

Content Management System



Shankar B. Chavan

Assistant Librarian

Central Library, IIT Delhi

Email: shankar.chavan@library.iitd.ac.in

Outline

- **Introduction**
- **What is Content?**
- **What is Content Management System?**
- **Types of Content Management Systems**
- **What a CMS Does?**
- **Features of CMS**
- **Advantages of CMS**
- **Evaluation of Content Management System**
- **Drupal vs. WordPress vs. Joomla**
- **Trends of Content Management Systems and Market Share**

Introduction

- Over the decades, the Content Management System has seen an unprecedented growth from static web pages built on HTML to customized sites developed using PHP to give personalized experience. Initially, in the 1990's, we had flat HTML files. Then there was Dynamic HTML to create interactive and animated websites by using a combination of a static markup language.
- Apple.com at the very birth of the World-Wide Web in 1992.
- Then there was GeoCities, a web hosting service, later acquired by Yahoo in 1999. During this time, GeoCities was the third-most-visited site on the World Wide Web. It was the first kind of web-based CMS that allows users to manage their website. This is a concise history of CMS in the 1990s. On contrary to this, 2000's seen the massive development from basic HTML & DHTML web pages to proprietary and open source CMSs.

DRUPAL / WORDPRESS / JOOMLA



Drupal

Released in May 2000 by
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WordPress

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Joomla

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What is Content?

- Content is created through “editorial process.” This process is what humans do to prepare information for publication to an audience. It involves authoring, editing, reviewing, approving, versioning, comparing, and controlling.
- Content is information produced through editorial process and ultimately intended for human consumption via publication.
- Content is in essence, any type or 'unit' of digital information.
- It can be text, images, graphics, video, sound, documents, records etc



-or in other words, it can be anything that is likely to be stored and managed in an electronic format.

What is a Content Management System?

- A content management system (CMS) is a software package that provides some level of automation for the tasks required to effectively manage content.
- A CMS is usually server-based, multiuser software that interacts with content stored in a repository. This repository might be located on the same server, as part of the same software package, or in a separate storage facility entirely.
- A CMS allows editors to create new content, edit existing content, perform editorial processes on content, and ultimately make that content available to other people to consume it.
- Logically, a CMS is comprised of many parts. The editing interface, repository, publishing mechanisms, etc.,
- So, a CMS is a tool to assist in and enable the theoretical ideal of content management.
- Content Management System (CMS) is an application software that provides you an easy environment to manage your digital content data such as text, images, music, documents etc.

Types of Content Management Systems

- **Web content management (WCM):** The management of content primarily intended for mass delivery via a website.
- **Enterprise content management (ECM):** The management of general business content, not necessarily intended for mass delivery or consumption (e.g., employee resumes, incident reports, memos, etc.). This flavour was more traditionally known as “document management,” but the label has been generalized over the years. ECM excels in collaboration, access control, and file management.
- **Digital asset management (DAM):** The management and manipulation of rich digital assets such as images, audio, and video for usage in other media.
- **Records management (RM):** The management of transactional information and other records that are created as a by product of business operations (e.g., sales records, access records, contracts, etc.).

What a CMS Does?

Control Content

- Permissions: Who can see this content? Who can change it? Who can delete it?
- State management and workflow : Is this content published? Is it in draft? Has it been archived and removed from the public?
- Versioning: How many times has this content changed? What did it look like three months ago? How does that version differ from the current version? Can I restore or republish an older version?
- Dependency management: What content is being used by what other content? If I delete this content, how does that affect other content? What content is currently “orphaned” and unused?
- Search and organization: How do I find a specific piece of content? How do I find all content that refers to X? How do I group and relate content so it’s easier to manage?

What a CMS Does?

Allow Content Reuse

Using content in more than one place and in more than one way increases its value.

Some examples:

- A news article appears on its own page, but also as a teaser on a category page and in multiple “Related Article” sidebars.
- An author’s bio appears at the bottom of all articles written by that person.
- A privacy statement appears at the bottom of every page on a website.

In these situations, this information is not created every time in every location, but simply retrieved and displayed from a common location.

What a CMS Does?

Allow Content Automation and Aggregation

- We can allow users to consume content in other formats, such as PDF or other ebook formats.
- We can automatically create lists and navigation for our website.
- We can create multiple translations of content to ensure we deliver the language most appropriate to the current user.
- We can alter the content we publish in real time based on the specific behaviors and conditions exhibited by our visitors.

What a CMS Does?

Increase Editorial Efficiency

- The ability of editors to create and edit content quickly and accurately is enormously affected by the platform used.
- Editor efficiency is increased by a system that controls what type of content editors can and can't add, what formatting tools are available to them, how their content is structured in the editing interface, how the editorial workflow and collaboration are managed, and what happens to their content after they publish.
- A good CMS enables editors to publish more content in a shorter time frame (it increases “editorial throughput”), and to control and manage the published content with a lower amount of friction or drag on their process.

Features of CMS

- The most important features of CMS are that you can create a dynamic website without any programming and design knowledge.
- CMS is theme based which provides you options for various open source and premium design themes, which can be integrated easily without any designing knowledge.
- Plugins extend the functionality of CMS, which can be used to add new required modules.
- CMS sites are search engine optimization (SEO) friendly, it means sites built in CMS can be easily optimized for search engine listings.
- CMS support Multilingual, which allow users to translate content in their language.
- CMS has inbuilt Media Management System which is used to manage images, music, documents etc. and can be used with text content.

Advantages of CMS

- CMS is free and an open source platform under the GNU General Public License (GPL).
- Design themes customization in CMS is very easy.
- It allows you to manage users with different roles and permissions.
- CMS media management is quick and easy to use.
- CMS provides WYSIWYG editor to manage your text content which is very useful for manipulating the layout of the document.

Popular Content Management System

Open Source CMS

- **WordPress**
- **Joomla**
- **Drupal**
- **TYPO3**
- **Concrete5**
- **Django CMS**
- **Grav CMS**
- **OpenCMS**
- **OpenWGA**
- **C1 CMS**

Proprietary CMS

- **Microsoft SharePoint**
- **IBM Enterprise Content Management**
- **Pulse CMS**
- **Sitecore**
- **Shopify**
- **Kentico**

Evaluation of Content Management System

Check Points for Evaluation of CMS

Check Points for Evaluation of CMS

Content Management

- Does it have a flexible rich text editor (RTE) which enables formatting options as well as an HTML view for more complex tasks?
- Can we quickly and easily upload images and organize them?
- Does the system allow in-app resizing/cropping of uploaded images?
- Can videos from video services (like YouTube, BrightCove and Vidyard) be embedded into pages?
- How is frequently updated content (e.g. Events and News articles) handled? Do these require custom code or are there templating issues which support these types of content?
- How easy is it to update content models for particular site items? For example, adding a new field to a page. Do you need developer support or can this be handled by expert CMS users?

Check Points for Evaluation of CMS

Content Management

- Does the system allow re-use of content?
- Can we update primary/secondary navigation items and structure based on the structure of the pages within the CMS?
- Can you easily preview content development or updates without having to publish?
- Can redirects be handled within the CMS?
- Can you easily view dependencies for assets or pages?
- Does the system allow easy handling of metadata?
- Is the front-end of the CMS easy to use and something that will suit variable skill levels of internal staff?
- Does the system allow addition of schema markup?

Check Points for Evaluation of CMS

Integrations

- Does the CMS allow for integration with the corporate Marketing management? Automation platform? If so, how easy is it?
- Does the system allow for integration with the corporate CRM application? If so, how easy is it?
- Does the system allow for integration with the corporate Digital Asset Management application? If so, how easy is it?
- Does the CMS integrate with the corporate Single Sign-On mechanic?
- Can we integrate with the corporate Social Media channels? Are there any channels which aren't supported without bespoke development?
- Does the system integrate easily with 3rd party translation services for multi-lingual content
- Can we integrate the CMS with corporate back-office systems (e.g. payroll, ERP etc.) if required?

Check Points for Evaluation of CMS

Publishing

- Does the system allow to configure publishing pages to multiple environments (e.g. Staging, QA/Test, Production)
- Can we save drafts of page updates without publishing?
- Can we publish across multiple channels e.g. social media as well as web?
- Does publishing a page also publish dependency objects or do these need published separately?
- Can you schedule the publish/unpublish of pages?
- Can we roll-back published pages?
- What impact does unpublishing a page have on dependency pages? Is there reporting in place to mitigate the impact of unpublishing?

Check Points for Evaluation of CMS

Permissioning/ User Management

- Does the CMS allow granular configuration of user permissions? Can these permissions be set at both global and function level?
- Does the CMS allow configuration of user roles based on the permissions set?
- Can users be assigned to multiple roles if required?
- Is the on-boarding of new users easy?
- Do reviewers/editors have access to the CMS? If so, can they comment directly on the page?
- Can we do bulk updates on user permissions and roles?

Check Points for Evaluation of CMS

Workflow

- Do the built-in workflow management tools allow us to easily configure to comply with corporate editorial processes?
- Can workflows be amended/created to reflect internal changes without development support?
- Can translation workflows (with possible 3rd parties) be configured to comply with corporate editorial processes?

Check Points for Evaluation of CMS

Versioning

- Do all elements of the CMS have a versioning mechanism? (all elements include pages, images, blog articles etc.)
- Are all versions tagged by user and date modified?
- Can a side-by-side comparison of versions be viewed?
- Can the system rollback to a previous version of an asset simply?
- Does the system report on dependencies affected by a rollback?

Check Points for Evaluation of CMS

Taxonomy

- How does the CMS allow you to categorize your content?
- Can you easily update/add/delete taxonomical items?
- What does this implementation allow you to do with regards managing content in the back- and/or front-end?
- Can the taxonomy be localized (if needed)?

Check Points for Evaluation of CMS

Built-in Apps

- What built-in apps come as-standard with the CMS? Do these offer value and justify the license fee?
- What built-in apps are available within the system but require extensions to the license fee? Do these offer new functionality which may change the scope of possibilities on offer to support the marketing strategy?

Check Points for Evaluation of CMS

Infrastructure

- Are there any restrictions from corporate IT around what types of CMS will be supported e.g. Windows/.NET versus LAMP versus Java/Others?
- Does the vendors system conform to these restrictions if they exist?
- Are the terms of the corporate information security policy upheld?
- If corporate IT requires to set up multiple environments, are there any implications from the vendor to work across multiple environments?
- Does the CMS have a backup function? Does this conform to the corporate IT team's requirements?
- Does the CMS have security protocols in place to fend off brute force attacks?
- If required, is the CMS impacted by any auto-scaling requirements?

Check Points for Evaluation of CMS

Analytics

- Does the application come with an Analytics package as standard?
- If Analytics is an add-on module/service, does this offer any enhancements/insights/data that other Analytics packages we use (e.g. Google Analytics or Omniture) don't have?
- Does the Analytics offering provide insights across all channels being used to publish to? E.g. can we get insights from Social Media as well as standard web pages?
- Does the Analytics dashboard/front-end require special training for users or is the UI simple and effective but allow scaling for more in-depth data analytics requirements?
- Does the Analytics offering allow export, in various formats, of raw data to allow for further non-standard data modelling?
- Can we create our own reports and/or dashboards within the Analytics package?

Check Points for Evaluation of CMS

Support

- Is there suitable documentation for all user types and levels to support internal requirements?
- Does the vendor offer 24/7 support?
- Do they have a development roadmap for future releases?
- Does this fit with the corporate marketing strategy?
- Do future releases look like strong feature enhancements or does it look like feature bloat?
- Does the vendor have a proven track record of fixing bugs/issues quickly, securely and in a timely fashion?
- Does the system have an online user community? Are the users highly engaged?
- Does the vendors support staff get involved with the user community and provide guidance and insight?
- Do we need specialist developer skills to be able to support and enhance the application? If so, does the vendor offer developer support/courses?

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Drupal vs. WordPress vs. Joomla

- All the three platforms WordPress, Joomla, and Drupal are open source free software licensed under GPL. Therefore, you can download the software free, use, and modify as you like.
- All the three platforms have developed a community of their own consisting of developers, designers, trainers, users, and volunteers. The communities are aimed at making the platform a better CMS by sharing the knowledge, supporting the users, organizing events, solving the issues, and more.
- All the three platforms are based on PHP and MySQL.
- All three of them use themes/ templates for the design and plugins/ extensions/ modules for adding functionality and features.

CMS	WordPress	Joomla	Drupal
About	WordPress is open source software you can use to create a beautiful website, blog, or app.	Joomla! Is an award-winning content management system (CMS) which enables you to build websites and powerful online applications.	Drupal is content management software. It's used to make many of the websites and applications you use every day.
Software	FREE and Open Source	FREE and Open Source	FREE and Open Source
CMS Market Share	58.90%	7.00%	4.70%
Installation	One-click Install or manual installation manually within 5 minutes	One-click Install or manual installation within 10 minutes	One-click Install or manual installation within 10 minutes
Ease of Use	Beginner-friendly (5/5)	Somewhat Beginner-friendly (4/5)	Requires Coding Skills (3.5/5)
Design (Themes & Templates)	4500+ Official FREE Themes	NO Official Template Directory	2000+ Official Drupal Themes
	9500+ Premium Themes at ThemeForest	950+ Premium Joomla Templates at ThemeForest	450+ Premium Drupal Themes at ThemeForest
Functionality (Plugins & Extensions)	50,000+ Official FREE Plugins (Thousands of Paid Plugins on the web)	7500+ Official Extensions (FREE+Paid)	37,000+ Drupal Module at Official Directory
Websites Using this Platform	Chicaco Sun Times, Vogue India, Katy Perry & More.	Michael Phelps – MP Brand, Discover Magazine, French West Indies & More.	US. Department of Energy, University of Minnesota & More.

Trends of Content Management Systems and Market Share

Historical Yearly Trends in The Usage of Content Management Systems

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019
	01-Jan	01-Jan	01-Jan	01-Jan	01-Jan	01-Jan	01-Jan	01-Jan	01-Jan	14-Sep
None	76.40%	71.00%	68.20%	64.80%	61.70%	56.60%	53.30%	51.30%	45.30%	43.70%
WordPress	13.10%	15.80%	17.40%	21.00%	23.30%	25.60%	27.30%	29.20%	32.70%	34.60%
Joomla	2.60%	2.80%	2.80%	3.30%	3.30%	3.30%	3.40%	3.20%	3.00%	2.80%
Drupal	1.40%	1.90%	2.30%	1.90%	2.00%	2.10%	2.20%	2.30%	1.90%	1.80%
Shopify				0.10%	0.30%	0.40%	0.60%	0.90%	1.40%	1.70%
Squarespace	<0.1%	0.10%	<0.1%	0.10%	0.20%	0.40%	0.50%	0.70%	1.40%	1.60%
Wix			<0.1%	0.10%	0.10%	0.20%	0.30%	0.40%	1.00%	1.20%
Magento				0.90%	1.10%	1.20%	1.20%	1.20%	1.00%	0.90%
Blogger	0.60%	0.90%	1.10%	1.20%	1.10%	1.20%	1.10%	0.90%	0.80%	0.80%
Bitrix	0.20%	0.30%	0.30%	0.30%	0.40%	0.60%	0.70%	0.70%	0.60%	0.70%
PrestaShop			0.30%	0.40%	0.50%	0.60%	0.60%	0.60%	0.80%	0.70%
TYPO3	0.60%	0.60%	0.70%	0.60%	0.60%	0.70%	0.70%	0.70%	0.70%	0.60%
OpenCart					0.30%	0.40%	0.40%	0.40%	0.40%	0.50%
Weebly			<0.1%	0.10%	0.10%	0.20%	0.20%	0.20%	0.40%	0.40%
Adobe Dreamweaver						0.60%	0.60%	0.50%	0.40%	0.30%

Market Share Yearly Trends for Content Management Systems

	2010 1 Jan	2011 1 Jan	2012 1 Jan	2013 1 Jan	2014 1 Jan	2015 1 Jan	2016 1 Jan	2017 1 Jan	2018 1 Jan	2019 1 Jan	2019 14 Sep
WordPress	51.0%	55.3%	54.3%	54.8%	59.8%	60.7%	58.8%	58.5%	60.0%	59.7%	61.3%
Joomla	12.0%	10.9%	9.5%	8.7%	9.3%	8.6%	7.5%	7.2%	6.5%	5.4%	4.9%
Drupal	7.1%	6.1%	6.5%	7.2%	5.5%	5.1%	4.9%	4.8%	4.6%	3.5%	3.1%
Shopify					0.3%	0.7%	1.0%	1.3%	1.8%	2.6%	3.0%
Squarespace		0.2%	0.2%	0.1%	0.3%	0.5%	0.8%	1.1%	1.5%	2.6%	2.8%
Wix				<0.1%	0.2%	0.3%	0.4%	0.6%	0.9%	1.8%	2.1%
Magento					2.7%	2.8%	2.9%	2.7%	2.4%	1.9%	1.6%
Blogger		2.7%	3.0%	3.5%	3.3%	2.9%	2.7%	2.4%	1.9%	1.4%	1.4%
Bitrix		0.8%	0.9%	1.0%	1.0%	1.1%	1.3%	1.4%	1.5%	1.2%	1.3%
PrestaShop				0.9%	1.1%	1.2%	1.3%	1.3%	1.3%	1.4%	1.3%
TYPO3	4.2%	2.6%	2.0%	2.1%	1.6%	1.6%	1.5%	1.4%	1.5%	1.3%	1.1%
OpenCart						0.9%	1.0%	0.9%	0.8%	0.8%	0.8%
Weebly				0.1%	0.3%	0.4%	0.4%	0.4%	0.4%	0.7%	0.7%
Adobe Dreamweaver							1.4%	1.2%	1.0%	0.7%	0.6%

Conclusion...

- Content is in essence, any type or 'unit' of digital information.
- It can be text, images, graphics, video, sound, documents, records etc.
- Content Management System (CMS) is an application software that provides you an easy environment to manage your digital content data such as text, images, music, documents etc.
- Using content in more than one place and in more than one way increases its value.
- A good CMS enables editors to publish more content in a shorter time frame.
- WordPress, Joomla, and Drupal are open source free software licensed under GPL most used CMS.

Conclusion

- Some form of content management (CM) process or system is becoming essential for all organisations with a significant Web presence as the amount of digital content continues to proliferate.
- As the Web moves from small, informally designed Web sites into large, rapidly changing sites, the need for strong management tools has become pressing.

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THANK YOU

