



UBER CASE STUDY SUBMISSION

Name:

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Abstract

This report presents the analysis, problem identification, root cause of the problems faced by Uber and ways to resolve it. We have a dataset containing information of the cabs travelling to and fro from city to airport and vice versa. We had extracted relevant information out of the given columns and derived a meaningful analysis out of it. The problems here are the cancellation of cabs and non availabitlity of cabs. There are several factors like pick up points, time of the day, etc,. influencing the problem aspects. Univariate and Segmented analysis are done on the variables to derive useful and meaningful insights from the data.

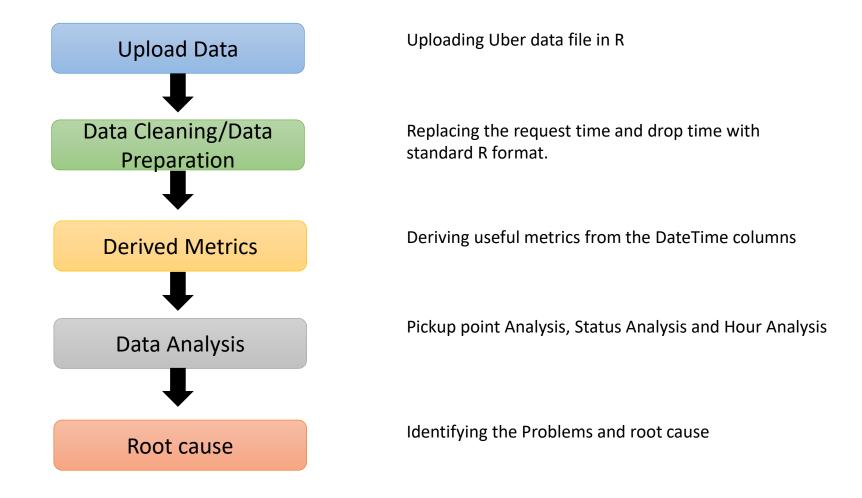
Objective:

The objective of this analysis is to identify the root cause of the problem (i.e. cancellation and non-availability of cars) and recommend ways to improve the situation.





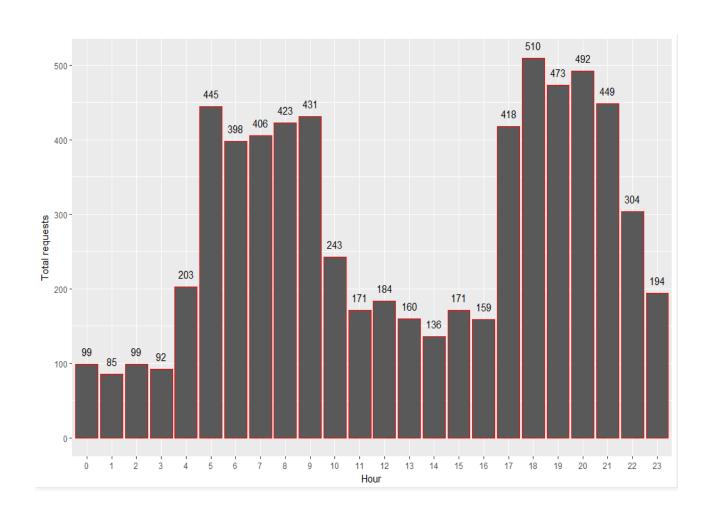
Problem solving methodology- Flowchart







Hourly/Time Analysis



- Hour is extracted from the Request time column.
- A plot is laid based on the total requests based on different hours of the day.
- We can see patterns around here across various timings of the day.
- Let us group these patterns to find much more insights.



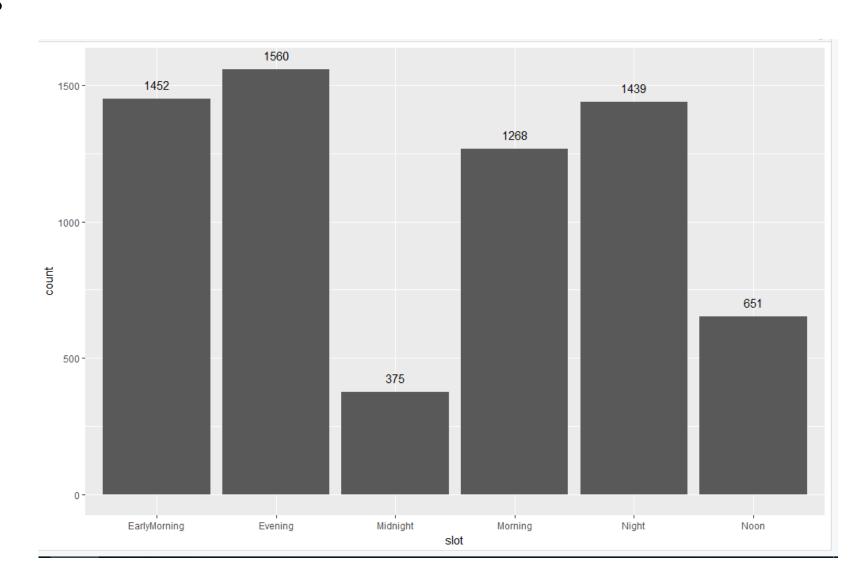


Slot Analysis

Categorising timings of the day into slots i,e.

- Early Morning
- Evening
- Midnight
- Morning
- Night
- Noon

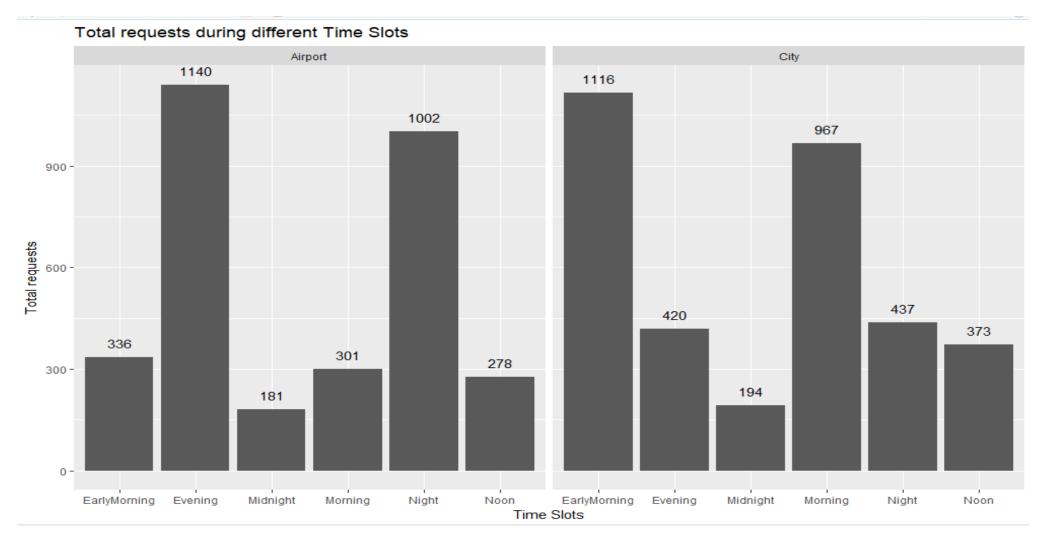
We can see there are more no of requests in the Evening and Early Morning hours.









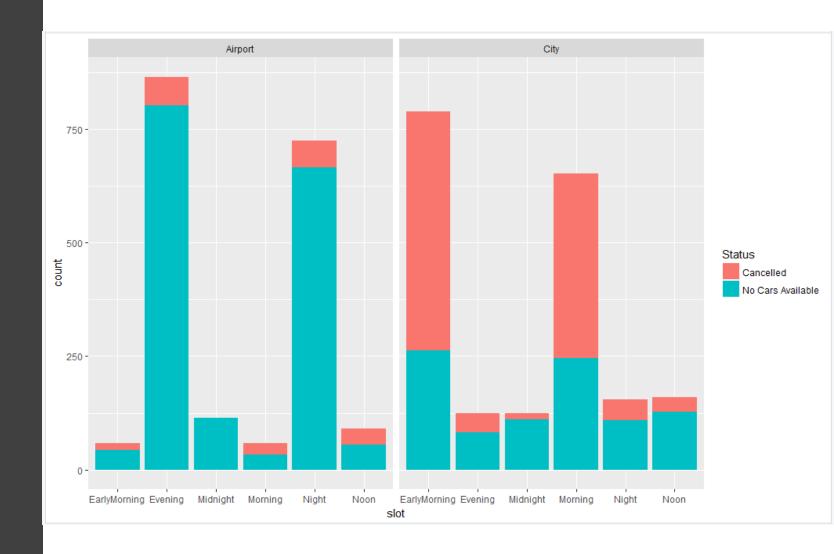


Insights: More requests in the evening from airport; More requests from city during early morning hours

Problems for Uber

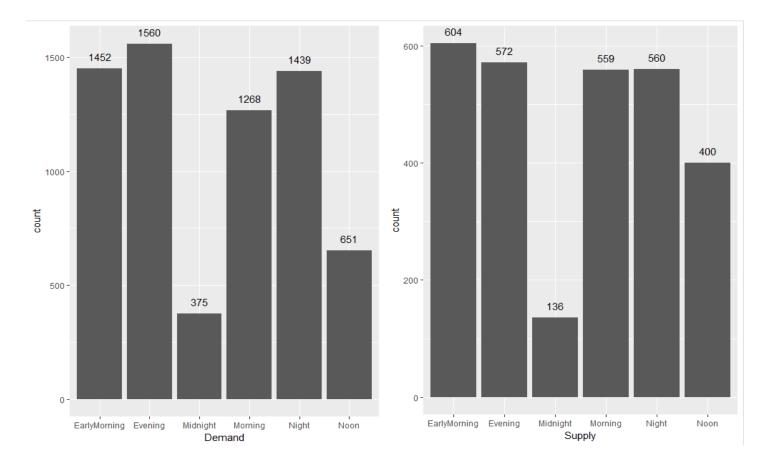
- There are cancellations and non availability of cars almost at any point of time in the day.
- More no of cancellations during the early morning hours from city.
- Maximum non availability of cars during the evening at the airport.









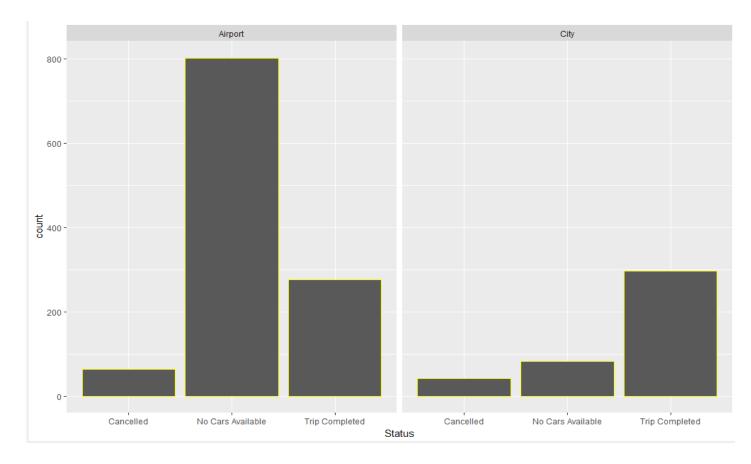


- Demand is the total requests made by the users irrespective of the status at different slots of the day.
- Supply is only the successful completion of trip.
- Plots for Demand and Supply are plotted and it clearly states Demand is more than supply.
- Highest gap is in the evening's

Demand and Supply







- Highest gap is found in the evening's.
- In the evening's it is in the airport where most cars are unavailable/non-availability of cabs exists.

Demand and Supply





Reason for Supply-Demand Gap

- Here ,we can see the total no of requests from city i.e, cabs coming to the airport from city are very less in the evening's.
- And, the requests are more at this time i.e, in the evening's from airport, thus there is huge demand for cabs.
- The cabs/requests from noon are comparitvely very low.
- The supply is not sufficient.
 So is the reason for the highest gap.

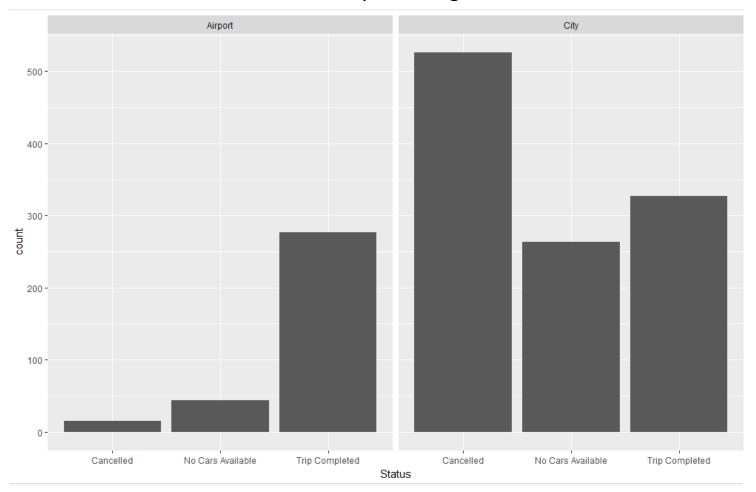






- We have also identified cancellations as another major problem.
- In the same plot above, we can see that the cancellations are more in the early morning hours from city.
- Looks like the no of requests from airport is half the number compared to city.
- So the drivers are cancelling their orders in the city. There are more requests in the later stages but they have to wait till then inturn losing their fares/wages because of idle time.

Early Morning







Recommendations

- Fare to/from the airports can be increased so that the profit margin is more in compensation to the idle time/lack of orders at the airport.
- Dedicated cabs can be introduced to and from airport/city and vice versa.