Uber Supply-Demand Gap

Name:

1. Alok Kumar Singh

Abstract

Customers of Uber India faces a problem of cancellation by the driver or non-availability of cars.

These very issues also impact the business of Uber. If drivers cancel the request of riders or if cars are unavailable, Uber loses out on its revenue.

Business Objective –

- The aim of 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.

Assumptions –

1-All time are in IST time zone.

2- If request is raised from city. I assumed the destination is only airport. Vice versa

3- Day-Slot is divided according to below timeslots as per Indian conditions-

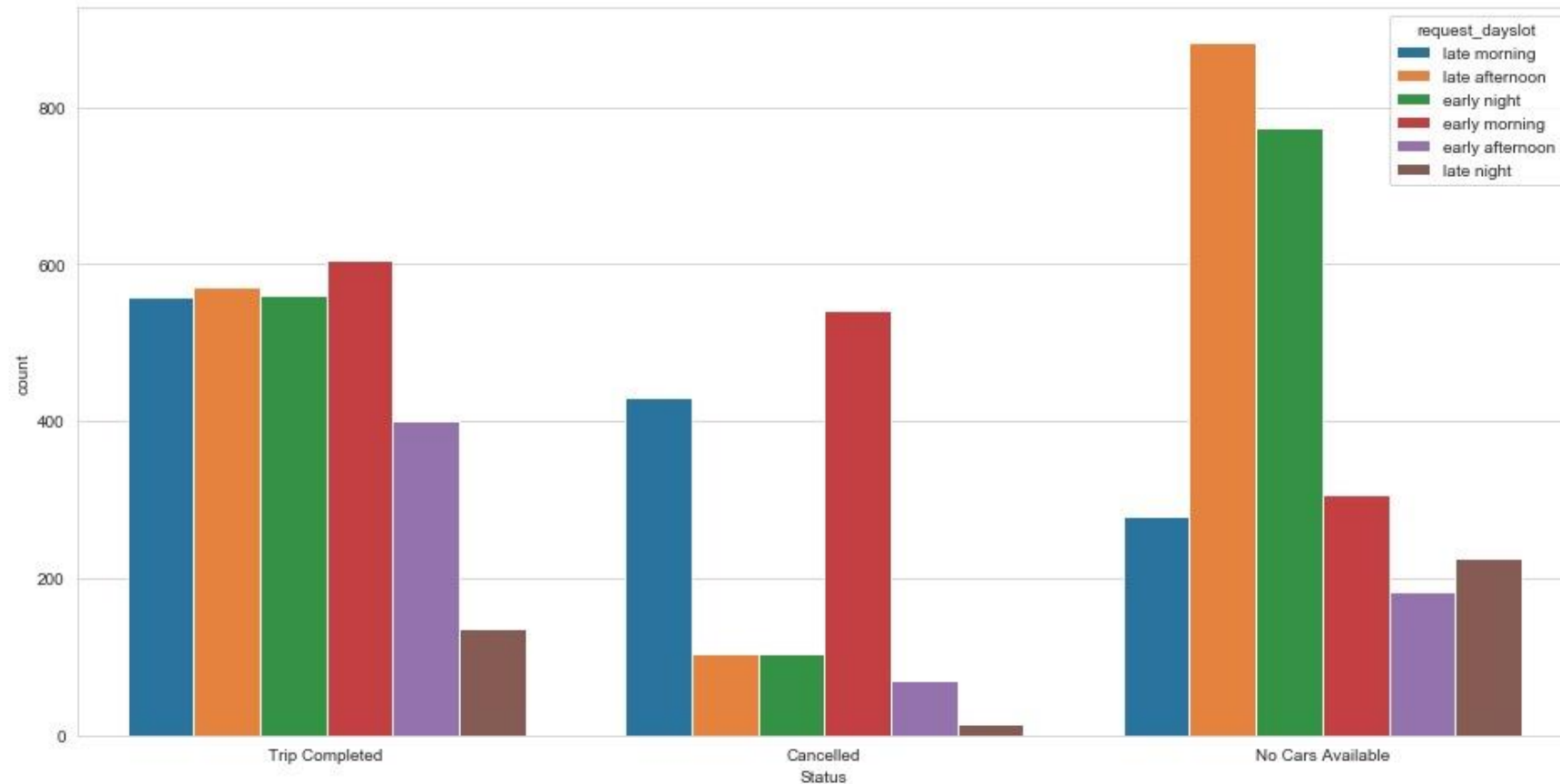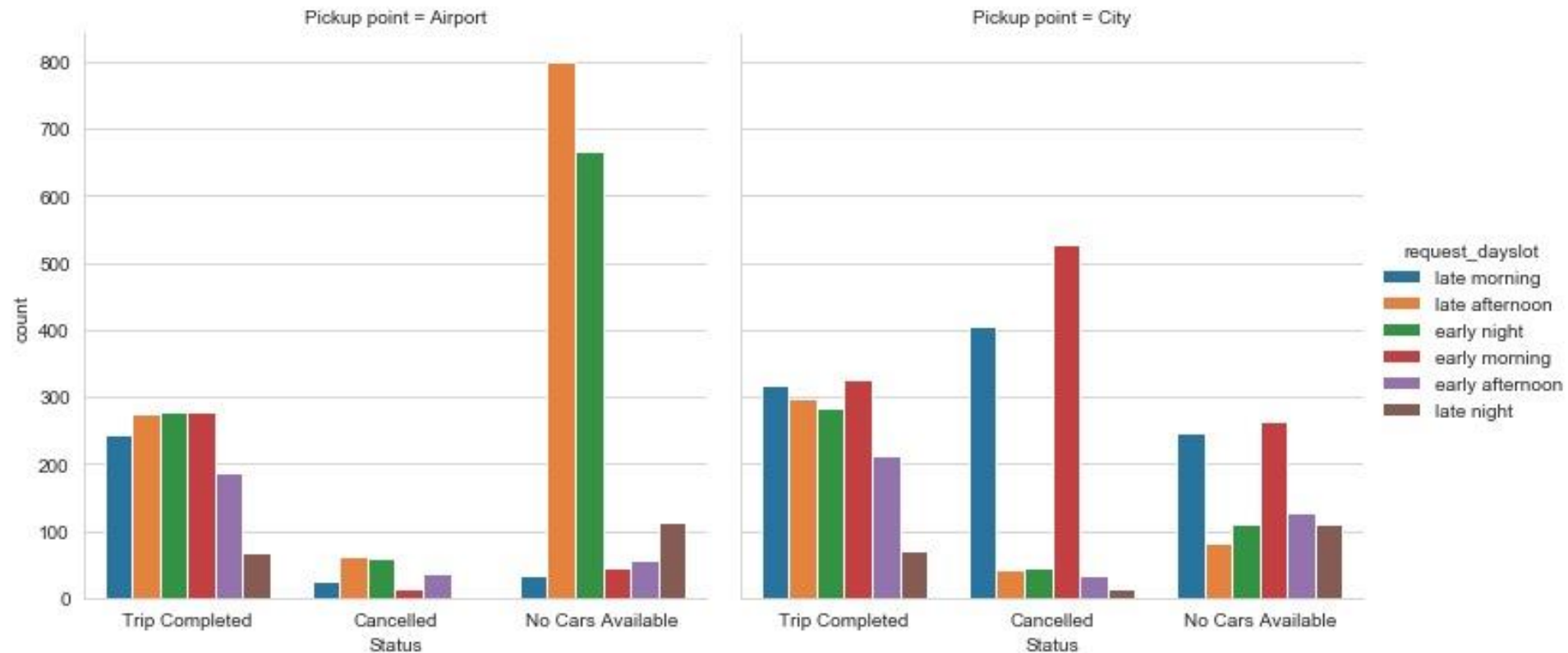|	
Early morning – 4-8	Late morning – 8-12
Early afternoon – 12-16	Late afternoon – 16-20
Early night– 20-24	Late night– 0-4

Identifying the Most problematic type of request

1- If we do not consider from where the request is being made, Most cancellation is done in early morning and most cars unavailable in late afternoon.

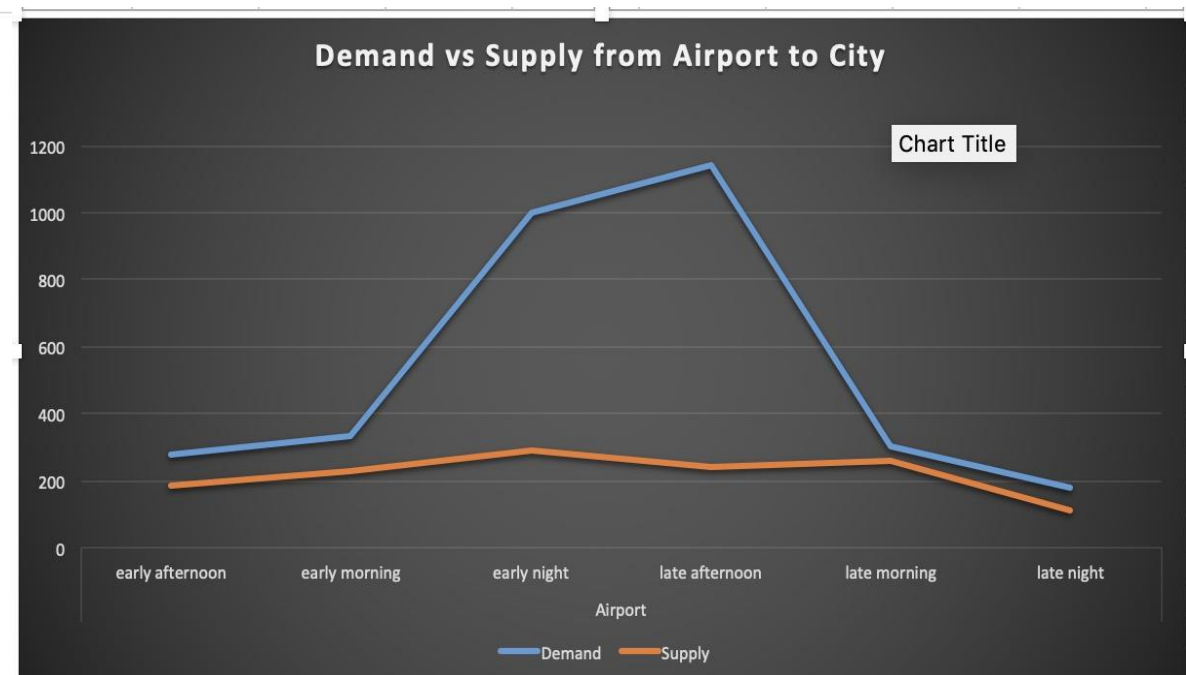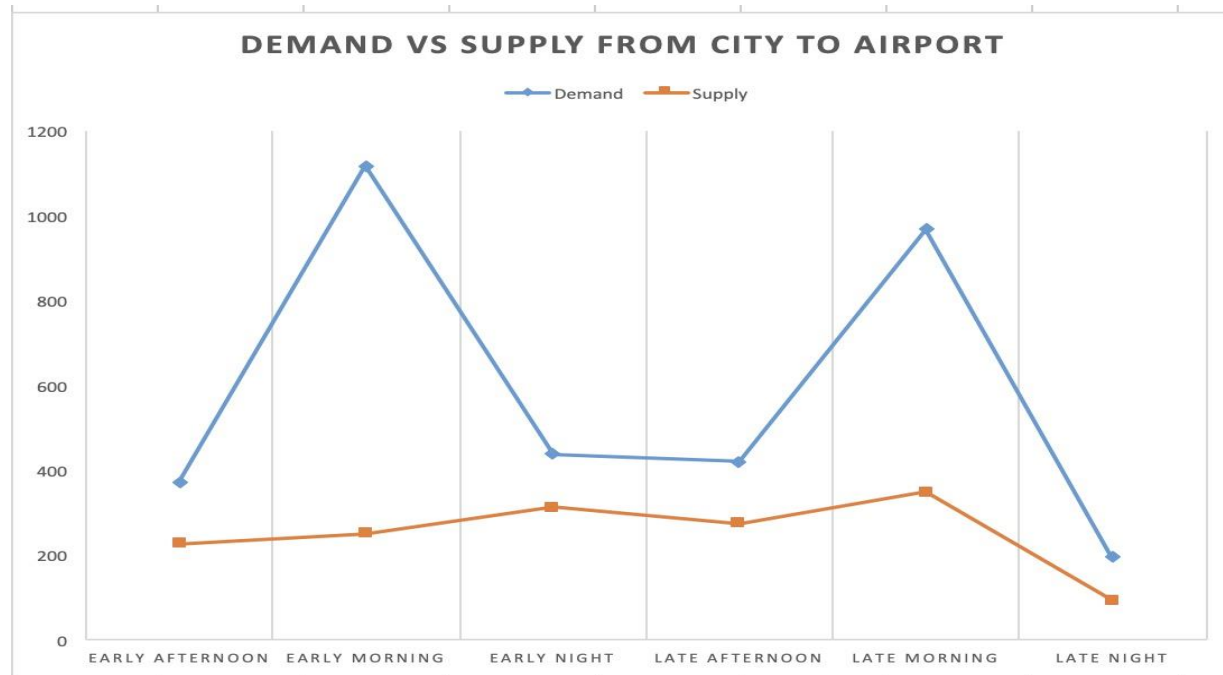# Identifying the Most problematic type of request

2- But when I drill down further I found that Most cancellation is done in the early morning from the city. It is painful for the customers whose flights were in early morning.

Supply Demand analysis

1- Highest gap between supply and demand exists in early morning and late morning for **city to airport** request.

2- Highest gap between supply and demand exists in early night and late afternoon for **airport to city** requests.

Pickup point	Airport						City					
request_dayslot	early afternoon	early morning	early night	late afternoon	late morning	late night	early afternoon	early morning	early night	late afternoon	late morning	late night
Demand	278	336	1002	1140	301	181	373	1116	437	420	967	194
Supply	187	228	293	244	261	114	226	251	312	274	348	93

Reasons of supply demand gap

1- **City to Airport** – Most cancellation is done in the morning. Drivers can get multiple customers in morning with less turnover time. So they can save more.

Pickup point	City					
request_dayslot	early afternoon	early morning	early night	late afternoon	late morning	late night
Demand	373	1116	437	420	967	194
Supply	226	251	312	274	348	93

2- **Airport to City** – Most gap between supply and demand exists in early night and late afternoon. Since early night is end of the day for most of the day drivers.

So few drivers want to go airport in the evening. So less availability of cars at airport.

Pickup point	Airport					
request_dayslot	early afternoon	early morning	early night	late afternoon	late morning	late night
Demand	278	336	1002	1140	301	181
Supply	187	228	293	244	261	114

end

Recommendation/Solution

1- Give more margins to the drivers for early morning bookings from city to airport travel.

2- Give sharing option so that customer and driver both get benefitted. Customer pay less individually.

   But driver get more as whole.

3- Try to increase the night drivers whose shift will start from 8PM to 8AM by giving night shift allowance.