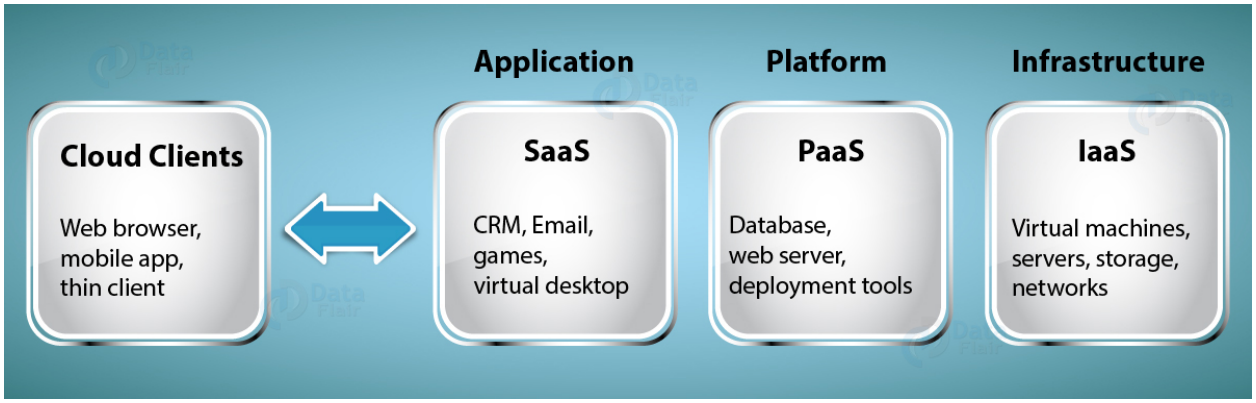
CLOUD COMPUTING

- **Cloud computing** is a service, which offers customers to work over the internet. It simply states that *cloud computing means storing and accessing the data and programs over the internet rather than the computer's hard disk.*
- The data can be anything such as music, files, images, documents, and many more.

TYPES OF CLOUD COMPUTING



i) SAAS :

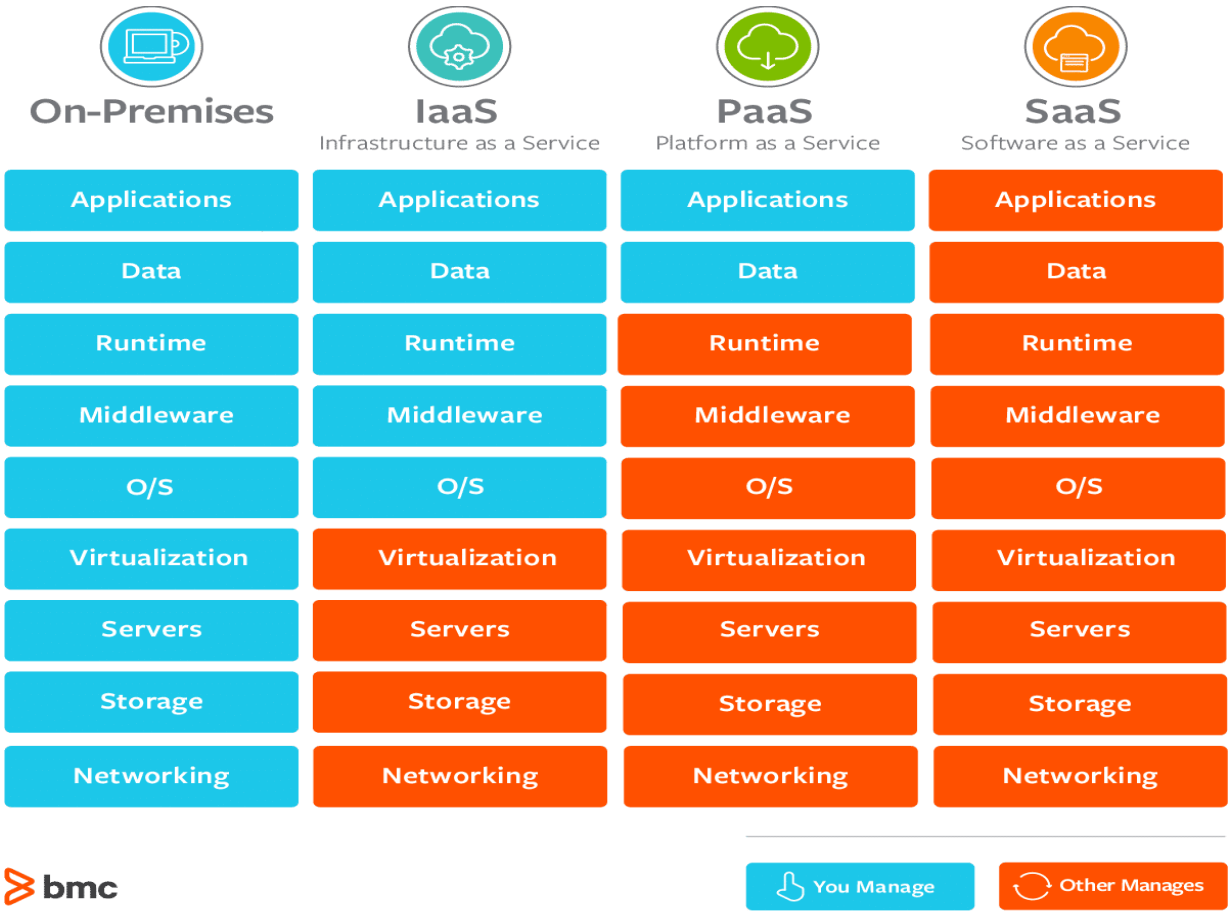
- **SaaS** stands for Software as a Service, providing a facility to the user to use the software from anywhere with the help of an internet connection. It is also known as software on demand.
- There are various benefits of the SaaS as it is economical and only the user has to pay for some of the basic costs such as licensing fees, installation costs, maintenance fees, and support fees.
- Some of the examples of SaaS are Yahoo! Mail, Hotmail, and Gmail.

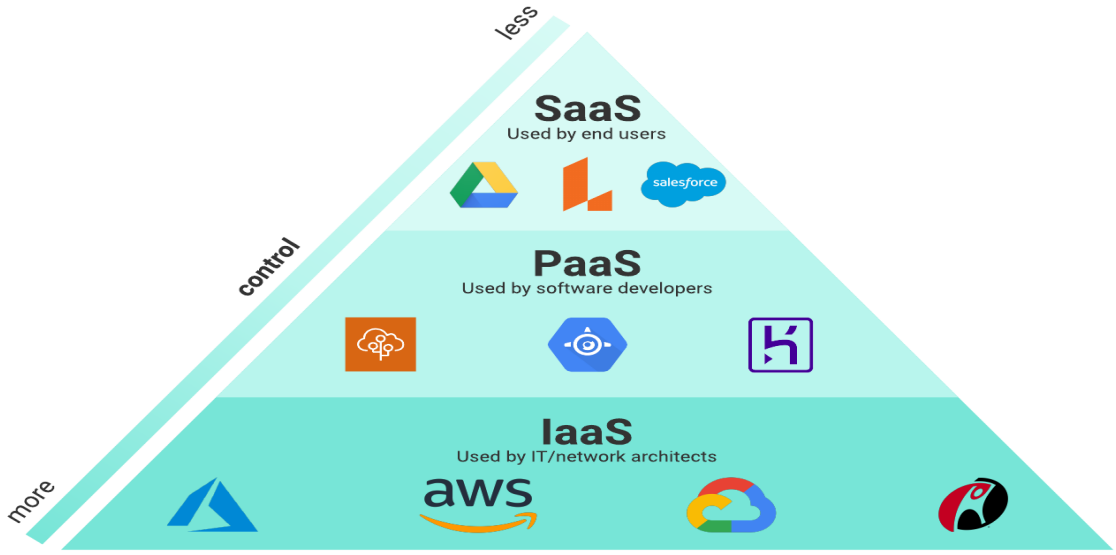
ii) **PAAS** :

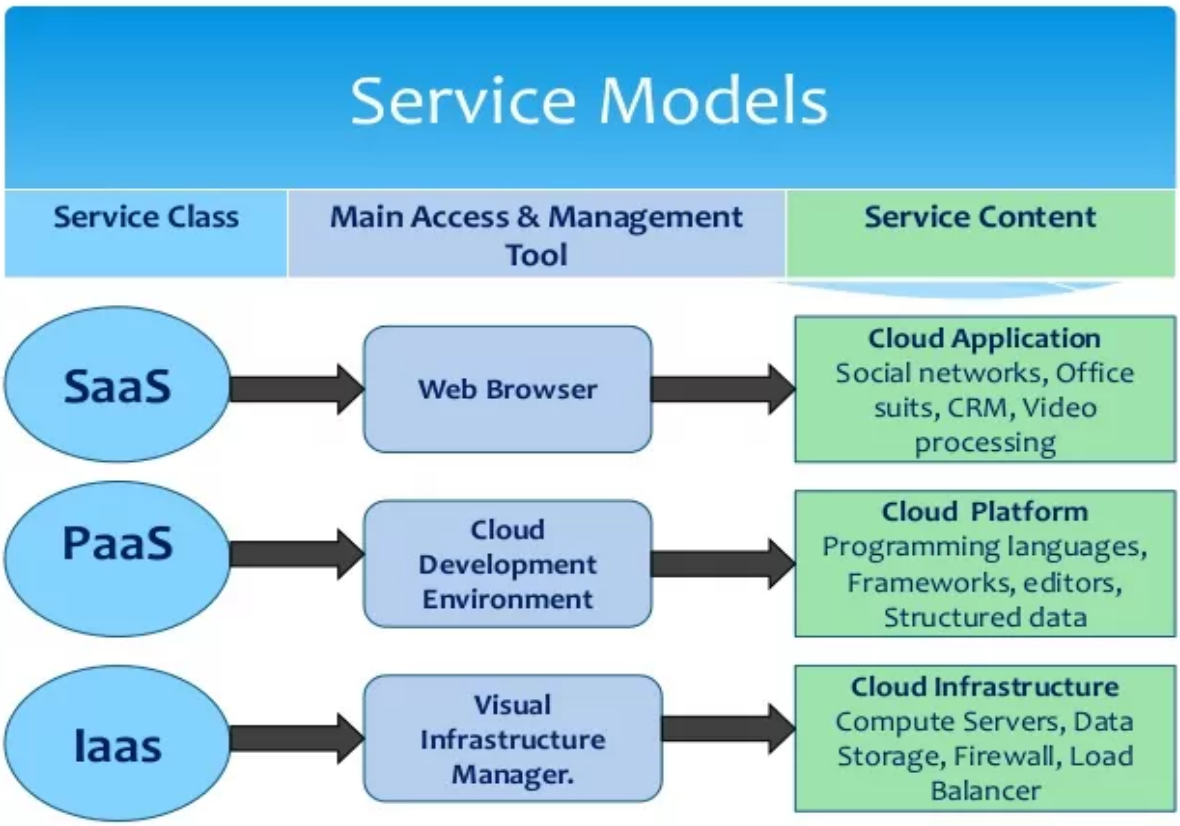
- **PaaS** stands for Platform as a Service. This helps the user by providing the facility to make, publish, and customize the software in the hosted environment. An internet connection helps to do it.
- The host of a PaaS has the hardware and software of its own. This frees the user from installing the hardware and software to execute a new application.

iii) **IAAS** :

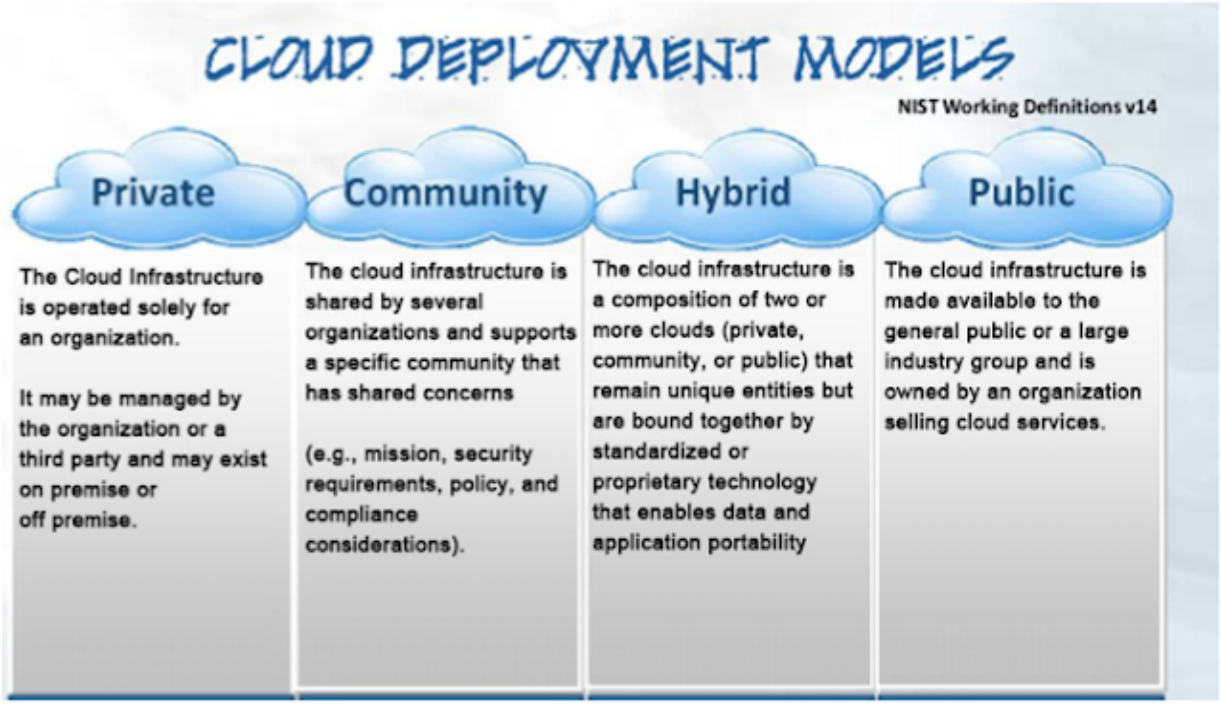
- **IaaS** stands for Infrastructure as a Service. With the help of IAAS, the user can use IT hardware and software just by paying the basic price of it.
- The companies that use IaaS are IBM, Google, Microsoft, Amazon.
- For small start-ups and firms, the IaaS has the major advantage as it benefits them with the infrastructure rather than spending a large amount of money on hardware and infrastructure.
- The reason for choosing IaaS is that it is easier, faster, and cost-efficient which reduces the burden of the organizations.


On-Premises
IaaS
Infrastructure as a Service
PaaS
Platform as a Service
SaaS
Software as a Service
Applications
Data
Runtime
Middleware
O/S
Virtualization
Servers
Storage
Networking
bmc
You Manage
Other Manages


less
more
control
SaaS
Used by end users
salesforce
PaaS
Used by software developers
IaaS
Used by IT/network architects
aws

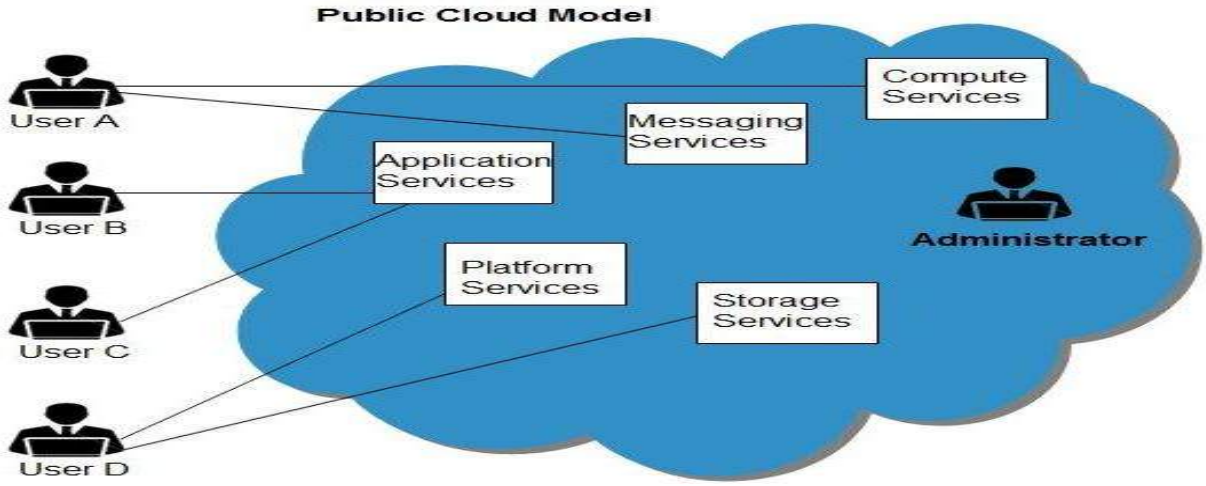


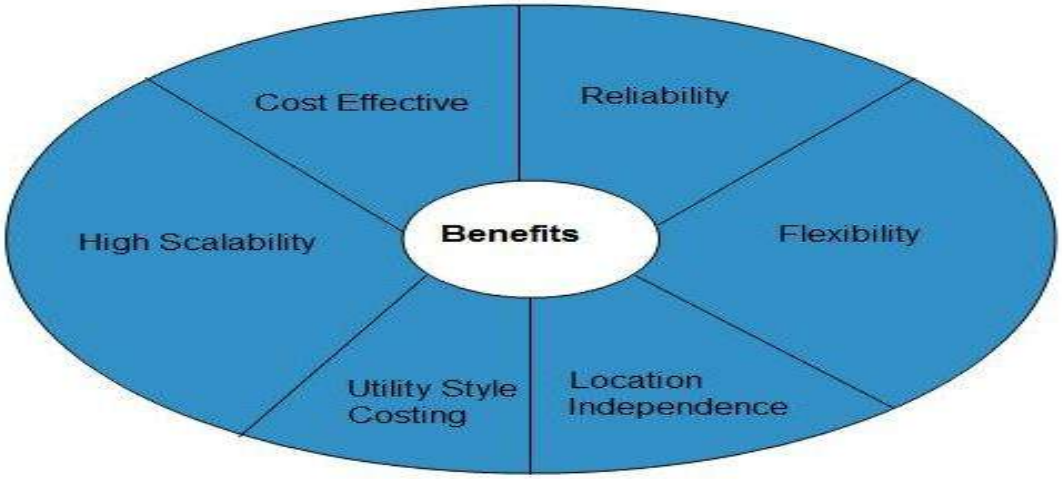
CLOUD COMPUTING DEPLOYMENT MODELS :



1. PUBLIC CLOUD :

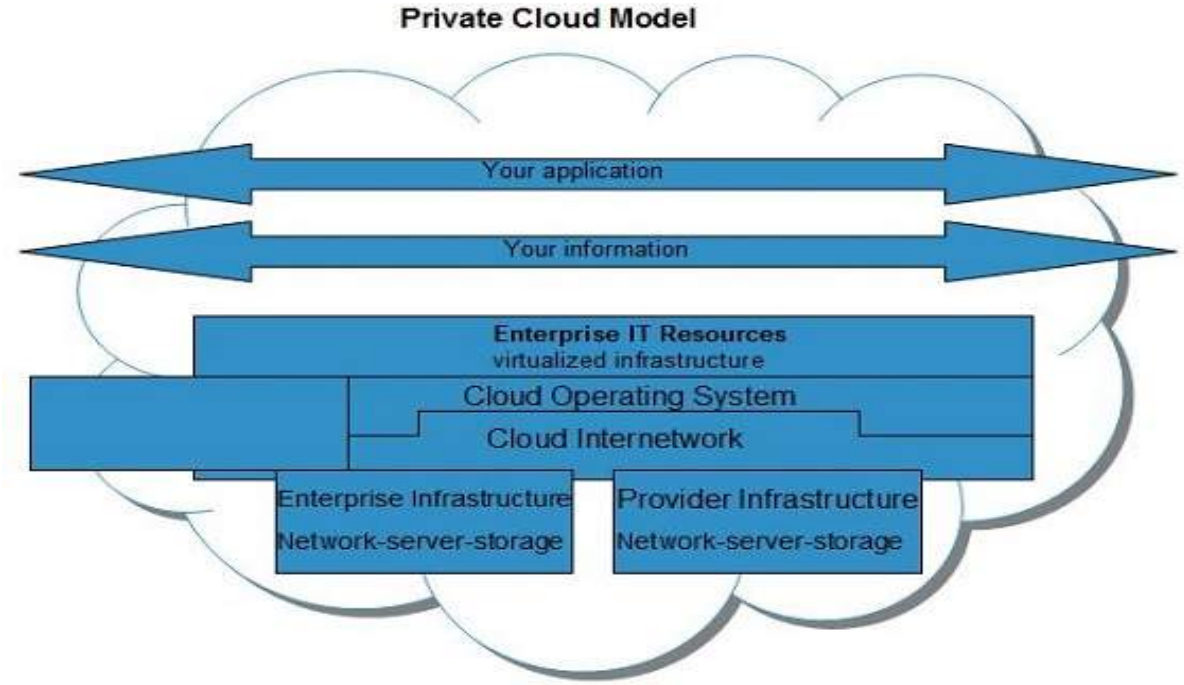
Public Cloud allows systems and services to be easily accessible to the general public. The IT giants such as Google, Amazon and Microsoft offer cloud services via the Internet. The Public Cloud Model is shown in the diagram below.

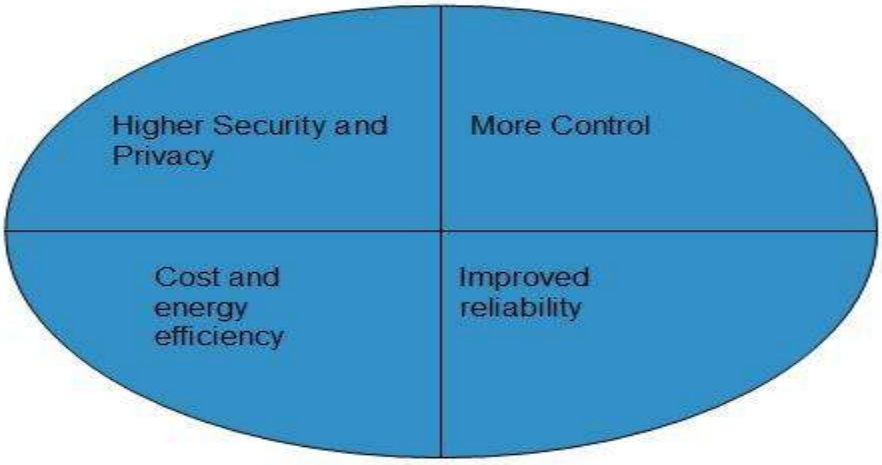




2. PRIVATE CLOUD :

- Private Cloud allows systems and services to be accessible within an organization. The Private Cloud is operated only within a single organization. However, it may be managed internally by the organization itself or by third-party.

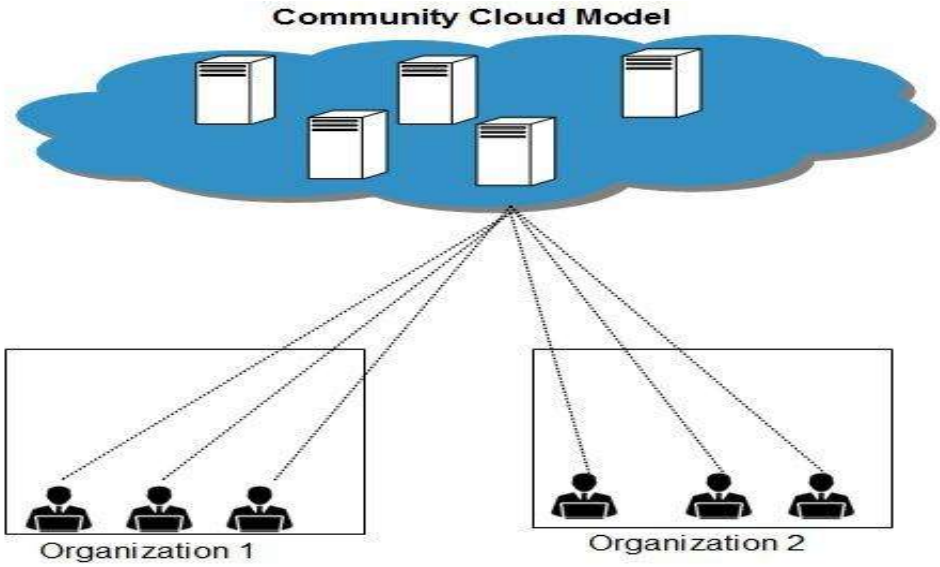




3. COMMUNITY CLOUD :

Community Cloud allows systems and services to be accessible by a group of organizations. It shares the infrastructure between several organizations from a specific community.

It may be managed internally by organizations or by the third-party.



4. HYBRID CLOUD :

- Hybrid Cloud is a mixture of public and private cloud. Non-critical activities are performed using the public cloud while the critical activities are performed using private cloud.