


MS-900 Agenda



- 01 Describe cloud concepts ←
- 02 Describe Microsoft 365 apps and services
- 03 Describe Microsoft 365 security and compliance capabilities
- 04 Describe Microsoft 365 pricing, licensing, and support

Credential
Certification Appl. Skill



MS-900 Learning Path: Describe cloud concepts

$12^{30} - 13^{30}$

Learning Path agenda

- Describe cloud computing
- Describe the benefits of using cloud services
- Describe cloud service types

onprem pizza
IaaS PaaS SaaS

Azure

Module 1: Describe cloud computing



Module 1: Introduction

After completing this module, you'll be able to:

- 1 Define cloud computing
- 2 Describe the shared responsibility model
- 3 Define cloud models, including public, private, and hybrid
- 4 Identify appropriate use cases for each cloud model
- 5 Describe the consumption-based model
- 6 Compare cloud pricing models

NIST [2011]

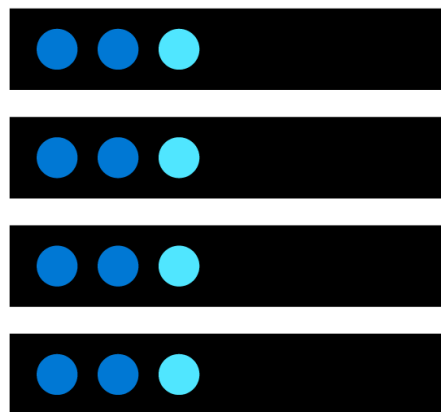
AWS

MS Azure
M365

What is cloud computing?

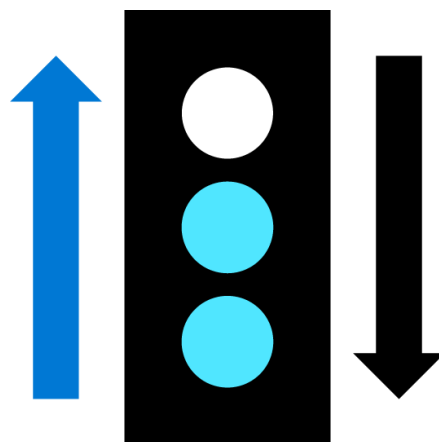
Cloud computing is the delivery of computing services over the internet, enabling faster innovation, flexible resources, and economies of scale.

Google



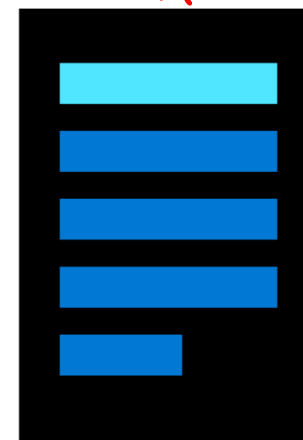
Compute

VM Container



Networking

VPN VNet



Storage

DB

IBM
Alibaba

Private cloud

Organizations create a cloud environment in their datacenter.

Organizations are responsible for operating the services they provide.

It does not provide access to users outside of the organization.

Automation
Self Service
Cost
Monitoring

Security



Public cloud

Owned by cloud services or hosting provider.

Provides resources and services to multiple organizations and users.

Accessed via secure network connection (typically over the internet).

ExpressRoute
Internet

M365

VPN

Azure



Hybrid cloud



Combines **public** and **private** clouds to allow applications to run in the most appropriate location.

Cloud model comparison

Public cloud

- No capital expenditures to scale up.
- Applications can be quickly provisioned and deprovisioned.
- Organizations pay only for what they use. *Azure*

Private cloud

- Hardware must be purchased for startup and maintenance.
- Organizations have complete control over resources and security.
- Organizations are responsible for hardware maintenance and updates.

Hybrid cloud

- Provides the most flexibility. *Exam*
- Organizations determine where to run their applications.
- Organizations control security, compliance, or legal requirements.

Compare CapEx and OpEx

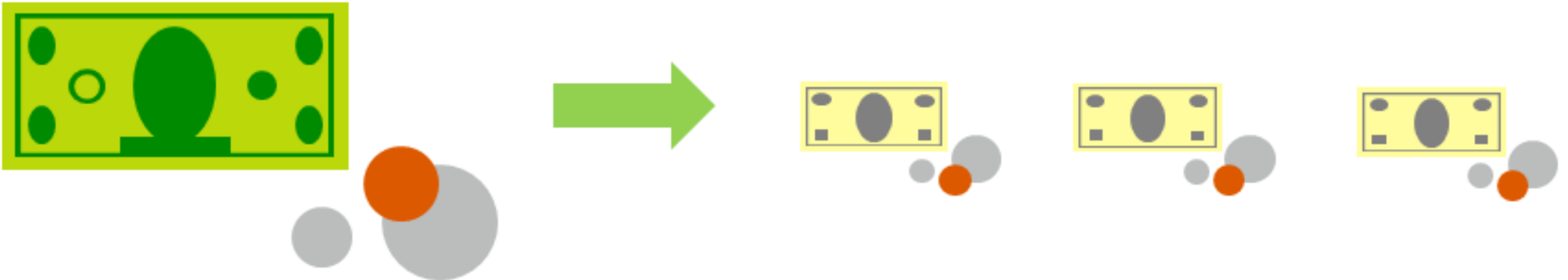
Betriebskosten

Capital expenditure (CapEx)

- The up-front spending of money on physical infrastructure.
- Costs from CapEx have a value that reduces over time.

Operational expenditure (OpEx)

- Spend on products and services as needed, pay-as-you-go.
- Get billed immediately.



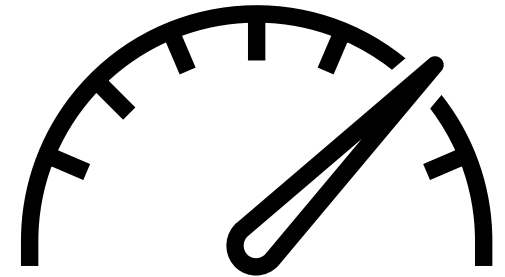
Consumption-based model

Cloud service providers operate on a consumption-based model, which means that end users only pay for the resources that they use. Whatever they use is what they pay for.

Better cost prediction.

Prices for individual resources and services are provided.

Billing is based on actual usage.



Azure public
↓ Azure Stack private

Module 2: Describe the benefits of using cloud services

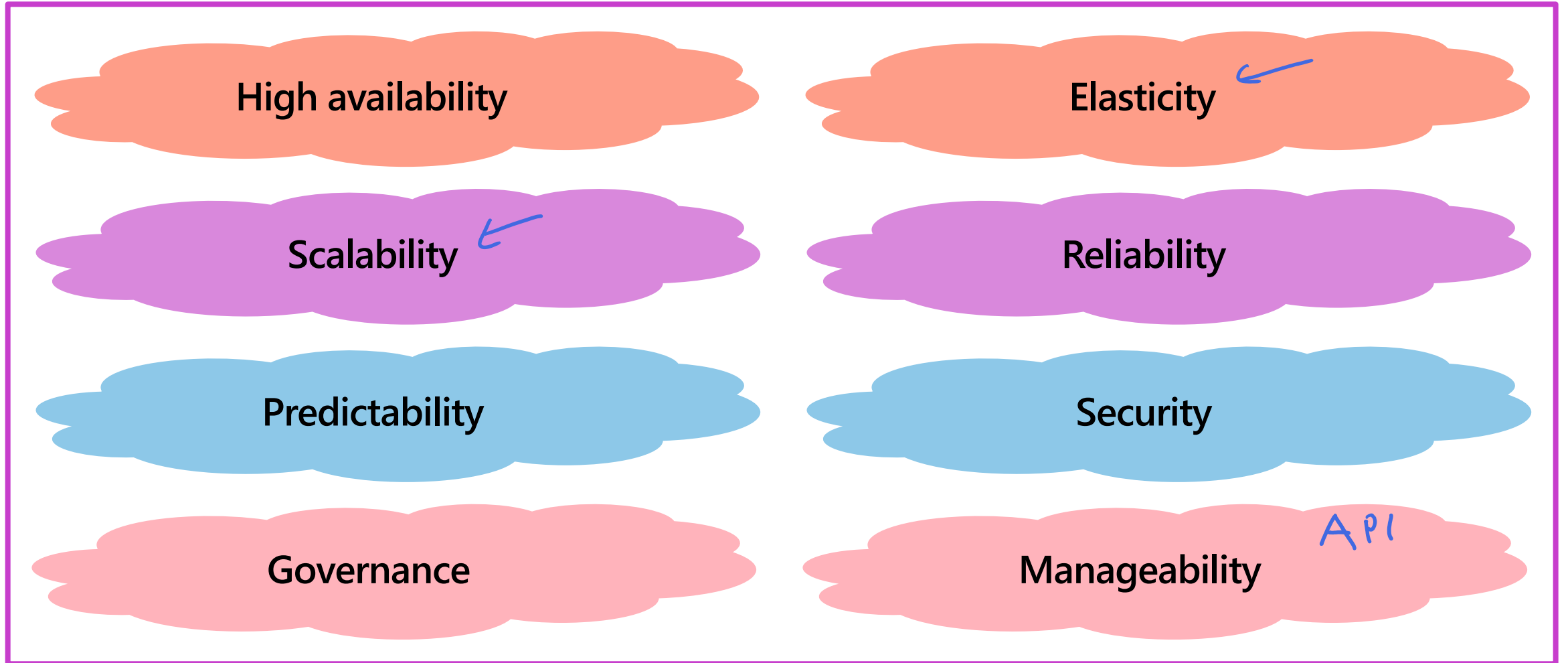


Module 2: Introduction

After completing this module, you'll be able to:

- 1** Describe the benefits of high availability and scalability in the cloud
- 2** Describe the benefits of reliability and predictability in the cloud
- 3** Describe the benefits of security and governance in the cloud
- 4** Describe the benefits of manageability in the cloud

Cloud benefits



Module 3: Describe cloud service types



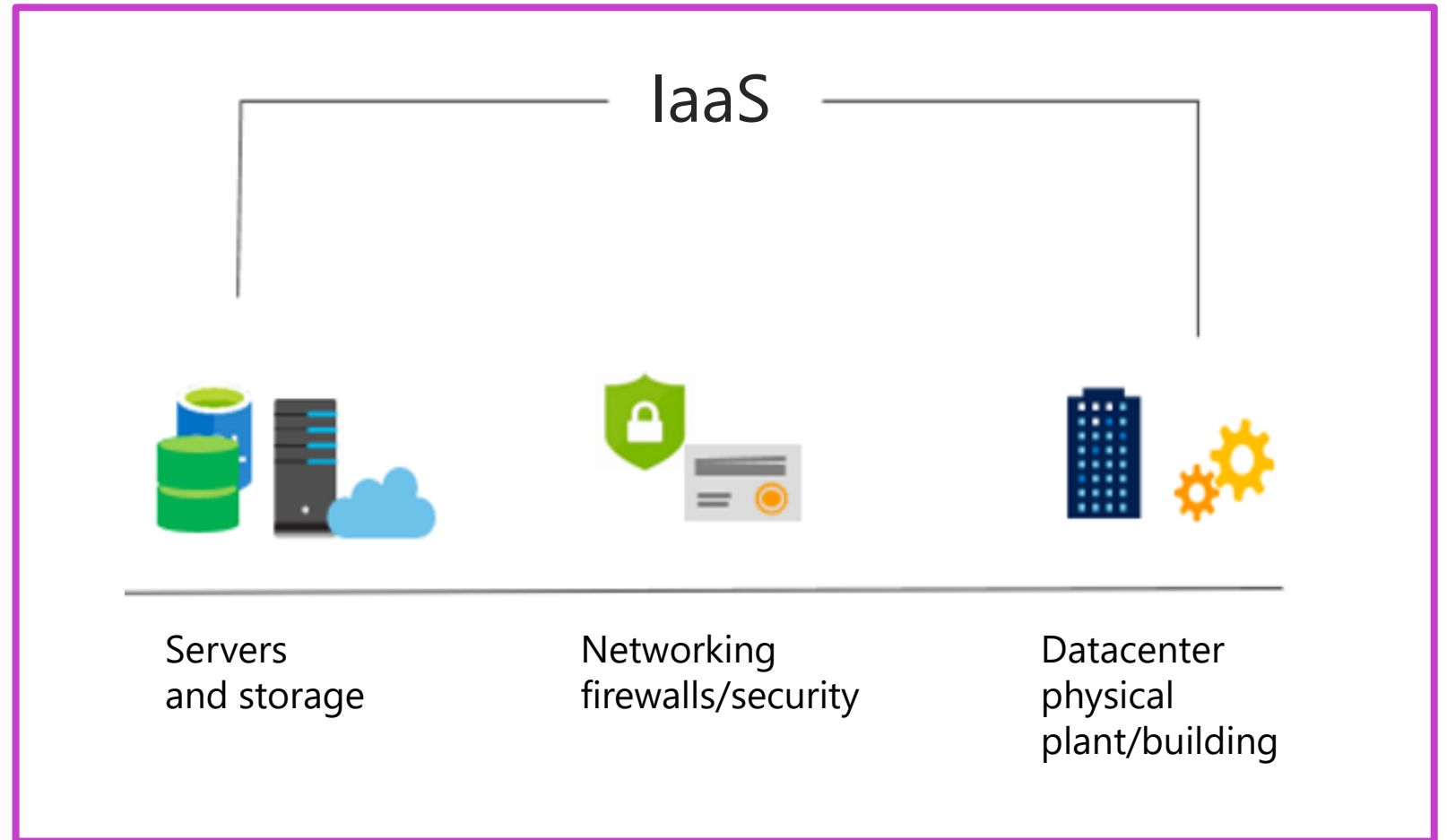
Module 3: Introduction

After completing this module, you'll be able to:

- 1 Describe infrastructure as a service (IaaS)
- 2 Describe platform as a service (PaaS)
- 3 Describe software as a service (SaaS)
- 4 Identify appropriate use cases for each cloud service (IaaS, PaaS, SaaS)

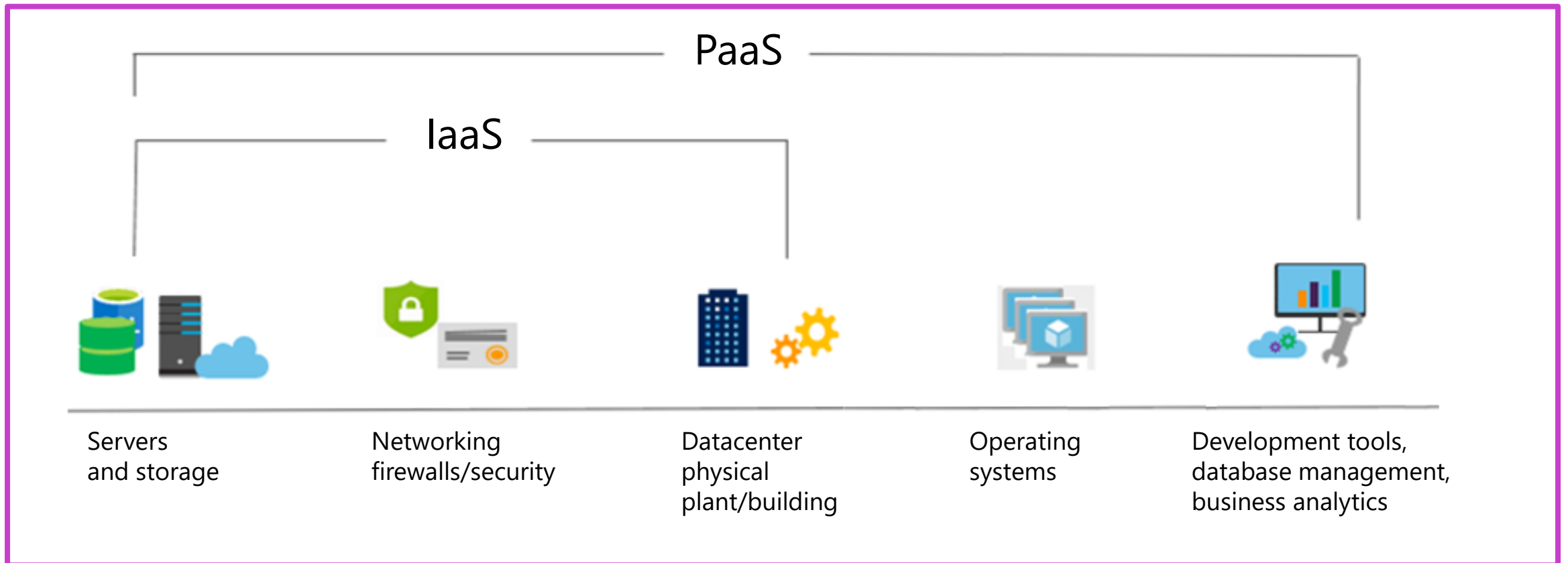
Infrastructure as a service (IaaS)

Build pay-as-you-go IT infrastructure by renting servers, virtual machines, storage, networks, and operating systems from a cloud provider.



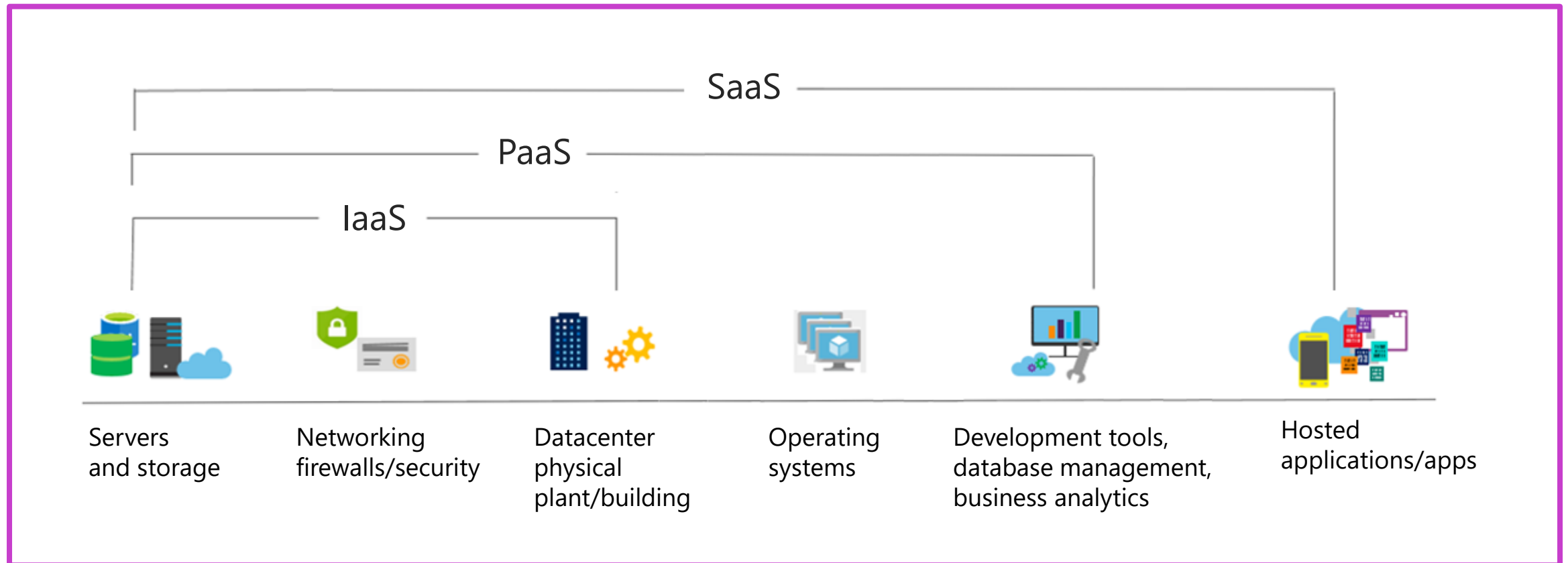
Platform as a service (PaaS)

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

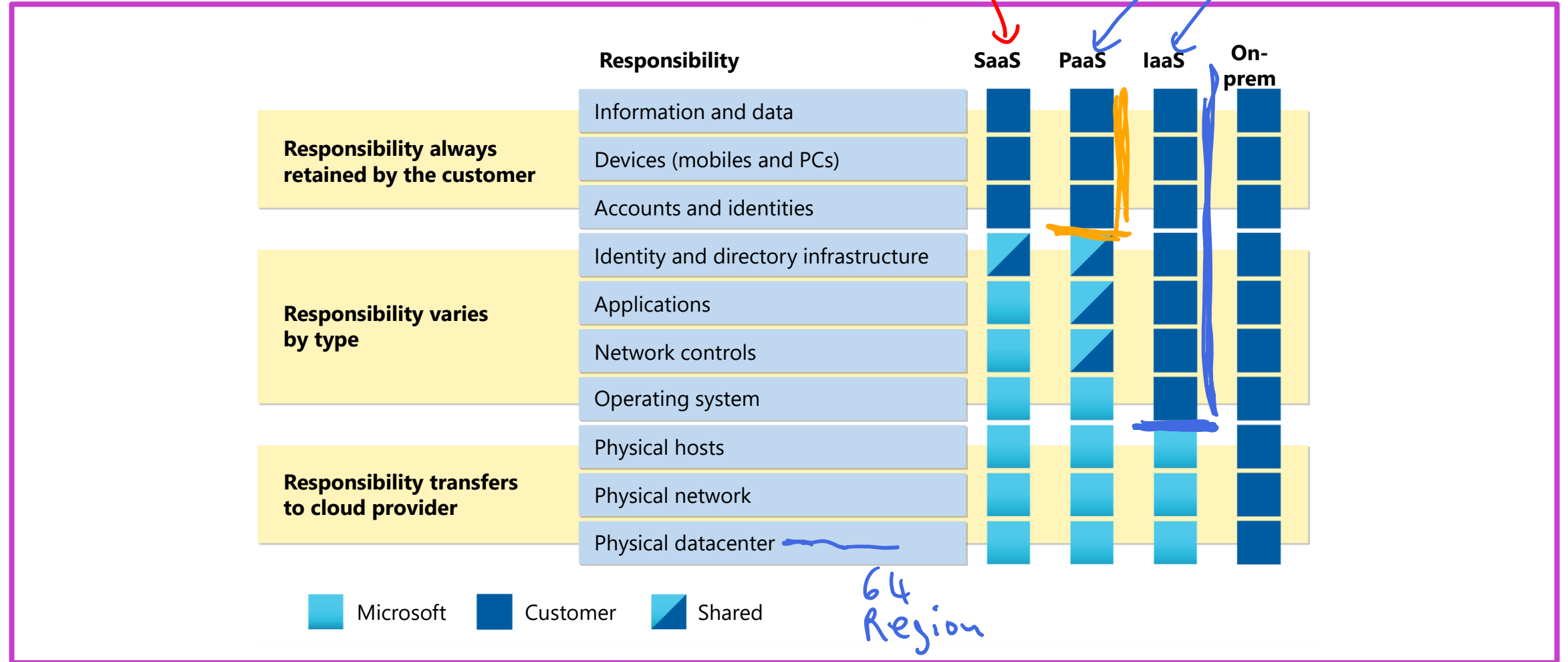


Software as a service (SaaS)

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



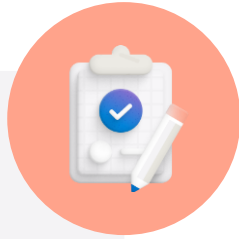
Shared responsibility model



Cloud service comparison

IaaS VM	PaaS Web server	SaaS App.
The most flexible cloud service.	Focus on application development.	Pay-as-you-go pricing model.
You configure and manage the hardware for your application.	Platform management is handled by the cloud provider.	Users pay for the software they use on a subscription model.

Learning Path summary



Learned about cloud computing

Learned about the benefits of using cloud services

Learned about cloud service types

pub
priv
hybrid

IaaS
PaaS
SaaS

