

AWS Certified Solutions Architect - Associate

Module 1 Cloud Computing Overview

Agenda

- ☐ What is Cloud Computing?
- **□** Why Cloud Computing?
- Definition of Cloud Computing
- ☐ On Premises v/s Service models
- Advantages & Disadvantages of cloud computing
- ☐ Capacity v/s Usage
- What's the difference
- **☐** Cloud computing Providers



What is Cloud Computing??

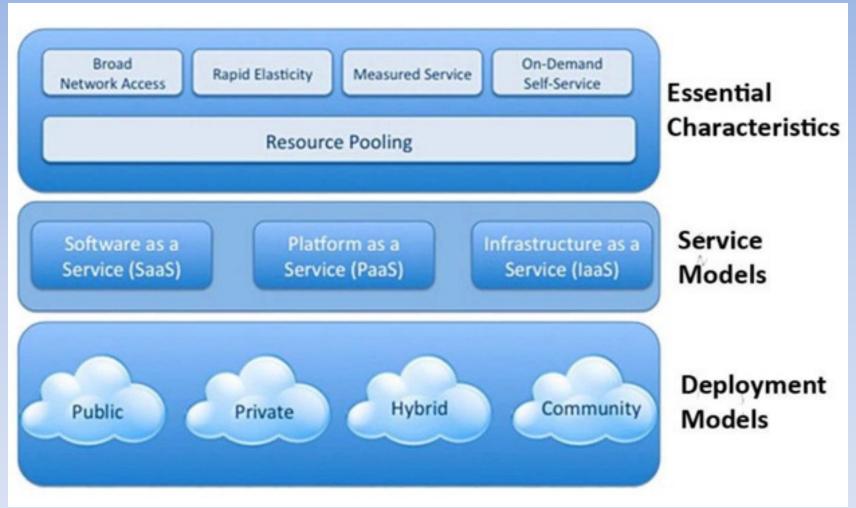
Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

The cloud model is mainly composed of

- Five essential characteristics
- ☐ Three service models
- Four deployment models



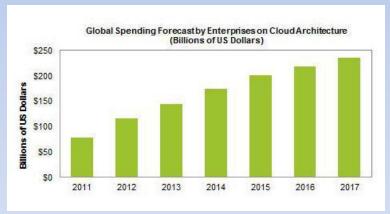
Cloud Computing??





Why Cloud Computing??

- ☐ Businesses have become less skeptical of cloud computing, more confident in its security, and more inclined to invest money in it, according to new findings.
- ☐ The cloud will continue to disrupt traditional IT models as the growing amount of data generated by people, machines, and things will increasingly be handled in the cloud.
- Cloud computing promises new career opportunities for IT Professionals



☐ Gartner predicts the worldwide public cloud cloud service market will grow 18% in 2017 to \$248.8B up from existing \$208B by 2018

On-premises v/s service models

OnPremises Applications Data Middleware **Operating System** Virtualization Server Storage Network

laaS **Applications** Data Middleware Operating System Virtualization Server Storage Network

PaaS **Applications** Data Middleware **Operating System** Virtualization Server Storage Network

SaaS **Applications** Data Middleware **Operating System** Virtualization Server Storage Network



Cloud computing: Advantages

ADVANTAGES

- Flexibility
- Availability
- Accessibility
- Multi-tenancy
- Scalability

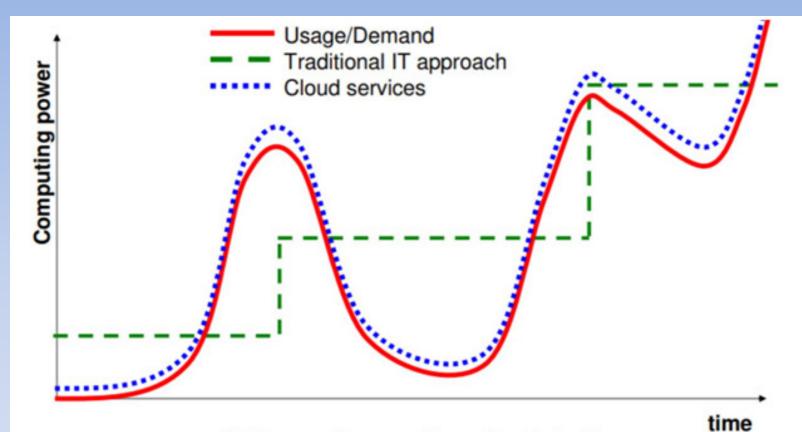
- Disaster
 Recovery
 - Cost of ownership
- Metered services

DISADVANTAGES

- Security
- > Vulnerability to attack
- > Downtime



Cloud Computing: Capacity v/s Usage



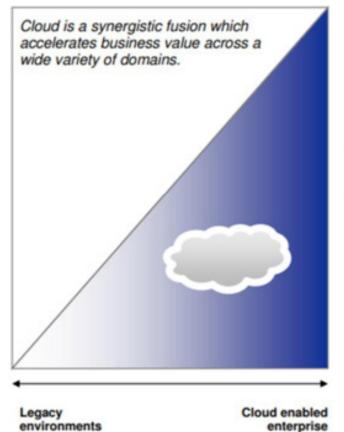
- Not enough capacity dissatisfaction
- More capacity than needed waste
- · Capacity matches need just right



What's Difference

Capability From

Server/Storage Utilization	10-20%
Self service	None
Test Provisioning	Weeks
Change Management	Months
Release Management	Weeks
Metering/Billing	Fixed cost model
Payback period for new services	Years



70-90%

Unlimited

Minutes

Days/Hours

Minutes

Granular

Months

To



Cloud Providers









