CASE STUDY

Google

Business task.

- Understand how **Casual** and **Member** riders use Cyclist bikes differently, the company Cyclist located in Chicago is requesting this analysis to help the marketing department design a strategy to convince **Casual** riders to convert into annual members in order to maximize profits.

Data sources used.

- For this analysis were used the previous 12 months from the following database *https://divvy-tripdata.s3.amazonaws.com/index.html*.

- Each one of the data frames are in comma separated values(.cvs) format, with 15 columns and 5’479,096 obs. in total.

Tools used in this analysis.

- RStudio:
    1. Gathering data.
    2. Data cleaning, presented in a Rmarkdown report.
    3. Performing calculations, presented in a Rmarkdown report.
    4. Plot results.

- Power Point:
    1. Present results, conclusions and recommendations.

Analysis

Context.

- There are 2 types of bike users, Casual and Members:
  - *Single-ride and Full-day passes are considered as Casual riders.*
  - *Annual users as Members.*
- This case study includes an analysis for **Ride length** and **Number of rides** summarized by day of the week, month and by type of bike between these users.

Average Ride duration and Number of rides by user.

- Comparing ride length.

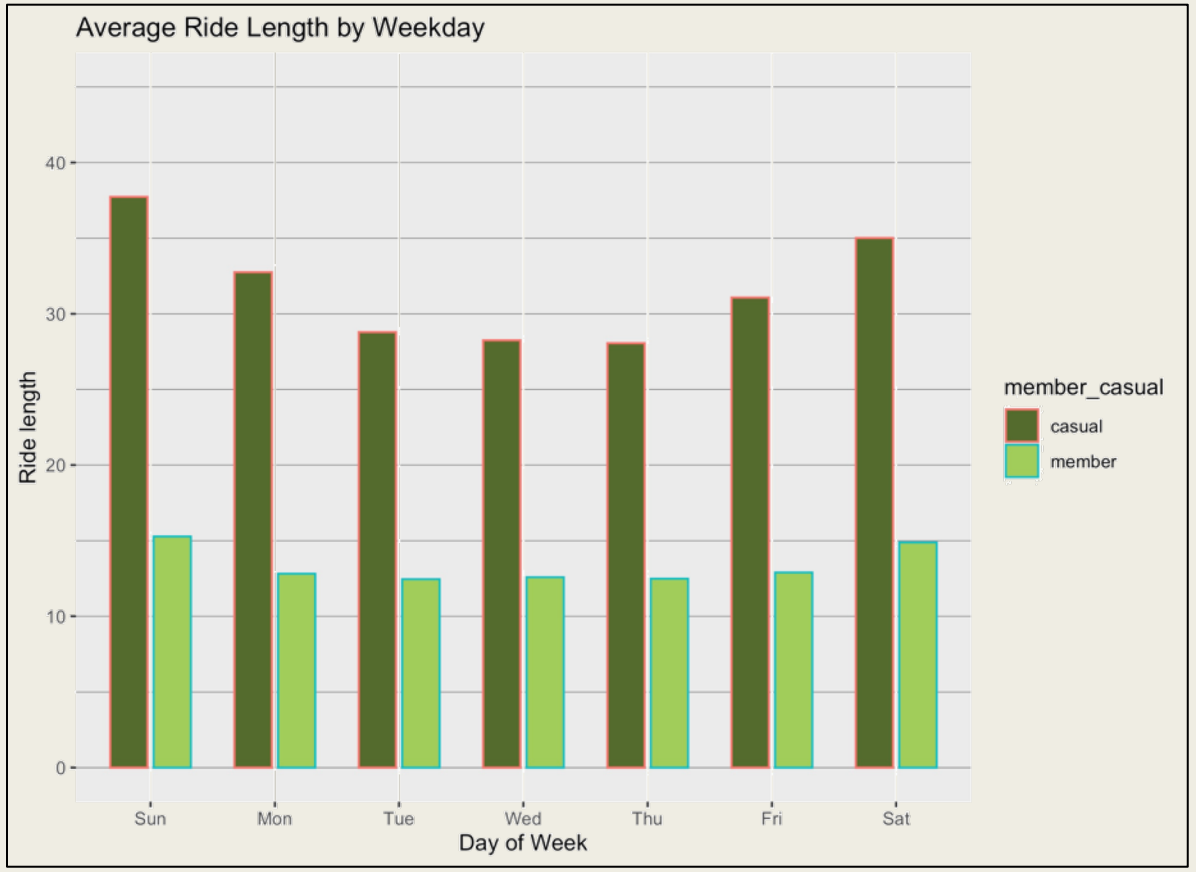
Type of User	Average duration (minutes)	Maximum length (minutes)
Casual	32.62	55,944.15
Member	13.29	1,499.83

- Comparing number of rides.

Type of User	Average number of rides	Max. Number of rides
Casual	89.68	1,487
Member	254.83	3,054

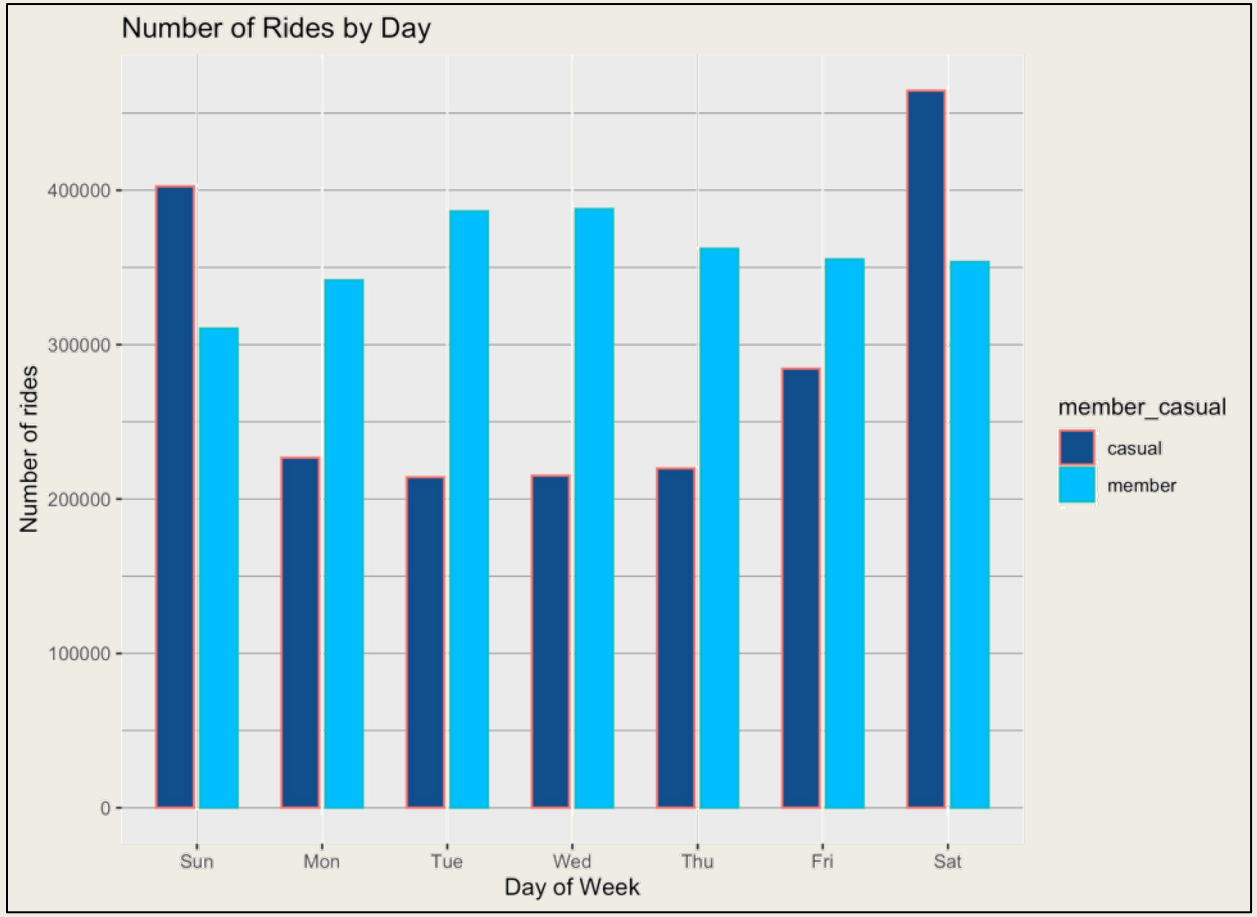
Ride duration by day of the week.

- The Ride Length is in average higher for Casual riders.
- Saturdays and Sundays have the highest ride length for Casual.



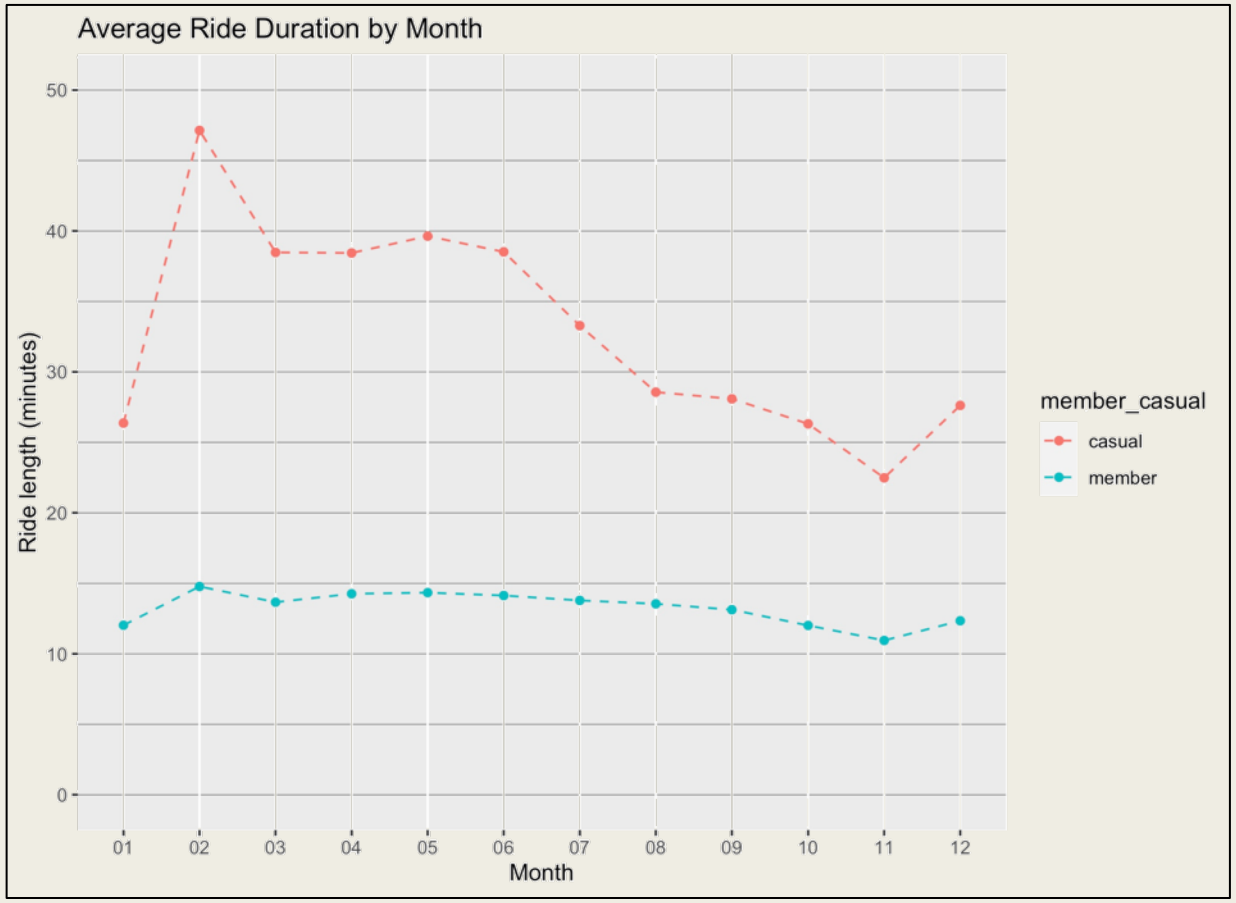
Number of rides by day of the week.

- From Monday to Friday the Casual riders have less rides in average.
- Saturdays and Sundays the Casual riders have more rides.



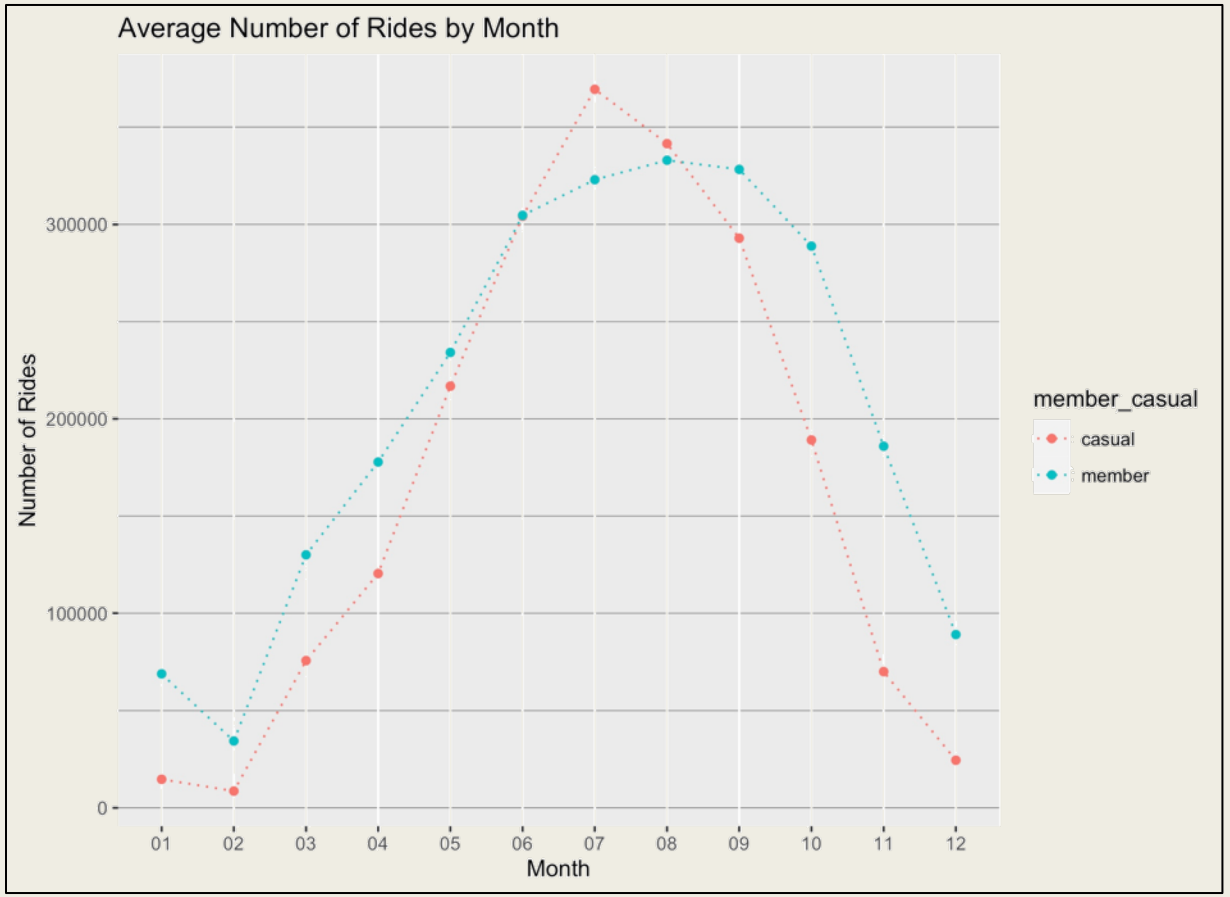
Ride length by month.

- The Casual riders have a higher ride duration in general.
- Casual riders tend to have a higher ride duration from February to June.
- Member users have a lower but stable ride duration during the year.



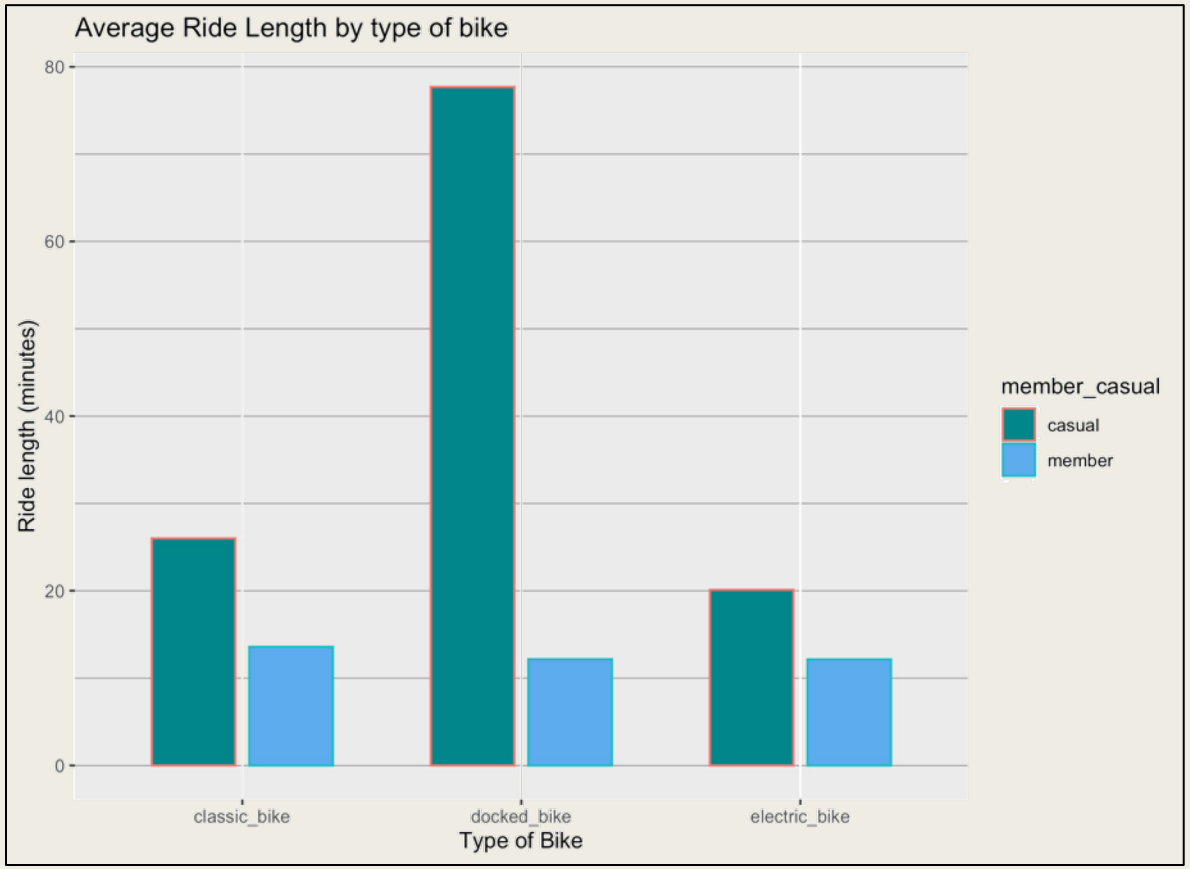
Number of rides by month

- Once again the Members tend to have a higher number of rides than Casual riders.
- From May to September, Casual riders have a higher number of rides.



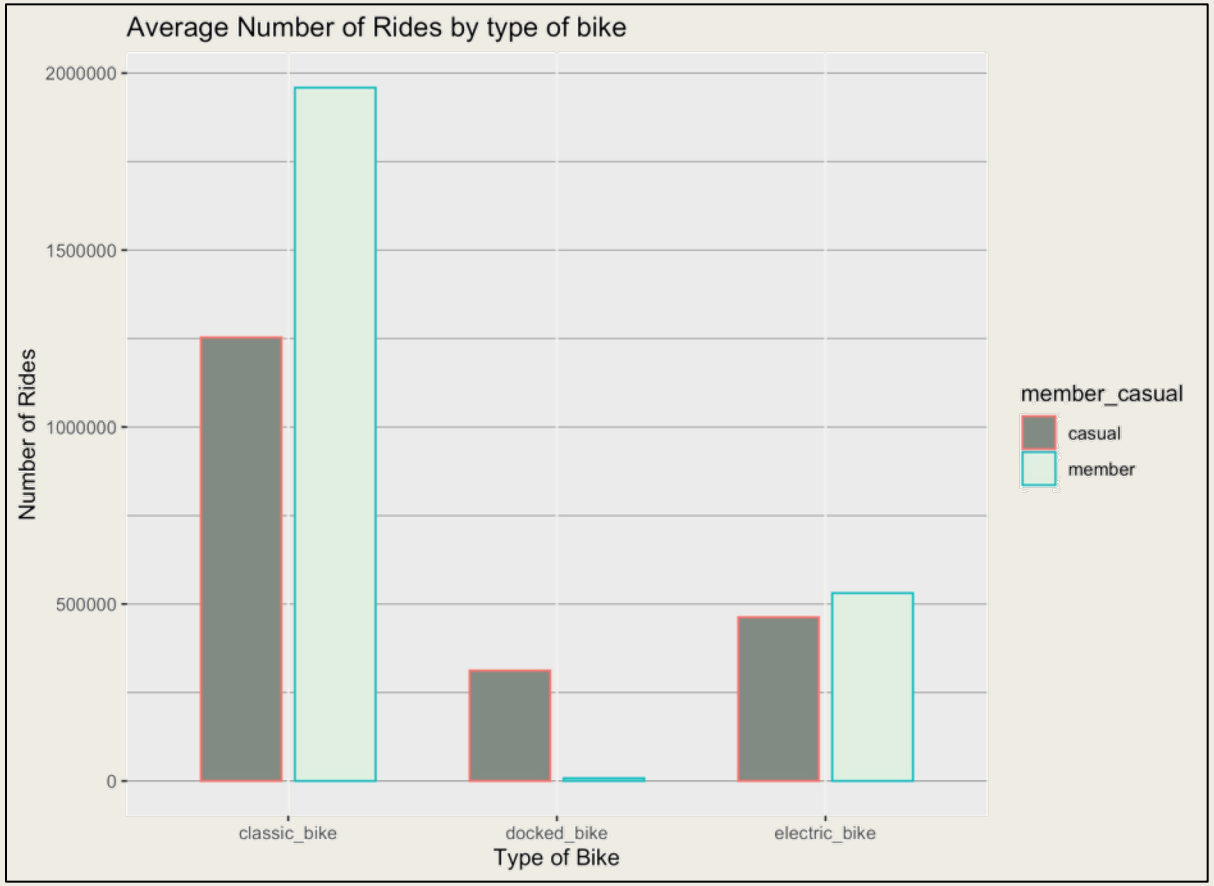
Ride length by type of bike.

- The highest ride length for Casual riders is on the ‘docked bike’.
- The highest ride length for Member users is on the ‘classic bike.
- Overall, Casual riders have a higher ride length in all the three types of bike.



Number of rides by type of bike.

- Both Casual and Member have a higher number of rides in a ‘classic type’ bike.
- The least number of rides come from the ‘docked bike’ type.



Conclusions

- Member users tend to have a **higher number of rides** than Casual users in general.
- Casual riders have in average a **higher ride duration** than Members.
- Both users have a **higher ride duration** and a **higher number of rides** on Saturdays and Sundays.
- The months with a higher **ride duration** are from February to June.
- The months with a higher **number of rides** are from May to September.
- Casual riders have **a higher number of rides** on classic bikes.
- Members have **longer** and **more trips** on classic bikes and **fewer** on docked bikes.
- The **least used type of bike** is the electric type.

Recommendations.

1. The months with the highest number of rides for **Casual** riders are from May to September, I propose to make a media-campaign alongside the tourism office to promote the best places to go by bike giving a special price within these months, offering all the trips they want for a price point close to an annual membership.
2. The ‘classic bike’ is the most used by **Casual riders**, you can increase the number of ‘classic bikes’ in every station.
3. **Casual riders** have fewer rides than **Member users**, I recommend to implement a reward system, based on giving ‘reward points’ by the number of bike rides rather than the ride length for both **Casual** and **Member** users.