Cyclistic Bike-Share Analysis Report

Executive Summary

This analysis was conducted to understand the riding behavior of Cyclistic users, particularly focusing on the differences between casual riders and annual members.

Key findings include:

- Casual riders prefer longer rides than annual members, with duration typically 10-35 minutes rides.

-Members generally take shorter, more frequent rides, with durations typically less than 20 minutes, indicating they use the service for daily commuting.

-Ride durations tend to be shorter on weekdays, likely due to work commutes, while weekends see longer trips, especially among casual riders.

-Rideable type popularity shows that electric bikes are more favored among both casual and members.

-Top stations for casual riders are located in tourist-heavy or leisure areas, suggesting that casual riders use bikes for exploration or recreational purposes.

-Top stations for members are located in business districts, highlighting those members rely on bikes for work commutes.

-Total rides per month peak during summer, suggesting a seasonal trend in usage.

Recommendations include targeted promotions to convert casual riders into annual members by offering incentives for shorter rides and encouraging weekday use.

1. Introduction

Cyclistic is a bike-share company operating in a large urban area, offering bikes for short-term rentals. The service is used by two main types of customers: casual riders (who pay per ride) and annual members (who pay a subscription fee).

The objective of this analysis is to explore riding patterns among these two groups, answer key questions related to their usage, and provide recommendations for improving business outcomes.

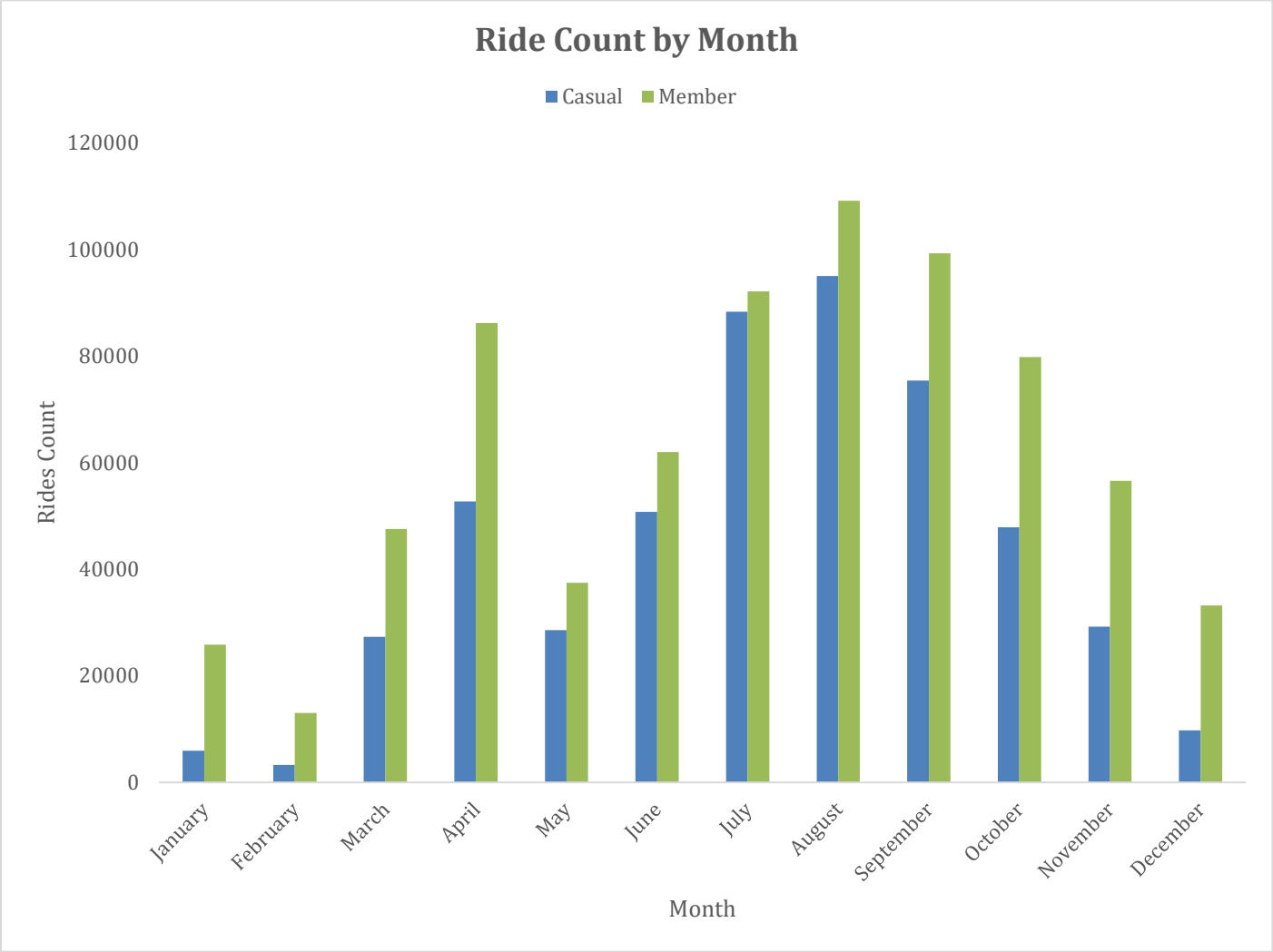
2. Data Collection

The data for this analysis was collected from Cyclistic's internal database, containing the following key fields:
- Ride ID
- Ride Start Time and End Time
- Membership Type (Casual or Member)
- Ride Location Data (start and end locations)

3. Key Metrics Analysis

3.1 Total Riders Count by Month

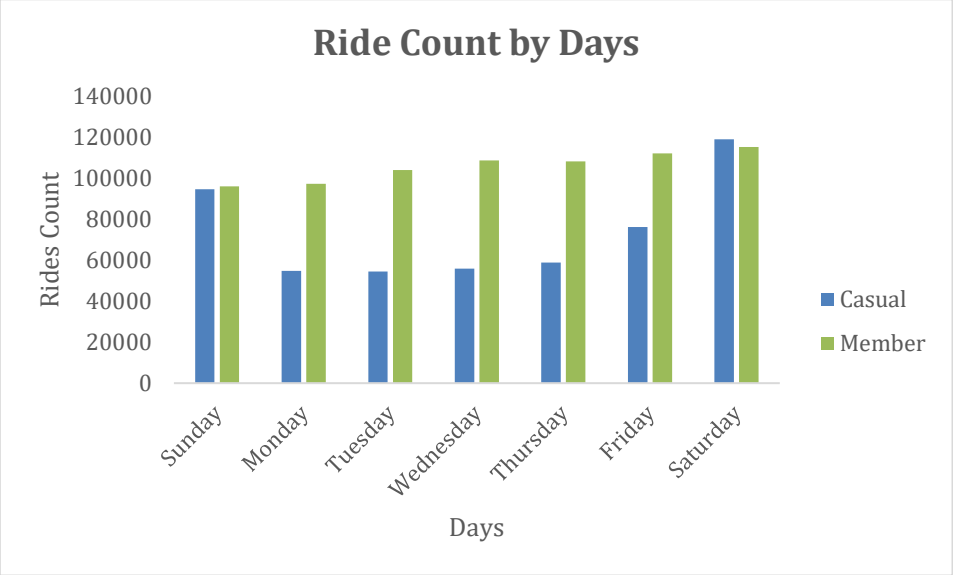
Monthly ride data provides insights into seasonality, showing peak and low periods in bike usage.



This analysis shows during summer months (June to September) both casual and member's uses of bikes to travel increases compare to other months, and with help of other analysis we can assume that in these months more annual members use our bikes as work transportation and more casual members use to travel with our service. Also, busy months for work industry like January & December annual members use more rides than other months.

3.2 Total Riders Count by Day

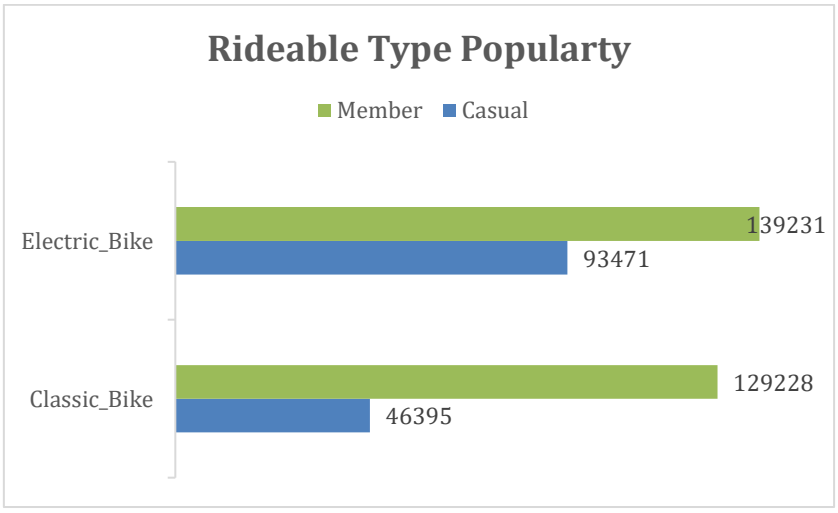
Daily ride data provides insights into seasonality, showing peak and low periods in bike usage.



The analysis of daily rider data shows that **weekends (Saturday and Sunday)** experience a significant increase in ride counts, particularly among **casual riders**, who likely use the service for leisure or recreational trips. In contrast, **annual members** maintain a more balanced usage pattern throughout the week, with a slight increase during weekdays, suggesting they use the service for commuting or routine activities.

3.3 Rideable Type Popularity

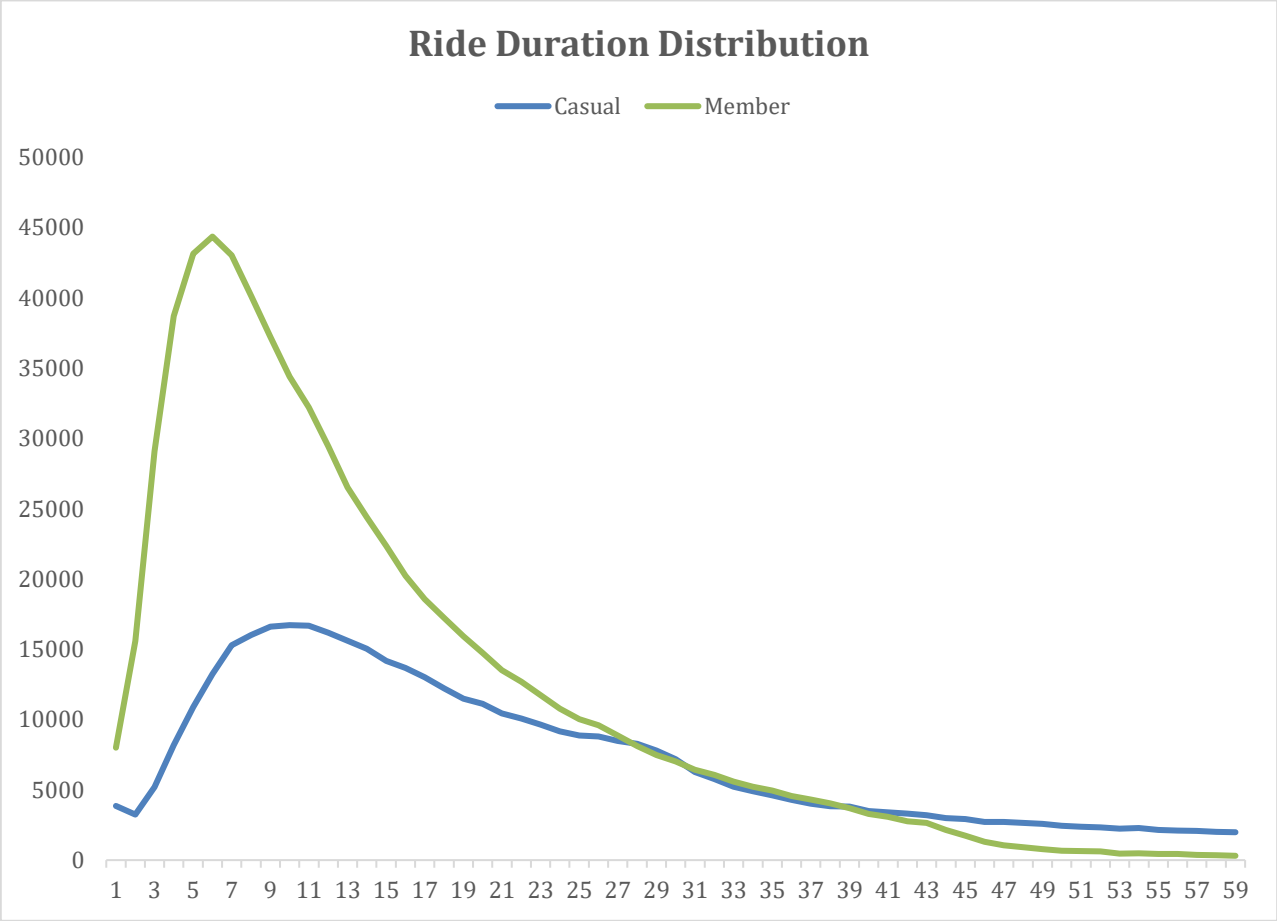
Rideable type analysis reveals which types of bikes (e.g., electric, classic) are most popular among users.



Regarding this analysis we can assume that electric bikes popular than classic bikes among our customers. Because of that we can assume that most of our customers use our services as quick travel method.

3.4 Ride Duration Distribution

Analyzing ride duration helps understand how long users spend on rides and reveals differences in usage patterns between casual riders and members.



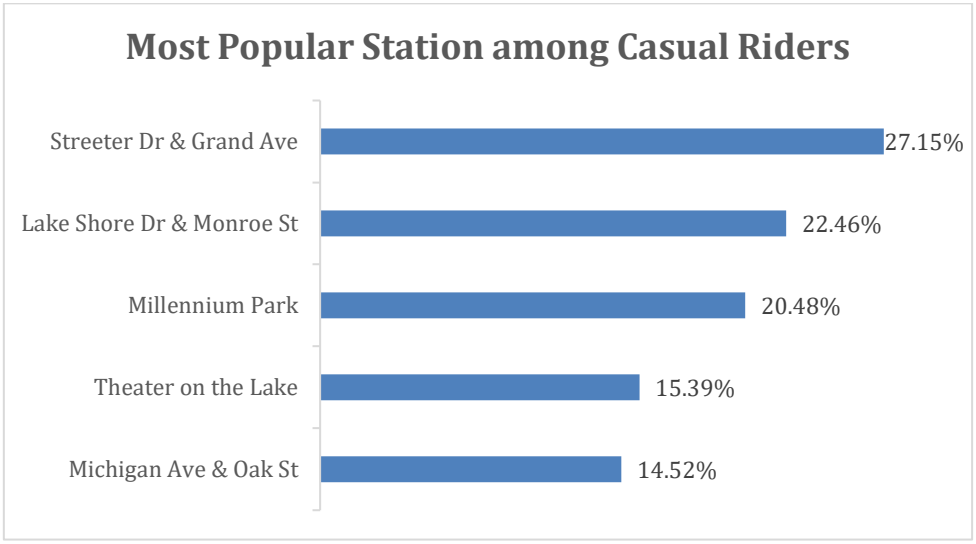
The analysis reveals distinct patterns in how members and casual riders use our service. **Members** typically take **short rides**, with the highest concentration of trips lasting between **6-8 minutes**. This suggests that members use the service primarily for **quick trips**, such as commuting or running errands. Their usage is frequent but for shorter durations, reflecting a more **purpose-driven** approach to bike-sharing.

In contrast, **casual riders** tend to take **longer rides**, peaking around **10 minutes** and continuing steadily for durations up to **30 minutes**. This indicates that casual riders are more likely to use the service for **leisure** or **recreational purposes**, particularly on weekends or during tourist activities. Their rides are less frequent but longer, highlighting a different motivation compared to members.

This distinction emphasizes how **members rely on Cyclistic** for **daily, routine activities**, while **casual riders** use it more for **exploration** or leisurely trips. Understanding these differences can help us to develop tailored marketing strategies, such as offering targeted promotions or customized membership plans that better meet the specific needs of each group.

3.5 Top 5 Start Stations for Casual Riders

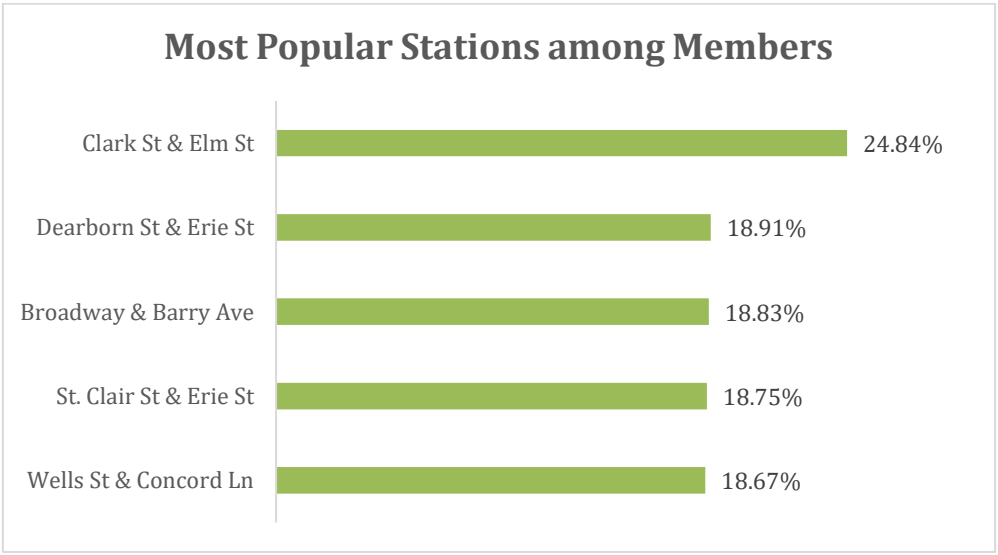
Identifying the most popular start stations for casual riders can help us to plan better services and allocate resources.



Casual Riders tend to favor **tourist** and **scenic** locations, with **Streeter Dr & Grand Ave** being the top station, followed by stations near the lakefront like **Lake Shore Dr & Monroe St** and **Millennium Park**.

3.6 Top 5 Start Stations for Members

Similarly, the top stations for members provide insights into popular locations for subscribed users.



Members show a more even distribution of station usage, with **Clark St & Elm St** being the most popular. Their preferred stations are located in **residential** and **business** areas, suggesting frequent use for **commuting** or **daily activities**.

4.Recommendations

Based on the analysis of user behavior, particularly the differences between casual and annual members, the following strategies could help our company convert more casual riders into annual members:

1. Targeted Weekend Promotions:

Since casual riders are more active on weekends, we can offer promotions that encourage casual users to become members. For example, a "Weekend Rider to Member" campaign could provide discounts for riders who rent bikes multiple times over the weekend, encouraging them to subscribe to an annual membership.

2. Commuter Incentives for Casual Riders:

Many annual members use our service for commuting during weekdays. We can design a campaign to incentivize casual riders who ride on weekdays to join the membership program by promoting the convenience and cost savings of an annual membership for daily commuting.

3. Flexible Membership Plans:

We can introduce flexible membership options, such as "Weekday Commuter Pass" or "Weekend Adventurer Pass". These could appeal to casual riders who use bikes more frequently on specific days. Offering different tiers of membership that cater to these varied usage patterns can make membership more attractive to a wider audience.

4. Seasonal Subscription Discounts:

Since bike usage peaks in the summer months, we can introduce special discounted memberships during these periods. Offering summer-long memberships or free trials for casual riders during peak seasons could encourage them to see the long-term value in an annual membership.

5. Loyalty Programs:

Introduce a loyalty program where casual riders can accumulate points with each ride. Once they reach a certain threshold, they can redeem the points for discounts on annual memberships. This gamifies the riding experience and encourages repeat engagement.

6. Personalized Marketing Campaigns:

Leverage the ride data to create personalized marketing campaigns that target frequent casual riders with offers tailored to their specific usage patterns. For instance, riders who frequently rent bikes on weekends can receive personalized discounts on weekend memberships.

7. Partner with Workplaces:

Since many annual members use bikes for commuting, we can partner with local businesses to offer corporate memberships or commuting incentives. Companies could provide annual memberships as part of their employee benefits, especially for businesses located near Cyclistic’s most popular stations for members.

Conclusion

The analysis of Cyclistic's bike-sharing data provides valuable insights into the usage patterns of both casual riders and annual members. Casual riders tend to use the service for leisure, especially on weekends, with longer ride durations. In contrast, annual members show a more consistent usage pattern throughout the week, indicating a focus on commuting and daily activities.

Electric bikes are particularly popular among both user types, with a notable preference for electric models during the summer months. Casual riders heavily favor tourist-heavy stations, while members primarily use stations near residential and business areas, reflecting their different needs and routines.

To convert more casual riders into annual members, we should focus on targeted marketing campaigns, flexible membership plans, and commuter-centric promotions. Offering tailored incentives, especially during peak riding seasons, and enhancing the user experience can encourage casual riders to commit to annual memberships, thereby increasing Cyclistic's long-term subscriber base.