

## Distributed Web Content management System Emerging trends for Web Administration, Development & Deployment

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### ABSTRACT

This research work makes a case to deploy web content management systems online for dynamic website and emphasize on comparative study of different Distributed Web Content Management System.

This research investigates the utilization of Distributed Web Content Management System in the area of Online Administration, Development & Deployment based on web application.

The Work Determining efficient and sustainable processes to assure high quality Distributed Web content management system

There is a large number of web-authoring software like FrontPage, Dreamweaver etc. that are used to develop and maintain the websites. But gradually, it became difficult to maintain and update the websites because of their very dynamic nature and a variety of file formats. Distributed Web Content Management Systems (CMS) evolved as an alternative to such web-authoring tools. There are many CMS Like Joomla, Drupal, .Net Nuke, PHP Nuke, Mambo, Sitecore, SharePoint etc., but this research work will deal with a comparative analysis between various Web CMS.

After analyzing the previous developments in the area of Web CMS it was found that even after finding solutions for many problems, there exist certain problems like unavailability of dynamic content management, Security issues, Complexity involved in repositories management and administration related issues that need the attention of researchers as well as practitioners. These problems motivated to explore better solutions for them and in distributed Web CMS major concerns are about advancement of repository management, security as well as administrative issues.

### Keywords:

Dynamic Web Application, Distributed Web Management, Online Communication, Web CMS.

### INTRODUCTION:

Three factors such as explosion of unstructured data, the need to manage content in a better way and the internetworking and collaboration within and between

the enterprises drive the need for distributed content management solutions. Distributed content management systems address the need to access content wherever it resides, produce content and maintain greater control over the produced content, and collaborate efficiently by sharing data in real-time within a distributed network of stakeholders.

Organizations can deploy the Distributed content management solutions to share real-time information across geographically dispersed knowledge workers. The Distributed content management solutions form the backbone of any platform that requires real-time, efficient information sharing, as it provides a virtual content repository without distracting from the strengths of other process-dependent systems. Distributed content management solutions complement enterprise portal solutions, which are less affected by wider e-business processes. Long term Distributed content management solutions can be designed to complement supply chain management, customer relationship management, and e-commerce solutions[1].

Implementing web content management (WCM) is not only crucial to maintain the quality of information on the website; it can provide significant efficiency, productivity and cost reduction benefits.

Organizations of all types, commercial, government, educational, and non-profit entities, create a lot of content. Increasingly it is desirable to retain and manage this information as an information asset for possible reuse. Content can be anything from complex structured documents, to simpler messages, correspondence, business documents, transactions, emails, and the many other documents that workers create, share, transmit and archive. If an organization can manage their information assets in a meaningful way, that content can provide financial benefits and therefore, its value increases.

Content management systems are relatively new in the market and while many are still not familiar with them, they have the potential to dramatically simplify the maintenance of both websites and intranets.

**OBJECTIVES:**

- This research work investigates the utilization of Distributed Web Content Management System in the area of Online Administration, Development & Deployment based on web application.
- Determining efficient and sustainable processes to assure high quality Distributed Web content management system
- The research makes a case to deploy web content management systems online for dynamic website
- Emphasize on comparative study of different Distributed Web Content Management System

**Dissertation category : Web Mining and Management**

In customer relationship management (CRM), Web mining is the integration of information gathered by traditional data mining methodologies and techniques with information gathered over the World Wide Web. Web mining is used to understand customer behavior, evaluate the effectiveness of a particular Web site, and help quantify the success of a marketing campaign. The distributed Web CMS is all about Web Data management and categorization of different module inside the database system.

**Tools/Platform, Hardware and software Requirement specification**

**Tools :** Sharepoint, Joomla, Wordpress, Drupal, SiteCore, .Net Nuke.

**Platform :** Windows-XP/Vista/Windows-7

**Hardware :** Pentium IV and above with standard configuration

**Software :** XML, PHP, C#, ASP.NET, MYSQL, SQL Server

**Problem Definition, Requirement Specification**

An organization has a website on internet or intranet. It has grown organically over time and while it is very useful, it is far from perfection. Much of the content is out-of-date or inaccurate, it's hard to find things, updating the site is complex, and the appearance is becoming outdated. What was on the site last week, or last year? One can't say. Thankfully, these problems are what a Distributed web content management system is specifically designed to solve.

There are a wide range of business benefits that can be obtained by implementing a CMS, including:

- Faster turnaround time for new pages and changes
- Greater consistency
- Improved site navigation
- Increased site flexibility
- Increased security
- Reduced duplication of information
- Greater capacity for growth
- Reduced site maintenance costs

Beyond these, the greatest benefit the Distributed Web CMS can provide is to support your business goals and strategies. For example, the Distributed Web CMS can help to improve sales, increase user satisfaction, or assist in communicating with the public. The open source community has produced a number of useful, high quality Web content management systems which presents an opportunity to deliver tailored content management solutions without the high licensing or management fees associated with commercially-licensed or hosted software. A more practical approach is to match your needs to a common business problem that others have solved using open source software and engage with the community to learn about their experiences in implementing the solution.

**SCOPE OF THE SOLUTION:**

Distributed Web Content management Systems has presented a general overview of typical content management system capabilities and how they can be used to benefit businesses. In the marketplace at present, there are literally hundreds of content management systems, all having different capabilities and strengths. This is the nature of a rapidly changing marketplace: while there are many very good products, there is little consistency between vendors. This research work primarily focuses on issues related to different parameters that affect the selection of most suitable CMS for an organization. There is a need to spend sufficient time to determine one's business requirements and then comprehensively evaluate the products on the market against them. By allocating sufficient time and resources for selecting the CMS, one can be confident that you have the best possible solution. This research work will analyse different factors and parameters that are helpful in selecting most appropriate CMS. This research work will include different technologies and solutions to different problems of different organizations.

**ANALYSIS:**

There are a large number of web-authoring software like FrontPage, Dreamweaver etc. that are used to develop and maintain the websites. But gradually, it became difficult to maintain and update the websites because of their very dynamic nature and a variety of file formats. Distributed Web Content Management Systems (CMS) evolved as an alternative to such web-authoring tools. There are many CMS Like Joomla, Drupal, .Net Nuke, PHP Nuke, Mambo, Sitecore, SharePoint etc., but this research work will deal with a comparative analysis between Joomla and Drupal.

The goal of this comparative study is to find the better Distributed Web CMS of the two according to various selected criteria. The criteria includes installation, platform support, browser support, modules and extensions, documentation, support, user management, multimedia integration, content creation and searching. Earlier web CMS was based on mainly LAMP technology, But Now almost all software companies trying to develop the Web CMS.

Price [2] investigated the problem related to manage a fire department website that was growing in size and complexity. He presented the solution through determining efficient and sustainable processes to assure high quality online communications. He also presented a case to deploy enterprise web content management systems.

Sol[3] Observed that on the web, content is king. Regardless of how your web site looks, once the content is in place, it is essential that time and energy is spent in thinking about how to present that content on the web. Like any medium, the web has its own quirks and intricacies that make content distribution different from other mediums such as print, radio, or television.

After analyzing the previous developments in the area of Web CMS it was found that even after finding solutions for many problems, there exist certain problems like unavailability of dynamic content management, Security issues, Complexity involved in repositories management and administration related issues that need the attention of researchers as well as practitioners. These problems motivated to explore better solutions for them and in distributed Web CMS major concerns are about advancement of repository management, security as well as administrative issues.

**Future scope and further enhancement:**

Content management systems will turn a common trade in coming years, as products become established, and even more solutions outspread the market. The Content Management industry will continue to mature over the next few years, to accomplish a higher level of reliability, reusability and expertise. The good news is that the profit for organizations who deal with CMS projects in a tactical way will be higher than ever, because of the technology effectiveness of CMS systems. In the perspective of a growing e-commerce, online marketing and e-government initiatives, the demand will be greater than ever. End-users expect quality information to be presented on the web. Web activities like intranet, extranet and internet are growing more complex and the managing cost for them are increasing[4].

Entrepreneurs are started thinking to spend money on a Content Management System to save money for the business. To take advantage of the business opportunities offered by the Web, companies necessitate Content Management Systems that manage and deliver their Web presence with fast, accurate and easy selection.

The future Distributed Web CMS development will come up with improved technologies for

- Reuse of content
- Quick content creation and publish without any time delay
- Integration of various internal applications
- Improved corporate and client communication

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