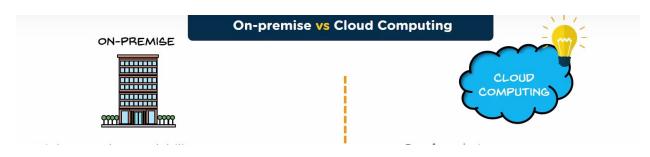
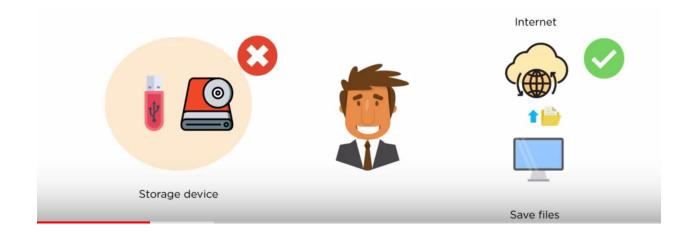
### Why Cloud computing?



Higher pay , less scalability	Pay what you use		
	<ul><li>Scale up = pay more</li></ul>		
	<ul><li>Scale Down = pay less</li></ul>		
Allot huge space for servers	No server space required		
Appoint a team or hardware and	No Experts requires for hardware and		
software maintaince	software maintenance		
Poor data security	Better data security		
Less chance of data recovery	Disaster recovery		
Lack of security	High Flexibility		
No Automatic updates	Automatic software updates		
Less collaboration	Team can collaboration from		
	widespread locations		
Takes longer implementation time	Rapid implementation		
Data cannot be accessed remotely	Data can be accessed and shared		
	anywhere over the internet		

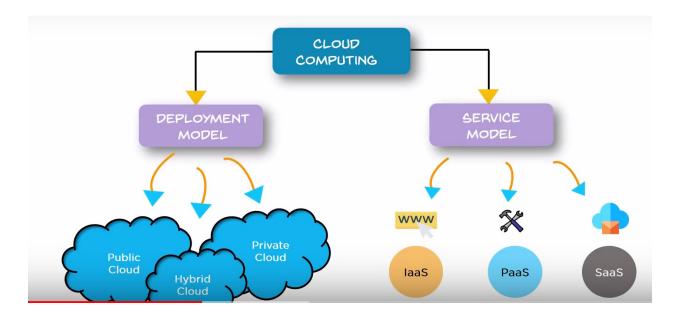
### What is Cloud Computing?

Rather than managing files on a local storage device , cloud computing makes it possible to save then over the internet



# **Types of Cloud computing?**

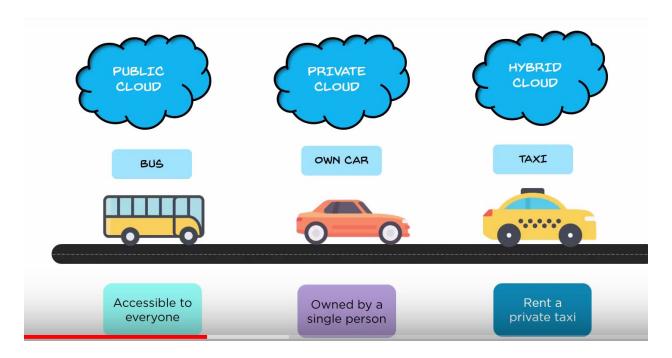
- 1. Deployment Model
- 2. Service Model



### **Deployment Model**

- 1. Public cloud
- 2. Hybrid cloud

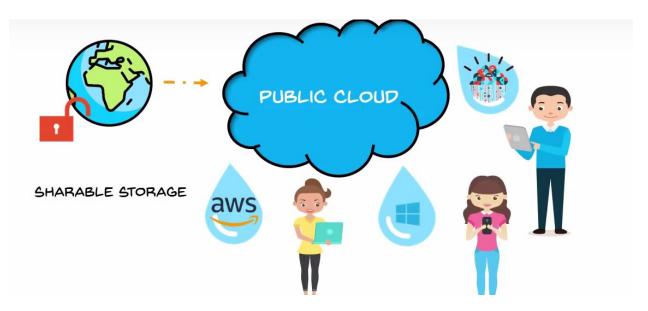
### 3. Private cloud



#### **Public Cloud**

The Cloud infrastructure is made available to the general public over the internet and is owned by a cloud provider

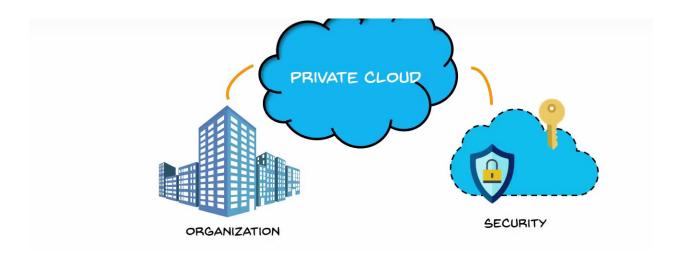
Eg: AWS, Microsoft Azure, IBM Blue cloud and Sun cloud



#### **Private Cloud**

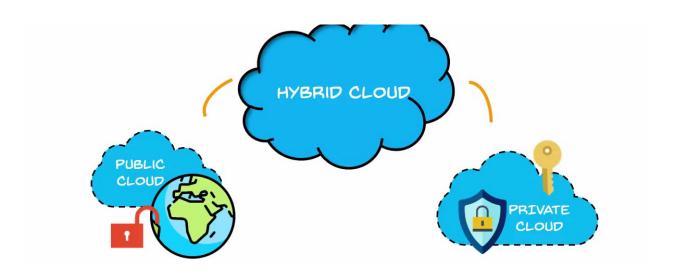
The cloud infrasture is exclusively operated by a single organization, it can be managed by the Organization or a third party and may exist on premise or off-premise

EG: AWS, VMware

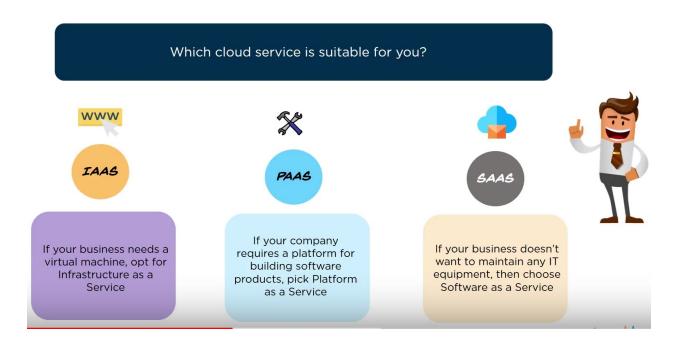


## **Hybrid Cloud**

This consists the functionality of both private and public EG: Federal agencies

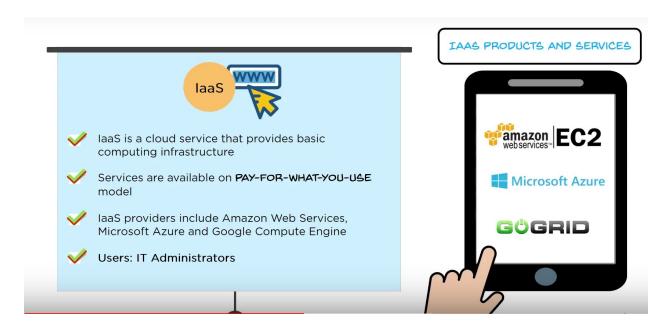


## **Types of Service model**



## Difference between IASS, PASS, SASS

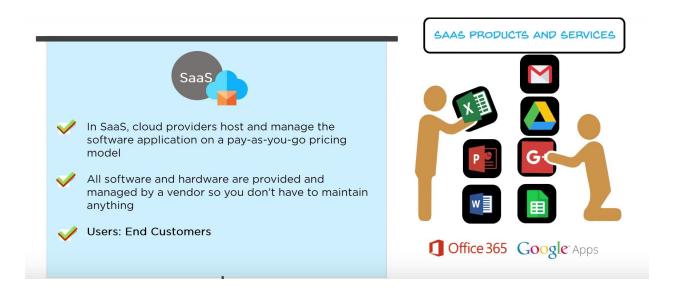
On-Premises	laaS	PaaS	SaaS
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking



#### **PASS**



**SASS** 



#### **Cloud Providers**



#### **Cloud Computing with AWS**

- → Amazon Web Services (AWS) is a cloud service from amazon
- →It Provides services over the network
- →AWs services can be used to create and deploys and type of application in the Cloud
- → AWS uses the subscription pricing model (pay for what you use)

Life Cycle of Cloud computing



#### **Define the Purpose**

Understand the requirements of the business and determine what type of applications to run on the cloud



EC2



Lambda



Elastic container
Service



**Define the Hardware** 

Choose a compute service that will provide the right support where you resize the compute capacity in the cloud to run application programs







**Define the Storage** 

Choose a storage service where you can backup and archive your data over the internet







Route 53

Direct Connect



Define the Network

Define a network that securely delivers data, videos, applications etc. with low latency and high transfer speed







IAM

**KMS** 

Cognito



#### **Define Security**

Set up your security service which enable services for user authentication or limiting access to a certain set of users on your AWS resources







CloudWatch

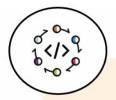
**Auto scaling** 

CloudFormation



**Define Management Processes and Tools** 

You can have complete control on your cloud environment by defining management tools which monitor AWS resources and the customer applications running on AWS platform







CodeStar

CodeBuild

**CodePipeline** 



Testing the process

Verify the process using AWS developer tools where you can build, test and deploy your code quickly







**Athena** 

**EMR** 

CloudSearch



Finally, analyze and visualize data by using analytics services where you can start querying data instantly and get results

