Optimizing Cyclistic Memberships

A Data-Driven Analysis of Casual vs. Annual Member Rider Behavior

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Cyclistic

Executive Summary & Key Takeaways

Business Problem: Increasing revenue for Cyclistic by determining strategies towards converting more casual riders into annual members.

We have found that casual riders more commonly use the bikes leisurely (afternoon/evenings and on weekends) while annual members use the bikes to commute to work.

Recommendations:

- Market cost savings and convenience of annual memberships for frequent riders
- Implement a "weekend pass" for annual members, allowing access to an unlimited number of rides during the weekend at a fixed cost, making it more cost-effective
- Market cost savings and convenience of annual memberships for regular mid-week use

The Challenge: Maximizing Annual Memberships

How do casual rider and annual members Cylistic bikes differently?"

Objective: Identify crucial behavioral differences to develop new marketing strategies that will encourage more casual riders to become annual members.

Stakeholders:

- Lily Moreno, *Director of Marketing*
- Cyclistic Executive team

Data-Driven Analysis

Used Cyclistic data from *May 2024 – April 2025.*

The dataset included over seven million rides under Cylistic, including several significant variables such as day of the week, the duration of the bike usage, and rider type (casual rider or annual member)

Data Analysis was completed using Microsoft Excel (***Power Query*** for data preparation & ***Pivot Tables*** and ***Charts*** for data analysis)

Data preparation included calculating ride_length for duration of each bike ride and deriving different "time of day" categories (morning, afternoon, evening, night)

Overall Ride Usage Trends: Casual vs. Member

Annual members account for approximately 63.91 % of total rides. Casual riders account for approximately 36.09 %.

On average, casual riders take significantly longer bicycle trips (0:21:12 for casual riders compared to 0:12:10 for annual members)


Overall Average Ride Length (member vs. casual)
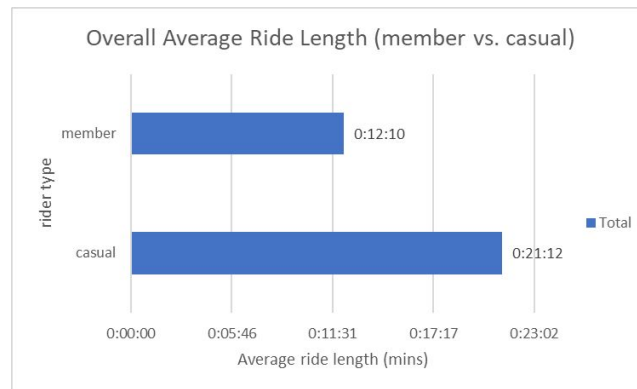
Daily Usage Trends: Ride Counts

According to the data, peak member usage occurs during the weekdays (Monday – Friday), indicating the preference towards commuting to work. Casual riders demonstrate higher activity during the weekend, indicating usage towards leisure purposes.

Daily Ride Counts by Rider Type
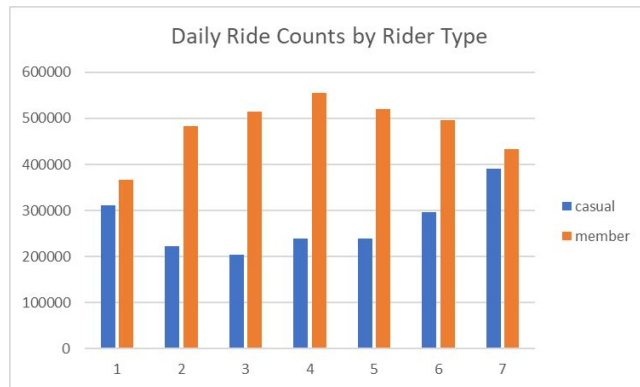
# Daily Usage Trends (Continued): Average Ride Duration

Casual riders take longer bicycle rides, on average, and typically longer during the weekend days, further indicating use for leisure purposes.
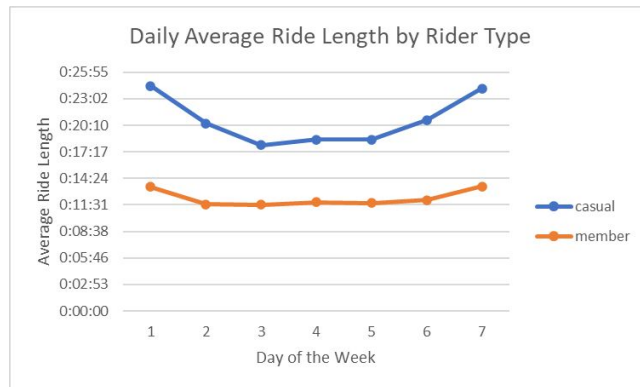
Daily Usage Trends (Continued): Time of Day Distribution

Both casual riders and annual members use the bikes more frequently during the afternoon (37.27 % and 32.49 %, respectively)

A significant majority of rides by casual members (approximately 65%) take place during the afternoon or evening, furthering the notion of utilizing the bikes leisurely.

Time of Day Usage Distribution
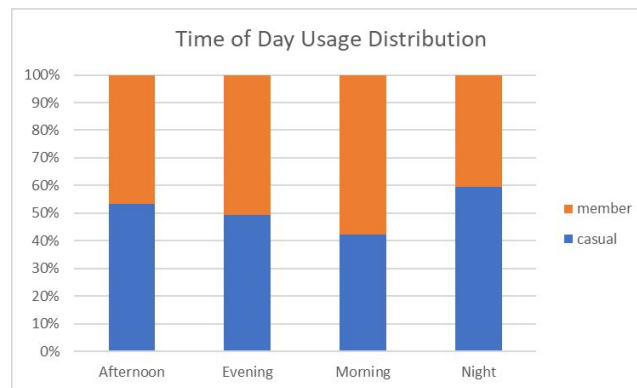
Summary of Findings

Key Insights!

Casual riders take much longer trips than annual riders on a daily basis

Casual riders show the most activity with Cyclistic during the times where leisure activities usually take place: in the afternoons and evenings and on the weekends.

Member usage is indicative of preference towards commuting purposes (shorter ride times and higher activity during weekdays)

Recommendations for Marketing Strategies

- Market cost savings and convenience of annual memberships for frequent riders
    - *This will target the casual riders who frequently utilize our services, presenting the possibility of cost savings*

- Implement a "weekend pass" for annual members, allowing access to an unlimited number of rides during the weekend at a fixed cost, making it more cost-effective
    - *This is based on casual riders' higher activity on Saturday & Sunday*

- Offer group ride discounts or incentives
    - *This is geared towards the casual rider group's recreational and leisure preferences*

Conclusion/Future Considerations

Understanding the different usage patterns between the two groups of riders (casual vs. member) is imperative in directing marketing strategies for conversion.

Next Steps:

- Identify the most popular stations for casual riders
- Conduct further in-depth analysis geared towards seasonal trends
- Perform split testing for the new marketing strategies to determine which ones may be most advantageous

Thank You!

For any further questions, please feel free to contact me!

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