

# Cyclistic Bike-Share Program: Insights and Suggestions

A presentation on the successful bikeshare program launched by Cyclistic in Chicago, highlighting insights from historical bike trip data on 2022 and suggestions for improving the program further.



<sup>\*</sup>This is a study case in the context of the Google Data Analytics Professional Certification.



### Successful Program Launch

- Cyclistic launched a bike-share program with 5,824 bicycles and 692 stations in Chicago
- Bikes can be rented and returned at any station
- Flexible pricing plans are offered to target a broad consumer base





# Annual Members vs. Casual Riders: A Behavior Analysis

- Annual members found to be more profitable than casual riders
- The overall objective is to convert casual riders into annual members.
- The objective of this analysis is to identify the differences in how annual members and casual riders use Cyclistic bikes.



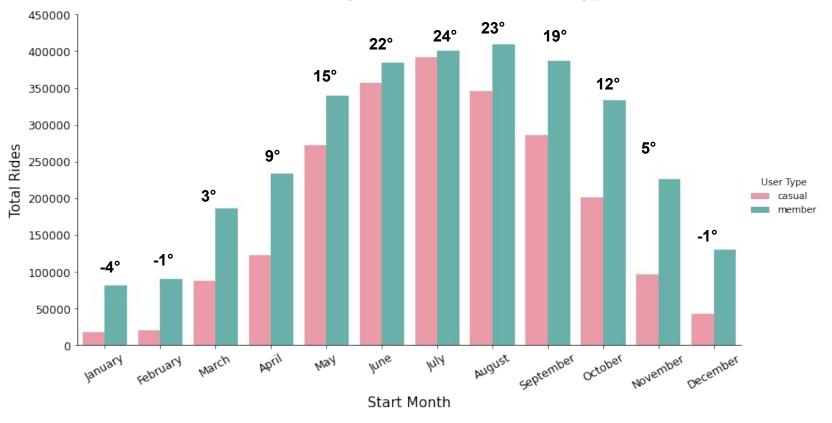


### How Many Trips and How Long?

- The analyzed data ranges from January to December 2022
- The number of trips and average duration was the focus of the analysis
- The data has been made available by Motivate International Inc. under this license

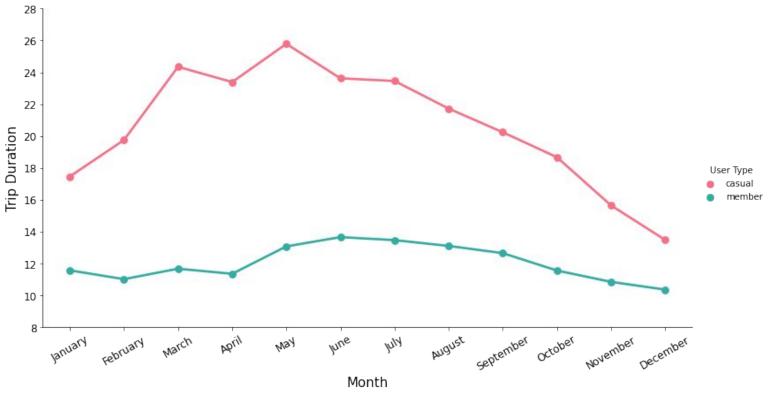


Ride Count by Start Month and User Type

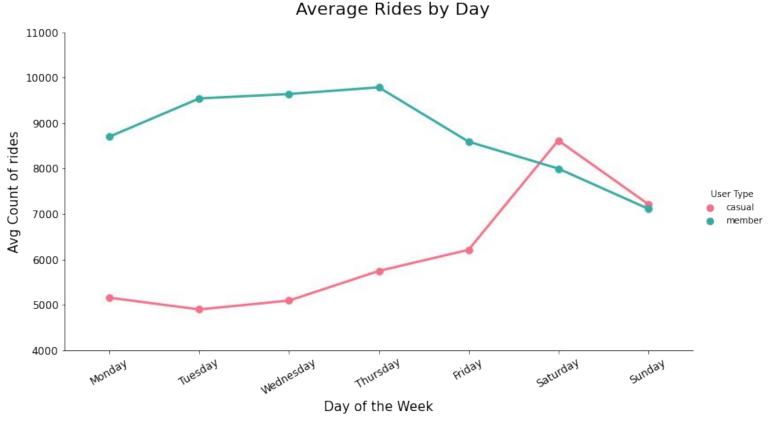


 An increase in trips during summer months was found to correlate with average temperatures between 15° and 19°

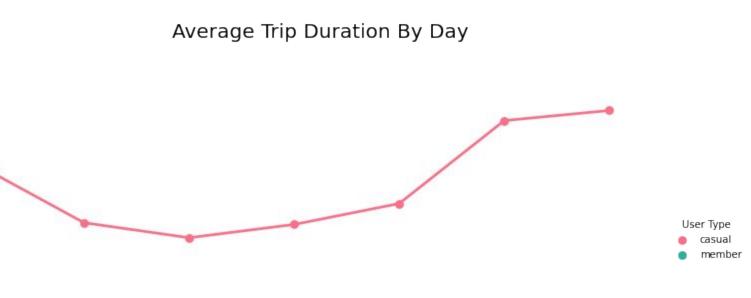
#### Average Trip Duration By Month



 The average trip duration for member users remains stable year-round, while for casual users, it peaks in spring (April to June) and subsequently declines.



 During Fridays, Saturdays, and Sundays there is an increase in trips by casual members, while there is a decrease by member users.



28

26

24

22

16

14 -

12

10

Monday

Tuesday

Wednesday

Trip Duration

 Member users exhibit consistent average trip durations throughout the week, whereas casual users experience a weekend increase of up to 5 minutes.

Friday

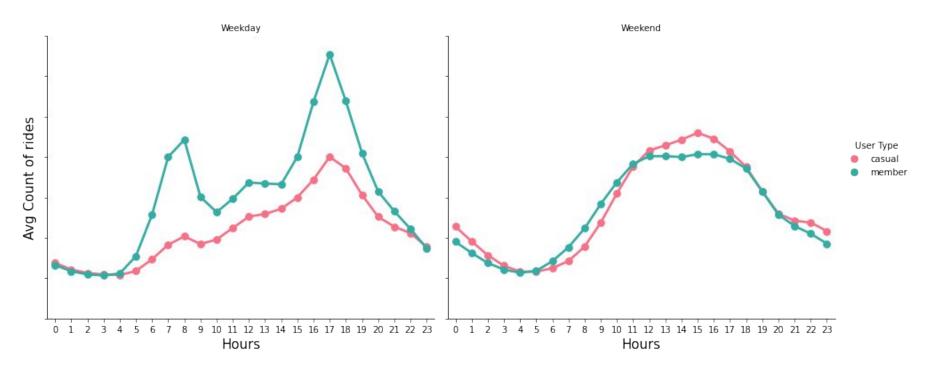
Saturday

Sunday

Thursday

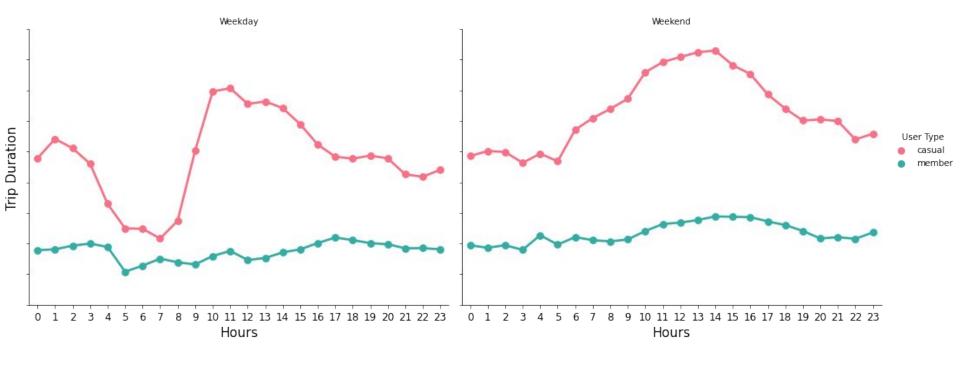
Days

#### Average Rides by Hours



 Peak hour usage: Member users have increased numbers of trips during peak hours on weekdays, specifically between 7-8 am and 17-18 pm

#### Average Trip Duration By Day Type



Member users have consistent trip durations all week long. On weekdays casual users have shorter trips in the early morning and longer trips between 10 am and 12 pm.

On weekends casual users have longer trips starting at 7 am, peaking at 1 pm, and gradually decreasing thereafter.



## Insights

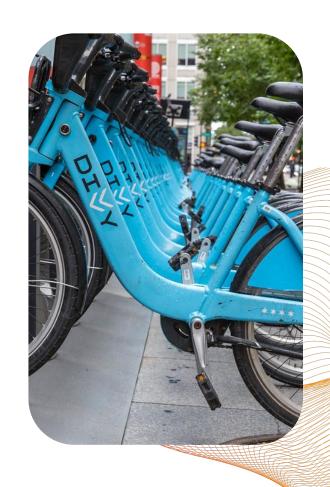
- Both types of users exhibit seasonal behavior with a significant increase in the number of trips during the spring and summer months. However, casual users show a stronger trend and tend to take more numerous and longer trips on weekends.
- Member users have a relatively stable ride length throughout the year. They have a remarkable higher number of trips on peak hours during weekdays





## Suggestions for Improving Program

- Seasonal discounts for annual memberships during spring to encourage casual users to sign up
- Provide additional benefits to annual members,
  like priority access on peak hours
- Introduce three tiers of membership with increasing benefits and prices, positioning the annual membership as the most affordable option





#### Future research

 In a future investigation, geolocation data from stations will be used to identify usage patterns and user preferences in different areas of the city and at different times of the year





# Thank you for your time and attention!

