

Cyclistic Bike-Share Analysis

1. Introduction

Cyclistic, a bike-sharing company in Chicago, aims to increase its annual memberships. This report analyzes the differences in ride patterns between casual riders and annual members to help design a marketing strategy for converting casual riders into members.

2. Data Preparation

The dataset used in this analysis is from May 2024 and contains over 609,000 ride records. Key data cleaning steps included: converting timestamps, calculating ride duration, handling missing values, and filtering out invalid rides.

3. Key Findings

Ride Duration Insights

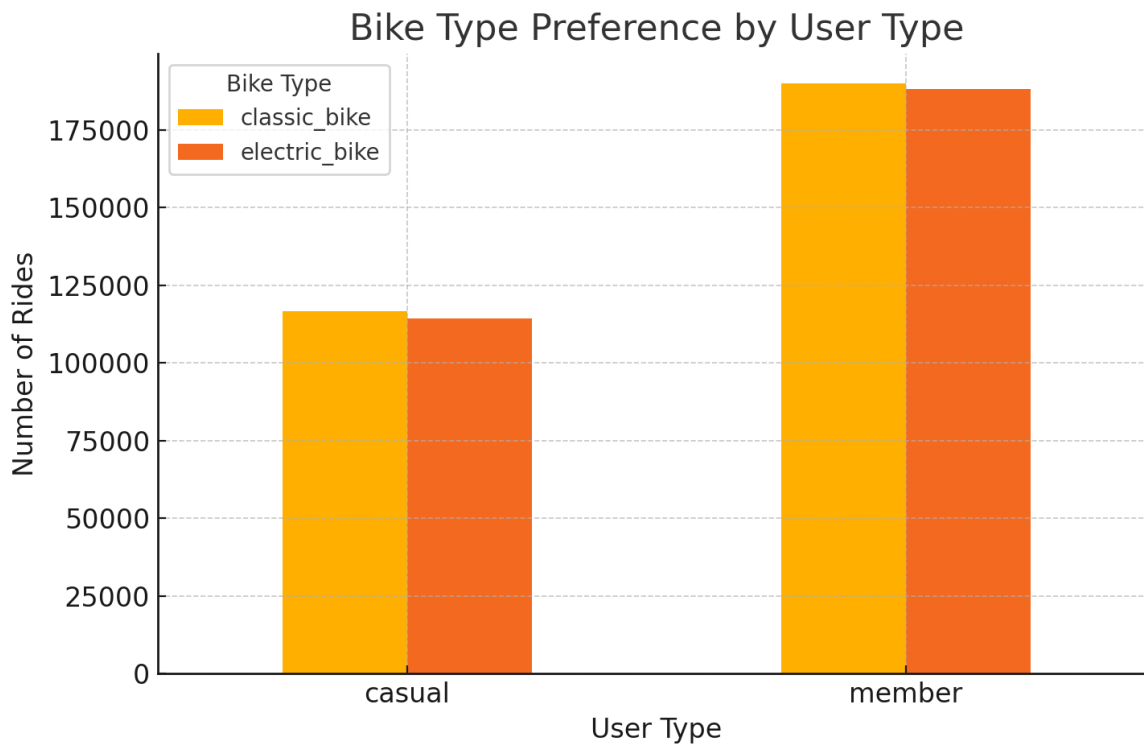
- Casual riders generally have longer rides compared to members.
- Members take shorter rides, suggesting frequent usage for commuting.

Ride Duration Statistics Table

casual: Mean = 27.75 min, Median = 13.47 min, Max = 1499.95 min
member: Mean = 13.49 min, Median = 9.27 min, Max = 1499.93 min

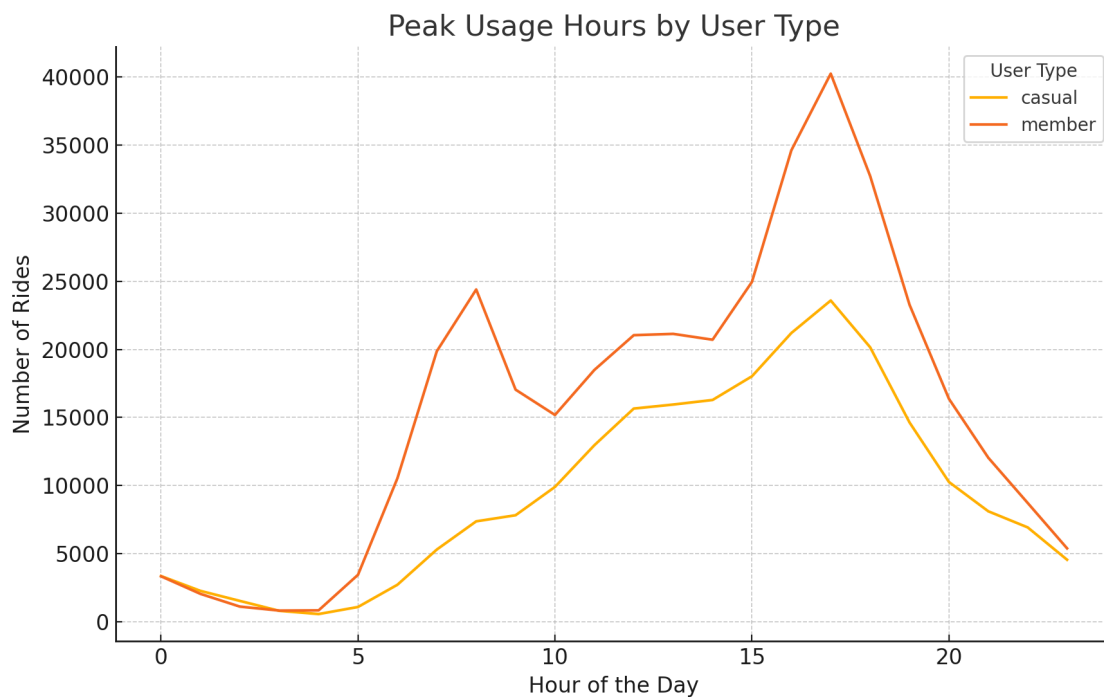
Bike Type Preferences

- Members prefer classic bikes, likely due to cost-effectiveness.
- Casual riders use electric bikes more, prioritizing convenience over cost.



Peak Usage Hours

- Members use bikes more during morning and evening rush hours, aligning with work commutes.
- Casual riders have higher usage during midday and weekends, indicating leisure trips.



4. Recommendations

- Introduce promotional offers for casual riders who frequently use bikes on weekends.
- Market membership plans emphasizing cost savings compared to casual usage.

- Improve station accessibility and bike availability in high-traffic leisure areas.

5. Conclusion

This analysis highlights key behavioral differences between casual riders and members. By leveraging these insights, Cyclistic can implement targeted marketing strategies to increase membership conversions and improve overall user experience.