews are available.

Content Admin Ease of Use: Excellent

- **Look of Admin Interface:** The interface for adding or editing content is well laid out but a bit technical-looking, with a number of tabs and options.
- **Ease of Finding What You Want to Edit:** An administrator can easily find the page or article they want to edit within the visitor view of the Web site, and then click a button to edit it
- **Ease of Text Editing:** Editing the text of an existing page is straightforward. Text can be formatted using a standard, Word-style What-You-See-Is-What-You-Get formatting toolbar
- **Advanced Options:** When editing a page, the more advanced options (the ability categorize an article, define a publishing start date, etc.) are handled nicely. The primary content is very prominent on the page, and friendly sections to define further options can be accessed through a set of tab-like buttons.
- **Pasting from Word:** There is a feature that allows for clean pasting of text from Word. Whether you use this feature or not, the system removes the original font styles so that the text matches the style of the Web site.
- **Adding an Image or Document:** An image can be uploaded and added directly from the page editing form. A document can be added into the system using the "Add New -> File" command. The document is then shown with a description in the appropriate section.
- **Advanced Image Manipulation:** A number of additional add-in modules are available to provide image management and manipulation features.
- **YouTube Videos:** YouTube videos can be embedded in a page by pasting the YouTube code into the provided HTML view of the page, if the site administrator allows this. An add-on can ease this process.
- **Adding a New Page:** The option to add a new page is relatively prominent through a top navigation bar. New articles are edited in the same way as any other, and can be published into the site in the section from which they were added.
- **Adding a Section to the Navigation Bar:** To add a new section to the navigation bar, the administrator chooses "Add New -> Folder" command (this language may confuse some users). They then create the page like any other.
- **Accessibility of Admin Interface:** The administrative tools are compliant with ADA 508 accessibility standards.
- **Admin Languages:** The administrative interface is available in 35 languages.

Graphical Flexibility: Excellent

- **Finding Pre-Packaged Themes:** Hundreds of pre-packaged graphical themes available. The official CMS Web site does not include ratings or download statistics.
- **Creating a Custom Theme From Scratch:** Creating a custom theme involves creating several different template files, a style sheet, and an information file. The administrator must then take additional steps to package the theme in the same way they would package an add-on module.
- **Creating a Theme from an HTML Page:** The best strategy for adapting an existing HTML page and style sheet to create a theme is to adapt from an existing Plone theme; modify template files from the HTML page; create a style sheet; include any images; determine where in the templates content and functional elements should go; and add any additional necessary files for the Plone package.
- **Number of Templates Allowed:** Each site can use as many different graphical page templates as desired.
- **Design Flexibility:** This theming structure provides a huge amount of flexibility in site look and layout. It supports nearly any Web page that can be designed via HTML and CSS.
- **Site Accessibility:** Default themes and the theming systems are designed to adhere to Web accessibility guidelines for users with disabilities. Care will need to be taken with any custom theme to ensure it remains accessible.

Structural Flexibility: Excellent

- **Number of Pages:** There is no practical limit to the number of pages the platform can support.
- **Levels of Hierarchy:** Pages can be arranged into a hierarchy with as many levels as you like.
- **Displaying Content Automatically Based on Category:** Site articles can be placed in one or multiple categories. The platform automatically displays the articles in the appropriate sections based on those categories.
- **Support for Unusual Content Types:** Administrative users can create custom content types (event listings, a directory of local stores, etc.) beyond simples pages or articles, and can define what fields should be stored for each of them.
- **Related Items:** You can use the included Collections module to create a "related items" feature on a page to automatically display links to site information similar to that shown.
- **Custom Display Based on Automatic Rules:** Site administrators can define, in as much detail as they'd like, what types of content should go where on a site, in what order, and what information should be shown with each piece of content.
- **Custom Data Collection Forms:** Site administrators can create custom forms to collect data from visitors, without coding, though an add-on module.
- **Page Printing and Referral Options:** Features to implement a "print-friendly" version, email a friend or allow site visitors to easily promote site content (like through a "Digg this" link) are available through add-ons.
- **Search Engine:** The system includes a search engine that automatically searches documents as well as all site content.
- **Multi-Language Support:** An add-on package helps manage site content that appears in multiple languages (for example, a news story with both English and Spanish versions).
- **Sharing Content Across a Set of Affiliated Web sites:** You can use different themes for different site sections, and define what data can go in each section using a variety of criteria. This makes it straightforward to support a group of affiliated Web sites that share some pieces of content but not others.
- **Support for Multiple URLs:** You can support sites with different URLs using the same deployment of the CMS.

User Roles and Workflow: Excellent

- **User Roles:** An unlimited number of user roles can be created. A default set of roles (contributor, editor, reviewer, manager) is available by default, but others can be defined to allow create, edit, publish or delete content based on content type, site section or other elements. Each role can be allowed to edit or publish their own content as well as others'.
- **Possible Article Statuses:** There are a number of different content stages to facilitate workflow: private; submit for publication; published. In addition, detailed configuration of workflows is possible.
- **Notifications:** A simple notification/events system that allows you to create and send emails when specific configurable events occur is available out-of-the-box. There is a popular add-on module that does this more robustly and flexibly.
- **Roll-Back Functionality:** Content administrators can track prior versions of each page and content item, and revert back to them as necessary.
- **List of System To-Dos:** You can create, with an out-of-the-box feature, a "dashboard"—a list of items that need attention. For example, you can show each content administrator the drafts that are awaiting publication.

Community/Web 2.0 Functionality: Solid

- **Comments:** The content administrator can allow logged-in site visitors to post comments for any piece of site content. Anonymous comments are provided by an add-on
- **Comment Moderation:** A popular add-on package provides detailed support to moderate comments, including defining what visitors need to do to comment (like register), and Spam filtering (although the popular Akismet spam filtering package is not available for Plone).
- **Blogs:** Blogs, including multi-author blogs, are supported.
- **Blogging Community:** Registered site visitors can easily create their own personal blogs on the site, to support a blogging community.
- **Publishing a RSS Feed of Your Content:** Full support for outgoing RSS feeds is provided.
- **Displaying Others' RSS Feeds:** Other RSS feeds can be pulled into and displayed on the site, but you cannot moderate which of the items from those feeds you would like to display.
- **Visitor Profiles:** Public site visitors can create a page with information about themselves, but this page does not have the structured contact and background information typical in most user profiles.
- **Social Networking:** No current add-on allows public site visitors to friend each other and create groups.
- **User-Submitted Content:** Public visitors can submit and publish content (like a story or photo), which then can be managed by content administrators like any other site content.

Extending and Integrating: Excellent

- **Available Add-ons:** Plone.org lists thousands of community contributed add-ons available for download.
- **Installing an Add-on:** To install an add-on module, a site administrator downloads the package and—depending on how it was packaged—uses a command-line admin tool to install it or uploads it into a specific directory. Plone is then restarted, and the add-on is installed on the Web interface.
- **Integrating with Other Systems:** Add-on modules are available to manage integrations with Salesforce and Democracy in Action.
- **Likelihood that Custom Add-ons Will be Necessary:** As the system allows administrative users to create custom forms or content types through the administrative tools, it's unlikely that writing custom add-ons will be necessary—except to integrate outside systems, or for unusual or sophisticated needs.
- **Programming Language for Add-ons:** Add-on components are coded in Python, a less widely used programming language. Finding a programmer to build an add-on component may be more difficult than with the other three systems.
- **Customization Flexibility:** The tools available to programmers include access to modify or enhance all system functionality. The system functionality is very flexible; it can accommodate almost any kind of customization.

Scalability and Security: Excellent

- **Support for Large Amounts of Traffic:** There are no practical limitations (beyond those imposed by hardware) on how much traffic the CMS will support. This is true up to at least up to tens of thou-sands of visitors a day; the scope of this report did not include investigating beyond that.
- **Caching:** By default, Plone does not cache pages, but it can be configured to cache all types of data.
- **Security Vulnerabilities:** Security Focus (www.securityfocus.com) reported two security vulnerabilities in 2008.
- **Security Updates:** Security vulnerabilities and updates are published on Plone.org. Vulnerabilities and updates are infrequent.

Site Maintenance: Solid

- **Site Backup:** To backup the Web site, a site administrator downloads all the site assets (HTML pages, documents, images, etc.) from a number of different directories on the Web server, and then backs up the Zope data file using a Zope utility script. Alternatively, they can copy the primary data file to do a quick backup.
- **Upgrade Frequency:** There has been one major upgrade, one feature upgrade, and 12 bug-fix releases in the past two years.
- **Upgrades Which Affect Themes and Add-ons:** Major upgrades may break existing themes and add-on components. Over the past two years, one update—a planned, major version—impacted themes and add-on components.
- **Notification of Out-of-Date Version:** The CMS does not include a notice to the administrator when they are using an out-of-date version of the system. They consider this to be a security feature so that no unauthorized connections to outside servers are made.
- **Options to Not Upgrade:** The CMS maintains legacy branches, so those who choose not to make a major update (which might break themes and add-ons, for instance) can still get security updates.
- **Ease of Installing an Upgrade:** To install a new update, the administrator backs up the site, performs the update from the command line, and restarts the system.

Support/Community Strength: Excellent

- **History:** Plone has existed as an open source project since 2001.
- **Consultant Support:** The CMS is supported by hundreds of independent consultants or firms in the United States.
- **Community Support:** There are a number of different helpful forums and discussion lists where anyone can ask questions about the system and receive answers. These communities have a reputation of being helpful to newcomers.
- **Available Books:** Several good books on the system are available.
- **System Governance:** The community is governed by the nonprofit Plone Foundation.

APPENDIX B: HOW WE RATED THE SYSTEMS

Ease of Hosting and Installation

Excellent

Meets all the Solid criteria, plus:

- A user with experience in installing systems (but not this one) can install the core package in less than 30 minutes.
- Installation does not require technical knowledge beyond how to FTP and how to install a database on a Web host.

Solid

Meets all the Fair criteria, plus:

- Installation does not require technical knowledge beyond how to FTP, and how to install a database and change file permissions on a Web host.
- The platform can be hosted on a standard (and inexpensive) shared Linux/Apache/MySQL/PHP environment.

Fair

- A user with experience in installing systems (but not this one) can install the core package in several hours.
- A sufficiently technical user could learn the skills required to install it.
- The platform can be hosted on an environment that is commercially available through a number of vendors.

Ease of Setting Up a Simple Site

Excellent

Meets all the Solid criteria, plus:

- Graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- Installing an existing graphical theme is essentially a process of uploading theme files onto the server and then enabling that theme in the Web interface.
- The core platform includes all typical components to create and administer a basic nonprofit site with a hierarchal page structure.
- Creating a simple 20-page site divided into four sections is quite intuitive; Web-savvy users don't need to consult documentation.
- The core platform includes features to support EITHER featured news stories OR an events calendar.

Solid

Meets all the Fair criteria, plus:

- Installing an existing graphical theme involves a straightforward process of uploading theme files onto the server OR Creating a simple 20-page site divided into four sections is quite intuitive, and is not likely to require a Web-savvy person to consult documentation.

Fair

Meets all the Solid criteria, plus:

- Graphical themes appropriate for a small nonprofit Web site are available for download or purchase.
- All typical components to create and administrate a basic nonprofit site with a hierarchal page structure are available at least through plug-ins.

- Someone with sufficient technical knowledge can install a new theme.
- A Web-savvy user with no experience with the system could set up a 20-page site divided into four sections in less than two hours.

Learning Curve in Configuring a More Complex Site

Excellent

Meets all the Solid criteria, plus:

- A technically savvy user could familiarize themselves with what the system can do and how to do it within a few hours.
- Substantial documentation on how to use the system, including published books, is available.
- The official Web site provides a directory and ratings of add-on packages.

Solid

Meets all the Fair criteria, plus:

- A technically savvy user could familiarize themselves with what the system can do and how to do it within a day or two.
- Substantial documentation on how to use the system is available from multiple sources.
- Useful listings of add-on packages are available.

Fair

- Someone with sufficient technical knowledge could familiarize themselves with what the system can do and how to do it with sufficient training.
- Someone with sufficient technical knowledge could learn how to create a custom theme with sufficient training.

Content Admin Ease of Use

Excellent

Meets all the Solid criteria, plus:

- Web-savvy users are likely to be able to conduct common tasks—such as updating pages or sidebars, adding new pages, or new sections to a navigation bar—without referring to documentation.
- When a user pastes text in from Microsoft Word and saves, the text is shown cleanly to public Web site visitors without extraneous garbage tags.

Solid

Meets all the Fair criteria, plus:

- An administrator can easily find the page or article they want to edit by navigating to it on the front end of the Web site and clicking an "Edit" button when they get to the appropriate page. Most users are likely to be able to figure out how to add a new page or a new section in a navigation bar without training.

Fair

- A user without technical knowledge can be trained to use the CMS in a reasonable amount of time.
- Content administrators can format text using a standard formatting toolbar, as opposed to through HTML code.

Graphical Flexibility

Excellent

Meets all the Solid criteria, plus:

- You can create as many different graphical page templates as desired for a site.
- The platform supports nearly any graphic design that can be created via HTML and CSS.

Solid

Meets all the Fair criteria, plus:

- A site administrator can create a custom theme for their site which provides substantial flexibility for layout, colors, and graphics. The platform supports more than three graphical page templates for each site.
- Default themes and the theming system is designed to be accessible to those with visual disabilities.

Fair

- The site administrator can choose one from at least dozens of pre-packaged graphical themes.
- The site administrator can tailor the colors and the fonts of the site.

Structural Flexibility

Excellent

Meets all the Solid criteria, plus:

- The core system allows you to arrange pages into a hierarchy with as many levels of hierarchy as you like.
- The core system allows administrative users to create custom content types (like event listings or a directory of local stores), and define what fields should be stored for each of those content types, without custom code.
- Site administrators can flexibly define a "related items" feature on a page, to automatically show links to site information similar to that shown.
- Site administrators can define, in as much detail as they'd like, what types of content (for instance, the most recent five news stories, a list of events in March) should go where on the site, in what order, and what information should be shown with each piece of content.
- You can support sites with different URLs using the same deployment of the CMS.

Solid

Meets all the Fair criteria, plus:

- The system includes a search engine.
- It's possible to support most typical types of nonprofit content items (like news stories or a list of events) at least via add-on modules.
- The platform offers a number of options to define what types of content (for instance, the most recent five news stories, a list of events in March) should go where on the site, in what order, and what information should be shown with each piece of content, without custom code.
- It's possible to manage content in multiple languages (for example, a news story with both English and Spanish versions) at least via add-on modules.

Fair

- There is no practical limit to the number of Web site pages the platform can support.
- Features to implement a "print-friendly" version, email a friend or to allow site visitors to easily promote site content (like through a "Digg this" link) are available through add-on modules.

User Roles and Workflow

Excellent

Meets all the Solid criteria, plus:

- An administrator can define complex user roles and workflow without resorting to coordinating multiple add-on modules.
- The system supports the creation of custom user roles, defining who is allowed to create, update, publish and delete content by content type AND by site section, possibly through an add-on module.

- There are at least four or more possible states that an article can be in to facilitate the development of a workflow, possibly through an add-on module.
- There is a flexible notification system to flag and forward content items to content administrators' attention, by email or within the system, possibly through an add-on module.

Solid

Meets all the Fair criteria, plus:

- The system supports the creation of custom user roles, defining who is allowed to create, update, publish and delete content by content type OR by site section.
- The system tracks prior versions of each page and content item, and allows content administrators to revert back to a previous one.
- Site administrators can see a list or dashboard of content items that need their attention, such as drafts to be published, within the interface.

Fair

- The system allows for a workflow where a user can create content without the rights to publish it to the site. It's possible to save site content in draft mode and allow someone else to review it.

Community/Web 2.0 Functionality

Excellent

Meets all the Solid criteria, plus:

- Registered site visitors can easily create their own personal blogs on the site, to support a blogging community.
- Public site visitors can submit and publish content (like a story or photo), which then can be managed by content administrators like any other site content
- Public site visitors can friend each other and create groups, potentially through an add-on module.
- You can pull in and display other RSS feeds on your site, and moderate which of the items from those feeds you would like to display, potentially through an add-on module.

Solid

Meets all the Fair criteria, plus:

- Full support for outgoing RSS feeds is provided.
- Public site visitors can create their own site profiles.

Fair

- The content administrator can allow site visitors to post comments for any piece of site content.
- The system provides detailed comment moderation support.
- Blogs are supported.

Extending and Integrating

Excellent

Meets all the Solid criteria, plus:

- There are existing integration modules with at least two of: CiviCRM, Salesforce and Democracy in Action.
- The system functionality is very flexible; it can accommodate almost any kind of customization.

Solid

Meets all the Fair criteria, plus:

- The tools available to programmers include access to modify or enhance all system functionality.
- Thousands of community contributed add-on modules are available for download.

Fair

- The tools available to programmers include access to all system data, and most system functionality.

Scalability and Security

Excellent

Meets all the Solid criteria, plus:

- Security Focus (www.securityfocus.com) reported fewer than 10 security vulnerabilities in 2008.
- Full pages can be cached.

Solid

Meets all the Fair criteria, plus:

- There are no practical limitations (beyond those imposed by hardware) on how much traffic the CMS will support. This is true up to at least up to tens of thousands of visitors a day; the scope of this report did not include investigating beyond that.
- Security Focus (www.securityfocus.com) reported fewer than 75 security vulnerabilities in 2008.

Fair

- The CMS will support, with appropriate hardware, thousands of visitors a day.
- Security Focus (www.securityfocus.com) reported fewer than 200 security vulnerabilities in 2008.

Maintenance

Excellent

Meets all the Solid criteria, plus:

- To backup the Web site, a site administrator can download all the site assets (HTML pages, documents, images, etc.) from a single directory on the Web server.
- There have been fewer than 15 updates in the past two years.
- The CMS includes a notice to the administrator when they are using an out-of-date version of the system.
- The administrator can use an automatic upgrade utility within the Web interface to completely install a new update.

Solid

Meets all the Fair criteria, plus:

- Over the past two years, only one or few updates to the system have impacted many themes and add-ons OR The CMS maintains legacy branches so those who choose not to make a major update can still get security updates.

Fair

- A sufficiently technical administrator can update and backup the system.

Support/Community Strength

Excellent

Meets all the Solid criteria, plus:

- The code base for the system has existed as an open source package for more than five years.
- At least 100 different independent consultants or firms in the United States provide support or implementation services.
- Several reputable books on the system are available.

Solid

Meets all the Fair criteria, plus:

- The code base for the system has existed as an open source package for more than three years.
- At least 50 different independent consultants or firms in the United States provide support or implementation services.

Fair

- The code base for the system has existed as an open source package for more than two years.
- At least 20 different independent consultants or firms in the United States provide support or implementation services.

APPENDIX C: MARKET ANALYSIS

In order to determine which software packages are most commonly used by nonprofits to create and manage their Web sites, we took a look at a number of metrics of popularity and use. Unfortunately, download information and similar statistics are not readily available for most of these tools.

We used the following metrics to investigate the nonprofit use of the most commonly cited open source tools for nonprofits. We generated a list of the top 10 open source Content Management Systems based on the findings of Water and Stone's 2008 Open Source CMS Market Share Survey (available at www.waterandstone.com/resources.html) and the NTEN's 2008 Content Management Systems Satisfaction Survey (available at http://tinyurl.com/6ehws3). For each of these systems, we looked at four different metrics:

The number of nonprofits using each system as their primary CMS, as provided by the NTEN Survey, which included input from 1,000 participants from a wide variety of nonprofits.
- Incoming links to the application's Web site, according to Google.
- Number of results using the query 'Application Name, CMS, nonprofit' on Google.
- Number of results using the query 'Application Name, CMS, nonprofit' on the Google Blog Search.

The results were weighted to count each metric the same amount, and tallied. The final tally showed Joomla as the market leader, followed by Drupal, then WordPress, then Plone. The results were as follows (note that the weighted score has no particular meaning itself, but a higher score shows a higher degree of popularity in our analysis):

Rank	Application	Weighted Score
1	Joomla!	2.20
2	Drupal	.58
3	WordPress	.51
4	Plone	.31
5	Movable Type	.21
6	Impress CMS	.07
7	Xoops	.04
8	DotNetNuke	.04
9	Typo3	.03
10	MODx	.01

APPENDIX D: AUTHORS AND CONTENT CONTRIBUTORS

Authors

Laura Quinn, Idealware. Laura is the Executive Director of Idealware. She conducted some of the interviews for this report, gathered all data for the **Content Admin Ease of Use** and **What Other Systems are Available** sections, wrote the rating criteria, and made all final decisions on what should be included in summaries, comparisons and recommendations throughout the entire report. While she has evaluated all four of these content management systems for other Idealware resources, she has no hands on experience using or implementing any of the four systems.

Michelle Murrain, OpenIssue. Michelle helps nonprofits choose and implement software, and is the Coordinator of the Nonprofit Open Source Initiative. She conducted some of the interviews for this report, gathered all the system data for every section other the **Content Admin Ease of Use** section, and contributed to the text throughout the report. Michelle helps nonprofits choose which of these content management systems will be most useful to them, has acted as strategic lead and project manager on Joomla and Drupal web redesign projects, and has implemented WordPress, Joomla and Drupal with an emphasis on Drupal.

Maggie Starvish. Maggie is a freelance writer who wrote and polished much of the text throughout the report. She has no hands on experience in using or implementing any of the four systems.

Contributors

We are indebted to the 19 people who participated in interviews and reviewed drafts of this report.

We used the input from consultants and nonprofit staff members to understand the factors that cause nonprofits to choose one content management system over another, the features and attributes that nonprofits find useful, and to fact check the system details and summary information in the final report.

We also relied on the knowledge of one official community representative for each system. These representatives answered our questions as we collected data through first-hand use of the systems, and reviewed a draft of the report for accuracy. Some of the official representatives gathered input on the draft from more people within their community and submitted a consolidated list of official comments — as such, there may have been reviewers that are not listed here.

Throughout the process, we preferred to get input from people who had experience with multiple systems rather than those who make a living implementing a specific one. This resulted in an underrepresentation of Plone among our contributors, as there are far more Plone specialists than people who implement both Plone and other systems. We distributed draft versions of this report to more people who implement Plone than we did to other systems in order to ensure we provided appropriate coverage of Plone.

Raanan Bar-Cohen, Automattic. Automattic is an open source software development firm that created and managed WordPress. Raanan was our official WordPress contact for the report, and answered questions and reviewed the report in that capacity.

Tracy Betts, Balance Interactive. Balance Interactive helps businesses, associations and government groups design and implement cutting edge Web technologies. They implement five different content management systems, including WordPress, Joomla, Drupal and two proprietary systems. Tracy was interviewed about CMS options beyond the four systems included in this report, and reviewed a draft of the report.

Steve Backman, Database Designs. Database Designs is a consulting firm that helps nonprofits select Web and database systems. It provides implementation and integration on a number of them, specializing in Drupal. Steve was interviewed about nonprofits' needs in content management systems, and reviewed a draft of the report.

Dan Bollinger, IntactAmerica. As part of his role with IntactAmerica, Dan has considered a number of different content management systems and implemented WordPress and Drupal for different sites. He also has experience with Joomla. Dan was interviewed about nonprofits' needs in content management systems.

Matt Bowen, http://m.odul.us Matt is a consultant who helps clients plan and implement Web sites and applications. He specializes in Plone, but also has experience with Drupal. Matt reviewed a draft of the report.

Peter Davis, Free Flow Data. Free Flow Data helps nonprofits with technical advising and implementation. They help nonprofits evaluate and choose content management systems, but primarily implement Drupal and Ruby on Rails. Peter was interviewed about nonprofits' needs in content management systems.

Heather Gardner-Madras, gardner madras | strategic creative. Heather is a consultant who helps nonprofits with technology selection, planning, marketing and design of Web sites. She then implements or oversees the development process, and has experience with a wide variety of open source and proprietary content management systems including WordPress, Joomla, Drupal and Plone. Heather was interviewed about nonprofits' needs in content management systems, and reviewed several drafts of the report.

Nick Gernert, CNP Studio. CNP Studio is a Web development firm with a specialty in WordPress sites. Nick was interviewed about nonprofits' needs in content management systems.

Stephan Gross, JESNA. As part of his role with JENSA, Stephen considered a number of different content management systems and chose to use Joomla. Stephen was interviewed about nonprofits' needs in content management systems

Cheryl Hanback. Cheryl is an independent consultant who helps organizations with Web design and development, primarily using Joomla and WordPress. Cheryl was interviewed about nonprofits' needs in content management systems

Jeff Herron and Tim Arnold, Beaconfire. Beaconfire is a consulting firm which works with nonprofits on software evaluation, web design and development projects, and online marketing. Both Jeff and Tim have experience with a wide variety of content management systems, both open source and proprietary. They have specific implementation experience with Drupal and WordPress. Jeff was interviewed about nonprofits' needs in content management systems and about CMS options beyond the four systems included in this report. Both Tim and Jeff reviewed several drafts of the report.

Allyson Kapin and Jared Seltzer, Rad Campaigns. Rad Campaign is an online communications firm that provides web design, web development, online marketing and online strategy services to nonprofit organizations, political campaigns and socially responsible businesses. They implement WordPress, Joomla, Drupal and many other open source CMS systems. Rad is also the lead WordPress sponsor for this report. Allyson and Jared were interviewed about nonprofits' needs in content management systems.

Jayne Lytel, Early Intervention Network. Jayne researched a number of both open source and proprietary systems for her organization's Web site needs, and decided on Convio. Jayne was interviewed about CMS options beyond the four systems included in this report

Ryan Ozimek, PICnet. Ryan is the CEO of PICnet, which helps nonprofits plan, design and implement Web sites in Joomla, and runs a hosted Joomla solution called Non-Profit Soapbox. Ryan is on the board of Open Source Matters, the nonprofit organization that governs Joomla. Ryan was interviewed about nonprofits' needs in content management systems. He was our official Joomla contact for this report, and answered questions and reviewed the report in that capacity. PICnet is also the Joomla lead sponsor for this report.

Laura Scott, pingVision, LLC. pingVision provides design and implementation services for Drupal Web sites. Laura is a Permanent Member of the Drupal General Assembly. She was our official Drupal contact for the report, and answered questions and reviewed the report in that capacity.

Patrick Shaw, NPower Seattle. NPower Seattle is a full-service technology consulting organization for nonprofits. Patrick manages the implementation of Plone Web sites for nonprofit organizations. Patrick was interviewed about nonprofits' needs in content management systems, and reviewed a draft of the report.

Jon Stahl, ONE/Northwest. ONE/Northwest helps nonprofit environmental organizations design and implement online strategies, including Web sites in Plone. Jon is on the board of the Plone Foundation. Jon was interviewed about nonprofits' needs in content management systems. He was also our official Plone contact for this report, and answered questions and reviewed the report in that capacity.

Naomi Stern, Greater Miami Jewish Federation. Naomi has researched and worked with a number of open source content management system, with a current focus on Joomla. Naomi was interviewed about CMS options beyond the four systems included in this report.

Kristin Taylor, Knight Foundation. As part of her role with the Knight Foundation, Kristin considered a number of different content management systems and chose to use Drupal. Kristin was interviewed about nonprofits' needs in content management systems

CONSULTANT DIRECTORY

It often makes sense to hire a firm to help you choose or implement a Content Management System. To help you find one, we've compiled a number of the organizations that offer services in this area.

These are paid listings; each firm paid a sliding scale fee to be included, based on the size of their firm. Those with logos and descriptions paid more for these elements to be included. Idealware has not assessed the services provided, but only aggregated the information given to us by the firms. Conduct your own due diligence before hiring any firm.

NEW ENGLAND

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Altruistiq	www.altruistiq.com **Boston, MA** Drupal, and Drupal only. Altruistiq has a laser-like focus on doing one thing extremely well: working side-by-side with clients to turn their CMS vision into finished products, on-time and on-budget. Neil Abraham, 617-500-7904 or neil.abraham@altruistiq.com	●			●	
Boston Interactive	www.bostoninteractive.com **Boston, MA** Boston Interactive is a web design, development, and marketing firm focused on delivering innovative and effective web-based solutions that generate a powerful impact for Non Profit organizations. Jim Keller, 617-241-7977 or jkeller@bostoninteractive.com.	●			●	
		Other: Smartwebs CMS				
Database Designs Associates Inc	www.dbdes.com **Boston, MA** Designing technology solutions to promote organizational growth using Drupal and Open Source software. Steven Backman, 617-423-6355 or sbackman@dbdes.com				●	
Firefly Partners, LLC	www.fireflypartners.com **Hartford, CT** Firefly Partners works exclusively with nonprofit organizations to help them achieve success online. We strive to educate and empower organizations so they learn to make the most of their online tools. Jen Frazier, President, 303-339-0080 or jen@fireflypartners.com	●	●		●	
Digital Loom	www.digital-loom.com **Cambridge, MA** Digital Loom is a team of experts in web design, web development and brand identity. We offer custom Drupal sites, a low-cost Drupal option called 3 Hour Web, and Salesforce-Drupal integration. Ben Di Maggio, 617-395-7720 or ben@digital-loom.com				●	

NEW ENGLAND (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Jazkarta jazkarta	www.jazkarta.com **Boston, MA** Jazkarta is a web solutions provider specializing in Plone. Our new JazKit service is a unique hosted solution tailored for non-profits that combines the power of Plone with the insight of Salesforce. Nate Aune, 888-756-6348 or sales@jazkarta.com					●
Annkissam **Cambridge, MA**	annkissam.com Kevin Palmer, 617.513.8355 or kevin.palmer@annkissam.com				●	
EchoDitto **Cambridge, MA**	www.echoditto.com Michael Silberman, 202-285-9455 or michael@echoditto.com	●	●		●	
Isovera, Inc. **Cambridge, MA**	www.isovera.com Benjamin Baumann, 617-621-8555 x.22 or bbaumann@isovera.com	●	●	●	●	●

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NEW YORK AND NEW JERSEY

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Advomatic, LLC	www.advomatic.com **New York, NY** Advomatic provides superior Drupal development, site planning, hosting, strategy, and design services. Experts in open source, we enable our clients to manage their own web presence effectively. Adam Mordecai, 877-ADVOMAT or newprojects@advomatic.com	●			●	
Capellic	www.capellic.com **Jersey City, NJ** Capellic provides Drupal consulting services to small non-profits and arts organizations. We are sticklers for usability and have extended Drupal to make it easy for day-to-day content management. Stephen Musgrave, stephen@capellic.com				●	
Firefly Partners, LLC	www.fireflypartners.com **Middletown, NJ** Firefly Partners works exclusively with nonprofit organizations to help them achieve success online. We strive to educate and empower organizations so they learn to make the most of their online tools. Jen Frazier, President, 303-339-0080 or jen@fireflypartners.com	●	●		●	
JEM Consulting, LLC	www.jemconsulting.org **New York, NY** Expert advice and management of projects to enable organizations to choose and implement the best application for their needs. Certified Project Management Professional (PMP). Jennifer Mertens, 1-800-670-2713 or jenn@jemconsulting.org	●		●	●	
OCTL (Openflows Community Technology Lab, Inc.)	www.openflows.com **New York, NY** Founded in Toronto in 2000 and now based in NYC, OCTL provides consulting/development services using many different F/OSS tools, often integrating CMS's with an organization's existing legacy systems. Eric Goldhagen, eric@openflows.com	●	●		●	
PICnet	www.picnet.net **New York, NY** Affordable Web development and design services, with support you can count on. We help organizations effectively use the Web to achieve their mission. Ryan Ozimek, 202-585-0239 or cozimek@picnet.net			●		

NEW YORK AND NEW JERSEY (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Rad Campaign	www.radcampaign.com **New York , NY** Rad Campaign is a full-service online communications firm providing web design, development, online marketing and strategy to non-profit organizations and political campaigns. Allyson Kapin, 240-475-3362 or Allyson@radcampaign.com	●	●	●	●	
		Other: ModX, ExpressionEngine				
Trellon, LLC	www.trellon.com **New York, NY** Trellon builds outstanding web sites, and we are specialists in CRM solutions, social media, ecommerce, mobile and open source software. Michael Haggerty, 877-661-1862 or mhaggerty@trellon.com				●	
EchoDitto **New York, NY**	www.echoditto.com Michael Silberman, 202-285-9455 or michael@echoditto.com	●	●		●	
Palante Technology **Brooklyn, NY**	www.palantetech.com Jack Aponte, 347-274-9937 or jack@palantetech.com	●	●		●	
theCoup **Brooklyn, NY**	www.theCoup.org Matthew Willse, 718-504-2332 or info@theCoup.org	●	●		●	

New To Open Source?

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Who We Are

Trellon is a full-service Internet Strategy and Development firm specializing in open source software. We build web portals, content management systems, social networks, online communities, e-commerce and CRM solutions. Since 2004, we have helping non-profits, NGOs, political campaigns to do build their online strategies.

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- Social Network Integration
- Widget Strategy
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- Strategic Consulting
- Training
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MID-ATLANTIC (DC, Maryland, Pennsylvania, Virginia)

	Neutral Advice	WordPress	Joomla	Drupal	Plone
Beaconfire Consulting www.beaconfire.com **Arlington, VA** Award-winning design that inspires users to act. Engineering the simple and complex: Drupal, WordPress, EZ Publish, Ning and other open source and commercial software. Everyday, results that shine. Jeff Herron, 703-894-0080 x211 or jeff.herron@beaconfire.com	●	●		●	
Other: eZ Publish, Ning, Sitecore, Ektron, CommonSpot and RedDot					
Community IT Innovators www.citidc.com **Washington, DC** We deliver "just right" online solutions for non-profits and fellow sustainable businesses. We combine technology expertise with a genuine commitment to making the world a better place. Sean Speer, 202-234-1600 x331 or sspeer@citidc.com	●	●		●	
Other: CITI CMS					
EvolveStrategies evolvestrategies.net **Philadelphia, PA** We are a full-service communications and tech firm serving issue advocacy, nonprofit, and political organizations. We create compelling campaigns with expert strategies and the latest new media tools. Rob Stuart, 215-825-4018 or rob@evolvestrategies.net	●	●	●	●	

Handy Web Redesign Checklist:

- ☐ Select firm with open source experience
- ☐ Get user-centered design - must be unique & fabulous
- ☐ Market the heck out of site
- ☐ Laugh along the way

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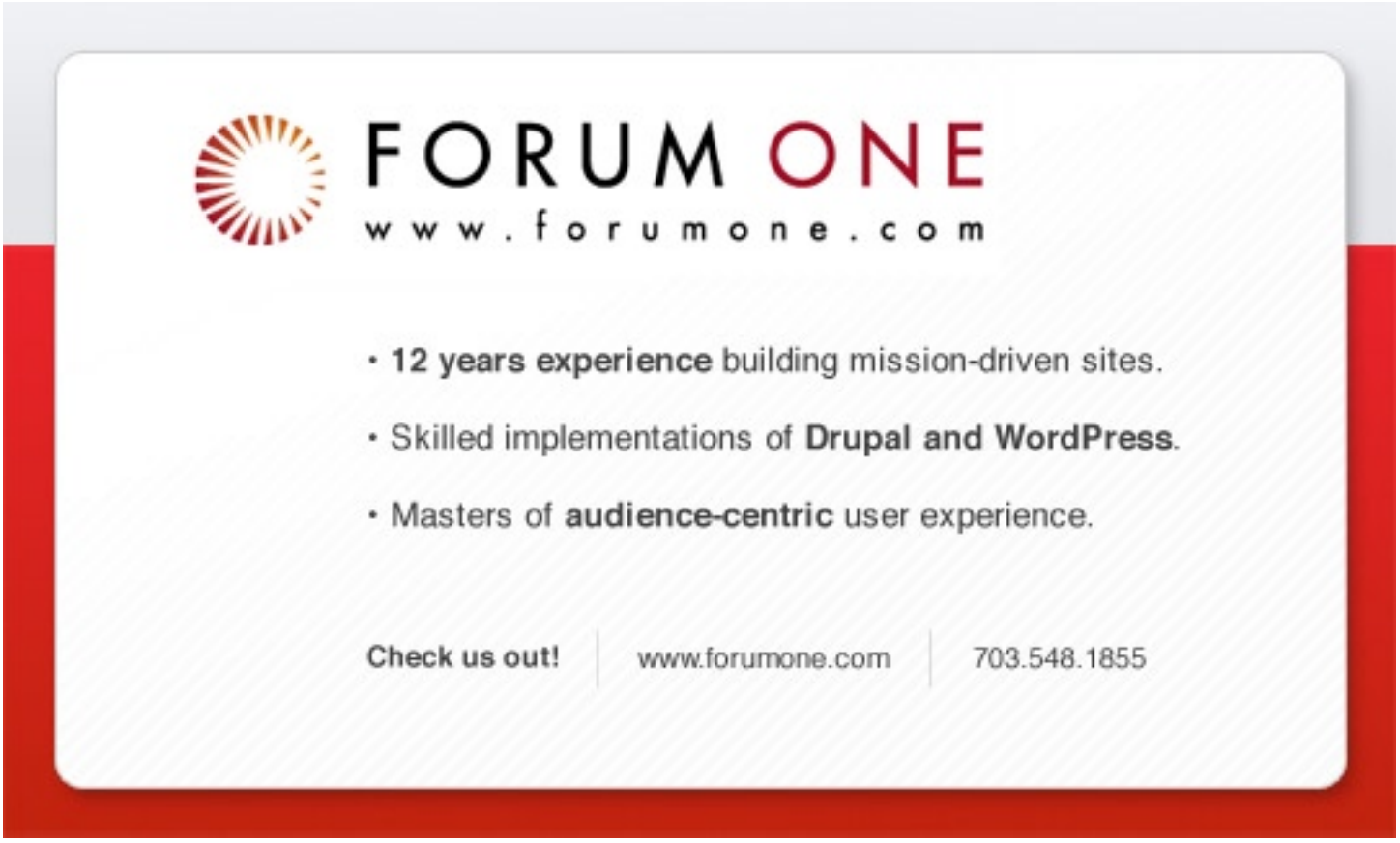
MID-ATLANTIC (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Forum One Communications	www.forumone.com **Alexandria, VA** For over 12 years, Forum One has harnessed cost-effective open-source content management systems including Drupal and WordPress to create high-value solutions for governments and nonprofits. Chris Wolz, 703-548-1855 x11 or info@forumone.com		●	●	●	
Grand Junction Design	www.grandjunctiondesign.com **Takoma Park, MD** GJD is a woman-owned business offering web development services to progressive nonprofits, groups committed to social responsibility, and groups committed to environmental sustainability. Margaux O'Malley, 301-920-0552 or margaux@grandjunctiondesign.com				●	
Informatics Studio	www.yourmissioncontrol.com **Pittsburgh, PA** Informatics Studio works with Non-profits to provide: 1.) Strategic Branding, Marketing, Communication Strategy and Sophisticated Design 2.) eLearning, Usability, Web Design, CMS Implementation Todd D. Cavalier, 412.361.2911 x. 1007 or todd@is-east.com		●		●	



MID-ATLANTIC (continued)

	Neutral Advice	WordPress	Joomla	Drupal	Plone
Inner File Software www.innerfile.com **Washington, DC** Inner File offers 508 compliant Drupal web design, CiviCRM integration, custom web-accessible databases, sophisticated automated reporting, design services and more. Our primary focus is ease of use. Erica Madrid, 202-270-6665 or emadrid@innerfile.com		●		●	
Message Agency www.messageagency.com **Philadelphia, PA** Message Agency is a creative studio providing web development & systems integration, branding/messaging, design, and content services. We harness new media to help nonprofits market their missions. Marcus Iannozzi, 215-546-6496 or marcus@messageagency.com		●	●	●	
Phase2 Technology phase2technology.com **Alexandria, VA** Phase2 is nationally recognized for providing technology leadership on the web for non-profit, association, and online publishing clients using open source technologies such as Drupal and Java. Andre Hood, 703-548-6050 or sales@phase2technology.com				●	
PICnet www.picnet.net **Washington, DC** Affordable Web development and design services, with support you can count on. We help organizations effectively use the Web to achieve their mission. Ryan Ozimek, 202-585-0239 or cozimek@picnet.net			●		
Rad Campaign www.radcampaign.com **Washington, DC** Rad Campaign is a full-service online communications firm providing web design, development, online marketing and strategy to non-profit organizations and political campaigns. Allyson Kapin, 240-475-3362 or Allyson@radcampaign.com	●	●	●	●	
Other: ModX, ExpressionEngine					
Rock River Star rockriverstar.com **Philadelphia, PA** We develop effective and affordable websites for non-profit, education, and corporate clients that focus on rewarding user experience, and help you manage your content, communication, and community. Nathan Gasser, 215-592-7673 or ngasser@rockriverstar.com	●	●		●	

MID-ATLANTIC (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Trellon, LLC	www.trellon.com **Washington, DC** Trellon builds outstanding web sites, and we are specialists in CRM solutions, social media, ecommerce, mobile and open source software. Michael Haggerty, 877-661-1862 or mhaggerty@trellon.com				●	
Winthrop Morgan & Associates	www.winthropmorgan.com **Bethesda, MD** Experienced professionals dedicated to cost-effective, impactful communication through Joomla!, WordPress, and more. Win Morgan, 301-807-2731 or win@winthropmorgan.com		●	●	●	
		Other: Community Builder				
EchoDitto **Washington, DC**	www.echoditto.com Michael Silberman, 202-285-9455 or michael@echoditto.com	●	●		●	
Epolitics.com **Washington, DC**	www.epolitics.com Colin Delany, 202-422-4682 or cpd@epolitics.com	●	●	●	●	
Jackson River **Washington, DC**	www.jacksonriver.com Tom Williamson, 202-609-7911 or tom.williamson@jacksonriver.com	●	●	●	●	
		Other: SiteCore				
OmniStudio **Washington DC**	www.omnistudio.com Jim Jacobs, 202-464-3053 or jim@omnistudio.com		●		●	
Urban Insight **Arlington, VA**	www.urbaninsight.com Chris Steins, 877-872-6150 or steins@urbaninsight.com	●			●	
UX Interactive **Arlington, VA**	www.uxinteractive.com Adam Rasmussen, 703-822-5737 adam@uxinteractive.com	●	●	●	●	

SOUTH

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Cathexis Partners	www.cathexispartners.com **Austin, TX** Our extensive experience in CRM and CMS software solutions can help your organization maximize the tools you have, identify gaps and find the best tool and strategies to accomplish your mission. Mark Becker, 773-274-0769 or mark@cathexispartners.com	●				
Firefly Partners, LLC	www.fireflypartners.com **Miami, FL** Firefly Partners works exclusively with nonprofit organizations to help them achieve success online. We strive to educate and empower organizations so they learn to make the most of their online tools. Jen Frazier, President, 303-339-0080 or jen@fireflypartners.com	●	●		●	
ifPeople	www.ifpeople.net **Atlanta, GA** ifPeople helps organizations use the Web to communicate and collaborate. We provide strategy consulting, training, and custom websites with integrated CRM, donation processing, and newsletter. Christopher Johnson, 678-608-3408 or cjj@ifpeople.net	●				●
netCorps	www.netcorps.org **Durham, NC** netCorps is a 13-year old nonprofit helping environmental, social justice and community-based nonprofits develop the tools and power to change the world. We build engaging and beautiful websites. Matthew Latterell, 503-956-4165 or matthew@netcorps.org	●	●			●
Phase2 Technology	phase2technology.com **Austin, TX** Phase2 is nationally recognized for providing technology leadership on the web for non-profit, association, and online publishing clients using open source technologies such as Drupal and Java. Andre Hood, 703-548-6050 or sales@phase2technology.com				●	
Totsie.com Website Development	www.totsie.com **Swannanoa, NC** Established in 1996, Totsie.com Website Development Studio has worked exclusively with Plone since 2006. We are known for our unique custom designed sites for both commercial and nonprofit clients. Totsie Marine, 828-299-4521 or totsie@totsie.com					●
Jackson River **Austin, TX**	www.jacksonriver.com Tom Williamson, 202-609-7911 tom.williamson@jacksonriver.com	Other: SiteCore				
Shoemaker Group **Raleigh, NC**	shoemakergroup.com Nancy Shoemaker, 919-662-0538 or nancy@shoemakergroup.com		●			

MIDWEST

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Bob Willems Consulting bob willems consulting online communications for nonprofits	www.bobwillems.com **Chicago IL** 20 years experience working with nonprofits to promote the public interest. Websites, email campaigns, fundraising & advocacy all driven by sound strategy and deep expertise. Bob Willems, 773-235-3126 or bob@bobwillems.com	●	●	●	●	
Cathexis Partners Cathexis Partners	www.cathexispartners.com **Chicago, IL and Dayton, OH** Our extensive experience in CRM and CMS software solutions can help your organization maximize the tools you have, identify gaps and find the best tool and strategies to accomplish your mission. Mark Becker, 773-274-0769 or mark@cathexispartners.com	●				
Contextual Corporation Contextual Corporation	www.contextualcorp.com **Gurney, IL** Contextual Corporation provides Plone CMS consulting, integration (with SugarCRM and other systems), and development services, for non-profits, such as ChicagoHistory.org Ken Wasetis, 847-356-3027 or info@contextualcorp.com					●
See3 Communications see3	www.see3.net **Chicago, IL** See3 works exclusively for nonprofit organizations and social causes to assist them in becoming more effective on the web. We specialize in web development, video production, and online outreach. Elliot Greenberger, 773-784-7333 or elliot@see3.net				●	
The Center for Association Growth The Center for Association Growth	www.tcag.com **Glenview, IL** The Center for Association Growth (TCAG) has significant experience with Plone. TCAG has built an entire open source platform (OPENAssociations) that any association can use to run their organization. Brett Wangman, 847-657-6700 or brettw@tcag.com					●
Cruiskeen Consulting LLC **Menomonie, WI**	www.cruiskeenconsulting.com Steve Hanson, 715-556-8674 or sales@cruiskeenconsulting.com				●	
Fuse IQ **Chicago, IL**	www.fuseiq.com Tim Godfrey, 206-227-5862 or tim@fuseiq.com				●	
Moberg Consulting **St Paul, MN**	www.mobergconsulting.com Tom Moberg, 612-741-0365 or tom@mobergconsulting.com	●		●	●	
Rooty Hollow LLC **Columbus, OH**	www.rootyhollow.com Jim Taylor, 614-886-5530 or jim@rootyhollow.com				●	

PACIFIC NORTHWEST

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Forum One Communications	www.forumone.com **Seattle, WA** For over 12 years, Forum One has harnessed cost-effective open-source content management systems including Drupal and WordPress to create high-value solutions for governments and nonprofits. Chris Wolz, 703-548-1855 x11 or info@forumone.com	●	●	●	●	
Free Flow Data, LLC	www.freeflowdata.com **Eugene, OR** Free Flow Data is a vendor neutral web consultancy helping organizations make better use of information through data integration, analysis, reporting, and web application design & development. Peter Davis, 541-434-5674 or peter.davis@freeflowdata.com	●	●		●	
netCorps	www.netcorps.org **Eugene and Medford, OR** netCorps is a 13-year old nonprofit helping environmental, social justice and community-based nonprofits develop the tools and power to change the world. We build engaging and beautiful websites. Matthew Latterell, 503-956-4165 or matthew@netcorps.org	●	●			●
ONE/Northwest	www.onenw.org **Seattle & Bellingham, WA, Portland, OR** ONE/Northwest is a not-for-profit consulting firm that helps environmental groups connect with people. We plan, design and build websites, databases and strategy projects for environmental nonprofits. David Averill, 206-286-1235 or davida@onenw.org					●
Web Collective, Inc.	webcollective.coop **Seattle, WA** Web Collective serves sustainability-driven businesses and nonprofits with elegant website design, effective CMS/CRM integration and agile custom software. Eric Magnuson, 206-428-1959 or ericm@webcollective.coop		●			●
Catapult Solutions **Walla Walla, WA**	www.catapultsolutions.net Larry Pitcher, 509-849-2660 or larry.pitcher@gmail.com					●
Fuse IQ **Seattle, WA**	www.fuseiq.com Tim Godfrey, 206-227-5862 or tim@fuseiq.com				●	
Lumazoic **Seattle, WA**	www.lumazoic.com Susana Rodley, 206-984-2890 or info@lumazoic.com	●	●		●	●

MOUNTAIN

	Neutral Advice	WordPress	Joomla	Drupal	Plone
Advomatic, LLC www.advomatic.com **Denver, CO** Advomatic provides superior Drupal development, site planning, hosting, strategy, and design services. Experts in open source, we enable our clients to manage their own web presence effectively. Adam Mordecai, 877-ADVOMAT or newprojects@advomatic.com				●	
Cathexis Partners www.cathexispartners.com **Las Vegas, NV** Our extensive experience in CRM and CMS software solutions can help your organization maximize the tools you have, identify gaps and find the best tool and strategies to accomplish your mission. Mark Becker, 773-274-0769 or mark@cathexispartners.com	●				
Firefly Partners, LLC www.fireflypartners.com **Boulder, CO** Firefly Partners works exclusively with nonprofit organizations to help them achieve success online. We strive to educate and empower organizations so they learn to make the most of their online tools. Jen Frazier, President, 303-339-0080 or jen@fireflypartners.com	●	●		●	

CALIFORNIA

	Neutral Advice	WordPress	Joomla	Drupal	Plone
Firefly Partners, LLC www.fireflypartners.com **Berkeley, CA** Firefly Partners works exclusively with nonprofit organizations to help them achieve success online. We strive to educate and empower organizations so they learn to make the most of their online tools. Jen Frazier, President, 303-339-0080 or jen@fireflypartners.com	●	●		●	
Five Paths www.fivepaths.com **Berkeley & Chico, CA** Five Paths' proven technology professionals provide progressive organizations and businesses complete online services, including internet strategy, planning, website development and data integration. Eric Leland, 510-375-2396 or eric@fivepaths.com	●			●	
Forum One Communications www.forumone.com **San Francisco, CA** For over 12 years, Forum One has harnessed cost-effective open-source content management systems including Drupal and WordPress to create high-value solutions for governments and nonprofits. Chris Wolz, 703-548-1855 x11 or info@forumone.com	●	●	●	●	

CALIFORNIA (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
PICnet	www.picnet.net **San Francisco, CA** Affordable Web development and design services, with support you can count on. We help organizations effectively use the Web to achieve their mission. Ryan Ozimek, 202-585-0239 or cozimek@picnet.net			●		
Trellon, LLC	www.trellon.com **San Francisco, CA** Trellon builds outstanding web sites, and we are specialists in CRM solutions, social media, ecommerce, mobile and open source software. Michael Haggerty, 877-661-1862 or mhaggerty@trellon.com				●	
Informatics Studio	www.yourmissioncontrol.com **San Francisco, CA** Informatics Studio works with Non-profits to provide: 1.) Strategic Branding, Marketing, Communication Strategy and Sophisticated Design 2.) eLearning, Usability, Web Design, CMS Implementation. Todd D. Cavalier, 412.361.2911 x. 1007 or todd@is-east.com		●		●	

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through it's non-profit arm, Mission Control.

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informatics studio

for more information please contact us at info@yourmissioncontrol.com

CALIFORNIA (continued)

		Neutral Advice	WordPress	Joomla	Drupal	Plone
Office Information Systems **Oakland, CA**	www.ois-online.com Dan Thomas, 510-568-7900 or dthomas@ois-online.com					●
Reid-McMahon, LLC **Davis, CA**	www.reidmcmahon.com Steve McMahon, 530-758-0888 or steve@reidmcmahon.com					●
Urban Insight **Los Angeles, CA**	www.urbaninsight.com Chris Steins, 877-872-6150 or steins@urbaninsight.com	●			●	

CANADA AND GREAT BRITAIN

Free Flow Data, LLC free flow data	www.freeflowdata.com **Ottowa, Canada** Free Flow Data is a vendor neutral web consultancy helping organizations make better use of information through data integration, analysis, reporting, and web application design & development. Peter Davis, 541-434-5674 or peter.davis@freeflowdata.com	●	●		●	
Freeform Solutions FREEFORM solutions	www.freeformsolutions.ca **Toronto, ON, Canada** Freeform Solutions is a not-for-profit organization that helps not-for-profit and charitable organizations use technology to build their capacity and increase their effectiveness. Jason Côté, 647-723-5415 x100 or jason.cote@freeformsolutions.ca	●	●	●	●	●
Fruition Interactive fruition interactive www.fruitioninteractive.com	www.fruitioninteractive.com **Toronto, ON, Canada** Fruition Interactive creates great online experiences that generate exceptional return on investment and new opportunities for our clients. Kent Wakely, 416-628-4880 or kent@fruitioninteractive.com Other: eZ Publish	●	●		●	
FRY-IT LTD fry-it	www.fry-it.com **London, England** Delivered Plone to many not-for-profits such as several Health organisations (NHS, Great Ormond St Hospital), Universities (UCL), Unions (Unison, GMB), Defence (MOD), Charities (VSO, Disability Now). Zahid Malik, +44 207 0968800 or z.malik@fry-it.com					●
OCTL (Openflows Community Technology Lab, Inc.) OCTL Openflows Community Technology Lab http://openflows.com	www.openflows.com **Montreal, QC, Canada** Founded in Toronto in 2000 and now based in NYC, OCTL provides consulting/development services using many different F/OSS tools, often integrating CMS's with an organization's existing legacy systems. Eric Goldhagen,eric@openflows.com	●	●		●	