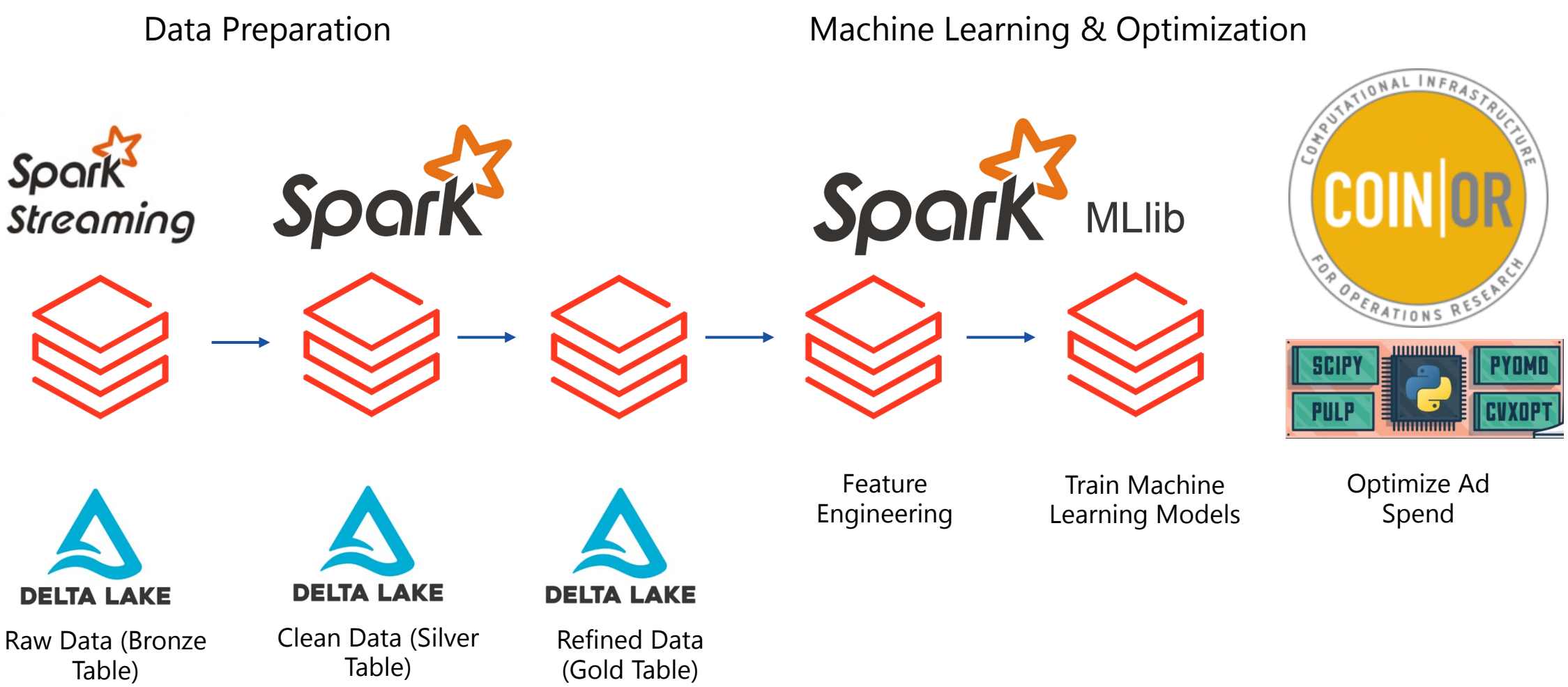
Blueprint

Optimizing Advertising Spend with Azure Databricks

Architecture

Leverage Machine Learning + Databricks



databricks

- Detailed Flow (Original)

Steps in Journey Raw Data

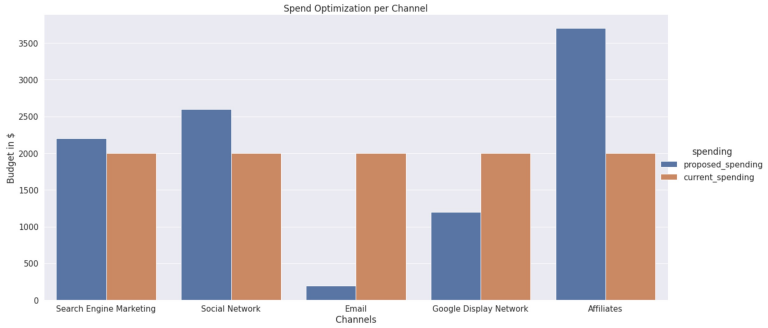
Silver User Journey Table

Gold User Journey Table

Attribution Model

First Touch Last Touch

Markov Chain



Per Marketing Campaign

Gold Ad Spend

Per Marketing Campaign

Budget Allocation

Per Channel

Spend Dashboard

+ Detailed Flow (New)

Raw Click Share Data

Silver Spend and Revenue Table

Gold Feature Engineering

Spark Streaming

DELTA LAKE

Spark

Blueprint

Split Data

Train

Test

Evaluate

New - Ad Spend Optimizer

Spark MLlib

Machine Learning Models

Spend Prediction

Per Bid Unit

Ad Spend Optimizer

Markov Chain 2

Utility and Risk Aversion Estimator

SCIPY PYOMO PULP CVXOPT

bpcs.com

Spark

Spark MLlib

Steps in Customer Journey → Detailed Clicks, Spend and Revenue → Predictive Modeling & Data Engineering → Ad Spend Optimizer

DELTA LAKE

Get started for free with our accelerator

Download the code at
https://github.com/BlueprintConsulting/Blueprint-Databricks-Advertising-Spend-Optimization-Accelerator

bpcs.com • 206.455.8326 • info@bpcs.com

Blueprint Technologies • 2600 116th Ave NE, First Floor • Bellevue, WA 98004

© Copyright Blueprint Technologies. All rights reserved.