

# Cyclistic Bike Ride

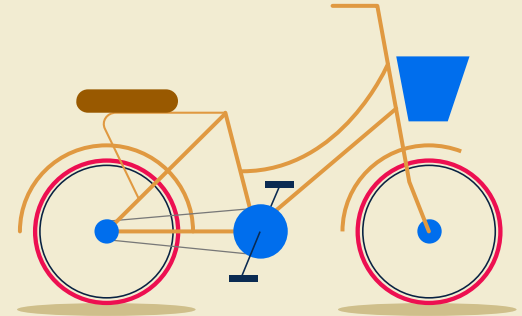
Google Data Analytics:  
Case Study

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 **design 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

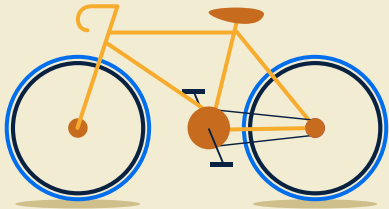
To achieve the goal, our team with discussion with all stakeholders come with the following questions to the guide the project:

- 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 [here](#).
- The data was made available by Motivate International Inc. under [this license](#). 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 not required for analysis.
  - After the above steps the data was reduced to approx. **4 million records.**
- 

# The number of Riders 🧐

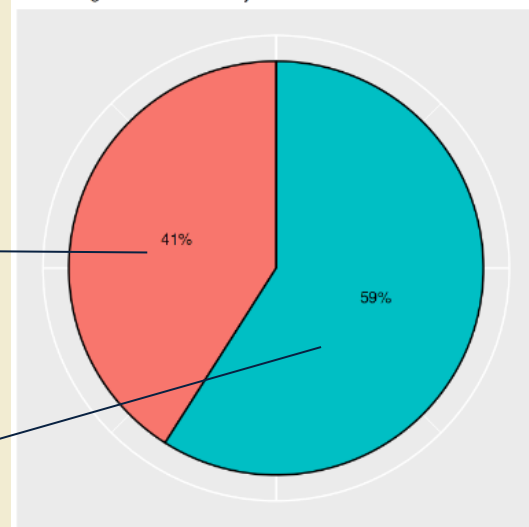
Casual Riders

1707226

Members

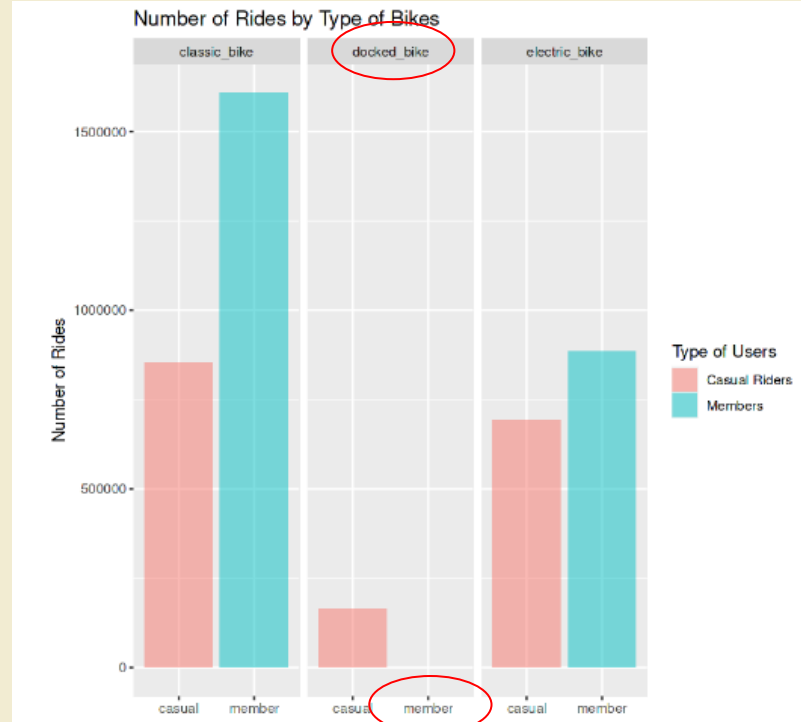
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Percentage of Total Rides by Users



# The number of Riders by Bike type

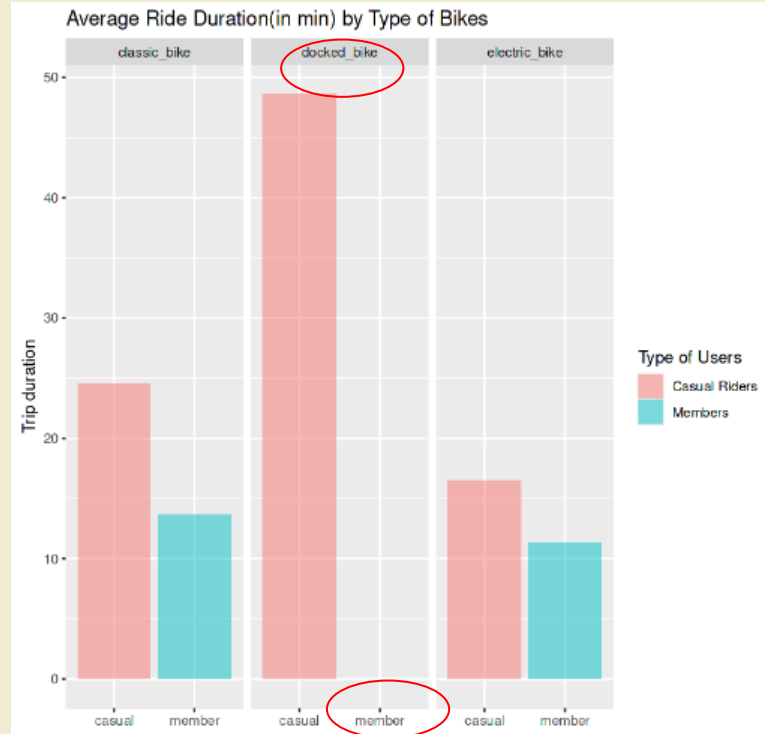
Most of the riders are members and they only prefer classic and electric bikes

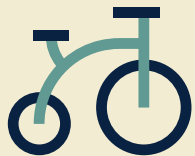




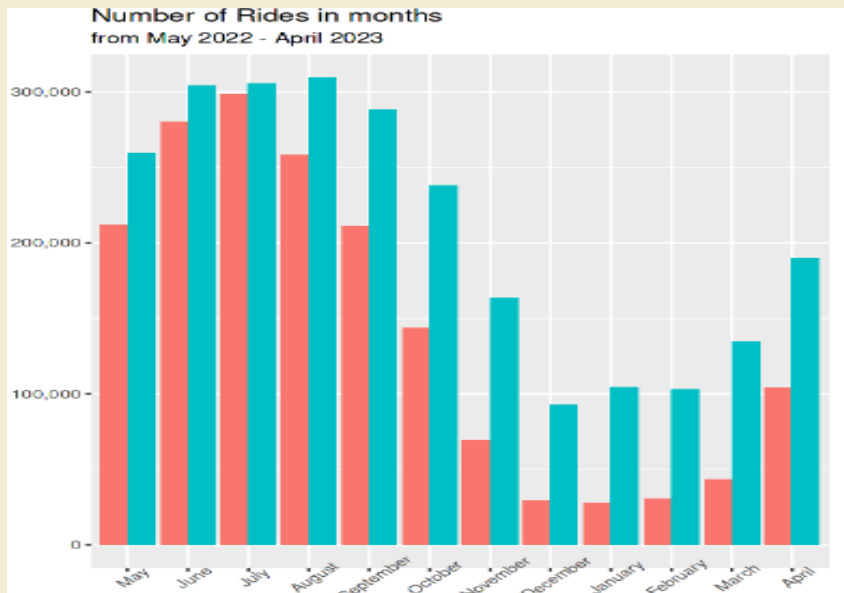
# Ride Duration by Bike type

Casual riders spend the most time riding docked bikes

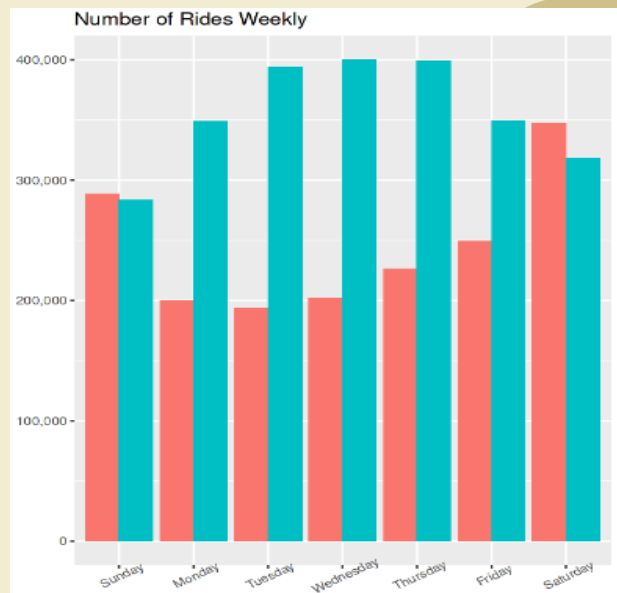




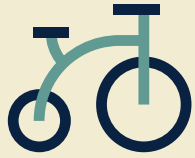
# Riders Analysis



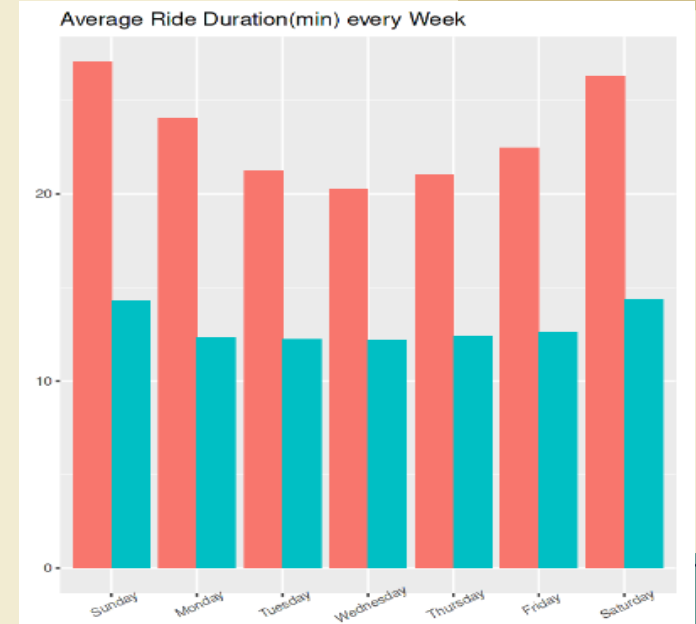
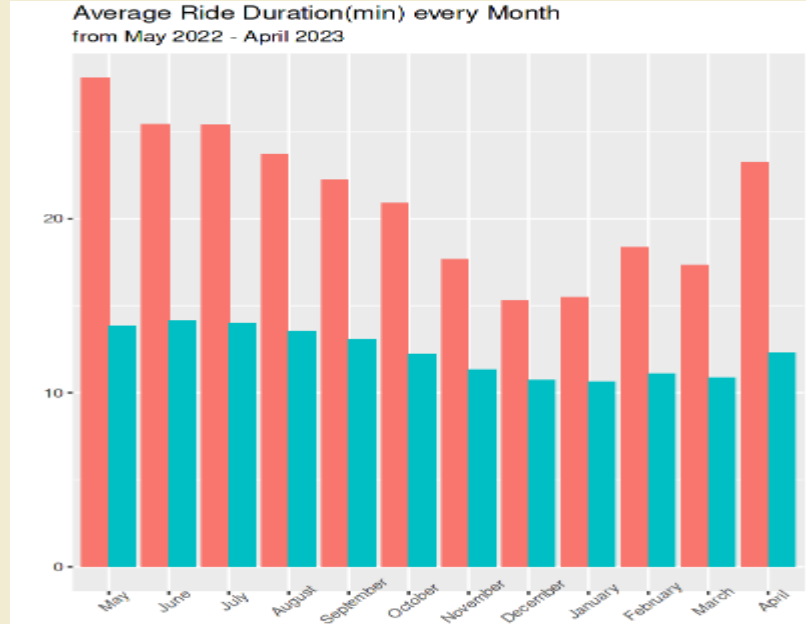
Monthly more member riders



Only on weekends there are more  
causal ride



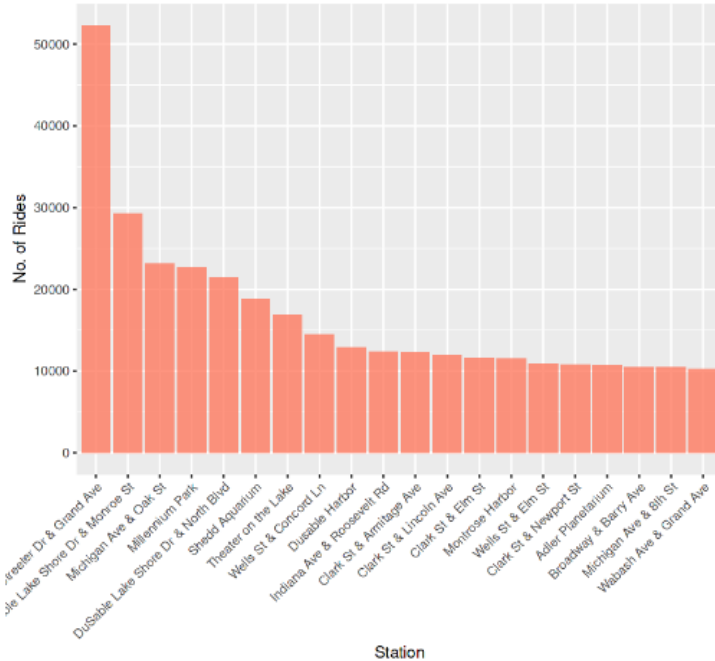
# Riders Time Duration Analysis



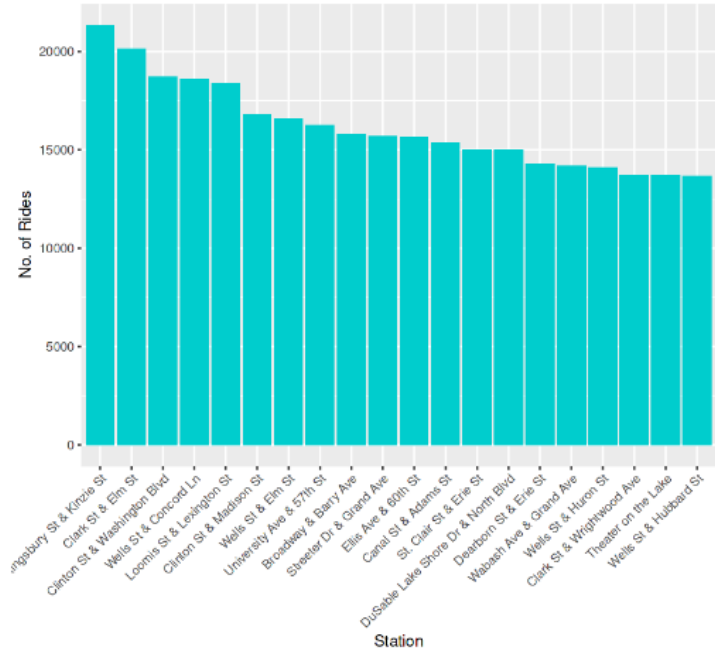
causal riders spent more time riding the bicycles

# Most Popular Start Station

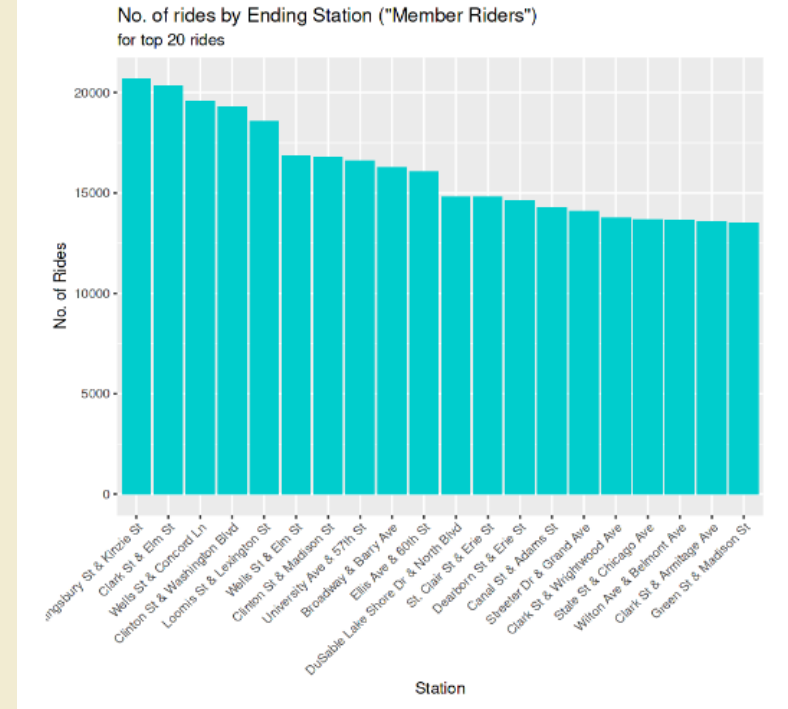
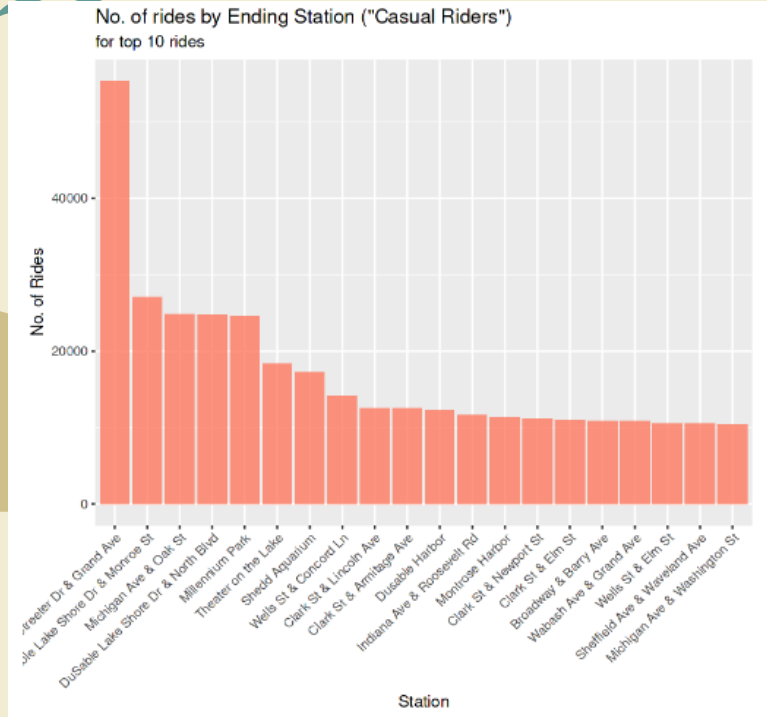
No. of rides by Starting Station ("Casual Riders")  
for top 20 rides



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



# Most Popular End Station



# 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.

# Bike Ride by Gunjan Basra

Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Dashboard 3

Member Casual



Month

(All)

Day Of Week

(All)

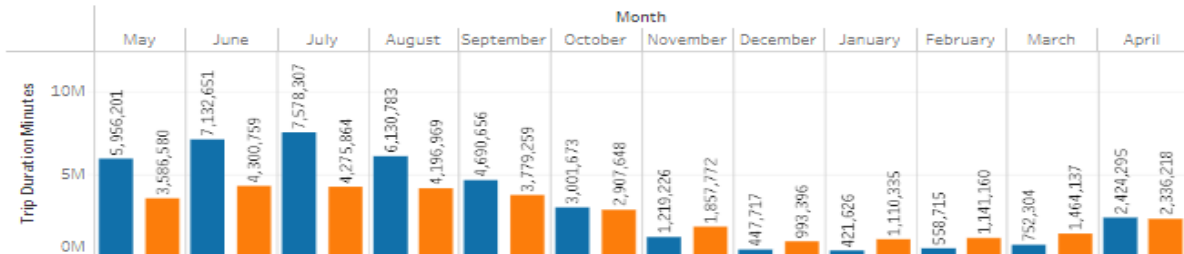
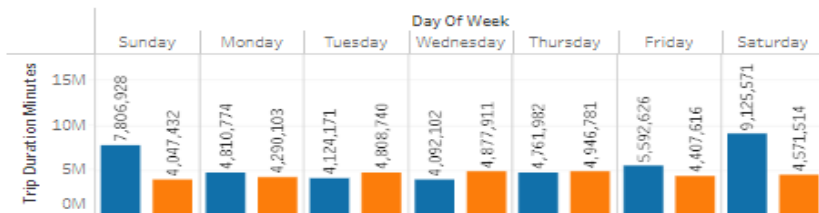
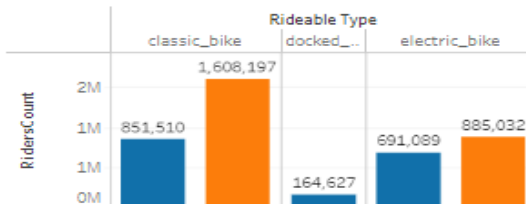
Number of Riders by membership



## Cyclistic Bide Ride

May 2022-April 2023

Number of Riders by Rideability



+ a b l e a u

10 Most popular stations where the trip 'START'

Start Station Name	F
Streeter Dr & Grand Ave	68,021
DuSable Lake Shore Dr & ...	37,794
Michigan Ave & Oak St	36,508
DuSable Lake Shore Dr & ...	36,459
Wells St & Concord Ln	33,091
Clark St & Elm St	31,697
Millennium Park	31,310
Theater on the Lake	30,549
Kingsbury St & Kinzie St	29,347
Wells St & Elm St	27,467

10 Most popular stations where the trip 'ENDS'

End Station Name	
Clark St & Elm St	31,259
DuSable Lake Shore Dr & Mo...	36,690
DuSable Lake Shore Dr & Nor...	39,478
Kingsbury St & Kinzie St	27,748
Michigan Ave & Oak St	37,523
Millennium Park	32,261
Streeter Dr & Grand Ave	69,508
Theater on the Lake	31,132
Wells St & Concord Ln	33,669
Wells St & Elm St	27,371

# Tableau Dashboard

Thank you!





# Alternative resources

