Cyclistic Case Study

The Business Task

I will analyze data to determine how annual members and casual riders use Cyclistic bikes differently. Using this information, I will make recommendations for how Cyclistic’s marketing team can drive membership growth.

Processing the Data

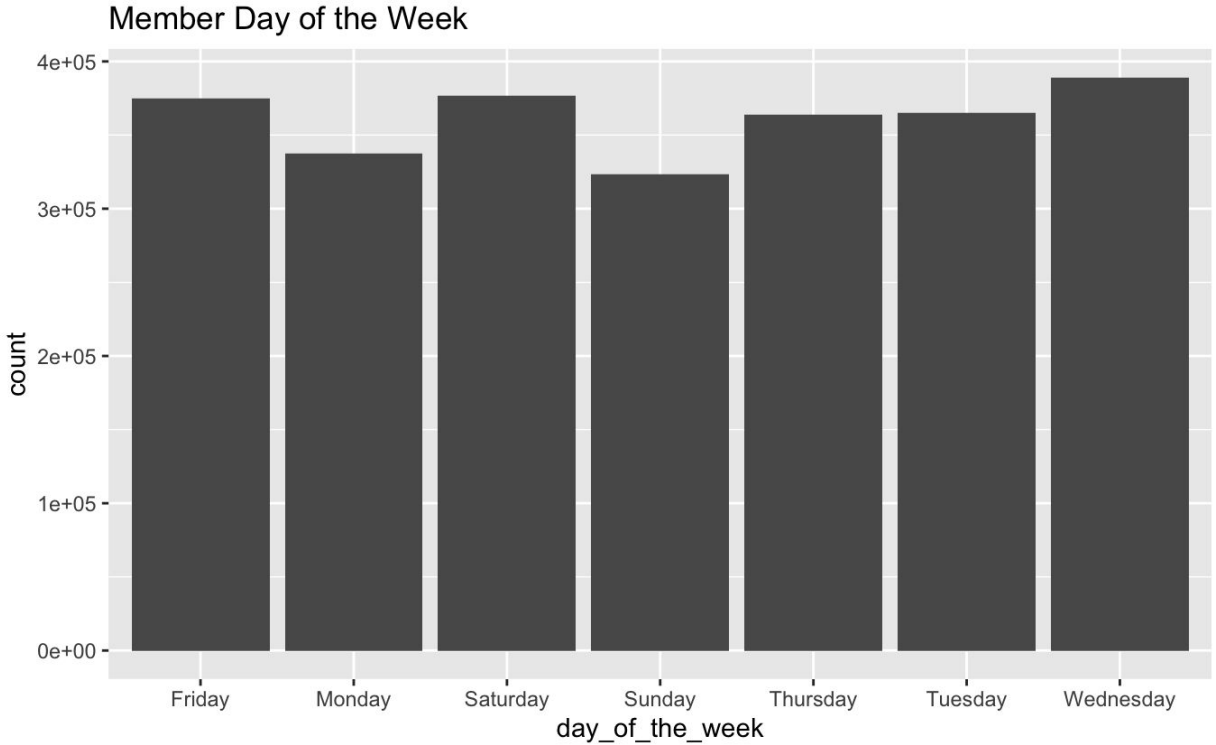
All my work was done in an R Notebook available in the appendix of this presentation.

To process the data, I pulled the datasets for the past year, then joined them into one file. I then removed duplicates to ensure the data's accuracy.

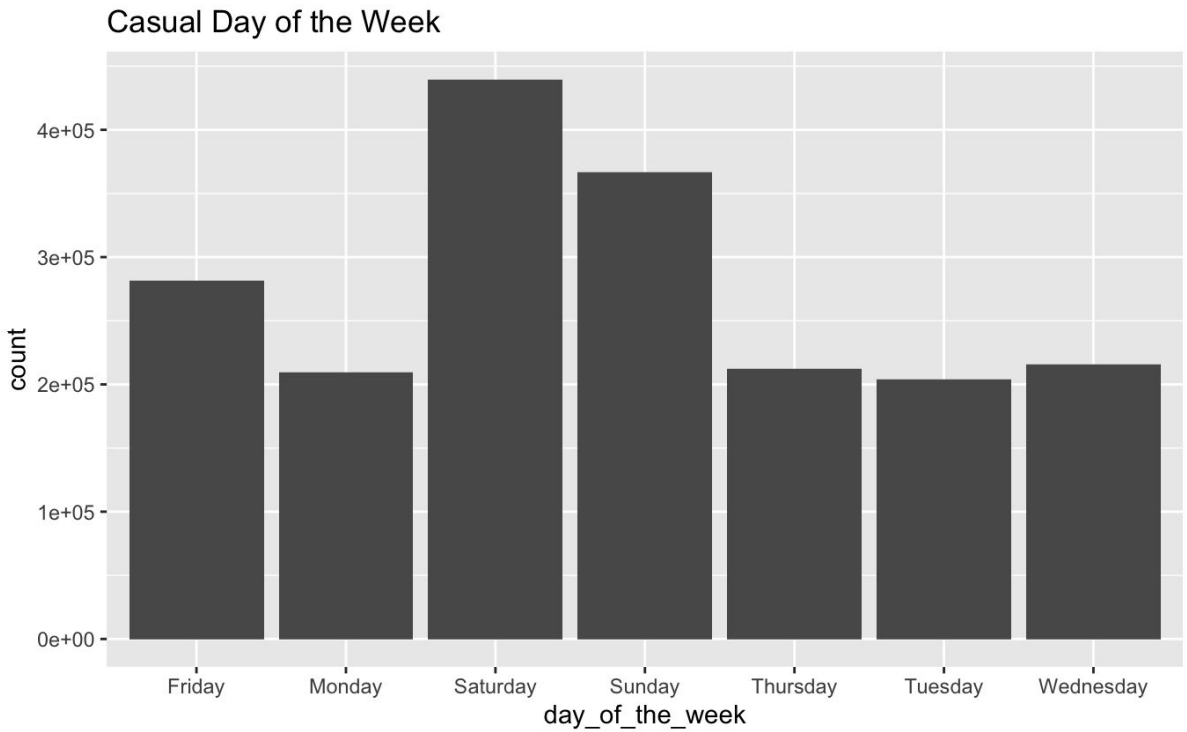
Data Analysis

To analyze the data and look for trends across casual users vs. members, I looked at when and where each group used the service.

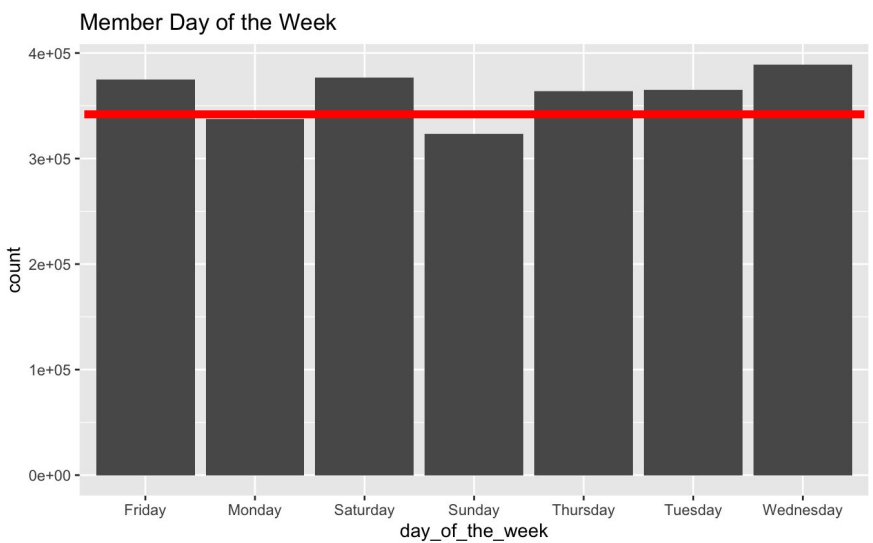
When Members Ride

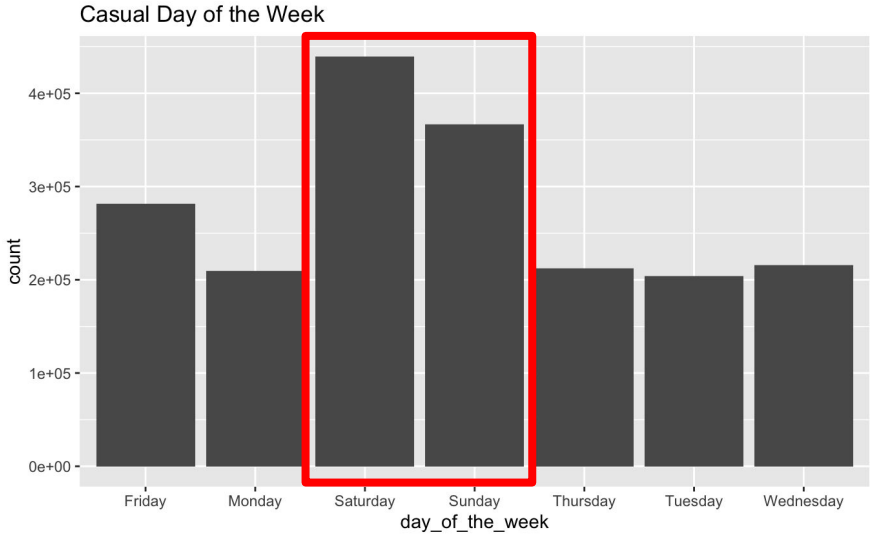


When Casual Users Ride



When Users Ride





Finding One

Members use the service at similar rates across weekdays and weekends.

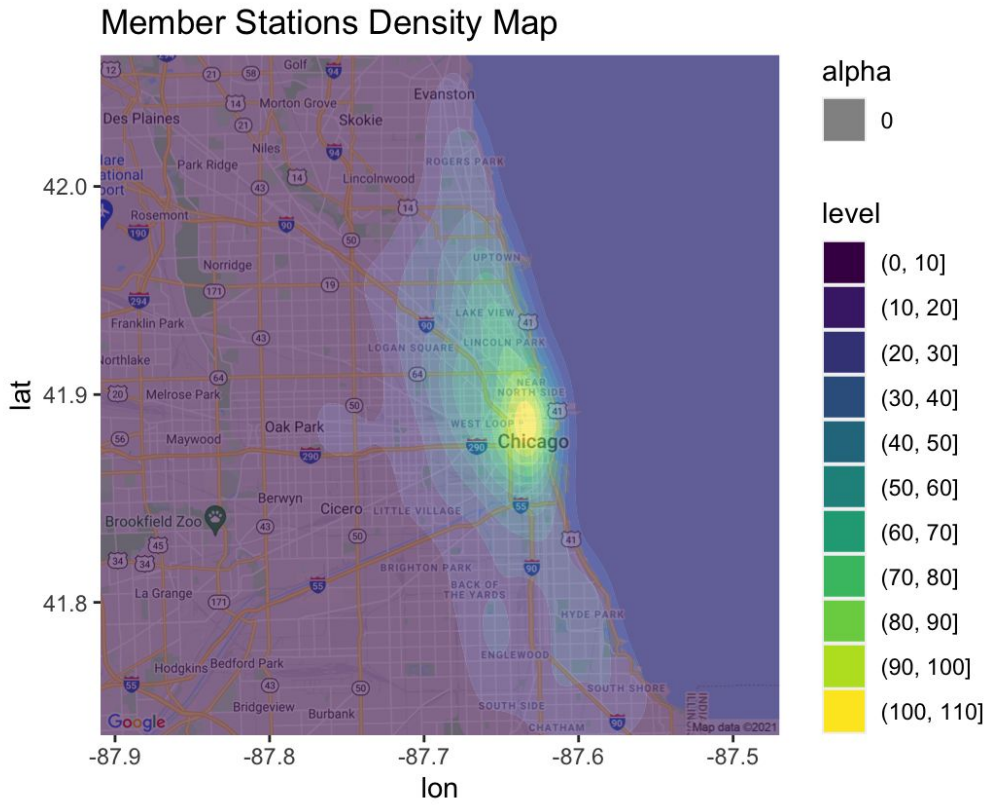
Casual users primarily use the service on weekends.

Where Users Ride

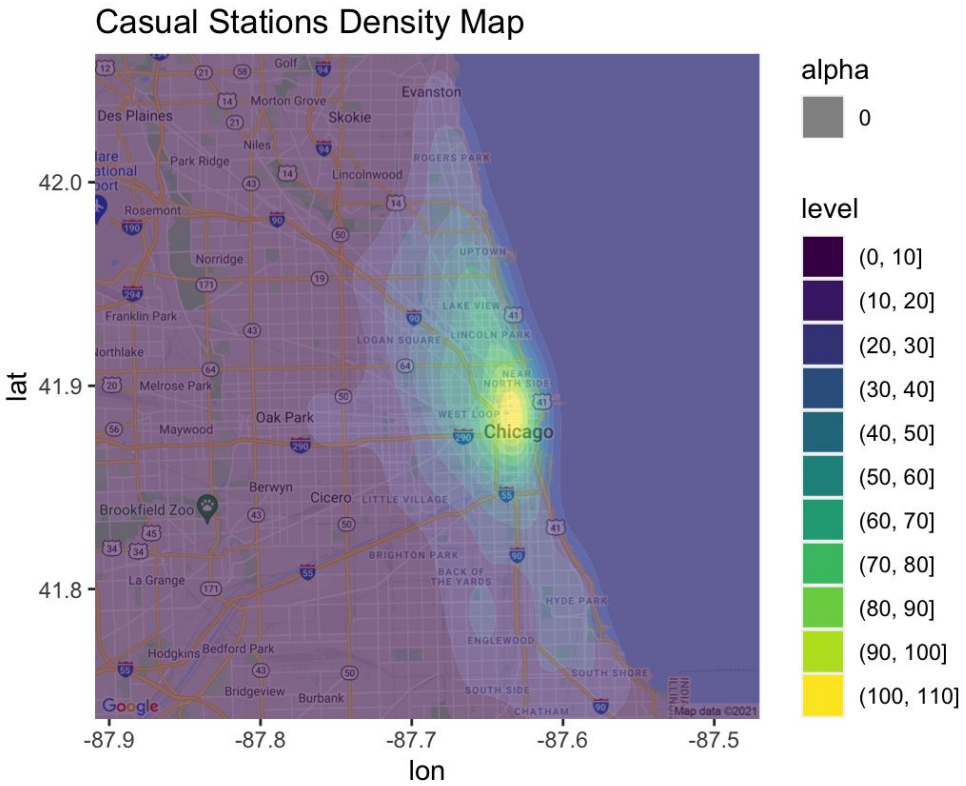
Top Stations by Member Visits	
Station	**Number of Visits**
Clark St & Elm St	24237
Wells St & Concord Ln	19394
Kingsbury St & Kinzie St	19065
Theater on the Lake	18680
Dearborn St & Erie St	18277
Broadway & Barry Ave	17913
Wells St & Elm St	17730
St. Clair St & Erie St	17581
Wells St & Huron St	17277
Lake Shore Dr & North Blvd	17215

Top Stations by Casual User Visits	
Station	**Number of Visits**
Streeter Dr & Grand Ave	45075
Lake Shore Dr & Monroe St	31999
Millennium Park	28124
Michigan Ave & Oak St	22228
Theater on the Lake	21121
Lake Shore Dr & North Blvd	21040
Indiana Ave & Roosevelt Rd	17020
Shedd Aquarium	16943
Michigan Ave & Lake St	15184
Clark St & Elm St	14492

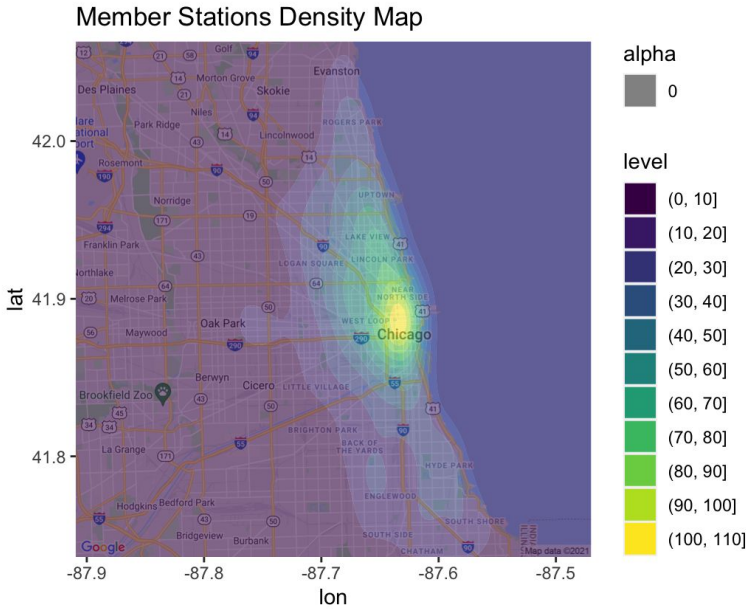
Where Users Ride

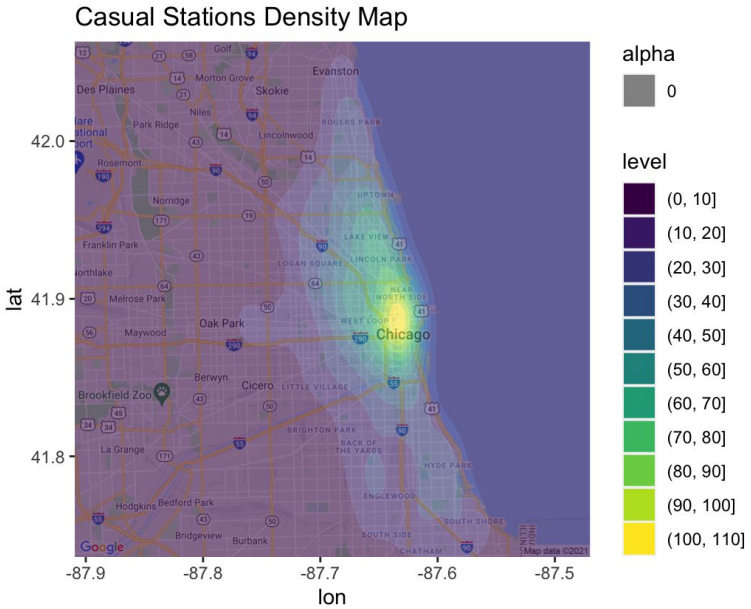


Where Users Ride



Where Users Ride





Finding Two

There are differences in which station casual users use more often than members.

However, when looking at the broader map, the difference in geographic trends vanishes.

Recommendations for Expanding Membership

Target Weekday Casual Riders

Current members use the service broadly on weekdays. The segment of casual riders that might be most easily converted to members are those who use the service on weekdays.

Target Top Member Stations

Casual members who visit the most commonly used stations by members may be another segment who could be converted to Members.

Takeaway Data Sets

My R code on Github (find it here) will produce the datasets of interest:

- Casual members who use the service on weekdays
- Casual members who visit the most commonly used stations by members