

# HOW CLOUD COMPUTING WILL AFFECT COLLEGE LIBRARIES

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**ABSTRACT:** Past few years concept of cloud computing libraries become very popular. Even countries which are affected by recession started recognizing that by computer clouding fast access to data will enhance there productivity. Data and information about libraries can be placed in the cloud. In this paper we will study meaning of computer clouding, advantages, disadvantages, type's, virtual cloud, impact on libraries, libraries which are using loud computing, security concerns etc. computer compounding is internet based computing.

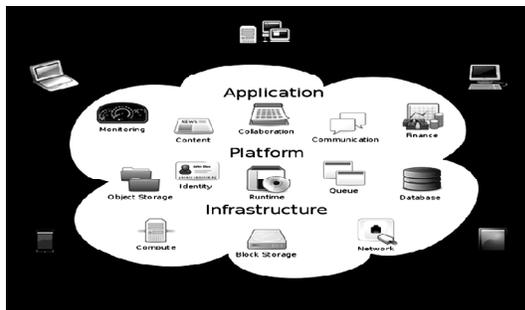
**Keywords:** Cloud computing; enhance productivity, virtual cloud, impact on libraries, security concerns

“By 2013 the cloud computing market will reach \$150.1 billion”

GARTNER

## 1. INTRODUCTION

Computer clouding is one of burning topics now a days. According to top PC Magazines Tech Encyclopedia ‘clouds generally refer to wide area networks such as the internet, but it can also be used to depict local networks. Term Computer clouding used to describe web based operating systems and Sharing of data through internet. This concept become famous in 2007. Cloud computing allows consumers and business to use application without installation and access their personal files at any computer with internet access. Its acceptance is growing very quickly. It is newly emerged method which is broadly used in information technology. Which has shown new horizons to knowledge based society. It is cost effective. We can access data from anywhere in the world.



(Source: Wikipedia)

## Models

Cloud computing have gone through number of phases. It is a metaphor of internet. Big advantage of computer

clouding is you will pay for what you will use. It shares features with the automatic computing, grid computing (grid computing which is form of distributed and parallel computing), cluster computing, utility computing. It offers software and hard ware as a service.

1. Software as a service (SAAS)
2. Platform as service (PAAS)
3. Infrastructures as a service (IAAS)

## Software as a Service (SAAS)

SAAS is a model where Software Company provides maintenance.

Daily technical operations and support for the software provided to client by the vendor. Cloud computing make the availability of s/w as a service to its end user. These services are provided through internet. He will pay only for what he used. In SAAS user will only request of particular software and vendor will provide the services to the user. End neednot to bother about the license and other software related issues.

## Platform as a Service (PaaS)

PaaS is like a Saas and it is a delivery model which deliver computing platform as a service over the internet. in essence we can say it is s/w which provides it as service that can be used to build higher-level services. PaaS provides development environment that user can access and utilize on the internet. Services are provided through browser.

## Infrastructure as A Service (IaaS)

Infrastructure as a Service is a provision model in which an organization outsources the equipment used to support operations, including storage, hardware, servers and networking components. The service provider owns the

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equipment and is responsible for housing, running and maintaining it. The client typically pays on a per-use basis. It is sometimes referred as Hardware as a service. It provides basic storage. It provides services on the internet. Examples of IaaS are IaaS, go grid Right scale. Services and software products as on demands computing to the organizations as the other on demand utilities such as electricity, water etc. simply provides latest technologies no software or data but still data can be retrieved from any where through internet. It is newly emerged method which is broadly used in information technology which has shown new horizons to the knowledge based society.

### Types of Computer Clouding

Broadly there are two types of computer clouding

1. Public cloud
2. Private cloud
3. Hybrid cloud
4. Community cloud

**Public Cloud:** Public cloud sells service to any one on the internet. Amazon is one of the public cloud providers. Customer has no information about the location of the cloud. Infrastructures are shared between organizations.

**Private Cloud:** It is different from public cloud because it provides data to limited number of people. Private clouds are expensive but it is considered more secure than public clouds.

**Hybrid Clouds:** This is combination of public and private computers. it has qualities of both public clouding private clouding. In this type of cloud sensitive data is stored in private cloud and other data is in public cloud.

**What is Virtual Private Cloud:** When service provider uses public cloud resources to create their private cloud. This result is called virtual private cloud.

**Advantage of Computer Clouding in Libraries:** In computer clouding data is saved in cloud. Whatever we are doing on computer for even on MS word is saved through internet. It is new generation of computers.

1. It is economical. We pay in installments.
2. Capacity is increased. We can store more data.
3. Information can be retrieved from anywhere through internet.
4. We need not to keep our software updated. It saves our time.
5. Third law of library science given by Mr Ranganathan "save the time of user" is satisfied because user time is saved.

6. Users will not experience delays while working on computers.

7. It provided automatic updates.

### Disadvantages of Computer Clouding in Libraries:

Biggest disadvantage of using computer clouding is in the libraries internet connection is must. If internet is down it will become impossible to work without internet. Secondly 1 mbps connection is required it need high speed. Thirdly data you stored on the internet is secured in the cloud. Fourthly data is present on the other server there is no direct control at where your data is actually present. There is danger to privacy.

### Examples of Libraries where Computer Clouding

**is Used:** If one have already worked with web 2.0 technologies over the past few years (e.g. Gmail, Google, Wikipedia etc. This means one have knowledge about computer clouding. We are living in the era of budget restraints. Cloud computing we will say is economical because now we are in world of information economy, digital libraries and virtual libraries is economical. Many vendors are selling cloud hosted versions to libraries.

**OCLC: (Online Computer Library Centre):** It is a non-profit, membership, computer library service. OCLC offers hands to other vendors also and started giving LIS tool that they complement WORLD CAT and First Search. World cat is also one of the best examples is the union catalogue.

Libraries started building and managing there on datacenters. Hybrid computer is privately owned.

**Library Thing:** Library thing is one of sites brings together aspects of social networking and cloud computing. It enriches your library catalogue with the power of web 2.0.library thing is a product .it offers catalogue enhancements packages, book recommendations, tag cloud for books, tag based search. Library things for libraries build worlds largest personnel and social cataloguing site.

**Amazon and Google:** These are also one of leading enter also providing solutions for libraries by having partnership between library automation centre's. We will pay what is used by us. Mobile Me is provided by Apple.

Google for years is working from years working for dissemination of information also taking interest in library solutions.IBM developed infrastructure known as "blue cloud". (Fox 2009) 157 INTERNATIONAL RESEARCH: JOURNAL OF LIBRARY AND INFORMATION SCIENCE (Vol.1 No.2,Dec.2011) Terrapod is a video Digital library [<http://surferblue.wordpress.com>]

We will say cloud computing is a burning topic which is giving new dimensions to computers. It is vital for libraries due to various reasons Important part of cloud computing

are known as the front end and back end front part is seen by computer user and back end is cloud itself. Computer clouding is useful in library and information sciences we can access data from anywhere. Its services are available from anywhere. We can order it on the internet. It helps in modernizing data centre's so we can say cloud computing is like revolution in the field of library and information services.

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