

Information Management in Digital Era

Editor
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Published by

Information Resource Center

Vivekanandha Institute of Engineering and Technology for Women
Elayampalayam, Tiruchengode-637 205, Tamilnadu.

In collaboration with

Indian Academic Library Association (IALA), Tamil Nadu Chapter

Knowledge Management And Bioinformatics

The success of Knowledge management in Bioinformatics can be achieved by the assistance of Knowledge Technology. Knowledge Technology is a part of Knowledge management, refer to an unclear set of tools including languages and computing tools. Knowledge Technologies are knowledge mapping, organization and exchange of information and knowledge. Among the existence of text, stories, models, numbers or abstract symbols between map makers and map users. Knowledge maps are excellent tools to capture and share explicit knowledge in organizational contexts. (Wexler, 2001) Knowledge Mapping tool in the system will help the user of the system to map the document consists of certain knowledge to their category. For instances, the system user will key in the category of the knowledge that want to submit to the system. The category can be chose from existence categories or user construct a new category but with the system administrator permission. The permission in constructing a new category for the submitted knowledge is to avoid redundancies happened in the databases. Besides that, Knowledge Ontology as part of semantic technology also one of technology to be implemented in the knowledge management systems in Bioinformatics with Collaborative Environment but currently, the Knowledge Mapping and Knowledge Ontology is still in development phase.

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60. ROLE OF WEB TECHNOLOGY ON THE LIBRARY SERVICE

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Abstract:

Web is an ideal media for providing information to the users. These technologies includes Client-Server Technologies, Web Browser document mark Up Languages like HTML(Hyper Text Markup Language), XML (extensible Markup). Today library and information professionals are developing digital libraries for their users. They are more dependent on the web technologies for quick delivery of information and other allied services of the library. This paper highlights the web technology and its role in providing library and information service.

Keywords: web technology, internet, Social Networking and library service

1. Methodology:

The study is based on secondary data includes books, journals and published documents etc. The paper is an analytical and descriptive one.

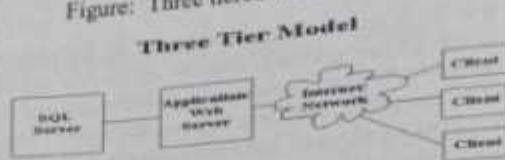
2. What are Web Services?

Web services have following characteristics:

- They form a distributed environment. Objects can be remotely accessed via interfaces and proxies, and operations can be performed on them
- They use a three-tiered model.
- Its components are loosely coupled. It is possible for a client to query the broker at run-time, get the interface to a service, and bind to it without having to hardcode a URL or even a method name.

- For communication, they rely on open Web standards: TCP/IP, HTTP, and XML. Higher level protocols like procedure calls, description, publishing, binding and so on are based on XML grammar.

Figure: Three tiered model.



Access To Database

Several publishers today offer web-based, intranet solutions for providing local access to their databases. Examples include Silver Platter, Cambridge Scientific Abstract and Institute for Scientific Information. EBSCO Journal publisher have also begun to offer similar solution, e.g. Elsevier, Springer. Large no of R&D have been taken place to develop the digital libraries and take the advantage of these developments and provided desktop access to key database and electronic publications to their users.

Apart from the externally purchased databases, libraries have their own collection of CD-ROM, DVD databases mounted on their CD server/tower. Online database vendors such as Dialog, Lexis-Nexis, ERIC are delivering their database over internet. So a library which subscribes to these databases can now easily access them over NPTEL (National programme on Technology Enhanced Learning) is an example of online database which is developed by the renowned Professors of the different seven IITs and IIISc Bangalore have developed the curriculum based both video and audio courses. It is a collaborative project with ministry of HRD, India. Each course contains the different databases of the different subjects. Till now more than 129 web courses in engineering and science have been developed. Each course contains materials that can be covered in depth in 40 or more lecture hours. In addition, 110 courses have been developed in video format, with each course comprising of approximately 40 or more one-hour lectures. In the next phase other premier institutions are also likely to participate in content creation. The NPTEL project, receives its funding support through the National Mission on Education through Information and Communication Technology (NMEICT) since the year 2009.

Blogs:

This is a powerful two way web based tool. A blog is a website where library users can enter their thoughts, ideas, suggestions and views. Blog entries known as blog posts are made in journal style and are usually displayed in reverse chronological order, entries listed in specific categories that can be searched; links to other sites of interest and places for comments. A blog entry might contain text, images or links to other blogs and web pages. Any user can publish a blog post easily and cheaply through a web interface, and any reader can place a comment on a blog spot.

Social Networking:

Social Networks are built upon a hypothesis that there exists a determinable networking structure of how people know each other. A social network thus can be formalized into a net structure comprising nodes and edges. Nodes indicate individuals or organizations. Myspace and Facebook are two popular social networking sites launched during 2003 and 2004 respectively. Myspace allows organizations to create their own profiles, pages and can be used by libraries. But Facebook allows individual librarians to create profiles.

Podcasting:

A podcast is a series of audio or video digital media files which is distributed over the internet. By syndicated download through web feeds to portable media players and personal computers.

16.1 Use of Podcasting:

- Podcast promotional recordings about the library's services and programs.
- Podcast highlights about new resources.
- Podcast enable librarians to share information with anyone at any time.
- Podcasting can be a publishing tool for users and librarians' oral presentation.

17. Tagging:

A tag is a keyword that is added to a digital objects to describe it, but not as part of a formal classification system. The concept of tagging has been widened far beyond website bookmarking, and services like Flickr (photos), YouTube (video) and audio (podcast) allow a variety of digital artifacts to be socially tagged.

Use of tagging in Libraries:

Tagging can be applied to the library management system editing the subject heading from the user point of view and thereby enhancing the indexing and relevancy of the searches, making the collection more dynamic.

Using would greatly facilitate the lateral searching.

Ask-A-Librarian

Ask-A-Librarian services are internet based question and answer service that connects users with individuals who possess specialized knowledge and skill in conducting precision searches. Most "Ask-A-Librarians" services have a web based question submission form or e-mail addresses or both. Users are invited to submit their queries by using web forms or through e-mail. Once a query is ready by service, it is assigned to an individual expert for answering. An expert responds to the query with actual information and or a list of information services. The response is either sent to the users e-mail account or is posted on the web so that users can access it after a certain period of time, services and take the initiative to provide them. Further research and complete intensive study should require relating to the development of the library's web based services.

26 CONCLUSION:

From my conversations with colleagues and these studies, it is clear the workload of web librarians is already split between web-related and other library tasks. But today's technological environment has created new implications for existing services and new demands for staff time. Now, therefore, is the time to reconsider how libraries can best allocate resources to provide effective web services. The role of librarians has changed considerably with the advancement of information technology. Libraries should make consistent efforts to provide web-based services to their users and it is the role of the librarians to act as a guide and be up-to-date himself and should know the usefulness of web sites, web portals. There is an urgent need to develop dynamic websites with direct hyperlink to the different library's websites library services and take the initiative to provide them. Further research and complete intensive study should require relating to the development of the library's web based services.

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61. CLOUD COMPUTING USE OF DIGITAL LIBRARY MANAGEMENT IN CURRENT TREND

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Abstract

Latest technological development has brought a dramatic change in every field, and library science is not exception to it. Information technology impacted positively on library and information system and services they provide for users. The libraries have been automated, networked and now moving towards paper less or virtual libraries. To gather challenges in the profession librarians are also applying different platforms in Library science filed for attaining economy in information handling. This paper overviews the basic concept of newly developed area known as cloud computing. Cloud computing provides a fascinating possibility for libraries that helps to increase data storage capacity, reliability, performance, and reduce technology cost.

Keywords Cloud computing, Library automation, Libraries, Information services

Introduction

Cloud computing is an expression used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. In science, cloud computing is a synonym for distributed computing over a network, and means the ability to run a program or application on many connected computers at the same time. The phrase also more commonly refers to network-based services, which appear to be provided by real server hardware, and are in fact served up by virtual hardware, simulated by software running on one or more real machines. Such virtual servers do not physically exist and can therefore be moved around and scaled up (or down) on the fly without affecting the end user - arguably, rather like a cloud.