

Cyclistic Case Study

How Does a Bike-Share Navigate Speedy Success?

Analyst: Göktuğ Yaman

Latest Version: 20.10.2022



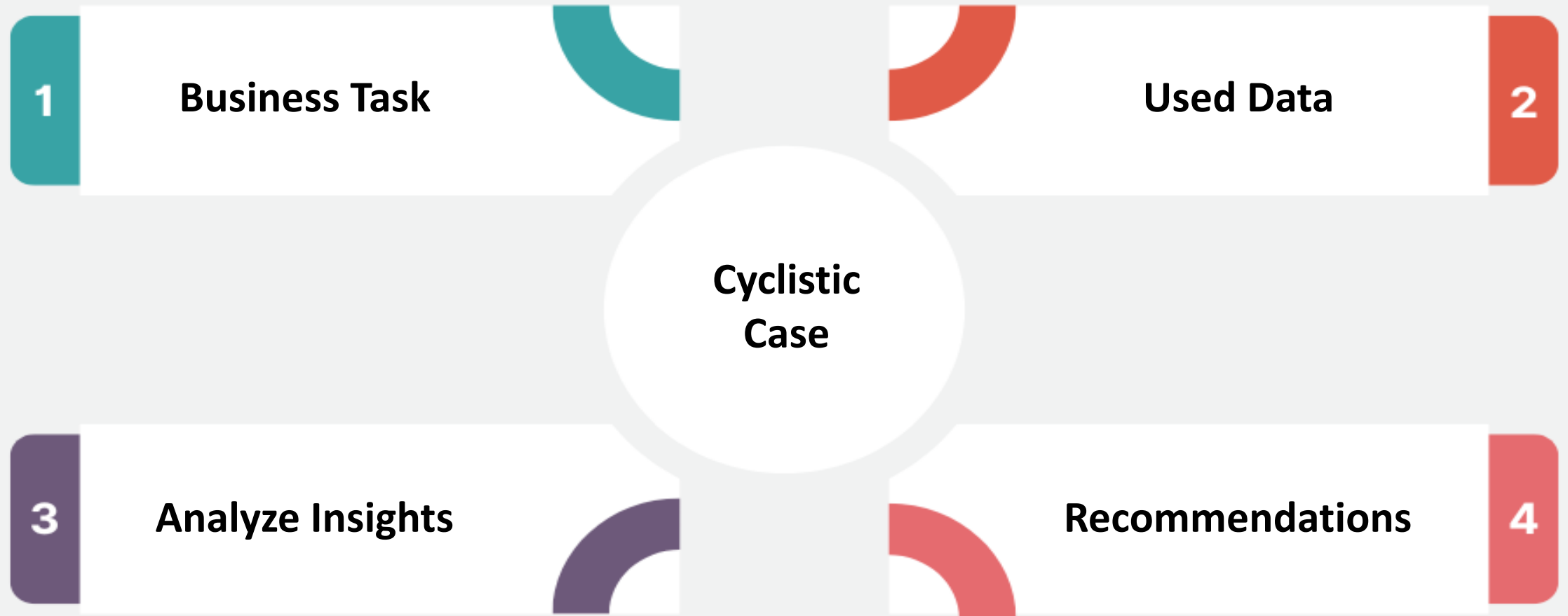
Who is Cyclistic?

- ➡ A bike-share program that features more than 5,800 bicycles and 600 docking stations.
- ➡ Offers reclining bikes, hand tricycles, and cargo bikes, making bike-share more inclusive to people with disabilities and riders who can't use a standard two-wheeled bike.


Analytics Team

- ➡ **Lily Moreno:** The director of marketing
- ➡ **Cyclistic marketing analytics team:** A team of data analysts who are responsible for collecting, analyzing, and reporting data that helps guide Cyclistic marketing strategy.
- ➡ **Cyclistic executive team:** The notoriously detail-oriented executive team will decide whether to approve the recommended marketing program.

What will we talk about?



1. Business Task



Identify the similarities and differences between the behaviors of the two consumer groups of the company, also, as trends and spending behaviors of the two groups in order to provide data-supported recommendations about the company's marketing campaign to be presented to the executive team, which is designing marketing strategies aimed at converting casual riders into annual members.

Ask?

- ➡ How do annual members and casual riders use Cyclistic bikes differently?
- ➡ Are there behavioral differences between the two customer groups: members and casual riders?
- ➡ Are there trends or patterns in the behaviors of the different customer groups?

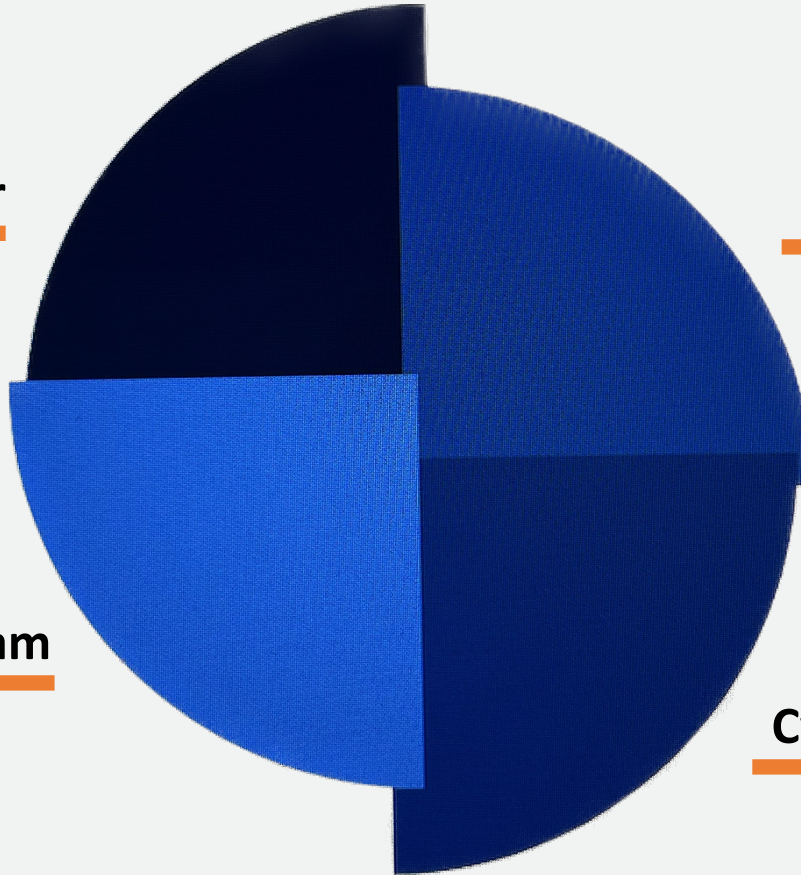
Key Stakeholders

Marketing Director


Executive Team

Analytics Team

Cyclistic users



Data



The main data source used is the publicly available "12 months of Cyclistic trip data" for the time period 2013-2021. Data is stored on the local computer and organized by year. These data can be used to complete the business task since it includes data for both groups (casual and annual).

Data Integrity and Limitations

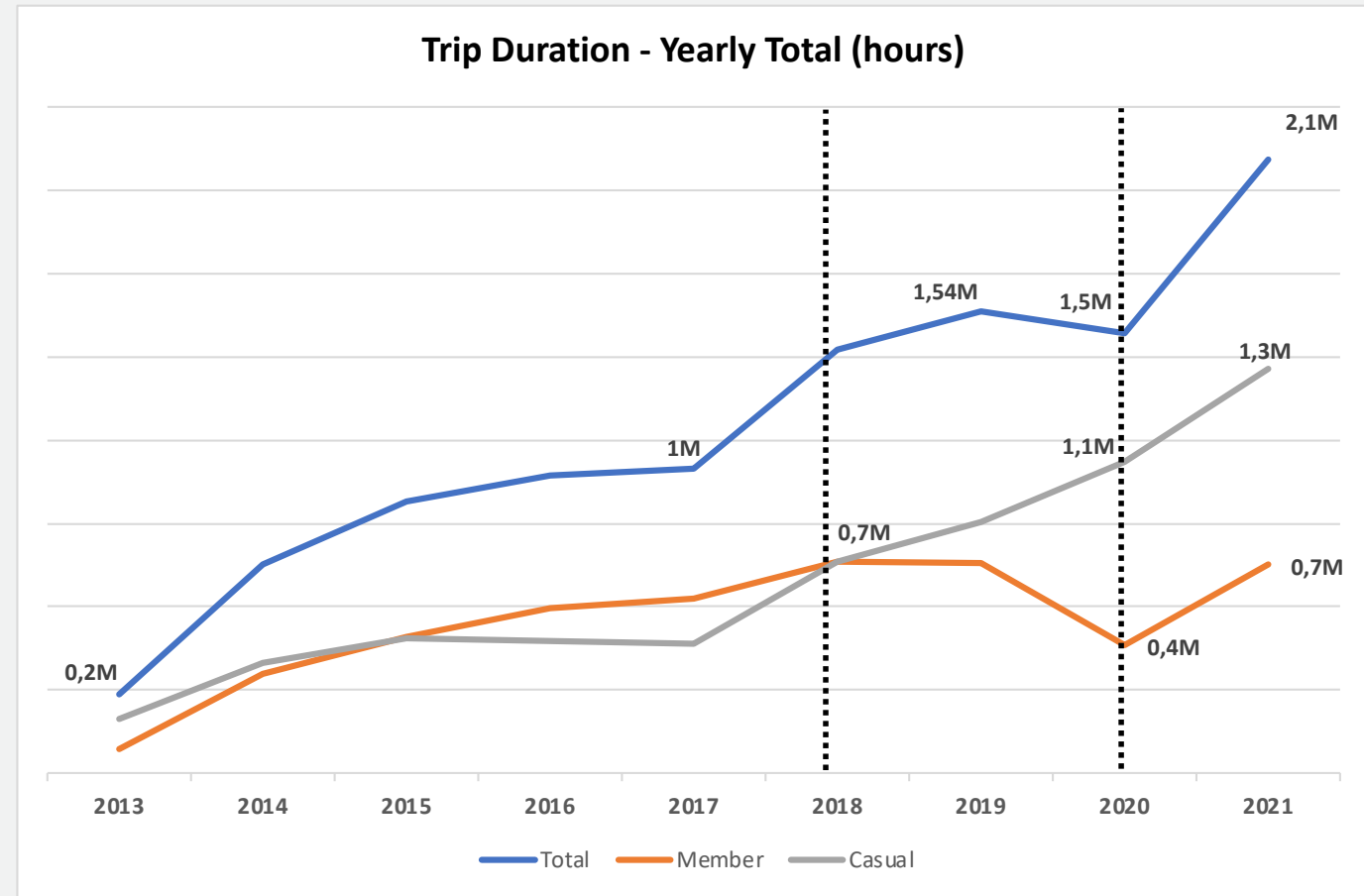
- ➡ No bias detected.
- ➡ Missing values and inconsistent data format
- ➡ Inconsistent column names for the same type of observations.
- ➡ Personally identifiable information is not available to use which prevents the determination of if casual riders live in the Cyclistic service area or if they have purchased multiple single passes.

Analyze Insights - 1

➡ Until Covid-19, both customer groups were contributing similarly.

➡ After 2019, trips taken by members decreased.

➡ Total trip duration stayed stable because the increase in casual riders during the period compensated for the decrease in members.



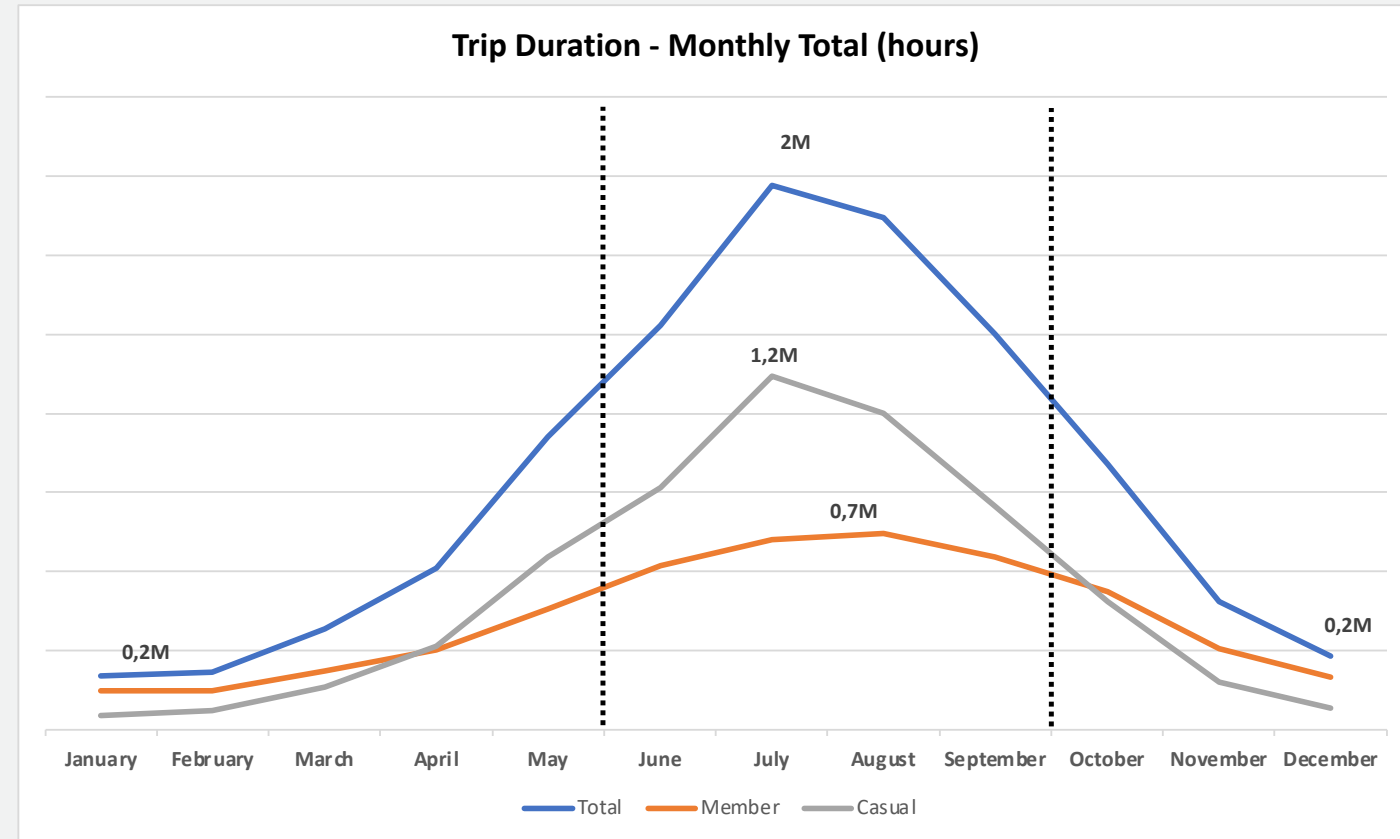
Analyze Insights - 2



Summer has the highest demand for bikes for both customer groups.



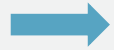
Casual riders have a special interest during the summer.



Analyze Insights - 3



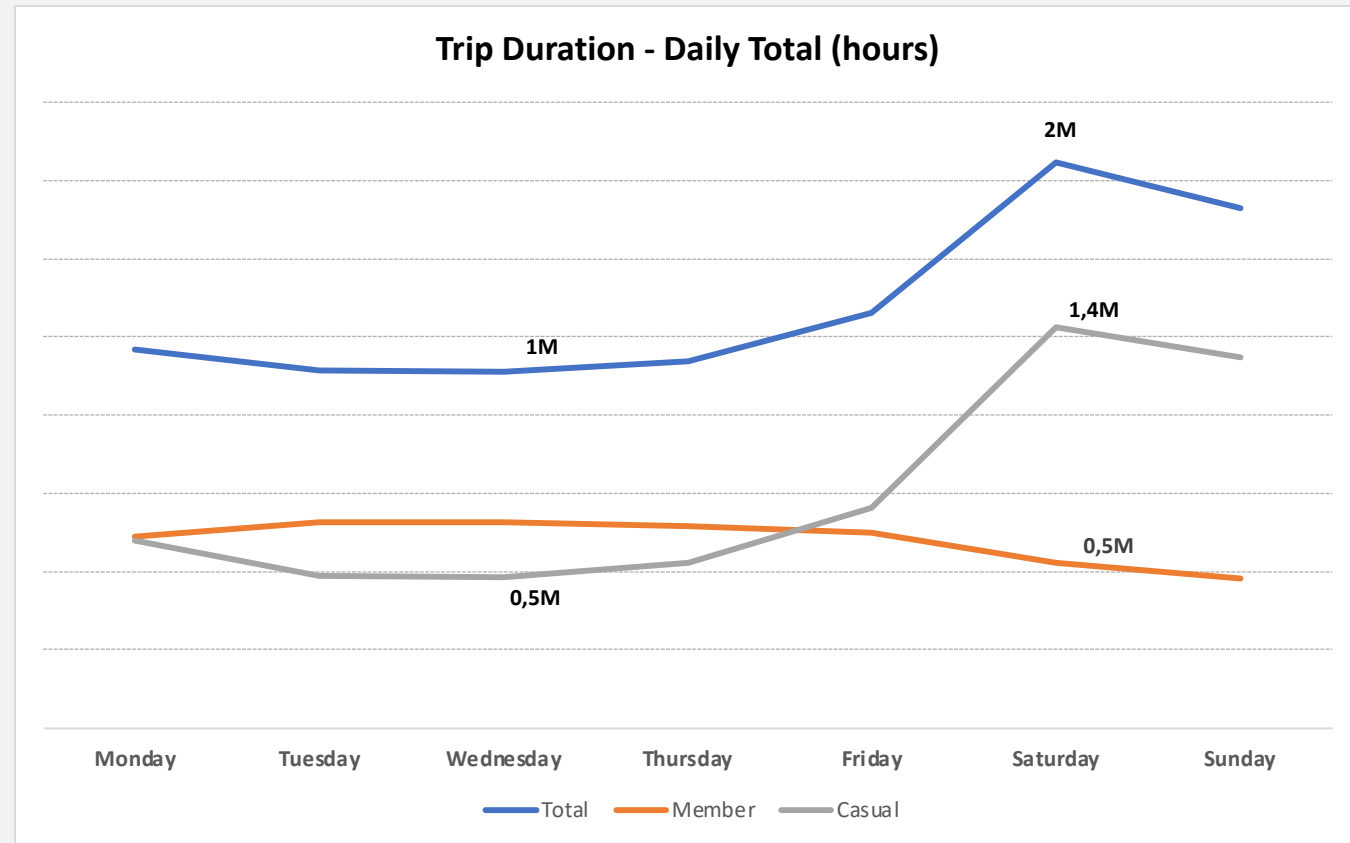
Members are using the bikes with a similar frequency during the week.



Casual riders are preferring the weekends.



In total, weekends are the most used time of the week.



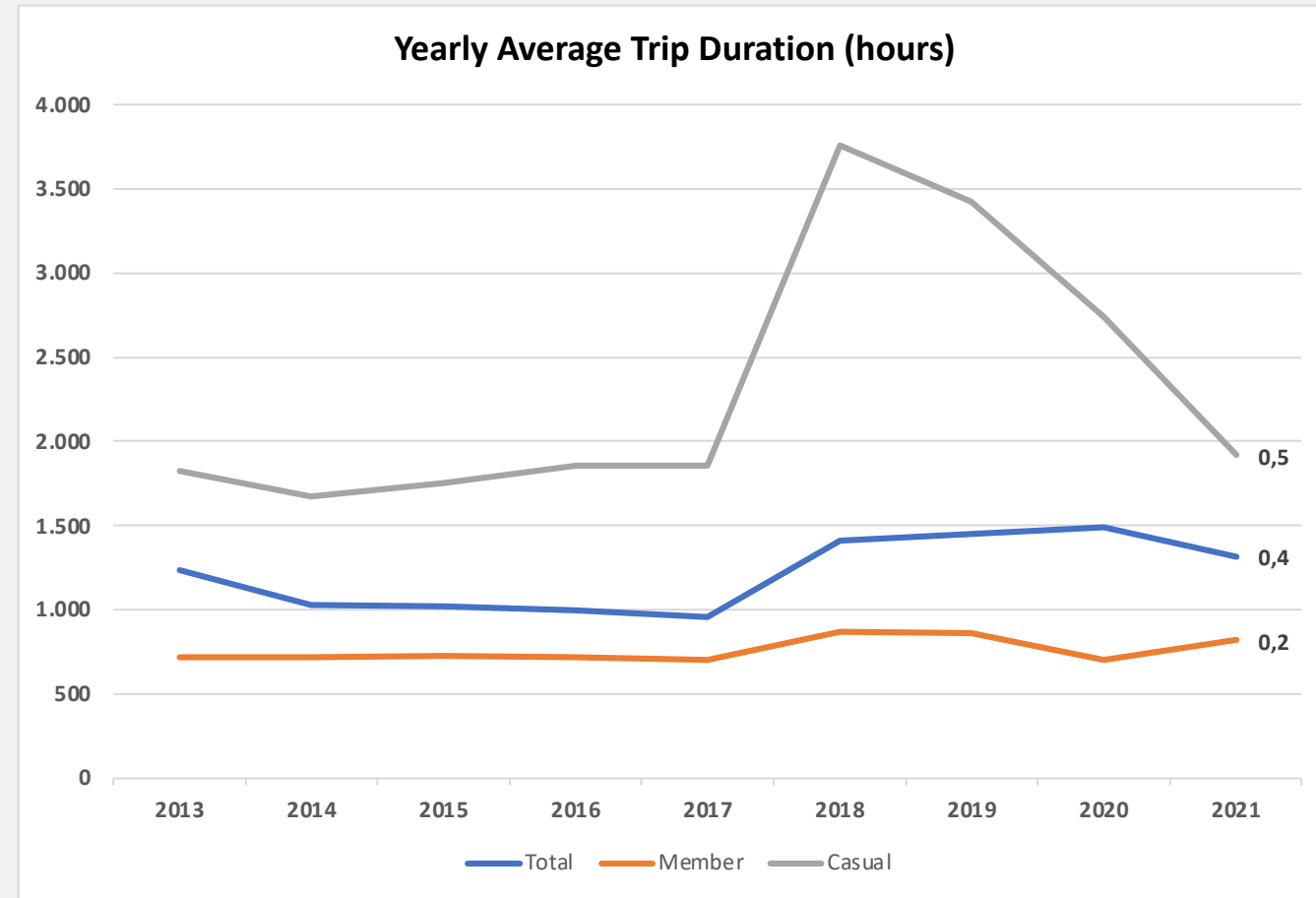
Analyze Insights - 4



Casual riders spent 2.3 times more time with the bikes on average in 2021.



Which means **2.3 times more revenue** per ride for the company.



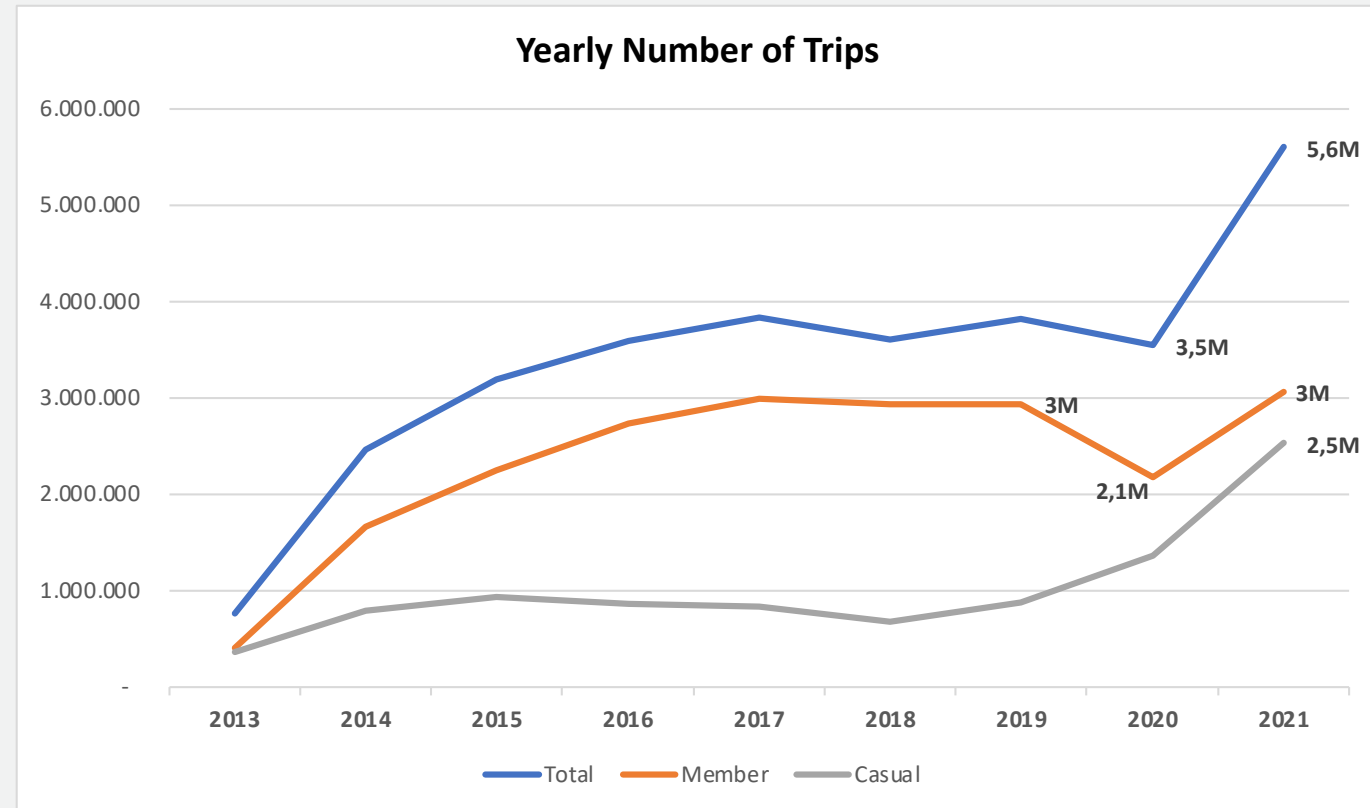
Analyze Insights - 5



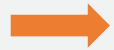
More than half of the customers of Cyclistic are members.



The only exception is the Covid-19 period but the number of members is still higher than casual riders.



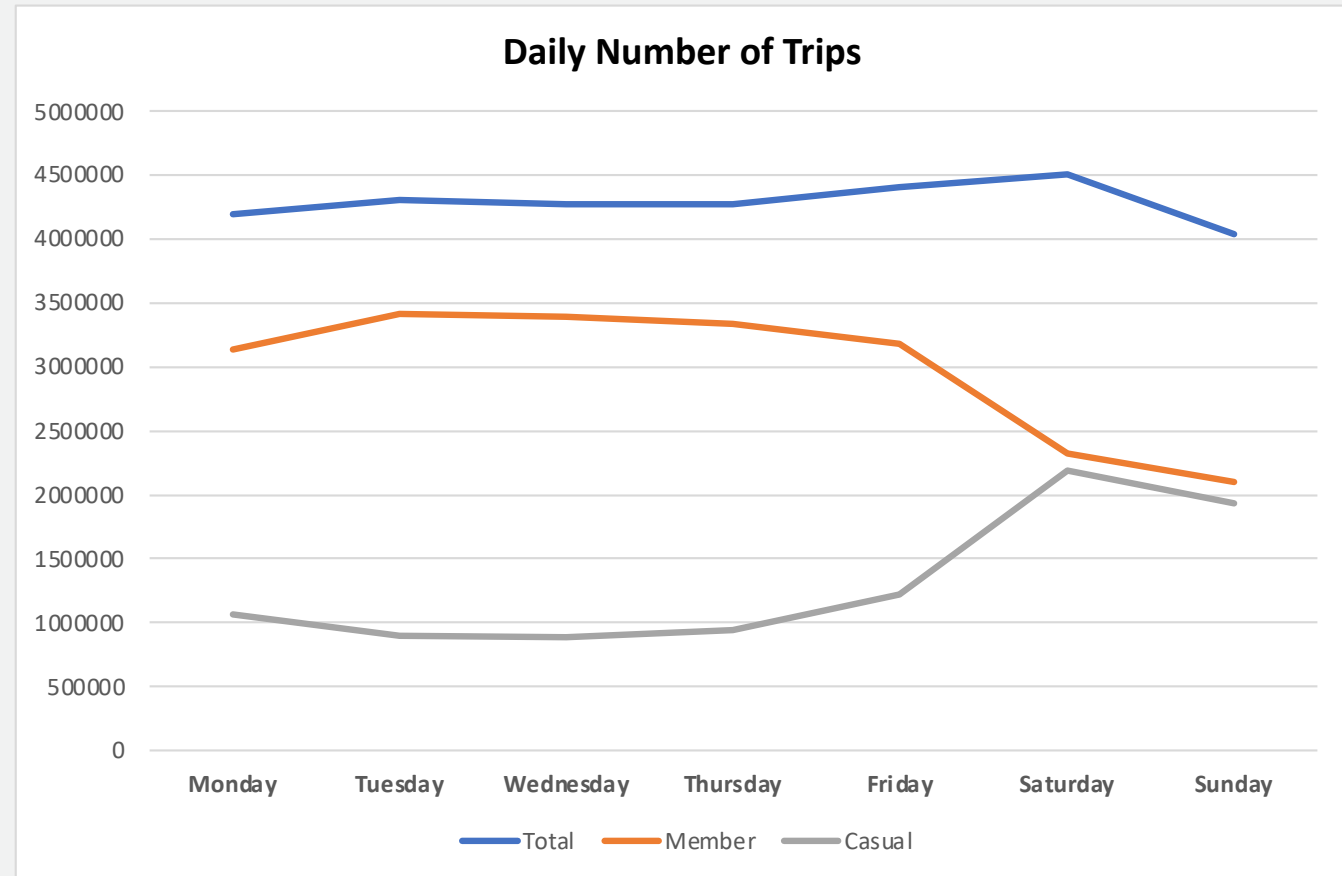
Analyze Insights - 6



The daily number of different customer groups shows that the number of members is always higher than the casual riders.



The number of members during weekends is lower than on weekdays but it is vice versa for the casual riders.



Recommendations

- ➡ Casual riders have a higher average trip duration, therefore, increasing the number of casual riders will have a more significant marginal effect than the members. Preparing special campaigns targeting casual riders will be more profitable for the company.
- ➡ Summer has the highest demand, prepare campaigns for summer focusing on both customer groups in order to increase the number of total users instead of only focusing on the number of members. Because this attempt may cause a decrease in the number of casual riders which has a higher marginal effect on the revenue.
- ➡ Prepare campaigns for weekends since the demand is at the top on weekends.

Food for Thought



Data includes observations about station locations of each trip. It is possible to run further analysis on the density of the stations in order to replace advertisement tools and balance the number of bikes docked at each station. Moreover, it is possible to manage the bike distribution among stations seasonally since there are data available.

Thank you for your attention..