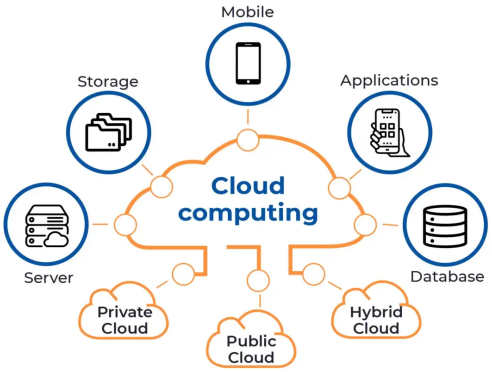
1. Cloud Basics -Azure

What is Cloud Computing?

Cloud computing provides all the IT resources over the Internet. Instead of storing data and running applications on physical servers, cloud providers provide their services over the cloud so that user can focus only on the development part.

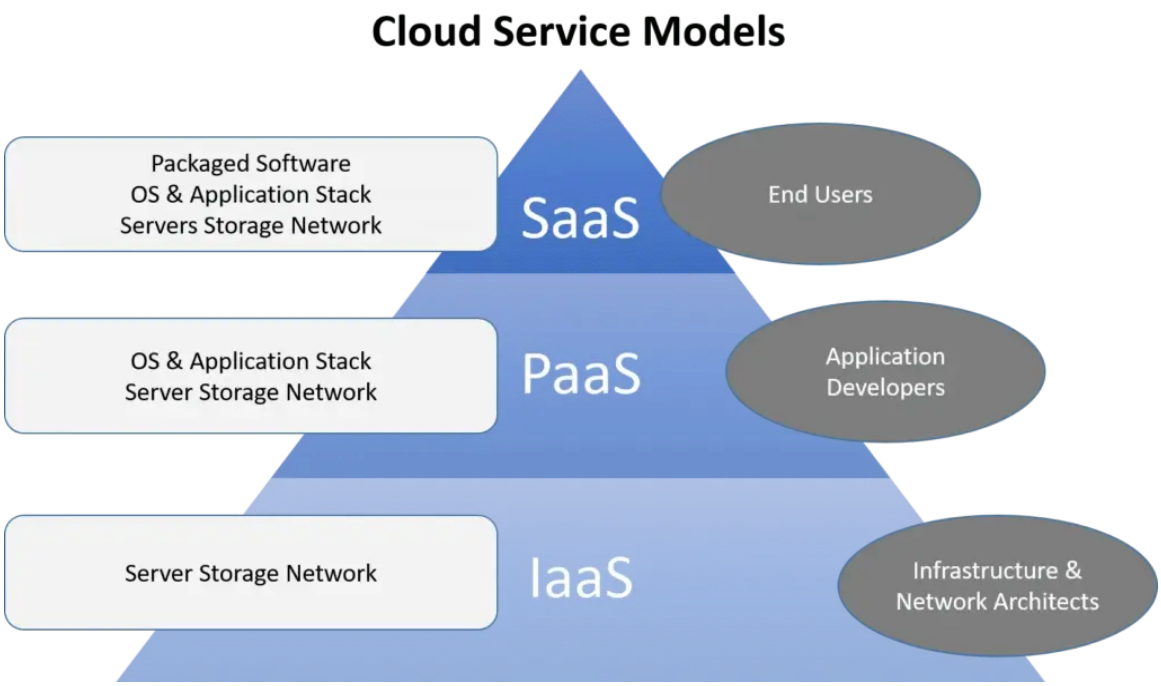


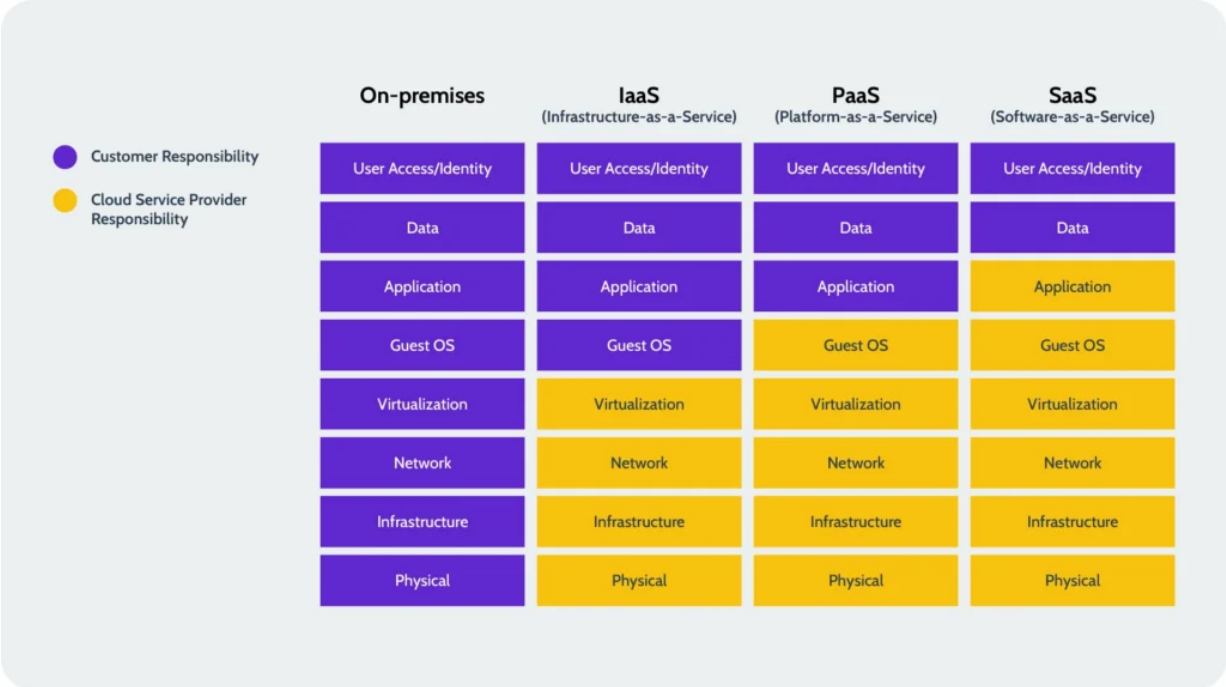
There are 3 types of Cloud:

Private Cloud: It is a type of cloud which is used by a single organization which is hosted on a on-premises infrastructure. The primary feature of private cloud is the security and privacy of the resources.

Public Cloud: It is a type of cloud which is owned and managed by by a third party cloud provider which can be accessible over the internet. The primary feature of public cloud is it is much cheaper.

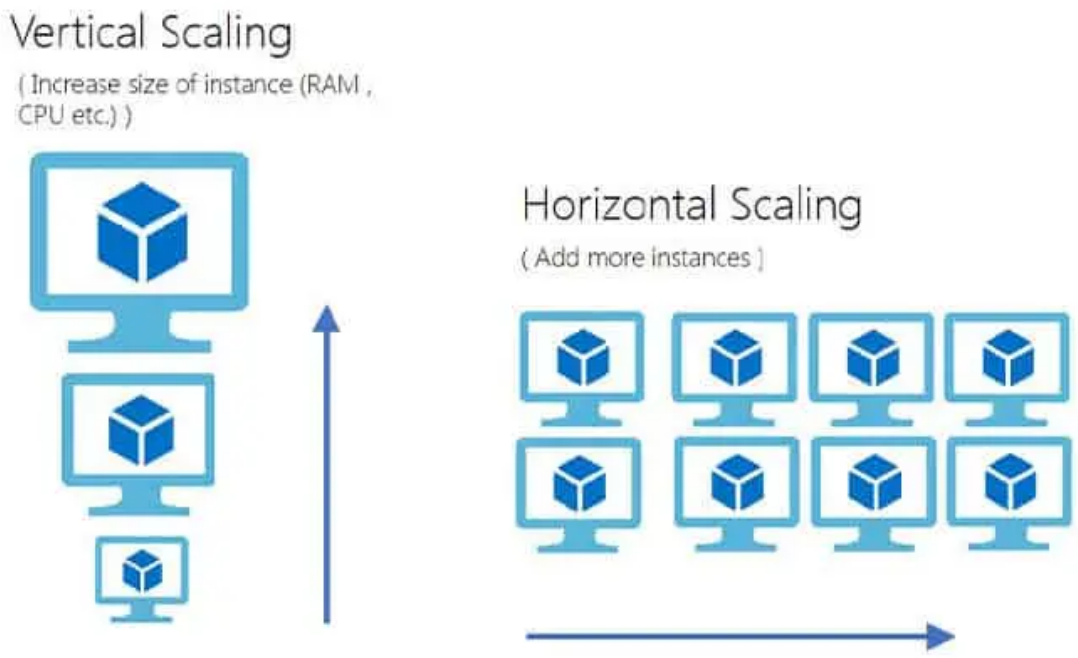
Hybrid Cloud: It is a combination of private and public cloud. It provides the features where applications can be shared between them.





What is Azure Scaling?

It allows users to automatically increase or decrease the resources so that the application can handle the varying the level of traffic without doing it manually.



The term scaling is divided in 3 parts.

- **Vertical Scaling :** It allows user in increasing or decreasing the size of Virtual machine. It is also known as Scale Up and Scale Down.
- **Horizontal Scaling :** It allows user in adding or removing the Virtual machine. It is also Known as Scale In and Scale Out.
- **Auto Scaling :** It automatically increase or decreases the Virtual machine depending on the traffic which helps in saving a lot of money.

When should I use Vertical scaling?

Ans. We can use vertical scaling when the application requires more resources like storage and CPU which will help in enhancing the performance.

When should I use Horizontal Scaling?

Ans. We can use Horizontal scaling when the application requires large amount of users. It is generally useful for applications that experiences huge spikes in traffic .
