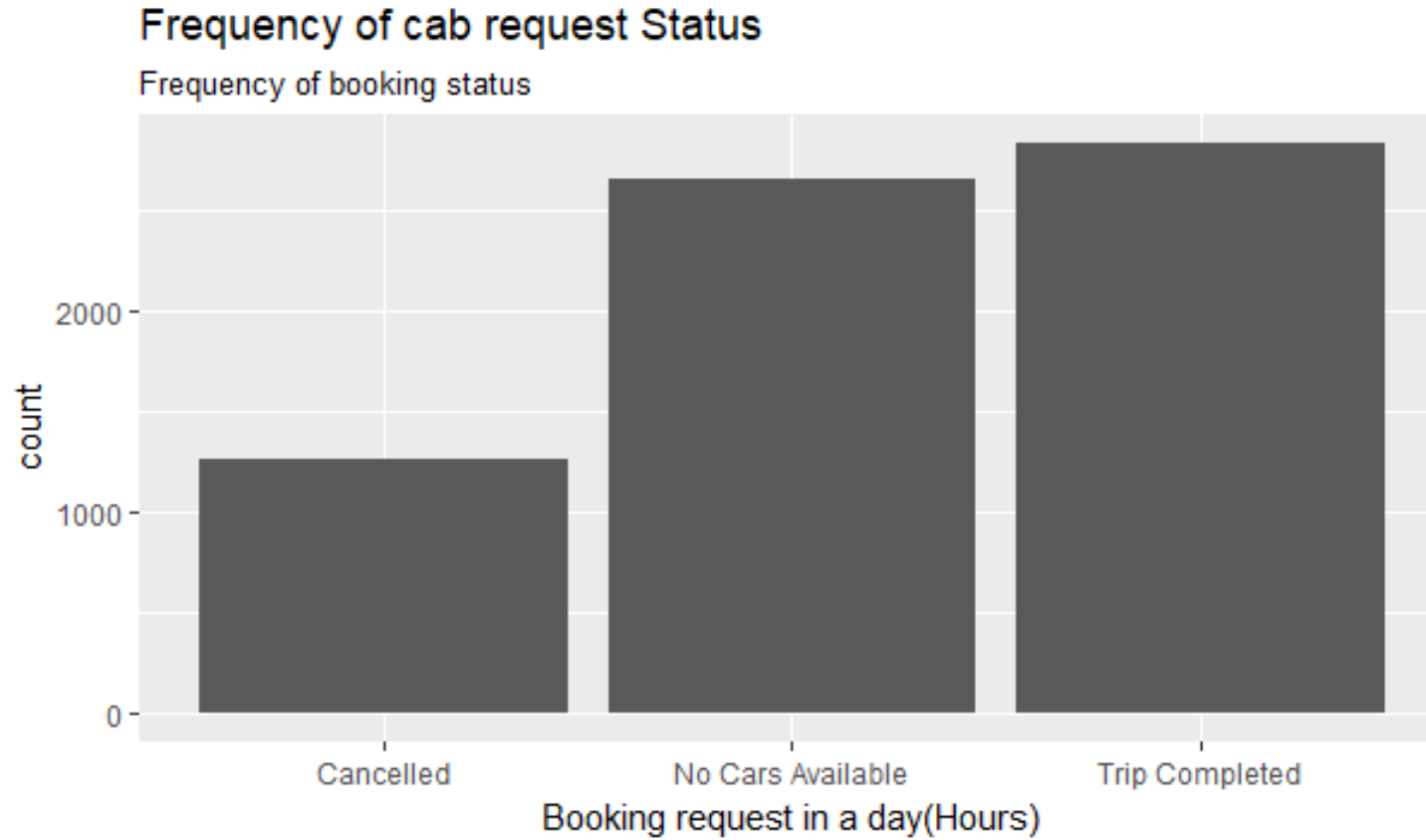


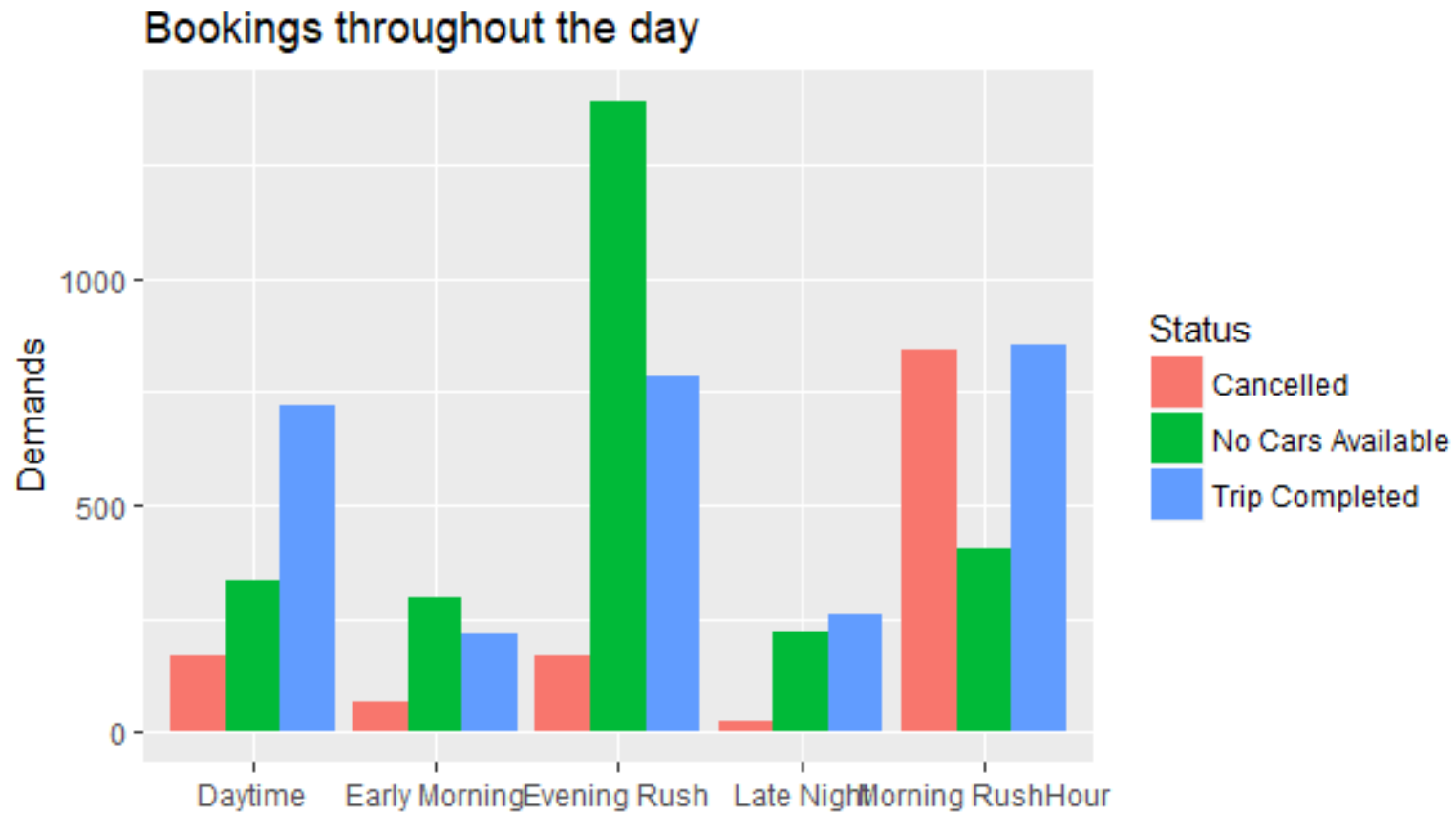
# UBER CASE STUDY ANALYSIS

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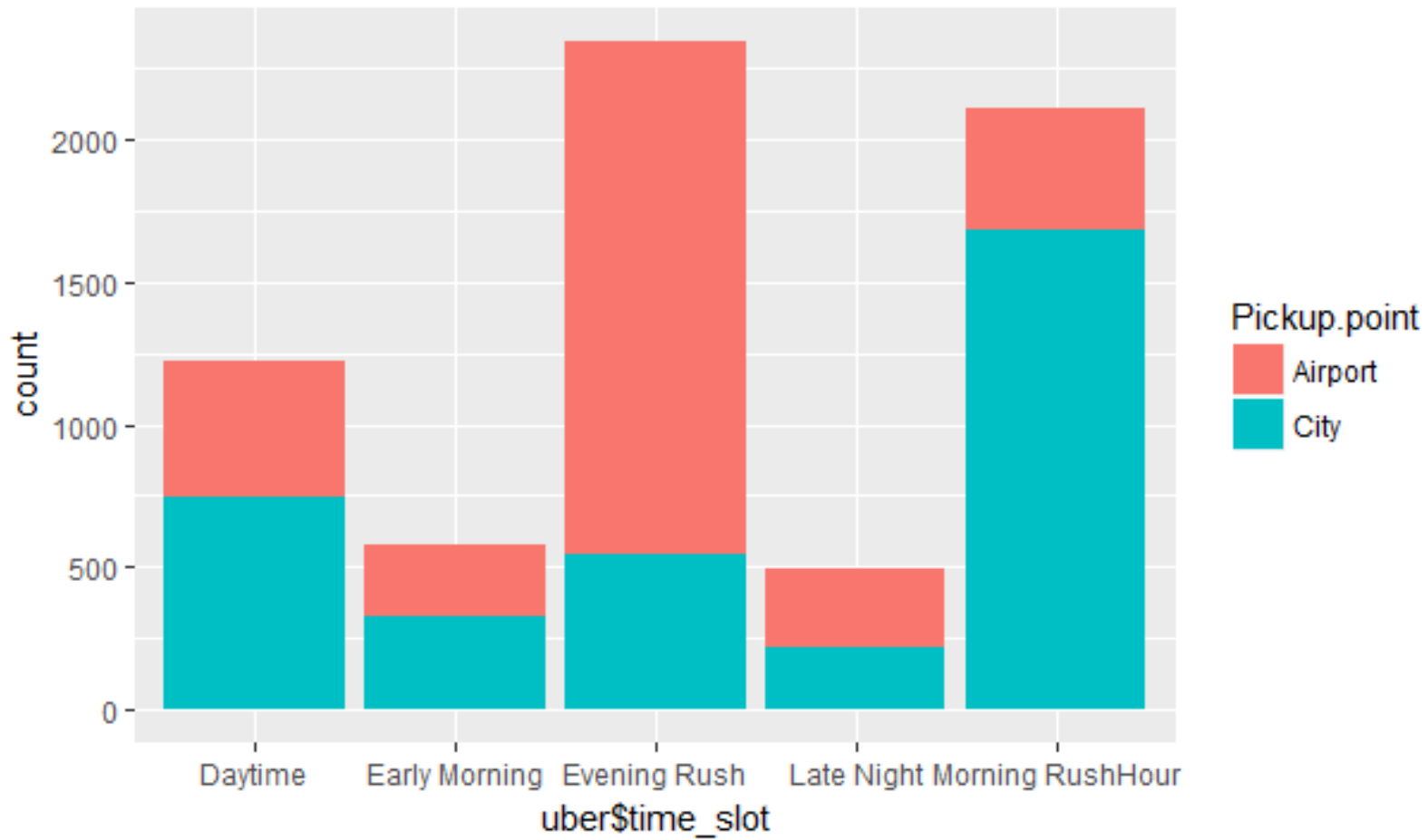
The above plot is the first in the series of graphs that have been plotted to analyse the Uber case-study. The plot here shows the frequency of Cab Request status with the Status of the booking request on x-axis and the count of status on y-axis.

It is evident from this plot that the frequency of cancelled cars or non-availability of cars is higher than the trips completed.



It is evident from this plot that the trips completed are almost equal through the day. However, non-availability of cars is the highest during Evening Rush-hour(5pm-10pm) and Cancellation of cabs is highest during morning Rush hour (5am-10am).

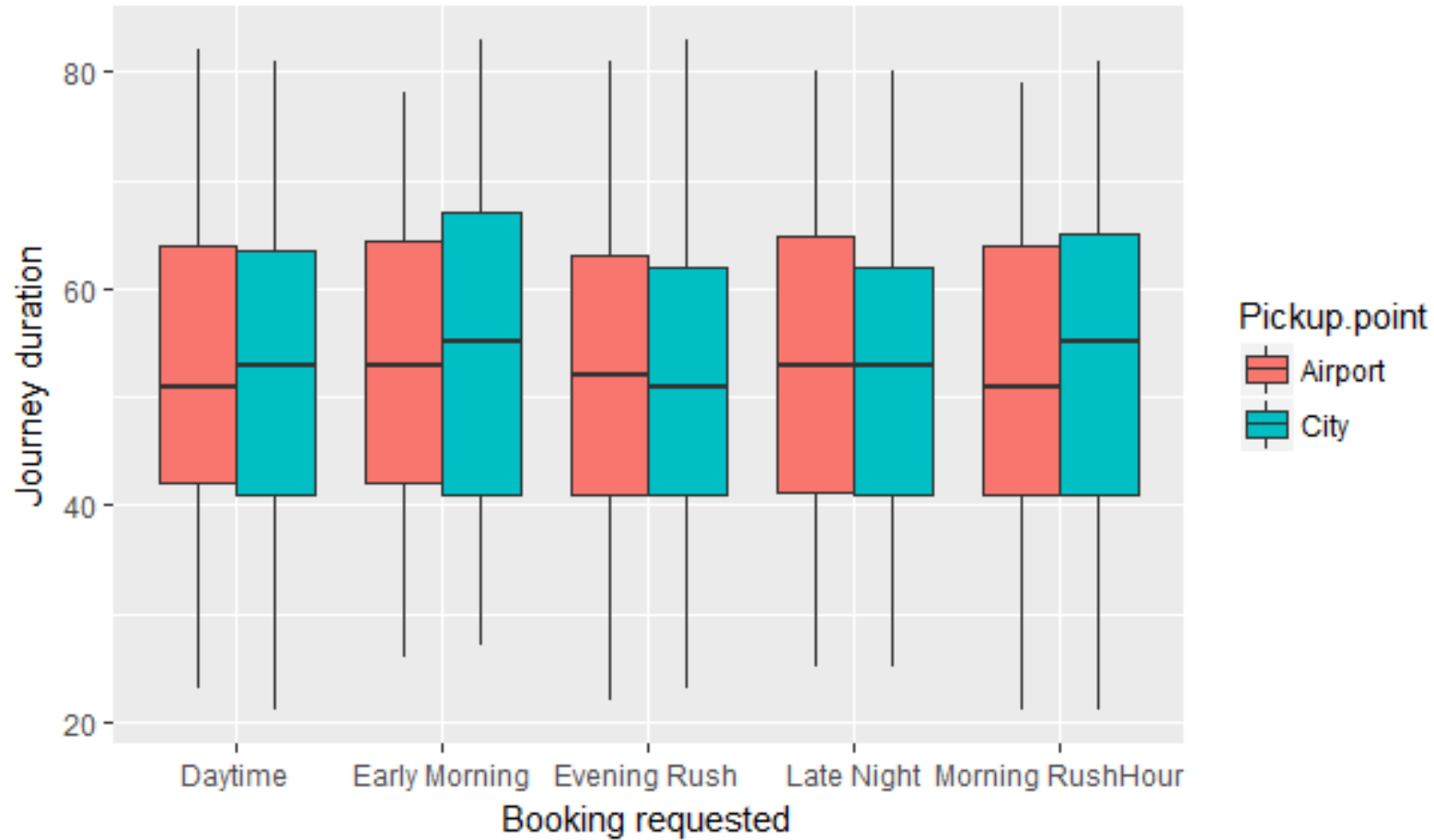
The next step is to look at the status of cancellations, non-availability and trip completion between the to and from pickups from airport and city.



This shows that demand for City to airport pickups is the highest in the morning peak hour. Demand for Airport to city pickups is highest in the evening.

The plots on slides 3 and 4 help us with this information:

- Non-availability of cars is highest during Evening rush-hour(5pm-10pm). So also, demand for Airport to city pickups is the highest during this time.
- Cancellation of cabs is highest during Morning rush-hour(5am-10am). Demand for city to airport pickups is highest during this time.
- In order to investigate this further, the journey time is plotted on both the airport to city and city to airport journeys on the weekday, as discussed on the next slide.



This plot shows that the time taken for the journey from city to airport is higher in the morning peak timing than the rest of the day. This is the time when the demand for cabs to the airport is high. 52.41 minutes is the average time taken for travel. However, in the morning peak timing, travel time from city to airport is much higher. From the plots gathered so far, it is evident that there is a huge demand-supply gap in the morning and evening peak hours.

What is the reason for the huge demand-supply gap?

1. Cancellations in the Morning Rush hour: There is a huge demand for city to airport pickups in the morning peak time owing to many outgoing flights during this time. However, just past the peak timings, the number of incoming flights decreases. Drivers who have made airport pickups spend a lot of idle time at the airport which could have been better utilised undertaking trips within the city, thus explaining driver cancellations.
2. Non-availability of cabs in the evening rush hour: The increased demand for airport pickups in the evening peak time is best explained as being due to the increased incoming flights during this time. With lesser outgoing flights, there are lesser cabs getting into the airport resulting in non-availability of cabs to meet the increased incoming passengers during this time.

# Recommendations to resolve the demand-supply gap

- Bonus to drivers from city to airport in the morning peak hours to avoid cancellations.
- Uber to setup a fixed return payment for drivers incase they drive back empty to the city.
- Encourage car-pooling in the customer-community during morning and evening peak timings with a drive towards environmental cause as a company corporate social responsibility.