Tableau Homework

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New York City Bike Share Program

Analysis of Ride time Minutes

The New York City bike share program was established in 2012 with significant expansion in 2017 and is still running strong today. The data analyzed is from August of selected years. August was selected because it is frequently the month of highest usage. The years selected were 2015, 2016, 2017, 2018, and 2019. The data from the files was munged to create consistent headings and filtered to included only data where the rider had a birthdate of 1950, 1960, 1970, and 1980. Birthdate filtering was done to follow riders’ patterns through the years.

Dashboard ‘D Bike Use’ shows directly the riding times of each birth year though the 5 years of data. Due to the significant expansion in 2017, its best to look at those years only. It would be expected that riding time would decrease with age and the data supports this. Average riding time decreases across each group when accounting for the decrease across all ages for year 2018. Total minutes also support this with total minutes decreasing steadily when looking from the years 1980 to 1950. Comparing the graphs shows that as the riders age both riding time and the number of riders decreases.

Dashboard ‘D\_Gender%’ looks at difference between men and women using the same birth date groups. It would be expected that fewer women than men would use bike share but is was surprising that the difference was so large. With few exceptions, men comprised over 70% of the users for all stations. Until the purpose for using the bikes is recorded, (ex: commuting, exercise, tourism) is will be difficulty to determine why men dominate bike use by so much.

Dashboard ‘D Map and Gender’ uses a scatter plot to compare the number of bikes with total ride time to show if more bikes means more ride time. This question can’t be confidently answered with this data but other conclusion can be made. The ratio at the most used stations is generally 800 minutes for 1 bike for the time examined indicating that the stations are properly stocked with bikes. The stations reporting the outliers should be audited to assure that they are reporting properly.

Data Files:

201508-citibike-tripdata.csv

201608-citibike-tripdata.csv

201708-citibike-tripdata.csv

201808-citibike-tripdata.csv

201908-citibike-tripdata.csv

Jupyter Notebook

MungingNY.ipynb

Tableau File

NY\_BikeShareAnalysis