

→ Actors in cloud computing

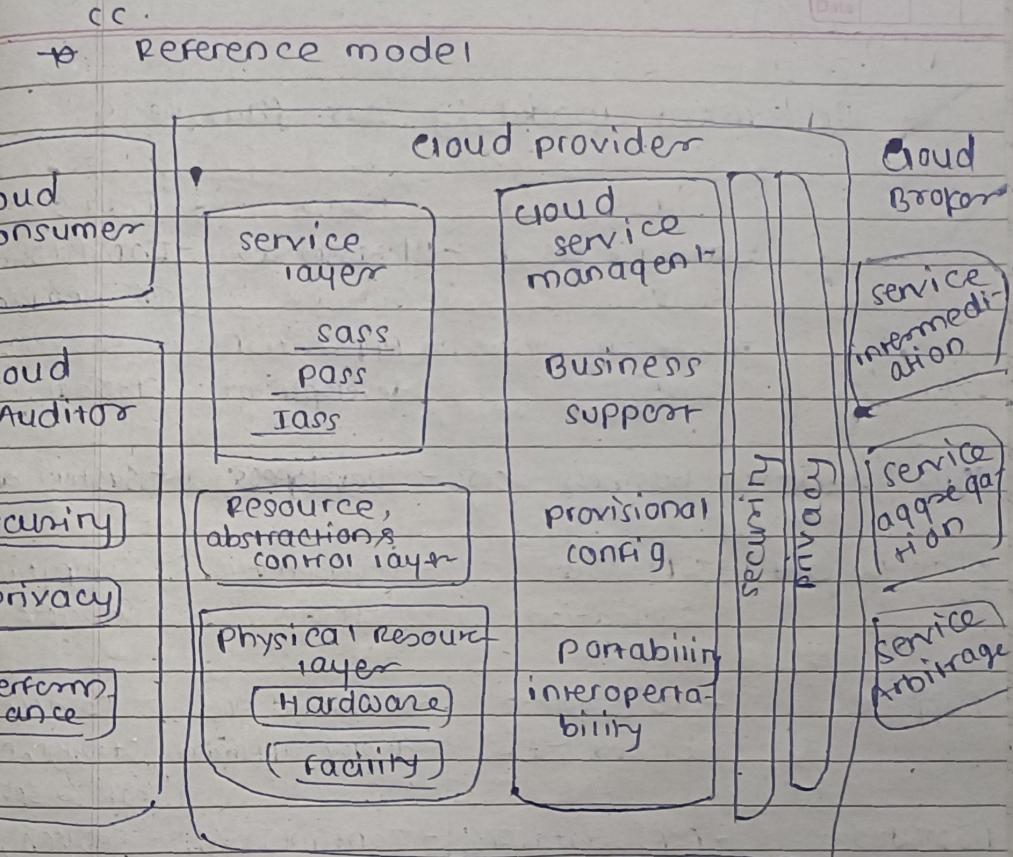
- ① cloud consumer → a person or organization that maintains a business relationship & uses service from cloud platform

- ② cloud provider → a person responsible for making a service available to interested parties.

- ⑧ Cloud Auditor → a party that can conduct independent assessment of cloud service information system operation, performance and security of cloud implementation.

- ④ Cloud Broker → An entity that manages the use, performance and delivery of cloud service.

- ⑤ cloud carrier → provide connectivity.



Delivery
or

Q. Deployment Model : SaaS, PaaS, IaaS

SaaS	PaaS	IaaS
- software as a service	- Platform as a service	- Infrastructure as a service
- s/w on remote servers	- Application development	- server, storage, OS

Who uses it	- Business users	- Developers	- System admin
what you get	- software application	- Development platform	- computing resources

Purpose	- To complete business tasks	- To build and deploy application	- To access storage, network & servers
Provider controls	- Apps, data, OS, runtime, servers, networking, storage, virtualization	- Runtime, OS, storage, servers, networking, virtualization	- Servers, storage, networking, virtualization

Customer controls	- everything is managed by the provider	- Apps and data	- Apps, data, runtime, OS.

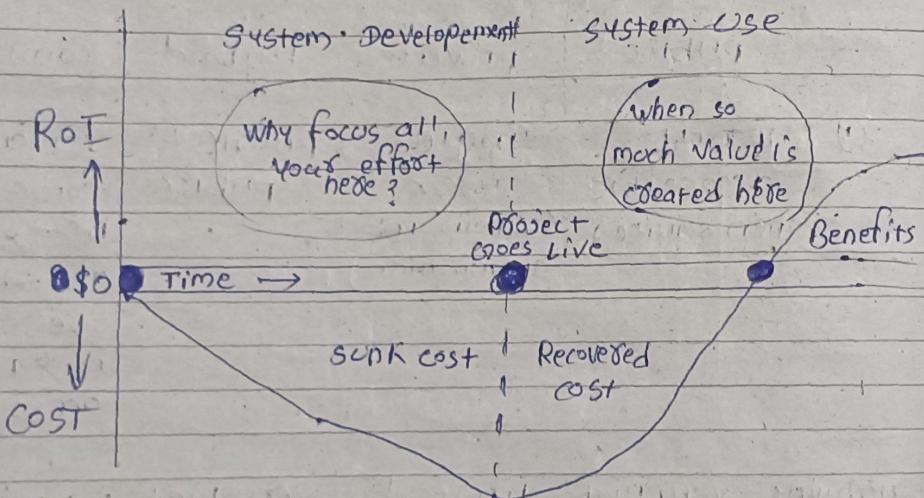
Q. Types of cloud

- a) public
- b) private
- c) hybrid
- d) community

	public	private	hybrid	community
① openly accessible (open source)	single user (within the organization)	private + public	several org come together & share the data as one community & public access	
scalability	very high	limited	very high	limited
reliability	moderate	very high	medium to high	very high
security	Totally dependent upon service provider	high	secure	secure
cost	cheaper	high cost	costly	costly
Example	Amazon EC2 Google app engine	VMware, Microsoft	IBM, HP	VMware

Q. Economics of cloud.

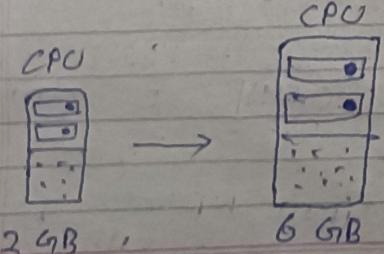
→ Cloud Economics is the study of cloud computing's costs and benefits and the economic principles that underpin them. As a business owner need to calculate Return of Investment (ROI) of Business.



Q. Vertical Scaling & Horizontal Scaling.

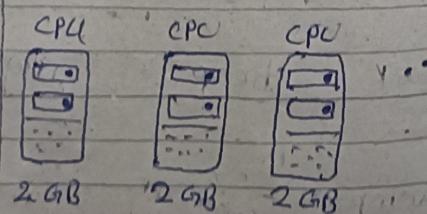
Vertical Scaling

Vertical scaling means adding more power (CPU, RAM, ROM) to an existing machine.



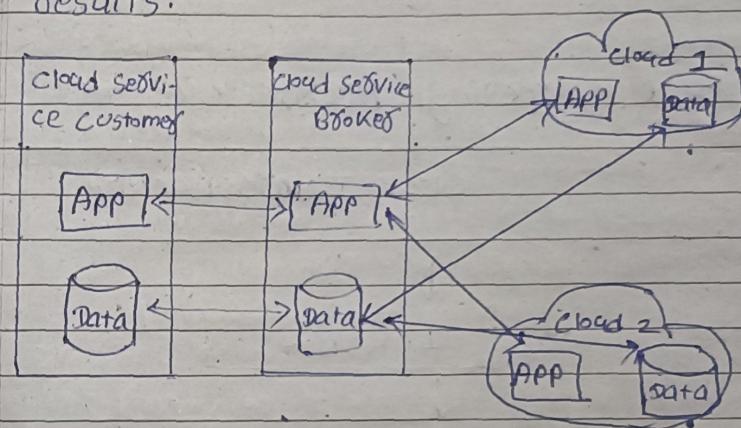
Horizontal Scaling

Horizontal scaling means adding more machines or nodes to a system.



Q. What is Interoperability in cloud?

→ Cloud interoperability is the ability of a customer's system to interact with a cloud service or the ability for one cloud service to interact with other cloud services by exchanging information according to a prescribed method to obtain predictable results.



Example of Interoperability in cloud

Interoperability ensures that patient data is shared accurately among providers communication between referring doctors and specialists.

Q. Fault Tolerance :

→ Fault Tolerance is the ability of system to continue operating without interruption when one or more of its components fail. This is especially important in cloud computing, where applications are often spread across multiple servers and locations.

Q. Cloud Computing Architecture.

