GOOGLE DATA ANALYSIS CAPSTONE : CASE STUDY

CYCLISTIC BIKE SHARE

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OUTLINE

- Introduction
- Scenario
- Objectives
- Method
- Results
- Conclusion
- Recommendation

INTRODUCTION

The Cyclistic bike-share analysis case study. In this case study, I will perform many real-world tasks as a junior data analyst for a fictional company, Cyclistic, and meet different characters and team members. In order to answer the key business questions,

Using the following steps as a data analyst ;

- Ask
- Prepare
- Process
- Analyze
- Share
- Act

SCENARIO

Working as a junior data analyst in the marketing analyst team at Cyclistic, a bike-share company in Chicago.

The director of marketing believes the company's future success depends on maximizing the number of annual memberships. My team want to understand how casual riders and annual members use Cyclistic bikes differently, From these insights, My team will design a new marketing strategy to convert casual riders into annual members.

OBJECTIVES

(Ask)

- How can the Bike-Share Navigate Speed up Success?

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

- How can Cyclistic use digital media to influence casual riders to become members?

METHOD :PREPARE

Using Cyclistic's historical trip data. The 12 different datasets were downloaded to analyze and identify trends. The datasets have a different name because Cyclistic is a fictional company.

- Using the read_csv() function data was loaded into R programming language
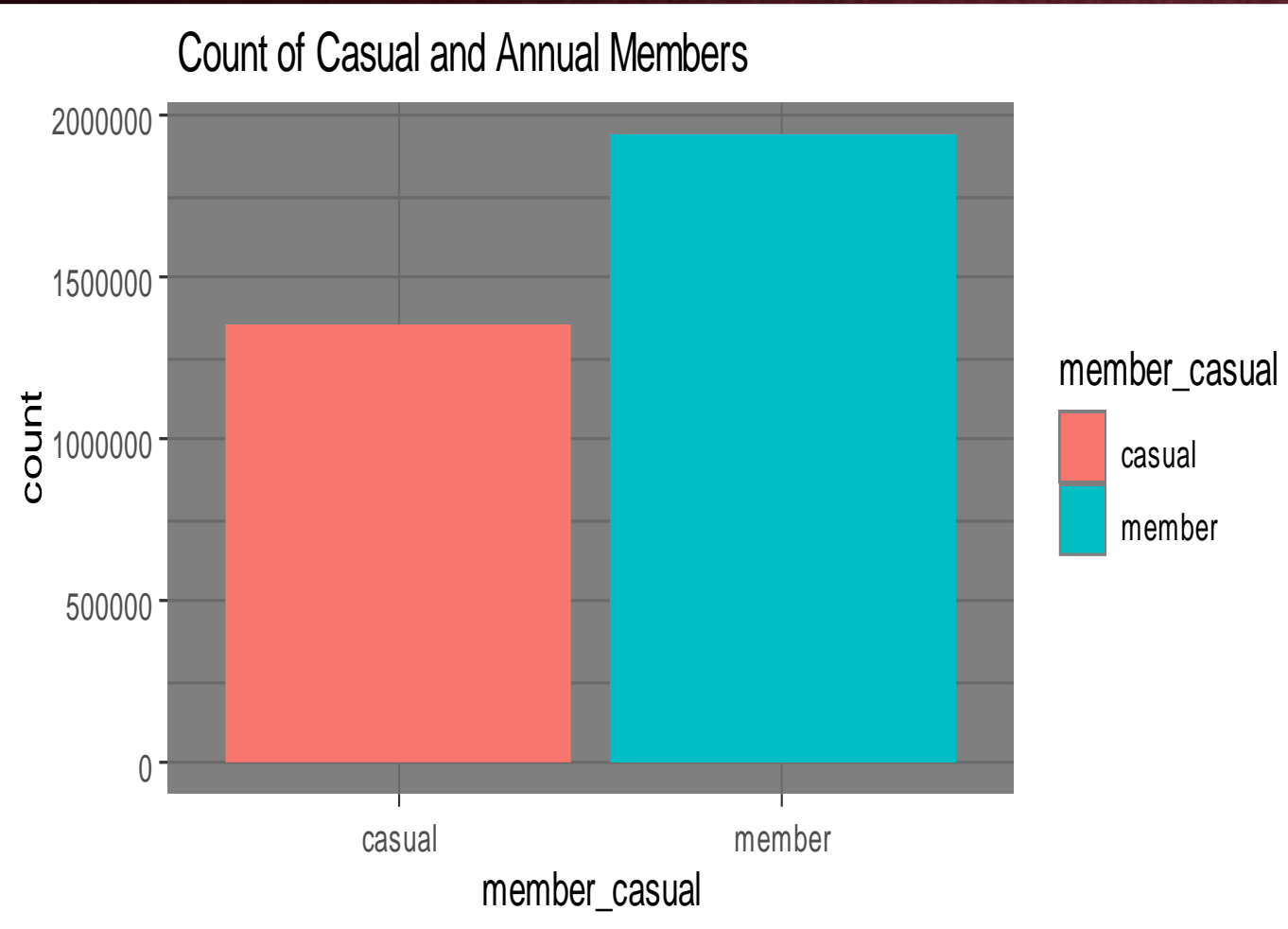- Using the Rbind function all dataset was combined

METHOD: PROCESS

Data processed for analysis

- Missing values were checked and drop

- New columns were created using the existing columns

- Date and time columns were split into day month and year

- Changing data types

METHOD: ANALYSIS

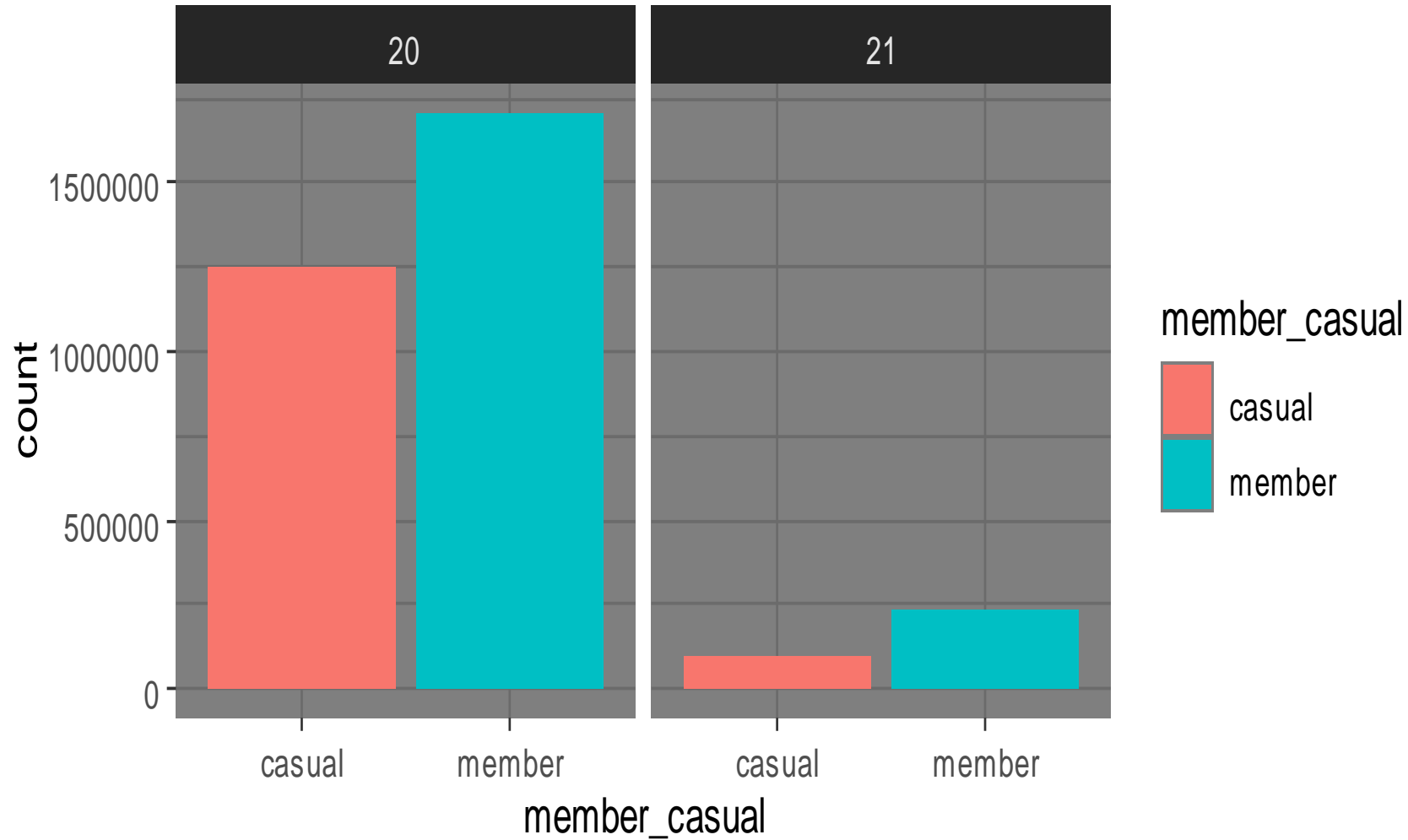Count of Casual and Annual Members

The bar plot showing the count of casual and Annual members indicates that there are more annual members using the service than that casual members
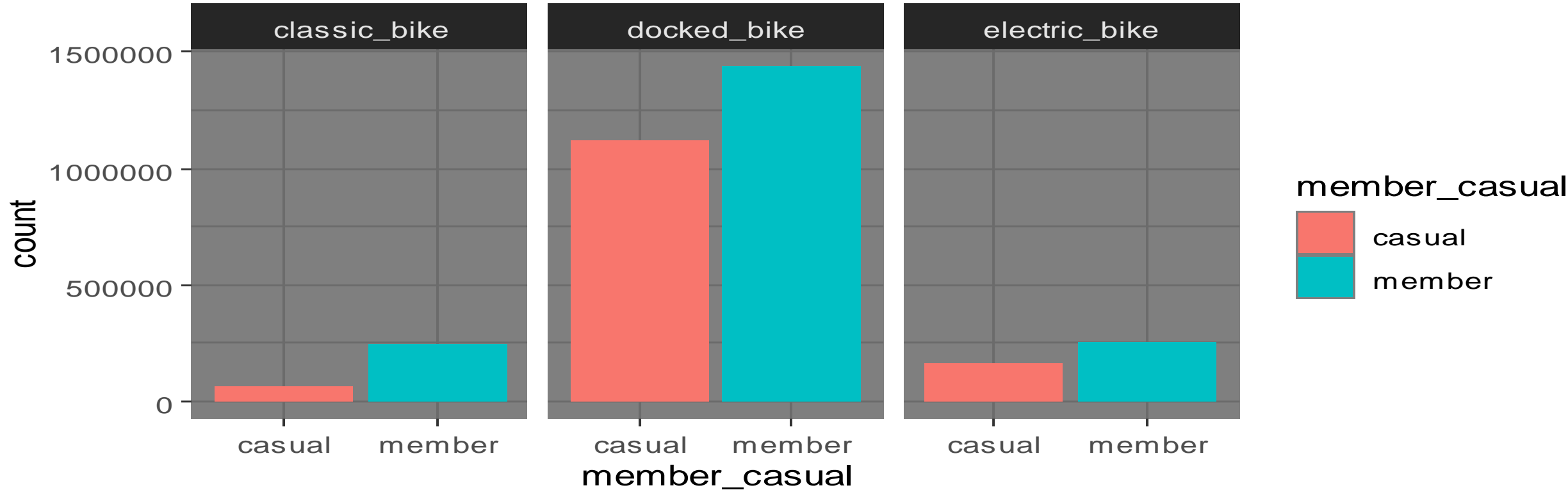
METHOD: ANALYSIS

Count of Casual and Annual Members by year

Both years 2020 and 2021 there were more annual members using the than casual members
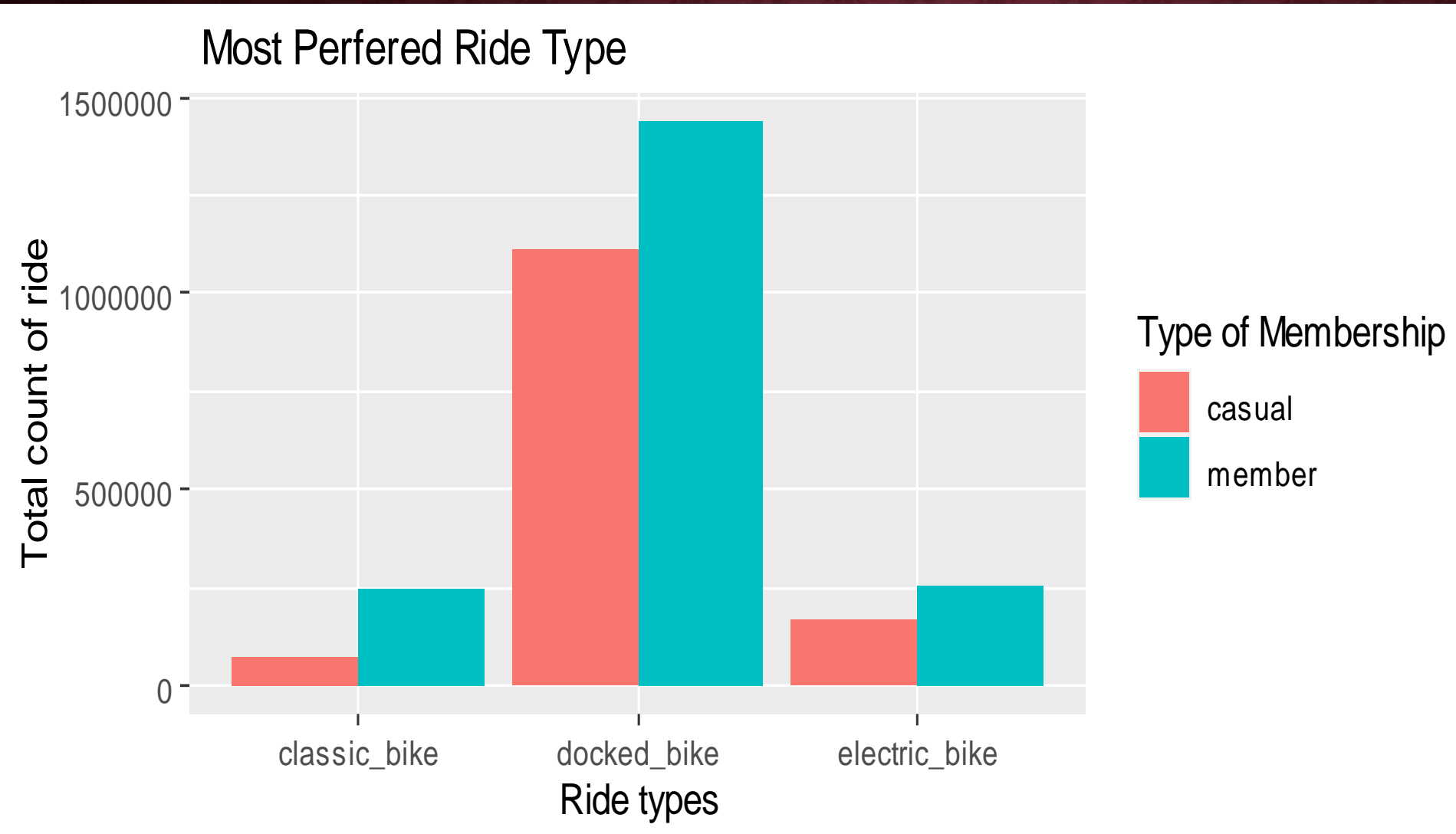
METHOD: ANALYSIS

Count of Casual and Annual Members by Ride type

Most purchased bike by members is the docked bike followed by the electric bike and the classic bike being the least but among the different type of ride the annual member purchase more compare to casual members
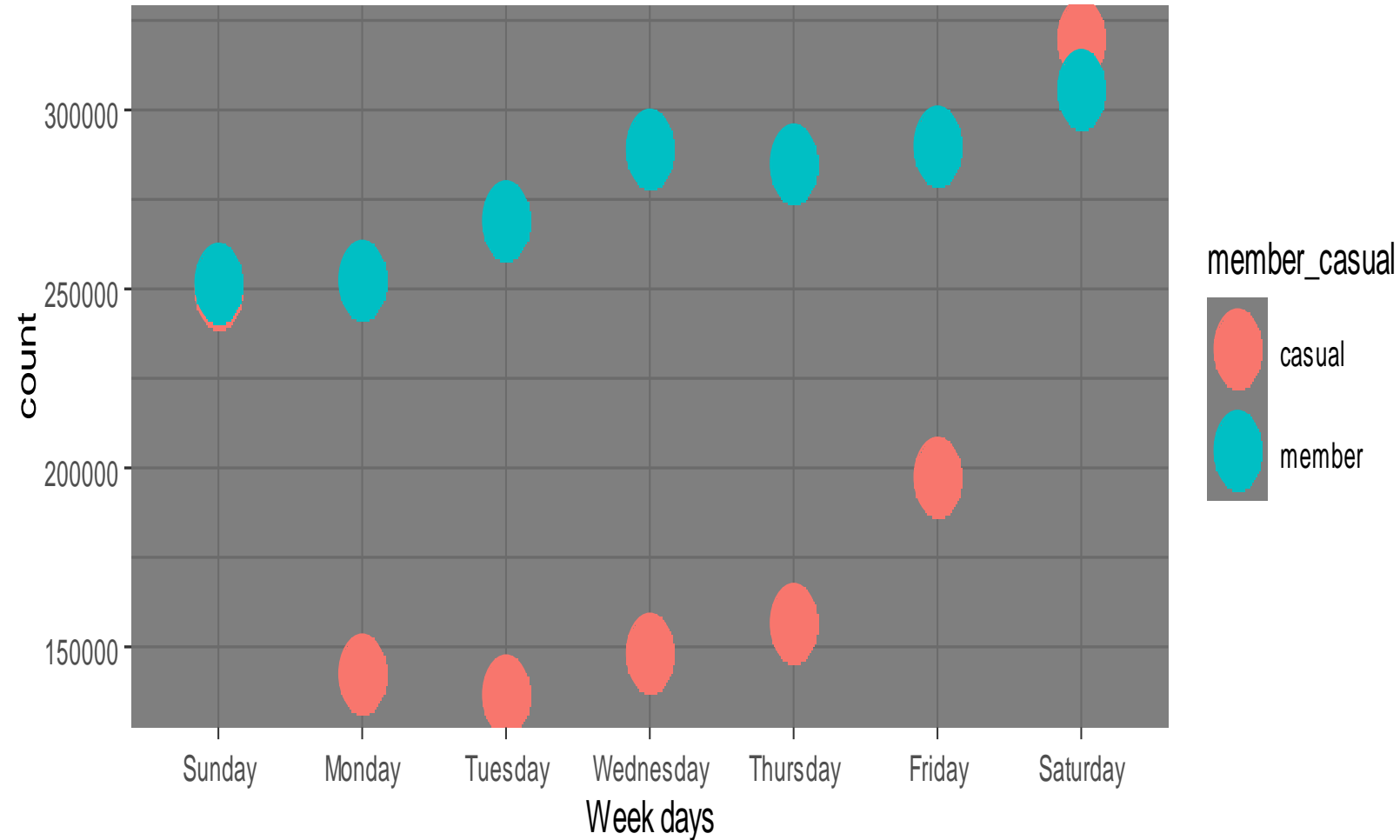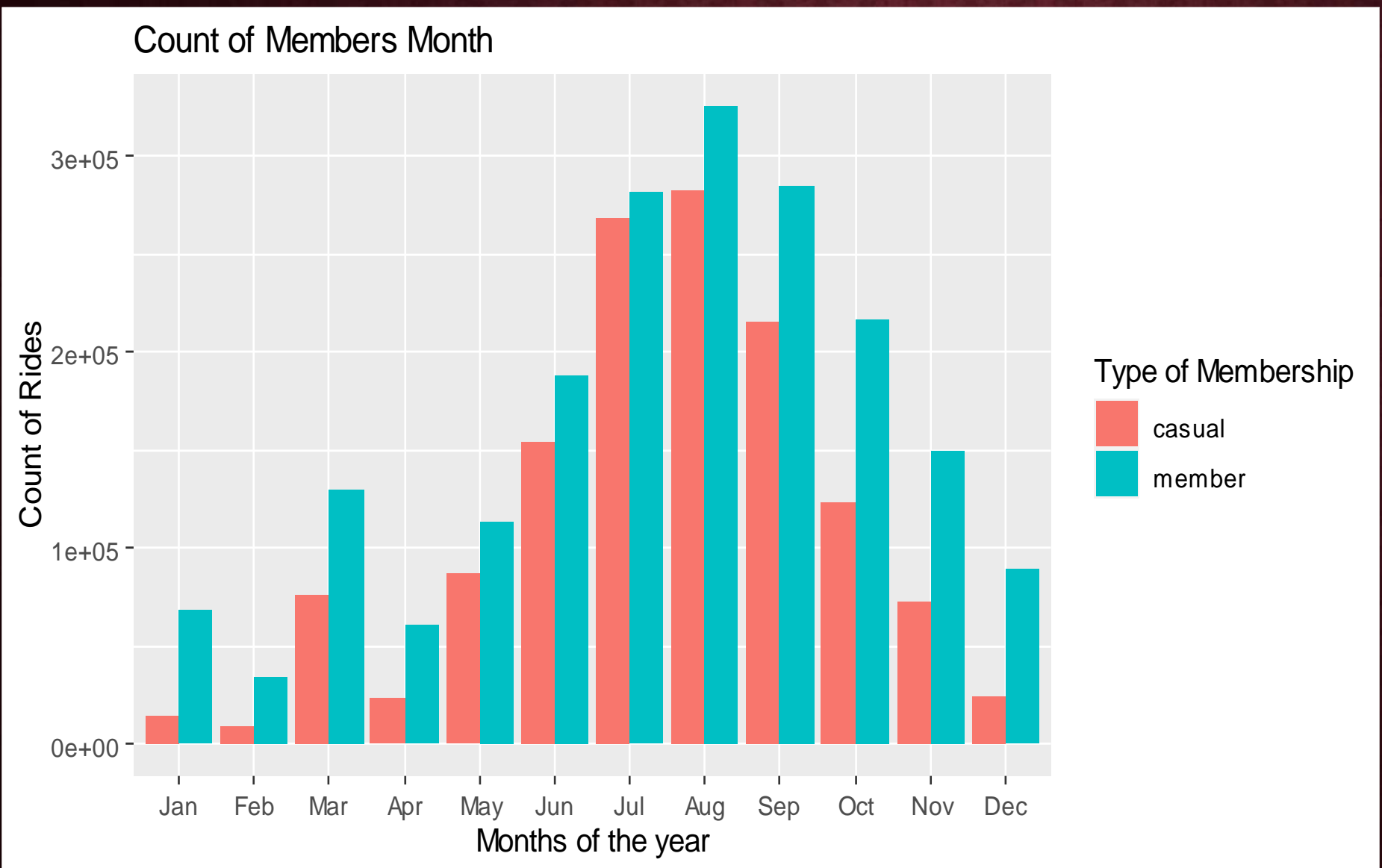
METHOD: ANALYSIS

METHOD: ANALYSIS

Ride usage on Week day by Annual and causal Members

The plot is showing the number of ride usage by casual and annual members during the week days. It shows that annual member are active throughout the week but for casual members the a
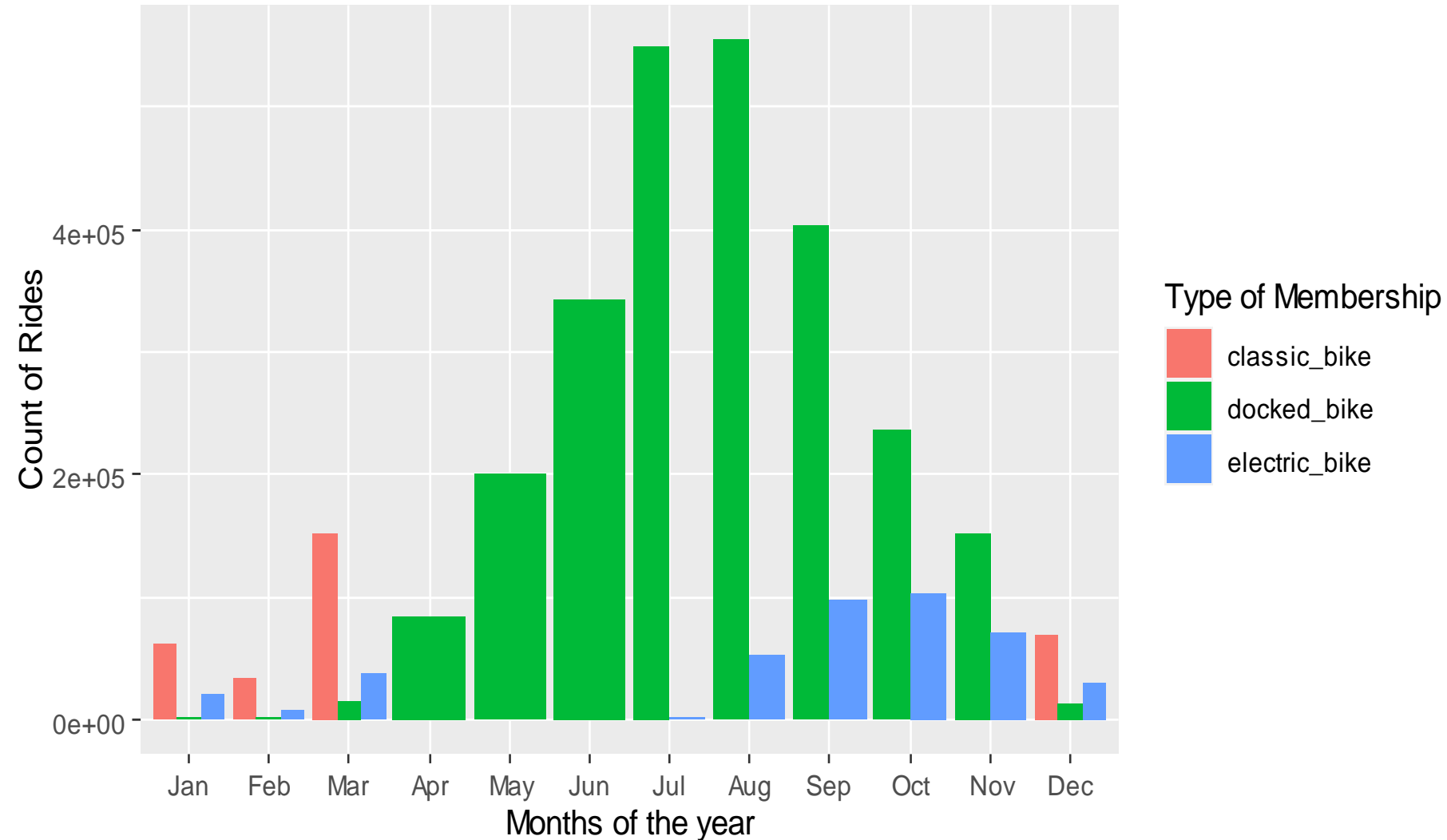
METHOD: ANALYSIS

Count of Members Month

At any giving month there is more annual member using the ride service than casual members

METHOD: ANALYSIS

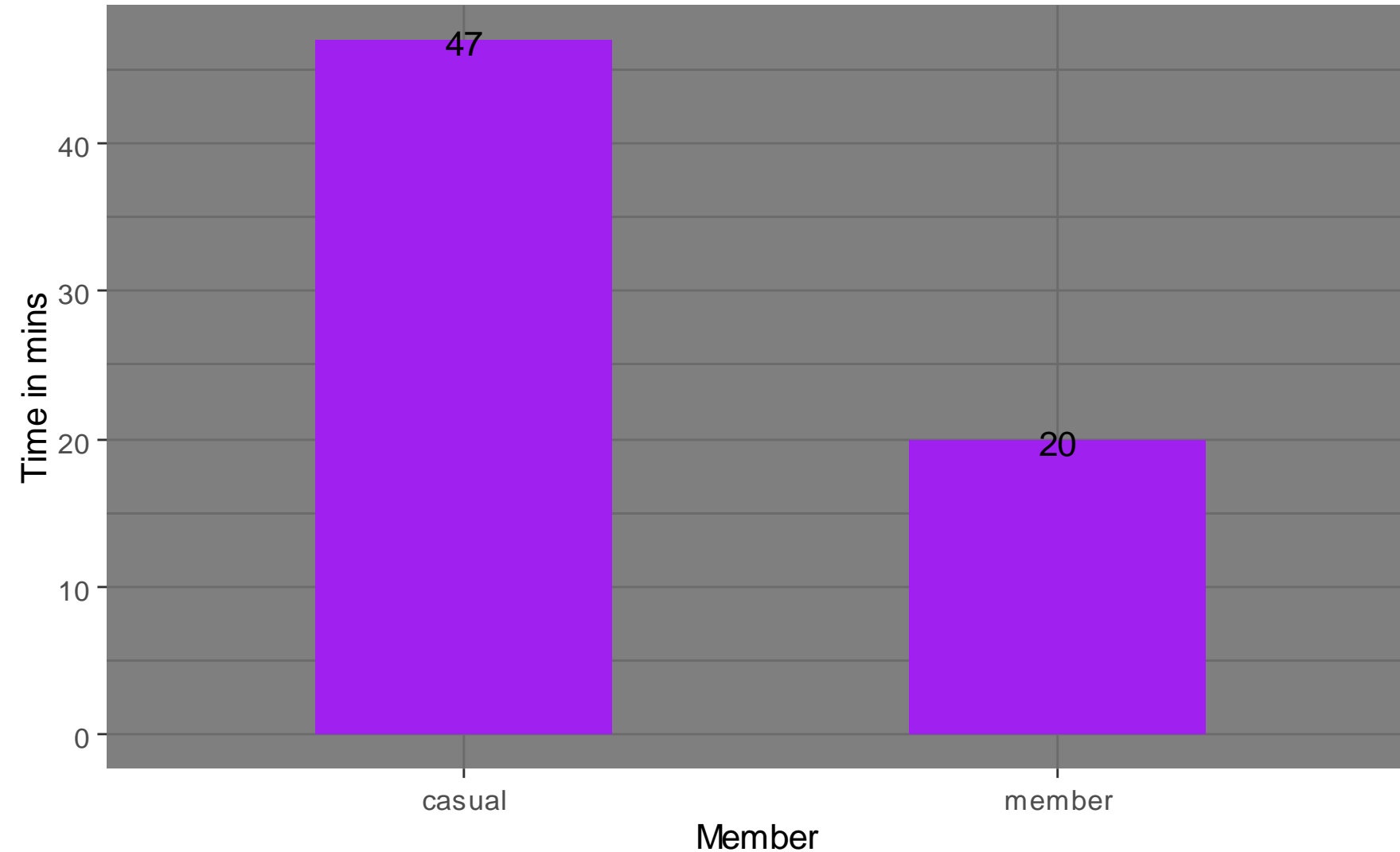## Number of Ride Type use per a Month

Most use ride type is the docked bike but it is mostly use in actively use from April to November, follow by the electric bike which is also active on August through to March but not as much as the docked bike and the classic bike is also mostly use in January March and December

METHOD: ANALYSIS

Mean Time Uages of Ride by Members

Annual members on average spend 20 minutes riding or keeping the bike while Casual riders spend 47 minutes riding on average or keeping the bike

CONCLUSION: SHARE

1. The bike-share navigate Speedy Success will depend on Annual members since :
   - There are more casual members using the service than casual members
   - In both years 2020 and 2021 there were more annual members using the service
   - In any given there are more annual members using the service and their numbers is consistency

2. How do casual riders and annual members use Cyclistic bikes differently?
   - Casual riders utilize the bike for leisure or as a source of pleasure while Annual members use the bike for activities related to their jobs
   - Causal members spend more time riding compare to annual members

3. How can Cyclistic use digital media to influence casual riders to become members?
   - There should be policies that will help convert the casual members to annual members

RECOMMENDATION: ACT

➢ There should be more docked bike types available in the company since it is the most preferred bike by both members.

➢ There should be plans to help convert casual members to annual members.

• Giving annual members a special offer.

• Charging casual riders based on the amount of time they spend on the ride

THANK YOU