

Data Engineering

Alternative Datasets Use Cases

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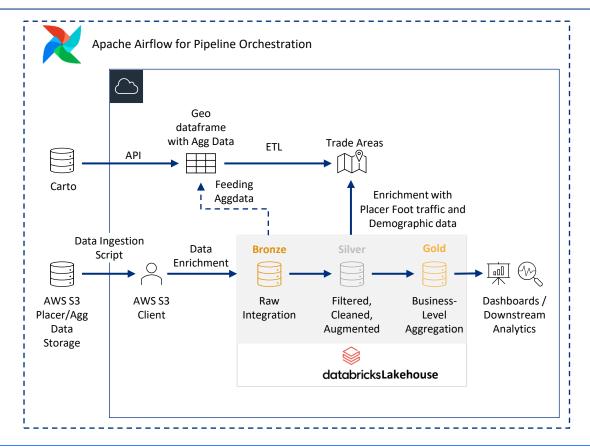
Alternative Datasets Use Cases

Geospatial Analysis

- Data ingested through the vendor's AWS S3 bucket to the client's S3 bucket using Python ingestion script
 - ETL scripts were built in Databricks that followed the medallion architecture
- Used Agg data for getting the store locations and it was converted to Geo dataframe by leveraging packages from Carto
- Isochrones and Isolines were drawn on the Geodata frame to create trade areas for the companies, and they were enriched with foot traffic and demographic data from Placer
 - Used foot traffic data to track the footfall of retail companies and customer segments to understand how holidays, seasonality, and events impact different companies
- Performed trade area analysis to identify the target demographic present within a 5-10 Mile trade area or within a 10-20 minutes drive time from stores of retail companies like Walmart, Kroger, and Costco
 - Performed trade area overlap analysis to identify how much trade area overlap is present across two companies to identify the Sales cannibalization
 - Identified white space where only a single company operates to identify upside potential of companies



Output Snapshot



Alternative Datasets like Placer, Aggdata, and Carto can be used to perform Geospatial Analysis

