

Part II - Usage of Ford GoBike System Data

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Investigation Overview

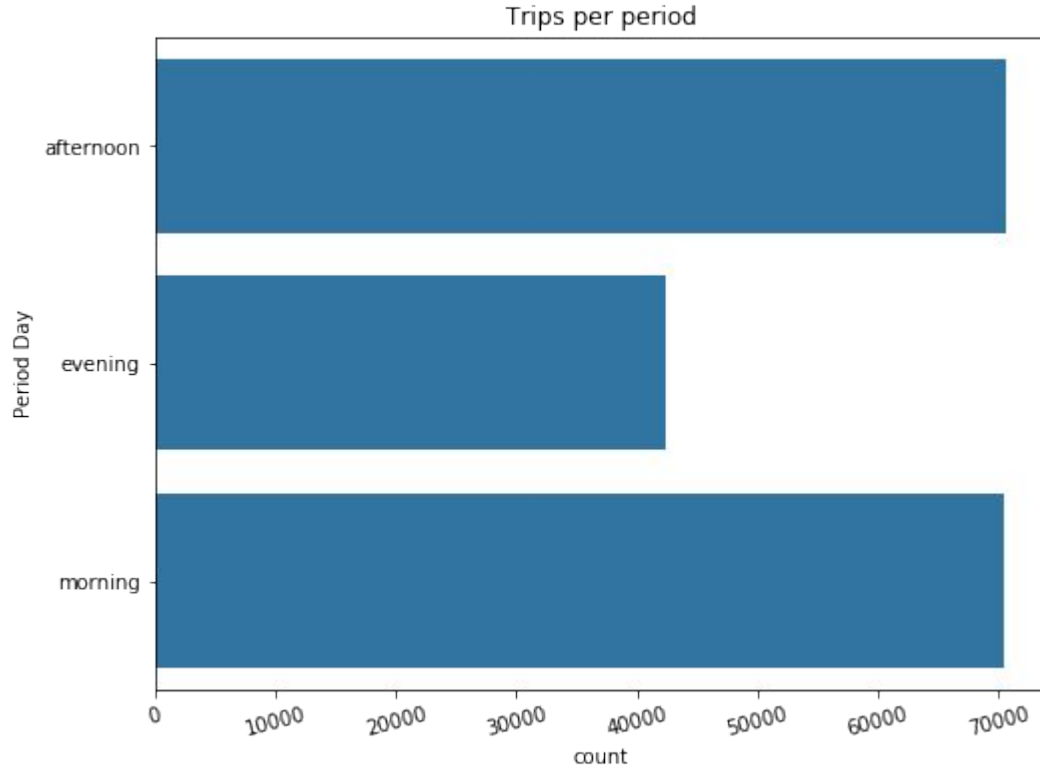
In this exploration, I wanted to investigate the Ford GoBike System Data. This dataset provided columns that I could make some codes to extract the date, minutes, hour, and member age. I wanted to focus on using these columns to answer what are the factors influencing the bike rides.

Dataset Overview

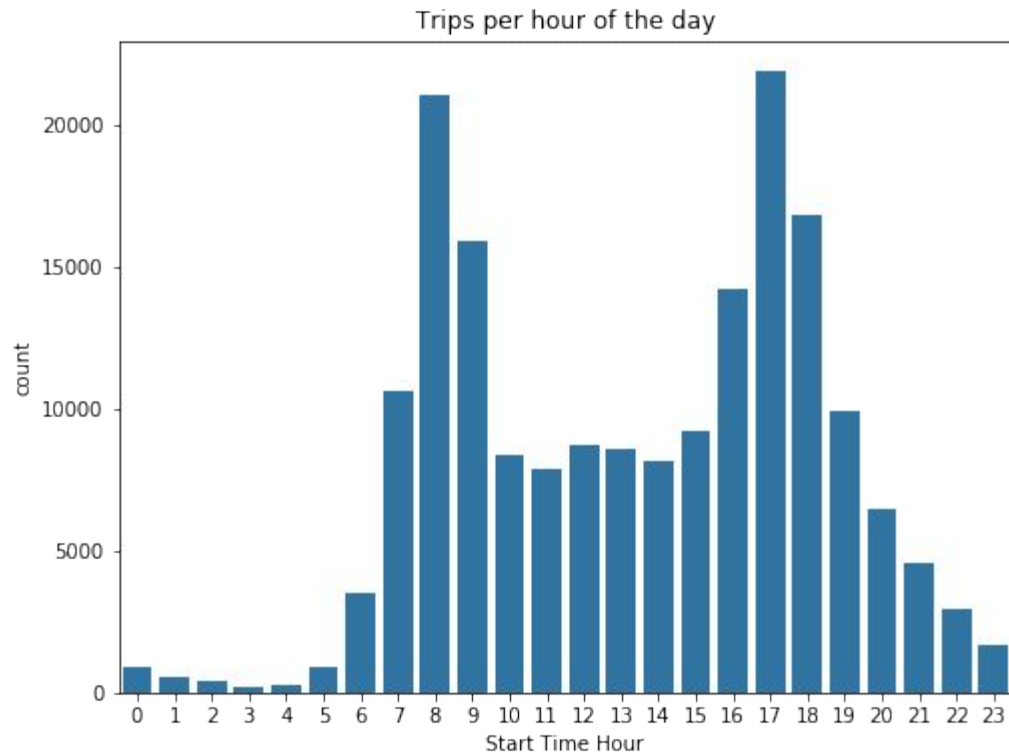
The original dataset had 183412 bike rides and 16 columns. In order to start the exploration, I had to assess and clean the data, creating a dataframe with the final columns to explore. This new dataset called `gobike_archive1` contains columns like, member gender, member age, user type, day, month, start hour, period day, start weekday num, start weekday char, start time type to help with the exploration.

Introduction

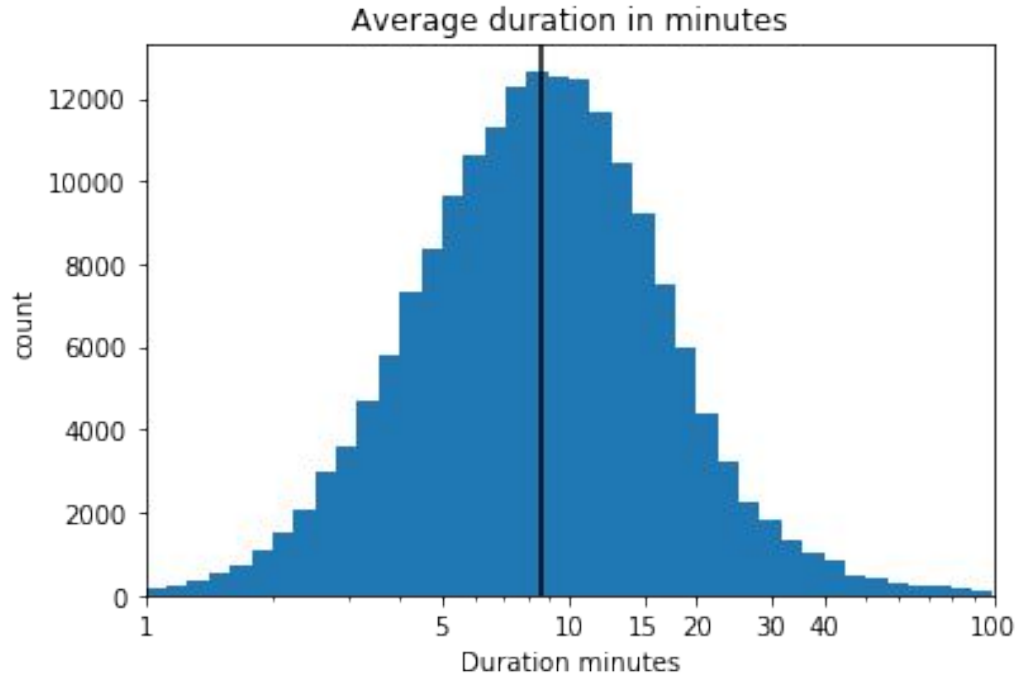
We're going to investigate the most popular times for rides to use the service. From there, we can dig deeper into investigating what are the user types using the service and what is the member gender as well. Through these variables, we can identify as well who has the longest trips from genders and how the customers are using the bikes.



- Morning and afternoons are the most popular trip periods with more than 7000 riders for each of those period.
- We can see that during the evening, we have approximately 4200 riders.



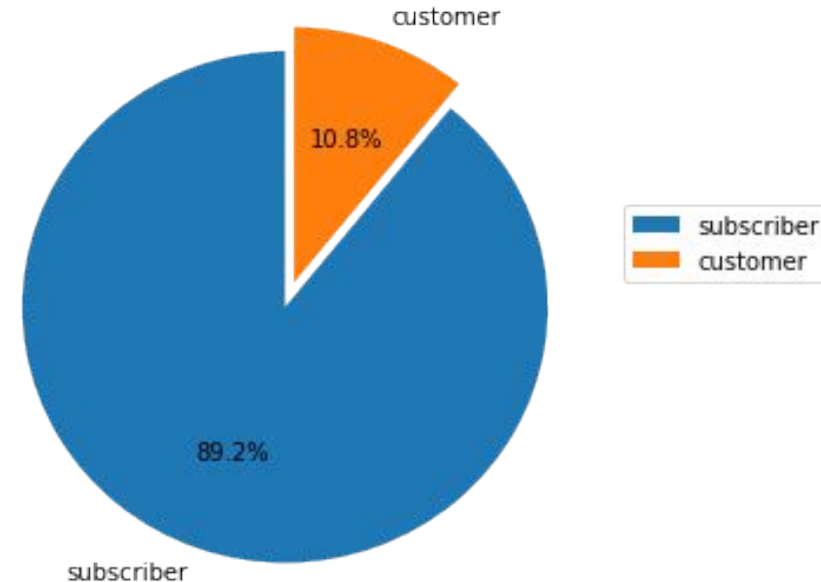
- Between the hours 8h - 10h and 17h - 19h we can see an approximate of 2000 riders.
- Slowest time are in the very early morning and in the evenings.

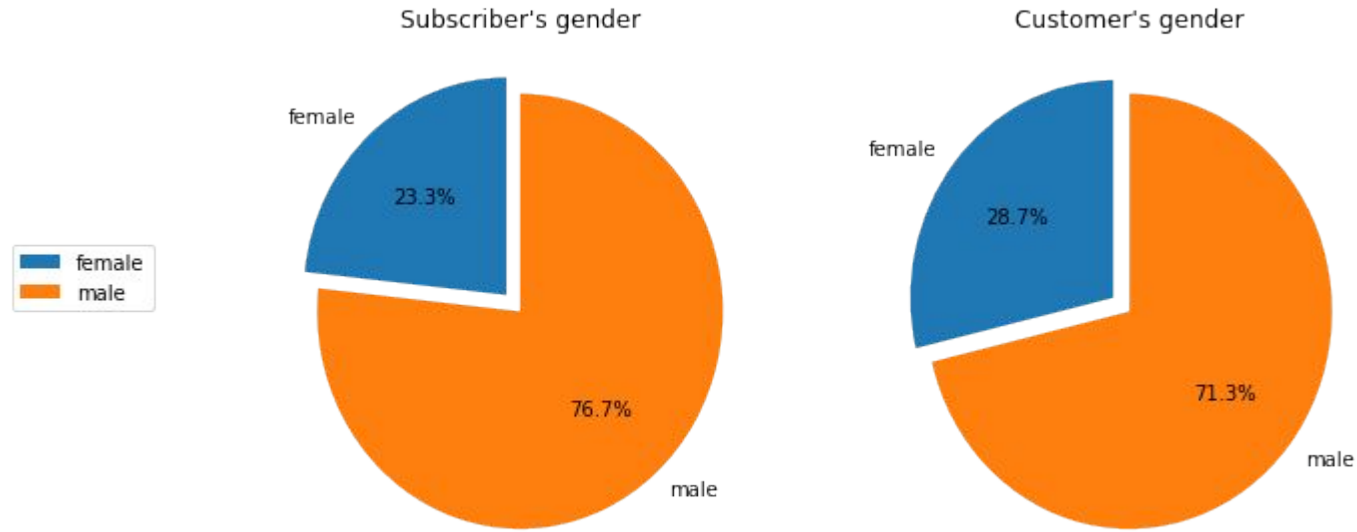


- The riders uses the bikes between 1 and 100 minutes approximately.
- The average duration in minutes for a rider is approximately 10 minutes.
- This could be due to commuting. People leaving to work or after work.

- This service has 89.2% subscribers and only 10.8% customers.
- It makes sense that those who frequently use the bikes would tend to subscribe to get easy access maybe to payment and/or information, or to get a membership deal.

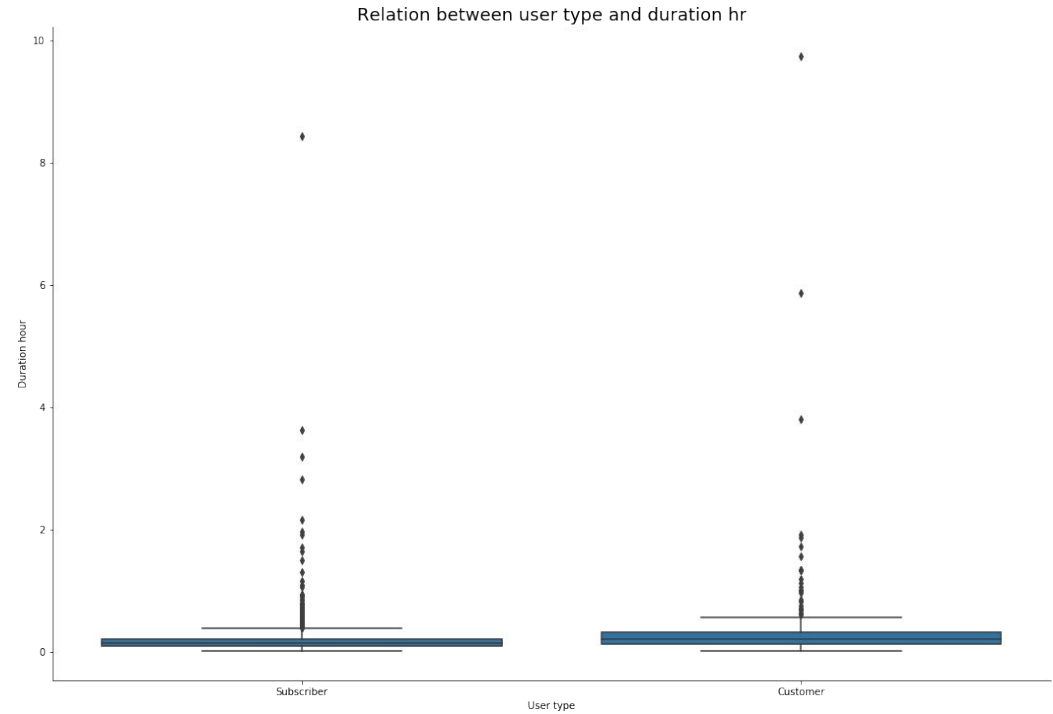
Difference between subscribers and customers

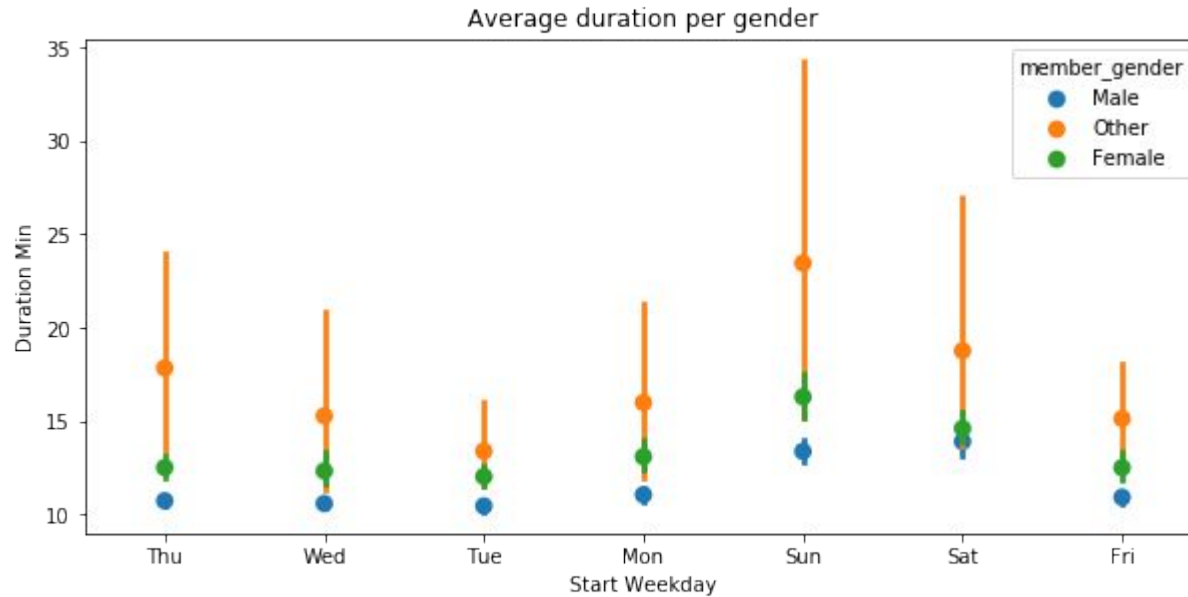




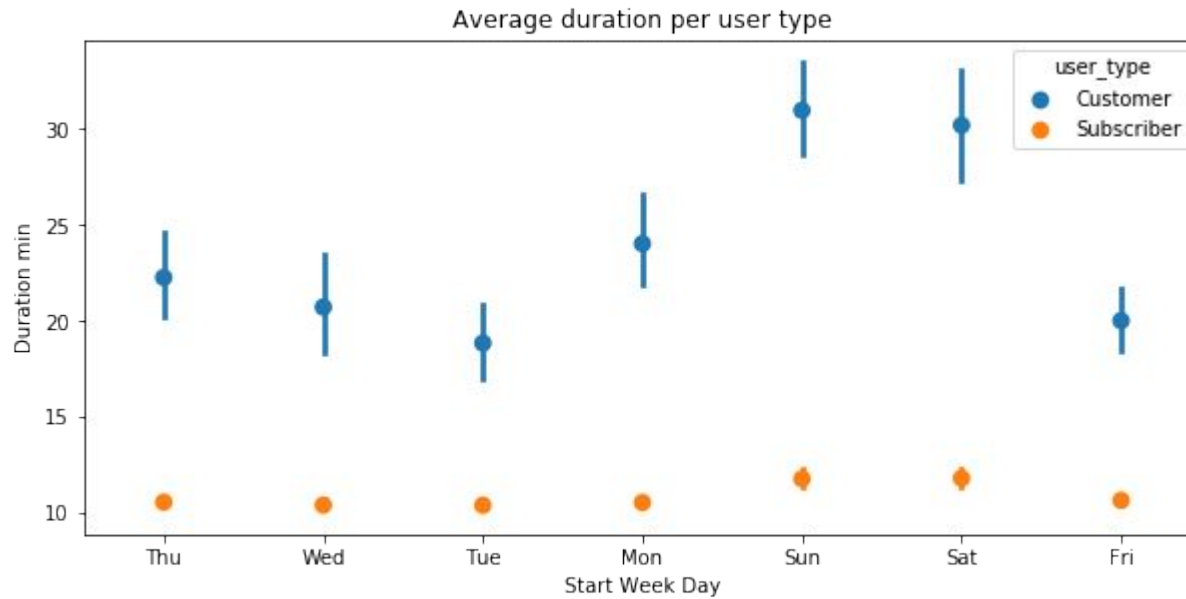
- For each user type, males are the dominant type of gender using the services with more than 70%.
- Females having less than 30% for each user type.

- Customers spend more time using the bikes compared to subscribers.
- This makes sense since subscribers use the services mostly for commuting.





- Females spend more time using the services of the bike per minute compared to males.
- Only Saturdays, we can note that both genders spend approximately the same time. However, there's a slight difference between genders on other days of the week.



- Customers use the bike services over the weekend, with approximately 30 minutes and more, compared to subscribers.
- We can observe the duration in minutes the subscribers spend on the bike per day. Approximately, 10 minutes.