Cyclistic Bike-Share Analysis

Case Study by Tim Greenli

The problem

Company

Cyclistic is a bike-share program with 5,800+ bicycles and 600 docking stations.

It stands out by offering non-standard bikes and by making bike-share accessible to people with disabilities.

Context

Director of Marketing believes success depends on maximizing annual memberships.

Problem statement

How do casual riders and annual members use Cyclistic bikes differently?

Analysis Process

Step 1

Prepare Data

- Data used is [Cyclistic's historical trip data](#).
- Data from June 2022 to May 2023.

Step 2

Process Data

- Verify and clean data.
- Calculate additional fields for analysis process.
  - ride_length
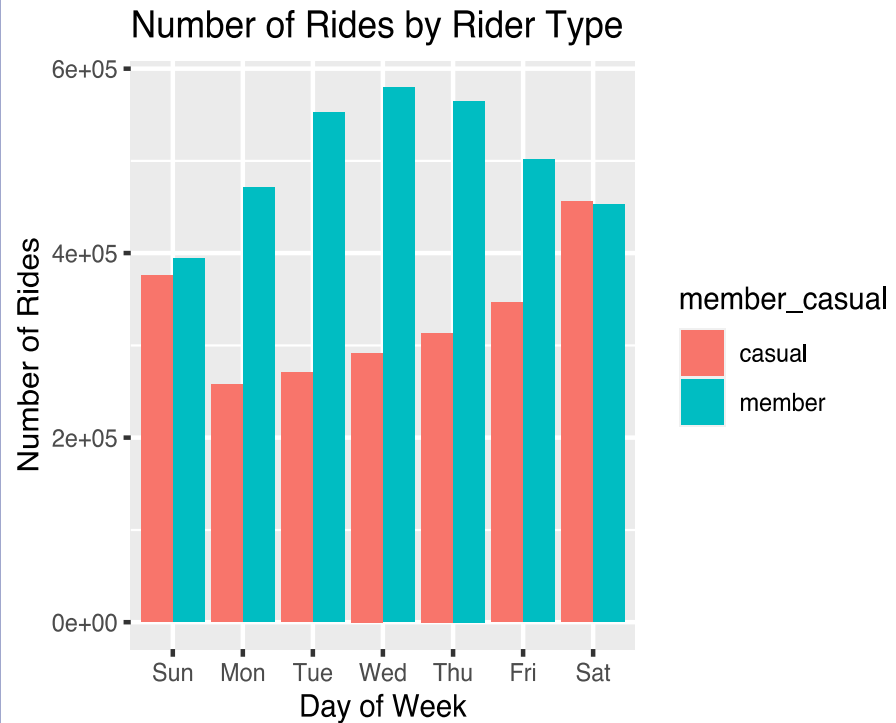 - day_of_week

Step 3

Analyze Data

- Summary of monthly data in spreadsheets with pivot tables.
- R and ggplot2 for further analysis and visualizations.
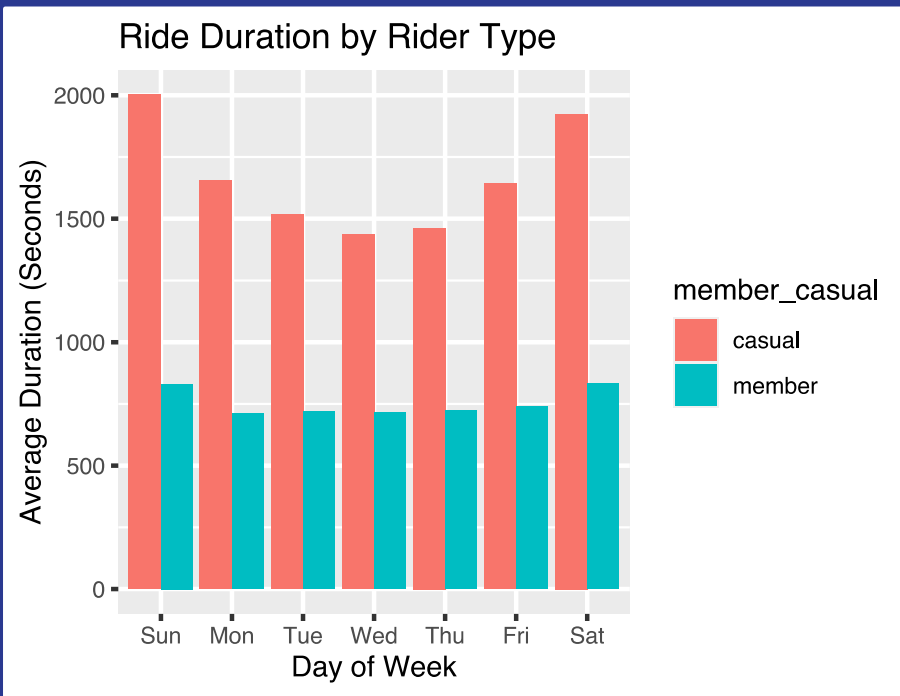
Findings

Riders by Type

Members take more rides

Ride Duration by Type

Casual riders ride longer

Ride Duration by Rider Type

Conclusions

Conclusion

Casual riders

- Fewer overall rides, but much longer duration.
  - Ride duration peaks on weekends, dips on Wednesday.
  - Fewest rides on Monday and climbs throughout the week to Saturday.

Conclusion

Member riders

- More trips overall, but shorter duration.
    - Number of rides peaking on Wednesday.
    - Ride duration consistent M-F.
    - Small duration increase on weekends.

Conclusion

How are bikes being used differently?

- Results suggest members are:
  - Mostly using bikes for commuting.
  - Small leisure use on weekends.
- Casual riders are:
  - Likely to be using bikes strictly for leisure.
  - Using service consistently and would benefit from membership.

Suggestions

Acting on the Data

- Target casual riders differently than member riders.
  - Highlight exploration, fun, leisure.
- Create a targeted marketing campaign.
  - Convert casual riders to members.