

# Casual to Usual

Cyclistic marketing strategy design --

base on behavior study of different user types

This presentation is mainly made for the stock holders/ management of the company. Information about the company and situation won't included. For viewer who is not aware of the purpose of this study, here is a brief introduction of the situation:

**Cyclistic** is a bike-share company features more than 5,800 bicycles and 600 docking stations in Chicago.

The director of marketing, Lily Moreno believes the company's future success depends on maximizing the number of annual memberships. So she seeks help from data analytics team to understand differences between members and casual users behavior, and from there give suggestion to design a new marketing strategy to convert casual riders into annual members.



# GOAL

What we are aiming to achieve from this study ?

**Goal** for this study is ...

To support design a Marketing Strategy

aiming at Converting

**Casual Riders** into **Annual Members**

**To achieve our goal,  
we need to understand:**

1. **How** do annual members and casual riders use Cyclistic bikes **differently**?
2. **Why** would casual riders buy Cyclistic annual memberships?
3. **How** can Cyclistic use **digital media** to influence casual riders to become members?

# Prepare Data

Prepare : integrity/ info security

Process : clean / unite

Overall meta data rundown

# Source and integrity

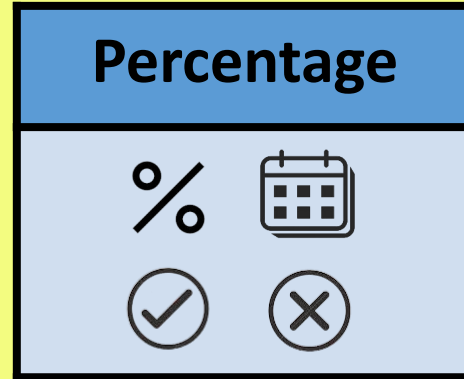
- The data is **first hand** data collected by Cyclistic.
- There is **no bias** when collecting data. No value is filtered, limited when collected.
- Data contain **current** trip and station information collected from late **2013 to 2023**.

# Information security

Data that we use **does not** contain any **personal information**, which more or less affect our ability to understand correlation between data, but can ensure the study does not violate any **privacy policy**, and the analysis is **bias free**.

# Cleaning data

- Checking for **missing** value, **incorrect** value, data type or format.





# Cleaning data

- Remove trip data that is **not** used by **customers**.



- Setting **conditions** to filter unreasonable scenario.

5 mins



2 hours

# Intergrade and Organize

- Intergrade

Make sure all format, column name from same type of data is united.

For example: In trip data, change all 'from\_station' to 'start\_station', so the column name is the same between data set.

- Organize

Using Google cloud and Bigquery to manage data base and set up file naming rule.

Also keeping a local copy as backup.

# Data summarize

- After processing, we have **two type** of data:

## Trip data

contain information in a single trip includes start and end station/time, location, user type and bike type.

## Station data

record station name and id, location(latitude and longitude), capacity and online date.

# Data summarize

- We will be using two different time period of data for analytic study.

One period is from 2013 – 2023, which is all the data we have since company started.

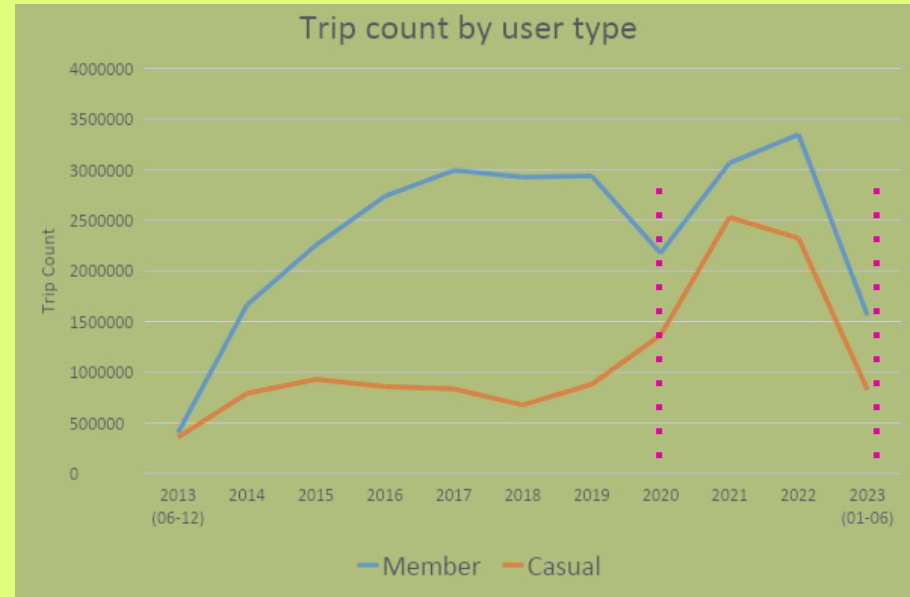
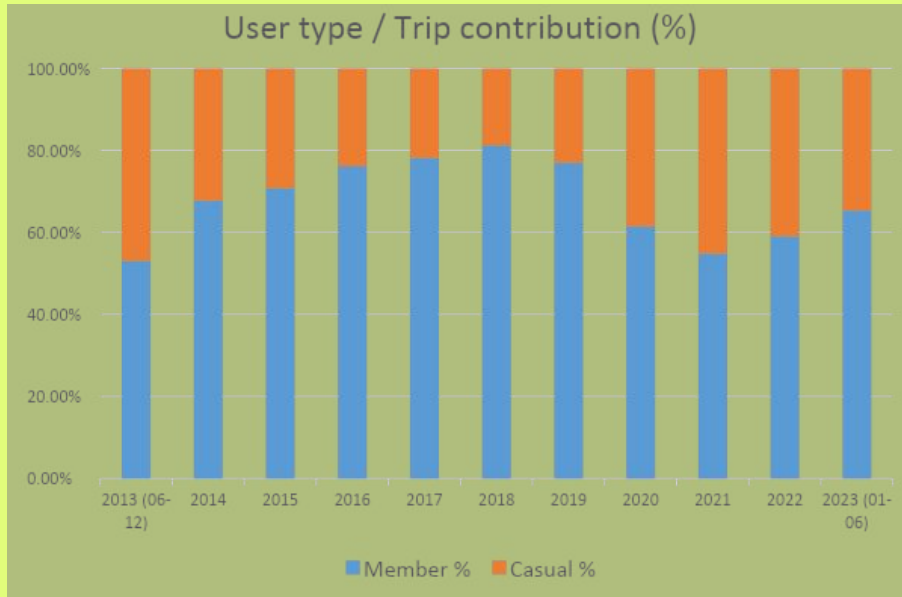
The other is from 2022 July – 2023 June, this will represent more current information.

# Analyze Data

Analyze Combine data, Explain and Visualize.

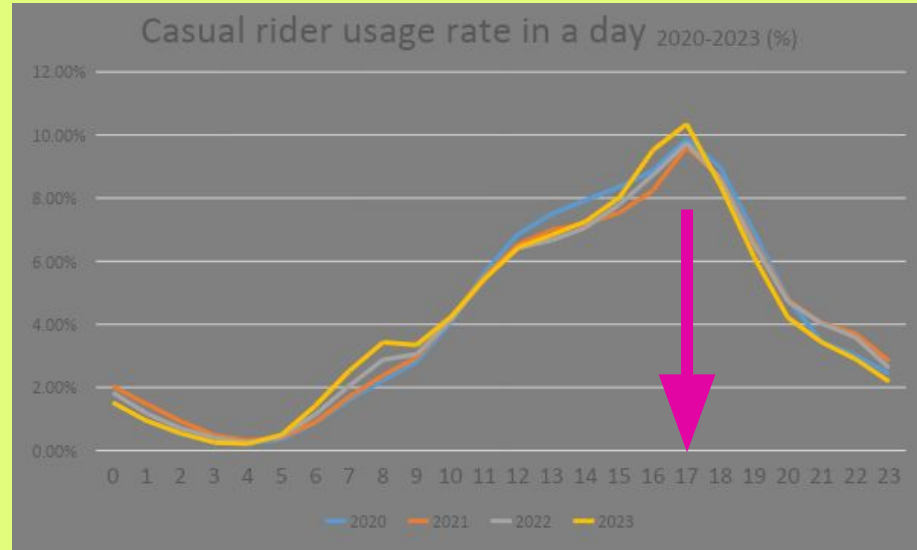
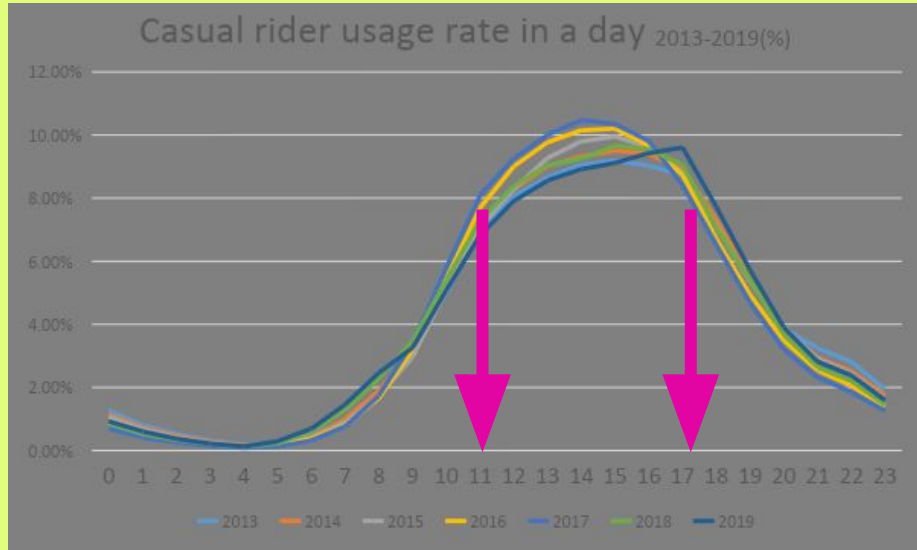
# Analyze – User type

- Big **growth in casual rider** since 2020, while member usage taken a hit due to Covid.
- This casual rider growth means the contribution of our customer has change over years, and now we want to convert this **new group of casual rider** into long-term member.



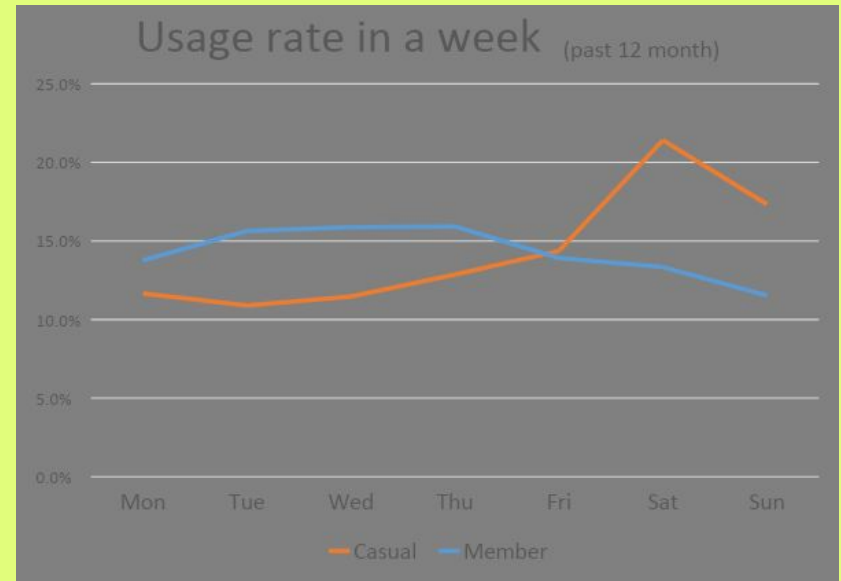
# Analyze – Usage rate in a day (trend)

- We can also see the different from past years data, our target group like to ride a little latter in the day around **afternoon**, with one obvious **peak at 5 PM**, which might indicate the customer are more likely to use the bike for **one way** instead of round trip.



# Analyze – Usage rate in a week

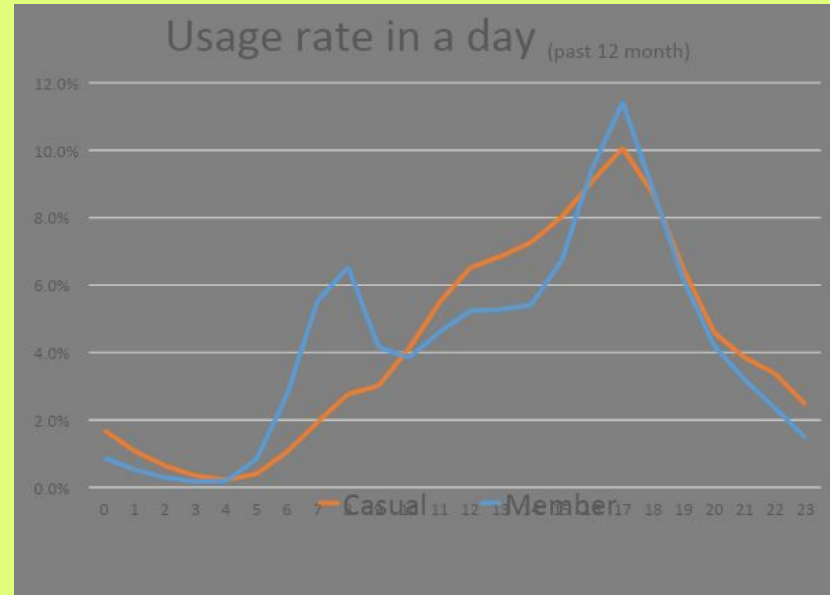
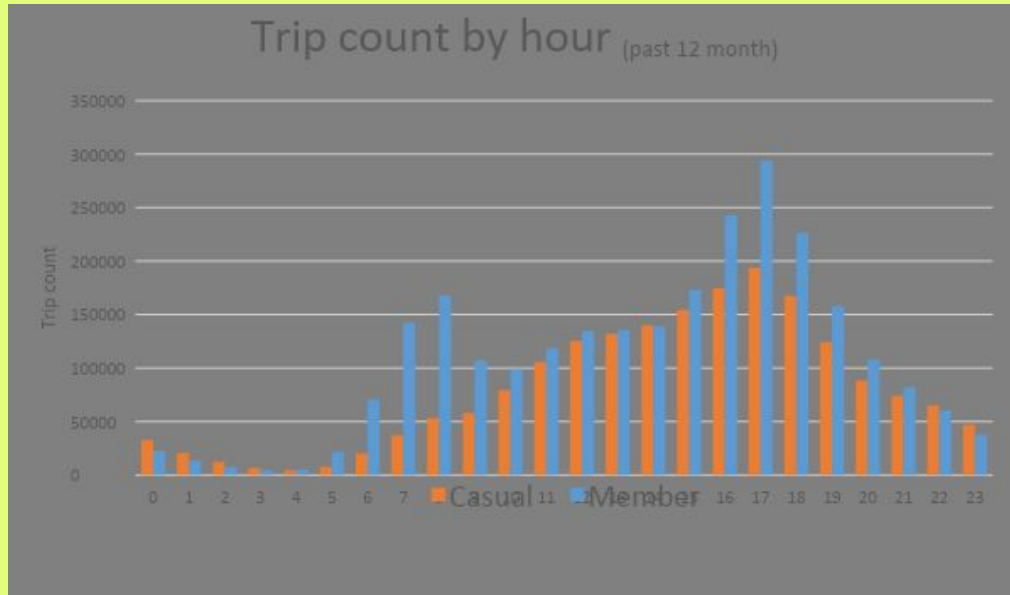
- Compare to member, most of **casual rider use the bike on weekend**, likely for recreation purpose.
- This also mean **casual rider might not use the bike as often** as member does.





# Analyze – Usage rate in a day

- Different peak hour in a day also support our speculation: Most casual rider use the bike on **weekend/ after work** for recreation activities.



# Analyze – Station popularity

- We also check the casual rider's most used / visited station, which further confirm our speculation.



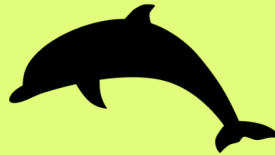
Theater on the Lake



Millennium Park



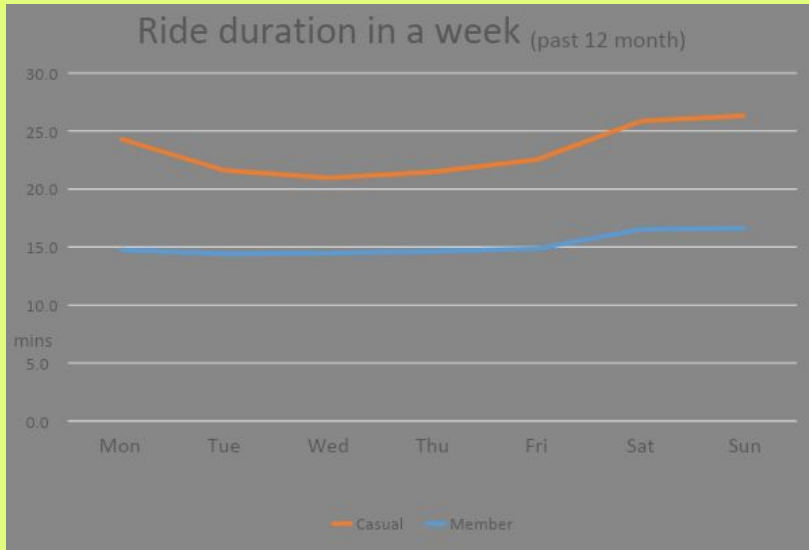
Adler Planetarium



Shedd Aquarium

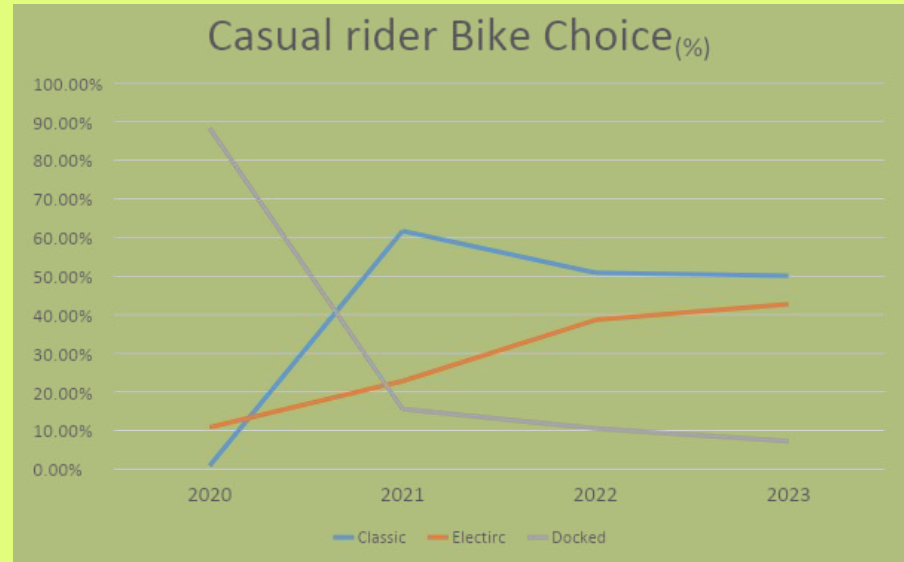
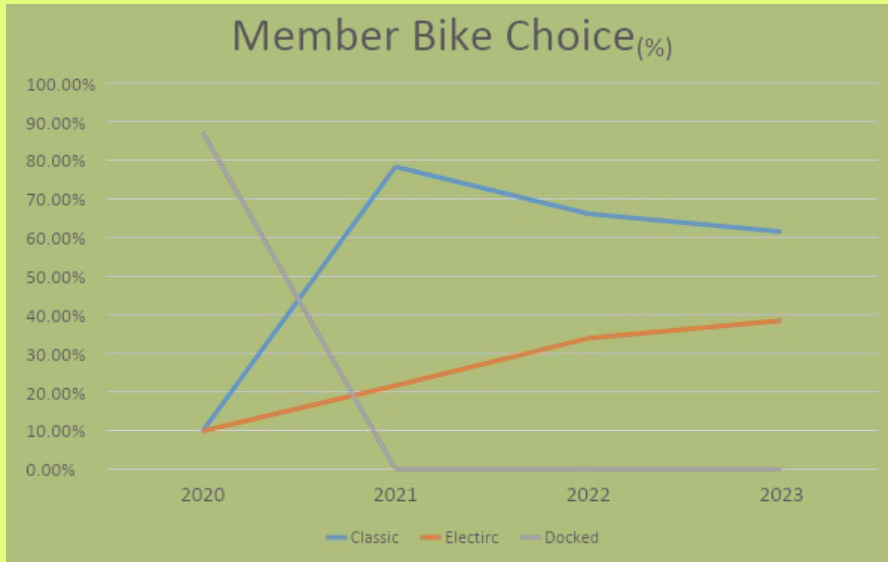
# Analyze – Ride Duration

- The average rides duration of **casual rider** is about **23 minutes**. The duration is getting shorter since 2018, and duration is slightly higher on weekends.
- **Median point** of casual rider duration(past 12 months), **13 minutes** , is about the same as member average, indicate .



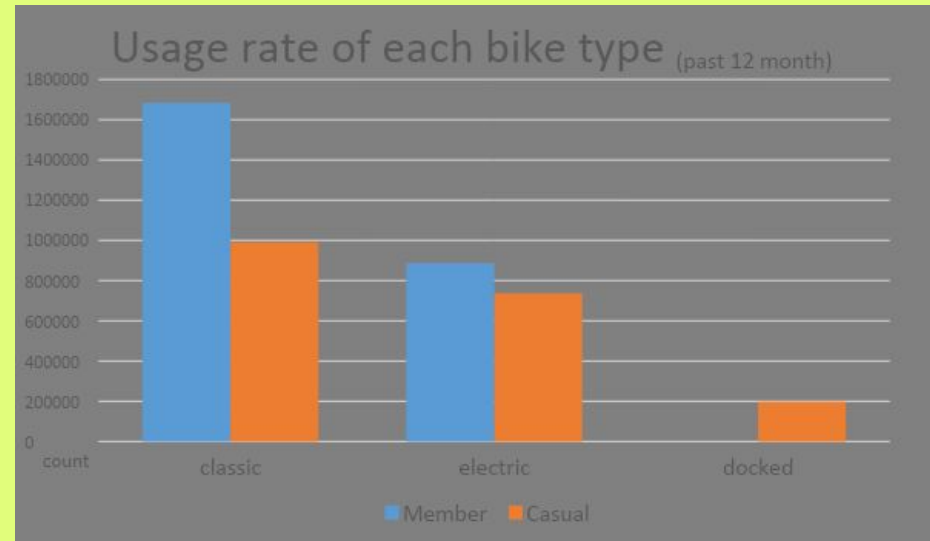
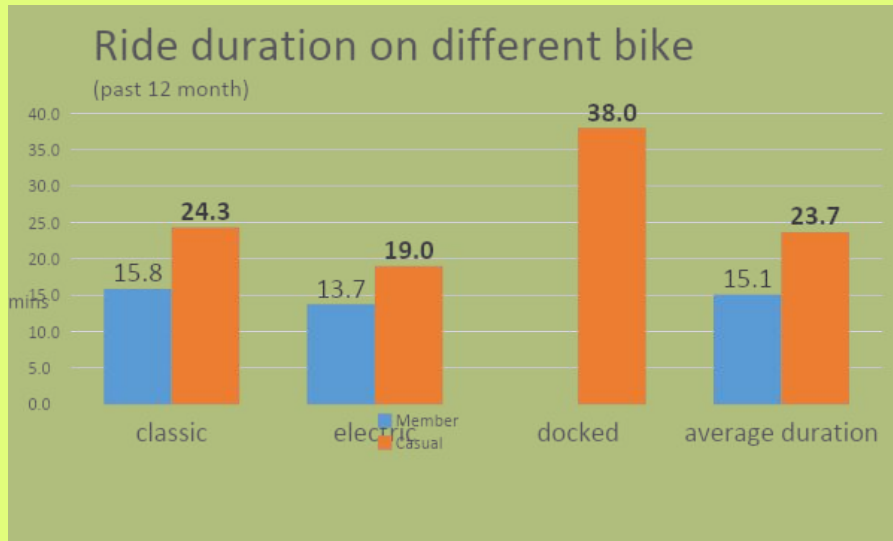
# Analyze – Bike type Popularity

- Most customer are choosing electric and classic bike over docked bike since the introduction of classic and electric bike.
- While classic is still the most popular choice, electric bike seen to be the only bike that is growing in popularity.



# Analyze – Ride Duration / Bike Type

- Compare to members, **casual rider** have a **longer ride duration** though out every category, this can mean that they might cover longer distance.
- Another thing worth mention is only casual rider use docked bike, might be because it is easier for first time/casual user to understand how it work.



# ULT RES

- Questions' answer
- Strategy and suggestion
- Excepted Result

# Answers

1. **How** do annual members and casual riders use Cyclistic bikes **differently**?
2. **Why** would casual riders buy Cyclistic annual memberships?
3. **How** can Cyclistic use **digital media** to influence casual riders to become members?

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

We learn that **casual riders**:

- Ride on weekend, around 12 pm to 7 pm.
- Have longer ride, average about 35 - 40 mins.
- They don't ride as often as members,
- Likely to use the bike for only one way trip.

All of these indicates that casual riders use our service for **recreation activities** on weekend or a day off afternoon.

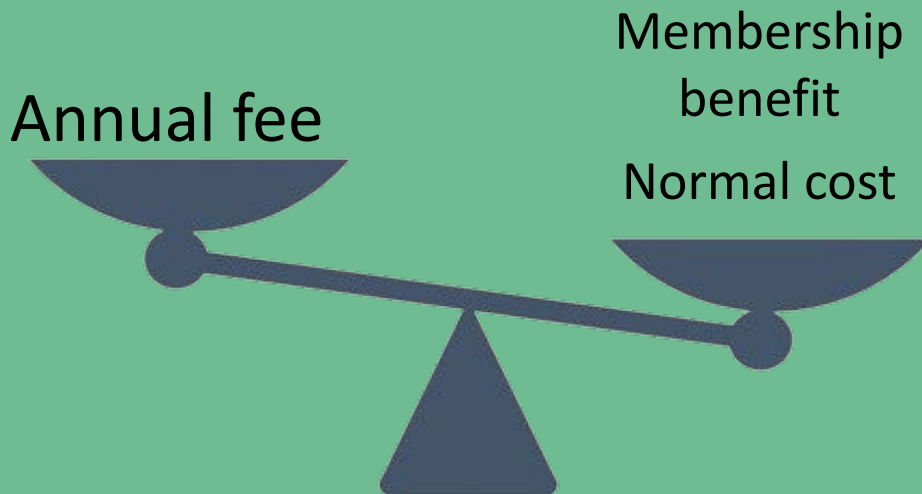


# Possible identity:

Young age college / work stage people who like to spent their afternoon explore the city.

Family that will constantly going out on weekend to place like Planetarium or Aquarium.

# Why would casual riders buy Cyclistic annual memberships?



# Digital media strategy

- Member-like rider



- Recreational rider



# Member-like rider

## New options

- Monthly pass
- Family plan

## Scheme

- Membership benefit
- Coupon
- Discount

# For Recreational Rider

We should target people who have a habit of doing outdoor activities on their day off. With...

- Advertisement on social media promoting our service using short video showing a casual afternoon tea, coffee or picnic.
- Host a reward event to encourage users to post and share their ride using our hashtag.
- Posting a weekly suggestion on where to go with a bike on our social media page.

# Suggestion

Docked V.S. No Docked

# Result Expectation

Since we don't have exact number of casual rider, we will use percentage to calculate.

If we can reach to about 20 times our current customer amount of potential customers with 5% conversion rate, and 15% becomes a member, we will have a **20% growth in membership**, plus more casual rider.