# Cyclistic Bike Ride

Google Data Analytics: Case Study

By Gunjan Basra

About Cyclistic

➢ Cyclistic, Chicago based company was launched in 2016 with a successful bike-share offering. Since then, the program has grown to a fleet of 5,824 bicycles that are geotracked and locked into a network of 692 stations across the city.

➢ They offer different types of bike like classic, electric and docked. The bikes can be unlocked from one station and returned to any other station in the system anytime.

➢ They also offer flexibility of its pricing plans:
  - ➢ single-ride passes
  - ➢ full-day passes
  - ➢ annual memberships
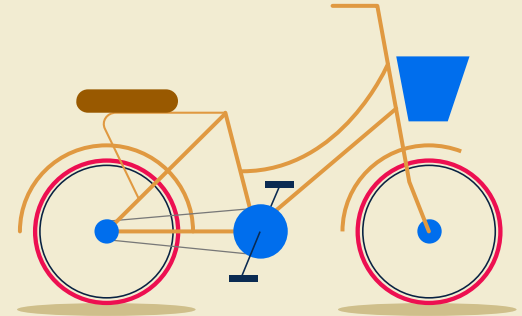
GOAL

The director of marketing aims to d**esign marketing strategies to convert casual riders into annual members.** Also, to better understand how annual members and casual riders differ, why casual riders would buy a membership, and how digital media could affect their marketing tactics.

Ask Phase

To achieve the goal, our team with discussion with all stakeholders come with the following questions to the guide the project:

- How do annual members and casual riders use Cyclistic bikes differently
- why would casual riders buy Cyclistic annual memberships?
- How can we influence casual riders to become members through digital platform ?

Data

- The data was taken from <u>here</u>.
- The data was made available by Motivate International Inc. under <u>this license</u>. I used 12 months data occurred between May 2022 until April 2023
- Each month has a separate csv file and contains 13 rows.
- In total the whole dataset have around 5.8 million records.
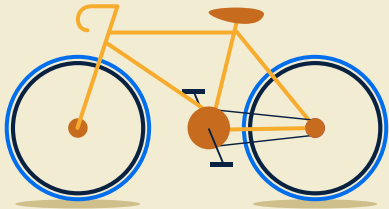
Preparing & Cleaning the Data

- I used R programming language to aggregate and clean the data for analysis
- I merged all month's data into a single table.
- Removed the missing, incorrect and duplicate records.
- Added new columns month, day of week and trip duration for analysis
- Also removed the columns that were to required for analysis.
- After the above steps the data was reduce approx. **4 million records.**
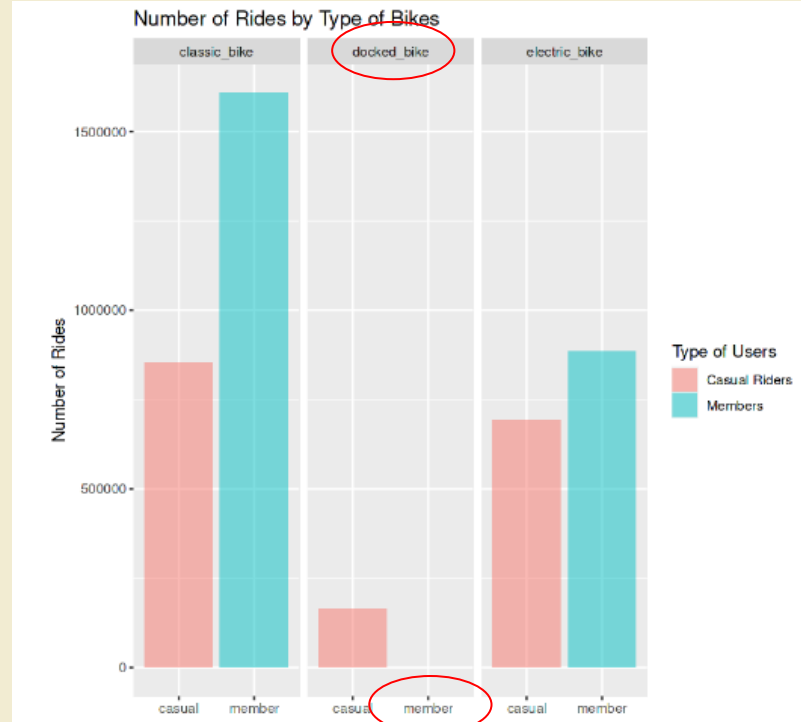
The number of Riders

Casual Riders

1707226

Members

2493229

Percentage of Total Rides by Users

41%

59%
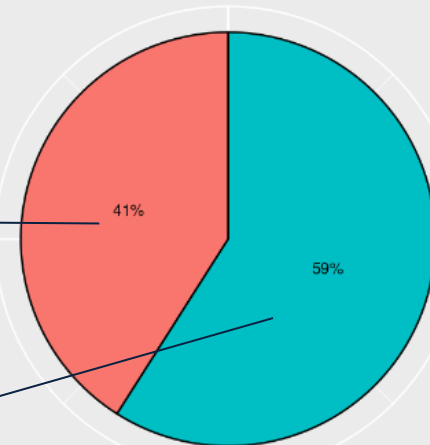
The number of Riders by Bike type

Most of the riders are members and they only prefer classic and electric bikes
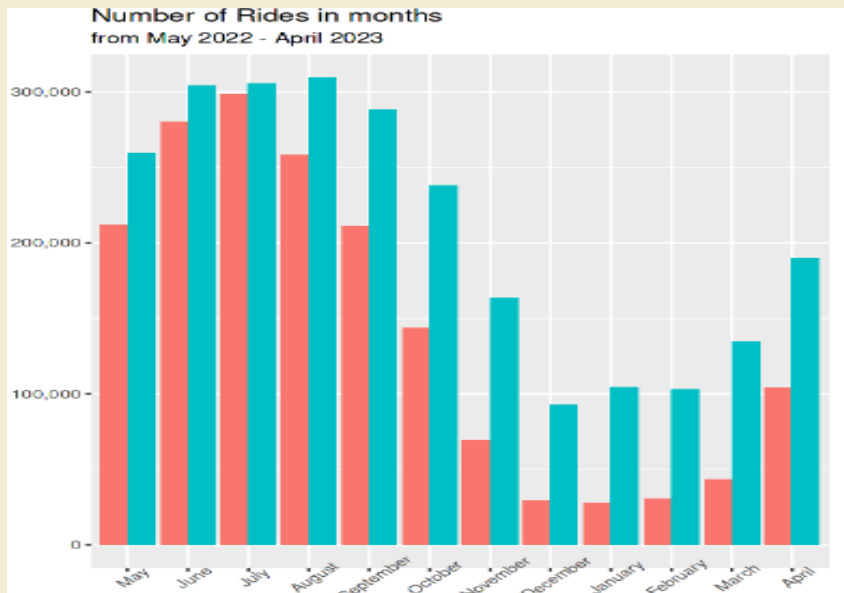
Ride Duration by Bike type
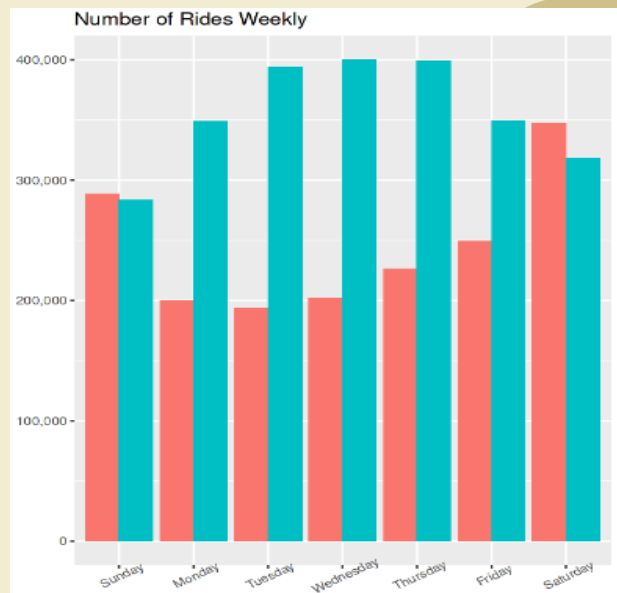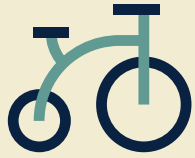
Casual riders spend the most time riding docked bikes

Riders Analysis

Number of Rides in months from May 2022 - April 2023
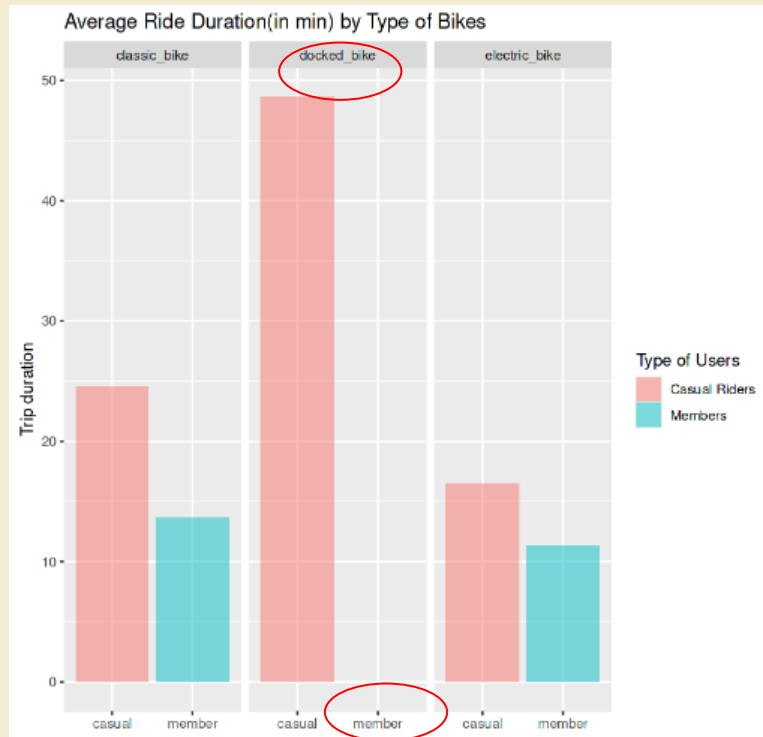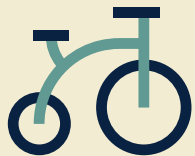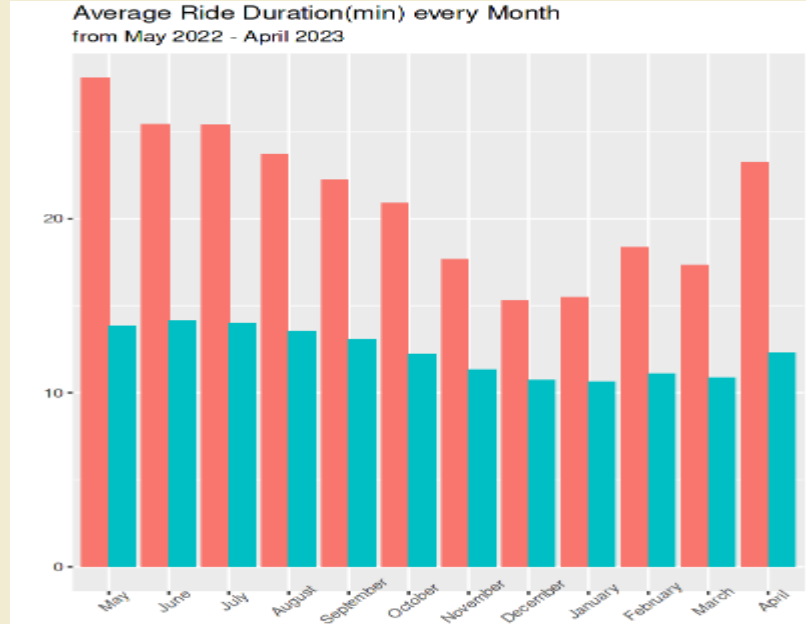
Monthly more member riders

Number of Rides Weekly

Only on weekends there are more causal ride

Riders Time Duration Analysis

Average Ride Duration(min) every Month from May 2022 - April 2023
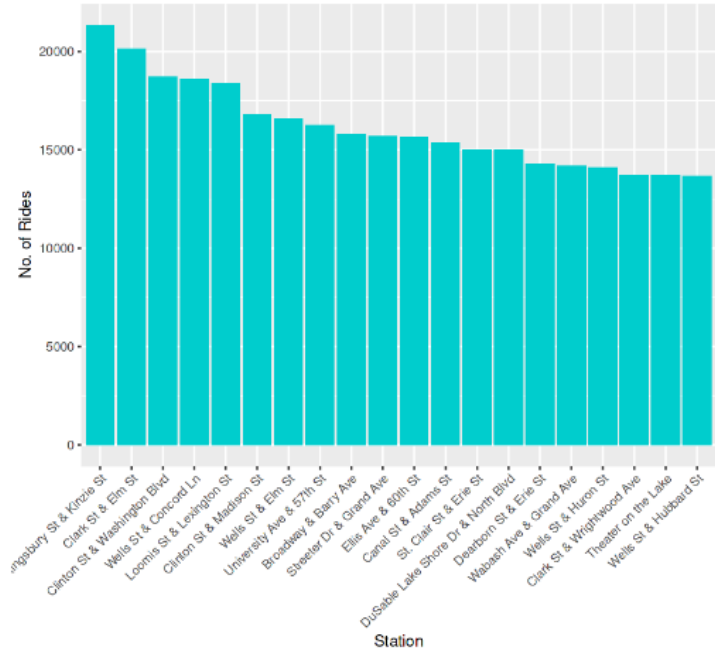

Average Ride Duration(min) every Week
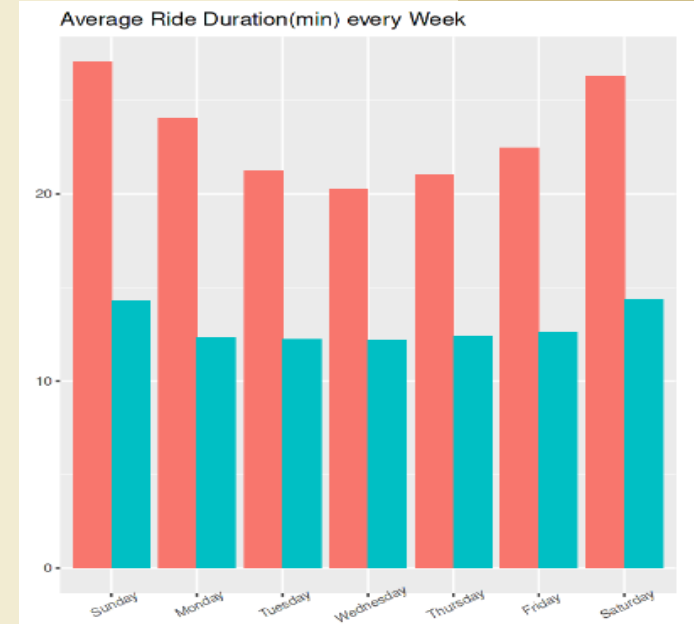
causal riders spent more time riding the bicycles
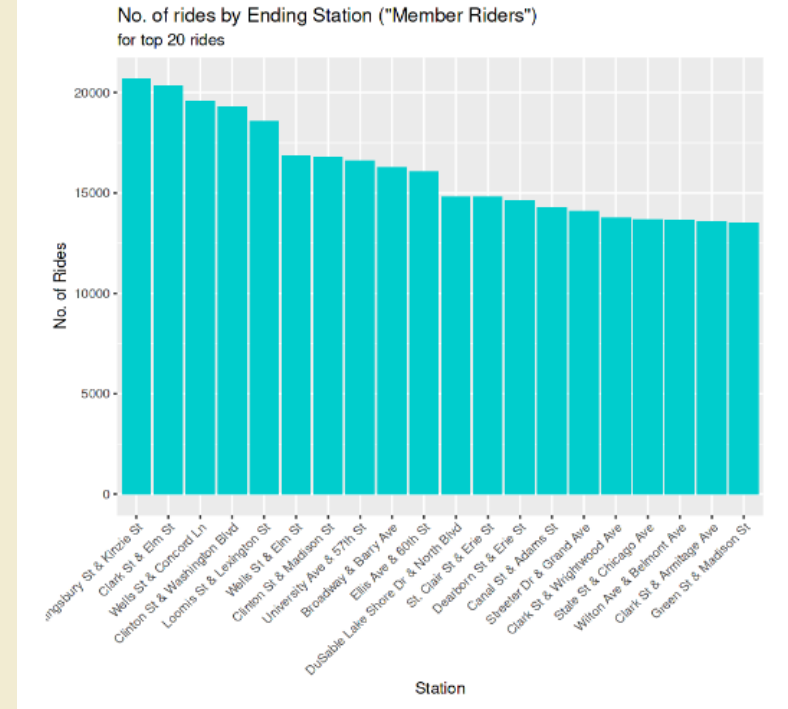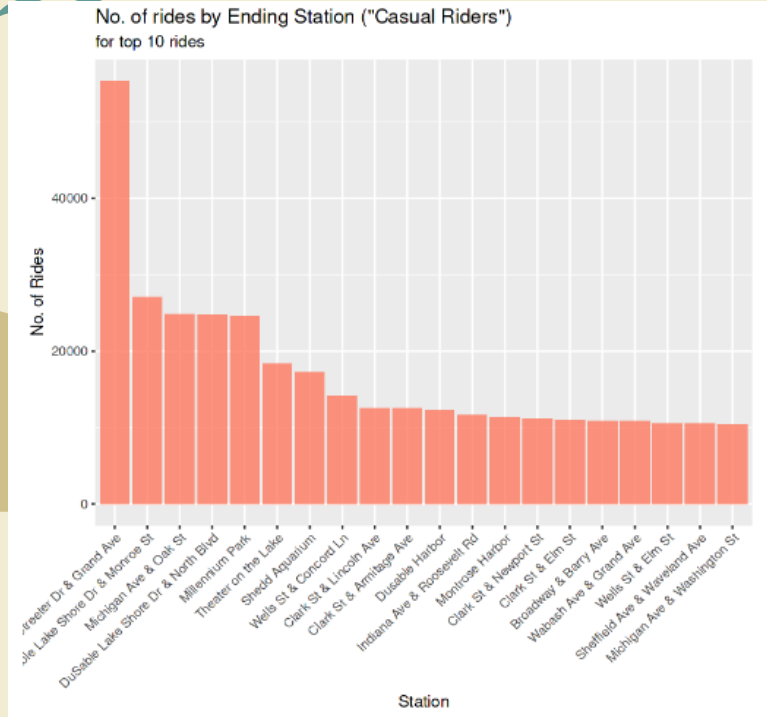
Most Popular Start Station

No. of rides by Starting Station ("Casual Riders")
for top 20 rides
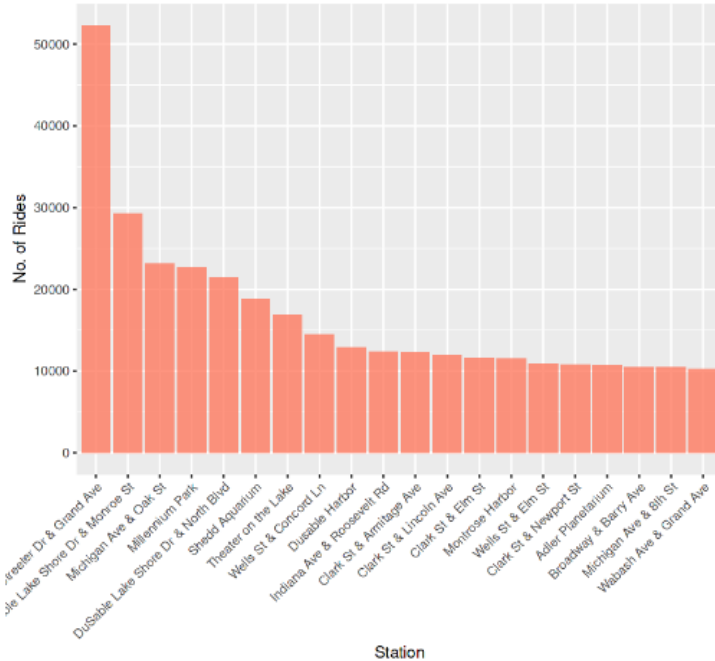
No. of rides by Starting Station ("Member Riders")
for top 20 rides

Most Popular End Station

No. of rides by Ending Station ("Casual Riders")
for top 10 rides

No. of rides by Ending Station ("Member Riders")
for top 20 rides

Recommendations

Benefits of membership

Casual riders mainly use Cyclistic bikes for leisure purposes. Therefore, they do not use Cyclistic bikes as often, which would make annual memberships seem expensive. One of the solutions is to launch "monthly memberships" that are exclusively for peak riding months.

Adversitment

Using posters and flyers at and around the most popular starting and ending stations areas regarding the benefits for membership and how they can become a member

Discounts/Deals

Offering discounts/deals and advertising on radio/tv during the peak seasons to become a member.

Tableau Dashboard

Thank you!