

## Summary: GCP CDA Module 2 Video 1

This video introduces key concepts in cloud-based data analytics, focusing on the transition from traditional systems to cloud environments.

1. Migrating Data to the Cloud: The process of moving data from on-premises systems to cloud platforms to leverage scalability and flexibility.

2. System Architectures:

- On-Premises: Data and infrastructure are hosted locally within an organization.
- Hybrid: Combines on-premises and cloud systems for greater control and flexibility.
- Cloud: Fully hosted on cloud platforms, offering scalability and reduced maintenance.

3. Google Cloud Architecture Framework: A structured approach to designing and operating secure, efficient, and reliable cloud systems.

4. Cloud's Impact: Demonstrates how cloud technology transforms data analytics and other industries by enabling faster insights and innovation.

5. Cloud Cost Optimization: Strategies to minimize cloud expenses while maximizing performance and value.

6. Cost Considerations:

- Storage: Costs associated with storing data in the cloud.
- Running Queries: Charges incurred when processing data.
- Resource Provisioning: Allocating computing resources efficiently.
- Billing Models: Different pricing structures offered by cloud providers.

7. Practical Application: Equips learners to advise organizations on selecting cost-effective cloud solutions tailored to their needs.

The video concludes with a preview of upcoming content and encourages continued learning.