

Bike Flow Analytics Presentation

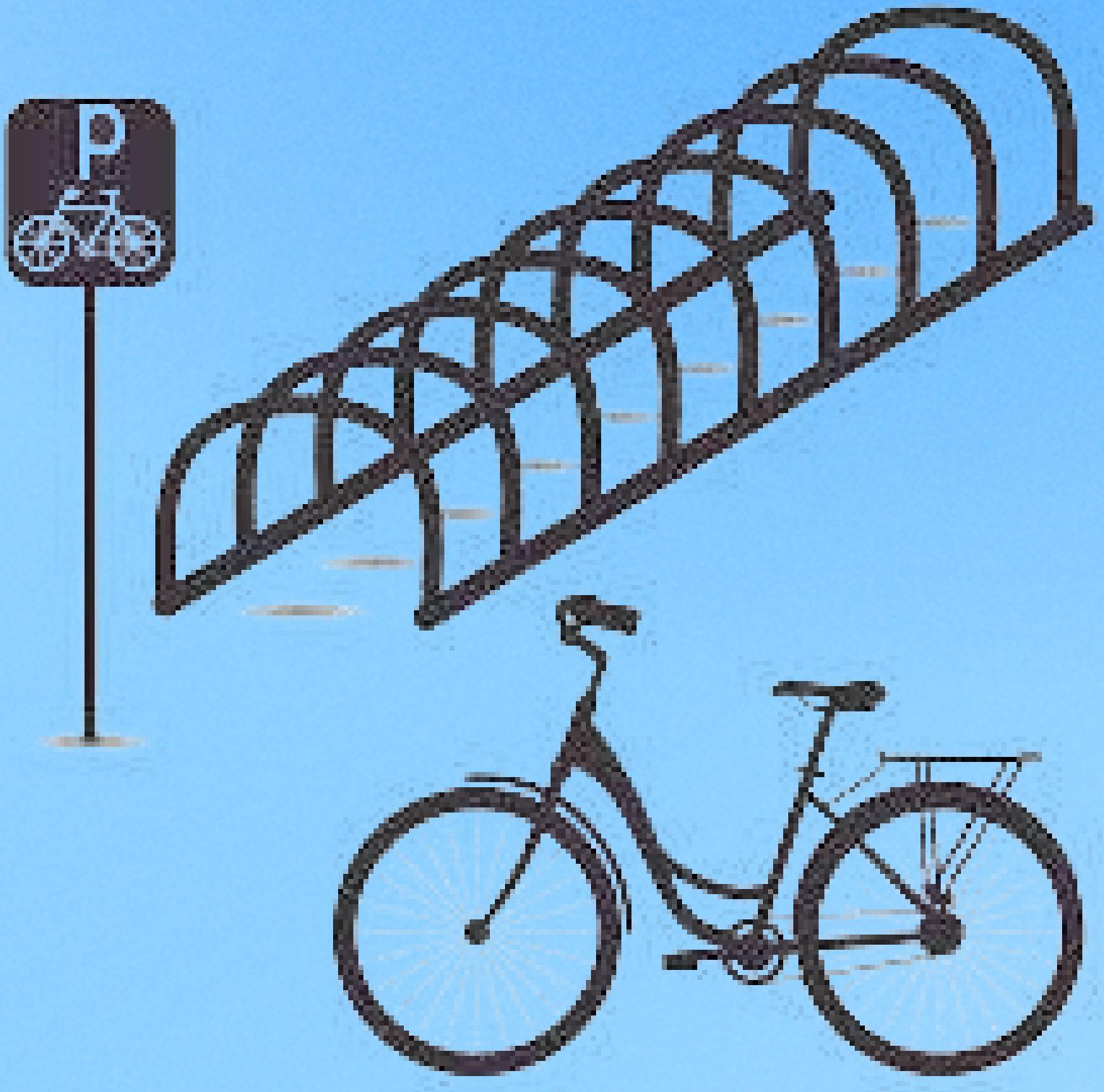
Comprehensive Analysis of
Bike Usage Metrics

Presented by Pavitra & Layashree

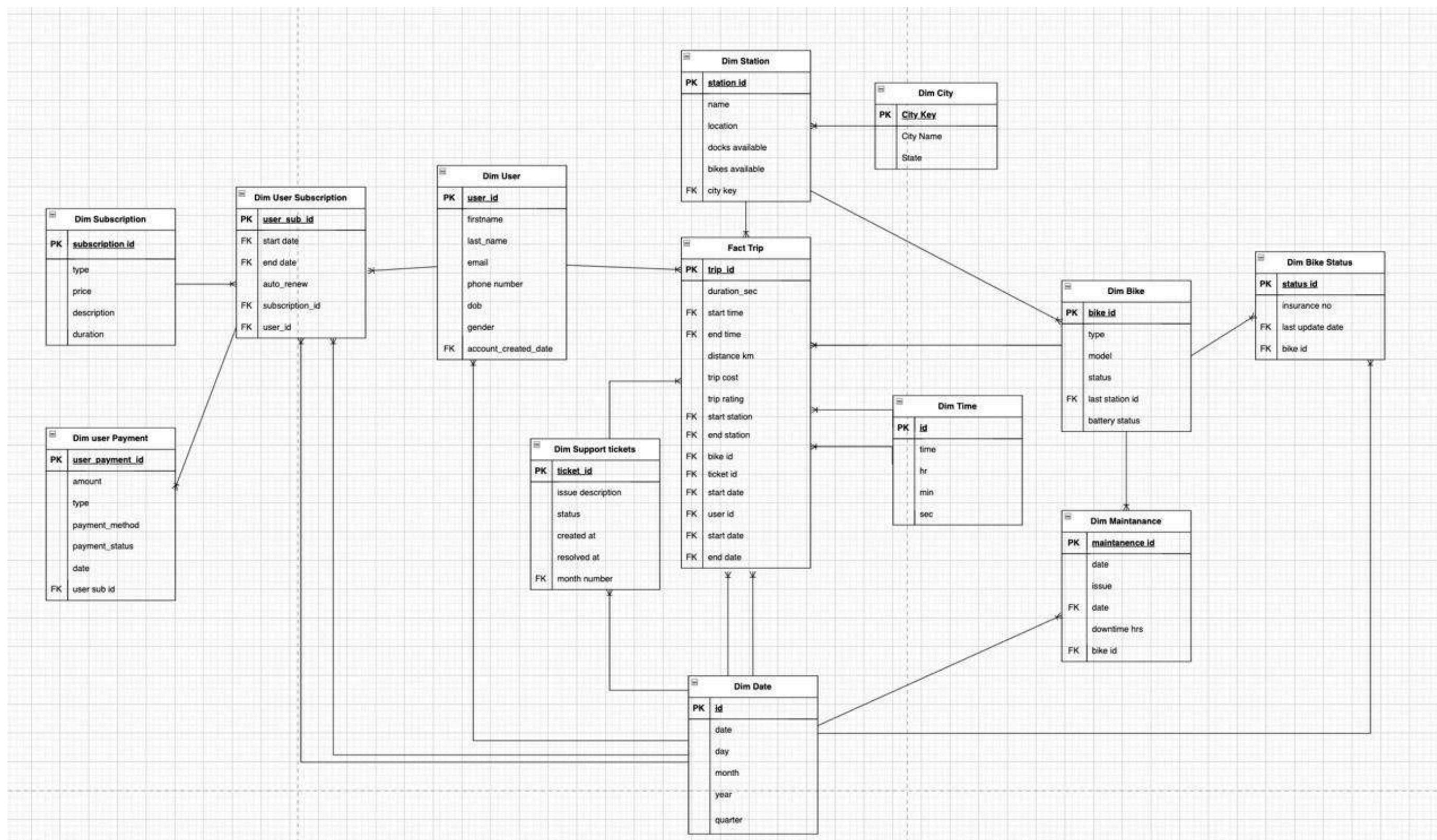


Introduction to the problem

The Bay Wheels bike-sharing service faces challenges in maintaining bike availability across its network of stations. Some stations frequently run out of bikes, while others have too many, leading to user dissatisfaction and inefficiencies in the system.



Datawarehousing diagram



Analytics Dashboards

Bike Flow Analytics

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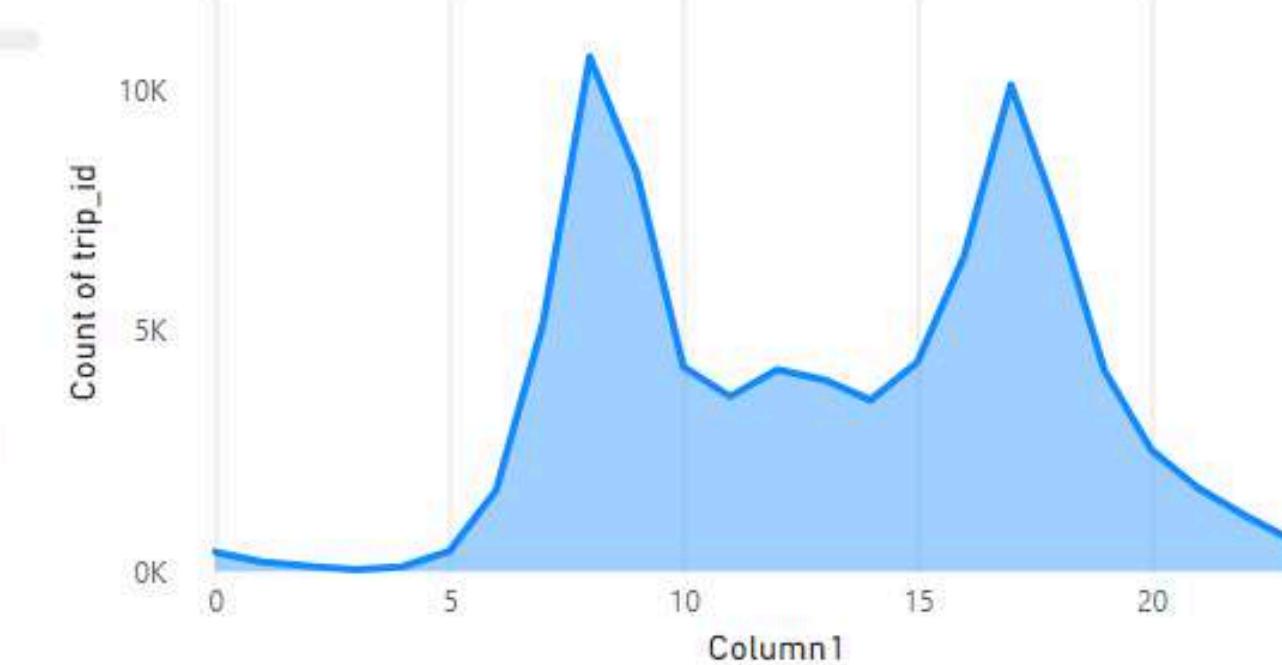
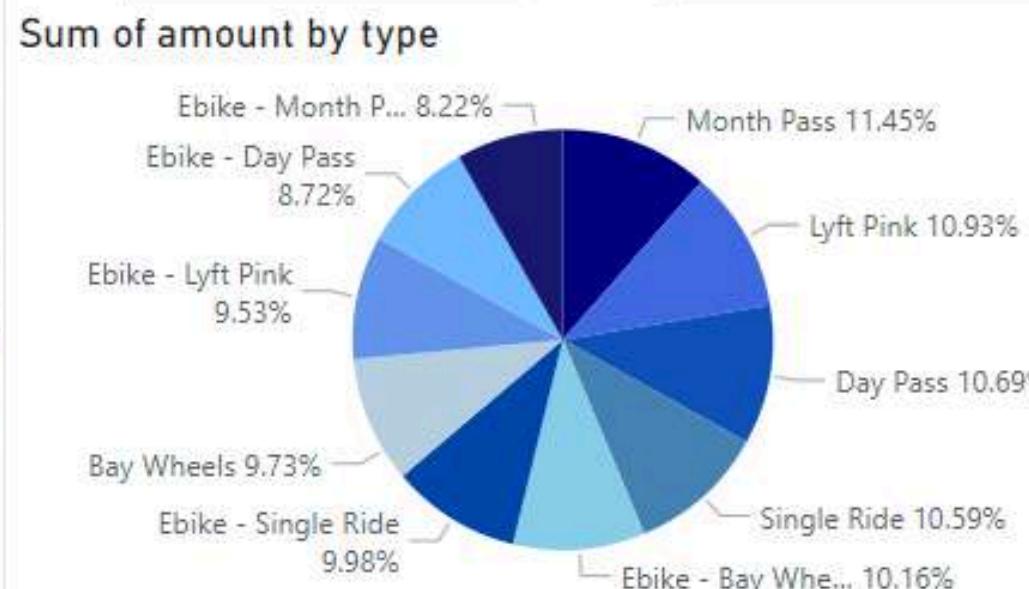
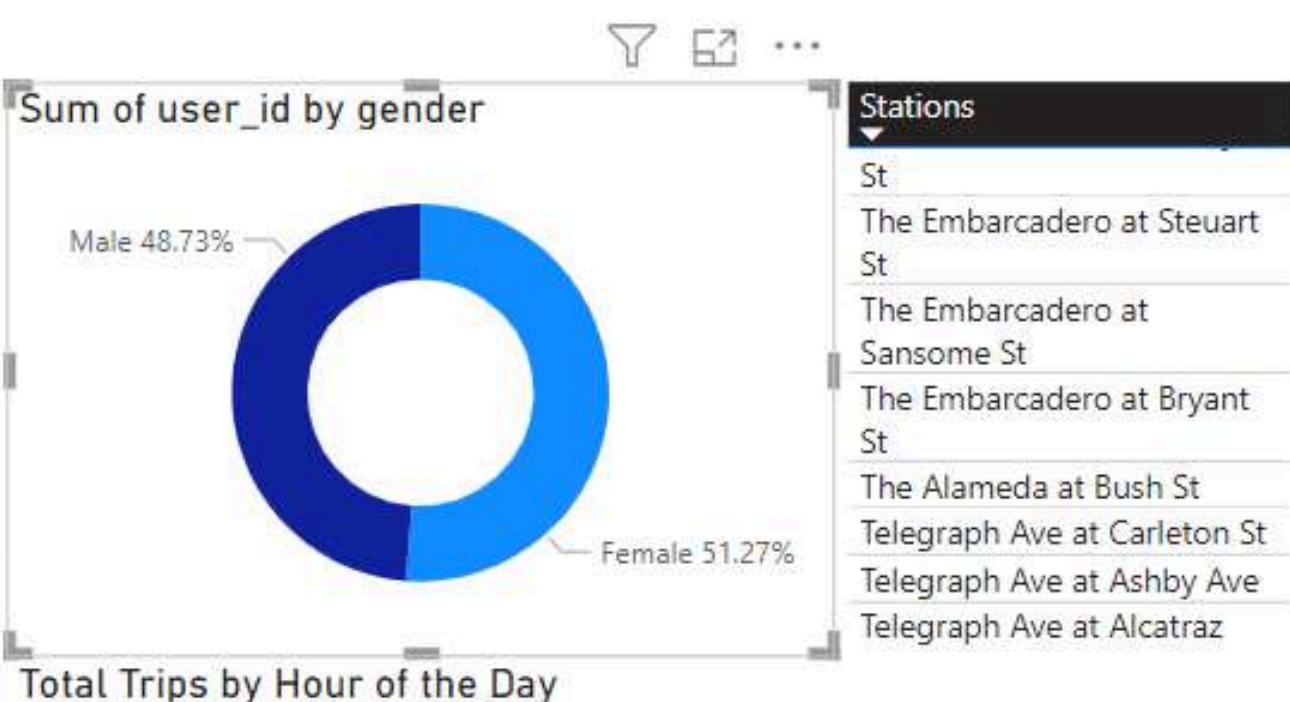
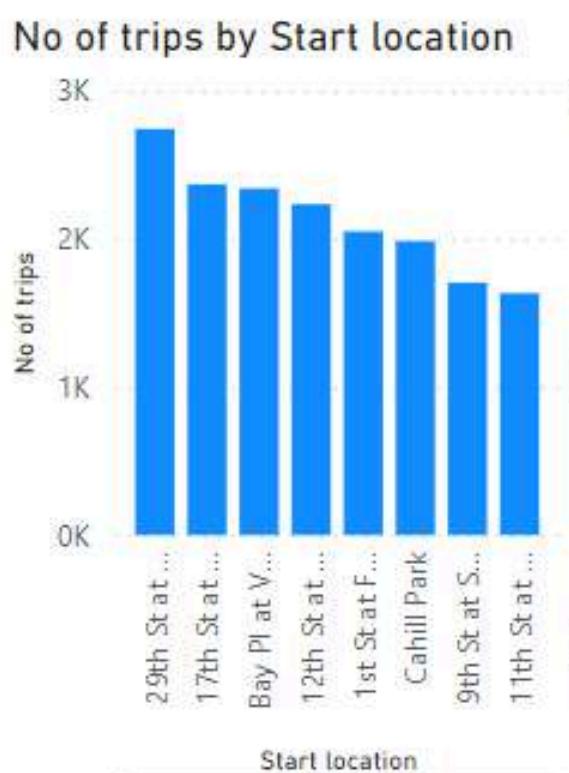
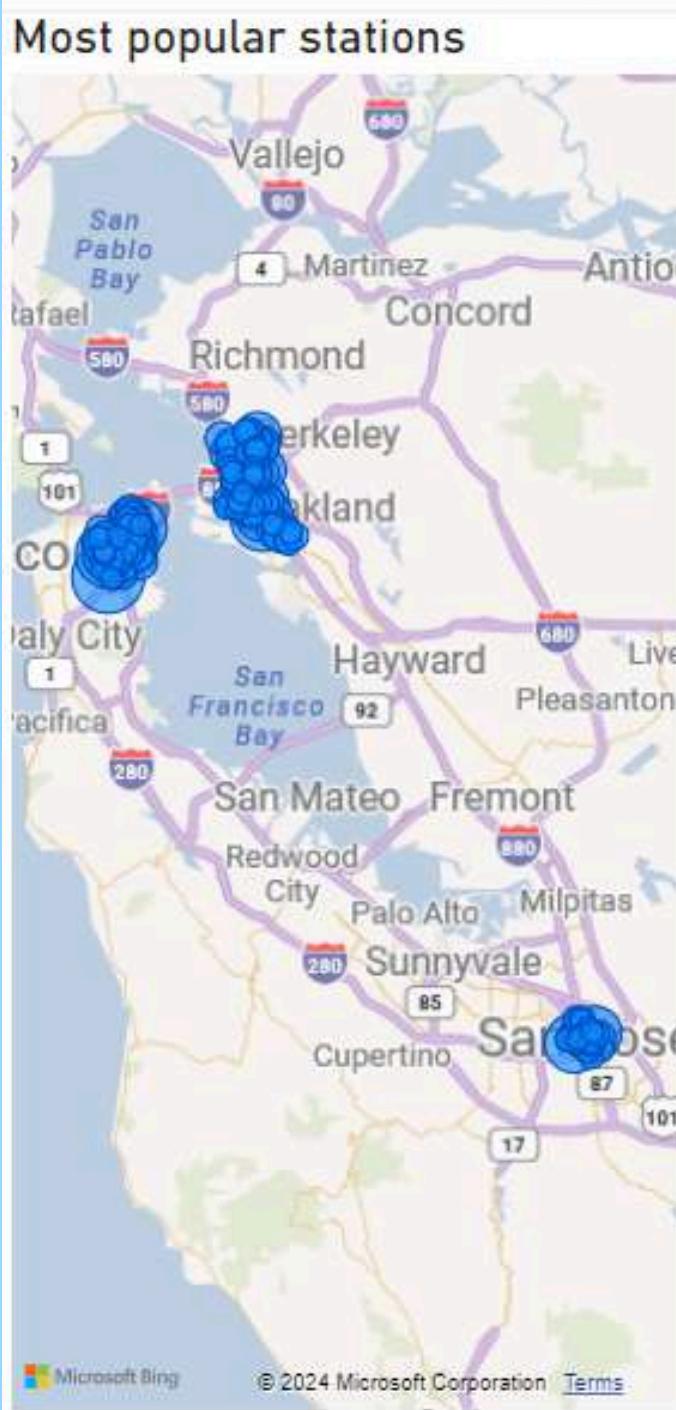
No of active users

73.55K

Total amount earned till date

85.27K

Num of trips till date



Key Performance Metrics

01.

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No of active users

02.

73.55K

Total amount earned till date

03.

85.27K

Num of trips till date

These KPIs provide a comprehensive overview of user engagement, revenue generation, and service utilization, enabling targeted decision-making and operational improvements.

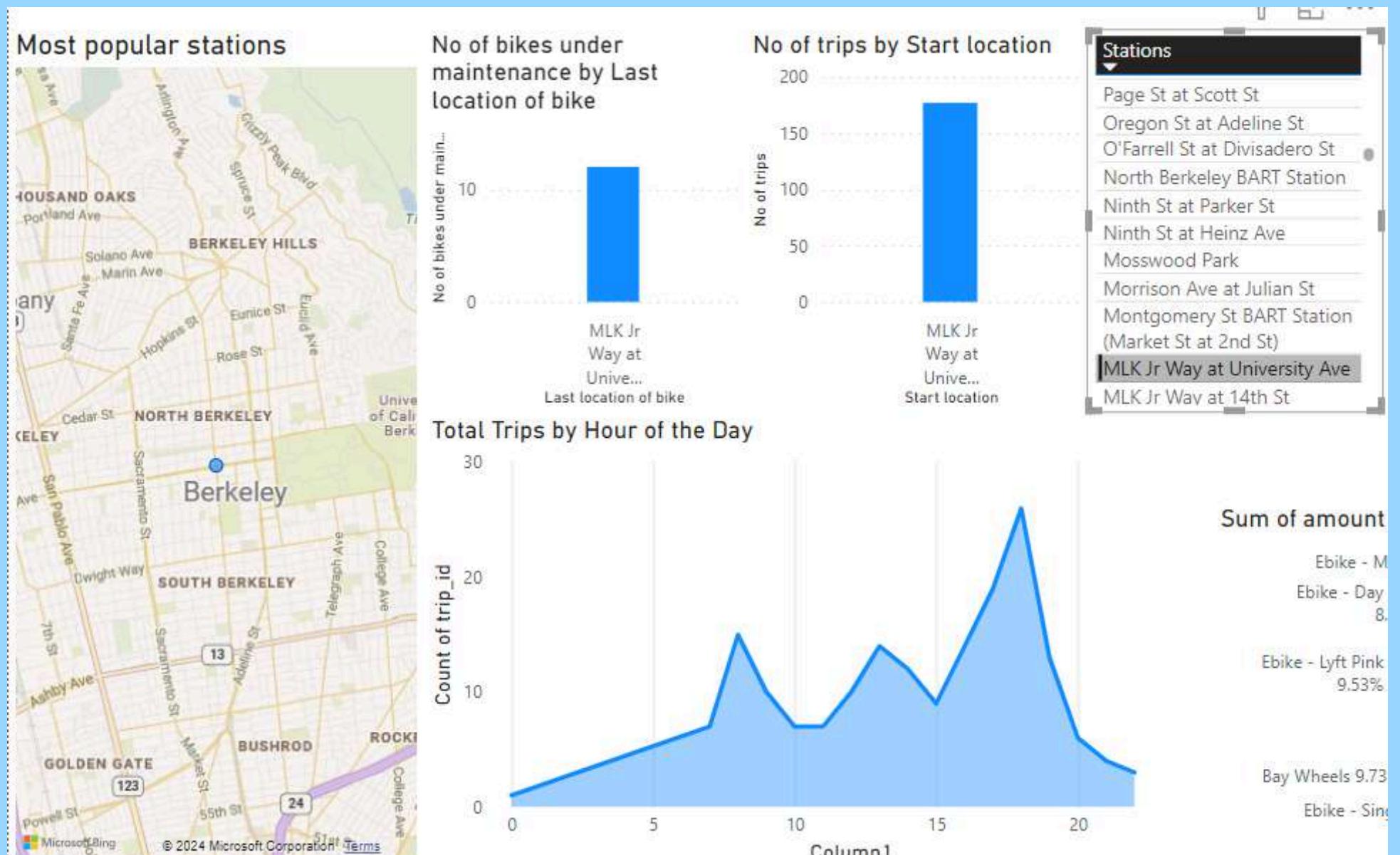
Key Features:

Interactive Map: Displays the most popular stations for bike usage, with clustering for high-traffic areas like Berkeley and San Francisco.

Bar Chart: Number of bikes under maintenance by their last known location.

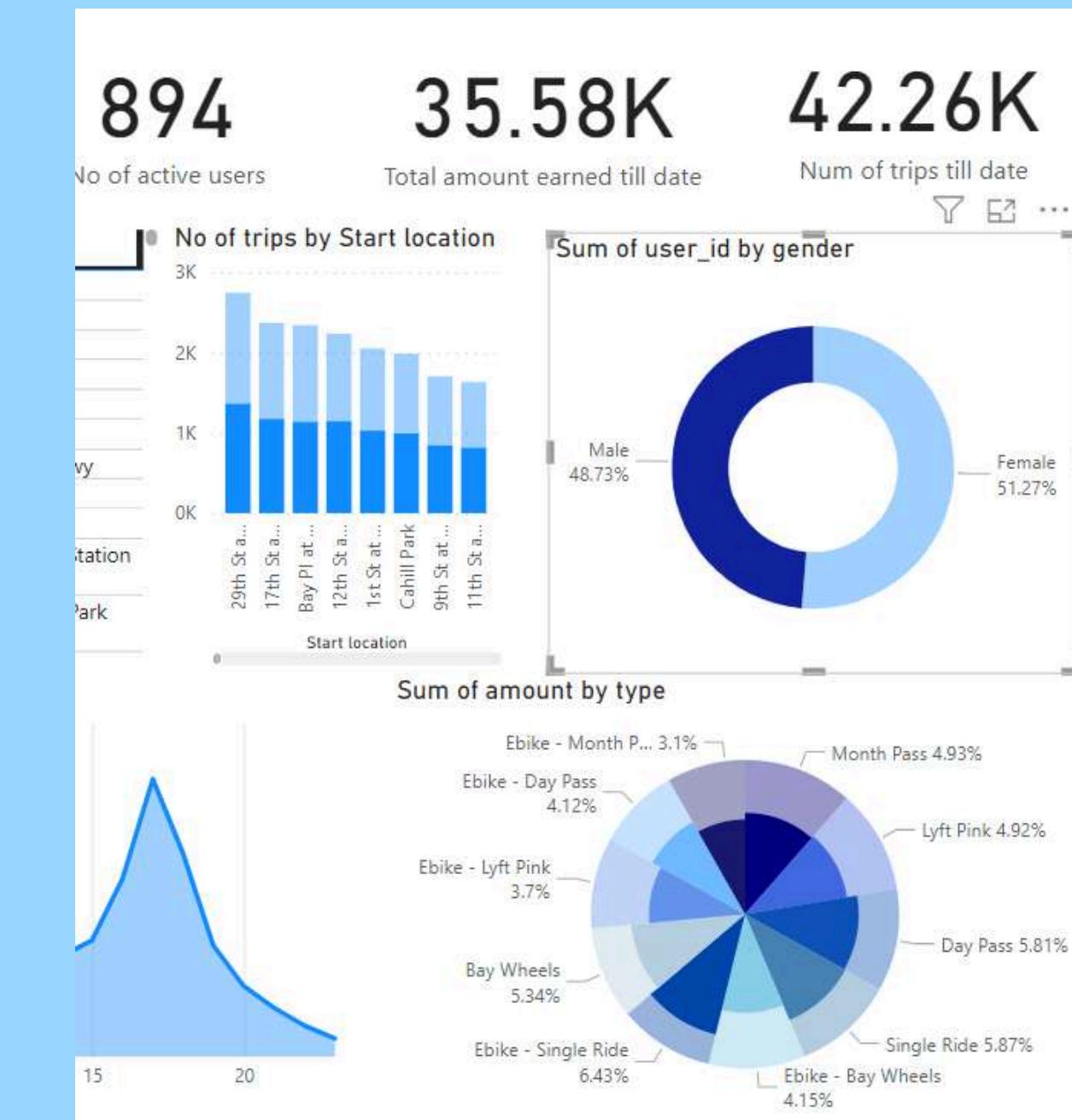
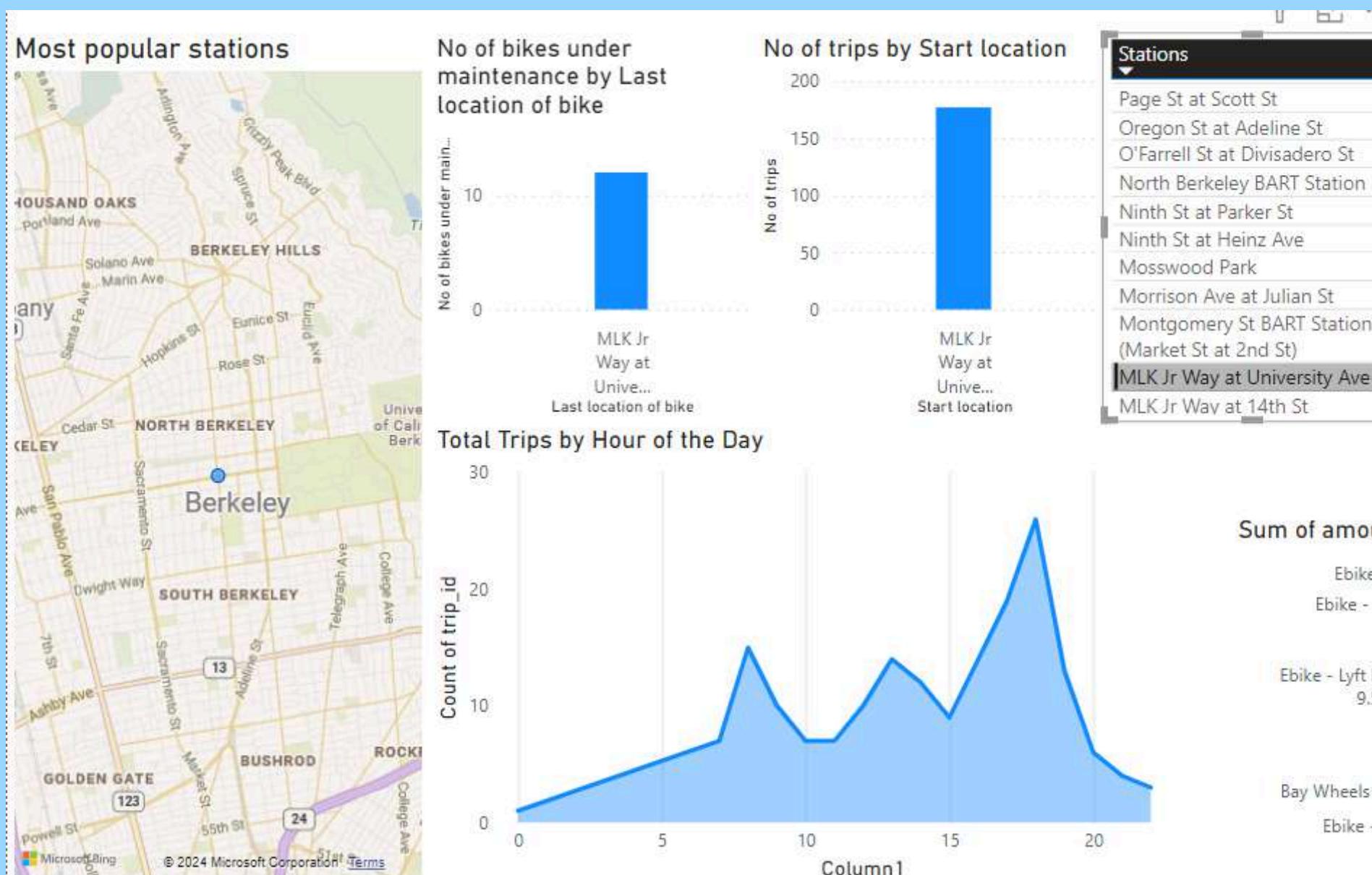
Bar Chart: Trips initiated from various start locations, highlighting high-demand areas.

Line Chart: Total trips by hour of the day, emphasizing peak usage times.



Implemented: Slicing and Dicing: Filter data by station, bike type, or time period for granular analysis.

Drill-Through Analysis: Explore detailed metrics for specific stations or bike types.



Aggregation: Summarize revenue and trip data for monthly or daily trends.

Interactivity: Gender Distribution: A clear breakdown of user demographics (Male: 48.73%, Female: 51.27%).

85%

Actionable Insights and Successes

The bike analytics dashboard has successfully provided actionable insights into user behavior, bike maintenance, and revenue generation. Key achievements include:

- Identification of peak usage hours to optimize bike availability.

- Insights into popular stations for strategic bike placement.

- Enhanced understanding of user demographics for targeted marketing.

These findings empower data-driven decision-making, ensuring operational efficiency and improved user satisfaction.

Thank
you very
much!

