

Bikes Usage for Cyclistic company (Project Executive Summary)

Overview

Cyclistic aims to expand its customer base by understanding bike usage patterns, station demand, and the impact of weather.

The Problem

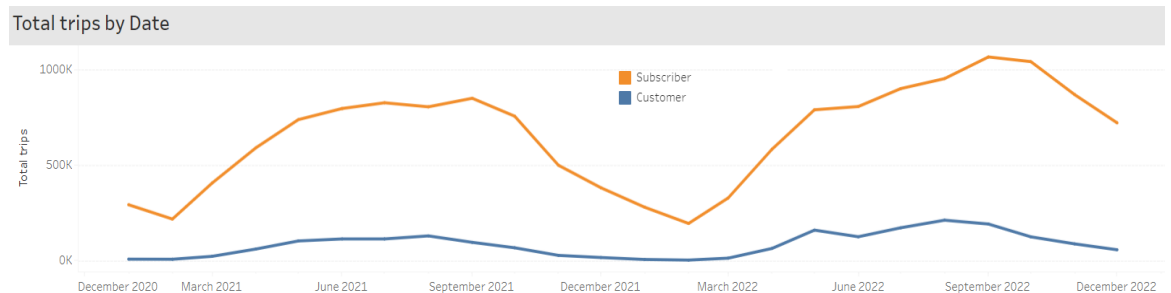
Cyclistic aims to grow its customer base by better understanding how customers use their bikes. The company's Customer Growth Team needs insights on:

1. Current customer needs and successful product features.
2. How different station locations impact customer demand.
3. Usage patterns of subscribers versus non-subscribers.
4. How weather and other factors affect bike usage.

The Solution

To address these needs, we conducted an in-depth analysis using data from the [NYC Citi Bike Trips](#) and [Census Bureau US Boundaries](#) datasets.

Details / Key insights



1. Customer Usage Patterns

- **Year-over-Year Growth:** Visualized percent growth in trips annually.
- **Top Stations:** Identified the most popular starting and ending stations.
- **Seasonal Trends:** Focused analysis on summer months (especially 2015) to capture peak usage periods.
- **Trip Duration and Destinations:** Visualizations showed which destination locations are popular based on total trip minutes.

2. Impact of Weather

- **Weather Conditions:** Analysis of how inclement weather (precipitation, temperature, wind speed) affects bike usage, showing a decrease in trips during bad weather.

3. Subscriber vs. Non-Subscriber Usage

- **Usage Differences:** Subscribers tend to use bikes more frequently than non-subscribers. Peak usage times also varied between the two groups.

4. Congestion and Demand

- **Station Congestion:** Insights into congestion at stations by calculating the net of start and ending trips per station.
- **Demand Insights:** Identification of high-demand stations and recommendations for new station placements to alleviate congestion.

Reflections/ Next Steps

- **New Station Placements:** Place new stations in high-demand areas to alleviate congestion.
- **Weather Strategies:** Develop strategies to maintain bike usage during bad weather.
- **Subscriber Conversion:** Launch targeted campaigns to convert casual riders to subscribers.
- **Ongoing Monitoring:** Continuously update and monitor key metrics to adapt to changing usage patterns