



Uber business problem

ABSTRACT

Problem statement:

Uber is facing driver cancellation and non-availability of cabs to and from airport leading to impact on the business and loss of potential revenue.

Objective:

To identify the root cause of the supply-demand gap of cabs to and from airport.

Data used for analysis:

- The data used is only to and from airport
- The span of the data is of 5 days.



Problem solving methodology

Data collection and cleaning

- Import the data
- Identifying the data quality issues and clean the data
- Format date and time variables
- Extract new variables required for analysis



Data exploration and analysis

- Analyze different variables
- Analyze variables across different time slots
- Identify the types of requests, time slots and locations that constitute for the supply demand gap.

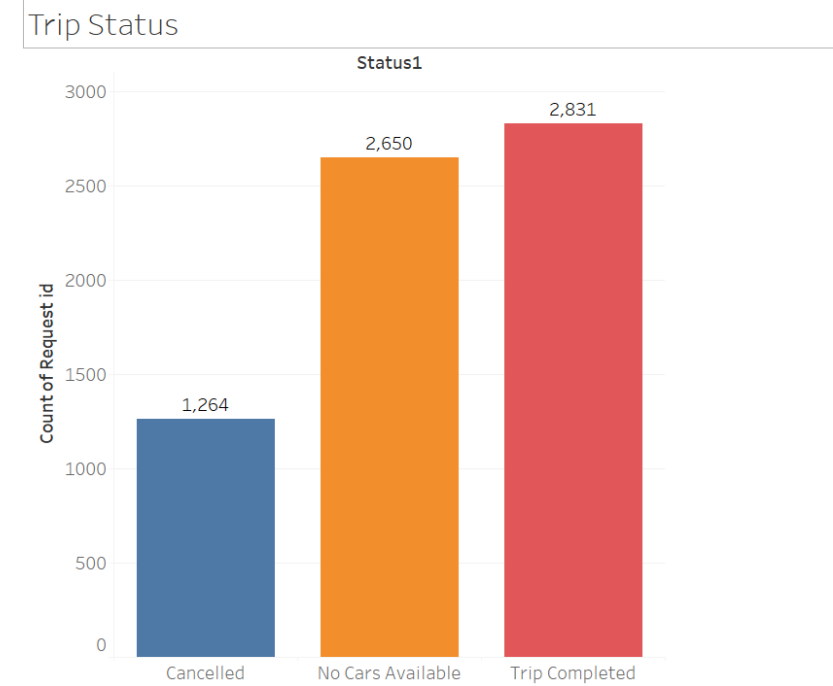
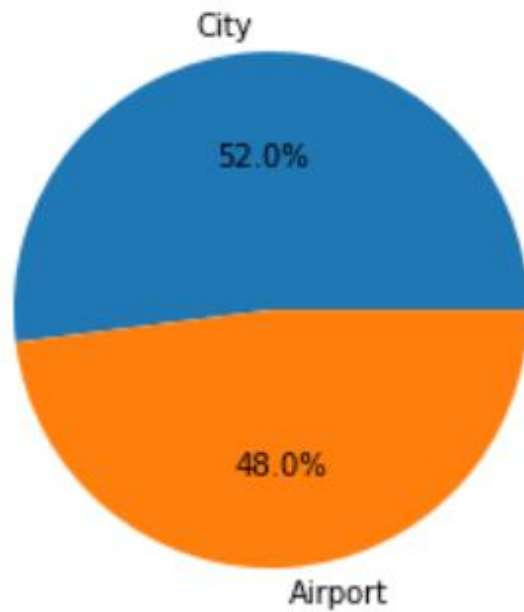


Outcome and recommendations

- Visualizing the problem
- Presenting the observations
- Recommendation to resolve the problem

Problem

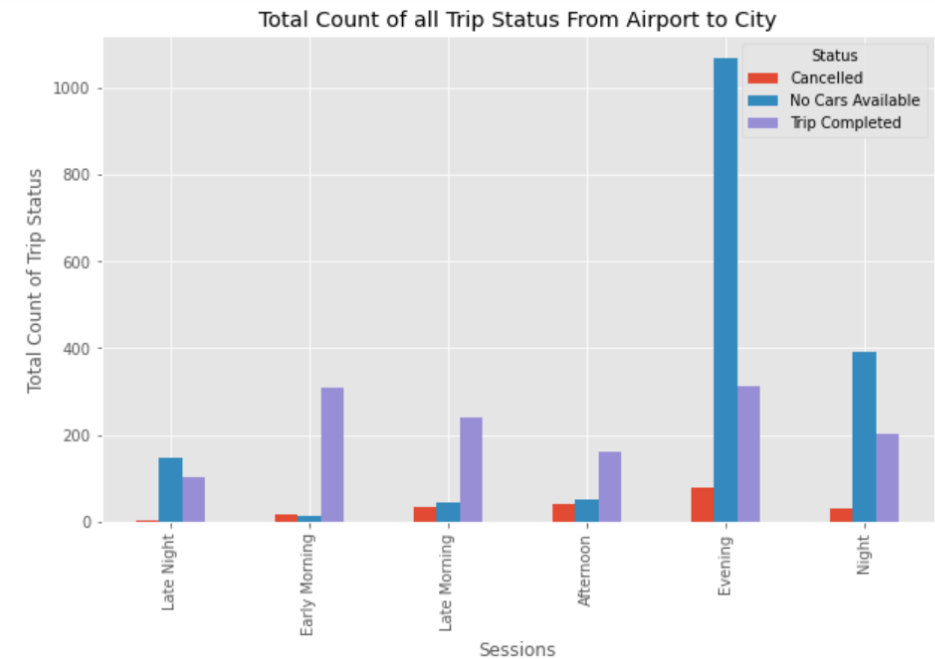
- Overall request is the same in city and airport
- From the request, 1264 cabs cancelled and 2650 cabs are not available.



Further analysis of the problem based on time

Inference:

1. Airport to City peak hour is Evening(4PM to 8PM) and customer is facing 'no car available' issue.
2. City to Airport peak hour is Early morning(4AM to 8PM) and customer is facing 'cancelled' of ride issue.



Analysis of supply-demand gap

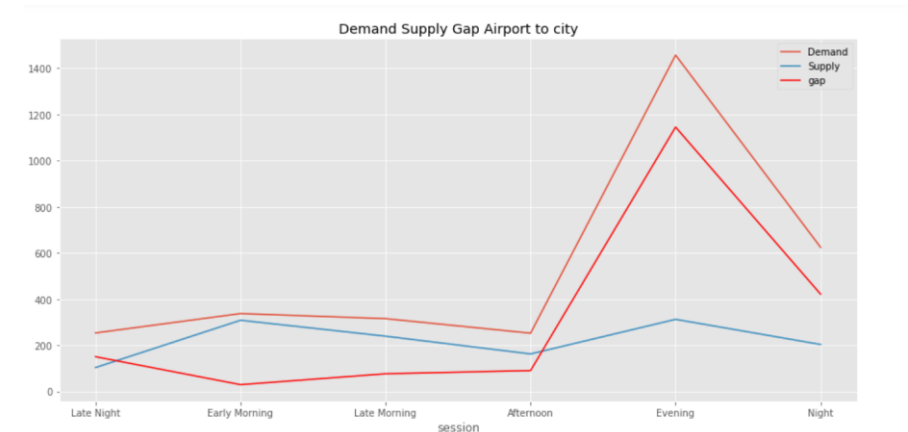
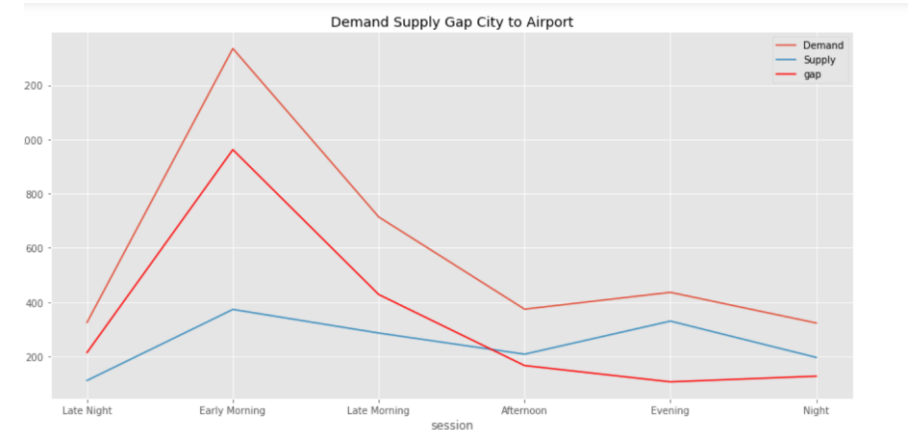
Reason:

In the morning hours:

Though there is a high demand for cabs from city to airport, the vice versa is not true. Hence the driver tends to 'cancel' the request as getting a return trip from airport to city would be tough.

In the evening hours:

Though there is high demand for cabs from airport to city, the vice versa is again not true. Hence 'no cars available' in the airport is the highest in the evening.



Possible solutions and recommendations

Setting targets for
drivers to take up the
City to Airport or
Airport

Encourage ride-sharing

Surge Charge the
customer for late
evening trips

Maintaining
transparency with
customers during Late
Evening Rush Hour.

Uber can increase
market share by
marketing campaigns
and offers to customers
when demand is low.