The world of computer networks and information technology is evolving at an enormous rate. In which cloud computing is one of the few methods to provide users with the data, resources in a more efficient way. Cloud computing is seen as a more advanced version of computer grid inclusive of virtualization and resources sharing. Distributed computing over the internet is another new innovative technique using storage and the internet as one. \"The Cloud\" is an idea used to portray the virtual idea of advanced stockpiling, which can mean the information is put away on workers genuinely positioned in numerous geological areas. Cloud computing is the method for getting to a common pool of configurable assets that can be quickly given, utilized and delivered with insignificant exertion with respect to clients or specialist organizations. Cloud computing is arising at the combination of three significant patterns—administration direction, virtualization and normalization of storing through the Internet

I. MOTIVATION

Motivation for writing this paper is an interest in this new technology of Cloud Computing. The opportunity to find out about another region of processing not canvassed in lectures.

II. INTRODUCTION

Cloud computing is sharing of the different services with the help of the internet. These services are inclusive of things like tools and applications like data storage, servers, database, networking and different software too.

Instead of storing files on a local CPU or in a specific hard drive, cloud-based capacity makes it possible to save them to a far-off information base or in simpler terms store them in a remote database.

III. FEATURES OF CLOUD COMPUTING
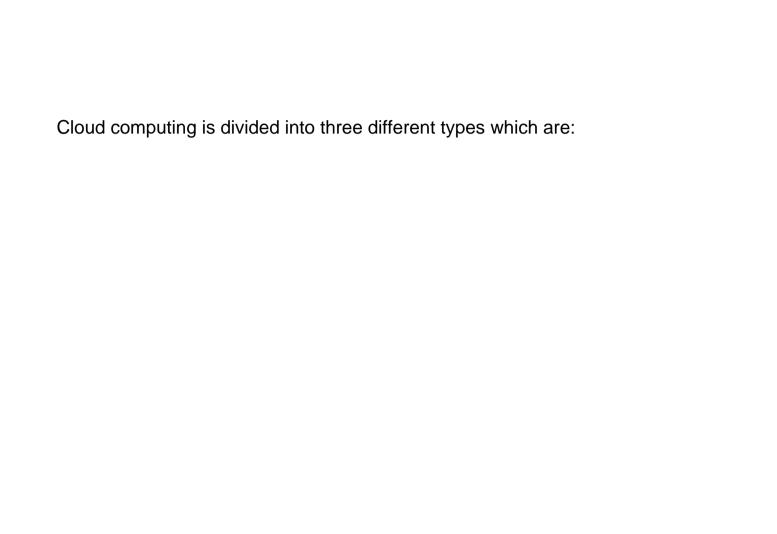
IV. HOW DOES IT WORK?

Cloud computing is mostly an application-based software infrastructure. To understand it working, It can be categorized into two parts:

The main server distributes tasks with the help of pre-defined protocols. It uses a different software to ensure a smooth connection between devices linked together via cloud computing.

It is common practice for the cloud providers to maintain different copies of the data to attenuate the risk of data breach, data loss etc.

V. CLOUD COMPUTING TYPES

Cloud computing is divided into three different types which are:

A. Private Cloud

These are mainly said to be working only for a single organization. Also known as corporate cloud provides better security specifications and details than the other types. It uses structure that is given by the organization itself. These are easily changeable according to the users. It can be further classified into-

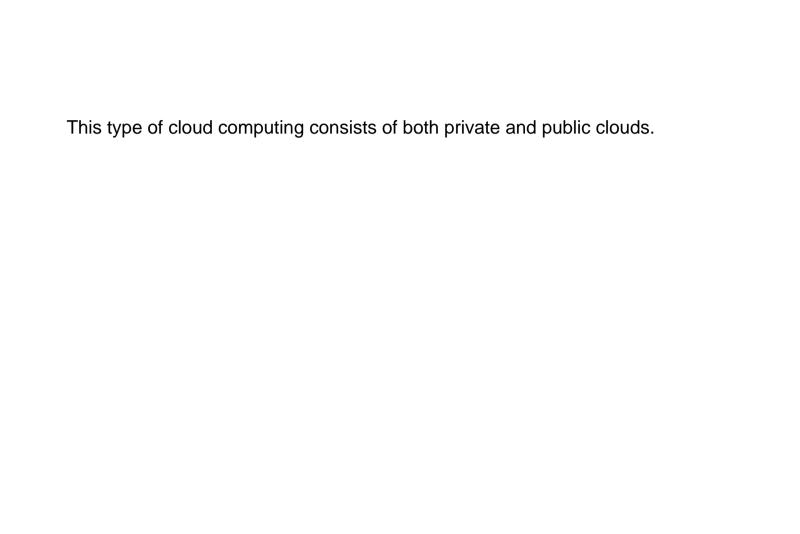a. Advantages:

b. Disadvantages

B. Public Cloud

It is the most common practice in the cloud computing branch. In this all services are managed and delivered by the provide only and almost every cloud has the potential to become a public cloud through sharing his resources with the different parties through the web.

a. Advantages

b. Disadvantages

C. Hybrid cloud

This type of cloud computing consists of both private and public clouds.

It is a single service but created from different services. Those who are inside the organization can access the private cloud contents but public cloud members are given authority to access only a limited number of things.

a. Advantages

b. Disadvantages

VI. CLOUD COMPUTING SERVICES TYPES

Cloud services can be further classified into: software as a service (SaaS), platform as a service (PaaS) and infrastructure as a service (IaaS).
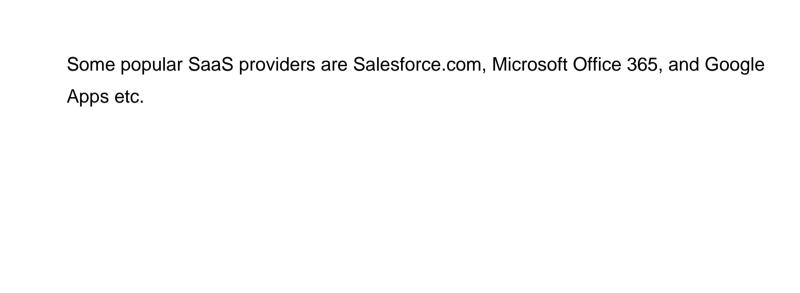
A. Software-as-a-Service (SaaS)

Also known as the "on-demand "software can be accessed through a web browser or an app. In this model services are provided by a company which we refer to as cloud service providers. End users can easily access these services without downloading any additional software's.

4. Services Provided by SaaS are

Some popular SaaS providers are Salesforce.com, Microsoft Office 365, and Google Apps etc.

B. Platform-as-a-Service (PaaS)

In the PaaS model, Users buy everything they need in accordance with their need for a specific time. The package mainly includes the development tools, infrastructure and operating systems. It also gives a runtime stage. In PaaS, back-end scalability is overseen by the cloud specialist co-op, so end-clients don't have to stress over dealing with the basic things.

2. Disadvantages of SaaS Model

3. Services Provided by PaaS are

Some Popular PaaS providers are Appfof, Openshift etc.

C. Infrastructure-as-a-Service (IaaS)

Also known as Hardware-as-a-service is the layer that allows the end users to externalize their infrastructure such as networking, virtual machines, servers, storage etc. It is instant distributed and managed over the internet. It allows users to expand and shrink the resources according to their need.

2. Disadvantages of SaaS model

3. Services provided by PaaS are

Some popular IaaS providers are Sify technology, Reliance communication etc.

Let\'s sum up by saying that cloud computing is a relatively new technological advancement with huge potential for widespread impact. It has a wide range of benefits to offer both individuals and businesses. For instance, one benefit it provides to businesses is that it reduces operating costs by putting more of an emphasis on the business itself and spending less on maintenance and software upgrades. However, there are still other issues that cloud computing must address. Many people are unsure of how secure and confidential their data is. Data transmitted using cloud computing is not subject to local or international norms or legislation. Regarding who has access to and control over their data, users are likewise worried.

[1] Rahman Gohar and Chai Wen Chuah. "Cloud Computing, Applications, Security and Challenges, Review". Information Security Interest Group(ISIG),Faculty of Computer science & Information Technology , Universiti Tun Hussein Onn Malaysia, Najafgarh, Johar 86400. Pp.01-04, 2018. [2] C. S. R. Prabhu. "Overview: Cloud Computing and Internet-of-Things(IoT)" .Keshav Memorial Institute of Technology, Hyderabad. P.01. 2019 [3] Khan Saad, Parkinson Simon and Qin Yongrui. "Cloud computing security: a review of current applications and security solutions". Khan et al. Journal of Cloud Computing: Advances, Systems and Applications. pp. 05-10. 2017. [4] Hunsukh wangdu, Chaczko Zenon , Rakhi Ajayan Alina , Klempous Ryszard . "A Review on Cloud Computing Technology". Centre for Innovation in IT Services and Applications (iNEXT), School of Computing & Communications, Faculty of Engineering & IT, University of Technology, Sydney -2007, NSW , Australia . p- 6. [5] Ahmed Arif, Arkian HamidReza, Battulga Davaadorj, Babu bhaiya , J. Fahs Ali,