

Key Notions from GCP CDA Module 3 Video 8

Automation

Automation is the use of software, scripting, or machine learning to perform data analysis processes without human intervention. It saves time and resources, reduces mistakes during data collection through automatic checks, ensures uniformity and accuracy for compliance, and allows for efficiency and process improvement.

Scalability

Scalability refers to the ability to handle increasing workloads efficiently. In data management, this means ingesting or processing more data at once without losing key information.

Efficiency

Efficiency in data management involves streamlining processes to preserve resources and control costs. Automation contributes to efficiency by speeding up data lifecycle processes and freeing up time for meaningful data analysis.

Error Reduction

Error reduction is achieved through automation by performing automatic checks for errors or incomplete data. This ensures that datasets are complete and accurate, which is crucial for reliable data analysis.

Compliance

Compliance is maintained through automation by ensuring uniformity and accuracy in data processes. This is especially important in regulated environments where data integrity is critical.