Project Communicate Data Findings

Dataset : https://www.fordgobike.com/system-data

Ford Go Bike Syatem is a bike sharing system.Ford Go Bike System Provides service in San Francisco, East Bay and San Joe. Bicycle Sharing systems is very convenient sytem for those who want to take bicycle on rent for short visits.It is very affordable way to visits nearby places with the bicycle.

I choose Ford Go Bike system Data that you can check from this link : https://www.fordgobike.com/system-data as my source data This data set includes information about individual rides made in a bike-sharing system.The features included in the dataset : Trip Duration (seconds) , Start-Time and Date , End-Time and Date , Start Station ID , Start Station Name , Start Station Latitude , Start Station Longitude , End Station ID , End Station Name, End Station Latitude , End Station Longitude , Bike ID , User Type (Subscriber or Customer – "Subscriber" = Member or "Customer" = Casual) , Member Year of Birth, Member Gender

I take data from **2017 to November 2018**

Findings Summary:

For Data Analysis, I considered data from 2017 to November 2018 and found very interesting facts from Exploratory Data Analysis. People took 2252058 rides initially to all ages. And then I choose the age group of members which is lees than or equal to age 60 because 95% of our Data lie in this age distribution so I removed the outliers from the dataset. Now our New Dataset is reduced. In which 20-60 yrs took around 2,0,32,159 bikes rides. 20-30 years Age group users are rapidly growing compared to other user groups. First service is started with 30-40 years users and followed by Age group of 20-30years age group who became dominant over the year. Ford Bike service is used by the two category, Subscribers and Customers .Bike Rentals are high in demand between April to October months due to summer season and they drop during winter season. Subscribers use the service during Weekdays from Monday to Friday for commute purposes between 8-9 am and 5-6pm are busy hours for daily bike riders. 70 % of 20-40yrs used bike rides ,of which 40% of 30-40 age group people took more rides compare to all other age groups. Male took around 75% of all bike rides, whereas female took around %24 of them. Now we talk about customer category. Customer used the bike on weekends that is Saturday Sunday they create a high traffic at 8-9am and 5-6pm has

highest traffic rate for customers. In customer category also 20-30 age group and 30-40 age group are growing bike rides age-group.

Key insights :

For My Data Analysis, I used FordGoBike dataframe , then I started the analyzing part I got to know that the some member age has over 100 years so I didn't consider those members .For Analysis purpose I limited dataset to less thanor equal to 60 years age people. For Univariate Exploration, I started exploring data by Monthly, Weekly, Hourly Bike Trends and Percentage of Age groups and Genders. In Bi-variate Exploration, analyzed by calculating Percentage of Subscribers and Customers and then Monthly, Weekly and Hourly usage by user types and also calculated Average Trip duration and distance for both Subscribers and Customers. In Multi-variate Exploration, I extended analysis by taking three variables using different age groups monthly trends by user types (Subscribers and Customers). Finally, I used heatmap to show when bikes are high in demand during Weekdays,Different hours by user types(Subscribers and Customers).

This is my all Analysis. I hope You will liked it..