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Original Research Article

Content management system for creating library websites

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ABSTRACT

The library's website is seen as a communication tool, helping to create and publish information regarding its activities and services. Creating and maintaining an interactive library website requires technical knowledge, money, and time. And keeping the library website in the traditional way creates problems even for library staff with little technical skills. Content management systems (CMS) are computer software systems to organize, view and facilitate the creation of collaborative content. They consist of predefined modules and functions for managing and organizing website content. Using the content management system, library professionals can create and update the website's focus on content and don't have to worry about the layout. This document verifies the scope of the content management system for the library building website.

1. Introduction

Online publishing is now easier than in the past with the advent of information and communication technologies (ICT), particularly with the widespread use of the World Wide Web. Information and communications technology is also persuading to change the way information professionals do it.

Opera. Library websites are also becoming the place to post creating content. Major libraries are setting up their website as a portal for everyone's services and using it as a marketing tool to attract users. Library patrons appreciate the timely dissemination of information about library activities and services through the libraries' websites. Creating and maintaining dynamic content on a website is a great challenge for information professionals and library authorities, it requires money and professional manpower. Compared to traditional website development, open-source content management systems are really viable in terms of functionality, cost, and maintenance.

2. Literature Review

The first purpose of this literature review is to examine previous research, emphasize important research studies, identify trends, and establish a theoretical framework. Previous research has focused on problems in today's content management systems, where the collection of digital information is constantly growing and increasing demands are placed on how this information is managed and delivered. The world is facilitating access to knowledge for humanity. However, the World Wide Web and other information repositories still face the challenges of explosive information growth. In many cases, these requests are fulfilled by tools called content management systems (CMS).[1]

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2.1. Problems related to the development of the library website

The library website can be used as a platform for a variety of activities. It can act as a bulletin of the various events that the library organizes as a guest of the service. It offers its users an interactive catalogue, for example of the book collection, a periodic list of additions, a series of references to other useful sites, etc. The content of the library website must be dynamic in nature. Constant updates of the website content are required to report on the library's ongoing activities. Without a user-friendly interface for uploading content to the traditional website, constant updates on content are avoided. Content creators are knowledgeable about HTML tags or need the help of the website administrator to publish the content on time. Karen A. Coombs, Head of Web Services, University of Houston (UH) Libraries, explains the reasons why they revamped their library's website in a more dynamic nature: "All content was passed through the Department of Web services before becoming part of the site. As a result, updating was a time-consuming task and important parts of the site were out of date. Furthermore, the structure of the site was rigid and inflexible and did not offer space for staff or user participation. An informal needs assessment revealed that staff members wanted to control their own content and have a way to make the site more attractive and interesting to its users "(Coombs, 2007).[2] Next-generation website development places more importance on interactivity with users. The following feature makes website content more dynamic, user-centric and Web 2.0 compliant:

1. Blog
2. RSS Feed
3. Discussion Forum
4. Surveys
5. Wiki
6. Podcast, etc. Developing an interactive web 2.0 website requires more time, technical expertise, and investment of money. Static websites do not have the ability to encourage collaborative content development. An ideal site for a new generation library does the following (Cohen, 2006):
7. Users participate in the creation of resource lists in the subject areas of their research.
8. Users contribute to search suggestions created by reference librarians' instructions.
9. Users add technical instructions for tasks such as logging off the site, using EndNote, using printers from the library, tips on working with workstation software, and more.
10. Users comment on library services using blogs linked to main services pages, for example: reference, inter library loan, circulation, reservations, online catalogue, website, technology in general, physical installation, etc. A website with this type of setup, based on both wiki and blog, would be very different from typical library-managed sites.

2.2. Open source content management system

A content management system (CMS) is a computer software system that is used to assist its users in the content management process. A CMS makes it easy to organize, control, and publish a large number of documents and other content, such as images and multimedia resources. A CMS often facilitates collaborative document creation. A web content management system is a content management system with additional functionality to facilitate the tasks required to publish web content on websites. Content management systems are widely used to create websites, portals, and intranets in business, educational, and non-profit organizations.[3] The following benefits are available with content management systems:

1. Create and publish content in a standard format without the need to know HTML or other languages;
2. Coordinate the work of groups of authors and editors (for example, ensuring that only one person at a time is editing each piece of content);
3. Verify the branding and quality of the content (for example, ensure that the correct style sheets are applied and that changes to the content are approved prior to publication);
4. Reuse the same content item across multiple sites and formats.

Open-source content management systems are the result of the open-source software movement. Conceptualized the values and principles of open source in the development of the content management system. Open-source software provides a new sense of optimism among users and software developers about the free use and sharing of software. It encourages the freedom of the user to run, copy, distribute, study, modify and improve the software. The freedom to use a program means the freedom of any type of person or organization to use it in any type of computer system, for any type of global work, and without the need to subsequently communicate with the developer or any other specific entity (Free Foundation Software, 2005). The open-source software model ensures community participation in software development, which is most important to the overall well-being of our society. Most open-source content management systems are available for free and can compete with commercial alternatives.[4]

2.3. Scope of the content management system in the development of the library website

Updating or creating content by editing HTML tags requires some knowledge of the CGI markup and programming

language. HTML tag errors that occurred when the web page was updated can distort the content of the web page. The intuitive interface can ensure accuracy and save time between creating and publishing content. An information professional without technical knowledge needs a user-friendly interface to drive the information content on the library website. Content management systems provide a web-based user interface for uploading information to the website. Content creators can easily manage and distribute text, audio, video, and other types of documents in digital format (PDF, RTF, ppt, doc, etc.) with the help of a simple content upload interface. Additionally, content management systems allow simultaneous access to content developers from multiple locations. This feature is useful in the case of libraries with branches or departments active in different activities. Content management systems help information professionals manage website content by targeting its accuracy and value without thinking about the technicalities more about this original text. The original text is required for additional information about the translation.

2.4. Selection, installation, and maintenance of the content management system

Selecting from over 100 open-source content management systems is a complex process. Choosing a content management system now consists of comparing the features each offer with what you want to do and choosing which one offers the best combination (Oake, 2006). The open-source content management system is freely downloadable from software websites, and this allows users to test the software before deploying it to the work environment.

Content management systems use various technologies and programming, such as PHP, ASP, PERL, Python, and Java. The databases they support are MySQL, Posture, and Oracle with Windows or Linux. The most popular content management systems developed on the PHP-MySQL-Windows / Linux platform. PHP is a popular open source programming language used to develop server-side applications and dynamic web content. The setup and installation of PHP-based content management systems requires only minimal technical knowledge. The most popular PHP-MySQL based content management systems are,

1. Joomla
2. Mambo
3. phpNuke
4. PostNuke
5. Drupal
6. Type3

All of these open source content management systems are powerful, cross-functional, and can be used to develop websites, intranets, and portals. In addition, a range of additional modules and functional components are available with an intuitive control panel. Community-based open source content management system software projects ensure strong user support and active development status.

The content management system runs on the web server platform (eg Apache) and the content is stored in a relational database system (eg MySQL). The administration and the public user interface are the two available interfaces of a content management system. Both interfaces are accessible through a web browser.

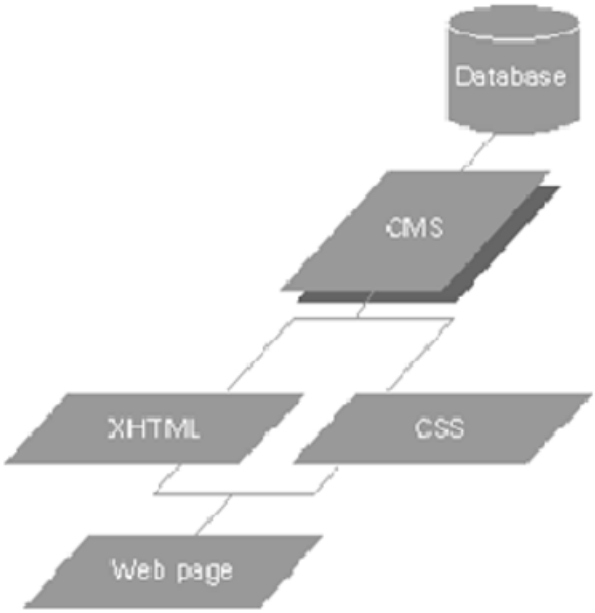

Fig. 1: Structure of a content management system

Installing the content management system alone does not make the system ready for use. After the installation of the content management system, a redesign of the site and the creation of forms and workflows for content entry are necessary. Customizing the existing content management system design is good for maintaining the library's branding design. This can be done by editing CSS (Cascading Style Sheet) base graphics templates. Defining workflows and forms suitable for the library's needs is a prerequisite for content entry and publication by website writers and editors.

Administrators and content creators are the people responsible for making the content management system live in an organization. The content management system administrator is responsible for maintenance, customization, creation of user accounts and privileges. The content creators submit the content to the system and the administrator accepts or rejects the document. Accepted content is published through the content management system and users can view the content on the website.

Content management systems are not without their drawbacks. Content management systems require an initial investment in technical support and a dedicated server.

Technical assistance is essential for customizing graphic design and workflow generation. The content management system is effective in an environment where the website content is regularly updated.

2.5. Problems solved with traditional web technologies

A lot of time and money is spent managing static content - especially with sites that have hundreds or thousands of pages. The sites are growing and have more and more content. Successful sites quickly accumulate large amounts of content. The report found that controlling content chaos is the main reason companies seek ECM solutions. The most chaotic content was external tweets, instant messages, and blog posts. The design of the pages and the "style" of the site are inextricably linked with the content itself; to update the content, you must use people with HTML experience or you risk mistakes and style problems. Significant IT time and financial resources are used in content management. Separating content creators from authors - This costs time and money, and accuracy and timeliness.

2.6. What is the diversity in today's CMS market?

1. The content management platform consists of an environment and development tools in which content management solutions can be implemented.
2. Content portals manage and administer content and services such as web information services.
3. Virtual classroom management systems support the publication of content for online learning and collaboration through forums, chat, online assessment, etc.
4. Digital library systems organize content around users, collections, and services. These systems typically provide management and collaboration tools and services organized around collections.
5. Digital publishing systems are focused on digital publications such as newspapers and magazines.
6. Collaboration systems provide tools for group work, such as the support of groups of users working together on projects. These types of systems manage workflow, users, process and workflow checkpoints, content deliverables, and these systems provide collaborative tools for communication and control of activities. Collaboration systems include the concept of wikis, which allow the "creation of documents for communities of shared interest".
7. Weblogs are typically single-user, simple workflow publishing systems that allow non-technical users to post documents on the World Wide Web.
8. Web content management is "the creation, publication and management of company information and documents on the web."
9. Document management software manages document lifecycles. This includes authorship, collaborative authorship, and archiving.
10. Integrated document management software scans, indexes, retrieves and archives digital images.
11. Digital asset management software manages the lifecycle of digital content, such as images.
12. Media asset management software handles highly complex types of digital assets, such as video and sound.
13. Records management software maintains documents throughout the long-term document life cycle.

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Clients alike and is becoming a community of interest with professional organizations such as the Association for Image and Information Management (AIIM, www.ai im.org). AIIM defines ECM as "the strategies, methods and tools that are used to acquire, manage, archive, retain and deliver content and documents related to organizational processes. Previous reports highlight several key findings and conclude that ECM implementations are driven by increased efficiency and optimal business processes, reduced costs and compliance needs, and that content chaos management is the single most important trigger that drives companies to seek an ECM solution.

AIIM indicates that there are four main areas of consideration for the ECM, or the four Cs:

1. Compliance,
2. Cooperation,
3. Continuity, and
4. Cost.

Developing compliance in an ECM system can reduce these costs. There is a growing need for collaboration tools within companies leading to records management, knowledge management, and collaborative material fulfillment needs. The AIIM indicates that the cost of implementing an ECM initiative must be weighed against the cost of inaction and cautions against overemphasizing return on investment.

2.7. Research objective, clearly stated, preferably in the form of a question

What are the limits or problems that companies face when managing the content of their website according to the traditional model? How much dependence do companies have on technical staff also for site content updates and additional problems / costs associated with it?

2.8. Research approach or methodology theoretical framework

A framework is developed to understand that success is influenced by factors related to information systems.

2.9. Theoretical framework

There are four areas of ECM to consider when adopting a new system.

1. Company
2. Process
3. Technology
4. Content

While a new project may have a clear plan with well-defined goals and objectives, it may not achieve the expected success without top management support. If an implementation considers all process, business, and content factors, but does not consider technology, it will not achieve the expected success. The fourth area, content, is not included in the theoretical framework since there is no proven content model. The content is included as an extension of the framework derived from Torvinen et al. untested model. Success is achieved by combining the intended use of the system and user satisfaction and its direct effect on individual and organizational impacts. This model has been extensively tested and is appropriate for defining the success of your ECM implementation. The success of the implementation is influenced by independent variables that influence the implementation process in a positive or negative way. Combining these framework models allows you to divide your implementation factors into appropriate subject areas and further determine their impact on your implementation success. More about this original text the original text is required for additional information about the translation.

3. Source of Funding

None.

4. Conflict of Interest

None.

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