Submitted By

1.Sanu Kumar Saurav
2.Sachit Sharma
3.Raj Kumar Gautam
4.Sulaksh Gupta
5.Saharsh Jain

Submitted To

Jainendra Shukla

What is Cloud Computing

Simply put, cloud computing is the delivery of computing services—servers, storage, databases, networking, software, analytics, intelligence and more—over the Internet (“the cloud”) to offer faster innovation, flexible resources and economies of scale. You typically pay only for cloud services you use, helping lower your operating costs, run your infrastructure more efficiently and scale as your business needs change.These platforms hide the complexity and details of the underlying infrastructure from users and applications by providing very simple graphical interface or API (Applications Programming Interface).

Types of Cloud Computing

Public cloud

Public clouds are owned and operated by a third-party cloud service providers, which deliver their computing resources like servers and storage over the Internet. Microsoft Azure is an example of a public cloud. With a public cloud, all hardware, software and other supporting infrastructure is owned and managed by the cloud provider. You access these services and manage your account using a web browser.

Private cloud

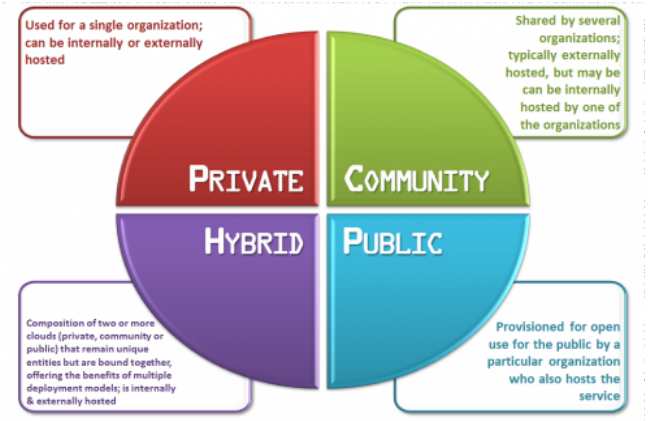
A private cloud refers to cloud computing resources used exclusively by a single business or organisation. A private cloud can be physically located on the company’s on-site datacenter. Some companies also pay third-party service providers to host their private cloud. A private cloud is one in which the services and infrastructure are maintained on a private network.

Hybrid cloud

Hybrid clouds combine public and private clouds, bound together by technology that allows data and applications to be shared between them. By allowing data and applications to move between private and public clouds, a hybrid cloud gives your business greater flexibility, more deployment options and helps optimise your existing infrastructure, security and compliance.

Community Cloud

A community cloud is a cloud service model that provides a cloud computing solution to a limited number of individuals or organizations that is governed, managed and secured commonly by all the participating organizations or a third party managed service provider. Community clouds are a hybrid form of private clouds built and operated specifically for a targeted group. These communities have similar cloud requirements and their ultimate goal is to work together to achieve their business objectives.



Types of Cloud Services

Most cloud computing services fall into four broad categories: infrastructure as a service (IaaS), platform as a service (PaaS), serverless and software as a service (SaaS). These are sometimes called the cloud computing stack because they build on top of one another. Knowing what they are and how they are different makes it easier to accomplish your business goals.

1. Infrastructure as a service (IaaS)

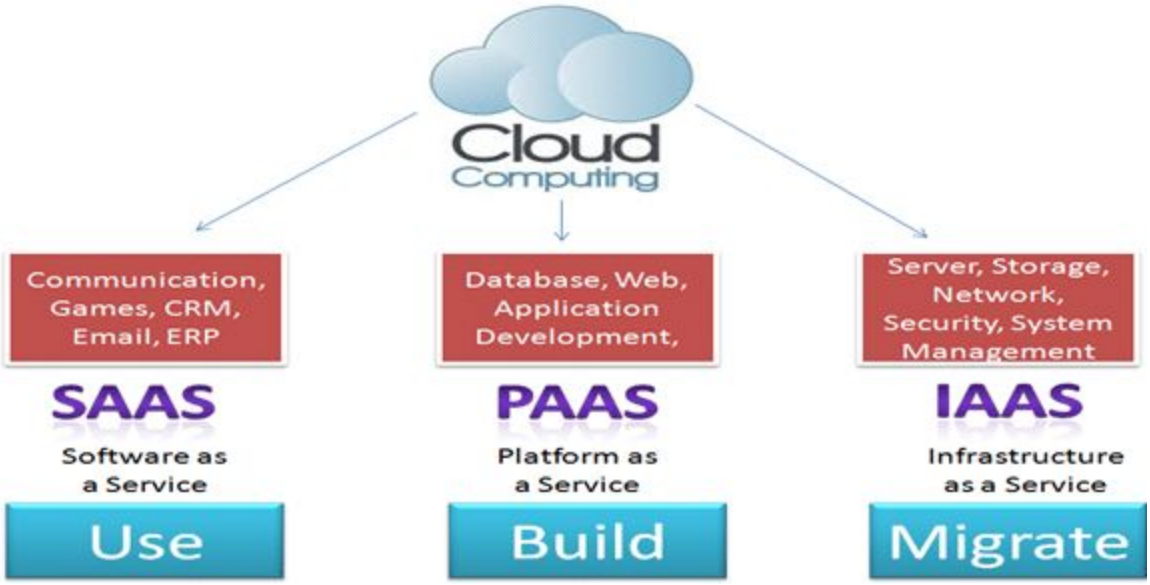
The most basic category of cloud computing services. With IaaS, you rent IT infrastructure—servers and virtual machines (VMs), storage, networks, operating systems—from a cloud provider on a pay-as-you-go basis.

2. Platform as a service (PaaS)

Platform as a service refers to cloud computing services that supply an on-demand environment for developing, testing, delivering and managing software applications. PaaS is designed to make it easier for developers to quickly create web or mobile apps, without worrying about setting up or managing the underlying infrastructure of servers, storage, network and databases needed for development.

3. Software as a service (SaaS)

Software as a service is a method for delivering software applications over the Internet, on demand and typically on a subscription basis. With SaaS, cloud providers host and manage the software application and underlying infrastructure and handle any maintenance, like software upgrades and security patching. Users connect to the application over the Internet, usually with a web browser on their phone, tablet or PC.



Benefits of Cloud Computing

•Improved performance:

–With few large programs hogging your computer's memory, you will see better performance from your PC.

–Computers in a cloud computing system boot and run faster because they have fewer programs and processes loaded into memory…

•Reduced software costs:

–Instead of purchasing expensive software applications, you can get most of what you need for free-ish!

-most cloud computing applications today, such as the Google Docs suite.

–better than paying for similar commercial software

-which alone may be justification for switching to cloud applications.

•Instant software updates:

–Another advantage to cloud computing is that you are no longer faced with choosing between obsolete software and high upgrade costs.

–When the application is web-based, updates happen automatically available the next time you log into the cloud.

–When you access a web-based application, you get the latest version without needing to pay for or download an upgrade.

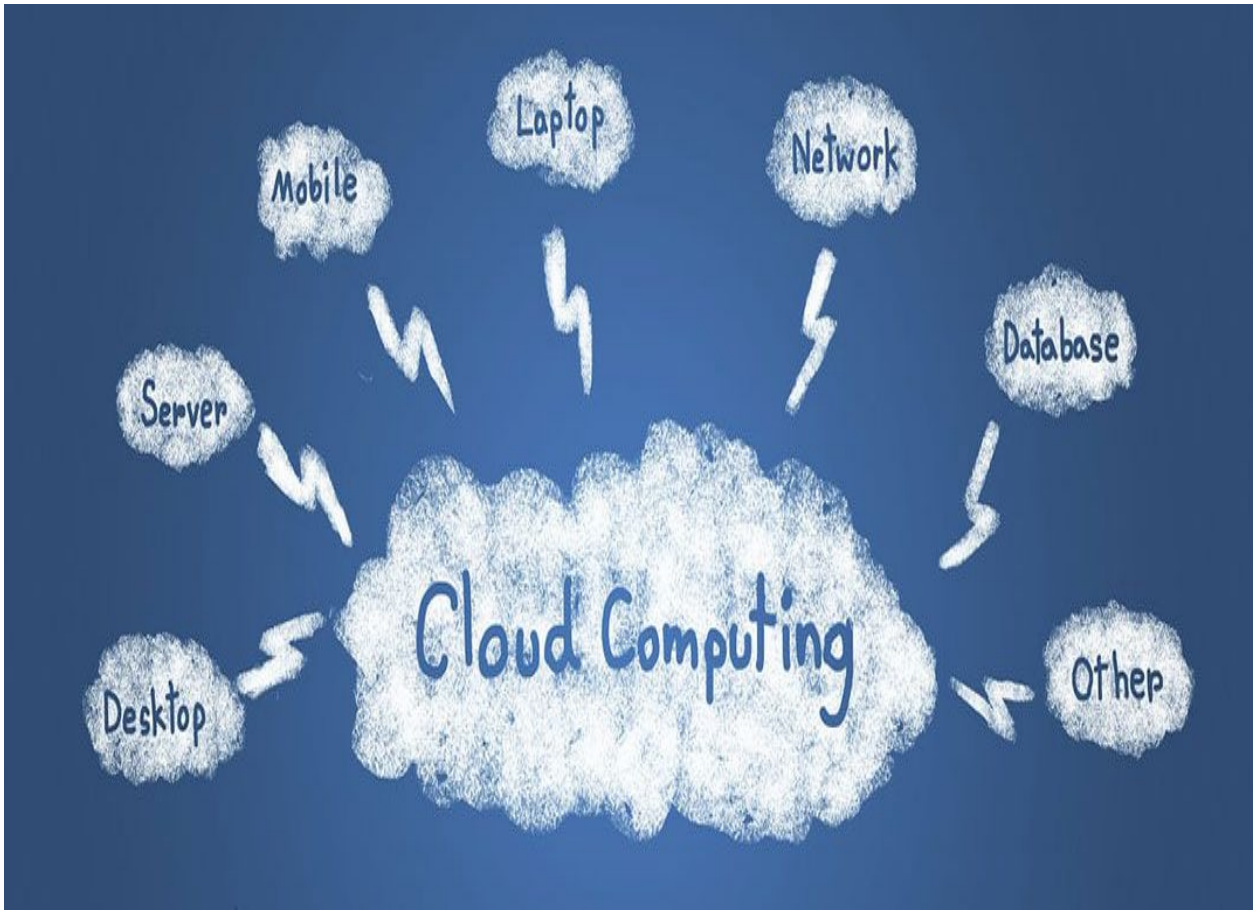
•Improved document format compatibility.

–You do not have to worry about the documents you create on your machine being compatible with other users' applications or OSes

–There are potentially no format incompatibilities when everyone is sharing documents and applications in the cloud.

Some commercial Cloud Offerings

Summary


Laptop
Mobile
Network
Server
Database
Cloud Computing
Desktop
Other