



Cyclistic Case Study

Google Data Analytics Capstone Project

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October 2022



About Cyclistic

Bike-share program in Chicago
Launched in 2016

5,824 bicycles
692 docking stations

Single-ride passes
Full-day passes
Annual memberships



Business objective

Design marketing strategies aimed at converting casual riders into annual members to increase future profitability.

Question

How do annual members and casual riders use Cyclistic bikes differently?





Data

Previous 12 month of trip data: September 2021 – August 2022

Rider definition

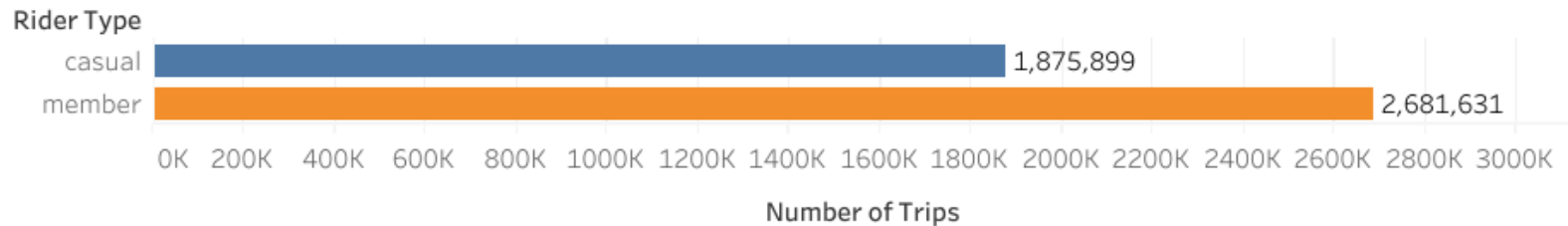
Casual riders: customers who purchase single-ride or full-day passes

Members: customers who purchase annual memberships



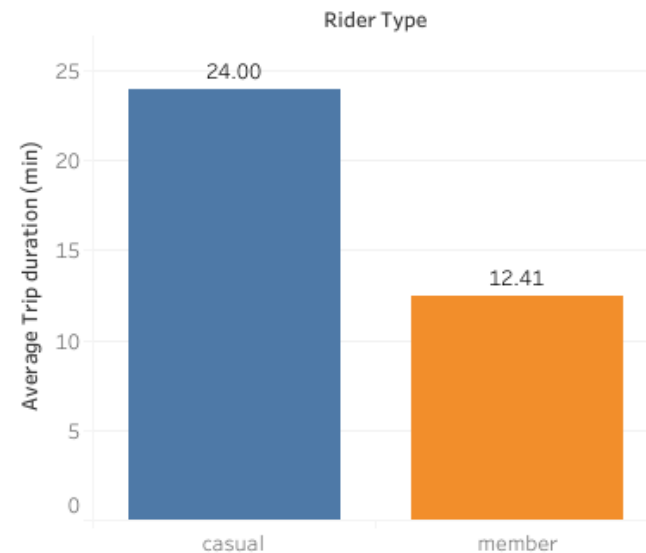
NUMBER OF TRIPS AND AVERAGE DURATION

Number of Trips by Rider Type



- **Member** riders take more trips in general.
- **Causal** riders use the bikes for longer trips.

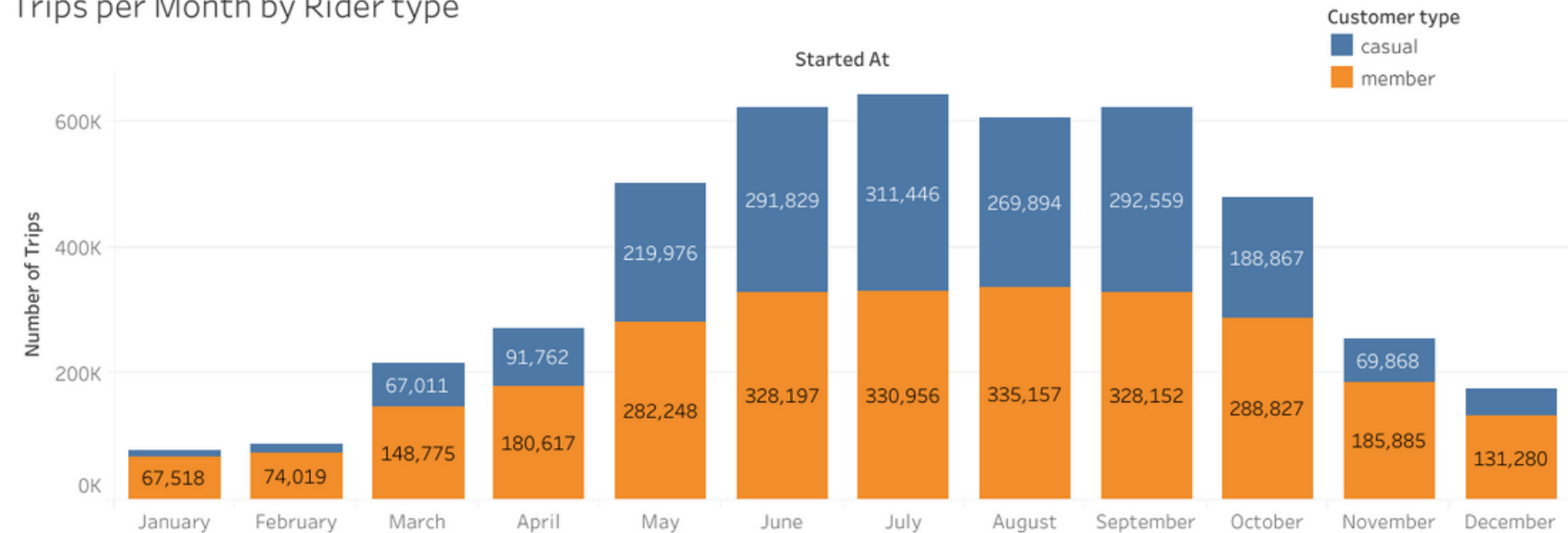
Average Trip Duration
(in minutes by Rider Type)



SEASONAL TRENDS

- Summer months are popular
- Peak month is July
- Very few trips during the winter months, mainly by members
- Least active month is January

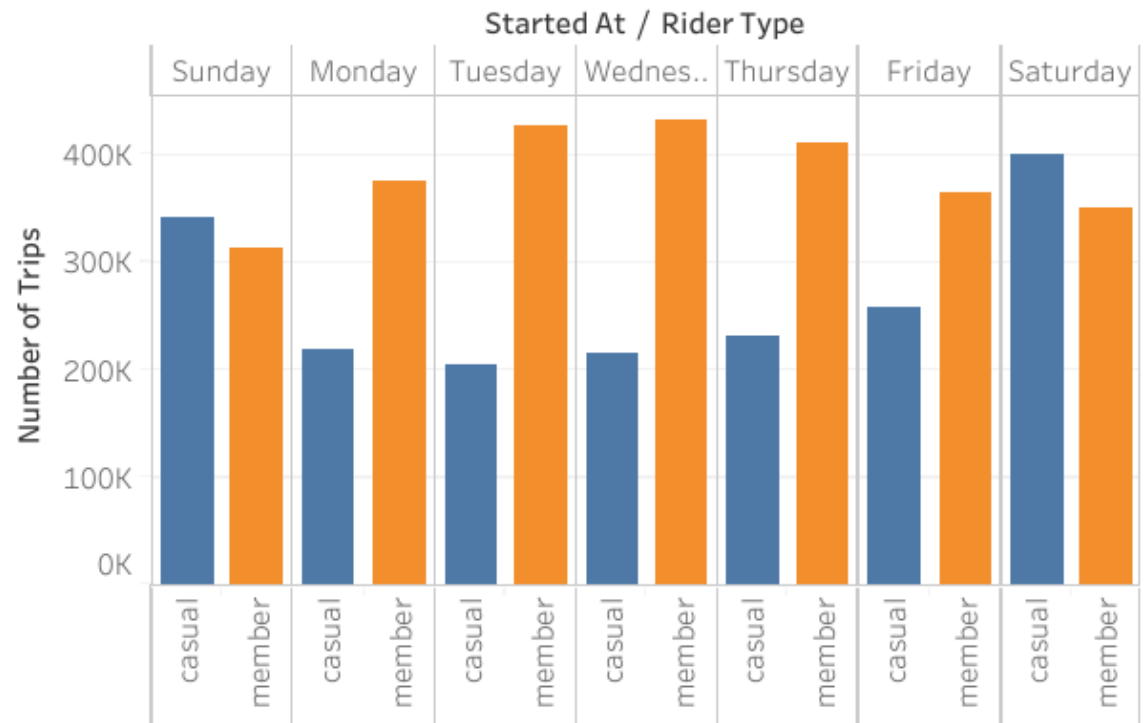
Trips per Month by Rider type



WEEKDAY TRENDS

- **Casual** riders are more active on weekends (leisure purposes)
- **Members** use the bikes during the whole week (commute to work)

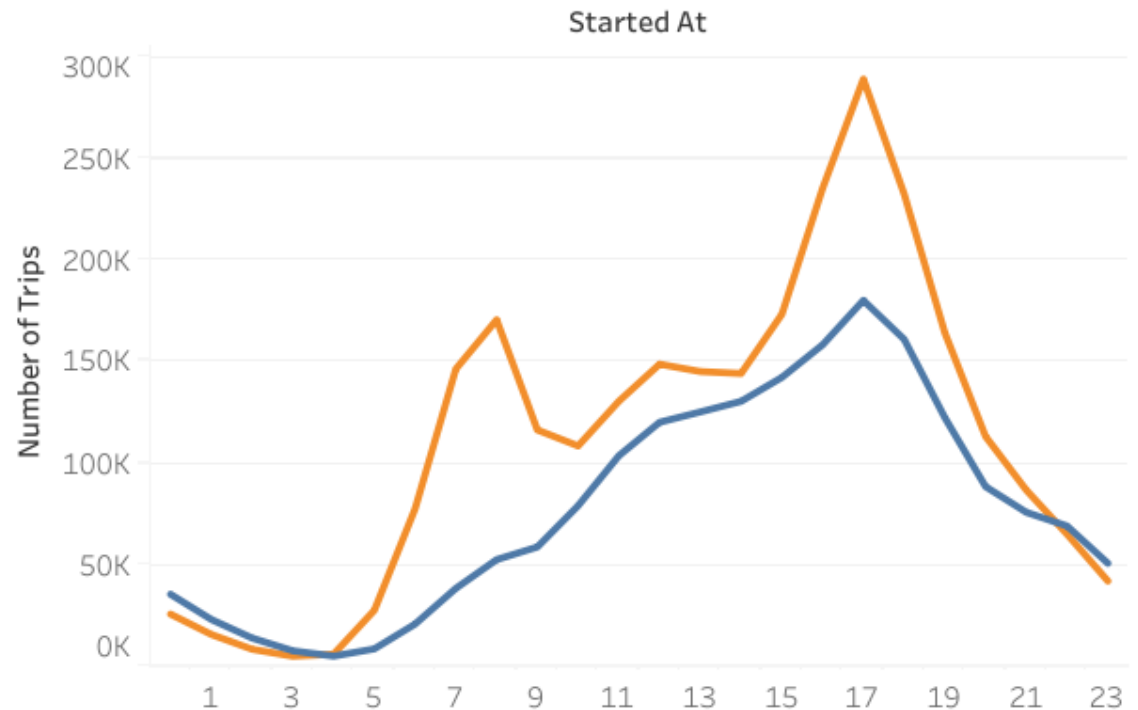
Trips per Weekday by Rider Type



TRENDS DURING THE DAY

- 17:00 is a peak time for both customer types.
- Morning peak time for **members** at 8:00 (going to work)
- The number of trips increases during the day for **casual** riders.

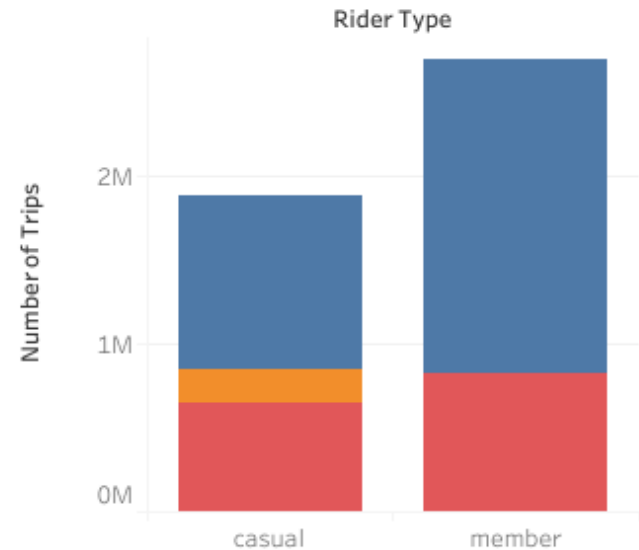
Trips by Start Hour



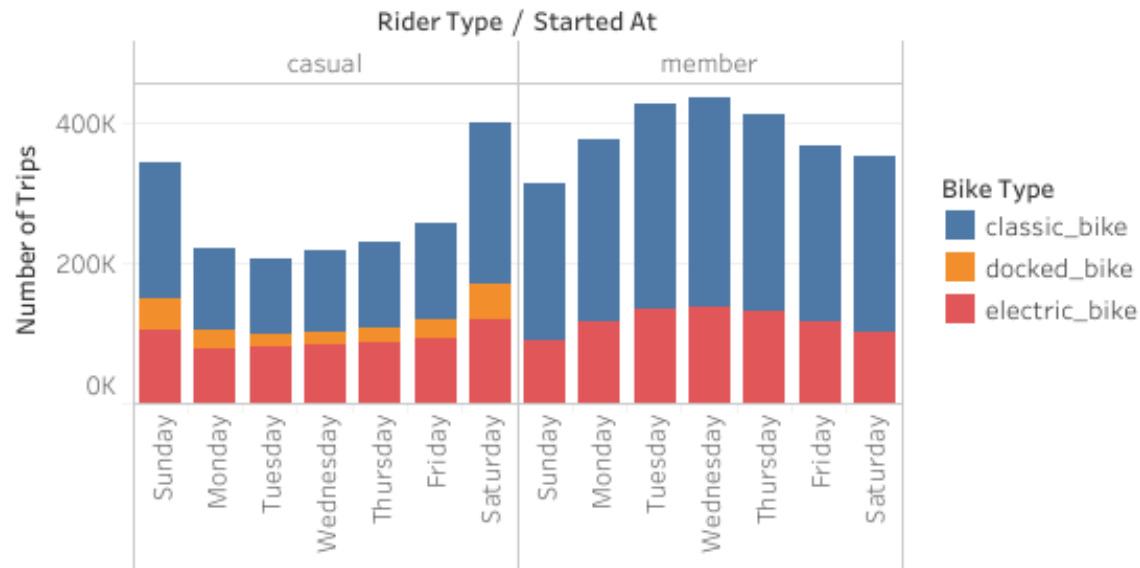
BIKE CHOICE

- Members choose classic bikes most of the time.
- Only casual riders use docked bikes.
- One third of all rides on an electric bike.

Bike Preference



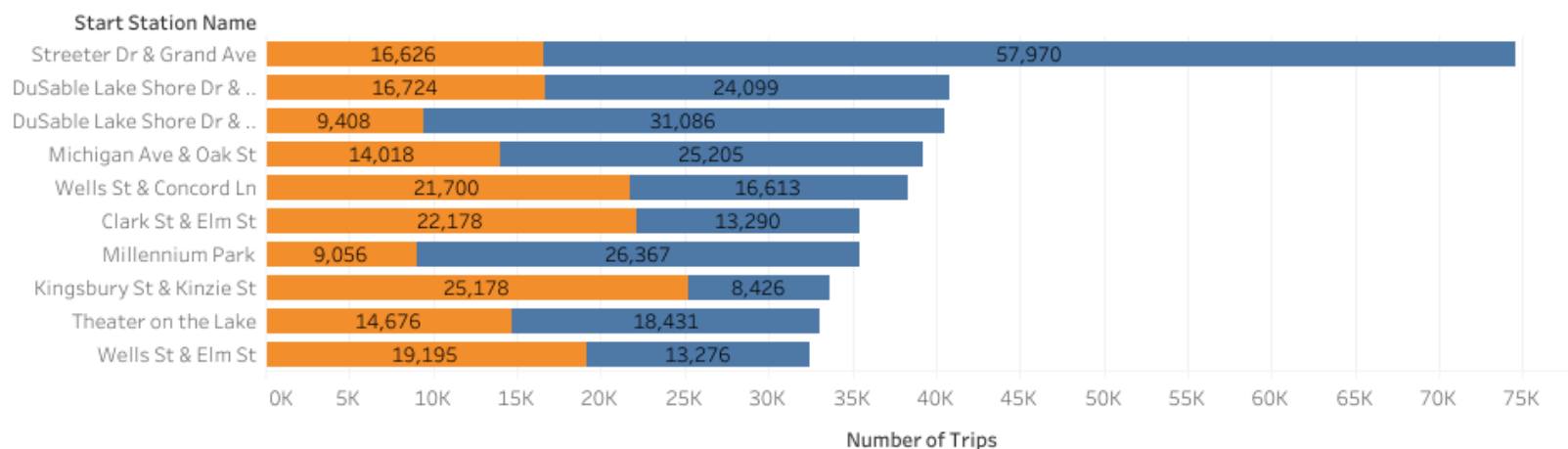
Bike Preference by Weekday



POPULAR START AND END STATIONS

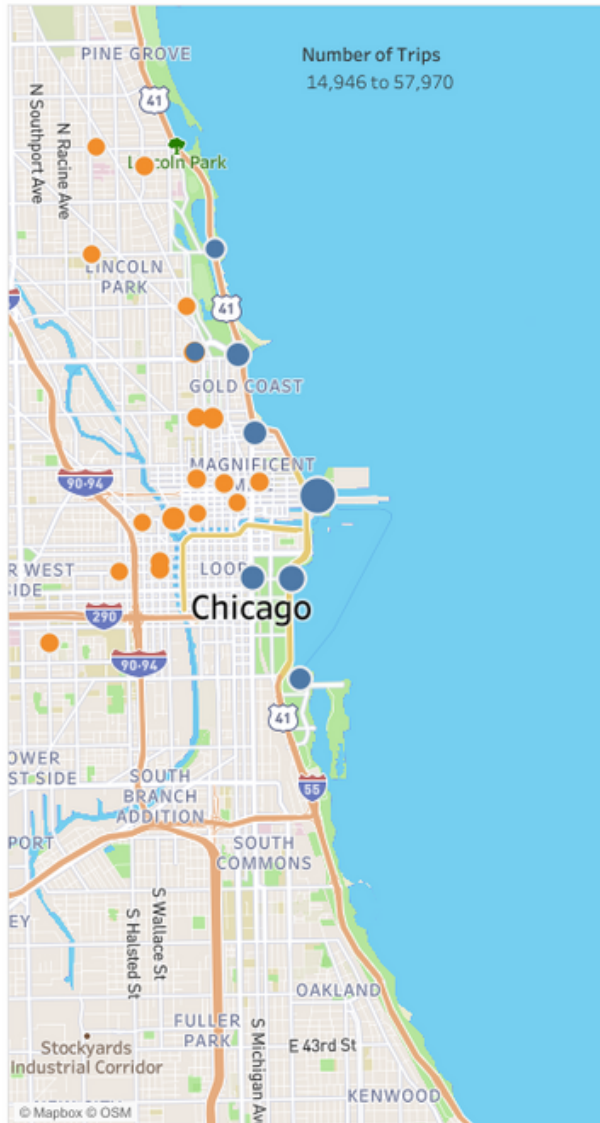
- Popular start stations and end stations are different for member riders and casual riders.
- Casual riders tend to start and end their rides close to the lake, near touristic areas.
- Member riders' top stations are located close to the business district of the city.

Stations

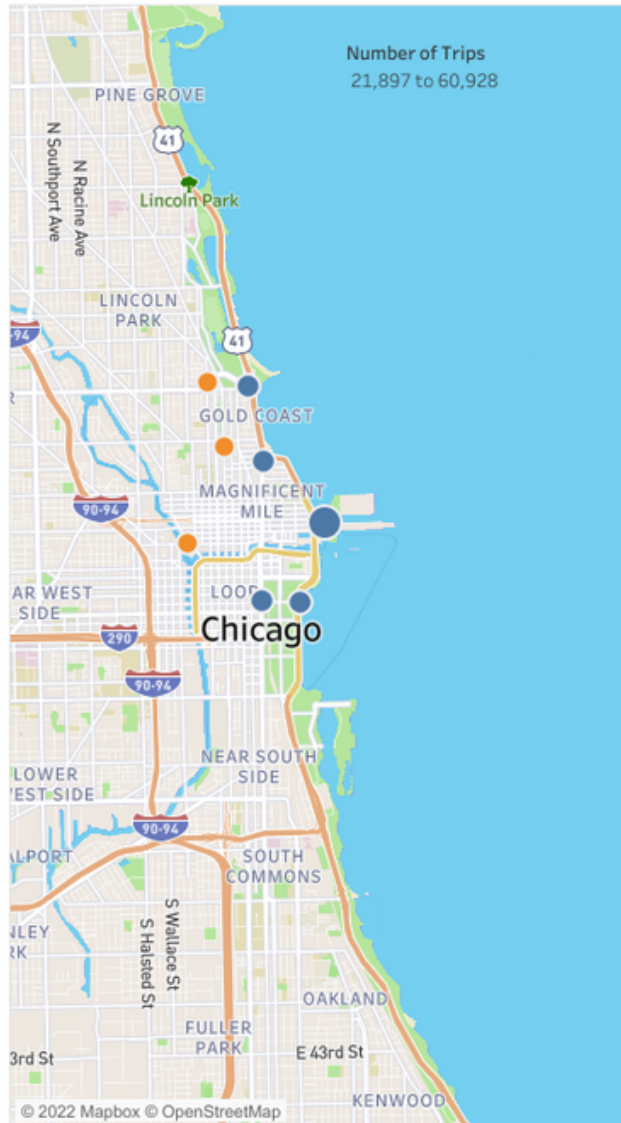


POPULAR START AND END STATIONS

Map - Start Station



Map - End Station



Rider Type
☒ casual
☒ member

Number of Trips
● 15,070
● 30,000
● 40,000
● 50,000
● 57,970

Key Takeaways

The main differences between causal riders and members:

- Member riders take more trips, but casual riders take longer rides.
- Summer months are popular in general, however mostly members are active during winter.
- Member riders use the bikes evenly throughout the week, while casual riders are more active on weekends.
- Popular start and end stations are different for members and casual riders.

Recommendations

- Marketing campaign targeted for the most popular time slots and seasons for casual riders:
 - Weekends
 - Afternoons
 - Summer months
- Marketing campaign targeted to the most popular start and end stations for casual riders.
- Further data to be gathered:
 - Find out if the casual riders are locals to the Chicago area or tourists.
 - Determine special offers or changes in the subscription system to attract local residents to commit to membership.