# UBER ASSIGNMENT

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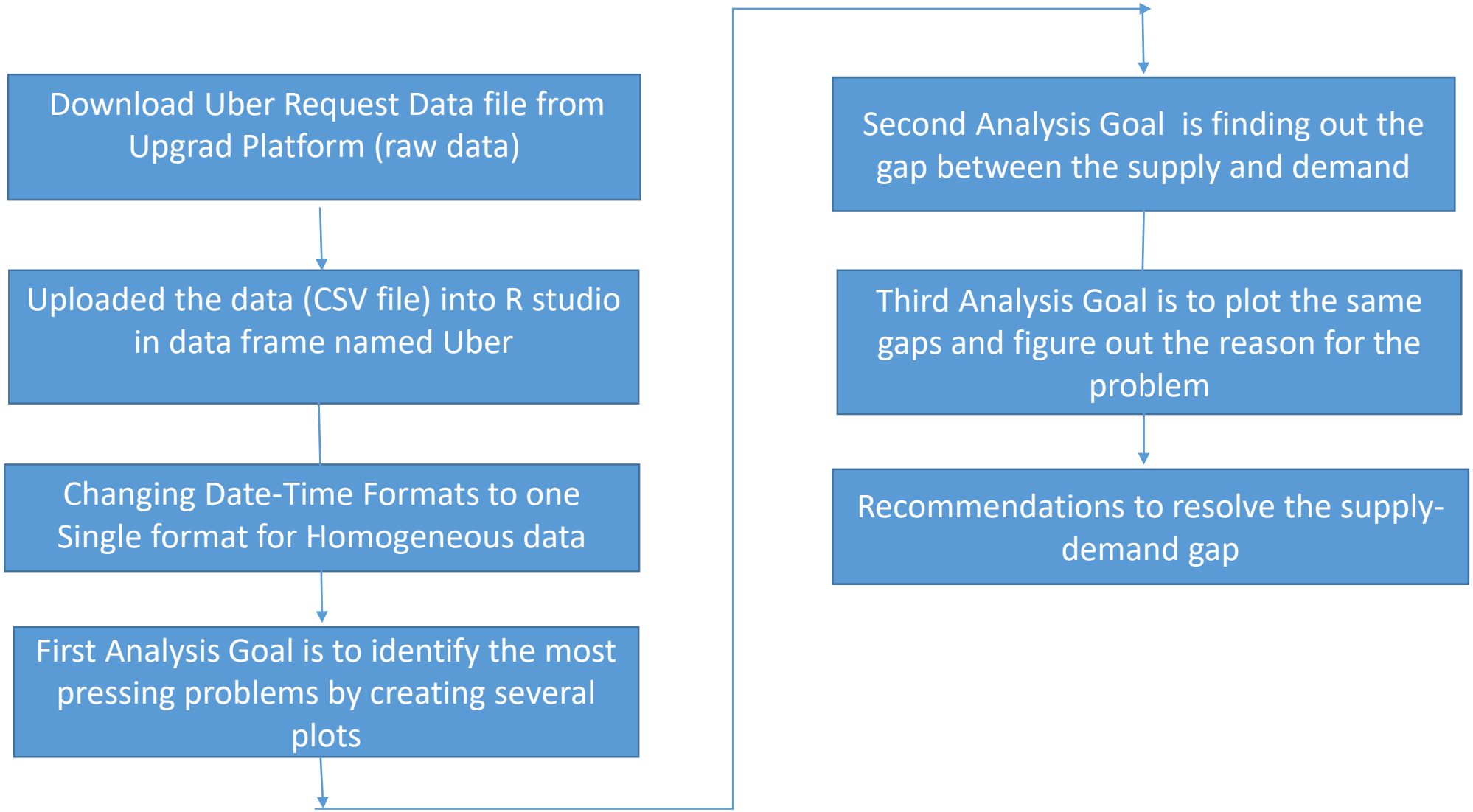
# PROBLEM

- **Uber Technologies Inc.** is a peer-to-peer ridesharing, food delivery, and transportation network company, with operations in 633 cities worldwide.
- Uber provides great opportunity of income to local drivers at their fingertips. Similarly, Uber turns out to be very helpful application for people to get faster transportation services.
- The problem with Uber Drivers is that they have the option to cancel their ride or not show the availability of their cars whenever they wish to do so.
- This problem persists majorly in the requests made to and from Airport. The drivers tend to cancel the trip from the city to the Airport and there is no availability of cars at the Airport.
- The ratio of trips to and from the Airport successfully completed is very less compared to the total trips done within the city.

# PROBLEM SOLVING METHODOLOGY

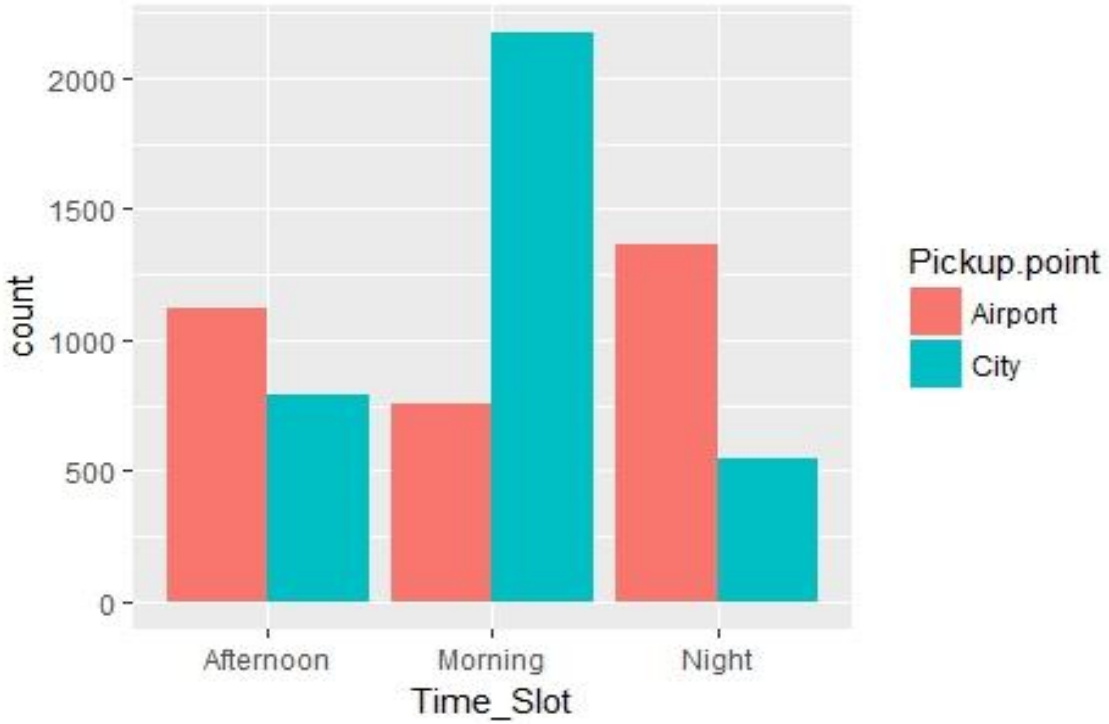


# ANALYSIS DONE

- Firstly, a plot of frequency of requests getting Completed, Cancelled or showing non availability of cars is created as shown below.

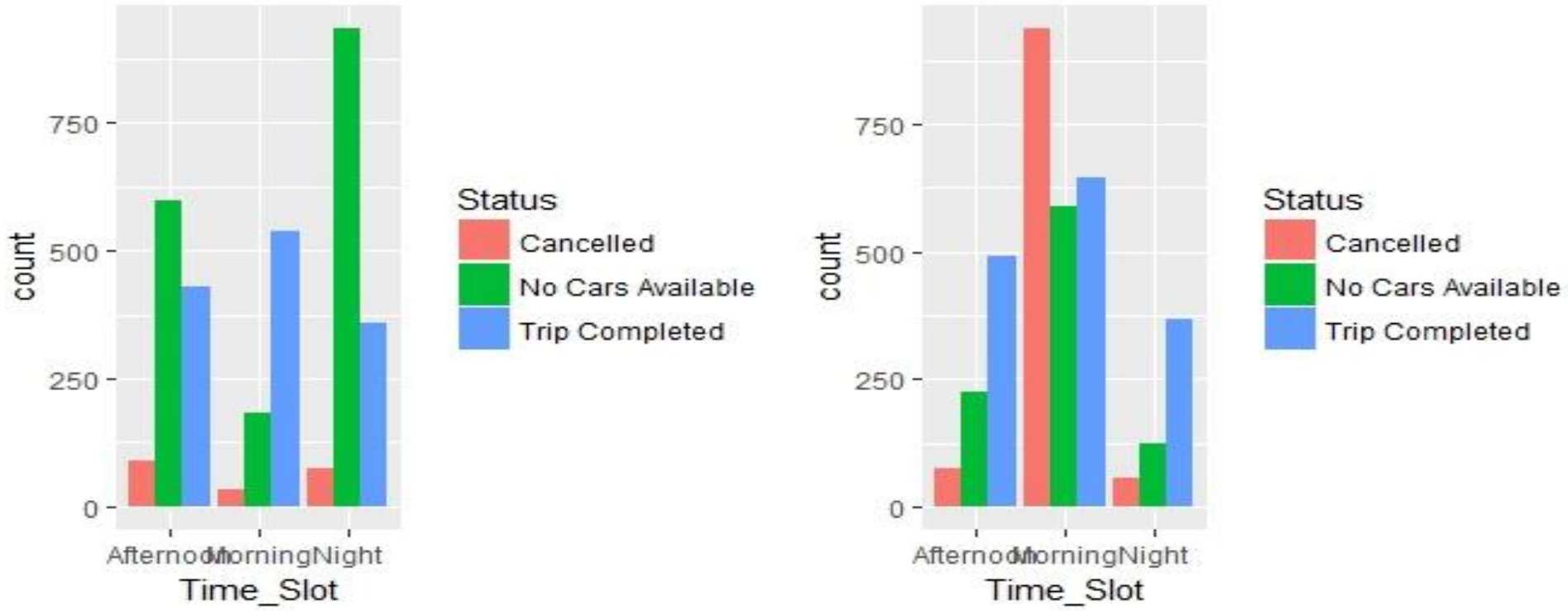
# ANALYSIS DONE

Secondly, a plot of frequency of requests in different time slots is created.



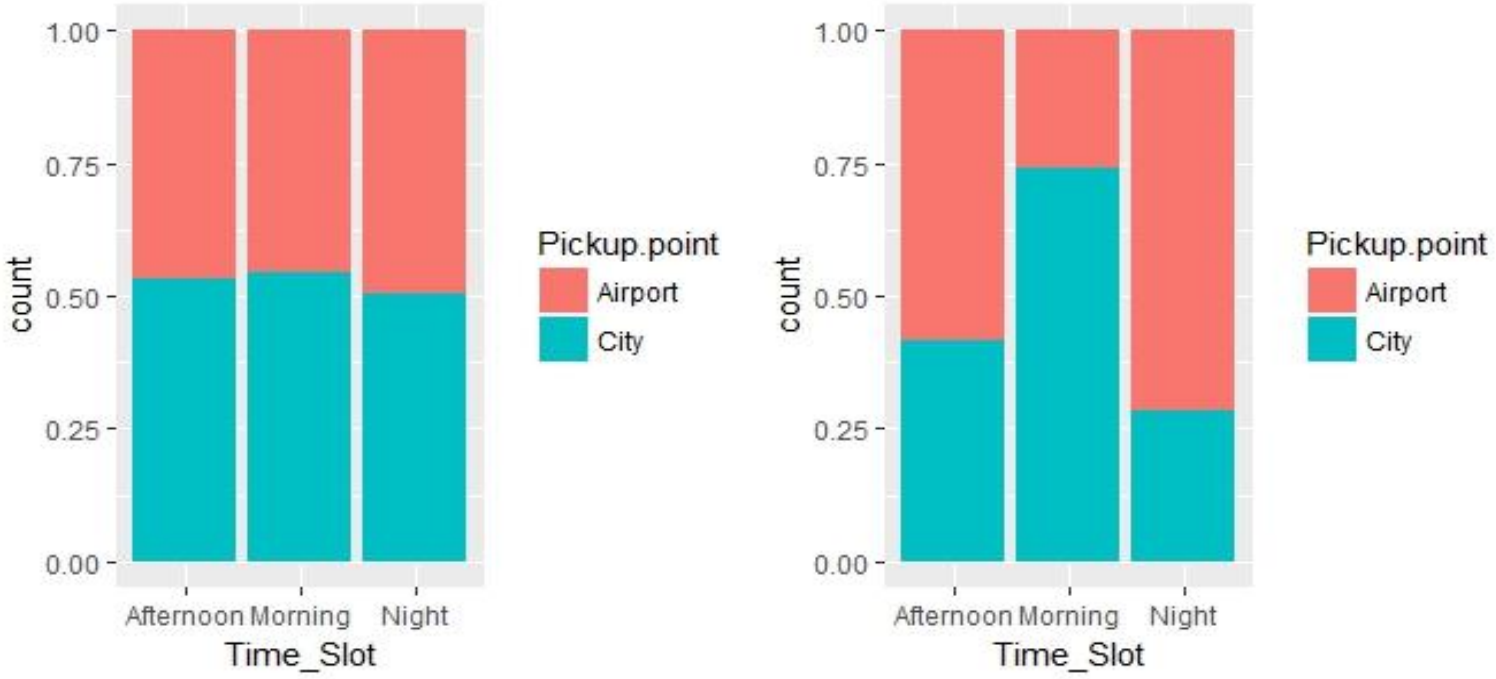
# ANALYSIS DONE

- Alternatively, the same problem can be derived by creating a plot of frequency of requests of Pickup Points (Airport-City & City-Airport)



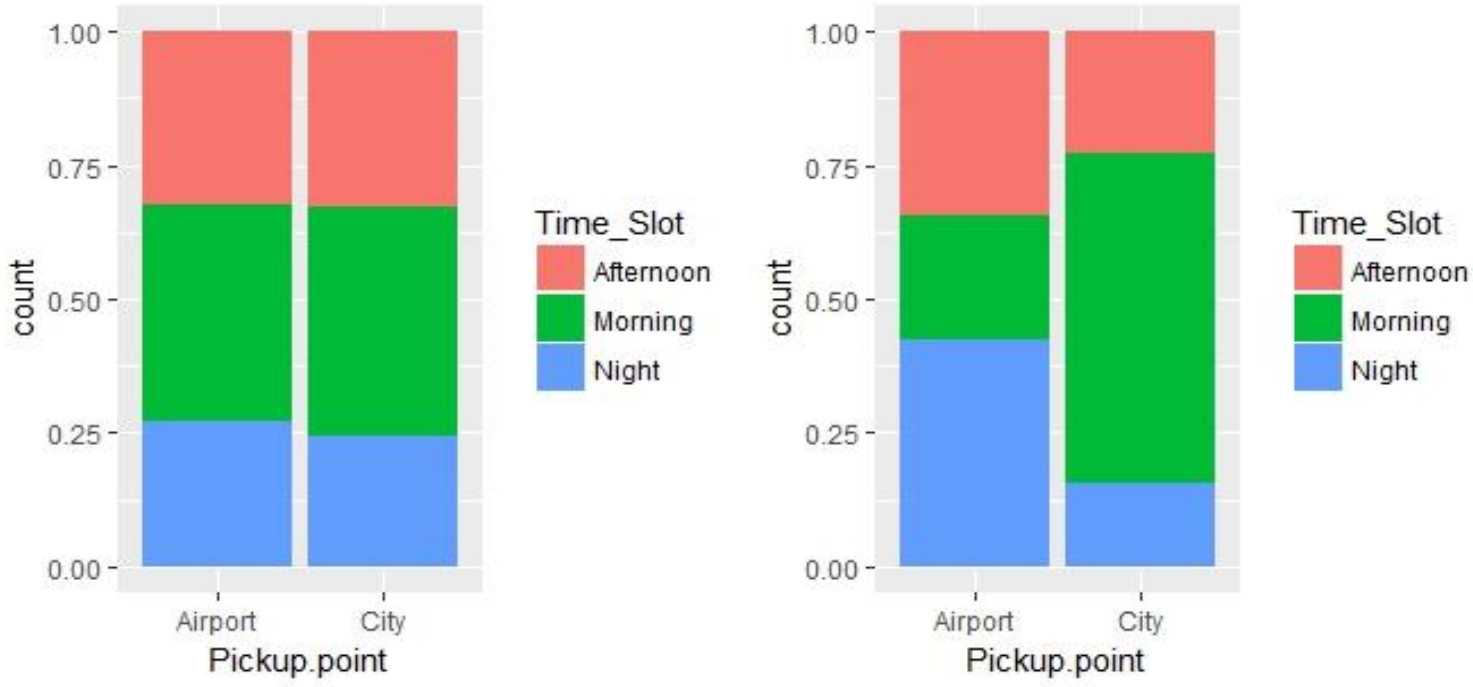
# ANALYSIS DONE

- Supply-Demand Plots based on Time Slots are created



# ANALYSIS DONE

- Supply-Demand Plots based on Pickup Points are created



# RESULTS

- The results of the plot show that there is major non availability of cars at the Airport at night, maximum requests are cancelled which are made from the city during morning time.
- The Supply-Demand gap shows a huge gap in the city in morning and in the night time at the Airport.
- The core reason can be the waiting time (idle time) for drivers to get another request at the Airport after dropping a passenger at the Airport. Also, this incurs huge parking charge at the airport due to which the drivers do not prefer to wait at the airport.

# RECOMMENDATIONS

- Uber can co-ordinate with the Airport Authorities to provide facility to Uber drivers of no or very low parking charge which can make a huge difference in the car availability at the Airport.
- The drivers serving at late night or early mornings should be given more commission so that they are lured to give their services at these odd times.
- Uber can also check-in with the flight arrivals schedules in order to meet the gap of Supply-Demand and accordingly assign certain Drivers for to and fro trips of the Airport only.