

# **UBER CASE STUDY**

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# Problem Statement

- ★ The well known Uber company have observed a demand supply gap in providing services to the customers. To analyse various reasons for this behaviour we are given a data set that has data of driver-ID, Pickup-point, status of the ride, Time stamps of request and drop. Using this information, a fair reason of this behaviour should be analysed and necessary suggestions should be given to overcome this problem.

# Steps to solve

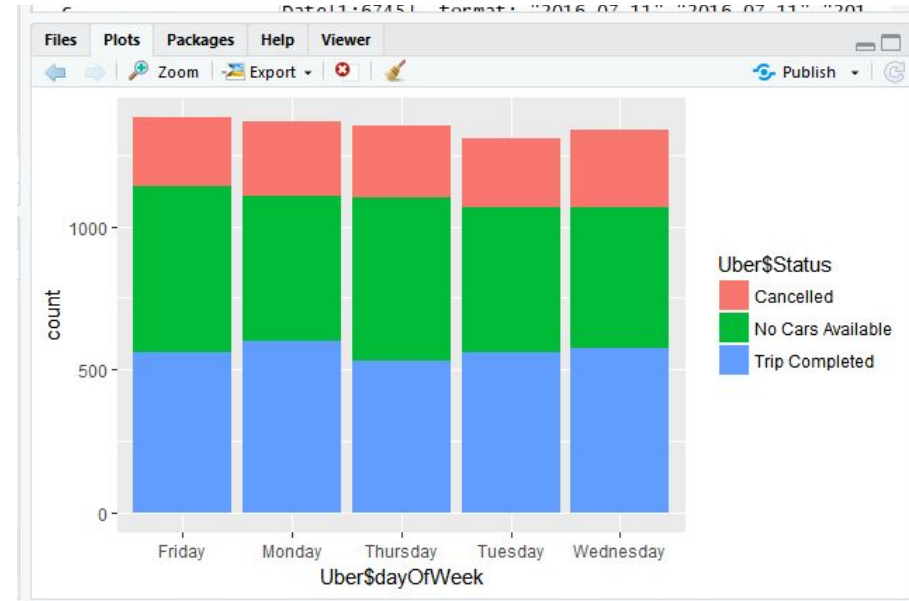
- ★ First, I have observed that the columns of date stamps are not in correct order so data cleaning must be done to put all of them in right syntax.
- ★ Later I have derived the date and time columns separately for Request and Drop that would be useful for analysis.
- ★ I have also thought of deriving the day of week column to see if it has any effect on the problem.
- ★ Using R, Graphs are made to visualise the problem.

# Observations:

1. Most of the status of the cars have completed the trip but also in same proportion there were no cars available. This infers there is a huge demand but rides were not available.

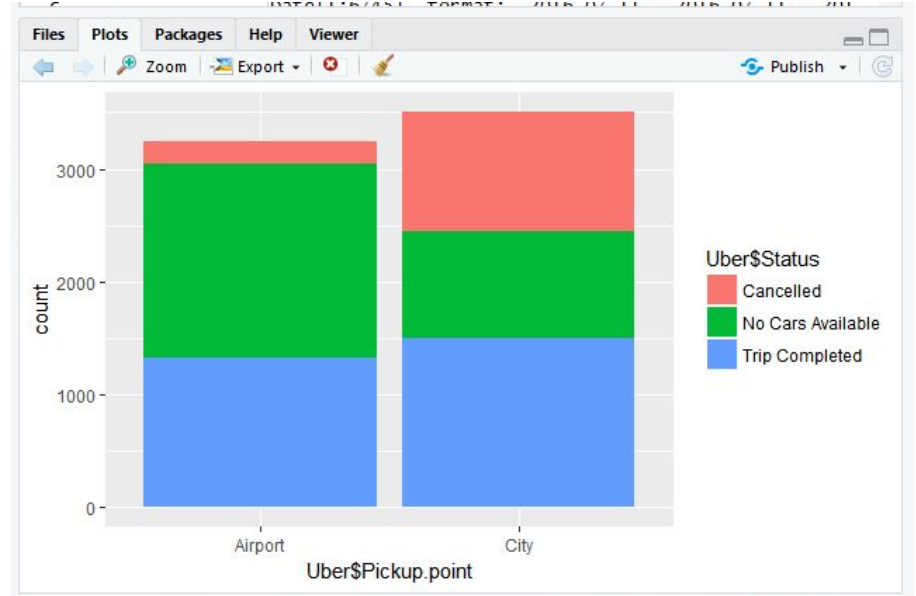


2) From this graph we observe there is no much effect of week days on the problem as all of them show the same count with very much less difference



3) From the graph two important points to infer are

- ★ There were no cars available from the Airport for most of the requests (No cars available are more than trips completed in Airport with few cancellations).
- ★ Requests from city to airport are cancelled more than the non availability of cars. So, maximum cancellations will be from City.



4) From the adjacent graph we observe that

- ★ Rides during the hours 0-4(Late nights) with very few requests and 17-23(Evenings and nights) with high demand there are no cars available. From the previous graph we can say that these requests are from Airport.
- ★ Rides during 6-9(Early Mornings) with high demand there are more cancellations and from previous graph there will be more cancellations from the city to airport.



# CONCLUSION:

- ★ From previous graphs it is evident that there are very few cars available from airport during evenings and late nights. But during 17-23 hours there is a high demand but no supply of rides to the customers. This might be because, most of the drivers generally work during 8A.M -5P.M and they leave. With the available few drivers and increasing incoming flights during 17-23 hrs, there is so much of supply demand gap. One way to reduce this is to employ part time drivers(preferably bachelors) during these hours.
- ★ Drivers cancel the rides during early mornings from city to airport may be because the drivers do not go to airport during these timings because of less revenue they get by waiting till they get another ride which instead of riding in the city. We can solve this by increasing the cost of journey during these hours to compensate the loss that would be occurred to the drivers by waiting there.