UBER SUPPLY-DEMAND GAP

SUBMISSION

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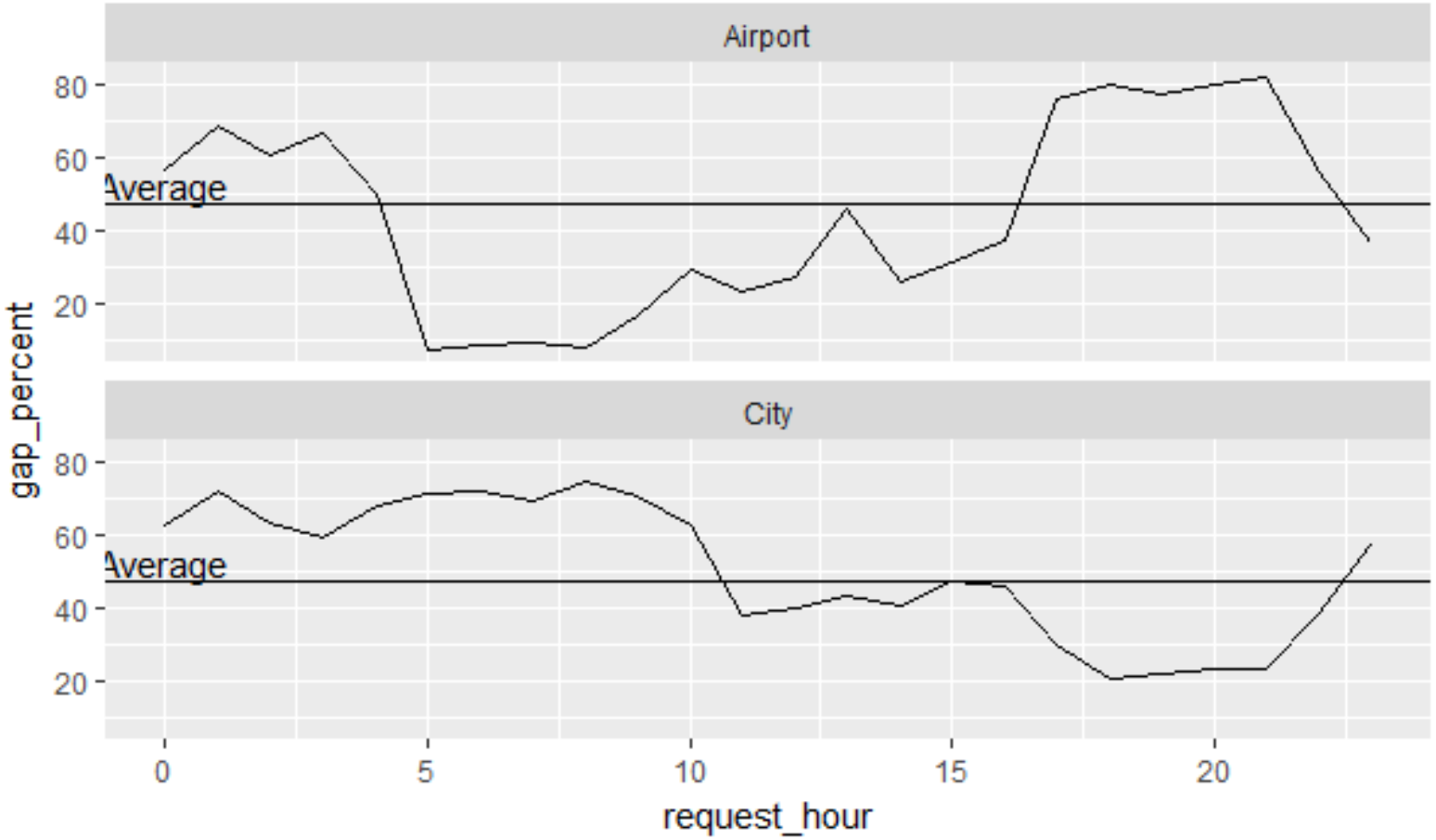
Business Objective

1. Finding the possible root cause of the potential loss of revenue caused by Non-Availability and Cancellation of Cabs.
2. Analysis of the Supply- Demand Gap Created because of the problems mentioned in the point 1.
3. Ways to resolve the Supply- Demand Gap.

Annotations Used –

1. Supply-Demand Gap – SD Gap

Problem Graph- Graph 1

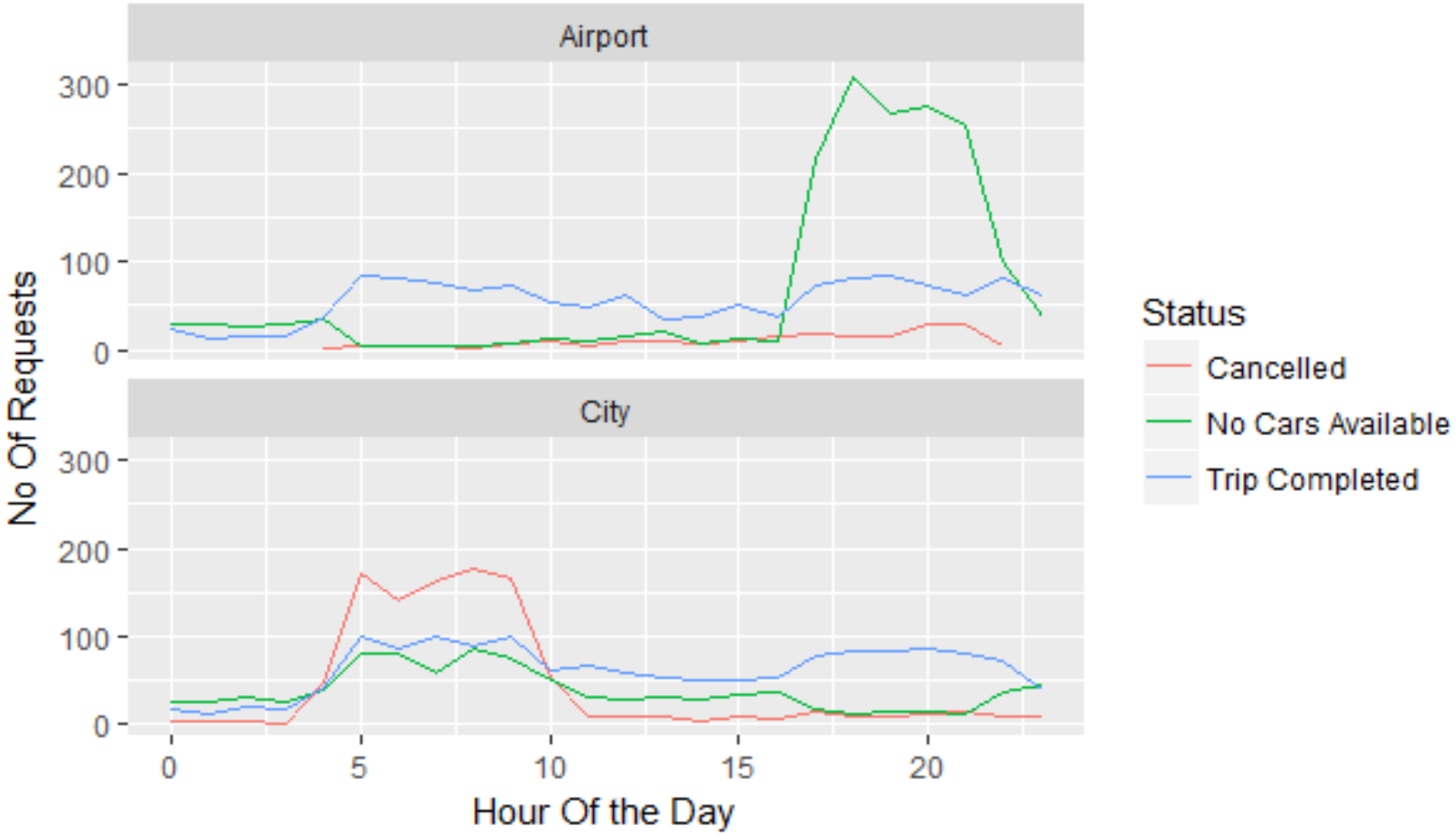


Analysing Graph-1

1. Average Supply-Demand Gap % - 47.62
2. Problem Time Slots with high SD Gap

No.	Time Slot	Type of Request
PE-1	00:00 hrs. - 4:00 hrs.	Both
PE-2	4:00 hrs. – 10:00 hrs.	City to Airport
PE-3	17:30 hrs. – 23:00 hrs.	Airport to City

Analysing Specific Problems- Graph-2



Analysis- Graph 2

Reference – Graph 2

Time slot :00:00 AM to 4:00 AM (Night) Type of Request- Both

Reason for SD Gap- No Cars Available

As we can see in the Graph 2 this can be the because of end of duty hours for most of the Uber drivers, so availability will be less.

Time slot : 4:00 AM to 10:00 AM (Early Morning) Type of Request- City to Airport

Reason for SD Gap- Request Cancellation

This can be as the flights coming to airport are very less at this time of hour ,as we can see that the demand is easily managed at the airport(airport to city), so idle time of the driver coming to the airport from city will be more as they will get return trip only when demand will go up in afternoon as and when more flights lands, so drivers tend to cancel the requests from city to airport.

PE-2 Analysis and Solution

Reference – Graph 2

Time slot : 17:30 P.M. – 23:00 PM**(Late Evening) Type of Request- Airport to City**

Reason for SD Gap- No Cars Available

This can be as inflow to the airport tends to decrease as more flights land at the airport then taking off, so the outflow of driver from the airport is more then the inflow coming from the city, as shown in the graphs the trip completed line curve is almost same for City and Airport during this hour, and as this is the peak time in the city most drivers tend to be busy in other buckets of the city.

Recommended Solutions

1. **To manage the shifts of the driver to meet the late night unavailability of cabs.**
2. **Incentivize the driver more(may be changing the model of there incentive, more Kms driven, more incentive) if the idle time for him at the airport is more, so that they tend to cancel less.**
3. **Predictive Analysis by analysing the flight patterns and making them aligned to the shifts of the drivers so that inflow and out flow can be maintained**
4. **Proactively tell drivers to move within these areas not in real time but a 2 hour or 3 hour lag so that they can position themselves there when the demand arises(Non- availability Problem- Getting supply from other pockets of the city where there is not much demand).**
5. **Sending out weekly communication to drivers in real time to inform them about high demand time at the airport with specific recommendations enabling driver-partners to make best decisions, increase earnings and lower ETAs.**