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# A LOOK AT LIBRARY SERVICES AND ITS APPLICATIONS: ENRICHMENT IN INTELLECTUALITY

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### Abstract :-

This literature evaluate enables library specialists and librarians approximately the era utilized by libraries and additionally the limitations confronted through them. Furthermore, it increases consciousness of the demanding situations those new technology poses each for customers and for libraries. This evaluate article examines library records offerings on this context of the net surroundings. It gives an perception into the brand new technology that are turning into the want of the hour of each individual. Cloud computing is a new phenomenon in the history of services provided over the Internet. This completely changed the way computers use power, regardless of geographic location. The main advantage for organizations and businesses is that it provides services using third-party hardware or software or platform. It is very economical because it saves cost and maintenance. Cloud service comes in many different forms. To minimize costs and avoid duplication of resources, libraries are increasingly using infrastructure, software, hardware and new technologies such as server virtualization and cloud computing. This paper has attempted to provide an overview of how cloud computing service, platform and infrastructure forms have been used to meet library needs. This article discusses the functions, types, advantages and disadvantages, the role of a cloud librarian, the use of technology and cloud computing initiatives. Libraries have also tried to identify areas where this technology can be used to provide better library services and increase the productivity of library staff.

**Keywords:** Library, Cloud, Computing, Service, Internet

# Introduction:-

Libraries have always been an important part of the ownership process. A library can be described as a unit containing centrally prepared sources, which includes, in addition to human resources, a whole spectrum of different media (text, video, hypermedia). When we look at libraries, the main question of thought is the extras of the body, which are space, equipment, storage, bookshelves and various teaching materials. No one could dispute the position of students in the existence of students. Since digitization has taken over the majority of additional subjects in mastering higher education and better learning, crafting through virtual libraries is no longer an extra thing. The decline in visits to traditional libraries indicates that researchers are choosing to access documents and study materials without personally traveling to a library. As many libraries and universities digitize their materials for the benefit of both participants and the public, let's review the main advantages of virtual libraries for improving education. Until recently and to this day, too many organizations and individuals use computers to work alone, at work or at home, and to invest in hardware, software and maintenance. The current need is to bring the latest technology to the organization. With technology, it can provide quick and essential access to all information when needed. Cloud

computing is the use of the Internet for computing needs. This technology has many uses. For example, using programs, saving data, etc. An example of such services is also the use of computing power or a platform to create applications. There are many services to choose from, from email to word processing to photo and video sharing. These services can be accessed through any internet connection and are secure. These services are also supported. The best living example of this is Gmail, which is increasingly used by organizations and individuals to manage email services. Google Apps, free for educational institutions, is widely used to run various applications, especially email services, which previously ran on their own computer servers. This has saved management costs, as they pay for applications and services on a per-use basis, as well as computer staff time that they can invest in managing other services. Google is responsible for updating, backing up and maintaining the servers. Libraries use computers to run services such as Integrated Library Management Software (ILMS), website or portal, digital library or institutional archive, etc. They are maintained either by the computer staff of the parent organization or by library staff. This requires investment in hardware, software and personnel to maintain these services and to support and update them when new versions of the software are released. "Many university libraries are now virtualizing servers and desktops, collaborating with other campus organizations, and saving money and staff time" (Kelley, 2012). Cloud-based services offer libraries the opportunity to free up information technology resources and focus on the core competencies of libraries, i.e. information management, organization and distribution. "Cloud-based services also bring modern services to libraries with less IT expertise," says Zhu (2012). Library professionals, who often lack server maintenance training, find it difficult to perform some of these functions without the help of IT staff inside or outside the organization. Now, cloud computing has become a new buzzword in the library industry, which is a boon for providing various ICT services without much effort, with third-party services taking care of server management and data update and backup. Although there are problems with the use of cloud services such as privacy, security, etc., some libraries have already adopted this new technology when using some of their services. Many libraries are now configuring 3M Cloud Library applications.

#### **Cloud Computing:-**

Cloud computing is a new phenomenon. Many individuals and organizations use this technology model for IT services. The advantage is that they are saved from having to host and operate multiple servers on their own network. This saves them the burden and risk of constant hardware failures. They have to worry about software installation, update or backup problems. It also saves on administrative costs. According to Wikipedia, cloud computing refers to "the delivery of computing as a service, not a product, where shared resources, software and data are delivered to computers and other devices as a metered service over a network, typically the Internet." "The idea of cloud computing arose to outsource computing infrastructure, store customer data and applications through a remote server" (Hosch, 2009; Knorr and Gruman, 2008). In the cloud computing model, organizations only need to purchase or pay for the services that the organization needs. In this opt-in model, organizations must ask service providers to add or remove services as needed. Christy and Carina of the Gartner Group define cloud computing as "a style of computing in which massively scalable and flexible IT capabilities are offered as a service to external customers using Internet technologies." To simplify the concept, cloud computing can be defined as "only sharing and using applications and resources in the network environment to do work, without worrying about the ownership and control of network resources and applications" (M.-S. E Scale, 2009).) Cloud computing is a very flexible model. In it, users can also build or prepare their own applications that can be used by others over the Internet. In fact, it provides a common computing platform.

#### Types of Cloud Computing:-

The IT model of cloud computing has a wider meaning as it basically has three different services viz. SaaS, PaaS and IaaS.

#### Software as a Service (SaaS):-

Software as a service, or Saas, is a service where software or applications are offered to users as a service. So we usually know it as subscription software. The program can be accessed online using any suitable client such as a web browser. In this model, users get access to applications through licenses or subscriptions. The software is offered on a so-called pay-as-you-use basis, where

the user has to pay only for the software or applications he intends to use, or for free. Examples of such services are Google Apps, Salesforce, etc. It is centrally hosted with little scope to customize or manage applications or software. However, there are advantages such as the user not having to worry about maintaining, installing, updating or maintaining software or applications. In addition, the user has low initial costs and access to (usually 24/7) support services.

#### Platform as a Service (PaaS):-

A platform as a service is a class of services that provide a platform or environment that developers can use to build the applications or software they need and that users can access simply through a web browser on the Internet. Software deployment and configuration settings are performed by users. Businesses of all types, regardless of size, use this service because it is very hassle-free and there is no need to worry about maintaining the software infrastructure hardware. In this model, companies are helped to build, test and deploy web-based applications. Organizations don't need to invest in the infrastructure they need to build web and mobile apps. They simply need to rent operating environments from vendors such as Windows Azure, Google AppEngine and Force.com. However, the downside is that applications or software created using the services of these vendors are usually locked to the same platform6. This service is like a water and electricity network where users only have to "touch" and take what they need without any complexity. It is based on a subscription model. Users pay only for what they use. Users can focus on innovation instead of complex infrastructure.

Cloud Computing: Application In Libraries

Some organizations and business houses act as a cloud service provider for library software, search engines and digital libraries, etc., and provide a cloud computing platform for this.

Some of them are:

# OCLC Net Weight:-

OCLC excels in the use of cloud computing in libraries and is a model for others. Together, OCLC has been a cloud service provider for many years, providing online cataloging tools and allowing member institutions to use their own centralized data repository13. OCLC implemented a Worldshare Management Services (WMS) plan for library management systems. This service includes services in many areas such as acquisition, analysis, resource sharing, cataloging and license management components. It enables the entire library to be managed in a cloud-based application. Webscale's main goal is to make it easier for libraries to share their resources, information and innovations. To this end, it has certain functions that together provide better library services to the users. In other words, it offers libraries cost advantages and efficiencies that are not possible when using different specialized systems13. The service promises to include privacy, security, scalability and technical support.

#### **Duraspace's Dura Cloud:-**

Duraspace provides open source data storage solutions, implementing key projects for organizations and libraries to share scholarly literature using DSpace and Fedora Commons. It is specifically dedicated to the improvement and maintenance of Fedora and DSpace. These open source data storage solutions are very famous for their IR solutions. Its new service, DuraCloud, provides cloud-based digital storage services that are cost-effective and easy for libraries. DuraCloud helps libraries transfer content to the cloud and store it with different service providers to avoid the risk of data loss. Cloud solutions offered include online backup, storage and archiving, media access, online sharing and cloud delivery.

#### **Conclusion:**-

Cloud computing is a new phenomenon in computer system technology. It happened because of the development of the Internet and related technologies. The phenomenon is evolving and will be very useful to organizations if the services are used carefully. However, this technology is very useful for organizations such as libraries to automate and manage services. This technique has some advantages. This technology frees library staff from managing servers. In general, it can be seen that library staff find it difficult to manage technologies. The reasons could be their skill level; The IT department may lack support or organizations may lack IT equipment. In this situation, the library staff prevents the automation of library work or the development of digital

library services, etc. This technology can be of great importance in the implementation of modern ICT operations in libraries. Library professionals do not have to worry about the technical side of ICT operations. They just need to increase the content of the resources.

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