GCP CDA Module 2 - Video 5 Summary

This summary outlines key concepts from the video on cloud cost management, focusing on resource provisioning, storage costs, query pricing models, and cost optimization strategies.

Resource Provisioning: The process of selecting and managing software and hardware resources in the cloud. It includes three delivery models:
- **Advance provisioning:** Resources are pre-arranged via formal agreement and billed monthly or at a fixed rate.
- **Dynamic provisioning:** Resources scale based on usage and are billed based on actual consumption.
- **Self-provisioning:** Users purchase resources via an online portal and receive them quickly.

Storage Costs: One of the top cloud expenses, influenced by:
- **Data storage:** Amount of data stored, referred to as 'buckets'. Costs vary by location and data class.
- **Data processing:** Cleaning and organizing data for analysis. More processing requires more storage.
- **Network use:** Data movement between storage buckets affects cost.

Query Pricing Models: Cloud providers charge based on data processed during queries, not the data returned. Google BigQuery offers:
- **On-demand pricing:** Charges based on bytes processed per query.
- **Capacity pricing:** Charges based on computing power used over time (slots).

Cost Optimization Strategies: Being strategic about resource selection and usage helps reduce waste and save money. Cloud professionals guide organizations to choose cost-effective solutions.