

Cloud Platform Comparison Presentation

Use Case-Based Approach for Architects & Technical Leaders

Duration: 35-40 minutes + 10-15 minutes Q&A

Target Audience: Technical Leads, Solution Architects, Engineering Managers

Slide 1: Title Slide

Title: Cloud Platform Comparison: AWS vs Azure vs GCP

Subtitle: A Use Case-Driven Architecture Perspective

Talking Points:

- Welcome and introduce yourself
- "Today we'll compare the three major cloud platforms through real-world architecture scenarios"
- "Not about which is 'best' - about which is right for YOUR use cases"

Duration: 1 minute

Slide 2: Why Use Case-Based Comparison?

Visual: Three cloud logos with architecture diagrams

Key Points:

- Traditional service-by-service comparisons are overwhelming (AWS has 200+ services!)
- Real-world architecture decisions need practical context
- Different clouds excel at different workload types

Talking Points:

- "Rather than comparing hundreds of individual services, we'll look at how you'd build common architectures"
- "This helps answer: 'Which cloud should I choose for MY specific needs?'"
- "We'll cover three critical use cases that represent 80% of enterprise workloads"

Duration: 2 minutes

Slide 3: Agenda Overview

Visual: Three use case icons with brief descriptions

Use Cases We'll Cover:

1. **3-Tier Web Application** - Foundation of enterprise apps
2. **Container Orchestration with Kubernetes** - Modern microservices
3. **Data Analytics Pipeline** - Big data and warehousing

Plus: Decision framework to help you choose

Talking Points:

- "These use cases build from fundamental to advanced"
- "Each demonstrates different strengths of the platforms"
- "At the end, you'll have a framework to evaluate for your organization"

Duration: 1 minute

SECTION 1: 3-TIER WEB APPLICATION

Slide 4: Use Case 1 - 3-Tier Web Application

Visual: Generic 3-tier architecture diagram (Web tier → App tier → Data tier)

Scenario Description:

- E-commerce or SaaS application
- User traffic via web/mobile
- Business logic in application layer
- Relational database backend
- Static assets (images, CSS, JS)
- Caching for performance
- Auto-scaling for elasticity

Talking Points:

- "This is the bread-and-butter of enterprise applications"
- "Let's see how each cloud implements this pattern"
- "We'll look at compute, networking, storage, database, and caching"

Duration: 2 minutes

Slide 5: 3-Tier Architecture - AWS

Visual: AWS reference architecture diagram (use from AWS Architecture Center)

Link: <https://aws.amazon.com/architecture/>

Key Services:

- **Web Tier:** CloudFront (CDN) → Application Load Balancer → EC2 Auto Scaling Group
- **App Tier:** EC2 instances with Auto Scaling, Lambda for serverless functions
- **Static Assets:** S3 + CloudFront
- **Database:** RDS (Aurora/PostgreSQL/MySQL) with Multi-AZ
- **Caching:** ElastiCache (Redis/Memcached)
- **Network:** VPC with public/private subnets across multiple AZs

Talking Points:

- "AWS pioneered most of these service categories - mature and battle-tested"
- "Aurora is AWS's proprietary database - 5x faster than standard MySQL, but lock-in consideration"
- "Auto Scaling Groups give granular control but require more configuration"
- "Strong: Breadth of options, extensive documentation"
- "Challenge: Complexity, lots of knobs to turn"

Duration: 3 minutes

Slide 6: 3-Tier Architecture - Azure

Visual: Azure reference architecture diagram (use from Azure Architecture Center)

Link: <https://learn.microsoft.com/en-us/azure/architecture/>

Key Services:

- **Web Tier:** Azure CDN/Front Door → Application Gateway → VM Scale Sets
- **App Tier:** Virtual Machines with Scale Sets, Azure Functions
- **Static Assets:** Blob Storage + CDN
- **Database:** Azure SQL Database or Azure Database for PostgreSQL/MySQL
- **Caching:** Azure Cache for Redis

- **Network:** Virtual Network with subnets across Availability Zones

Talking Points:

- "Very similar architecture to AWS - services map almost 1:1"
- "Biggest differentiator: Seamless integration with Microsoft ecosystem (Active Directory, Office 365)"
- "Azure SQL Database has intelligent performance tuning built-in"
- "VM Scale Sets are intuitive if you know Azure"
- "Strong: Windows workloads, hybrid cloud, enterprise integration"
- "Challenge: Less mature than AWS for pure Linux/open-source stacks"

Duration: 3 minutes

Slide 7: