Cyclistic BI Project Executive Summary

Business Needs

The product development team at Cyclistic has begun developing their business plan for next year. In order to build a better Cyclistic, the team needs to understand how customers are currently using the bikes, how location and other factors impact demand, and what stations get most traffic.

Project Goals

The Cyclistic team has a few goals:

- Understand what customers want, what makes a successful product, and how new stations might alleviate demand in different geographical areas
- Understand how the current line of bikes are used
- Apply customer usage insights to inform new station growth
- Understand how different users (subscribers and non-subscribers) use the bikes

Solution

Visualizing the data to make a dashboard tool for Cyclistic's team.

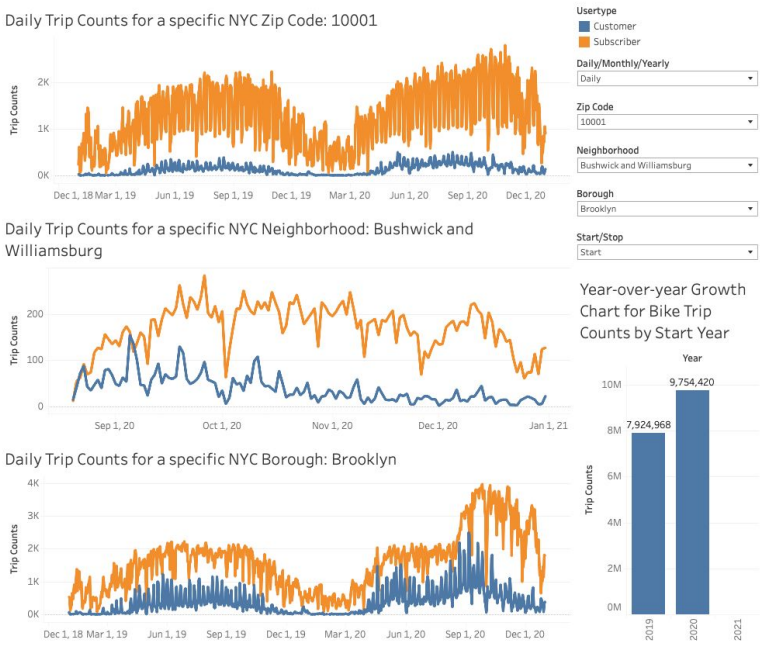
Key Details of the ETL Pipeline Process to enable the solution

- Source Datasets:
  - Primary dataset: NYC Citi Bike Trips
  - Secondary dataset: Census Bureau US Boundaries
  - Weather dataset: GSOD from the National Oceanic and Atmospheric Administration
  - NYC Zip Codes dataset: NYC zip codes
- Main Storage System: Google BigQuery
- SQL query for the extraction phase of ELT (Extract, Load, and Transform)
- Kaggle Python notebooks for the transform phase of ELT
- Tableau tools to build the dashboards

Dashboard Highlights

- Tableau Link: Google BI Project Cyclistic 2 (https://public.tableau.com/views/GoogleBIProjectCyclistic2/Story1?:language=en-US&:sid=&:display_count=n&:origin=viz_share_link)
- Dashboard capabilities
  - Maps of the Average Daily/Monthly/Yearly Trip Counts and Trip Minutes by Location
  - Map of the Average Daily Bike Count Increase/Decrease by Zip Code
  - Graphs for the Daily Trip Minutes by Time, Daily Trip Count by Seasons, by Daily Weather Conditions
  - Year-over-year Growth Chart for Bike Trip Counts, etc.
- Important Screenshots: (turn to next page)

Cyclistic Dashboards



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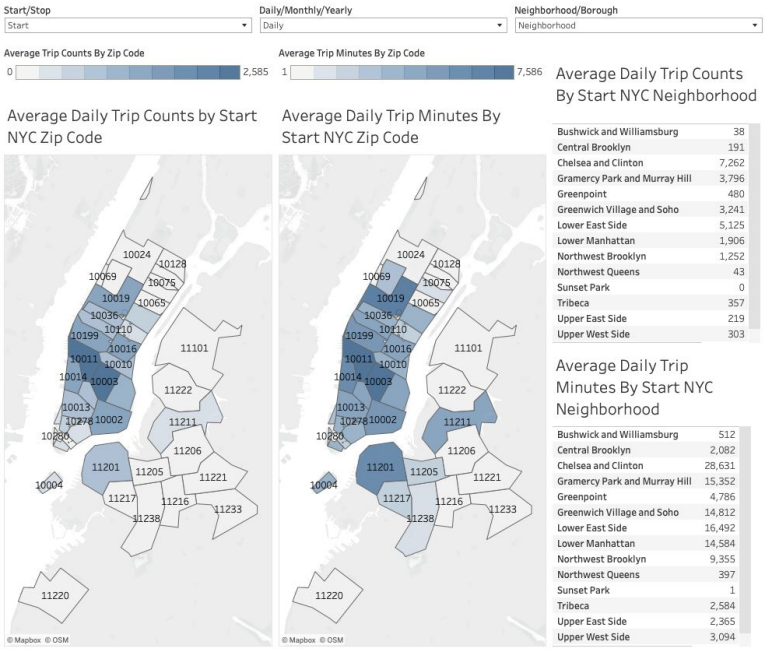

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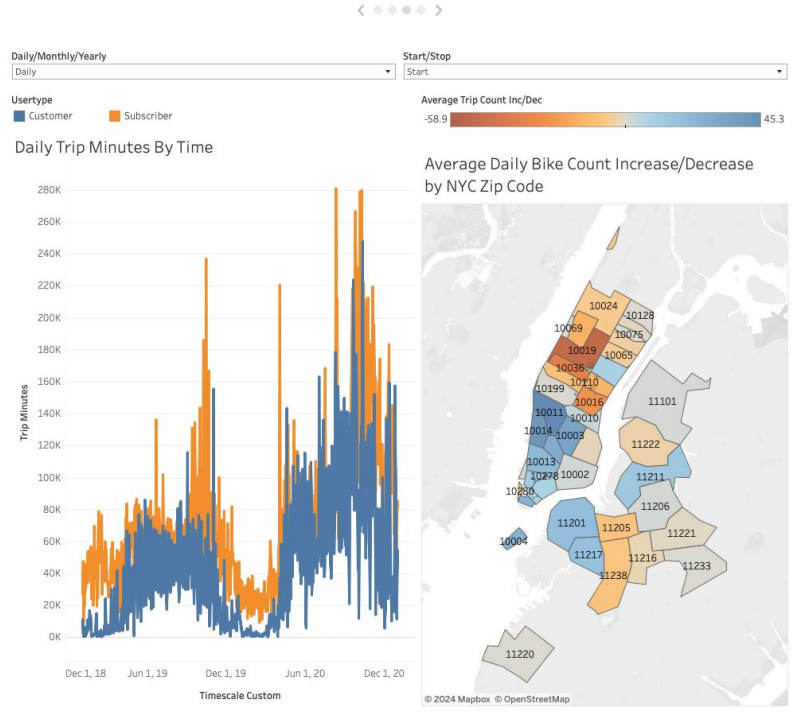

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