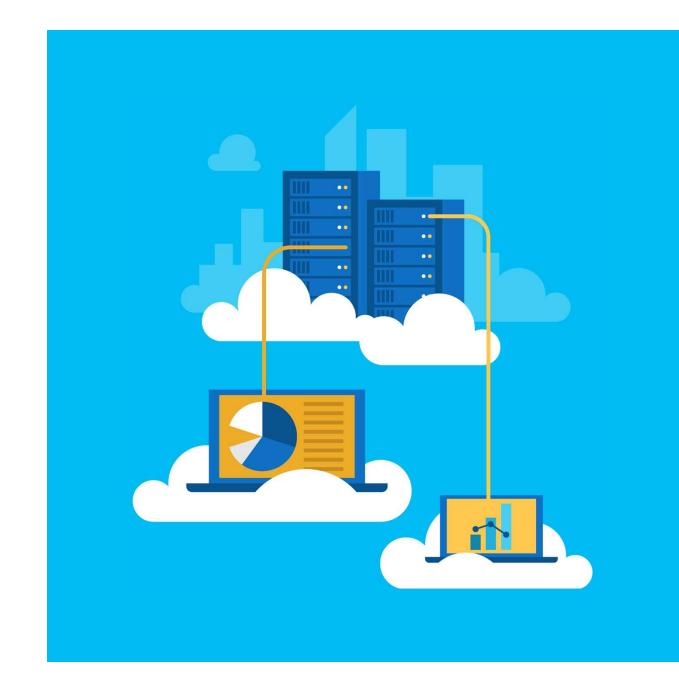
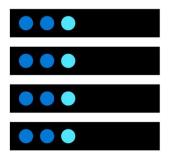


# Explore Microsoft Azure Cloud concepts

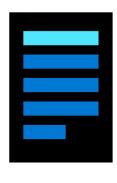


#### Define cloud computing



Compute





Storage



**Analytics** 



Cloud providers include Microsoft, Amazon, and Google

#### **Try This Exercise**

- 1. Open a browser.
- 2. Enter the URL portal.azure.com
- 3. Take a few minutes and look at the site.
- 4. Can you find:
  - 1. where to create a resource like a Virtual Machine?
  - 2. how to launch your Dashboard to see what resources you have?
  - 3. where Microsoft Learn training site is linked right into Azure to help you learn?
- 5. Close your browser.

#### **Explore key cloud concepts**

Agility

High availability

Scalability

Elasticity

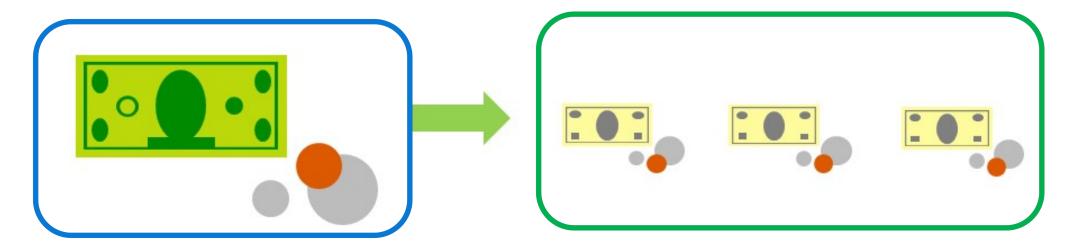
Global reach

Predictive cost

Security

Disaster recovery

#### Compare CapEx vs. OpEx



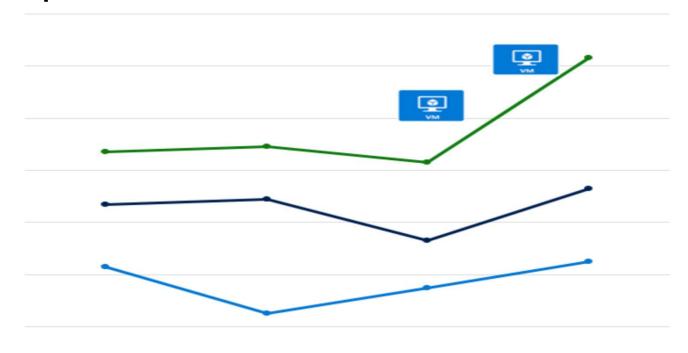
#### Capital Expenditure (CapEx)

- · High upfront cost
- · Value of investment reduces over time.

#### Operational Expenditure (OpEx)

- · Spend as needed.
- · No upfront cost, pay-as-you use.

#### Define consumption-based model

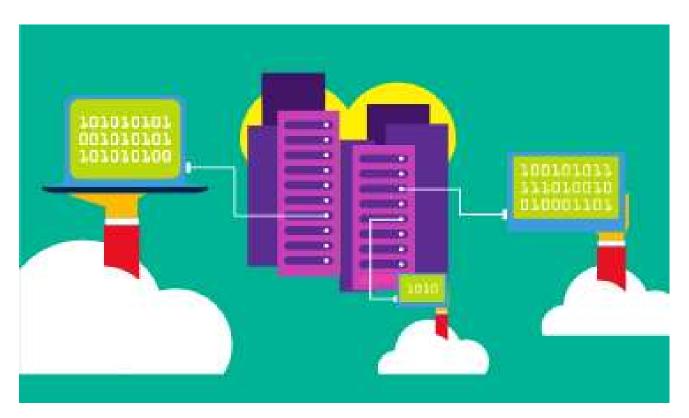


Consumption-based model = Pay only for the resources you use

# Module: Distinguish types of cloud models



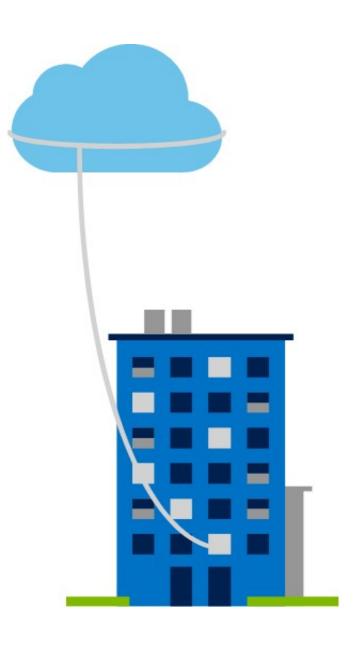
#### Define public cloud



- Owned by cloud services provider.
- Provides resources to multiple organizations and users
- Accessed via secure network connection
- (typically over the internet).

#### Define private cloud

- Organizations create a cloud environment in their datacenter.
- Organizations are responsible for operating the services they provide.



#### Define hybrid cloud

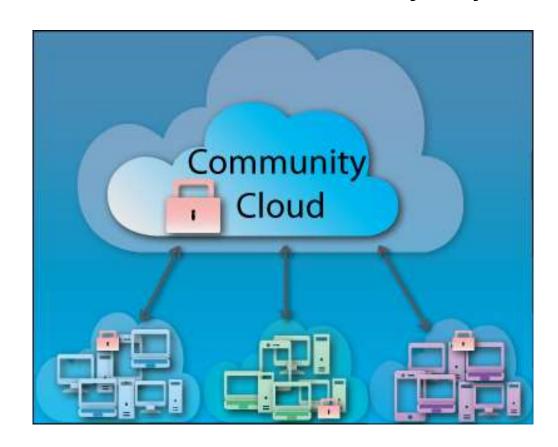


Combines *Public* and *Private* clouds to allow applications to run in the most appropriate location.

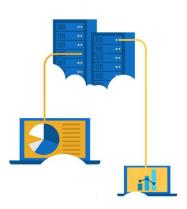
#### **Community Cloud**

A collaborative effort where infrastructure is shared and jointly accessed by several

organizations



Module: Explore types of cloud services



#### Discuss shared responsibility model

On-Premises (Private Cloud) Data & Access **Applications** Runtime **Operating System** Virtual Machine Compute Networking Storage

Infrastructure (as a Service) Data & Access **Applications** Runtime **Operating System** Virtual Machine Compute Networking Storage

Platform (as a Service) Data & Access **Applications** Runtime **Operating System** Virtual Machine Compute Networking Storage

Software (as a Service) Data & Access **Applications** Runtime **Operating System** Virtual Machine Compute Networking Storage

You Manage

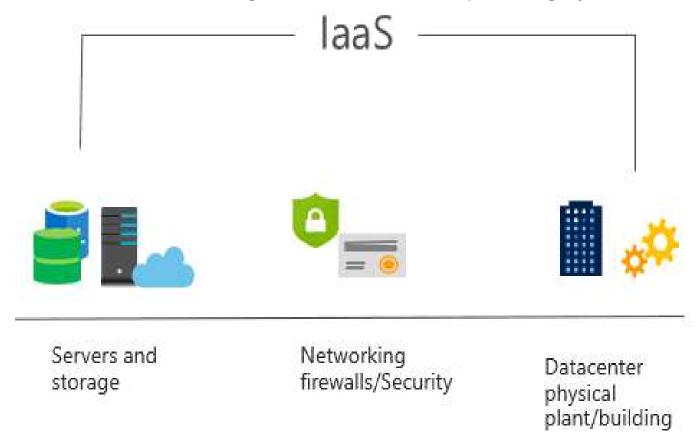
Cloud Provider Manages

## Define Infrastructure as a Service (laaS)

Build pay-as-you-go IT infrastructure

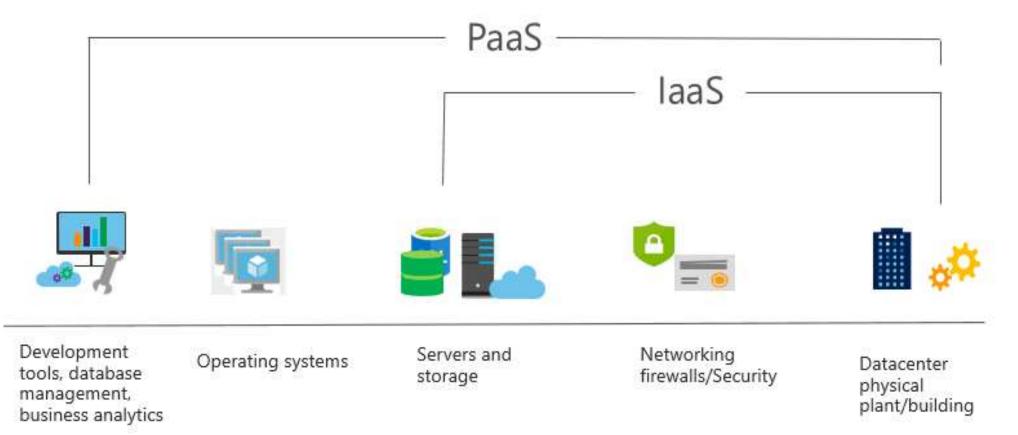
By renting servers, virtual machines, storage, networks, and operating systems from a

cloud provider.

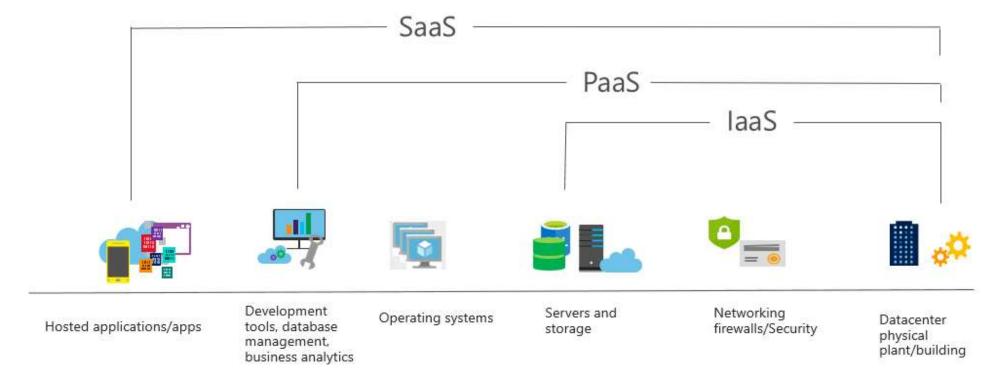


## **Define Platform as a Service (PaaS)**

Provides environment for building, testing, and deploying software applications; without focusing on managing underlying infrastructure.



# **Define Software as a Service (SaaS)**



Users connect to and use cloud-based apps over the internet: for example, Microsoft Office 365, email, and calendars.

- Monitoring functionalities
- For various other services within cloud.



Platform (PaaS)

Infrastructure (IaaS)

# Thanks