Capstone

Cyclistic Bike - Share Analysis

Batch No: DMT2DMT3

By

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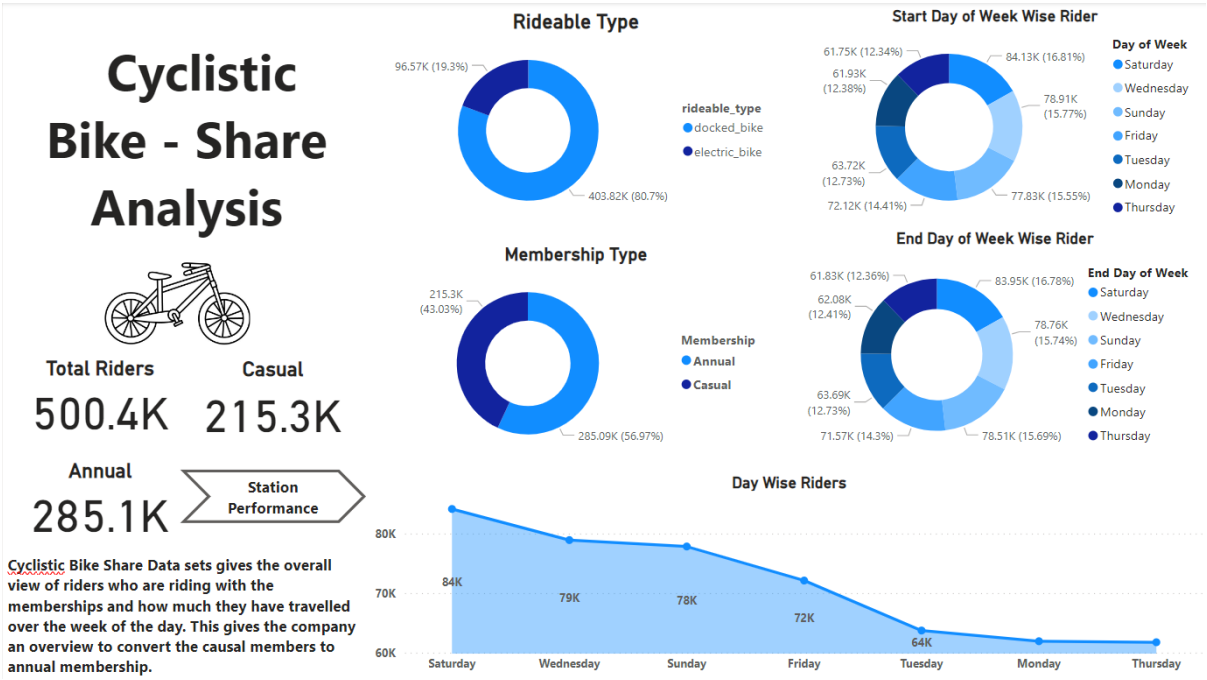
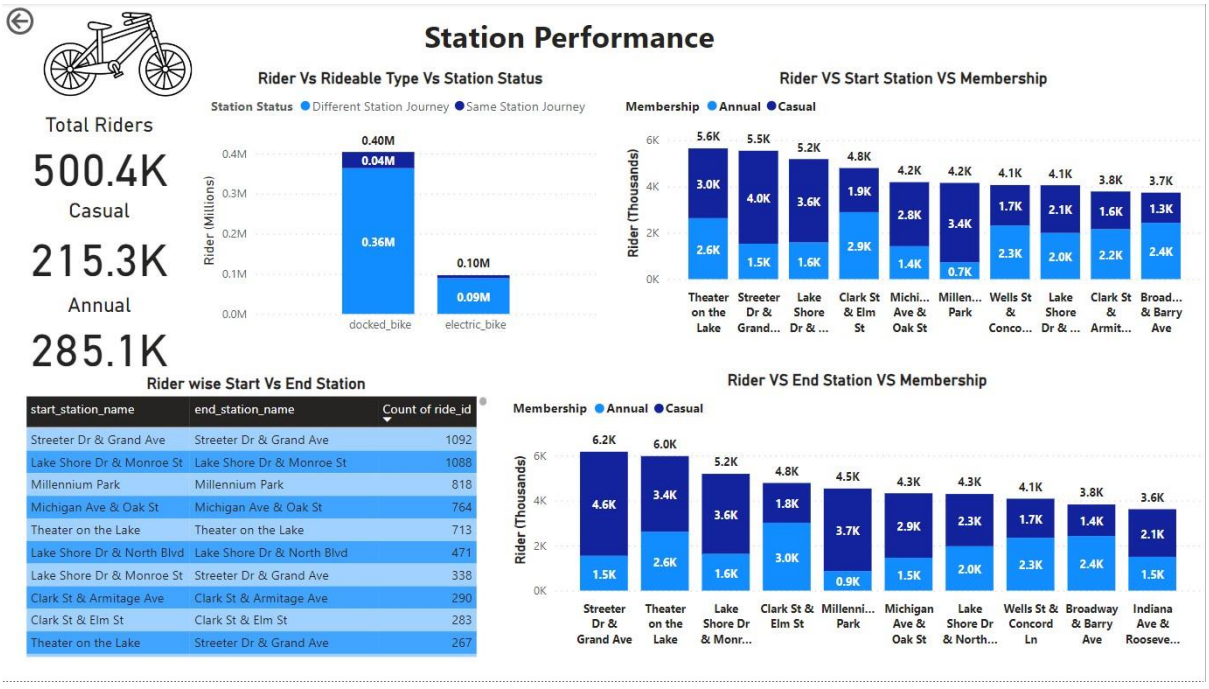
Introduction

The cyclistic data set gives the overview of all the types of riders using their membership programs and their riding patterns for the whole week. It also gives the data by drop down to get the riders behaviour about the station journey. The overall data sets is 500 K with that we get the riders information.

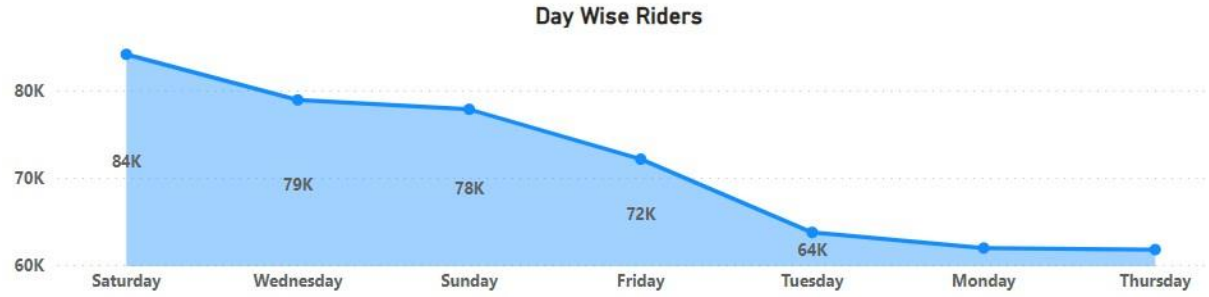
Dashboard Overview:





These are the dashboard with overview and station performance.

Let’s deep dive into the individual data graphs:



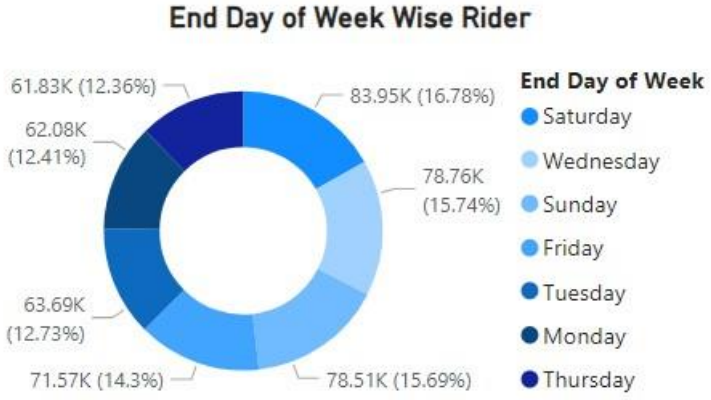
Day wise Rider

The graph shows the number of cyclists who went on rides each week of the day. The x-axis shows the week of the day, with Sunday on the left and Saturday on the right. The y-axis shows the number of cyclists, with 0 at the bottom and the maximum number of cyclists at the top.

The graph shows that there is a clear pattern in the number of cyclists who went on rides each week of the day. The most cyclists went on rides on Saturday, followed by Friday, Sunday, and Thursday. The fewest cyclists went on rides on Tuesday and Wednesday.

This pattern could be due to a number of factors, such as the weather, work schedules, or school schedules. For example, on the weekends, people are more likely to have free time to go on rides. On weekdays, people are more likely to be busy with work or school.

The graph is helpful for understanding the patterns in the number of cyclists who went on rides each week of the day.

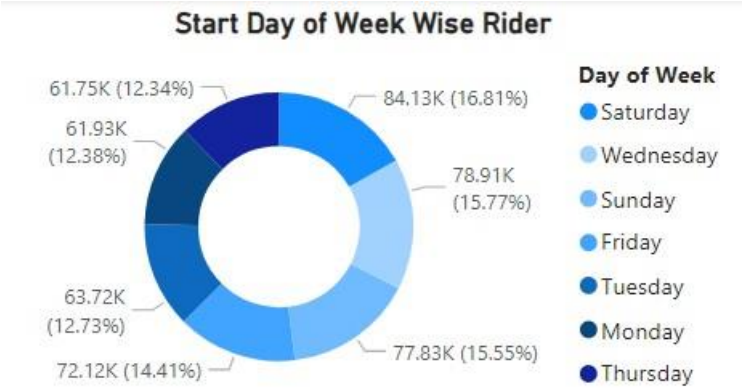


End Day of the week wise Rider

The pie chart shows the distribution of cyclist ridership by end day of the week. The chart is divided into seven slices, each representing a different day of the week. The size of each slice corresponds to the percentage of total ridership that occurred on that day.

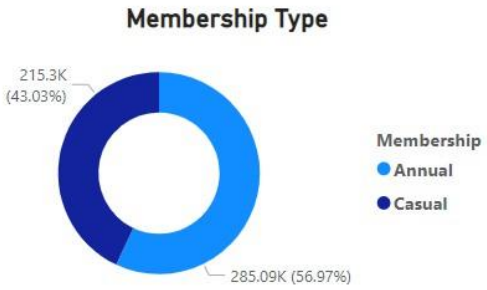
Monday is the smallest slice, accounting for 12.41% of total ridership. Tuesday is slightly larger, accounting for 12.73% of total ridership. Wednesday is the third-smallest slice, accounting for 15.74% of total ridership. Thursday is the fourth-smallest slice, accounting for

12.36% of total ridership. Friday is the fifth-largest slice, accounting for 14.3% of total ridership. Saturday is the second-largest slice, accounting for 16.78% of total ridership. Sunday is the largest slice, accounting for 15.69% of total ridership.
The pie chart shows that there is a fairly even distribution of ridership across the week, with no one day accounting for a significantly larger share of total ridership than any other day. This suggests that cycling is a popular mode of transportation throughout the week, not just on weekends.



Start Day of Week Wise Rider

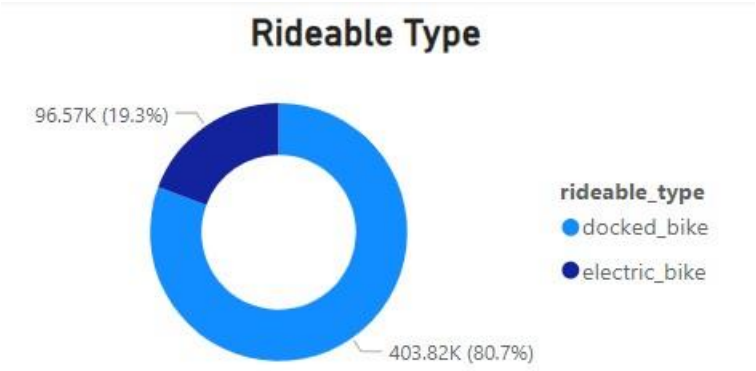
The data shows the percentage of riders for each day of the week. The highest percentage of riders is on Saturday (16.78%), followed by Sunday (15.69%), Wednesday (15.74%), Friday (14.30%), Tuesday (12.73%), Monday (12.41%), and Thursday (12.36%).
As you can see, the pie chart shows that there is a fairly even distribution of ridership across the week, with no one day accounting for a significantly larger share of total ridership than any other day. This suggests that cycling is a popular mode of transportation throughout the week, not just on weekends.



Membership Type

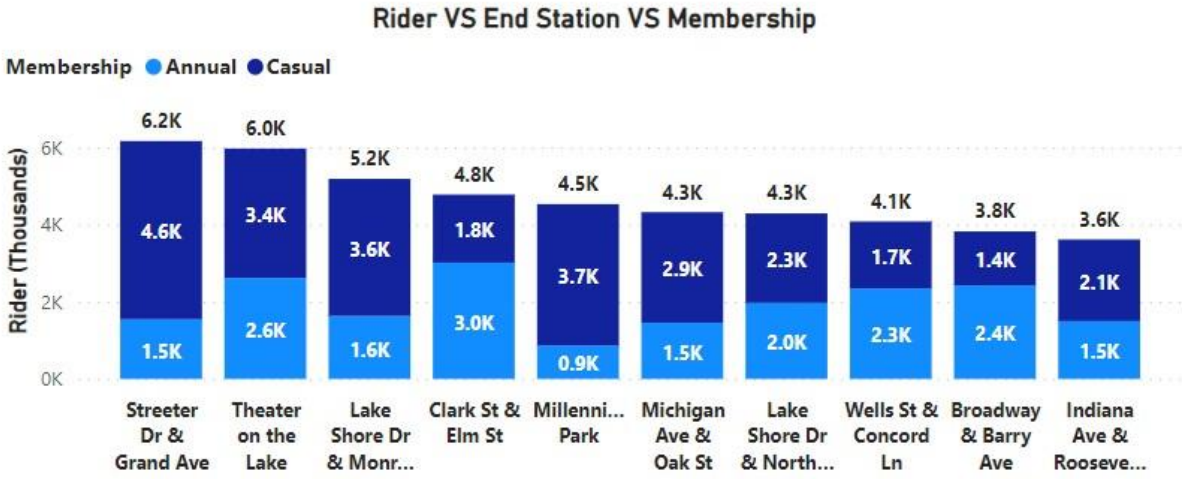
The pie chart shows the distribution of riders by membership type. The chart is divided into two slices, each representing a different membership type. The size of each slice corresponds to the percentage of total riders that have that membership type.

Annual membership is the larger slice, accounting for 56.97% of total riders. Casual membership is the smaller slice, accounting for 43.03% of total riders.
The pie chart shows that the majority of riders have an annual membership. This could be due to a number of factors, such as the cost of membership or the benefits of having an annual membership, such as access to discounts or exclusive events.



Rideable Type

The pie chart shows the distribution of rides by bike type. The chart is divided into two slices, each representing a different bike type. The size of each slice corresponds to the percentage of total rides that were taken on that type of bike.
Docked Bike is the larger slice, accounting for 80.7% of total rides. Electric Bike is the smaller slice, accounting for 19.3% of total rides.
This pie chart shows that the majority of rides were taken on Docked Bikes. This could be due to a number of factors, such as the cost of renting an Electric Bike or the availability of Docked Bikes.

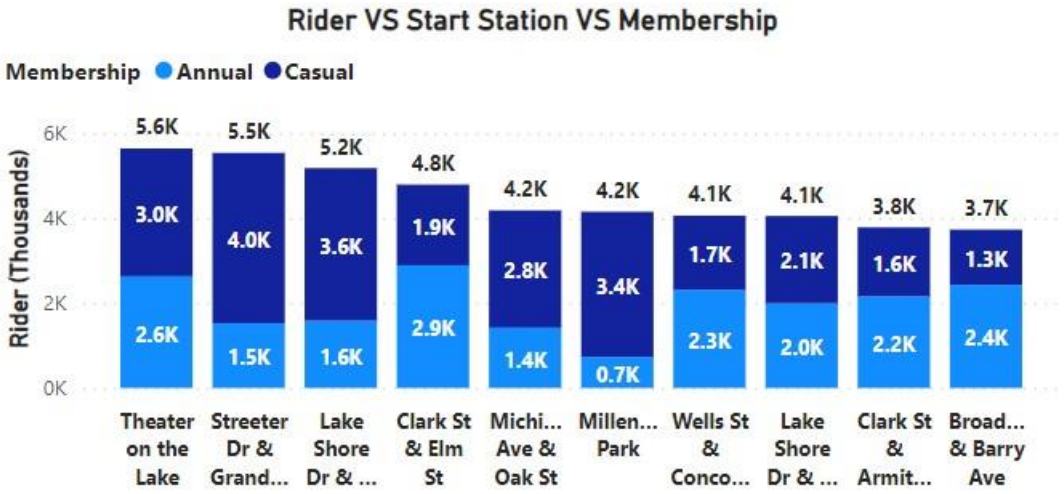


Rider Vs End Station Vs Membership

The bar graph shows the number of riders and end stations for each membership type. The x-axis represents the membership type and the y-axis represents the number of riders or end stations.

As you can see, the Casual membership has the most riders, followed by the Annual membership. The Streeter Dr & Grand Ave end station has the most end stations, followed by the Theater on the Lake end station.

Overall, the casual membership is the most popular membership type, and the Streeter Dr & Grand Ave end station is the most popular end station.

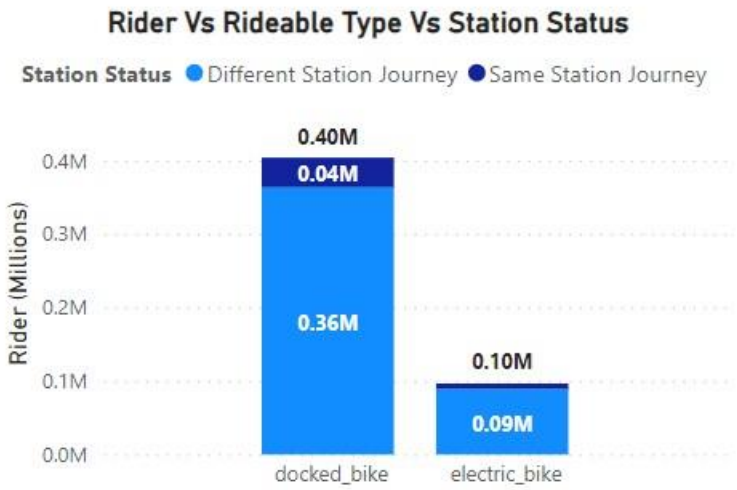


Rider Vs Start Station Vs Membership

The bar graph shows the number of riders and end stations for each membership type and start station. The x-axis represents the start station and the y-axis represents the number of riders or end stations.

As you can see, the Streeter Dr & Grand Ave start station has the most riders, followed by the Theater on the Lake start station. The Streeter Dr & Grand Ave end station also has the most end stations, followed by the Lake Shore Dr & Monroe St end station.

Overall, the Streeter Dr & Grand Ave start station is the most popular start station and end station.



Rider Vs Rideable Type VS Station Status

The bar chart shows the number of riders who used different rideable types and the different station statuses.

The rideable types with the most riders are Docked Bikes and Electric Bikes with 400,000 and 350,000 riders respectively. There are fewer riders who use Classic Bikes and E-Scooters at 75,000 and 50,000 riders respectively.

The station statuses with the most riders are Different Station Journey and Same Station Journey with 415,000 and 385,000 riders respectively. There are fewer riders who use Free Floating Journey at 10,000 riders.

Overall, Docked Bikes are the most popular rideable type and Different Station Journey is the most popular station status.

Recommendation:

Both type of riders use bikes differently based on their individual needs. Annual members may use the service for work related purpose, while casusal riders may use the bikes for leisure.

They may consider purchasing annual memberships if they find purchasing single rides or full day passes is more cost effective for frequent.

We can use digital media to influence casual riders to become members by offering special discounts & promotions, can be used to improve the customer experience for causal riders by addressing issues with bikes or stations and can create targeted marketing campaigns to increase the chances to convert.