AWS re:Invent

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AWS Well-Architected Framework: Improve performance with caching

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Well-Architected GEO SA
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Business opportunity
Cost-effectively scale and delight more than 94.9M subscribers around the world
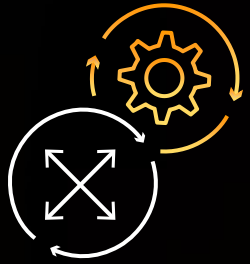
Challenge
Deliver ultra-fast, device-specific landing pages to subscribers, while managing seasonal spikes from highly anticipated worldwide releases

Solution
Amazon ElastiCache for Redis global datastore's cross-region replication boosted application performance and reduced latency to microseconds for core HBO services, while realizing significant cost savings
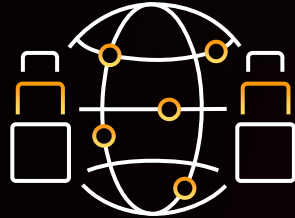
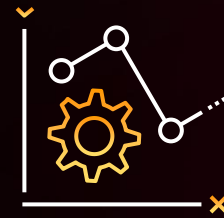# AWS Well-Architected Framework

Operational excellence
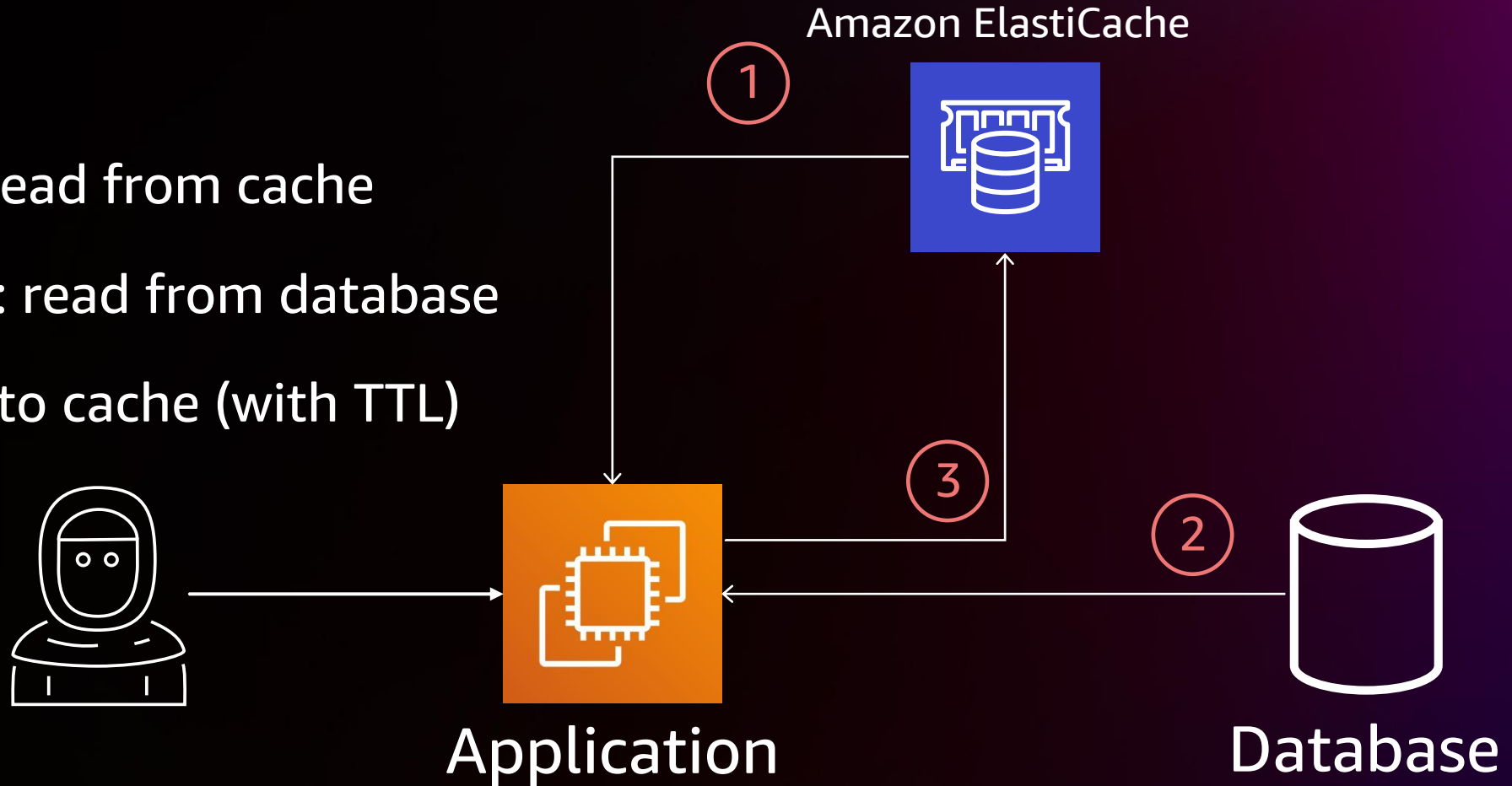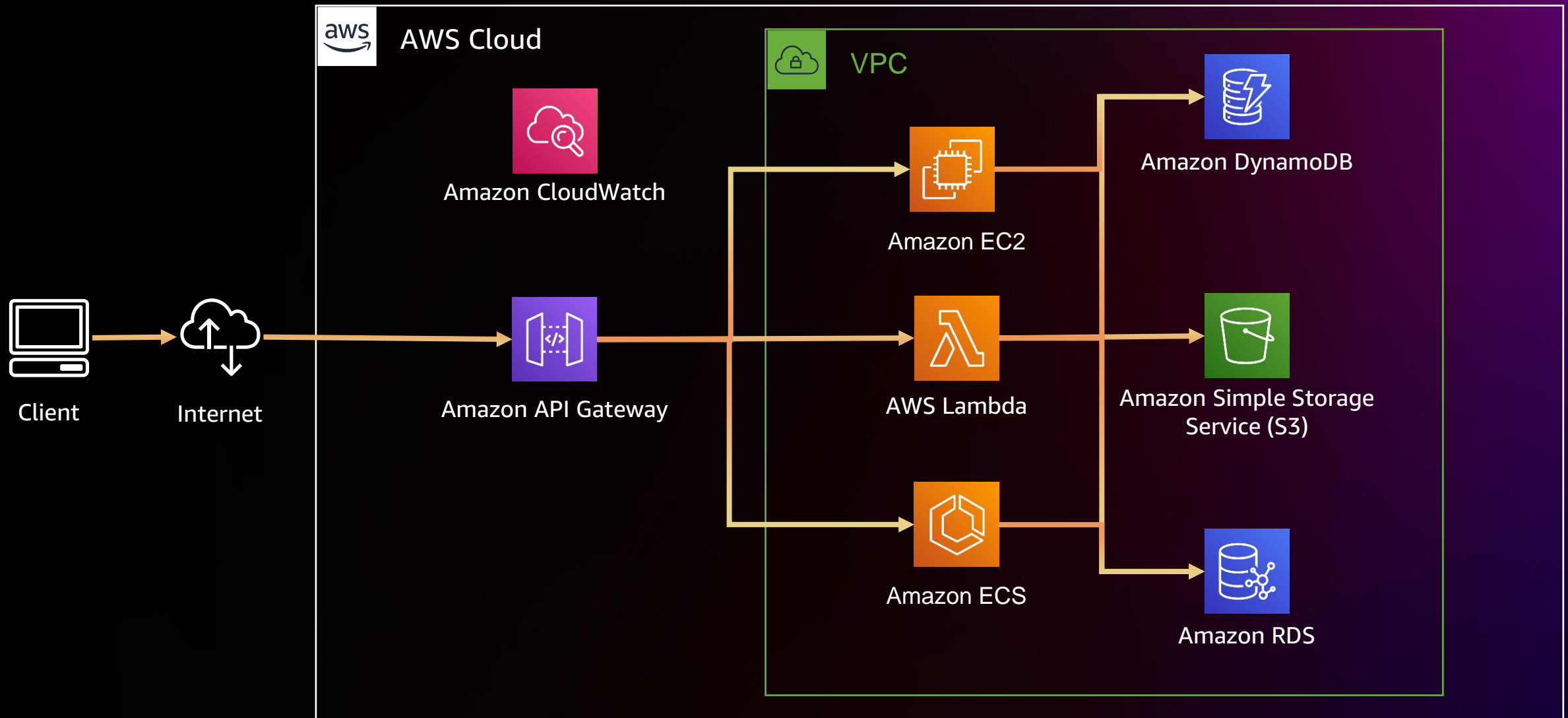
Security

Reliability

Performance efficiency

Cost optimization

Sustainability

Caching 101

1. Cache hit: read from cache

2. Cache miss: read from database

3. Write data to cache (with TTL)

Amazon ElastiCache

Application

Database

Unicorn shop app pre-caching

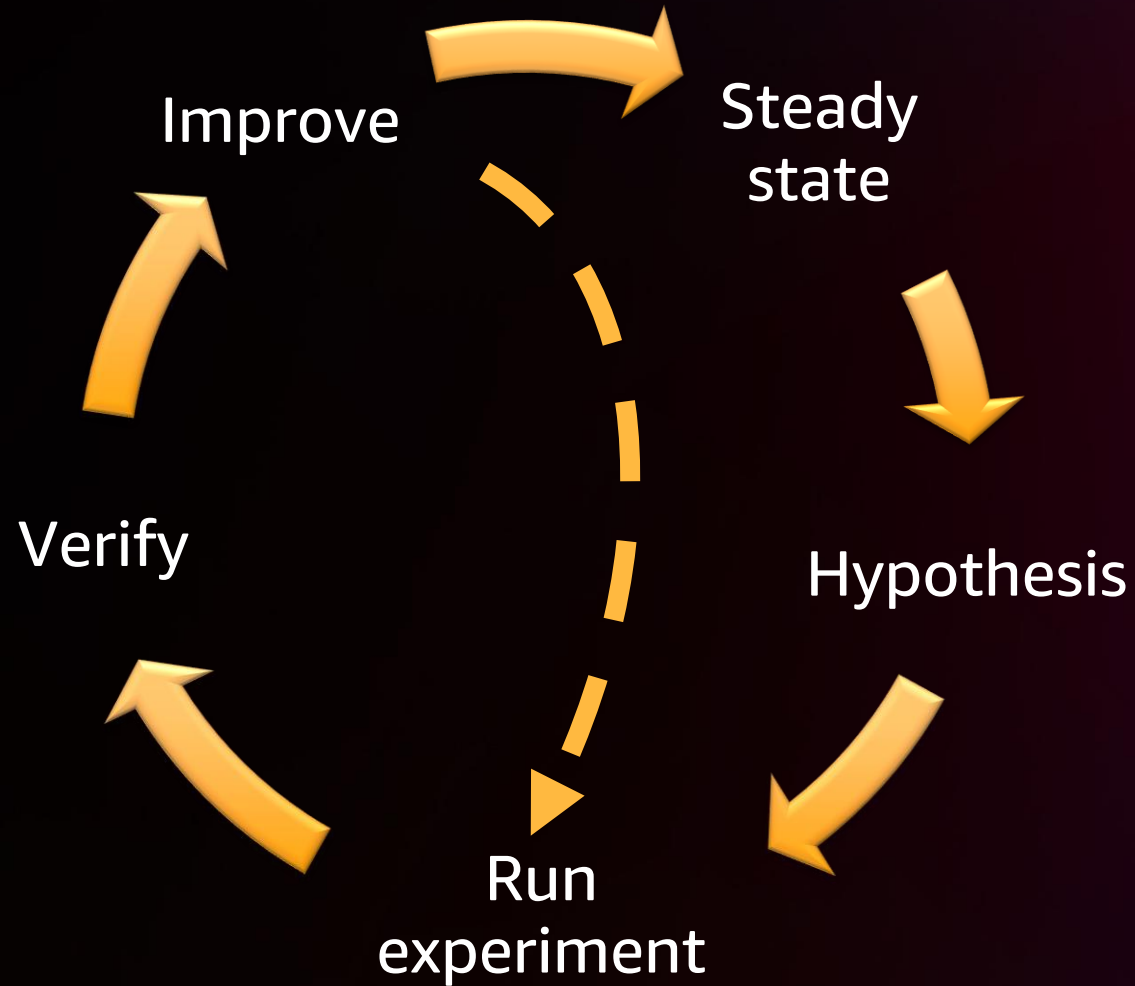# Performance efficiency best practice areas
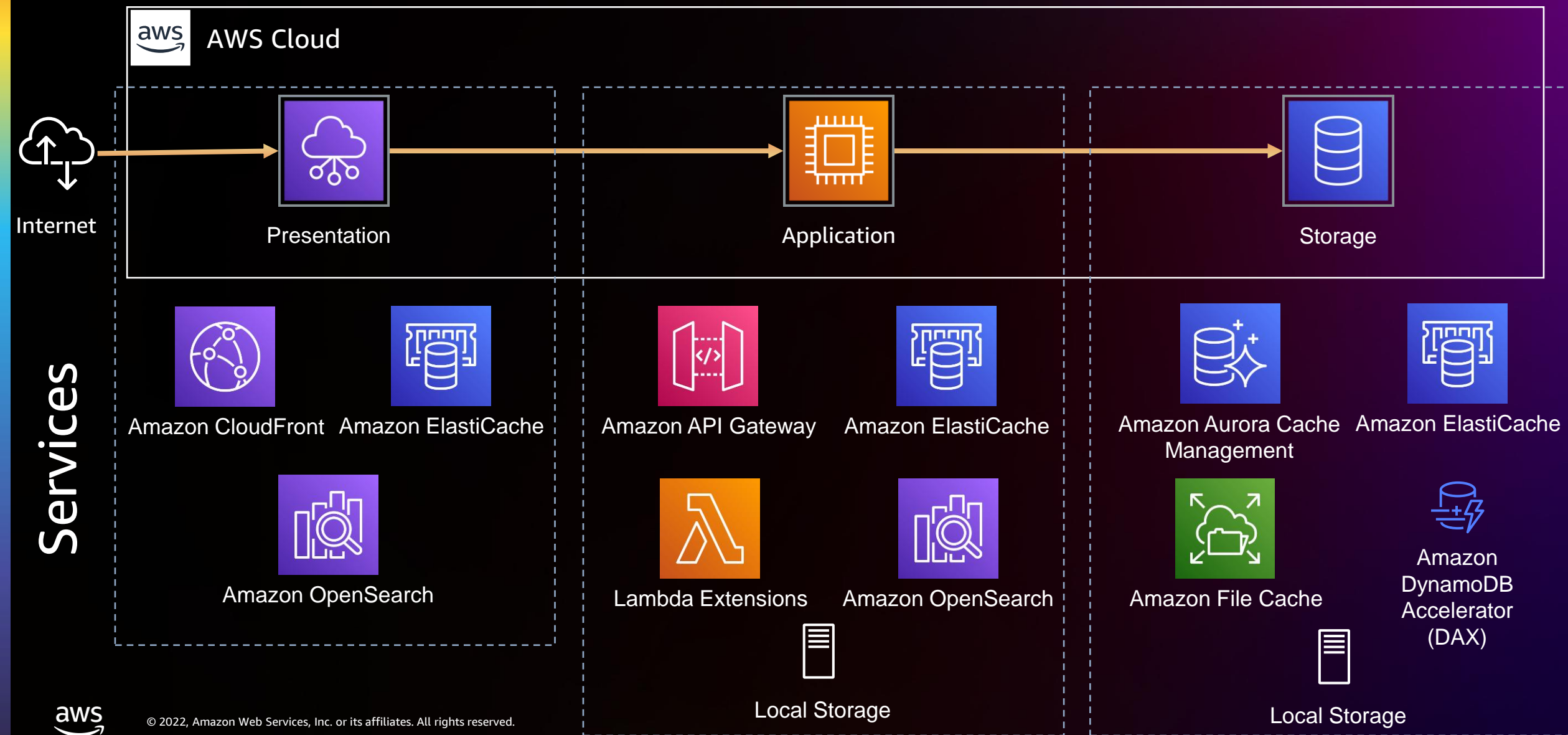
- Selection

- Review

- Monitoring

- Trade-offs

Testing performance

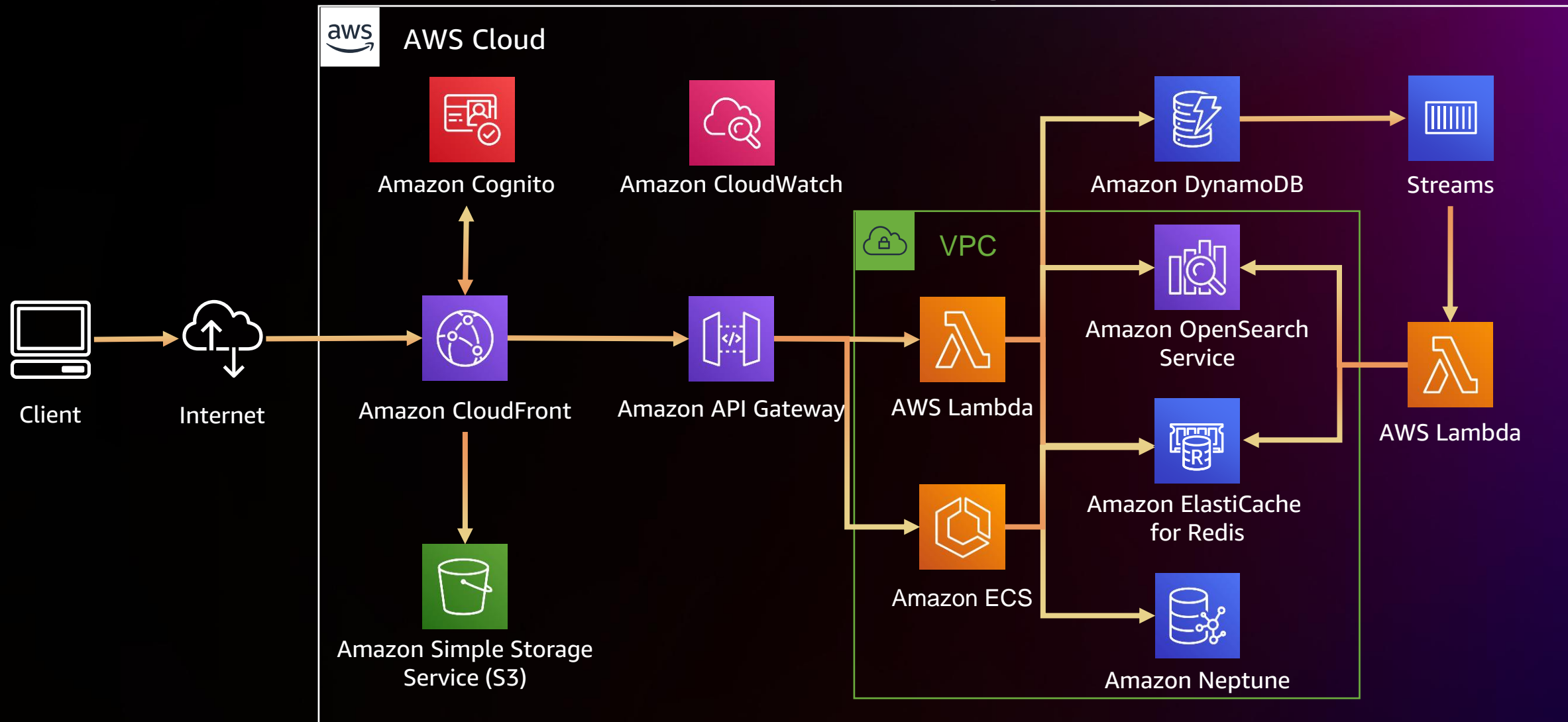Improve → Steady state → Hypothesis → Run experiment → Verify → Improve

Performance architecture selection

Unicorn shop app post caching

Q&A

Thank you!

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Please complete the session survey in the **mobile app**

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