

USING SOCIAL MEDIAS, CLOUD COMPUTING FOR DELIVERING LIBRARY SERVICES

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Abstract:

Today in the age of information technology library users are more techno savvy and required micro information about the subject. The technological revolution has influenced the libraries so deeply and profoundly. Social Networking sites are one of the new technologies offering libraries the opportunity to reach out or to satisfy the requirements of its clients. Moreover Cloud computing is also a new technology affected the services delivery of libraries. Cloud computing has become a major topic of discussion for any organization which relies on technology. Cloud computing is offering various opportunities for libraries. This paper made an attempt to give brief overview of use of social media tools and cloud computing for delivering library services as well as their advantages and challenges/ limitations, Reasons for using social media, Role of cloud computing in libraries and Present Situation of Indian Libraries.

Keyword: social media, Cloud Computing, web based information system.

Introduction:

The primary aim of the library is to offer a variety of services to its users to meet their specific information requirements. In the current scenario every users required pin pointed information on time. With the help of use of social media tools we satisfy the needs of the users. Currently, it has become a trend by libraries to use Social Media Tools (SMTs) to market their programs and services. They also use SMTs to connect and engage with their communities beyond the library walls. Also the new technology model, Cloud Computing is the use of computer resources (hardware and software) that are delivered as a service over a network. Today we are living in the information age. Information is exploring in large scale and information needs of the users are also growing rapidly. The users are expecting more from the information centre in the competitive world as quick as services from unknown information to known information. Libraries are adopting many new technologies to meet the information needs of the users and to provide better services. The user's main concern is not how the technology is implemented or what thoughts are being used to manage this technology but the only concern is that how they can easily access it and what level of security is necessary to meet their requirements. Cloud Computing is the recent technology trend in library science. Cloud computing has become a major topic for library and information centres. Anyone connected to the internet is probably

using some type of cloud computing whether they are using Google's, Gmail or searching the Web Bing they are engaged in cloud computing. In cloud computing the information is permanently stored on the internet servers and it can be cached or used by the users. Cloud computing provides us virtually unlimited and on- demand computing resources. The infrastructure of cloud computing is that it encourages the development of innovation in every field.

Definition of social networking:

Social media is an internet-based form of communication. Social media platforms allow users to have conversations, share information and create web content. There are many forms of social media, including blogs, micro-blogs, wikis, social networking sites, photo-sharing sites, instant messaging, video-sharing sites, podcasts, widgets, virtual worlds, and more.

Social Media = Sharing Caring Conversations Online

Social Media = The facilitation and practice of engagement and conversation online

A simple definition of social media is,

“Social media” means *websites that allow average users to create content and interact with each other around the content.*

According to Computing Dictionary (2011), Social networking site as any website designed to allow multiple users to publish content of themselves. The information may be on any subject and may be for consumption by friends, mates, employers, employees just to mention a few.

Barsky and Purdon (2006), on the other hand, pointed out that social networking websites collect data about members and store user profiles that are meant for sharing. These websites are offered for free and allow users to create personal pages filled with content like images, music and videos easily. These social networks also allow members to share web pages with friends and search for new friends who have similar interests.

Boroughs (2010) stated that social networking websites allow users to share interests and communicate with others.

What is Cloud computing?

Every library is developing digital contents and it can be put into their local storage with different application. Cloud computing is a new concept for libraries which stores data in servers and provide services to the users. Cloud Computing focuses on maximizing the effectiveness of the shared resources. Cloud resources are usually not only shared by multiple users but are also dynamically reallocated per demand.

According to the National Institute of Standards and Technology (NIST) definition (2009),

“Cloud computing is a model for enabling resources (e.g. networks, services, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”

With cloud computing multiple users can access a single server to retrieve and update their data without purchasing licenses for different applications. Cloud computing is not a new technology but it is a new form of computing. It facilitates in sharing the resources and services over the internet.

Cloud computing means:

- Automated backups, maintenance
- Automated upgrades
- Multi-tenant solution provided by vendor
- Modern web based integration
- Web and mobile – access from anywhere.

Cloud computing is a combination of:

- Servers,
- Networks
- Connections
- Applications and

- Resources.

Cloud computing is a model for delivery of resources as a service. Cloud computing encourages libraries and their users to participate in a network and community of libraries.

Objectives of the study:

The study seeks to achieve the following objectives:

- To explore the respondent's attitude towards the use of social media in marketing of library resources and services.
- To define the concept of Cloud Computing.
- To discover the library services that are clubbing with cloud computing technology.
- To investigate present situation of Indian libraries in order to adopt cloud computing into their library services.

Reasons for using social media:

- To publicize events, services, news and presence.
- To increase usage of library collections by promoting new and existing content.
- To connect with other librarians and keep abreast of industry news.
- To reach different kinds of needs of library users in today's modern online library.
- To provide quick updates to users.
- To spread news and service alerts.

Advantages of using social media:

- Financially the costs of using social media are perceived to be low.
- It requires little training.
- It promotes library services and disseminates news quickly, delivering this information more directly to library users.
- It increases engagement and interactions with library users.
- It helps gather feedback to enhance user services.
- The promotion of library holdings via social media can help increase usage of content.
- It enhances communication both within the library and with other departments.

- It can be used for outreach activities through onward sharing, well beyond the institution itself, helping build connections and reputation more broadly.
- Library services are provided to remote users.
- The opportunity to build a sense of community between the library and its users.
- Its ability to take the library service to users in their preferred spaces.
- Creates varied learning environment.

Challenges of using social media:

- Challenges associated with using social media in libraries include the following:
 - Limited internet access point.
 - Poor internet connectivity.
 - Lack of awareness of some existing SMTs by most librarians and users.
 - Social media can require considerable time commitment from library staff.
 - Social media can require technological expertise, for example customizing applications to provide access to online catalogs.
- It can be a challenge for librarians to use an informal but presentable tone, or deliver social media content in a bilingual or multilingual region.
- Levels of interest in and skills with using social media vary enormously across library staff.
- There are limited funds to support more advanced social media usage/ features and the training that would be required to enable this.
- A library needs to work hard to maintain engagement with library users and attract popularity (followers, likes and so on).
- It can be difficult to maintain library branding for content/resources made accessible via social media.
- There are potential copyright issues when using social media such as YouTube to build collections.
- External factors such as Internet connectivity, technological infrastructure and government restrictions on the use of social media may restrict access.
- Required to **maintain an active** social media presence.
- The pressure **to respond instantly** to service queries.

- **Maintaining visibility** for the library brand and copyright issues relating to hosting library resources on social media sites.

Types of Social Networking services:

There are many types of social networking services. They are as under:

➤ **Profile based SNS**

- Face book
- MySpace
- Bebo

➤ **Content based SNS**

- Flickr

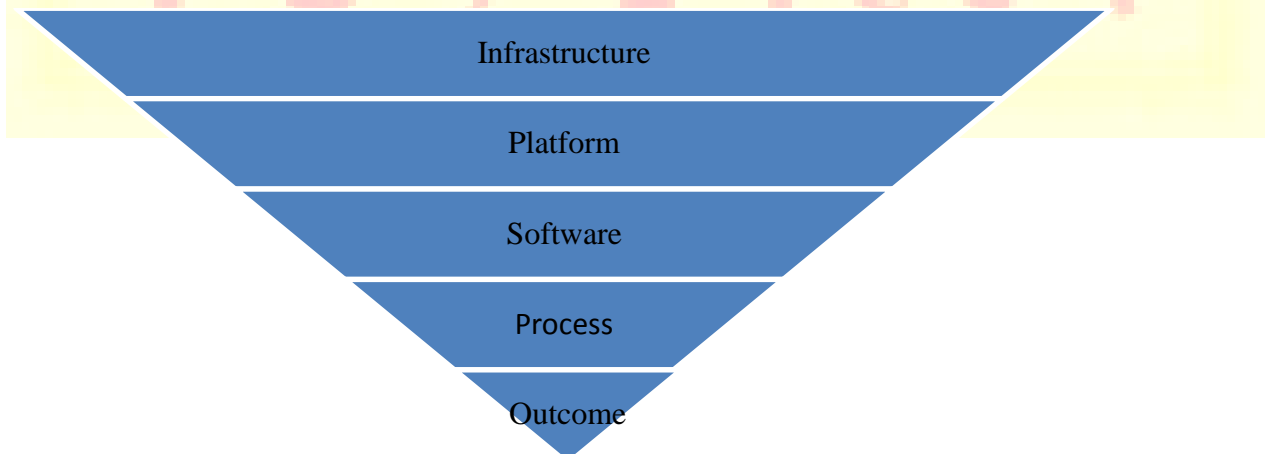
➤ **Mobile SNS**

- MySpace
- Twitter
- MYUBO

➤ **Micro blogging**

- Twitter
- Jaiku.
- Infrastructure.

Cloud Layers:



Advantages of cloud computing:

Cloud Computing offers many advantages. Some of that are as under:

➤ **Easy Access to Information:**

User can access the information from anywhere, where there is an Internet connection. This convenient feature lets user move beyond time zone and geographic Location issues.

➤ **Almost Unlimited Storage:**

Storing information in the cloud gives you almost unlimited storage capacity. Hence, you no more need to worry about running out of storage space or increasing your current storage space availability.

➤ **Backup and Recovery:**

Since all your data is stored in the cloud, backing it up and restoring the same is relatively much easier than storing the same on a physical device. Furthermore, most cloud service providers are usually competent enough to handle recovery of information. Hence, this makes the entire process of backup and recovery much simpler than other traditional methods of data storage.

Other advantages of Cloud Computing are as under:

- On – demand – self service.
- Highly secured infrastructure.
- Flexible and innovative.
- Cost effective.
- No IT maintenance costs.
- Not maintenance fee for hardware and software.

Disadvantages of Cloud computing:

In spite of its many benefits, as mentioned above, cloud computing also has its disadvantages:

- **Downtime:** This may be **one of the worst disadvantages of cloud computing**. No cloud provider, even the very best, would claim immunity to service outages. Cloud computing systems are internet based, which means your access is fully dependent on your Internet

connection. And, like any hardware, cloud platforms themselves can fail for any one of a thousand reasons.

➤ **Security in the Cloud:** The other major issue while in the cloud is that of security issues. Before adopting this technology, you should know that you will be surrendering all your sensitive information to a third-party cloud service provider. Hence, you need to make absolutely sure that you choose the most reliable service provider, who will keep your information totally secure

➤ **Limited Control:** Since the cloud infrastructure is entirely owned, managed and monitored by the service provider, it transfers minimal control over to the customer. The customer can only control and manage the applications, data and services operated on top of that, not the backend infrastructure itself.

- Reliability and Manageability.
- Constant connectivity required.
- Quality problems with cloud.

Examples of Cloud libraries:

- OCLC
- Discovery Service
- Google Docs/ Google Scholar
- Library Congress (LC)
- Encore
- Worldcat
- Exlibris
- Polaris
- Scribd

Examples of Social Media Websites:

- Social Bookmaking (Del.icio.us, Blinklist, Simpy)
- Social news (Digg, Propeller, Reddit)
- Social Networking (Face book, Hi5)

- Social Photo and Video Sharing (YouTube, Flickr)
- Wikis (Wikipedia, Wkia)

Why Cloud Computing?

Dr. Ranganathan's fourth principle very much applied when we say Cloud Computing. Save the Time of reader by providing information anytime anywhere. We should be able to design our services in such a way that a user gets it 24×7, if having good internet connectivity. More efficient and speedy distribution of library services with lower cost.

Role of Cloud Computing in Libraries:

Cloud computing is a completely new in technology and it is known as 3rd revolution after PC and Internet. The major problem of libraries are storage capacity, cloud computing solved the problem of storage because it improves storage solutions for libraries. Cloud Computing is an enhancement of distributed computing, parallel computing, grid computing and distributed databases. Among these, grid and utility computing are known as processors of cloud computing. Cloud Computing has large potential for libraries. Using cloud computing user would be able to browse a physical shelf of books, CDs, or DVDs or choose to take out an item or scan a bar code into his/her mobile device. All historical and rare documents would be scanned into a comprehensive, easily searchable database and would be accessible to any researcher. Many libraries already have online catalogues and share bibliographic data with OCLC. Data storage could be a main function of e-libraries, particularly those with digital collections storing large digital files can stress local server infrastructures. The files need to be backed up, maintained and reproduced for patrons. This can strain the data integrity as well as hog bandwidth. Moving data to the cloud may be a leap of faith for some library professionals. Cloud Computing increased capacity and less need for updates and maintenance, and has gained wider acceptance among librarian.

Present situation of Indian Libraries: In Indian scenario, Cloud Computing in libraries is in development phases. Libraries are trying to provide to users cloud based services but in real sense they are not fully successful owing to the lack of good service providers and technical skills of LIS professionals in the field of library management using advanced technology. But

some services such as digital libraries, web documentation and using web 2.0 technologies are running on successful modes. Some good examples of successful cloud services. Nowadays many commercial as well as open sources vendors are clubbing the cloud computing technology into their services and products. However, cloud computing technology is not fully accepted in the Indian libraries but they are trying to develop themselves in this area.

The Indian Prime minister Narendra Modi introduced “DIGITAL INDIA MOVEMENT” will also helpful for cloud computing in libraries.

Conclusion:

Access to Internet connectivity and computers are increasing day by day. In this century no one is interested in printed work; for librarians to make libraries interesting innovations such as social networking site should be introduced to attract them to the library environment. Social networking sites would help establish a cordial relationship between librarians and patrons; market the library’s services; announce library programmes on the wall and so on.

Moreover for information technology, cloud computing is a new model. Social networking tools and Cloud computing can save time and money. Cloud computing increases profitability by improving resource utilization. The cloud computing has safety and security by the third party and need not worry about the data loss or software corruption. Cloud based library services could bring the power of library cooperation to core library management.

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