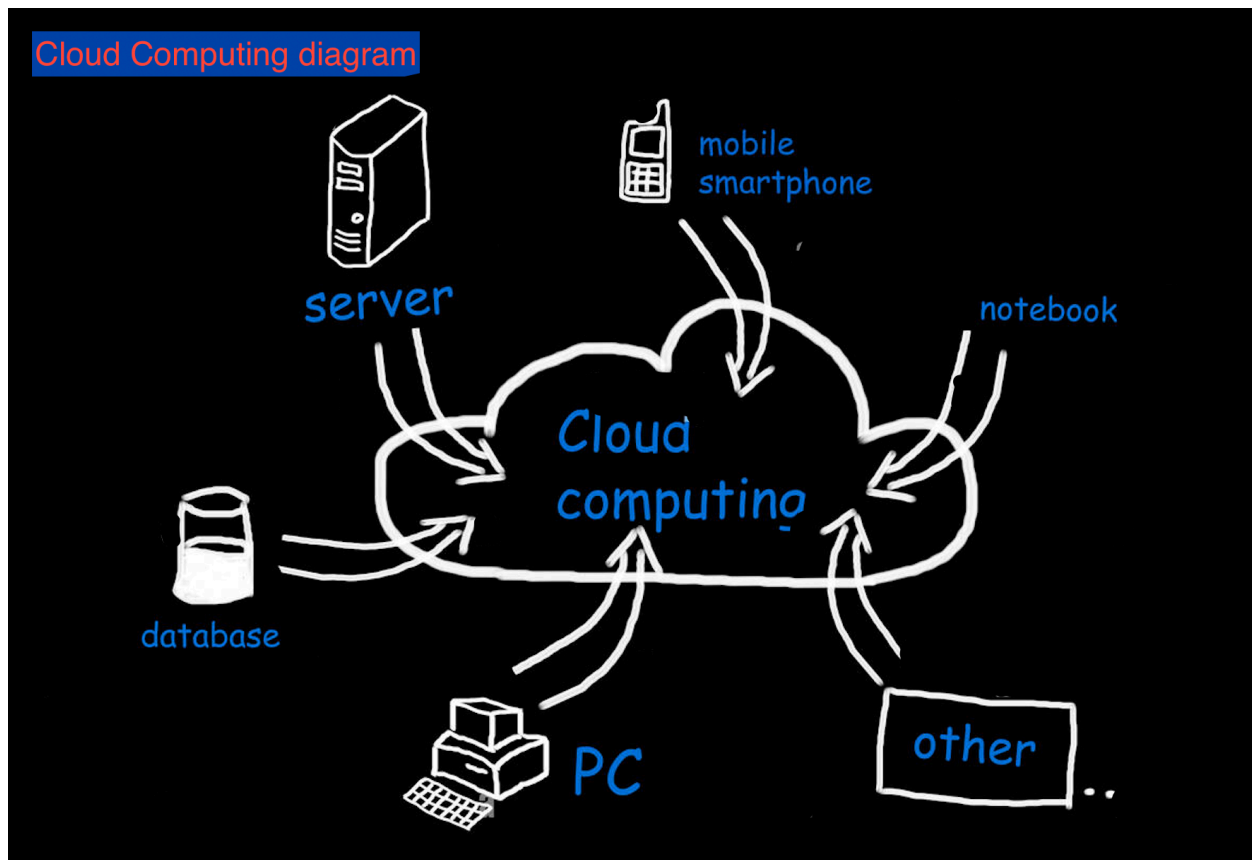


## Cloud Computing - A Brief Introduction:



- Cloud is just really a platform that you can have on-demand availability and delivery of virtual IT resources that you need for your personal use or your business use.
- Use these resources on a pay-as-you-go model, which means you use them and we will be billed for those services as we use them.
- Using cloud infrastructure or services means that the customer, do not physically own the infrastructure.

### What is Cloud computing?

Cloud computing is the delivery of different services through the Internet. These resources include tools and applications like

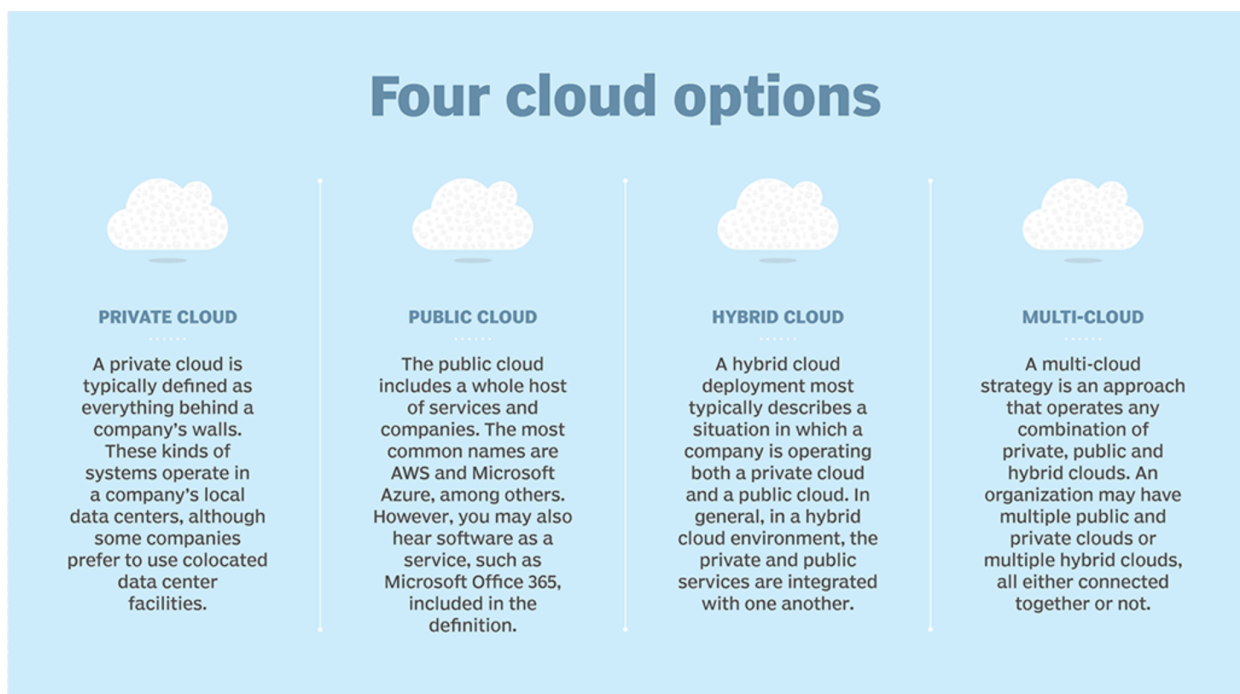
- Data storage
- Servers
- Databases
- Networking
- Software.

## Why cloud?

- **Agile** - On Demand - Flexible & Scalable
- **Payment Models** - Subscription / Pay-As-You-Go
- **Unlimited Resources** - Unlimited Expertise - Reliability
- **Global Coverage** - Accessibility / Many Locations - Ready for Disasters
- **Usage of Latest Technology / Industry Standards** - Collaboration - Easy to Integrate

## Types Of Cloud Computing:

- Cloud operates on 4 different models

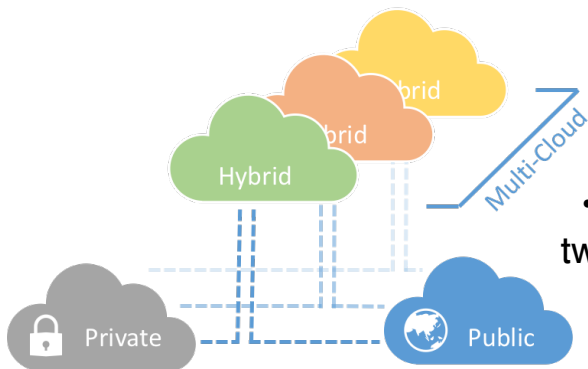


- **Private Cloud** - which is for organizations operating on a private network. There are two types of private cloud



- **Hosted private clouds**, which are offered by a third-party cloud provider
- **Internal private clouds**, which are managed and maintained by an organization internally.

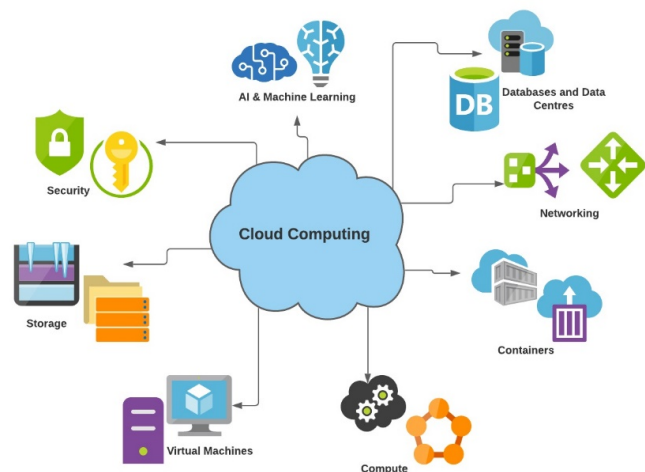
- **Public Cloud** - and this is owned by a provider like Amazon or Google or even Microsoft. And they provide a cloud computing model or cloud computing infrastructure for individuals like ourselves or businesses that want to take advantage of them.
- **Hybrid Cloud** - and this is just a combination of both private and public cloud offering.



- **Multi-cloud** - environment consists of two or more public cloud providers but does not require a private or on-premises component.

## Why should we use Cloud?

- Flexibility
- Agility
- Cost reduction
- Faster innovation
- Security
- Quality control
- Competitive advantage
- Sustainability
- Loss Prevention
- Improved performance



## Different Types of Cloud Providers

### 1. Amazon Web Services

- Amazon web services provides an on-demand Cloud Computing platform to individuals, companies, and governments on a paid-subscription basis.
- It offers a wide range of cloud services such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).

### Key Features of AWS

- Reliable, scalable, and low-cost infrastructure platform
- Over 200 fully-featured services
- A flexible and secure cloud computing environment
- 81 availability zones in 25 geographic regions across the world.

### Notable users of Amazon Web Services (AWS)

- Coursera
- Netflix
- Airbnb
- Food and Drug Administration (FDA)
- Coca Cola

## 2. Microsoft Azure

Microsoft Azure has the lowest on-demand and discounted instance pricing. Specialist developers can write, test and deploy algorithms using the Azure Machine Learning Studio.

### Key Features of Azure

- More than 200 products and cloud services
- 90+ compliance offerings
- 95 percent of the Fortune 500 companies rely on Azure
- Datacentres in 60+ global regions

### Notable users of Microsoft Azure

- Audi
- HSBC

- Starbucks
- Walmart
- HP
- Renault

### 3. Google Cloud Platform (GCP)

- With an intuitive interface, lower costs, preemptible instances and flexible compute options, GCP is an attractive alternative to both AWS and Azure.
- Google uses full-scale encryption of all data and communication channels including the traffic between data centers.
- Google Cloud Platform launched in 2008, and in less than a decade, it has established a strong foothold in the cloud business.
- Google Cloud strengthened Google's products, including its hugely popular search engine and its video-sharing platform, YouTube.

#### Key Features of GCP

- Open source, multi-cloud, and hybrid cloud
- Over 200 products
- A global network spanning across 200+ countries & territories, 85 zones
- Trust and security

#### Notable users of Google Cloud Platform (GCP)

- Toyota
- Spotify
- Twitter
- Paypal
- UPS