

AZ-900 Cloud Concepts Quick Reference

by Ayobamidele Aderosoye

Cloud Computing:

- Delivery of computing services (e.g., VMs, storage, databases, networking) over the internet.
- Includes new capabilities like IoT, ML, and AI.

Cloud Deployment Models:

1. Private: Hosted in a dedicated datacenter for one organization.
2. Public: Owned/managed by a third-party cloud provider.
3. Hybrid: Combines private and public clouds.
4. Multi-cloud: Use of multiple cloud providers.

Service Models:

- IaaS (Infrastructure as a Service): Azure VMs.
- PaaS (Platform as a Service): Azure App Service.
- SaaS (Software as a Service): Microsoft 365.

Key Concepts:

- Shared Responsibility Model: Security responsibilities are split between cloud provider and consumer.
- CapEx: Capital Expenditure, one-time cost to acquire infrastructure.
- OpEx: Operational Expenditure, pay-as-you-go model for cloud.
- Azure Arc: Manages on-prem, multi-cloud, and edge environments.
- Azure VMware Solution: Run VMware workloads natively in Azure.

Benefits of Cloud Computing:

- Cost-effective
- Scalable and elastic
- Highly available
- Secure and compliant