

Research study on content management systems (CMS): issues with the conventional model and CMS's benefits for running business websites.

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I Abstract or Executive Summary

This study examines the challenges businesses now experience in managing their websites using the **conventional approach** and the benefits or enhancements a content management system may provide. The process of gathering, organizing, categorizing, and arranging material that will be shown on a website is known as **online content management**. By isolating the content from the display and providing the content provider with an intuitive interface for adding material, CMS's offer a dispersed content model. This study has two objectives. The first goal is to examine how business users manage the material independently of technical staff. What impressions do they have of utilizing the system? Secondly? Numerous business professionals freely took part in this qualitative investigation. Personal interviews, server statistics, and an open-ended questionnaire collected the data. Descriptive statistics for the **quantitative data** and content analysis for the **qualitative data** were used in the comments. The results show that participants agreed with the idea of using the potential of content management.

II Introduction

Content Management Systems (CMS) are crucial in managing and organizing website digital content. A CMS is a software application or a set of programs that allow users to create, edit, organize, and publish digital content easily without requiring extensive technical knowledge. It provides a centralized platform for content—creation, storage, and distribution, enabling efficient website management.

Problems in the Traditional Model:

Before the advent of CMS, managing websites involved manually coding each page and updating content individually. This traditional model posed several challenges:

1. **Technical Expertise:** Developing and maintaining websites requires advanced coding skills. Non-technical

users found it difficult to make updates or publish content independently.

2. **Time-Consuming:** Changing a traditional website involves modifying multiple web pages. It was a time-consuming process, especially for large websites with numerous pages.

3. **Inconsistent Design:** With a standardized framework, traditional websites often have consistent design and layouts across different pages, leading to a better user experience.

4. **Limited Collaboration:** Collaboration among team members, such as content creators, designers, and developers, could have been improved as they had to work separately on their respective tasks and coordinate manually.

5. **Content Duplication:** In the absence of a centralized content repository, it was common to have duplicate content across various web pages, resulting in maintenance issues and decreased search engine optimization (SEO) performance.

Advantages of CMS in Managing Corporate Websites:

Content Management Systems address the limitations of the traditional model and offer numerous benefits for managing corporate websites:

1. **Easy Content Creation and Editing:** CMS platforms provide user-friendly interfaces, allowing non-technical users to create, edit, and format content effortlessly. Content authors can focus on the message rather than the technical implementation.

2. **Streamlined Workflow and Collaboration:** CMS facilitates seamless collaboration among team members. Content creators, designers, and developers can work together within the system, eliminating the need for manual coordination and speeding up the website development process.

3. Centralized Content Repository: CMS offers a centralized location for storing all digital assets, such as text, images, videos, and documents. This ensures easy access and version control and reduces content duplication.

4. Template-Based Design: CMS platforms often provide pre-designed templates or themes that ensure consistent branding and design across the website. This leads to a visually appealing and professional-looking website.

5. Efficient Updates and Maintenance: With CMS, making updates to the website is simplified. Changes can be implemented globally, instantly updating all relevant pages, saving time and effort. Regular maintenance tasks, such as security updates or backups, are often automated.

6. User Permissions and Access Control: CMS enables granular user permissions, allowing administrators to define roles and access levels for different team members. This ensures data security and prevents unauthorized modifications to the website.

7. SEO Optimization: CMS platforms offer built-in SEO features, including customizable URLs, meta tags, and XML sitemaps. These tools help improve search engine rankings and drive organic traffic to the website.

8. Scalability and Flexibility: CMS platforms are designed to accommodate corporate website growth and changing needs. They can handle significant content and support additional functionalities through plugins or extensions.

Conclusion:

Content Management Systems have revolutionized the management of corporate websites, overcoming the limitations of the traditional model. By providing a user-friendly interface, streamlined workflows, centralized content repositories, and a range of other features, CMS platforms empower organizations to efficiently create, manage, and maintain their digital content, ultimately enhancing the overall user experience and achieving business goals.

III Literature Review

This literature review's primary goals are to analyze prior studies, highlight essential research papers, spot trends, and provide a theoretical framework.

Previous studies have concentrated on the issues with today's content management systems, where digital material constantly expands, and there are ever-increasing

expectations on how it is handled and provided. The globe is facilitating easy access to human knowledge. The tremendous expansion of information continues to provide difficulties for the World Wide Web and other information warehouses. Solutions referred to as content management systems (CMSs) can often satisfy these requirements.

IV. TRADITIONAL WEB TECHNOLOGIES ARE USED TO ADDRESS THE FOLLOWING PROBLEMS:

Spending a lot of time and money monitoring static material, especially for websites with hundreds or thousands of pages Websites are expanding and have a tone of material now. Successful websites quickly amass substantial volumes of material. According to the study, the primary motivation for businesses to use ECM systems is to manage content anarchy. Tweets, IMs, and external blog postings had the most disorganized material.

The layout of the pages and the "style" of the website are intricately tied to the content itself; changing the material requires the assistance of experts in HTML to avoid mistakes and style issues.

The management of content consumes a substantial amount of IT effort and money. It takes time, money, and precision to distinguish the content's creators from its writers.

Content management consumes a significant amount of IT time and financial resources. Separating the content creators from the writers is time- and money-consuming, inaccurate, and outdated.

Why is a CMS needed for a business to administer its website?

1. Division of labor
2. Brand identity
3. Multiple sites
4. Particularly if High volume
5. Need for flexibility.
6. Personalization
7. Differential display
8. High peaks
9. Database orientation
10. Integration of related functions
11. The high number of hits
12. Varying content sources
13. Changing content
14. Openness
15. Multiple authors, contributors, and editors

How diverse is the CMS market today?

- A content management platform comprises an environment and development tools that may be used to implement content management solutions.
- As web information services, content portals manage and oversee content and services.
- Through forums, chat, online assessments, and other means, virtual classroom management systems facilitate the publication of information for online learning and collaboration.
- Systems used by digital libraries group material according to users, collections, and services. These systems frequently offer collaboration, administration, and tool services based on collections.
- Digital publications like newspapers and magazines are the main emphasis of digital publication systems.
- Collaboration systems offer resources for group work, such as the ability for user groups to collaborate on projects. These systems provide collaboration capabilities for communication and activity control, and they handle workflow, users, process and workflow control points, and content outputs. Wikis are a collaboration system component that allows for the "elaboration of documents for interest-sharing communities."
- Weblogs are often single-user, straightforward workflow publishing platforms that let non-technical individuals post material to the Internet.
- The generation, publication, and administration of business information and documents on the web are referred to as web content management.
- Document lifecycles are managed using document management software. This covers authorship, group authoring, and archiving.
- Digital photos are scanned, indexed, retrieved, and archived using integrated document management software.
- The lifespan of digital content, such as photos, is managed through digital asset management software.

- Video and sound are high-complexity digital asset categories handled by media asset management software.
- Documents are maintained by records management software during their long-term document lifespan.
- CMSs sometimes track taxonomies and their connections. An ontology is a type of information structure.
- ECM originates in earlier systems like knowledge, content, documents, and records management. The same defining approach is applied to enterprise content management as to precursor technologies like decision support and enterprise systems.

V. Research methodology or approach

The theoretical framework is created to comprehend how information systems-related elements affect success.

Theoretical Foundation When implementing a new system, four areas of ECM should be considered.

1. Enterprise,
2. Process,
3. Technology, and
4. Content makes up the list.

A new project may have a clear strategy with specified goals and deadlines, but if top management support is lacking, it may not be successful as planned. An implementation will not be successful if it considers all process, enterprise, and content elements but ignores technology. Since there is no tried-and-true model for content, the fourth category, range, is not included in the theoretical framework. The information is presented as an addition to the framework created by Torvinen et al. (2006) using an untested model.

Success results from anticipated system usage, user happiness, and their immediate effects on people and organizations. This model has undergone extensive testing and is suitable for determining the success of an ECM implementation.

Combining these framework models makes it possible to categorize implementation elements into pertinent problem areas and further assess their influence on implementation success.

Research Methodology:

The method used in this thesis is outlined here. It includes information on the organization selected to conduct the study, the research technique, and the procedure for acquiring data, analyzing it, and coming to conclusions. The viewpoints of others on the thesis topic were also made clear. Research technique is gathering information by investigating one's area of expertise, including collecting observations, gathering data and evidence, and learning new information. The choice of this research subject was influenced by the extensive usage of content management systems and open-source software in both big and small businesses. Another aspect of selecting this thesis subject is the belief among application developers that CMS software will not improve one's comprehension of online applications. The theoretical framework underpins the research strategy, which defines success factors for three of the four topic areas—theoretical considerations for business, procedure, and technological concerns. Tyrvaïnen et al. (2006) indicated the untested content issue area in the study model's structure. Several aspects from the literature were grouped into the model using the theoretical framework's categories of individual (business), task-related (processes), and technological (technology) elements.

The following section goes through the concerned regions and related factors.

a) Managerial factors:

b) User Factors:

c) Task-Related elements:

d) Content variables:

Sampling: s

A sample is a subset of the population frequently chosen to speak with every participant. The population needs to be more active regarding time, money, and other resources. Each job they perform for their company is given to a team of workers. In addition to the notes made during the interview, each transcript was carefully studied, and themes, patterns, and insights were highlighted. When this process was complete, related ideas and subjects were gathered and given a conceptual label. Two group discussions were held to discuss early findings and the researchers' perceptions of the participants. Businesses that employed content management systems but used the traditional strategy were the basis for the groups. This qualitative study of people's experiences at work was

conducted by ten specialists using a CMS and a conventional format—those who could not attend cited illness and unavoidable circumstances as their reasons. The group talked for over two hours in the conference room of their workplace, beginning with an explanation of the study's methodology and reasoning. The information provided was in-depth and comprehensive and repeated longitudinal interviews are typically preferred for learning about deeply felt events. The primary benefits of the study are fresh perceptions and comprehension of how people use CMS before, during, and after deployment. The researcher's experience is the first factor affecting these findings, as he has a substantial working knowledge of conventional and CMS environments. His identity was disclosed to the participants.

Analysis Method:

- First codes
- Added notes and thoughts; searched for trends, themes, connections, sequences, and distinctions.
- Investigated patterns.
- We have detailed, limited generalizations.
- We have constructed theories by linking generalizations to the corpus of knowledge.

The company's decision to transition to CMS depends on a few variables. A poll was conducted to analyze the data and found that 41% of respondents were managerial, 12% were users, 27% were task-related, 11% were technological, and 7% were content. The frequency of occurrences for each category was as follows: 41% were managerial, 12% were users, 27% were task-related, 11% were technological, and 7% were content. This suggests that managers have significant decision-making power.

Comparison of the functionality offered by CMS vs. traditional website management:

- Do you want a group of people to review the information before it is posted on the website? 95% of respondents agreed, citing the contents' proneness to inaccuracy and the necessity for ongoing evaluation before publication.
- Do you want to update on the server machine or a simple user interface with template forms? Since it is simpler to handle content than traditional website management, 75% of respondents stated they desire this capability.
- Do you prefer using browsers to manage users over UNIX scripts?

Managerial	User	Task-related	Technological	Content
39%	11%	33%	10%	7%

Planning to move to not planning to

VI Importance of the research

The online side of a business, which deals with web-related material and the representation of that content over the web, is covered in this study project, making it crucial. From a business standpoint, the material is viewed as a resource for the company. It also compares constructing a web application with existing web technologies like J2EE, dot Net, PHP, etc., to build a website using a CMS. This study aims to give organizations factual evidence to support the business case for using an ECM system.

VII Limitation and critical assumptions

Limitations:

1. Not all responders in a team or organization may thoroughly understand the issues with the current website administration because they may serve as the team's shadow or buffer resource.
2. Because the poll or interview was performed in February and March, when businesses often do not expect to add extra funding for new technology, the results may only be partially accurate.

Assumptions:

1. Enterprise content management systems are presently in use throughout organizations, and the correct CMS may be found at an affordable price.
2. The sample selected for this study consists of businesses using conventional web technologies or any of d. the content management systems. Therefore, the piece is typical of all IT organizations, including those where websites are created or maintained.

VII Conclusion

The data study suggests that most organizations wish to move to CMS from the old model due to the diversity of demands in today's business context. Companies already

using CMS want to move to one that provides additional capabilities necessary to enhance the website's user experience further and make website content management procedural.

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