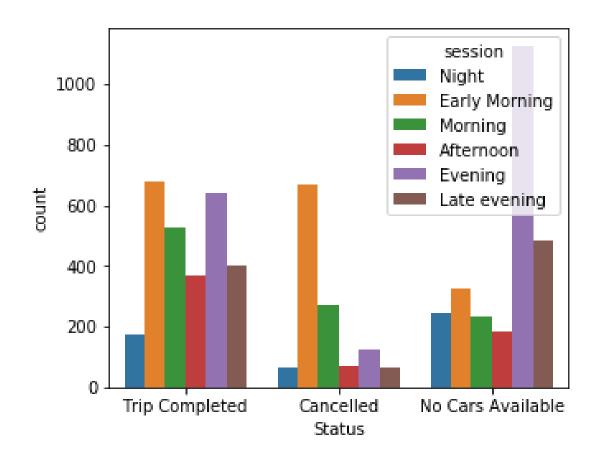


Uber Case Study

Kumar Avishek | Cohort8 | 2nd December 2018

Most Pressing Problem:



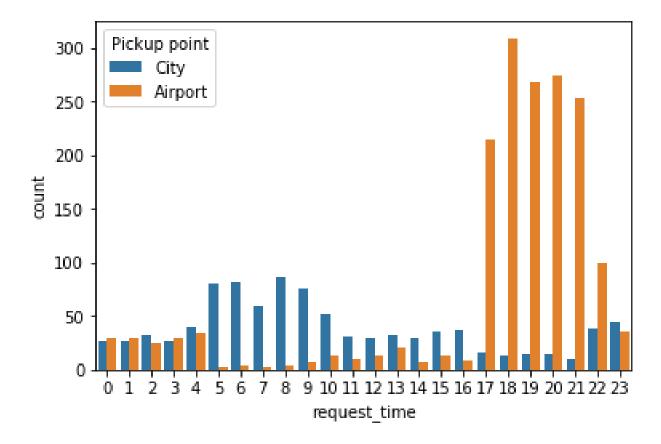
Observations: Top 2 Problems

- No Cars Available during Evening Hours 4PM 8PM is the Most peaking problem
- Trips Getting Cancelled and No cars available Early Morning 4AM 8AM

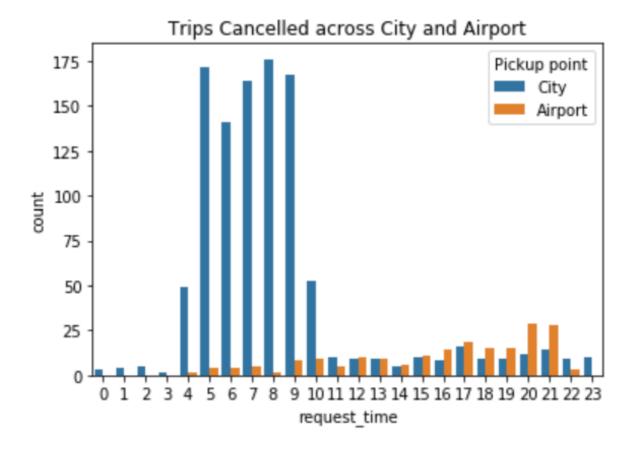
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CLASSIFYING THE OBSERVATION AS PER CITY AND AIRPORT.

Unavailability across the day across City and Airport



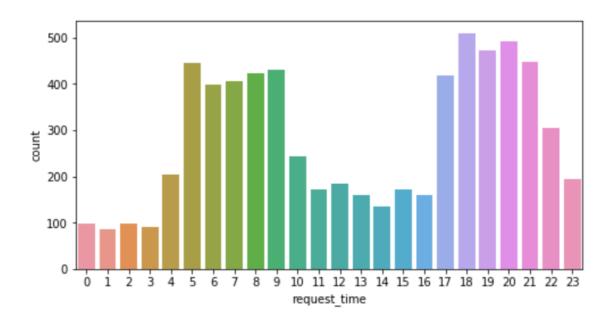
<u>Inference</u>: Unavailabity of Cars at Airport in the evening 6PM is the biggest problem for Uber.



<u>Inference</u>: Trips Getting Cancelled in the evening 5PM – 9PM is another Problem for Uber that needs to be looked upon.

Gap between supply and demand

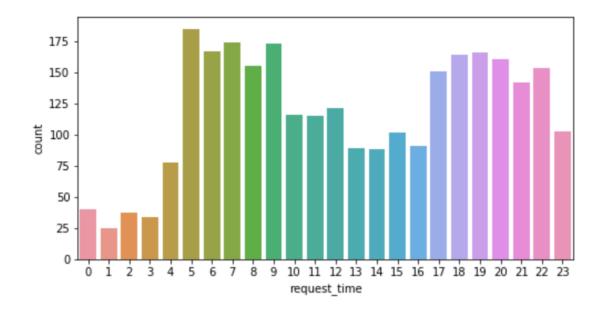
Demand across the Day



Peaking Demand at 6 PM where demand of cars stand at 504

Inference: High Demand of Cabs in the Early Morning and Evening Time Zone.

Supply across the Day



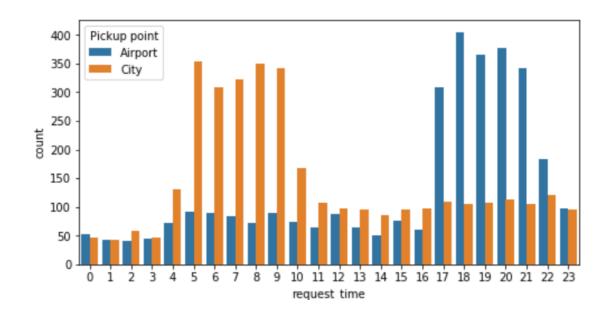
<u>Inference:</u> Maximum cabs supplied at 5AM-9AM (Early Morning)

Followed by Cabs between 5 PM - 8PM (Evening)

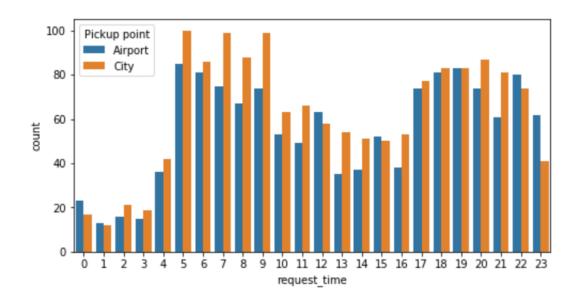
```
### Maximum Variation (Gap) is at 6-0 Clock in the Evening: 344
#Number of Cars Required(Demand) = 508
#Number of Cars Supplied(Supply) = 164
```

```
## Second Highest Variation (Gap) is at 8PM : 331
#where :
##Number of Cars required(Demand):492
##Number of Cars supplied(Supply):161
```

Demand of Cabs across City and Airport



Actual Supply of Cars across city and Airport:

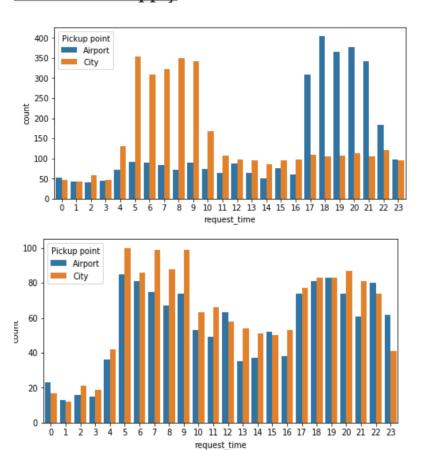


INFERENCE:

Gap at Airport in the evening is highest peaking at 6 PM ($_{324}$) and 8 PM ($_{308}$)

3: Reasons: supply-demand gap

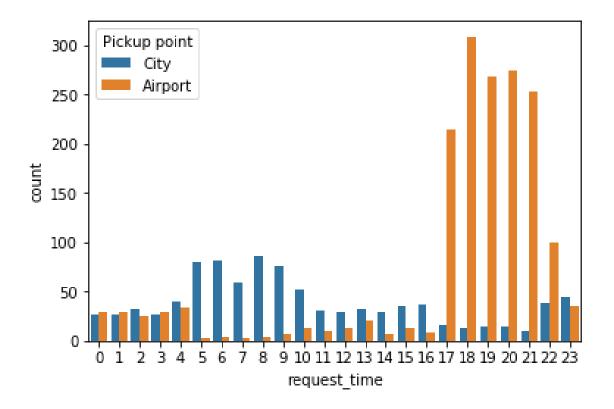
Demand vs Supply



Observation:

1) There is huge difference in the number of Cars required and Cars supplied at the Airport in the Evening.

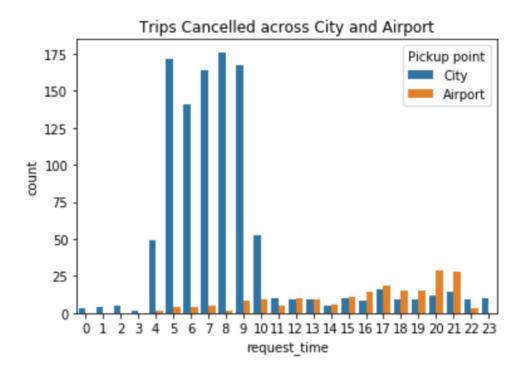
Reason: Shortage(Unavailability) of Cars at is the reason behind this Gap .Number of Cars at the airport has to be increased.



2) There is huge difference in the number of Cars required and Cars supplied in the City in the Time Zone 5AM-9AM. .

Reason: Trip cancellation in the morning hours in the city during early morning and morning hours is the prime reason for this Gap.

On an Average 600 Cabs are being cancelled in the time zone (5AM - 9AM)



Inference:

- 1: Number of cars supplied at the Airport has to be raised in the evening hours.
- 2: Trip cancellation in the morning hours in the city during 5AM 9AM has to be worked upon finding out if they are being cancelled by the customer or by the driver. There can be multiple reasons for this cancellation like:

Driver cancelling due to traffic congestion in the required route

Customer Booking multiple cabs, opting for the arrived first cab and cancelling all the rest.

4:Recommend some ways to resolve the supply-demand gap:

- Cars supplied at the Airport has to be raised in the evening hours:

Which can be achieved by adding the number of cars

By shifting the unused cars towards airport before the 5PM – 9PM time Zone

 Trip cancellation in the morning hours in the city during 5AM – 9AM has to be worked upon finding out if they are being cancelled by the customer or by the driver.

There can be multiple reasons for this cancellation like:

- Driver cancelling due to traffic congestion in the required route
- Customer booking multiple cabs, opting for the arrived first cab and cancelling all the rest.

All these reasons need to be worked upon by working on data like:

- -Driver Rating
- -Customer Rating
- -Reason for cancellation
- -Charging both the driver and the customer for Cancelling.