Common Issues

Data analysts face query, infrastructure, and storage challenges

"My queries are taking way **too long** to run and is stalling my analysis."

"We're a data department, not an **infrastructure** department. Maintaining and upgrading our own servers is unsustainable."

"We can only **afford to store a subset** of the data our business generates"

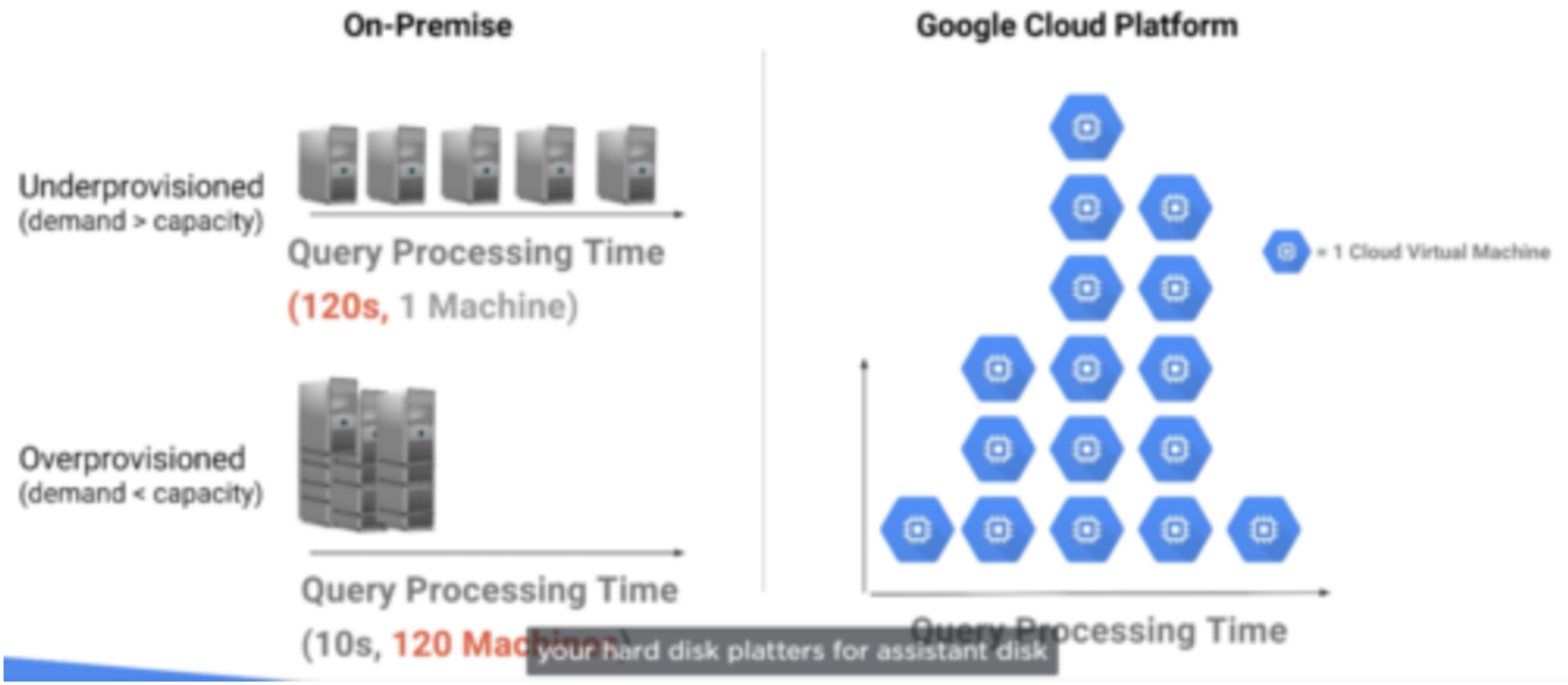
"I have no easy way to **combine and query** all the data I've collected"

"My on premise clusters **aren't scaling** with my analysis"

"We don't have a **central data** analytics warehouse or set of tools"

Google Cloud Platform
Scalability

Google Cloud Platform enables on-demand scalability



On-Premise vs GCP: Resource Allocation

Separation of storage and computing power enables efficient resource allocation

On-Premise

Pay for ability to use processing power even when no queries running

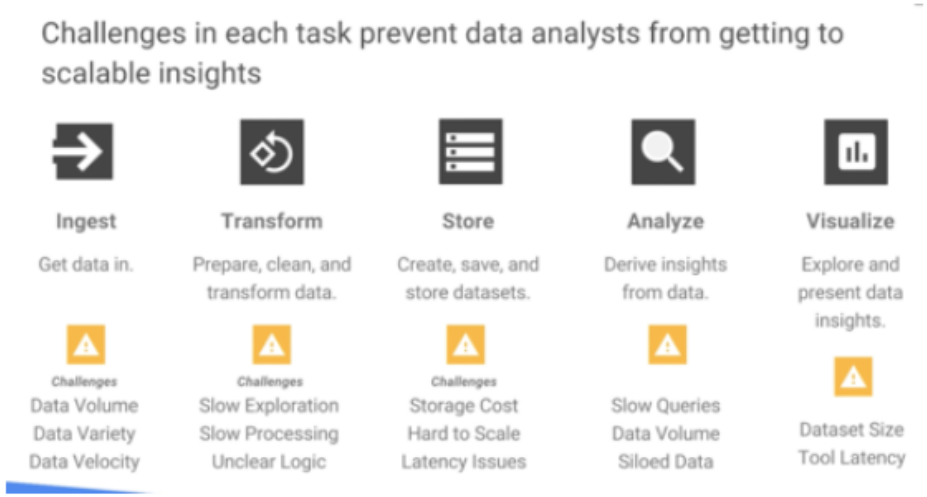
Google Cloud Platform

Pay for only the resources you are using and no more

How does BigQuery handle scaling and pricing?

BigQuery scales automatically and you only pay for what you use.

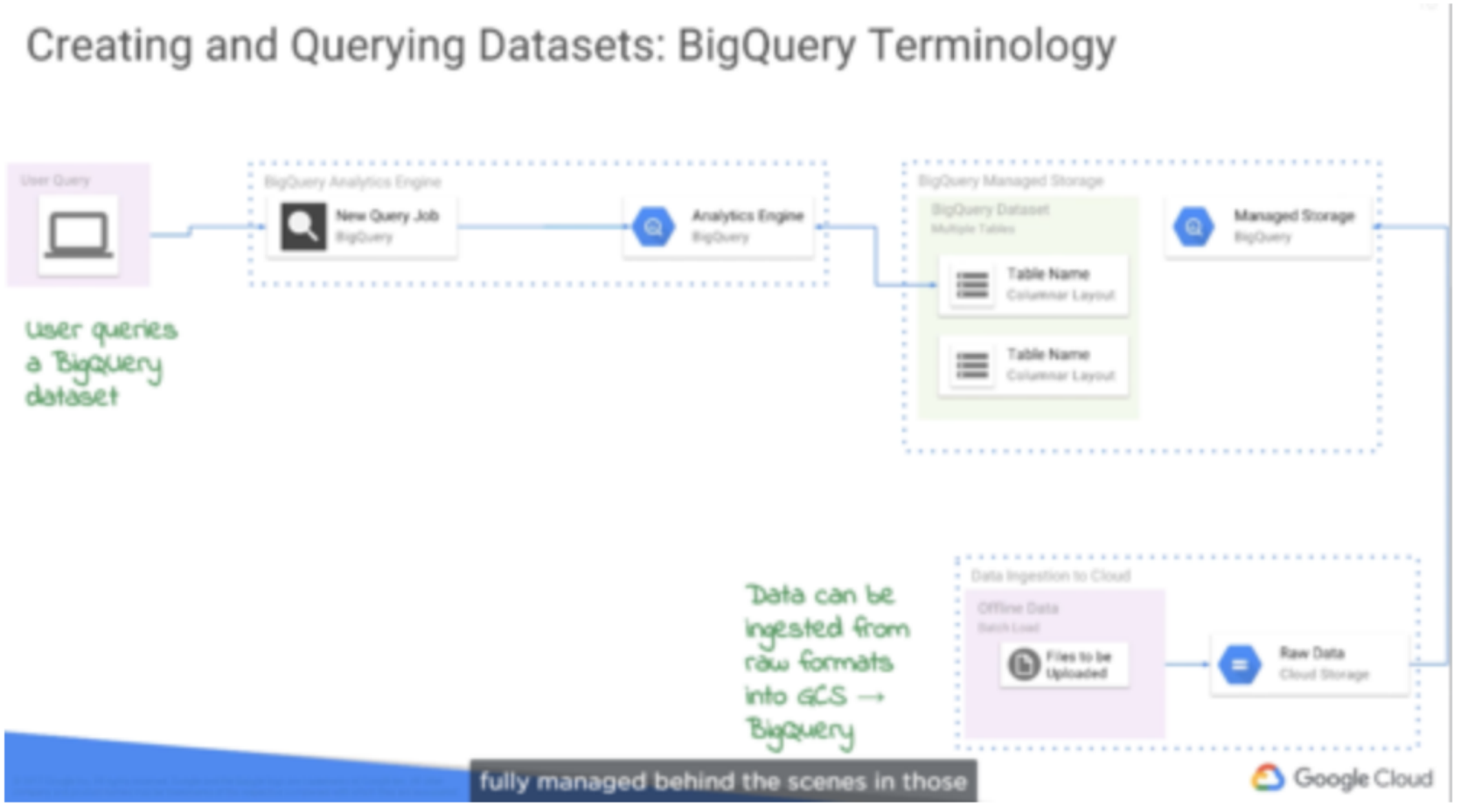
Data Analysis Steps and Challenges



Ingest (Get data in). Transform (Clean the data). Store (Save the data). Analyze (Derive insights from the data). Visualize (Explore and present data and findings).

BigQuery Terminology

Creating and Querying Datasets: BigQuery Terminology



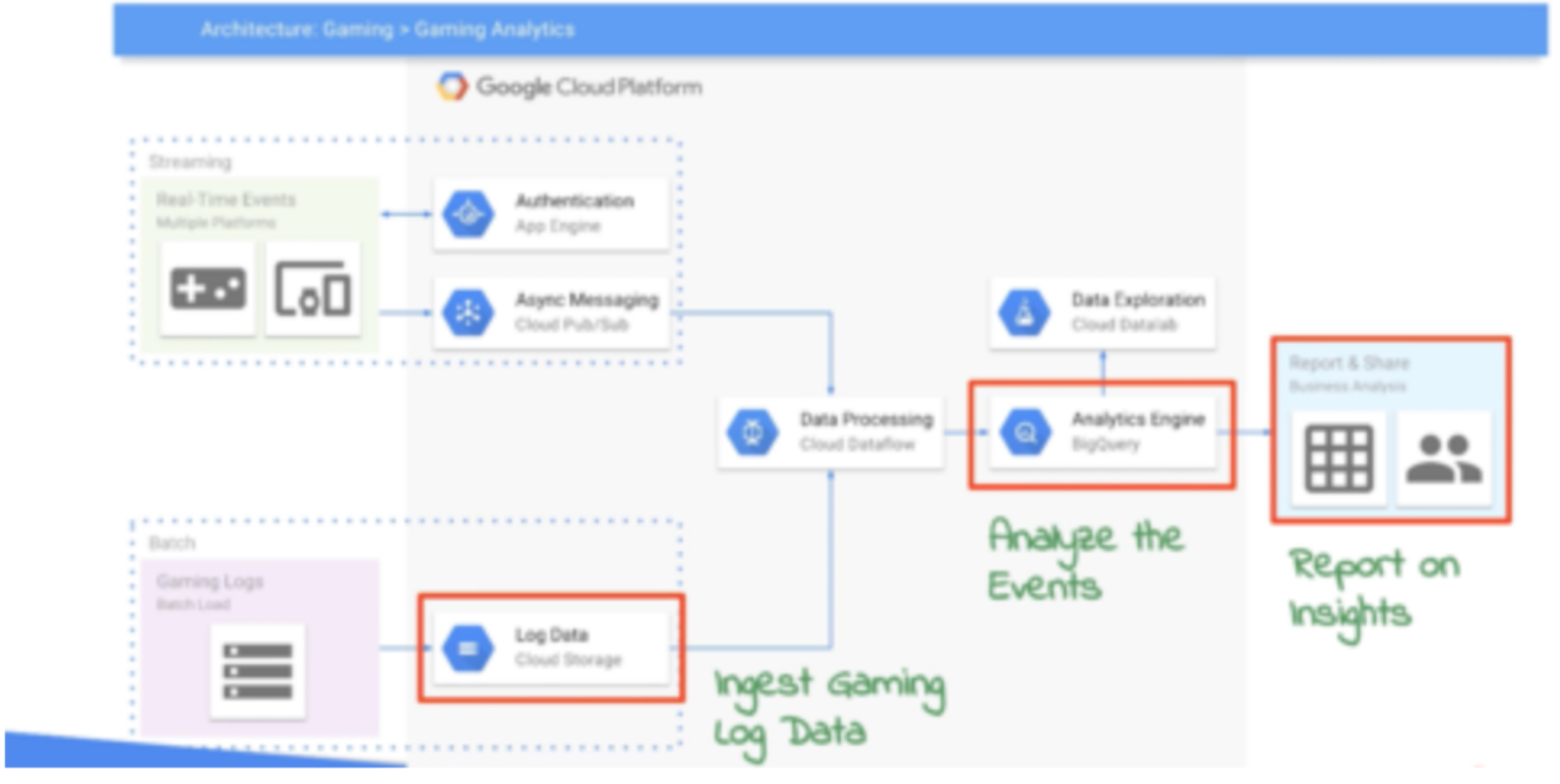
Data Analyst vs Data Scientist vs Data Engineer

Each data-related role uses a different suite of tools

Data Analysts derive insights from queries and visualization. Data Scientists analyze and model systems using statistics and machine learning. Data Engineers design, build, and manage data processing systems.

Highlighting GCP Tools

End-to-end gaming analytics example highlighting GCP tools



Why would you not want to use stylistic formatting inside of BigQuery?

It can unintentionally affect the data type.

Why should you avoid using * when writing queries?

Selecting only the columns you need greatly increases query speed and helps with readability.