Cyclistic Bike-Share: Google Data Analytics Capstone Project

Hello!

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CYCLİSTİC BIKE SHARE CONTENTS

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Project Purpose

This project includes a data-based decision-making scenario. Driving data was analyzed in order to identify the Cyclistic company's upcoming marketing campaign and trends.

The Question

The director of marketing and my manager Moreno has assigned me the question to answer:

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

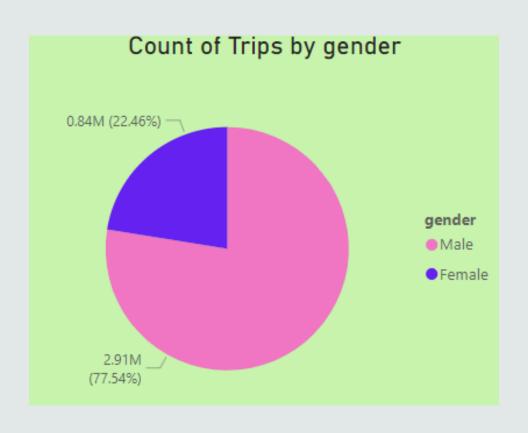
Count of Trips

Avg Trip Duration in Min

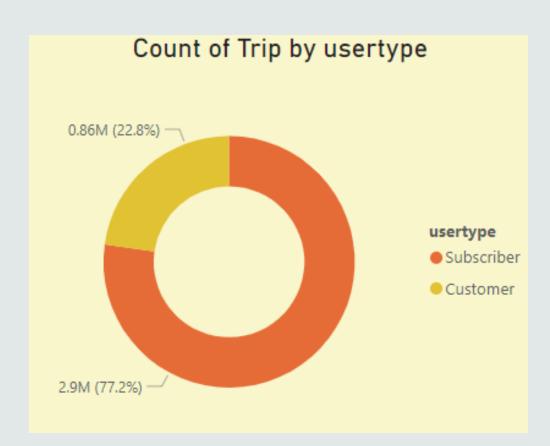
3.76M

24.12

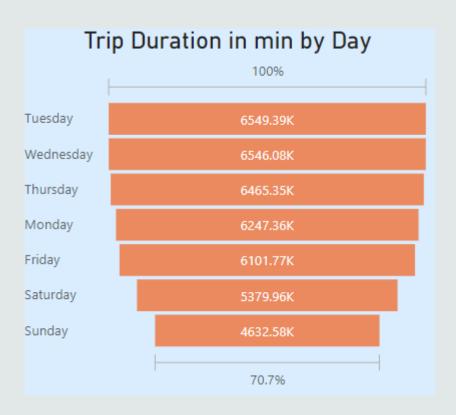
- ➤ Male riders make up 77.54% of the trips (2.91M trips).
- Female riders account for 22.46% of the trips (0.84M trips).



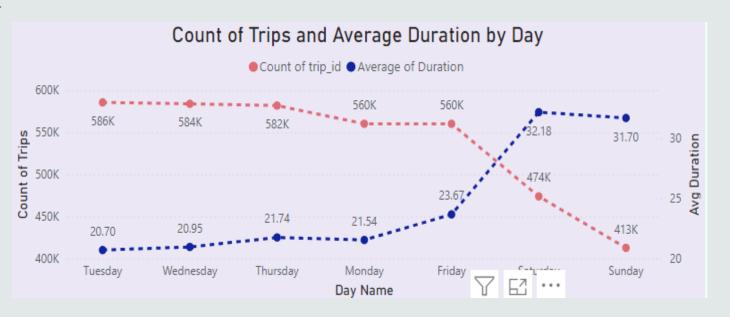
- Subscribers (annual members) account for the majority of the trips, making 77.2% of the total trips.
- Casual riders (Customers) make up only 22.8% of the trips.
- This suggests that subscribers are the core users of the service, while casual riders are a smaller segment.



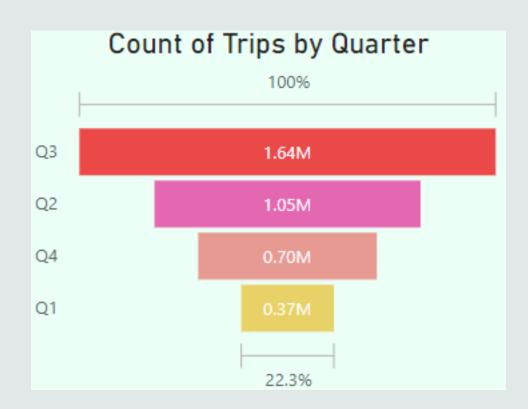
- The longest trips are taken on Tuesdays (15.25M minutes in total), followed by Wednesdays (13.26M minutes).
- Monday has the shortest total trip duration with 12.07M minutes, indicating fewer or shorter trips on Monday.
- Weekdays, in general, see higher trip durations than weekends.



- Tuesday has the highest number of trips with o586K trips, followed by Wednesday and Thursday with around 584K and 582K trips, respectively.
- Sunday has the lowest number of trips at 413K.
- The average trip duration is longest on Saturday (32.18 minutes) and Sunday (31.17 minutes), which suggests more leisurely or recreational trips on weekends. Weekdays have shorter average trip durations, with Tuesday at 20.7 minutes and Wednesday at 20.95 minutes.



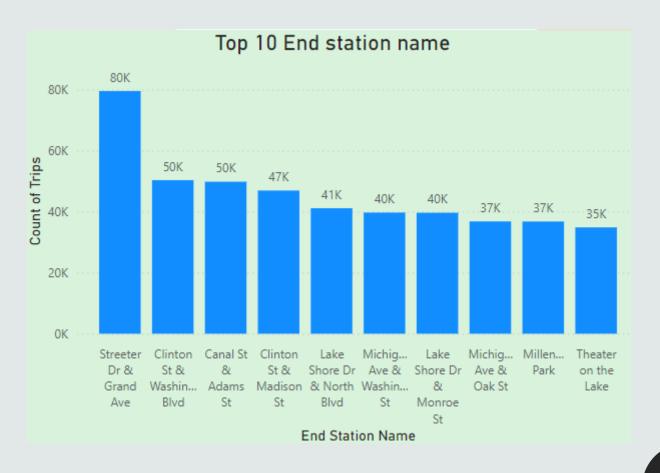
- ➤ Q3 (July to September) has the highest number of trips, with 1.64 million trips, followed by Q2 (April to June) with 1.05M trips.
- ➤ Q4 (October to December) and Q1 (January to March) have significantly fewer trips, with 0.7M and 0.37M trips, respectively. This indicates that cycling activity peaks during warmer months.

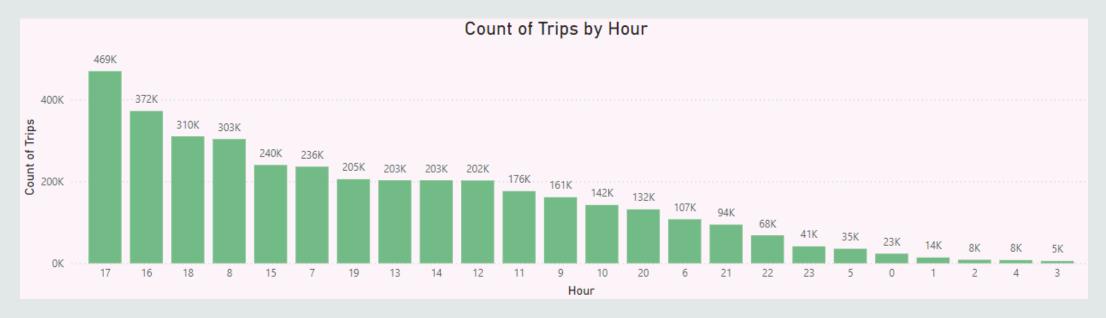


The busiest start station is Streeter Dr & Grand Ave with 66K trips, followed by Canal ST & Adams St and Clinton St & Madison st, with 54K and 49K trips, respectively.

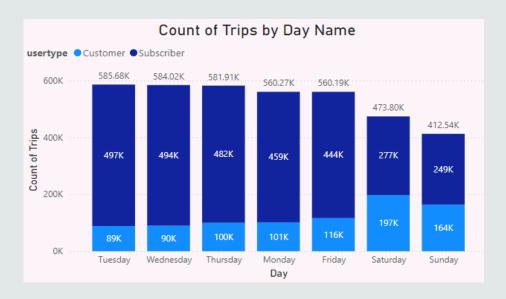


The most frequent end station is Streeter Dr & Grand Ave with 8oK trips, closely followed by Clinton St & Washington Blvd with 5oK trips.





- The most popular time for trips is during the 5 PM hour, with 469K trips.
- The second most popular time is 4 PM, with 372K trips, followed by 6 PM with 310K trips.
- There is a clear spike in usage during peak commuting hours, such as mornings (7-9 AM) and evenings (4-6 PM), indicating that many users likely use Cyclistic bikes for commuting purposes.



- Subscribers show a consistent number of trips across the weekdays, peaking on Tuesday (with 585.68K trips) and maintaining high usage on Monday, Tuesday, Wednesday, and Thursday.
- Casual riders, on the other hand, show a different pattern, with fewer trips on weekdays and more trips on the weekends, especially on Saturday with a slight peak at 197K trips.

Final Conclusion

• From the analysis, we see that annual members ride more often during weekdays and usually take longer trips. In contrast, casual riders tend to use the bikes on weekends for shorter trips. This shows clear differences in how each group uses the bike service. Most busy station is Streeter Dr & Grand Ave . The most popular time for trips is during the 5 PM hour, with 469K trips. The second most popular time is 4 PM, with 372K trips, followed by 6 PM with 210K trips. There is a clear spike in usage during peak commuting hours, such as mornings (7-9 AM) and evenings (4-6 PM), indicating that many users likely use Cyclistic bikes for commuting purposes. There is a significant drop-off in usage between 10 PM and 5 AM, which suggests that bike usage is minimal during late night and early morning hours. Subscribers show a consistent number of trips across the weekdays, peaking on Tuesday and maintaining high usage on Monday, Wednesday, Thursday and Friday. Casual riders, on the other hand, show a different pattern, with fewer trips on weekdays and more trips on the weekends, especially on Saturday with a slight peak at 197K trips. This suggests that subscribers use the bikes more regularly for commuting during the week, while casual riders tend to use the bikes more for leisure on weekends.

Recommendation

• The marketing team can work on turning casual riders into annual members by highlighting the advantages of membership. They can focus on weekends and target the stations that casual riders use the most. promoting the membership benefits during weekends or at popular casual rider locations might encourage more casual riders to convert to annual memberships. By focusing on how each group uses the service, Cyclistic can better meet their needs and improve overall satisfaction. The marketing strategy to encourage casual riders to get an annual membership should focus on key topics like saving money, improving health, helping the environment, and avoiding traffic. Highlighting the benefits of cycling in these areas can be more appealing than other transportation options.



Thank You