



Cloud Service Models – 6W's

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On Premise

On-site

Applications

Data

Runtime

Middleware

O/S

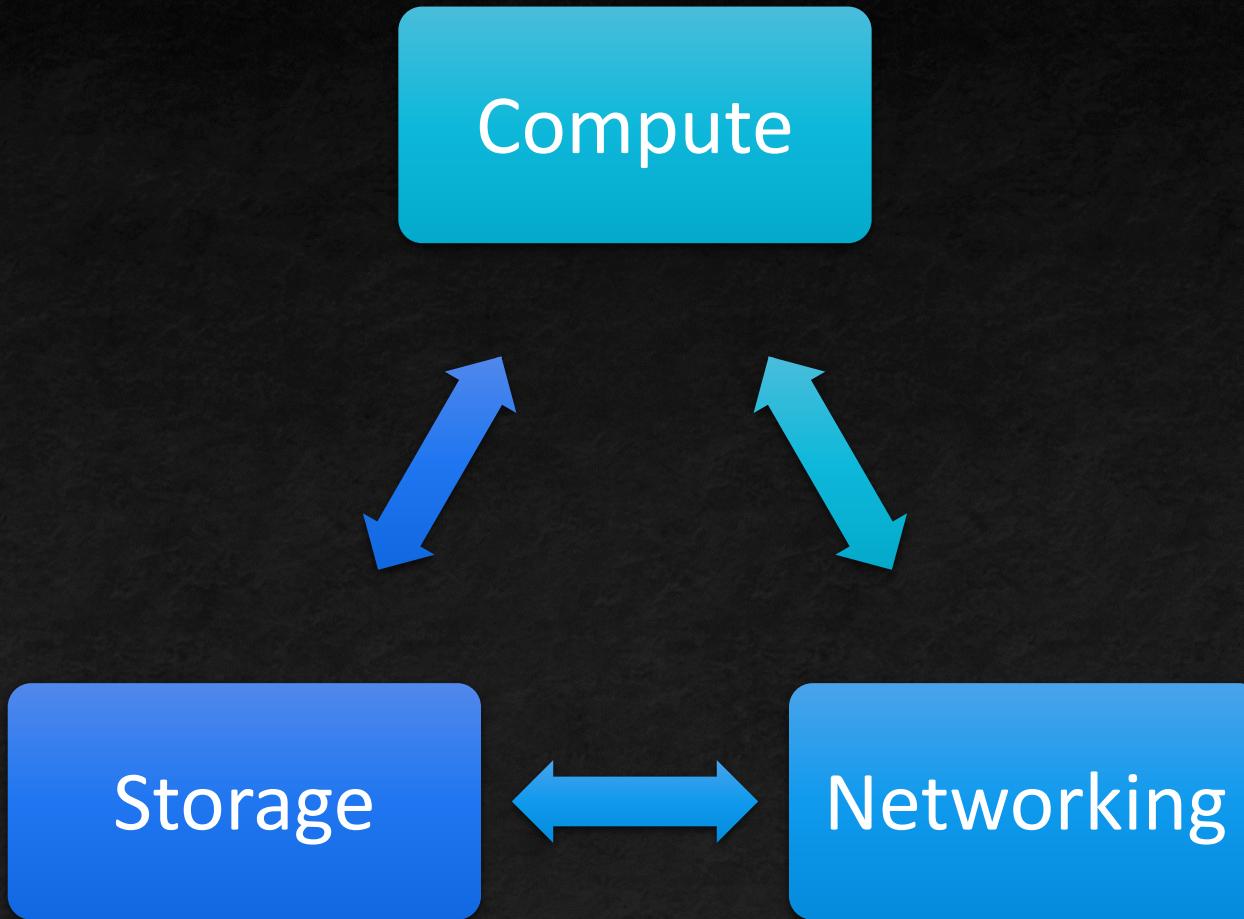
Virtualization

Servers

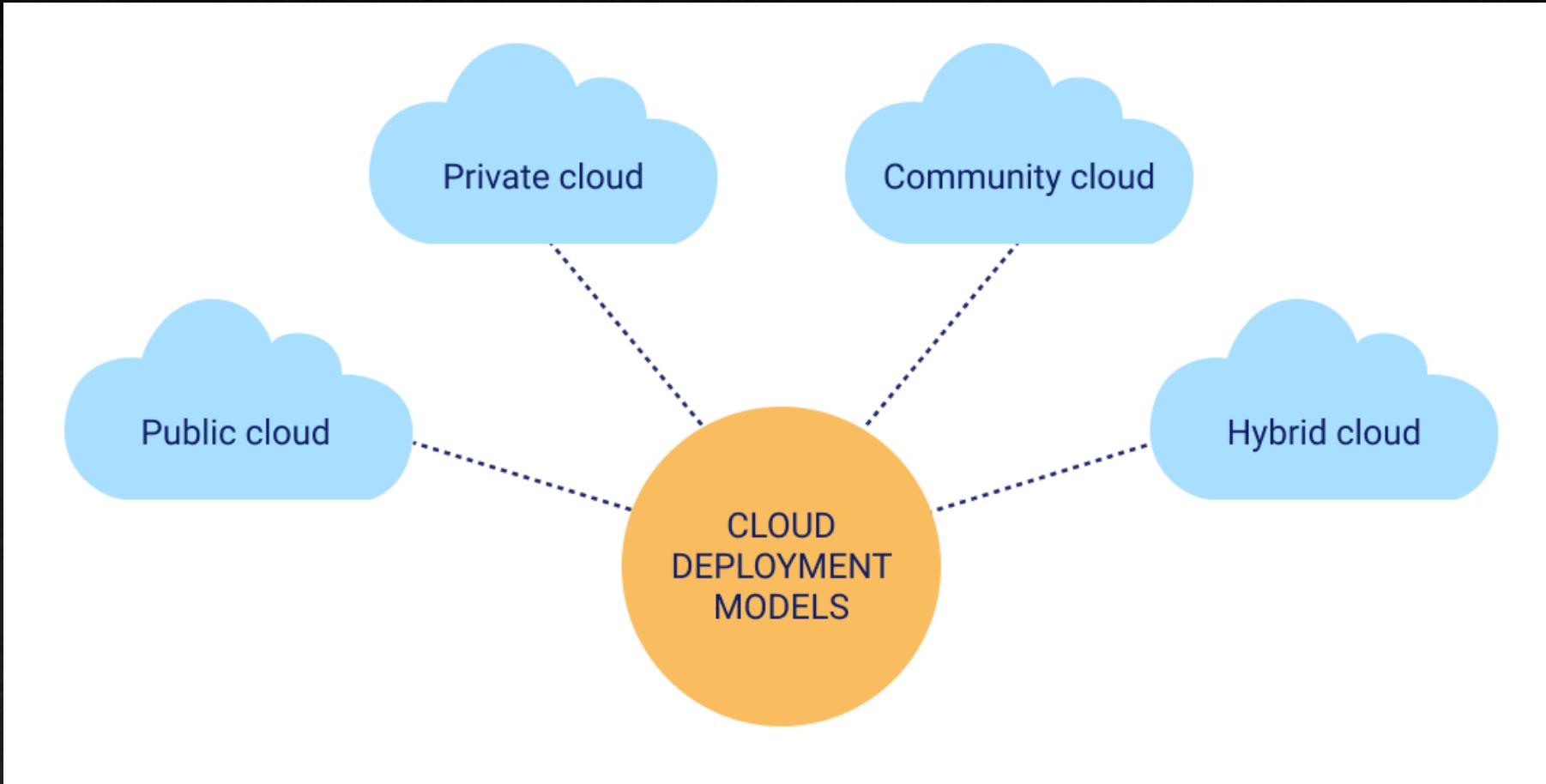
Storage

Networking

3 Core Pillars of Cloud



Cloud Deployment Models



Shared Responsibility Model



Shared Responsibility Model

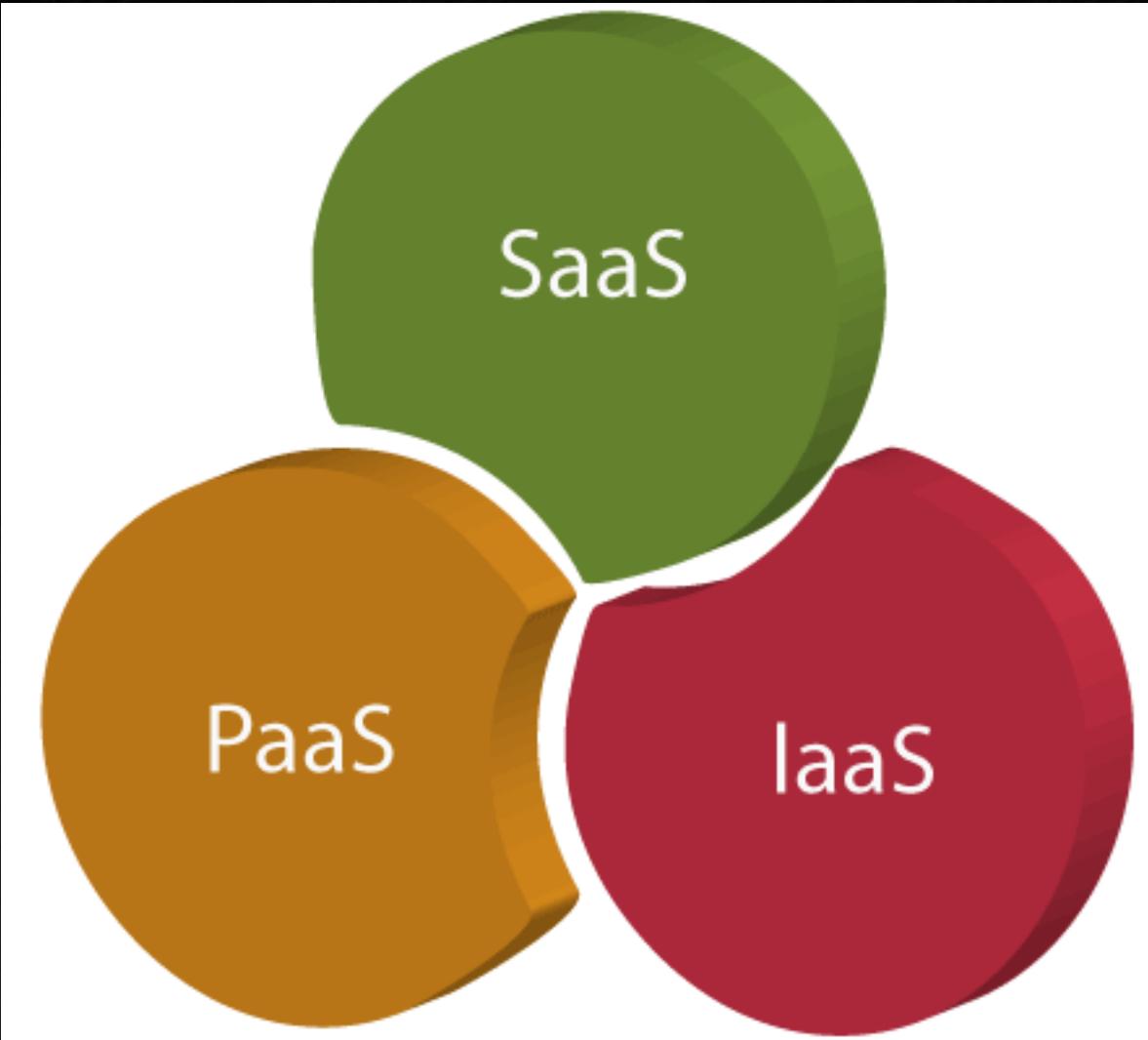
**Cloud Service Provider
(CSP)**

Responsibility ***OF*** the Cloud

Customer

Responsibility ***IN*** the Cloud

Cloud Service Models



Infrastructure as a Service - IaaS

- What: Cloud computing model that offers virtual compute resource over the internet.
- Who: Teams who require virtual compute resources.
- Where: Provided by cloud service providers (CSPs) that operate data centres globally.
- When: Fine grained configurations or dependencies are required
- Why: Greater flexibility and control over the underlying infrastructure
- How: Users access IaaS resources through a web-based interface or API provided by the CSP, provisioning and managing virtualized resources remotely.

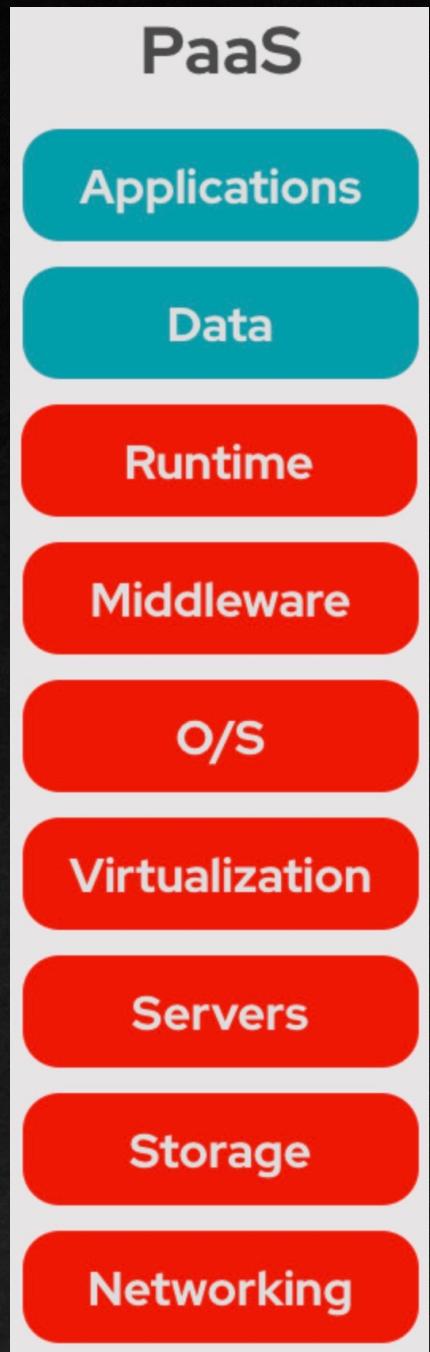


IaaS - Examples

- Microsoft Azure Virtual Machines
- Amazon Web Services (AWS) EC2 (Elastic Compute Cloud)
- Google Cloud Compute Engine

Platform as a Service - PaaS

- What: Tools and services for developing, deploying, and managing applications
- Who: Teams who focus on application development and deployment
- Where: Applications that can be developed, tested, and deployed on a cloud platform.
- When: Rapid application development, efficient deployment, and scalability
- Why: Simplify application development and deployment process, improve productivity, and reduce operational overheads.
- How: Web-based interfaces or APIs.



PaaS - Examples

- Azure App Service: Web applications.
- Azure Logic Apps: Workflows
- Azure SQL Database: Managed relational database
- Azure Cosmos DB: Managed NoSQL
- Azure Functions: Serverless compute

Serverless
Compute ?



Software as a Service - SaaS

- What: Software over the internet
- Why: Cost-effective and scalable access to Software
- When: Easy access to applications from anywhere, on any device
- Where: Hosted and delivered from the cloud
- Who: Businesses, organizations, and individuals
- How: Typically accessed through a subscription-based model

SaaS

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking

SaaS - Examples

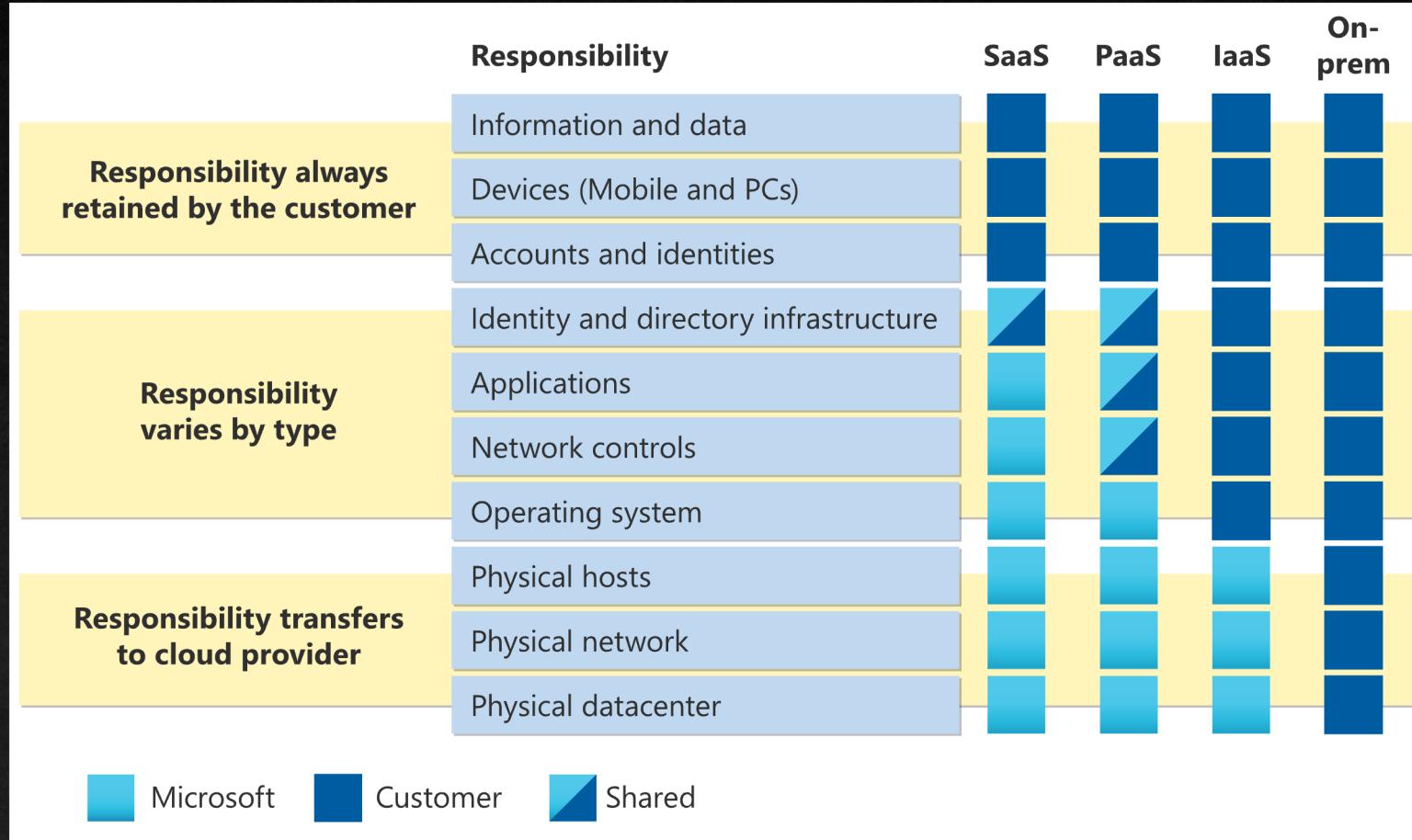
- Microsoft Office 365
- Azure Active Directory
- Microsoft Teams
- Microsoft Power BI
- Microsoft Defender for Cloud



On-site	IaaS	PaaS	SaaS
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

 You manage
 Service provider manages

Division of responsibility



Cloud Computing Service Models

