Cyclistic Bike-Share Analysis 2024

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Overview

About Cyclistic

- Chicago-based bike-share company with over 5800 bicycles and 600 stations.
- Pricing plans include single-ride passes, day passes, and annual memberships.
- Goal: Maximize annual memberships to support long-term growth.

Business Task

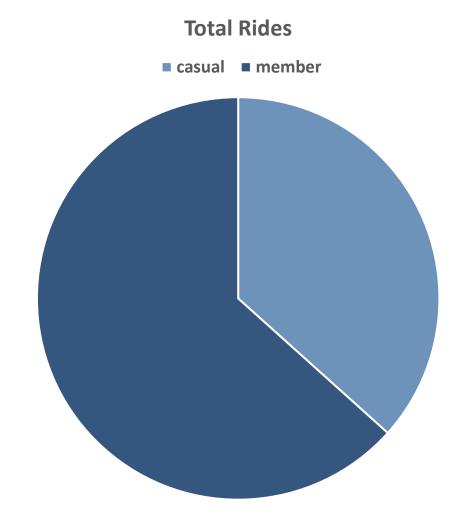
• Identify how annual members and casual riders use Cyclistic bikes differently.

Hypothesis

 By understanding differences in consumer behavior, Cyclistic can design marketing strategies aimed at converting casual riders to annual members.

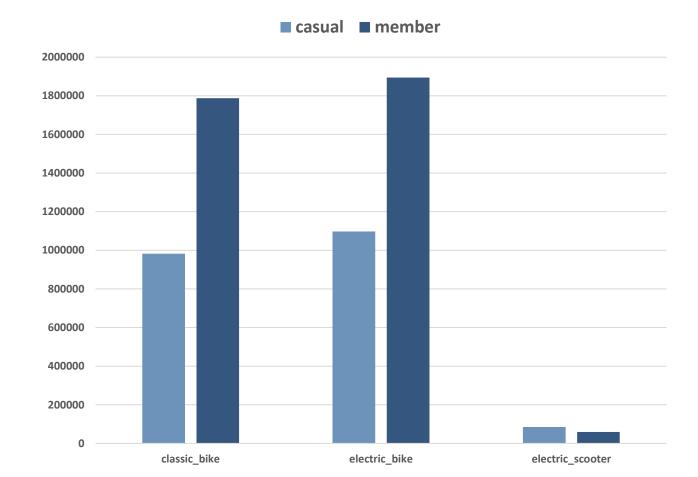
Total Rides

- 5,906,269 total rides taken in the 2024 calendar year.
- 37% casual riders and 63% members.
- Members constitute the larger share of Cyclistic's overall customer base.



Ride Type

- Cyclistic offers 3 ride types: the classic bike, electric bike, and electric scooter.
- The electric scooter was introduced in September of the 2024 calendar year.
- Ride popularity is equally comparable amongst casuals and members alike.

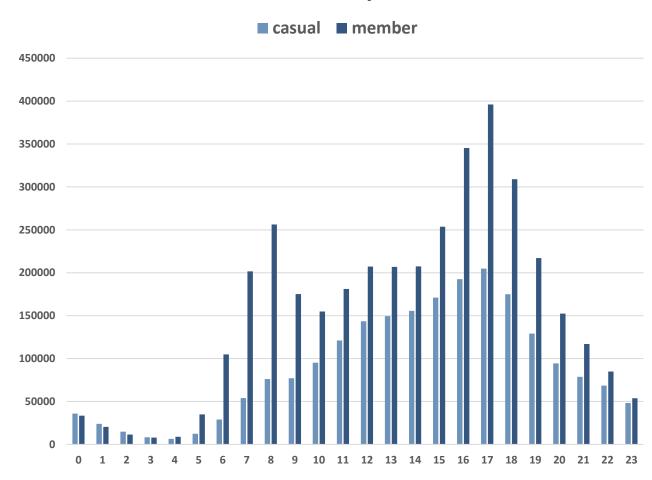


Ride Type

Rides by Hour

- Casual riders peak around 5 PM, likely for evening leisure.
- Members peak around 8 AM and 5 PM, matching typical commute hours.
- Casual use concentrates midday, while member rides span throughout.

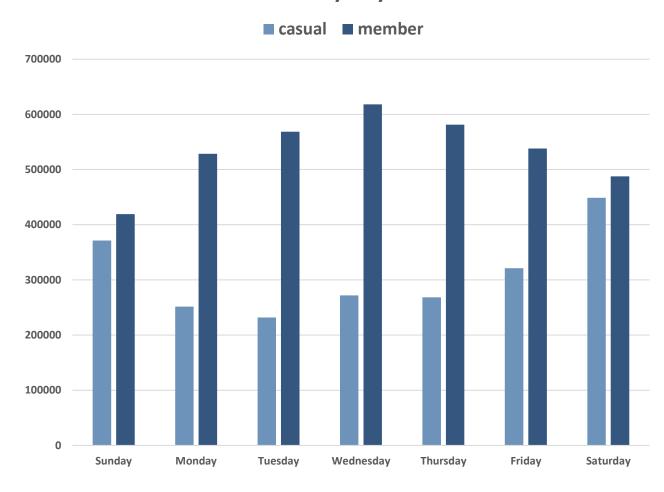
Ride Count by Hour



Rides by Day of Week

- Casual riders peak on weekends, suggesting recreational use.
- Members ride more on weekdays, indicating school/work-related use.
- Members appear habitdriven, while casual riders are more volatile.

Ride Count by Day of Week

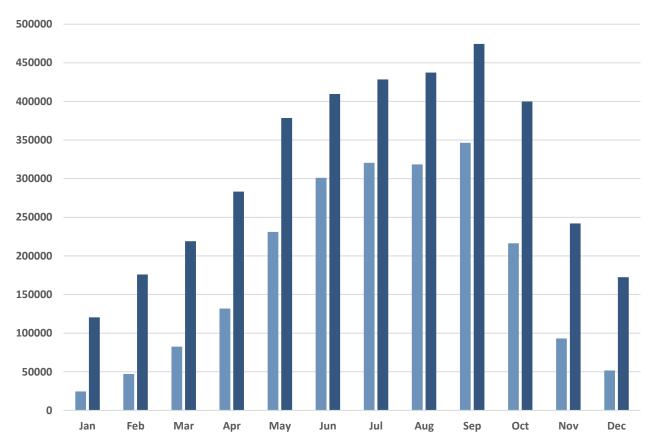


Rides by Month

- Similar distributions between casual riders and annual members.
- Peak usage during warm months and significantly less during cold months.
- Highest usage in summer provides optimal time to execute marketing strategy.

Ride Count by Month

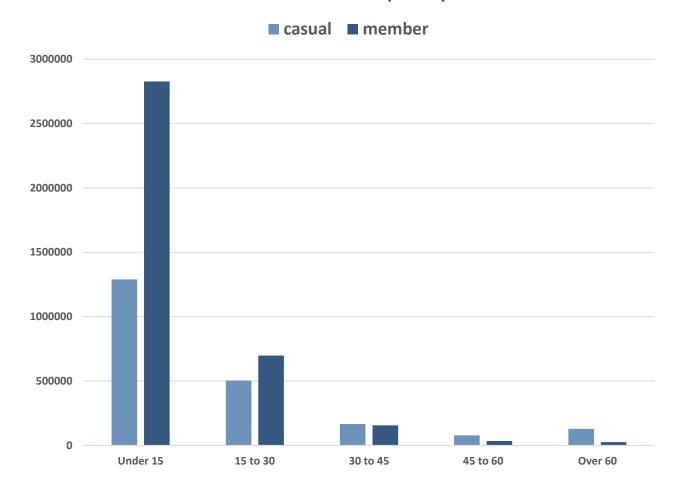




Ride Duration

- Large majority of rides take less than 15 minutes.
- Most riders use bikes for short trips rather than leisure or exercise.
- More casual riders take longer rides than members despite being fewer in number.

Ride Duration (mins)



Recommendations

1. Customize Membership Plans for Added Flexibility

Offer monthly or seasonal memberships to support high demand in the summer while bridging the gap between casual and annual membership.

2. Provide Incentives Based on Usage Patterns

Offer exclusive member benefits, such as promotions or reward points, during weekends and afternoons/evenings when casual riders are most active.

3. Highlight Cost Savings for Frequent Users

As many casual riders take longer, pricier rides, run targeted campaigns that show how much they could save if they switch to the annual plan.

Appendix

About the Data

- Divvy public bike-share dataset provided by Motivate International Inc.
- Data covers the full 2024 calendar year from January to December.

Assumptions

- "Casual riders" = single-ride or day-pass users; "members" = annual members.
- All ride durations are assumed to reflect valid trip times.

Limitations

- Data does not include demographic information for privacy reasons.
- External factors are not included but may influence consumer behavior.
- Missing or null data may reduce accuracy of the analysis.