Modeling Issues of Online Vendor Web-Based Content Management System (WCMS) for Software-like Business Content Processing

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ABSTRACT

Web-based Content Management Systems (WCMS) consist of applications that are used to create, manage, store and deploy content on the Web, including text, multimedia data(graphics, video or audio),andapplication code. Web-based Content Management Systems are often a component of Enterprise Content Management (ECM) solutions. The Content Management layer contains the core components for the Web Content Management Application. In WCMS, the authorization component grants the appropriate privileges to users, based on their respective roles. Also the library Services provide the core content management functionality (check-in/out, version control), along with Publish, Staging, Logging, and Content Reporting/Auditing.

The Web Interface and Portal Application presents the contents to the various user segments based on their authorization. Remote portals (e.g., web parts, gadgets, widgets) can be used to embed the content management functionality or sourced content in portals provided by other vendors. The search indexing engine can create searchable indexes from websites supported by the WCMS solutions. This paper concerned with some review work, introduction towards some basic modeling of CMS/WCMS for Business Processes with the reference of entire reviewed sources.

Key words: Authorization, BPM, CMS,ECM, Indexing, Privileges, Roles, WCMS.

INTRODUCTION

Web-based Content Management System (CMS) is critical to the success of almost every website and intranet, internet, and yet many organizations are not familiar with this technology.The dramatic growth in Content Management Systems (CMSs) and technologies - there are hundreds of CMSs, including dozens of open source tools - has defined the usual rules of business software markets. The number of new product launches by old and new companies somehow still manages to keep ahead of the ongoing consolidation. This is very healthy.Fortunately, there is an industry effort gathering steam to provide an open and free list of CMS products and features. This public domain classification will be based on an XML schema, so that anyone can use the information. Web Content Management Systems (WCMS) consist of applications used to create, manage, store and deploy contents on the Web, including text,

graphics, video or audio, and application codes.Web Content Management Systems are often a component of Enterprise Content Management (ECM) solutions and can be used to model the software- like Business Process.[2]Generally, a business process can be defined as a set of one or more linked and partially ordered activities, which collectively realize a specific goal (Davenport & Short, 1990).[1] However, the scope of these standards is limited to the basic WCMS solution.

CMS: DEFINITION

A content management system (CMS) supports the creation, management, distribution, publishing, and discovery of corporateinformation[2].

WCMS covers the complete lifecycle of the pages on site, from providing simple tools to create the content, through to publishing, and finally to archiving[2].

WCMS provides the ability to manage the structure of the site, the appearance of the published pages, and the navigation provided to the users[2].

Business Benefits of WCMS

There are a wide range of business benefits that can be obtained by implementing the WCMS, it includes:

o   Streamlined authoring process
o   It gives faster turnaround time for new pages and changes
o   It has greater consistency
o   It provides improved site navigation
o   It increases site flexibility
o   WCMS support for decentralized authoring
o   Increases security
o   Reduces duplication of information
o   Providesgreater capacity for growth
o   Reduces site maintenance cost[2]

Software-like Business Process Oriented Design Model

Given byScheer, a business process is the occurrence ofsome duration that is triggered by an event and results into some another event.[1]The model (Fig. 3.1) is given below. The model has 6 steps thathave to be performing one by one.The very first step is one should have to analyze and scan the business model. The scanning and analysis is done throughout the market to know the current requirements of the businesses or organizations. This is needed because we want to develop such a WCMS which useful to businesses and organizations, also which increases the profit of the WCMS Vendor.

The filtered data of first step is supplied to 'business process planning and strategies', which is second step. In this step, the planning of analyzed and filtered data (nothing but the requirements of clients/business) is done. Based on planning, different strategies are developed.

After this, we need to reengineer the process, this is done through the third step i.e. 'business process reengineering'. In this, we search for the alternative ways to develop the process and we select the best of them.

Foundation Models for Web Based CMS MIS
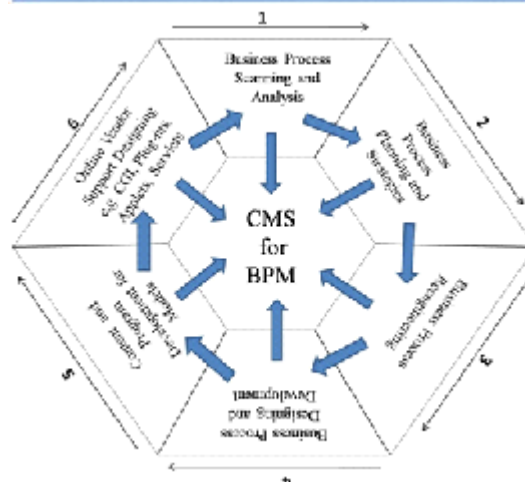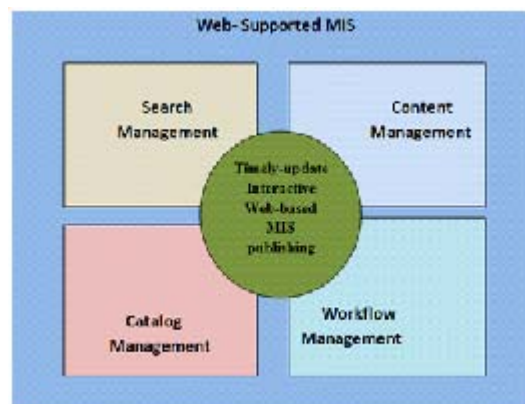
In the fourth step i.e. 'business process designing and development', we make the blueprint (modeling/Designing) of the business process. It means we describe the working of WCMS in the form of Data Flow Diagrams, Control Flow Diagrams, and UML Diagrams etc.for better understanding of the system.

The next step i.e. 'content and program development for models' as the name implies it is used to map the model into the actual content as well as application code.

The last but not least is the sixth step i.e. 'online vendor support designing'. At the time of implementation, we require Common Gateway Interface (CGI), Applets, Servlet, different types of plug-ins etc. All this support is provided by the Online Vendor.

While performing all these six steps, simultaneously we are developing the Content Management System (CMS) for Business Process Modeling (BPM). In the figure, the arrows pointed to centre does the same job.

This is the second vital model to learn about what fundamental criteria have to be follow when someone thinks about CMS supported MIS-Web-sites, since idea development to CMS implementation process. The most important pillars for effective web supported MIS, are

Search Management

For e-commerce web-sites, powerful, efficient and effective search management is necessary. This searching can help customer/end users to find out specific product or service information they want to evaluate or buy. Normally e-commerce software packages include faster search engine or customized e-commerce search engine from search Technology Company's link merge into it.

Content Management

Content management software & tools becoming more popular in e-business/.com business companies. This is used to develop, generate, deliver, update and archived text, graphics data and multimedia information at

business web sites. Many live presentations are now display with browser software and computer projectors, using an Internet link to display web pages as slides and using the hyperlink capability of web pages to navigate from slide to slide. Because browsing software available for almost any desktop computer system, speaker do not have to around their own computer instead, they can expect their presentation to work on any system that they are provided. Because multimedia elements can easily be built into the presentation, a flexible, powerful, and appealing display format is attainable. Add the capability to think to any other related web sites in the world and provide attractive means of conveying information to live audience.

Catalog Management

com business concept is normally stored in the form of multimedia catalog of products information management of such catalog is known as catalog management. Content and catalog management software's normally work with the profiling tools to personalize the content of web pages seen by individual users. Content and Catalog Management helps customers in designing their own system.

Workflow Management

Workflow Management software is used to automate and manage various business process of e-commerce applications. E-business workflow system helps employees electronically collaborate to accomplish structured work task within knowledge based business process

Online W-CMS Model

The 'Online W-CMS Model' can be viewed as cylinder which contains the different four layers. The W-CMS model is the combination of four different layers; they are L1, L2, L3, and L4. The core layer is the L1 which is nothing but the Content Management System because contents are the basis for WCMS. The next layer i.e. L2 contains the website which is fully platform independent.so it can be execute on different business workstations having different configuration. It includes software like Web process logic and can be implemented using XML, .Net, PHP, Perl, Java etc. The third (L3) layer having the CGI, Applets, Servlet, Plug-ins etc., which are needed for data communication in

WCMS. The last layer is the L4, which is nothing but the interface to the OnlineCMS Proxy Servers. Business is having only one Online CMS Proxy Server. Whenever any client want service from the WCMS Main Server, then it fires the query which is goes to the Online CMS Proxy Server .After this, proxy server sends the CMS Request to the Remote Server i.e. Online CMS Main Server. After receiving the CMS Request, the Main Server provides the service (Response) to the Proxy Server i.e. it grant the request and executes the Business Process. The Online CMS Proxy Server, then, provides the service to respected client (Business Workstation). The Online CMS Main Server is also called as Online CMS Vendor, because, the implementation of four layers is done by the Vendor or we can say, it provides the implementation of all layers and provides the support for the same. The model is shown in the Fig. 4.1.

CMS limitations

The need to speed up the design and building of intranets and websites has led to the growing use of content management systems
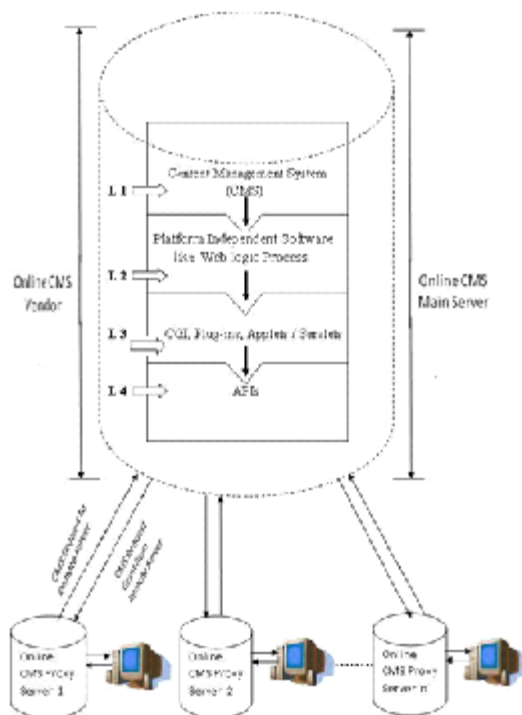
Fig. 5.1: Business Workstations with Business Processes

(CMS). But the limited facilities they provide adversely affects the quality of content.

Some cruder CMS systems do not allow the writer to format the appearance of text, for example:
o   don't allow the importing of text from other software content such as Microsoft Word or Excel. Or this causes screen corruption.
o   disallow indentation
o   provide poor table editing features
o   do not provide auto bulleting or numbering
o   as web pages are added and removed - they fail to manage related links adequately

CONCLUSION

We recommend that educators consider many factors when choosing a CMS. While some of these factors are purely technical, such as what type of server is required to run the CMS, others are more profound. By definition, most any CMS will enable basic activities like managing users and organizing and controlling their access to content. A demand for certain features like wikis might help narrow the decision, but popular features like blogs, announcements, and calendars are almost ubiquitous. In short, the difference between one CMS and another might appear slight.

Security requirements for users of cms computer systems

Anyone with access to CMS Computer Systems containing sensitive information must abide by the following:

o   Do not disclose or lend your identification number and/or password to someone else.
o   They are for your use only and serve as your electronic signature. This means that you may be held responsible for the consequences of unauthorized or illegal transactions.
o   Do not browse or use CMS data files for unauthorized or illegal purposes.
o   Do not use CMS data files for private gain or to misrepresent yourself or CMS.
o   Do not make any disclosure of CMS data that is not specifically authorized.

o   Do not duplicate CMS data files, create sub files of such records, remove or transmit data unless you have been specifically authorized to do so.

o   Does not change, delete, or otherwise alter CMS data files unless you have been specifically authorized to do so.

o   Do not make copies of data files, with identifiable data, or data that would allow individual identities to be deduced unless you have been specifically authorized to do so.

o   Do not intentionally cause corruption or disruption of CMS data files.

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