# AZURE AZ-900

- Describe Cloud Computing
  - Define cloud models, including public, private, and hybrid
  - Identify appropriate use cases for each cloud model
  - Describe the consumption-based model
  - Compare cloud pricing models

## **Define Cloud Models**

#### Public Cloud

- Owned and operated by a third party
- Offers computing services including servers and storage
- Resources are securely shared between customers
- Accessed over the Internet

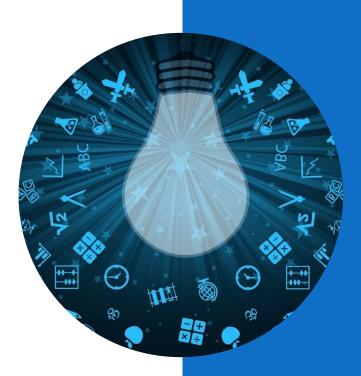
#### **Private Cloud**

- Cloud dedicated to a single organization
- On-premises or hosting providers datacenter
- Services and infrastructure on a private network

#### **Hybrid Cloud**

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- Combination of public and private clouds
- Expands options and flexibility by moving between public and private environments



### **Cloud Model Use Cases**



#### **Public Cloud**

- Businesses that don't want to manage data centers
- Organizations that require scalability and a globally distributed network
- Organizations that require details cost accounting for projects or departments

#### **Private Cloud**

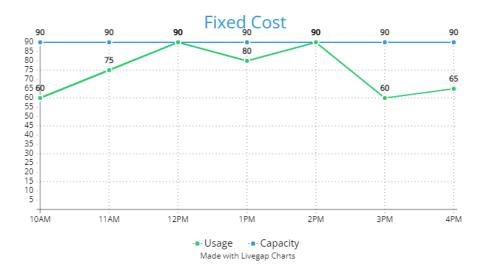
- Regulations prevent a move to the public cloud
- Physically isolated locations
- Large on-premises investment

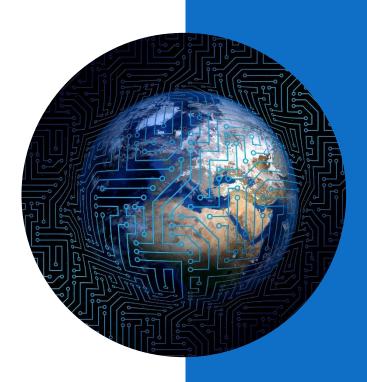
#### **Hybrid Cloud**

- Combination of public and private clouds
- Hybrid can be a transition or end-state
- Expands options and flexibility by moving between public and private environments

## **Fixed Price** Model

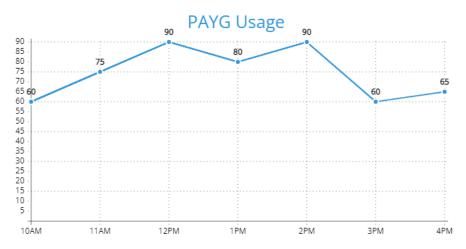
Fixed Price – Purchase and implement resources based on peak-demand

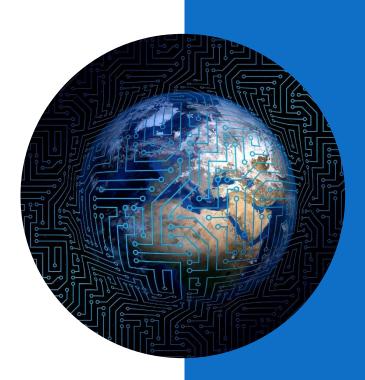




### **Consumption-Based** Model

Consumption-based – Only charged for the resources used on a pay-as-you-go (PAYG) rate





Made with Livegap Charts

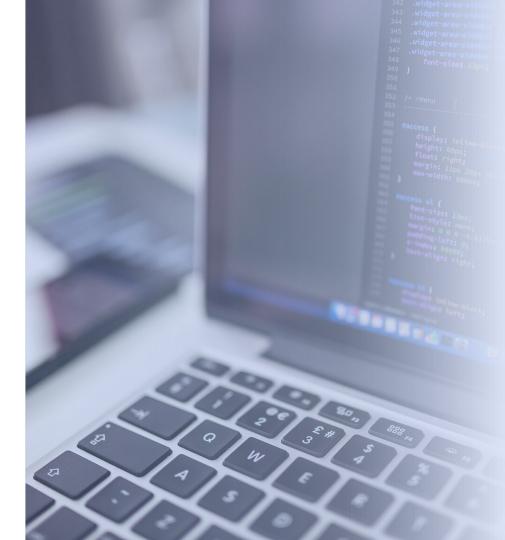
### CapEx VS. OpEx

### Capital Expenditure (CapEx)

- Assets are purchased up-front
- The value of the asset depreciate over time

### **Operational Expenditure (OpEx)**

- Billed when resources are used, no up-front costs
- Allocate costs to a project or department



# Consumption-Based Model

- No up-front CapEx costs
- No need to purchase, deploy and manage costly infrastructure
- Add and remove resources as needed
- Only pay for what is used

