TEAM 6

Google Cloud BigQuery ML
Demand Forecasting

WHO IS IT FOR?

Retailers | Utility | Telecom | Financial companies | Healthcare

Inventory Managment : Retail Operations Manager

- In charge of managing inventory and ensuring optimal stock levels
- Has pool of sales data making it challenging to discern patterns and make decisions
- Aiming to strike the perfect balance between supply and demand

Spot Product Trends : Marketing Manager

- In charge of desinging the future marketing strategy and promotion
- Who has hard time to integrate all the data sources together
- Easily combine with google trends keywords and google analytics tool to spot the recent market trends

HOW BIGQUERY ML CAN HELP YOU

TIME SERIES FORECASTING

Predictive Forecasting:
- customer demand
- financial metrics
- supply chain optimization

REDUCE COSTS

- pay-as-you-go structure
- Computing price $6.25 per TiB
- Storage price $0.01 per GiB per month
- 26-34% cheaper than competitors

FASTER PERFORMANCE

% of queries that finish in < 10 seconds:
- 47% for BigQuery queries
- 20% for alternative cloud services queries

HOW GOOGLE CLOUD BIGQUERY WORKS

STEP 1

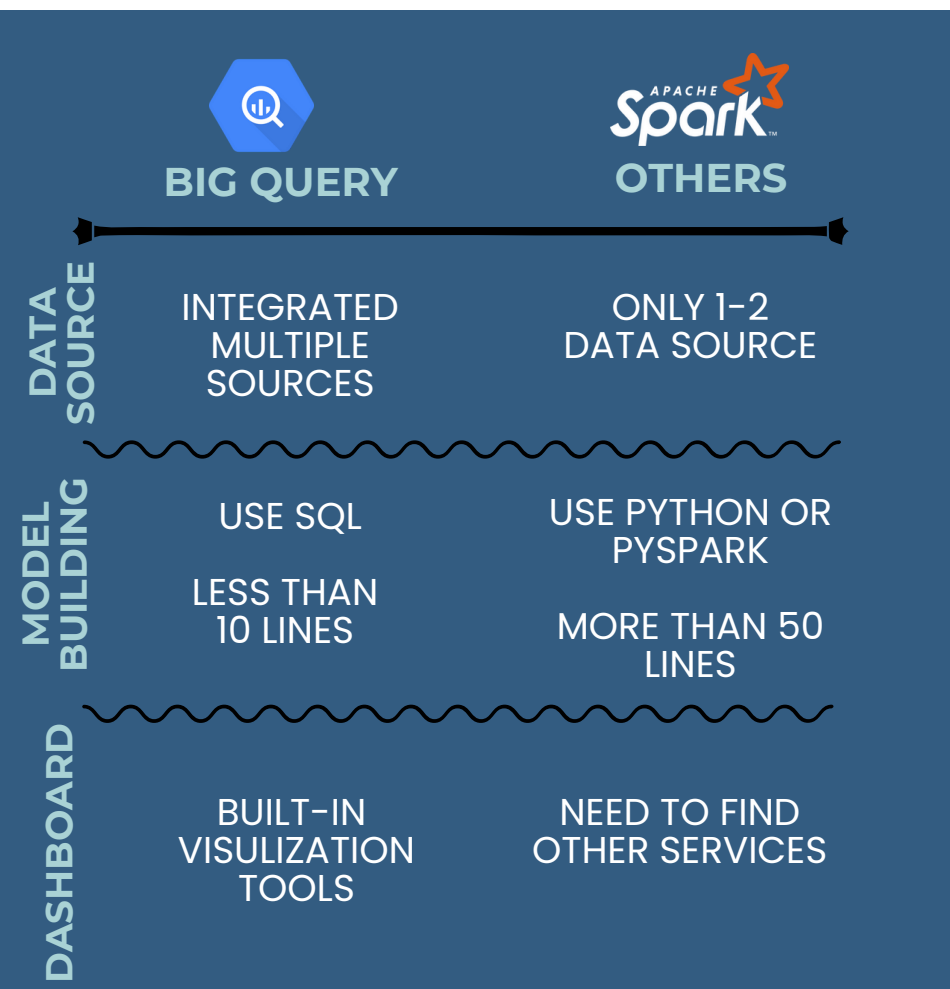**LOAD DATA**

CSV, API, DATABASE

STEP 2

BUILD MODEL

Multiple built-in models

STEP 3

USE LOOKER STUDIO

Built-in dashboard to visualize

BIG QUERY

APACHE Spark™ OTHERS

DATA SOURCE	INTEGRATED MULTIPLE SOURCES	ONLY 1-2 DATA SOURCE
MODEL BUILDING	USE SQL / LESS THAN 10 LINES	USE PYTHON OR PYSPARK / MORE THAN 50 LINES
DASHBOARD	BUILT-IN VISULIZATION TOOLS	NEED TO FIND OTHER SERVICES

BigQuery ML Powered By 8+ Models

- Linear Regression
- Logistic Regression
- K-Mean Clustering
- PCA
- Ensembled Models
- Deep Neural Networks

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