

Uber Supply Demand Gap Case Study

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Abstract

Objective:

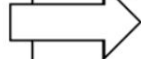
To Combat the loss of revenue being faced by Uber due to driver cancellation and non availability of cabs To and Fro Airport.

Identify the root cause for the gap and suggest strategies to combat the same.

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

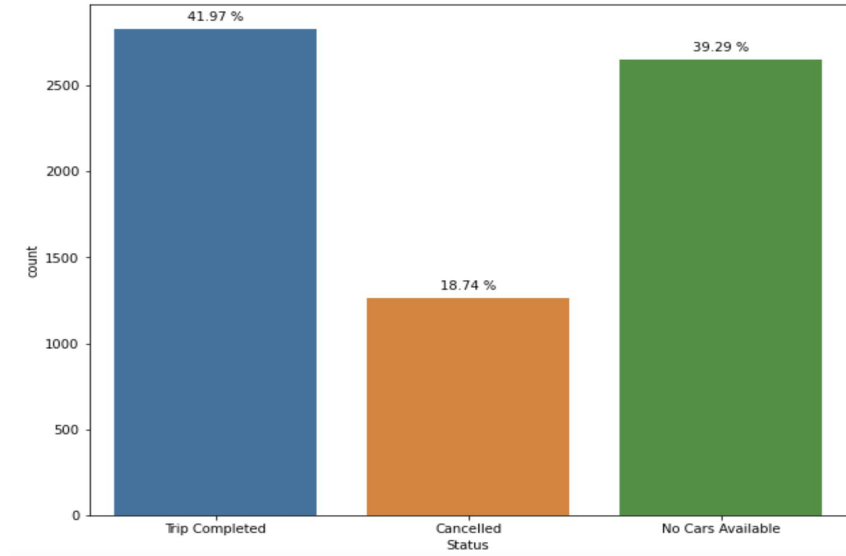
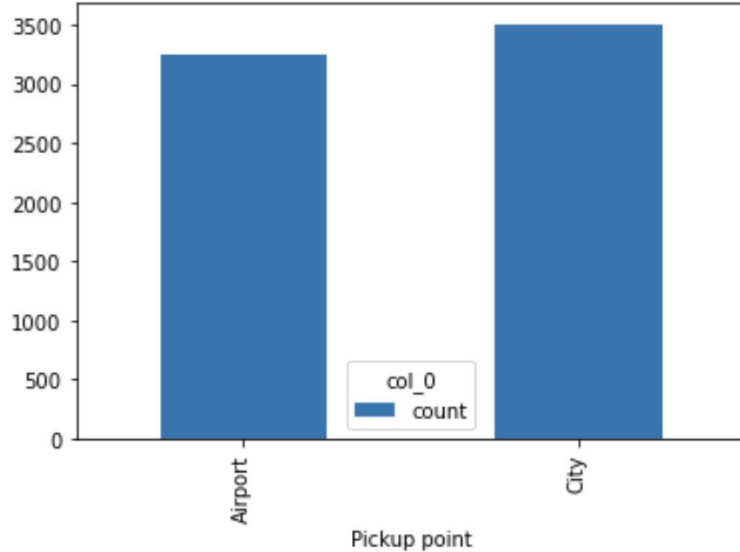
- Analyze different variables
- Analyze variables across different time slots
- Identify the types of requests, time slots and locations that constitute for the supply demand gap.



Outcome and recommendations

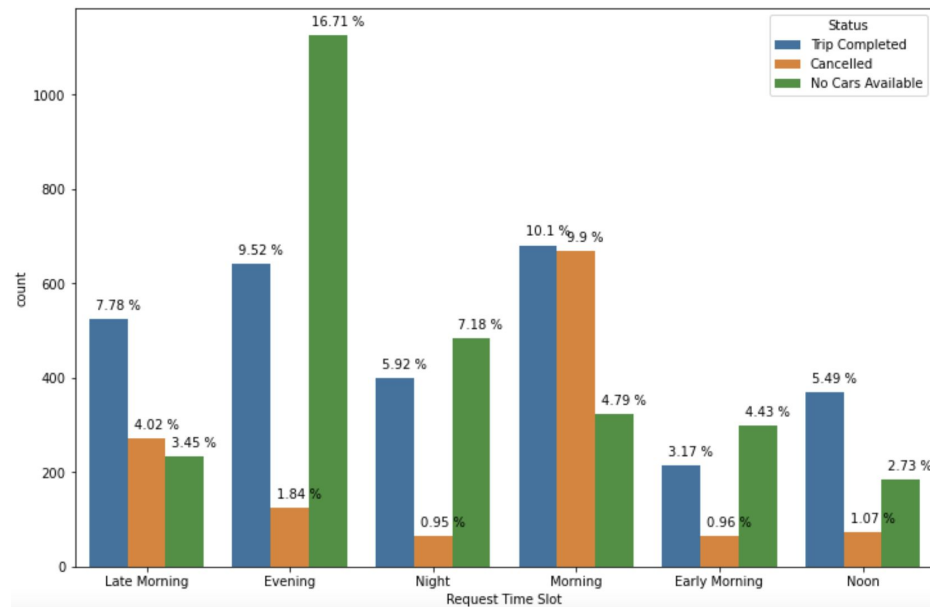
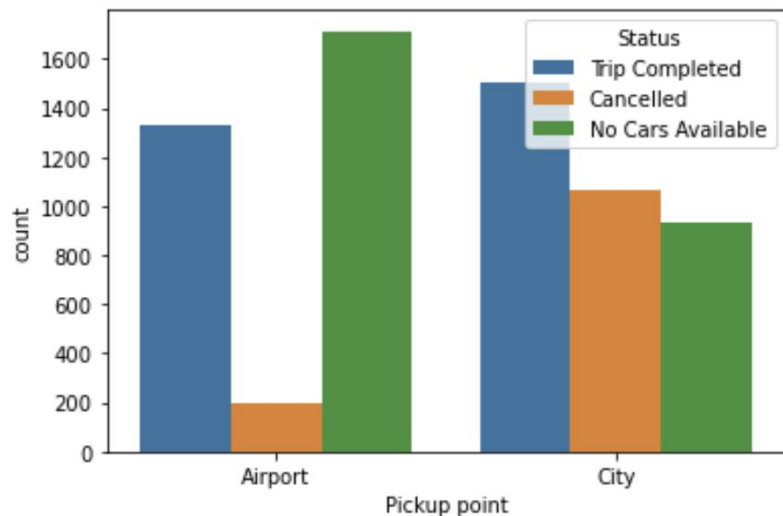
- Visualizing the problem
- Presenting the observations
- Recommendation to resolve the problem

Analysis of trips viz pickup point and time



1. No. Of Requests from Airport and City are almost similar.
2. Out of all requests only 41.97 % requests get completed.

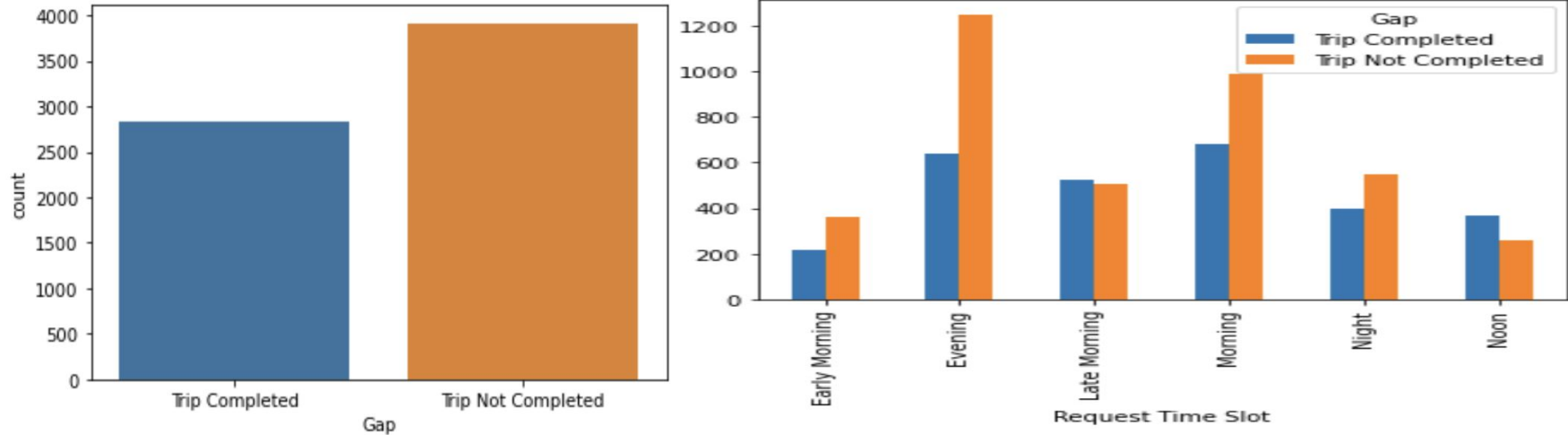
Analysis Based on Location and Time Slots



1. There are more 'No cars available' from Airport to City.
2. There are more cars 'Cancelled' from City to Airport.

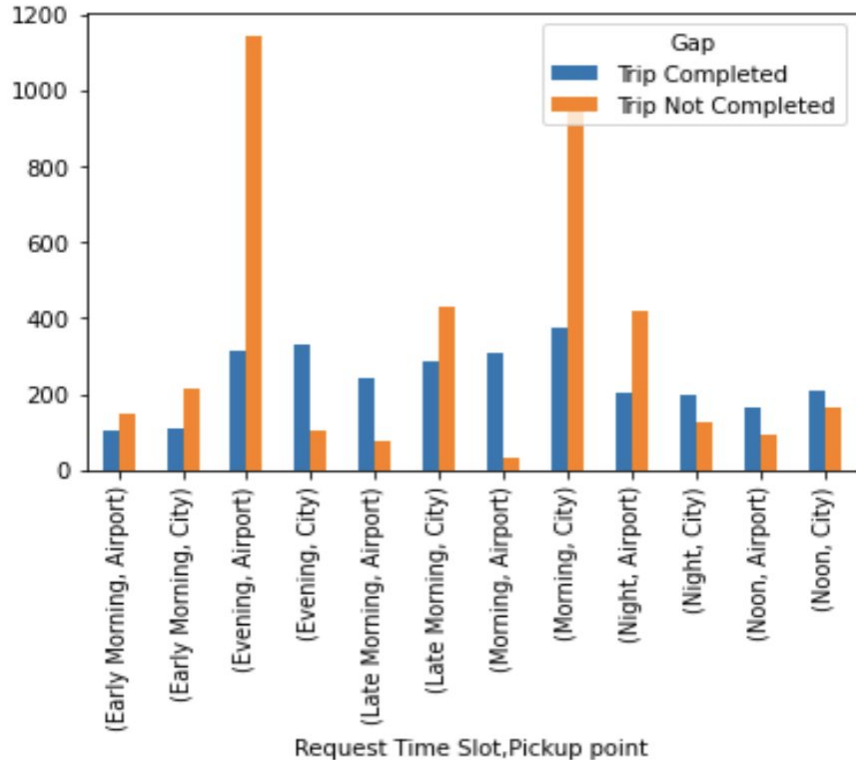
1. City; 5-9 am: most cabs get cancelled.
2. Airport; 5-9 pm: No Cars are available.

Analysis of Supply Demand Gap



1. There is a Gap of 58 % out of which 15 % exists in Morning and Evening each.

Analysis of Supply Demand Gap based on Location and Time



1. In Morning Hours, Gap being 15 % is due to Cancellation by Drivers.
2. In Evening Hours, Gap being 15 % is due to non availability of enough Cars.

Conclusion

Pickup Point-City:

As per the analysis, the morning time slot is most problematic where the requests are being cancelled. Most of Drivers might be cancelling this thinking of airport being far and hence fetching rides nearby in the Office hours.

Pickup Point-Airport:

Upon analysis, the evening time slot seems to be most problematic for pickup points as airport where the requests being No Cars Available. The reason seems to be that not enough cars are available to service the requests as cars might not be available at the airport due to the cars serving inside the city.

Recommendations

For Bridging the Gap following recommendations can be implemented by Uber.

1. Constructing a Taxi Stand at the Airport where cabs will be available at all times.
2. Provide incentives to drivers for Airport trips during Peak hours, this will result in less cancellation of Airport rides from City in Morning times especially.
3. Promote Advance booking to Airports, this will help drivers plan their other rides accordingly.
4. Also work on onboarding more Cabs in Uber's fleet.