

# BIKESHARE USAGE ANALYSIS FY 2021

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# SITUATION

The marketing analyst team has been charged with analyzing rider data from FY 2021 to inform a new marketing strategy intended to convert more casual riders to members by better understanding how casual and member riders use Cyclistic differently.



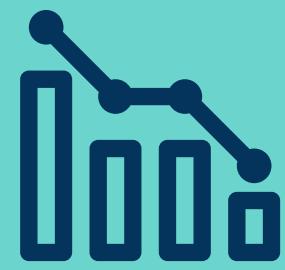
# PROCESS



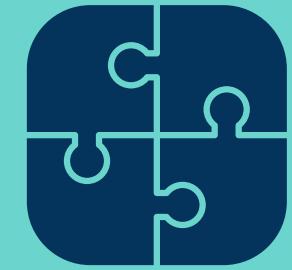
Explore



Clean



Analyze



Summarize

## DATA FORMAT

Data came to our team in a collection of .CSV files by month ranging from October 2020 - September 2021.

## INITIAL EXPLORATION

We visibly scanned the files in Excel to make sure there were no download errors and start to learn what data had been collected.

## OBSERVATIONS

During this exploration we noticed null values and additional cleaning that would best be done in R.

## RAW DATA LOADED INTO R

- Files separated by month
- Null values
- Mismatched data types
- Too many short rides
- No calculations

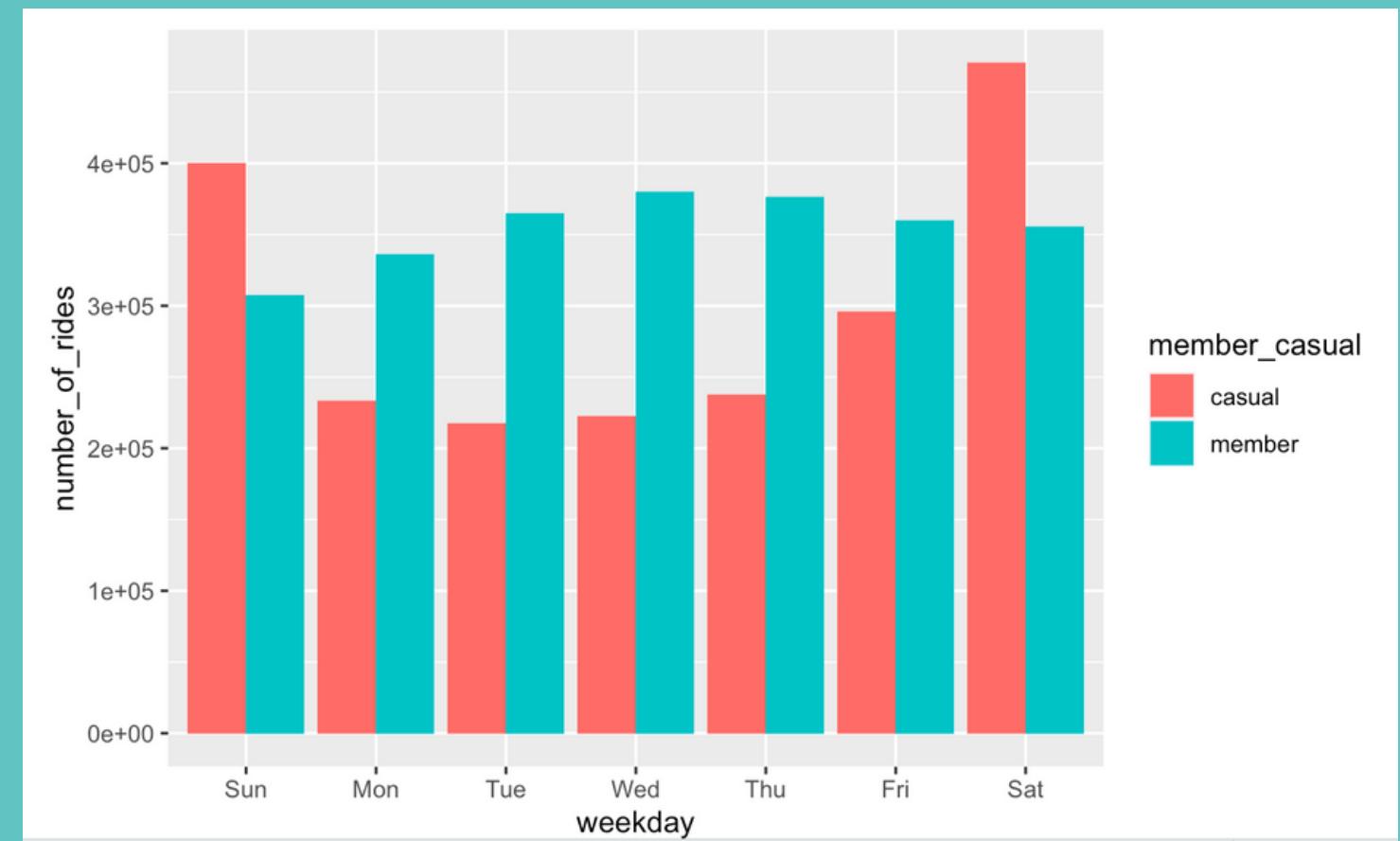


## CLEAN AND PREP

- Data types matched
- Dataframes joined
- Rows with null values removed
- Ride length calculated
- Test and short rides removed (WATSON TESTING as starting station and rides < 10 seconds.)
- 12% of rows removed

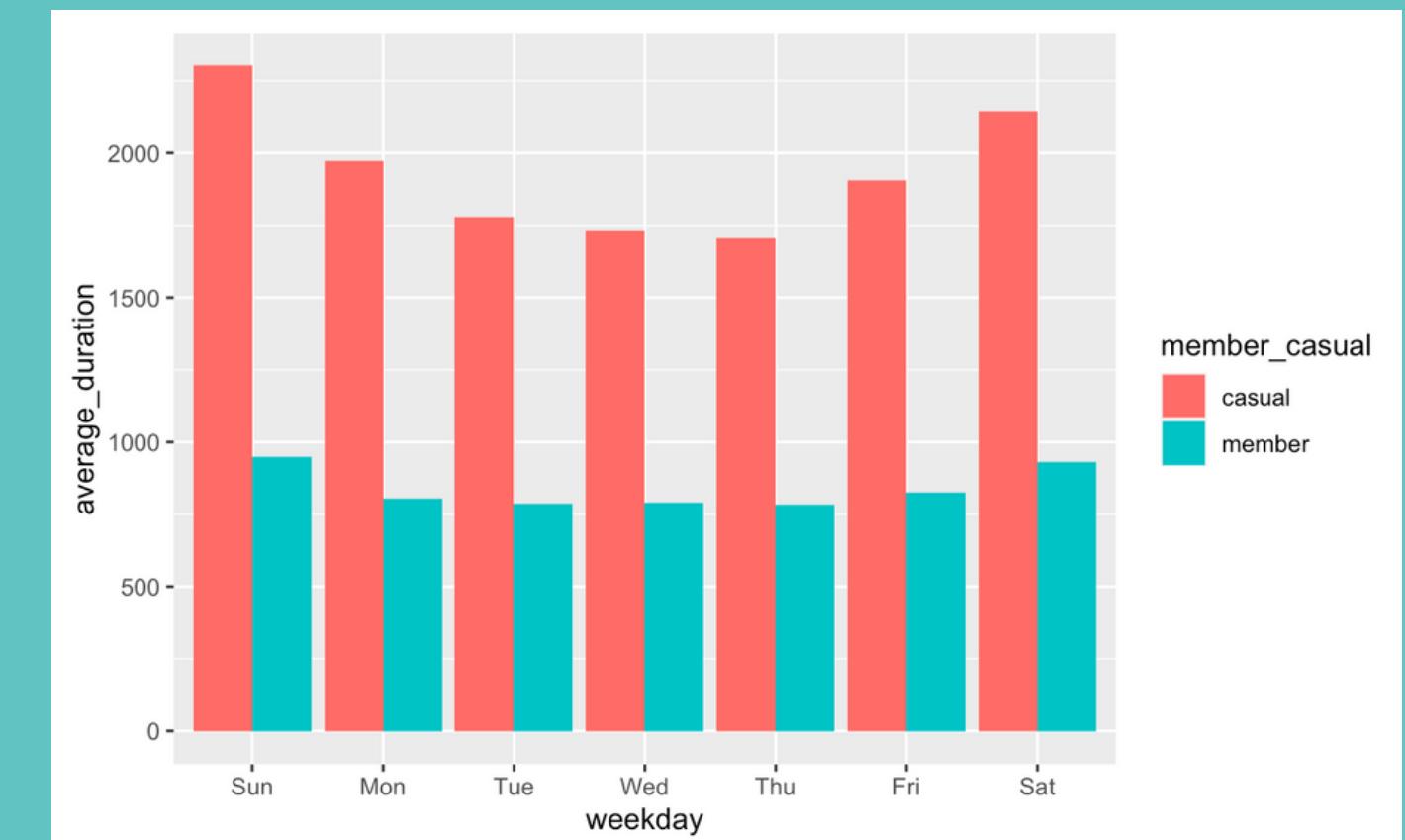
## RIDES BY DAY OF WEEK

Members have a more even distribution of rides by weekday with ridership peaking on Wednesday, while casual members ride more on weekends, nearly doubling rides from Tuesday to Saturday.



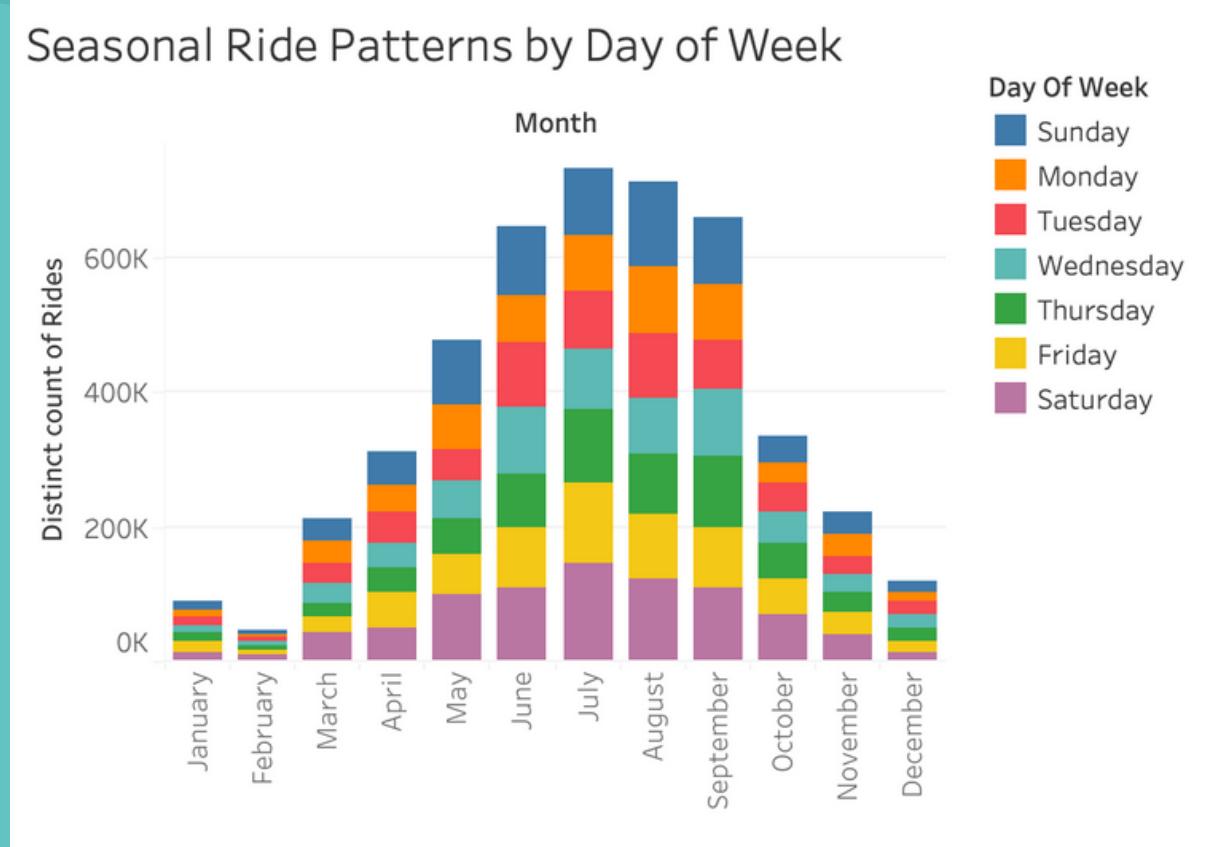
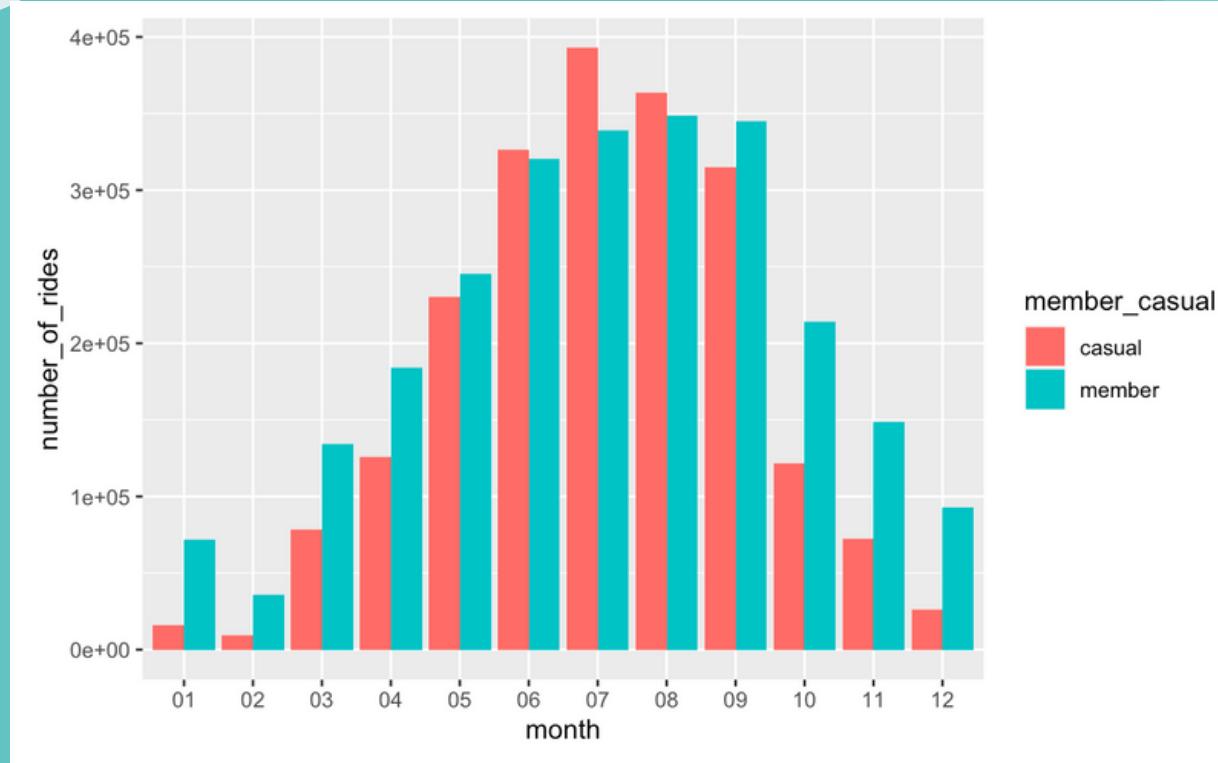
## AVERAGE RIDE TIME BY DAY OF WEEK

Even though there are fewer casual riders on weekdays, on average, they still ride longer than members. The average ride duration is higher for both members and casual riders on weekends. Overall, 2/3 of ride time in FY 2021 was clocked by casual riders.



# SEASONALITY

Ridership plummets during the winter months, and is dominated by members most of the year, except in June, July, and August. It's fair to assume that some of these riders may be tourists using Cyclistic to get around during their vacation. Overall, rides are fairly evenly distributed across the days of the week.



# Marketing Campaign Recommendations

- May-September would be the best time for marketing campaigns
- Consider offering seasonal memberships
- Marketing audiences can include both locals who may be entertaining guests and tourists
- Plan outdoor advertising near popular starting stations



# Data & Product Recommendations

- Agree on a minimum ride length cutoff for analysis
- Consider a feature that sends a push notification that gathers data from riders who complete very short rides. Is there a problem?
- Use a clearer code for test rides or remove them altogether
- Investigate why the starting station is not always recorded. Hardware or software issues?



# Thank You

