



METHODOLOGY FOR SELECTING CMS TOOLS : WORDPRESS, JOOMLA, DRUPAL

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ABSTRACT

This research paper aims to help in selecting content management tool. Today in digital Era every one wants a website for his business but it is difficult to maintain and update website from a professional web developer. It is time consuming and costly also. Solution for this is developing , maintaining and updating the website by their own using very simple and easy content management system (CMS) tools. To find best CMS tool among hundreds of tools is very difficult task. Different methods can be used to compare these CMS tools. These tools can be compared using different methodologies like survey, users opinions ,Philosophical Method,Historical Method ,Case Study Method,Genetic Method and experimental method etc.

Keywords : CMS, HTML, XML, WordPress, Joomla, Drupal

1. Introduction

CMS is used to manage website and content for information. CMS is a software package that lets you build a website, write a blogs that can be quickly and easily updated by your non-Professional staff members.[1]

A CMS can be easily embedded into a live website so as to help the owner or staff member update its content at its ownhaving minimum knowledge about coding of the websites.[2]

As we know that a webpage's have text, graphics, photos,video, audio etc that display content or interacts with the user. CMS provides all above inbuilt features andmany more.[3]

Now if we go for CMS tools ,there are so many CMS tools which are free to download and use for developing websites and writing blogs. Now the problem is selection of easy and simple CMS tool. In this paper , I compare most common , famous three tools for better selection of CMS tool.

2. Review of Literature

Drupal, Joomla! And Wordpress are currently the three most popular PHP-based, free, open source web applications for online publishing and CMS-based website development. That does not mean they are necessarily the best applications of their kind or the best choice for a particular project. This document profiles and compares each without reference to other systems.

Feature criteria generally should not be your sole selection criteria, and the information in this document is not intended as a substitute for hands-on trials and personal research, especially considering the rapid pace of Drupal, Joomla! And Wordpress software development. This chart should be used as a basis for further research and planning for specific site building projects, but take not of its creation/revision date.[4]

The author said that A system was needed to manage, create, and distribute various forms of content. The Content Management System was created. Most CMS's are built on the LAMP (Linux Apache MySQL PHP) stack and are FOSS (Free Open Source Software.) Every CMS now uses downloadable add-ons known as

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modules or extensions. Modules enable the community and other third parties to expand the capability beyond the original intent. There are many CMS Like Joomla, Drupal, Wordpress, Mambo, SilverStripe etc.[5]

3) Research Methodology

Methods Of Comparing CMS tools are

- 1) Comparison Based on Features –In this type of comparison people compare few features because list of features is very large . They compare the features like Ease of Hosting and Installation , Ease of Setup ,Ease of use, ease of Graphical use ,Extension and integration ,security etc.[1]
- 2) Comparison with respect to security –In this how many people are using internet for accessing the website , penetration rate ,penetration possibility ,which CMS tool is more secure etc.
- 3) Comparison Based on Core Features-In this they are comparing file structures of CMS tools, Built in features , Easy to develop website ,Requirement of any programming language ,modules, templates, uploading files etc.
- 4) Comparison Based on versions and popularity-In this type of comparison they are comparing different versions of CMS tool , popularity of CMS tool using survey.
- 5) Comparison Based on traditional way and CMS tool –In this type of comparison traditional way of developing website using HTML(Hyper Text Mark up Language) ,CSS, Javascript , XML(Extensible Mark up Language) is compared with website using CMS tools,

There are many ways of comparisons, depending on that we can select best CMS tool for specific purpose.

I compare these three tools with considering some parameters with the experimental method. In reality I developed three sites with same content using these three CMS tools-WordPress , Joomla and Drupal. Observed the result in tabular form with the explanation.

To develop the sites first thing we required is space on internet and we need to host our site . But I developed site on XAMPP server that is Locally to check the parameters like:

- 1) Size of software

- 2) Installation and Setting Issues
- 3) Utilities of Tool-Creating Menus,Drag n Drop
- 4) Uploading and Managing Photos
- 5) Database Issues
- 6) Hosting and Publishing Site
- 7) Size of files using Tools
- 8) Level of skills Needed
- 9) SEO(Search Engine Optimization) Friendly
- 10) OWASP(Open Web Application Security Project)

4. Data Analysis

As we have to upload the site on Internet we required space . So first parameter is size or space required to install CMS tool WordPress , Joomla and Drupal . We can compare size of software at Installation stage and after development of site.

Definitely after development of site size of software increases . So Size could be the most important comparison factor.

Now second parameter is it must be easy to develop with minimum amount of knowledge of languages and Database. So developing environment must be clean clear and easy to understand. Ex-We are developing website so we required Menus in our website. If it is clearly and easily shown by the tool just by clicking how to create menu easily then that tool must be selected . The CMS tools development environment must be developer friendly.

Third important parameter is to check whether media files like photos , Videos and audios upload and download easily and quickly without decreasing performance of the site.

Database is one of the important parameter in development of website because if you want to store something you need storage that is database which handle your data in a systematical approach.

Publishing and hosting is also a parameter as we need to update our site frequently ,so it should be easy and quick.

Level of skills required to design a website must be minimum so that any one can design and develop an maintain website very easily.

Search engine optimization is very important if you are developing website means you are expecting the

user to visit your website , so it should be easily searched by search engines like google.

Open Web Application Security Project means your website should be secured enough, for that developer need to follow some rules and regulations decided by OWASP

Conclusion

WordPress, Joomla and Drupal are the three most popular content management systems (CMS) tools. WordPress is very easy for lay man to write a content on internet like to write a Blogs, Joomla enables you to develop website with more structural way than WordPress .If you are going for small website or e-commerce website Joomla gives you simple interface and help to develop it.But if you want develop little more complex website then go for Drupal as it gives systematic approach for your complex site , It has ability to fulfil need of your business.Free and open source content management systems can help you create a powerful website on a limited budget and time. WordPress and Joomla are well suited to build smaller sites quickly,while Drupal support robust and complex functionality.

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