Selection of Appropriate Web Content Management System (WCMS)

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Abstract: In today's scenario there are so many good websites which are powered by easy to use web content management systems (WCMS) that allow making changes to a website without needing to touch a single line of code. Now a days there is a substantial number of open source WCMS that are available as free for website developer. This research paper aims to make a comparison between three most commonly used WCMS (WordPress, Drupal and Joomla) that are present in the web world today. This comparison will guide which CMS should be selected based on their setup, plug-in, themes, multilingual-ness, security, scalability, administration, Role Management, flexibility, installation time and ease of customization.

Keywords: WCMS, Wordpress, Joomla, Drupal.

1. Introduction to WCMS

WCMS (WContent Management System) is a computer program that allows publishing, editing and modifying content as well as maintenance from a central interface. Content management systems are often used to run websites containing blogs, news, and shopping. Many corporate and marketing websites use WCMSs. WCMSs typically aim to avoid the need for hand coding but may support it for specific elements or entire pages.

Open source WCMS make it easy to develop any type of websites, because the source code is available to anyone who wants to develop and build site based on the current code.

Selection of an appropriate open source WCMS have become a very difficult task for an application. This paper will provide a comprehensive comparison list of WordPress, Joomla, Drupal. This will be a great help for the people who wish to develop interactive and powerful websites with minimum information technology knowledge.

There are more than 200 open source WCMSs in the web world but most of them are hardly used by web developers. Some of open source WCMSs distributed into specific categories, such as (blogging systems, forums systems, e-commerce systems, wiki systems, social networking systems …etc.), but the powerful systems still able to build any type of website. Here the main focus is on three WCMSs WordPress, Drupal and Joomla. Choosing the right one can be difficult because they're all good options. But chances are one of these three will fit your unique situation the best (whether that's firing up a simple business website or running a fully functioning social network).

2. WORDPRESS

WordPress is free and open source content management system (CMS) use to create a beautiful website or blog. It is the most widely-used CMS software in the world and it powers more than 27% of the top 10 million websites. Wordpress is best choice for beginners because of its ease-of-use; it is best suited to small to medium size websites, blogs, e-commerce stores. WordPress started in 2003 with a single bit of code to enhance the typography of everyday writing and with fewer users. Till

Now it is has become the largest self-hosted blogging tool in the world used on millions of websites.

2.1 FEATURES OF WORDPRESS

2.1.1 Easy to Install – Many web hosting companies offer instant, automated WordPress installs. It means within few minutes you can have you website up-and-running.

2.1.2 Publish with Ease – Creating content with WordPress is as simple like working with a word document. You can create Posts and Pages, format them easily, insert media, and with the click of a button your content is live and on the web.

2.1.3 Standard Compliant Coding – Every piece of code generated by WordPress is in full compliance with the standards set by the W3C. It takes into account proper PHP, HTML, CSS, privacy and security protocols as quality code is the skeleton for a quality website. Because of this there will not be any issue in displaying a website with today's browser and with the next generation of browser.

2.1.4 Design Bundles – WordPress theme designers are expanding themes to include a variety of add-ons to provide a complete design package. It has huge number of plug-ins, themes, widgets etc than any other CMS.

2.1.5 User Management – Every user dealing with the website has its own role and access for different modules. Administrator manages the site, editor works with content, authors and contributors write that content, and subscribers have a profile that they can manage. This makes various contributors to your website, and let others simply be part of your community.

2.1.6 SEO – All WordPress themes support search engine optimization which is very important now a day. Further you can ensure that your WordPress site is using permalink structure for URLs and creating custom and keyword relevant slugs for page and blog posts.

2.1.7 Flexibility – Using WordPress, one can create any kind of website like a personal blog or website, a business website, a professional portfolio, an online community, a magazine or news website, a government website, even a network of websites.

2.1.8 Community Support – WordPress has millions of people who are using and supporting users through support forum. If you have any issue or have questions about your new WordPress site, you can easily approach these people already using and supporting it.

2.1.9 Multilingual – WordPress is available in more than 70 languages. So you can choose the language you prefer.

2.1.10 Multi-site – This is one of the important features of WordPress that enable user to have several different websites (with different domains and/or sub-domains) all with a single installation of WordPress. This is useful in a situation where in an organization each employee running their own blog with a unique design or even their own domain.

3. JOOMLA

Joomla is a free, open source, an award winning CMS content management system. With more than 3 percent of the Web running on Joomla and a CMS market share of more than 9 percent, Joomla powers the web presence of hundreds of thousands of small businesses, governments, non-profits and large organizations worldwide.

3.1 FEATURES OF JOOMLA

3.1.1 Template Management – Templates in Joomla are a powerful way to make the site look exactly the way you want. You can either use a single template for the entire site or a separate template for each site section. It is very simple to change the look of the website without distorting the content structure.

3.1.2 Easy setup of Commerce Sites – With Joomla you can setup ecommerce shops with less effort and customizations than Drupal and WordPress.

3.1.3 Multilingual Support – Joomla is the most popular and widely supported open source multilingual CMS platform in the world, offering over 65 languages. This is a big step forward and represents a set of capabilities that can make websites much more accessible, reaching out to a much larger audience.

3.1.4 Nested categorization – A robust organization is required when you are managing content on a website. Being able to create categories with nesting and no limits on depth is a great plus in helping manage large websites.

3.1.5 Powerful Extensibility – Apart from the core functionality it provides over 7,500 extensions to extend your website and broaden its functionality. You hardly go out of the Joomla's extension library for fulfilling your needs.

3.1.6 Extensive ACL – ACL stands for Access Control List, it allows you to manage the users and groups of your website.

When you're managing large content portals or even intranets that mean you need extensive control on who can see what and who can edit or manage what. The Joomla ACL is extremely powerful and can be tweaked via configuration to suit any needs you might have.

3.1.7 Search – Joomla's search feature helps navigate users to most popular search items and provide the admin with search statistics.

4. DRUPAL

Drupal is an open source content management platform powering millions of websites and applications. Distributed under the GNU General Public License, it provides a back-end framework for at least 2.2% of all Web sites worldwide ranging from personal blogs to corporate, political, and government sites. It's built, used, and supported by an active and diverse community of people around the world.

4.1 FEATURES OF DRUPAL

4.1.1 Technically Advanced — Drupal is the most technically advanced of these three content management systems.

4.1.2 Improved Performance – Drupal pages typically load more quickly, and have faster response times than those made with WordPress or Joomla because it's less resource-intensive, requiring a less expensive server.

4.1.3 Customizable   – Drupal is easy to customize with many widely available plug-ins, themes and other configurable options to choose from. You can also edit the root files directly, perfect for those developers who need to make more significant changes.

4.1.4 User Management – Drupal supports multiple-users functionality where users can be given specific rights and permissions. This adds an extra layer of security to the system, by allowing the administrator to pick and choose which individuals can view and edit specific information.

4.1.5 Large and vibrant community - Drupal has a large community of millions of users who are using, testing and supporting other users. Many modules are freely available from developers. Many people are donating their time to writing documentation, helping new users, etc.

4.1.6 Flexible architecture – You can create your own modules for custom features and can create your own themes for custom.

5. The Comparison Chart

Following diagram shows the comparison between Wordpress, Joomla and Drupal based on some important points that helps in their choice for a user.

	WordPress	Joomla	Drupal
Release Date	5/27/2003	9/16/2005	1/15/2001
Popularity	140 Millions downloads	63 Millions downloads	15 Millions downloads
Cost	Free	Free	Free
Free Themes	4K+	1K+	2K+
Free Plug-ins	45K+	7K+	34K+
One Click Installation	Yes	Yes	Yes
Manual Installation Time	5 Minutes	10 Minutes	10 Minutes
Ease of Moderation	☆	☆ ☆	☆ ☆ ☆
Ease of Setup: Simple site	☆ ☆ ☆	☆ ☆	☆ ☆
Ease of Setup: Complex site	☆ ☆ ☆	☆ ☆ ☆	☆ ☆
Ease of Use: Content Editor	☆ ☆ ☆	☆ ☆	☆ ☆
Ease of Use: Site Administrator	☆ ☆ ☆	☆ ☆	☆ ☆
Level of Skill needed	☆	☆ ☆	☆ ☆
Support/ Community Strength	☆ ☆ ☆	☆ ☆ ☆	☆ ☆ ☆
Updated Frequency	42 days	36 days	51 days
Best Suited for	Blogs,Corporate website, Small-Medium Sized Websites	E-Commerce, Social N/W Sites	One Size Fits all

Fair: ☆   Good: ☆ ☆   Excellent: ☆ ☆ ☆

Figure 1: Comparing Wordpress,Joomla,Drupal

6. CONCLUSION

What CMS should you choose? Your own unique scenario will require different capabilities, which probably makes ONE of these three CMS options the perfect fit. All three are solid systems with robust communities and a huge amount of functionality that will allow your technical staff to update your site. Looking to get started quickly with a simple business website or blog? Look no further than **WordPress.** 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 If you have high hopes from day one that your site will grow significantly, requiring extensive features and unlimited customizations, take the plunge with **Drupal.** It supports a wide variety of site structures—with widely used add-ons, you can define very detailed rules as to what content should be displayed where, and build your own custom content types. Split between those two options, or need something unique like a social network or ecommerce site, **Joomla** might be the best bet. Joomla is a solid utility player, good for a variety of different situations, and it's relatively straightforward to install and set up. All three platforms are free. Each offers a variety of helpful third-party tools to add unique features to your site. And you'll find readily available technical support with each one (although Drupal's might be among the most expensive).

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