

Case Study Presentation

"Life is like riding a bicycle. To keep your balance, you must keep moving."

-Albert Einstein



Today's Agenda

Introduction to the business task

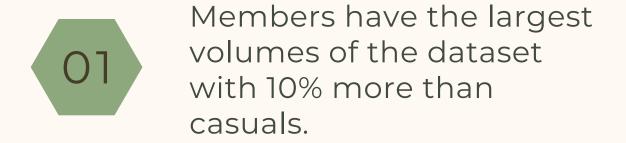
Consclusion

- Data analysis and findings
- Recommendations

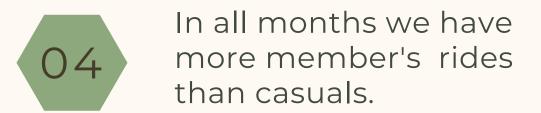
BUSINESS TASK

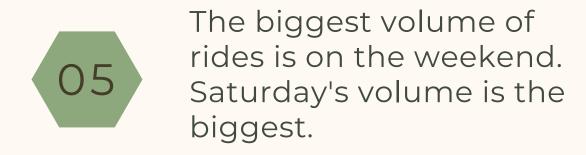
To identify and understand the bike usage among annual members and casual riders in order to suggest marketing strategies to convert casual riders into annual members.

FINDINGS



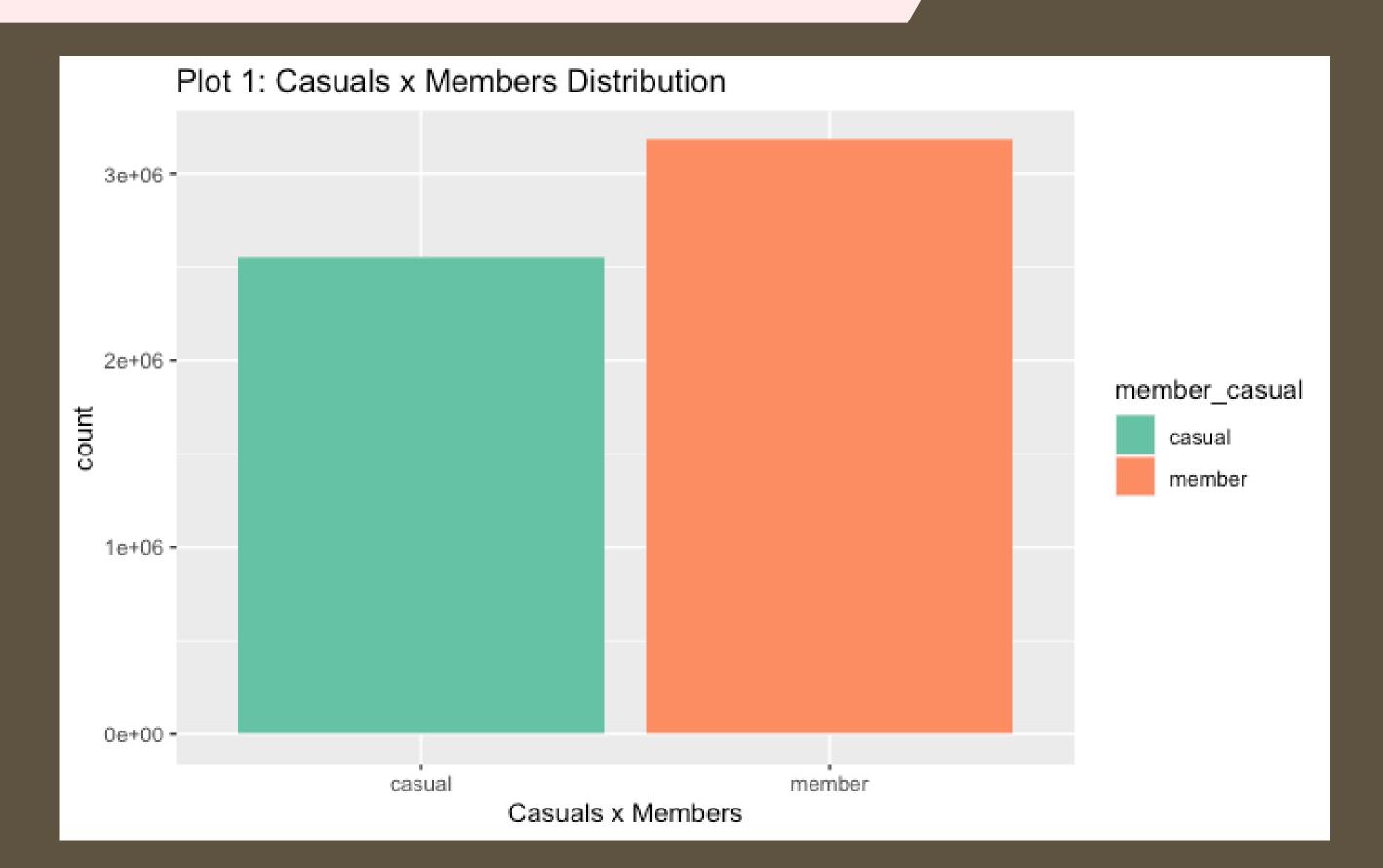
- August and July are the months with the biggest volume of rides.
- Temperature significantly influences the volumes of rides. More riders during the summer months.



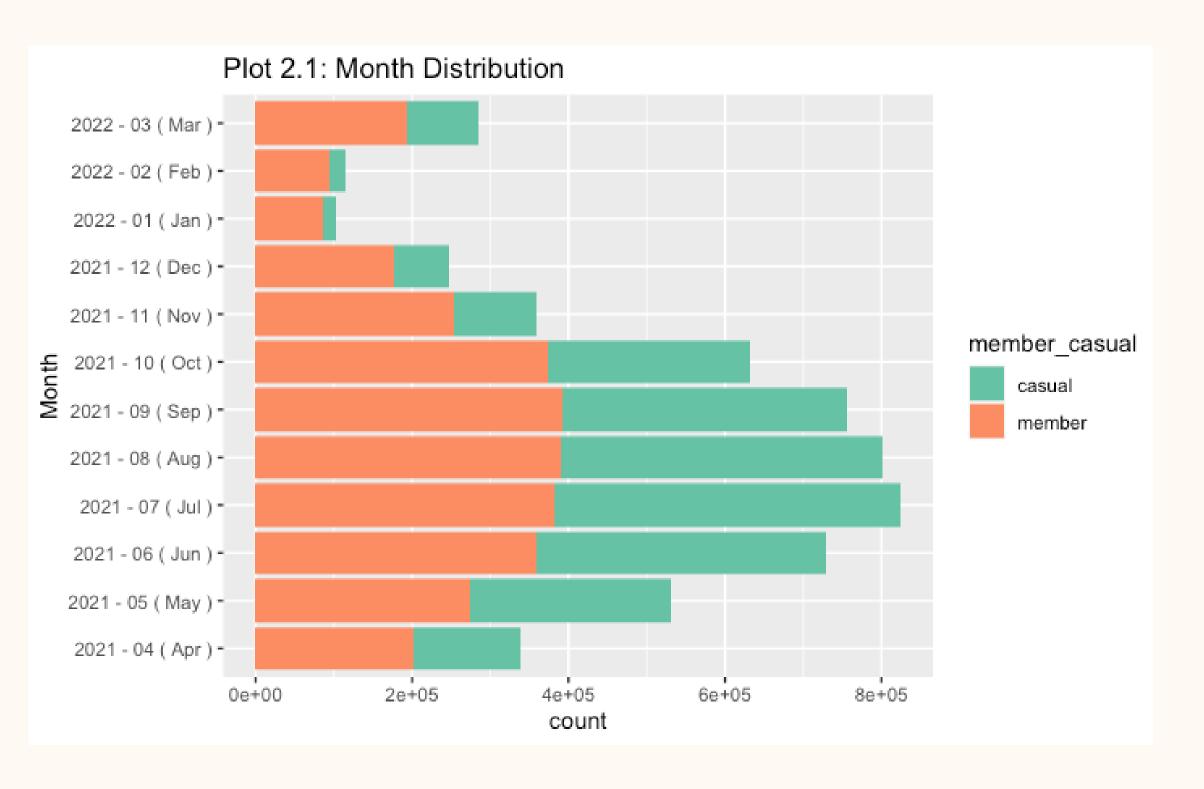




Why do we have more members than casuals?



Month Distribution

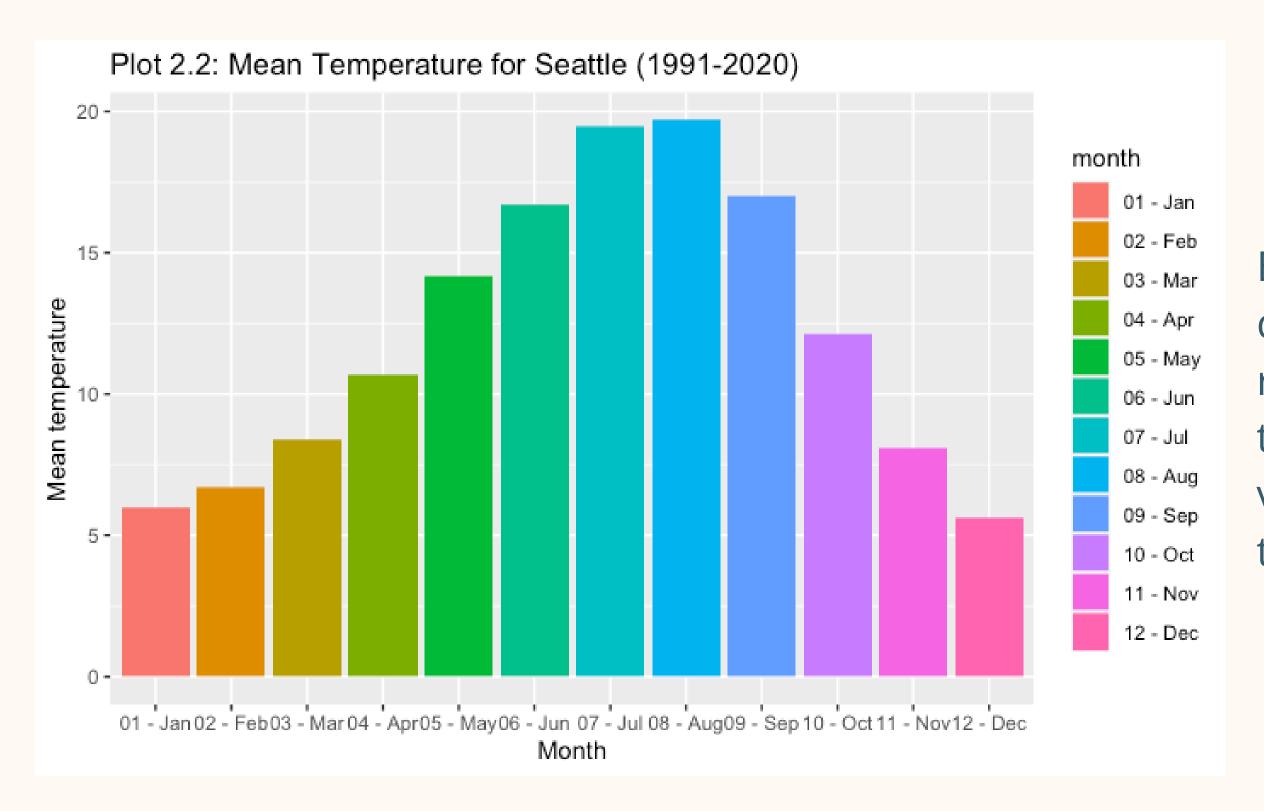


- The months with the biggest volume of rides are July and August (summer months).
- The months with the least volume of rides are January and February.
- In all months, we tend to have more members' rides than casual rides.



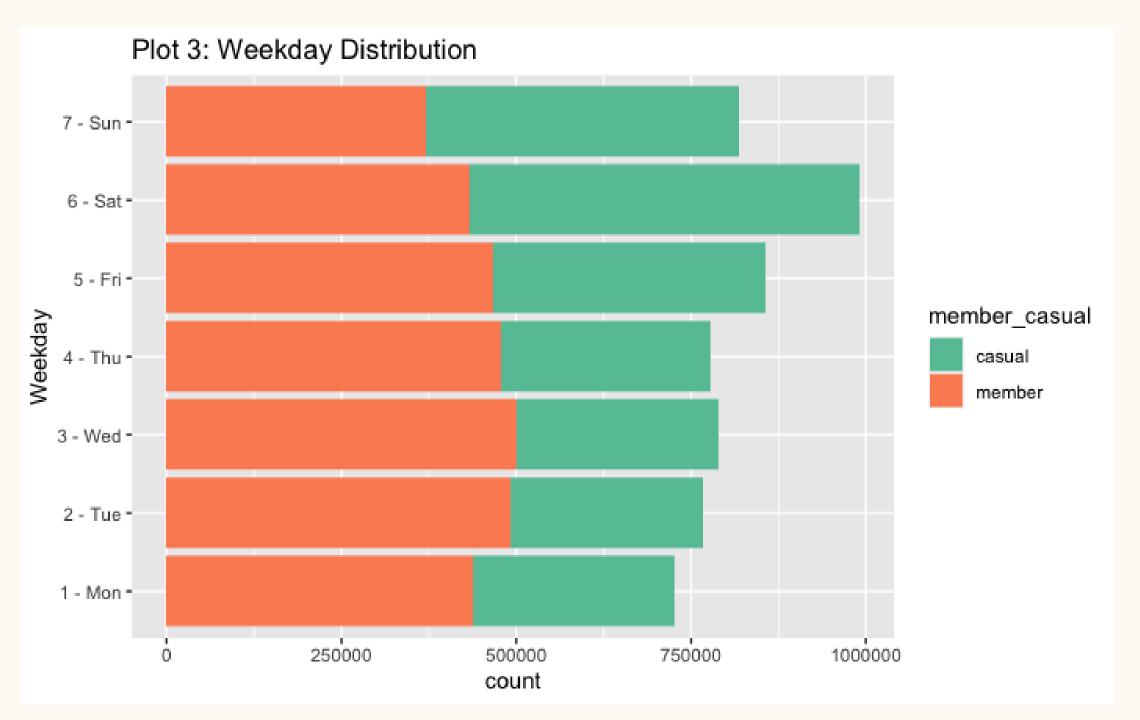
Why do our volumes of rides increase during the summer months?

Seattle Climate Data



Based on the Seattle climate data, there's a significant relationship between the temperature and the volume of rides throughout the year.

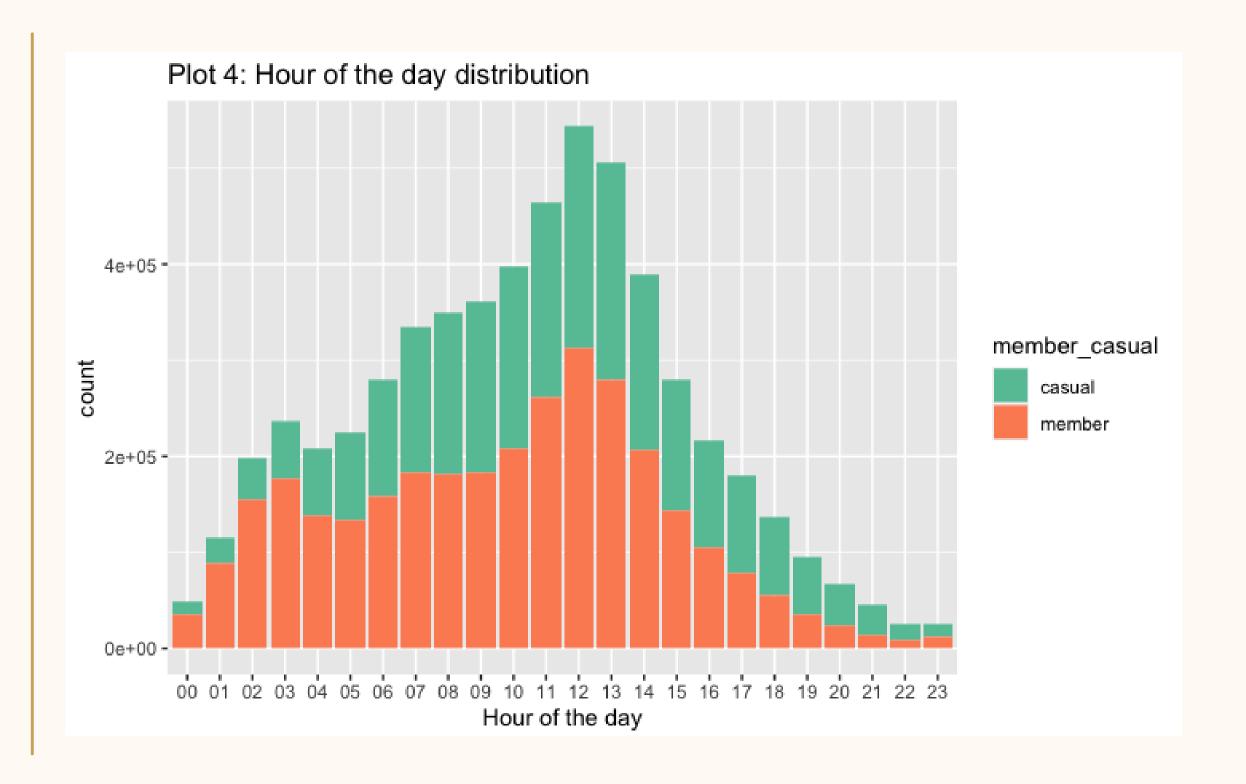
Weekday Distribution



- Members have a bigger volume of rides throughout the week, except on Saturday.
- Casual's volume is the largest on Saturday which is ~56%.
- Casual's volume increases during weekends, starting on Friday with a ~7% increase.

Hour Of The Day Distribution

- The highest volume of rides is at
 12 pm afternoon.
- Bigger volume of rides during the afternoon.
- More members during the morning mainly starting at 5 am-11 am.
- More casuals starting at 4 pm-10 pm.

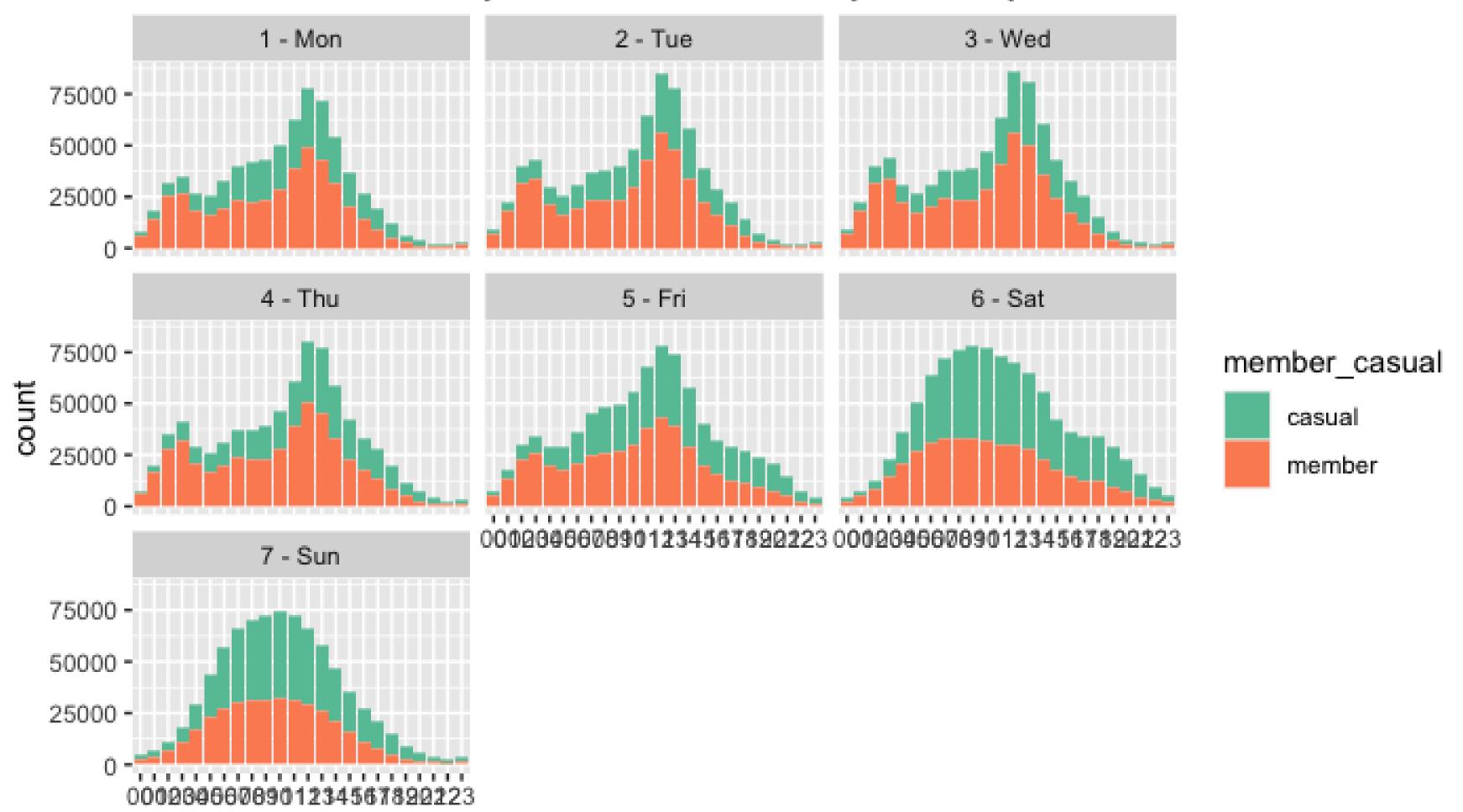


Plot 5: Hour of the day distribution divided by weekday 1 - Mon 2 - Tue 3 - Wed 75000 -50000 -25000 4 - Thu 5 - Fri 6 - Sat 75000 -50000 -25000 -7 - Sun 75000 -50000 25000 Hour of the day

Hour Of The Day Distribution (by weekday)

- We can tell that Mon, Tue, Wed, Thur, Fri data looks quite similar to each other.
- And Sat and Sun data also look similar to each other.
- There's an obvious difference between midweek data and weekend data.

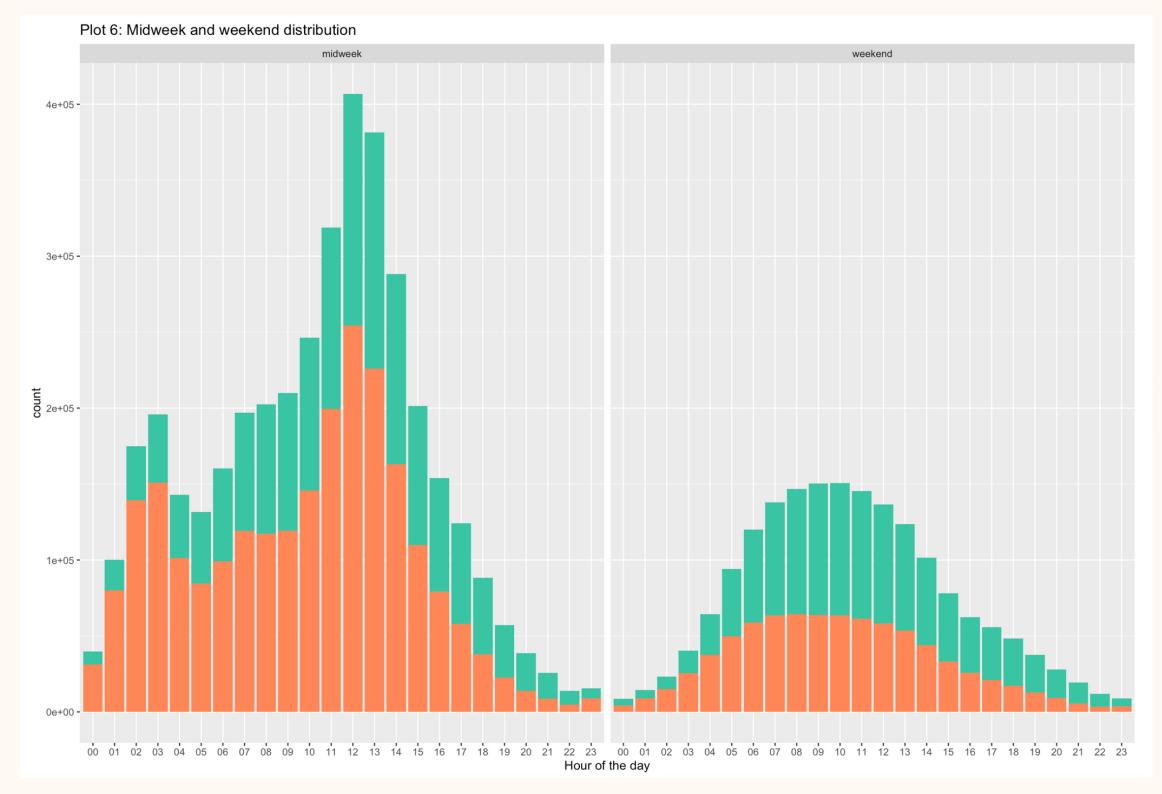
Plot 5: Hour of the day distribution divided by weekday



Hour of the day

Midweek and Weekend

Distribution

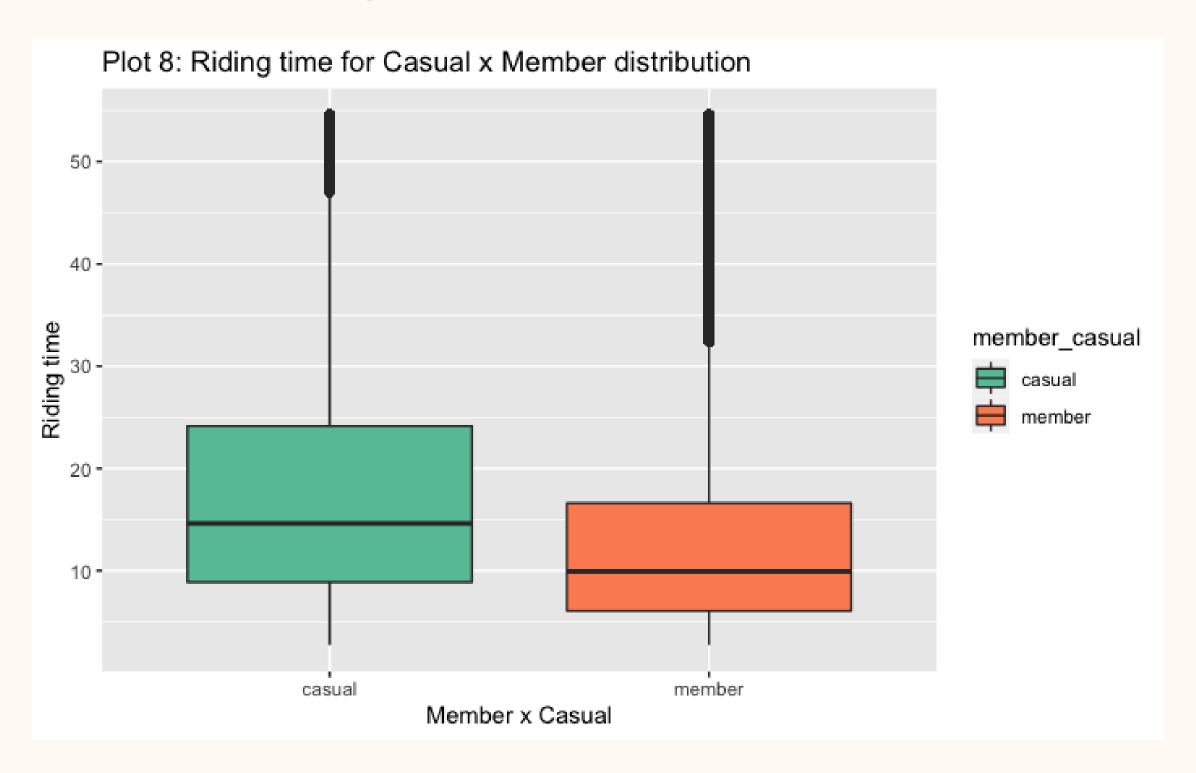


- Midweek- increase starting at 5 am-12 pm; decrease starting at 1 pm. More members than casuals throughout the day.
- Weekend- much larger flow of casuals than members during the afternoon and evening.

Plot 6: Midweek and weekend distribution midweek weekend 4e+05 -3e+05 member_ca 2e+05 casual member 1e+05 -00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

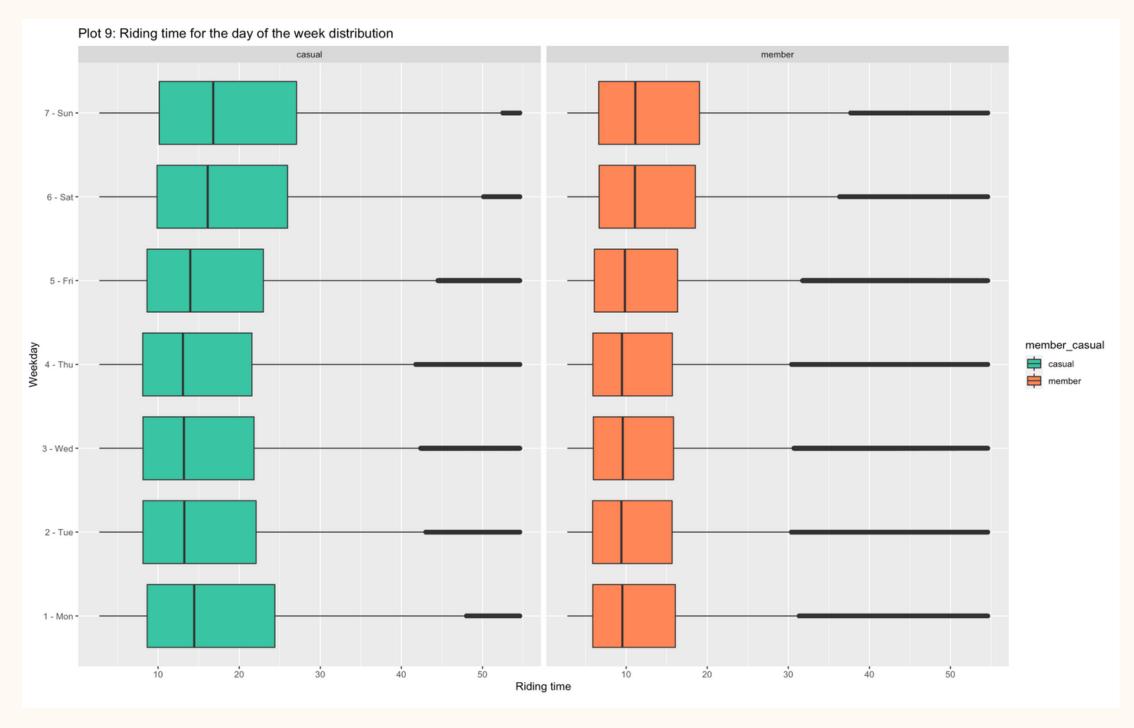
Hour of the day

Riding Time Distribution



Casuals have more riding time than members.

Riding Time Distribution (days of the week)



- Casuals- Riding times follow a more curve distribution, peaking on Sundays and valleying on Wednesday/Thursday.
- Members- Riding times keep unchanged starting from Monday to Thursday, we can see the data starts to change starting on Friday.

CONCLUSIONS



Members use the bikes for fixed activities such as work.



Bikes are used for leisure on weekends.



Temperature significantly influences the volumes of rides.



RECOMMENDATIONS

Partner with influencers to create a marketing campaign focusing on healthy lifestyles and promoting an eco-friendly approach to protecting the environment by reducing car emissions.

The ads can be shown on social networks such as TikTok, Instagram posts, or

The ads can be shown on social networks such as TikTok, Instagram posts, or reels.

Offer discounts and special programs during the cold months.

Create an ad promoting how practical and beneficial riding the bikes can be, focusing on casual riders during the weekends.