

Uber Supply-Demand Gap

Case Study

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Abstract



Objective :

Identify the root cause of the Supply – Demand Problems at Airport – City travels for Uber .
Recommend ways to improve the situation.



Problem Statement :

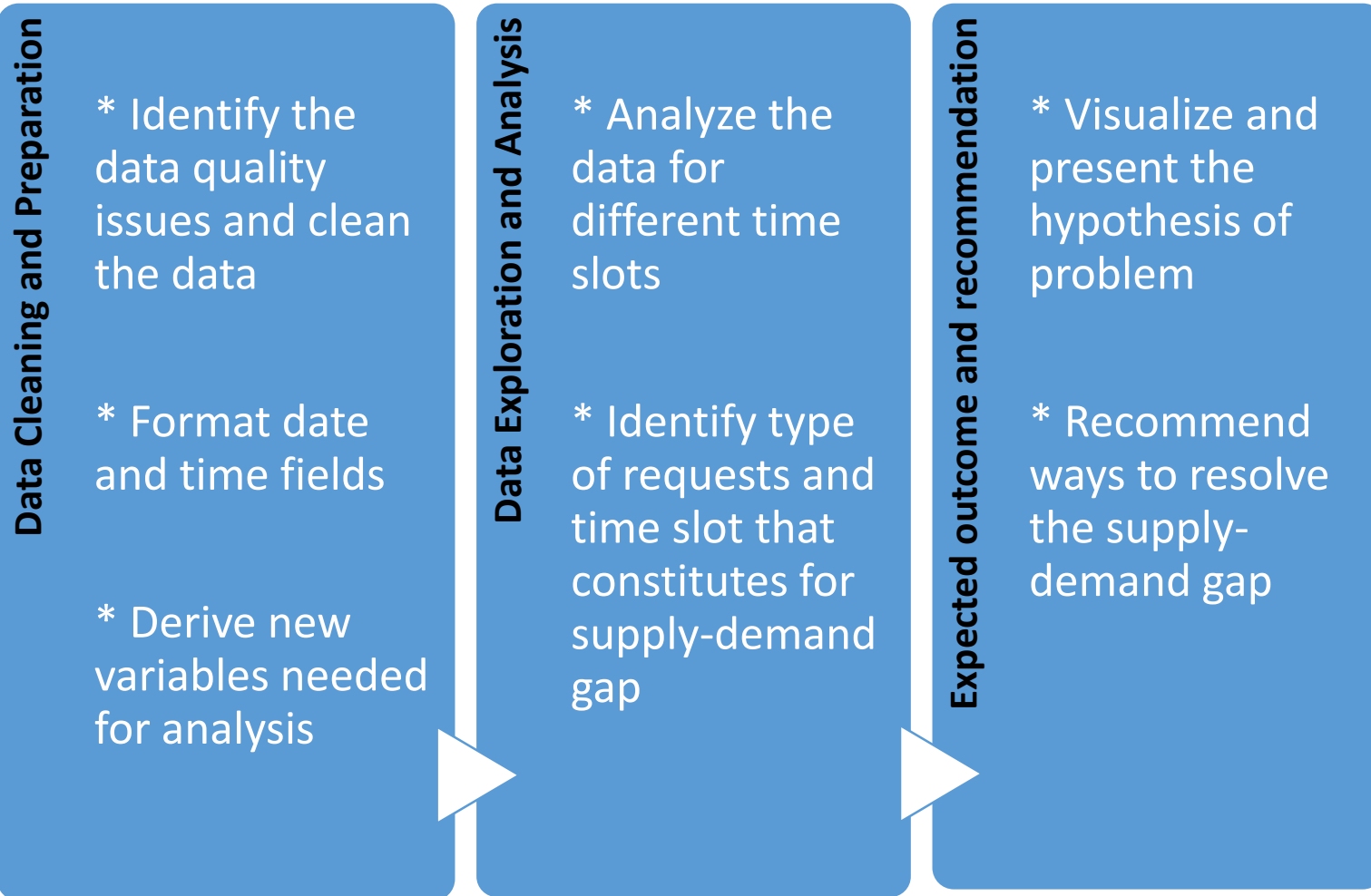
Uber is an online cabs rental service provider. Uber is facing driver cancellation and non-availability of cars issue for commutation from or to the Airport leading impact on the business and loss of potential revenue.



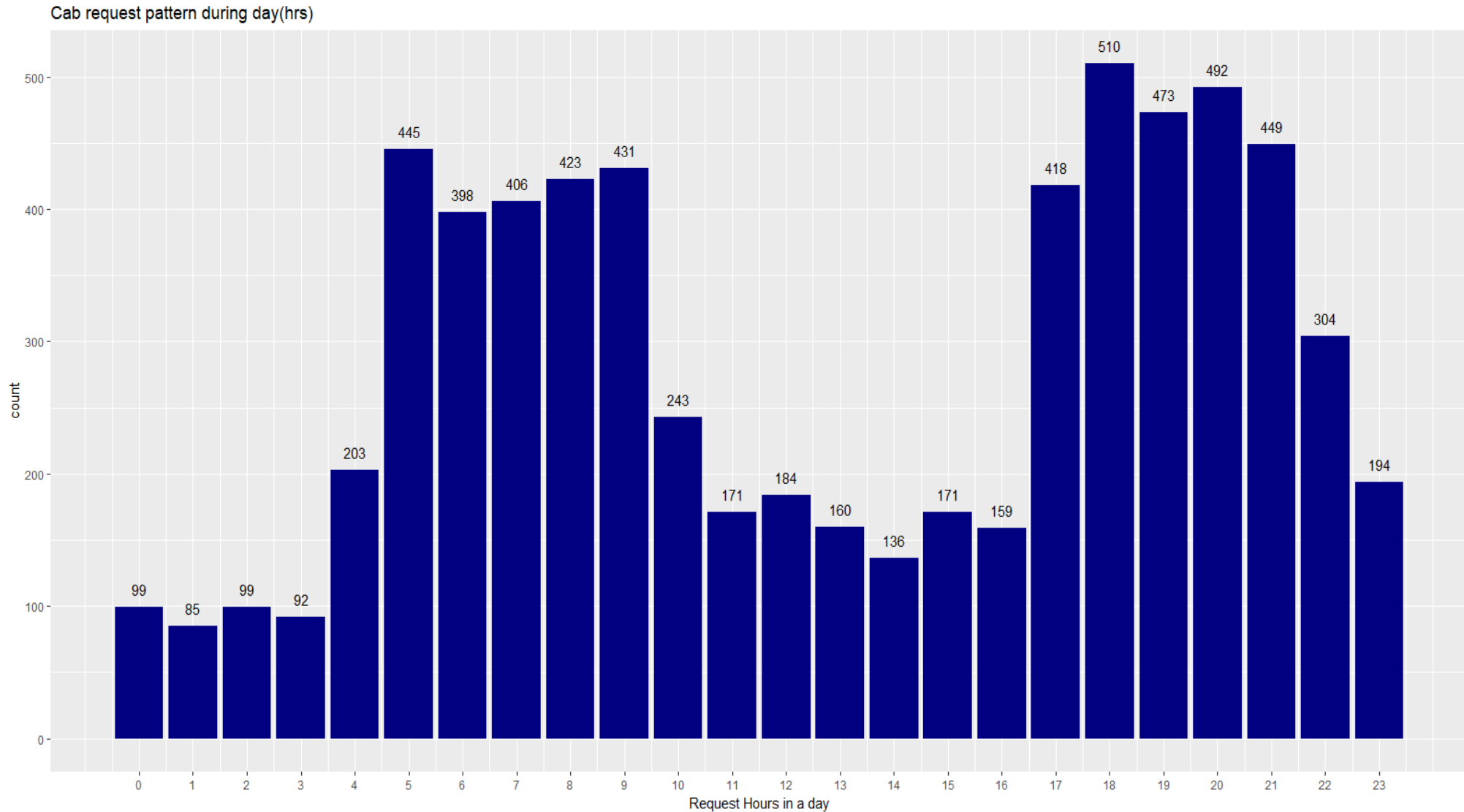
Approach :

- Identify the most pressing problems for Uber.
- Identify the gap between supply and demand of requests.
- Identify the reason for the supply-demand gap and recommend some ways to resolve them.

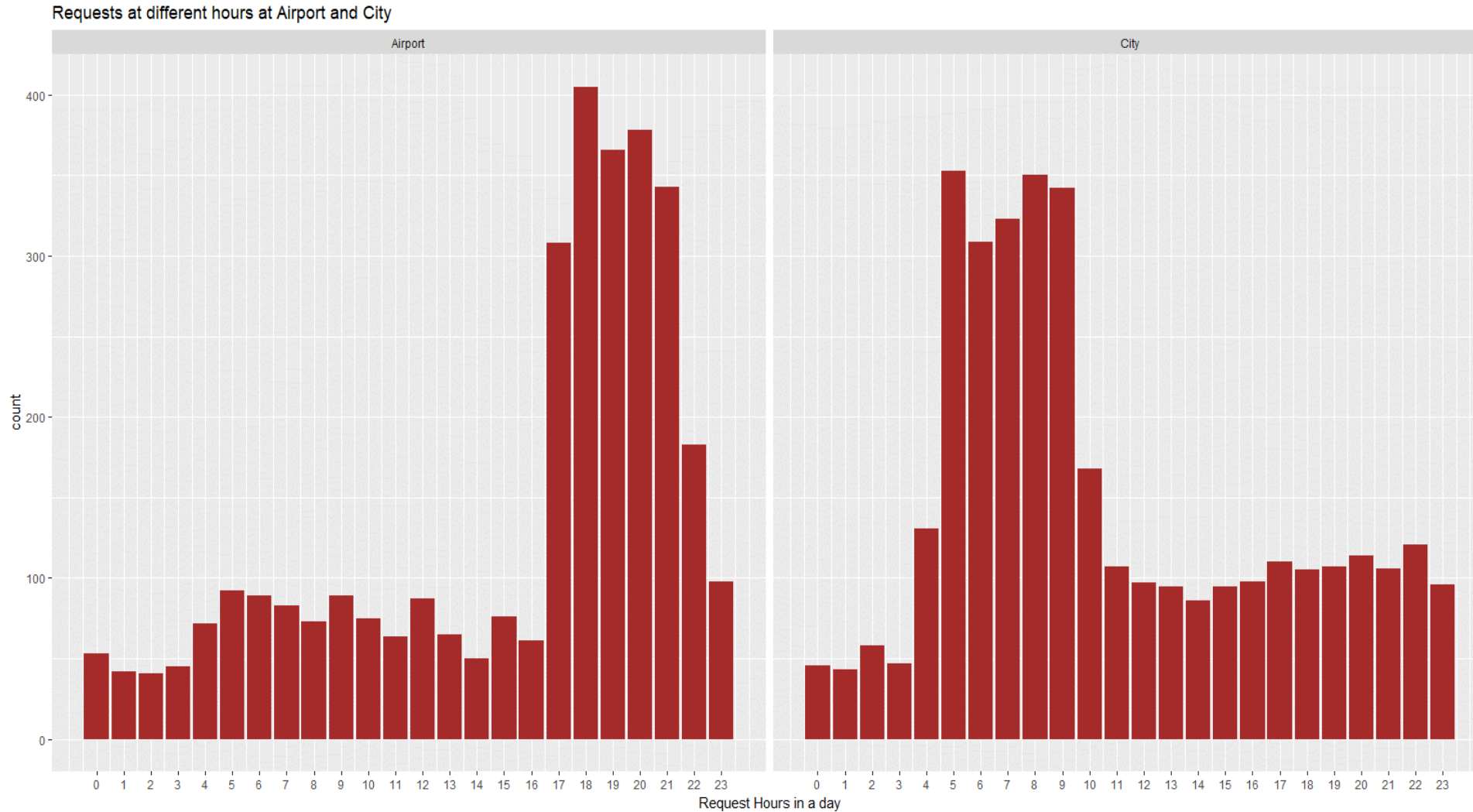
Problem solving methodology



Demand Pattern in a day



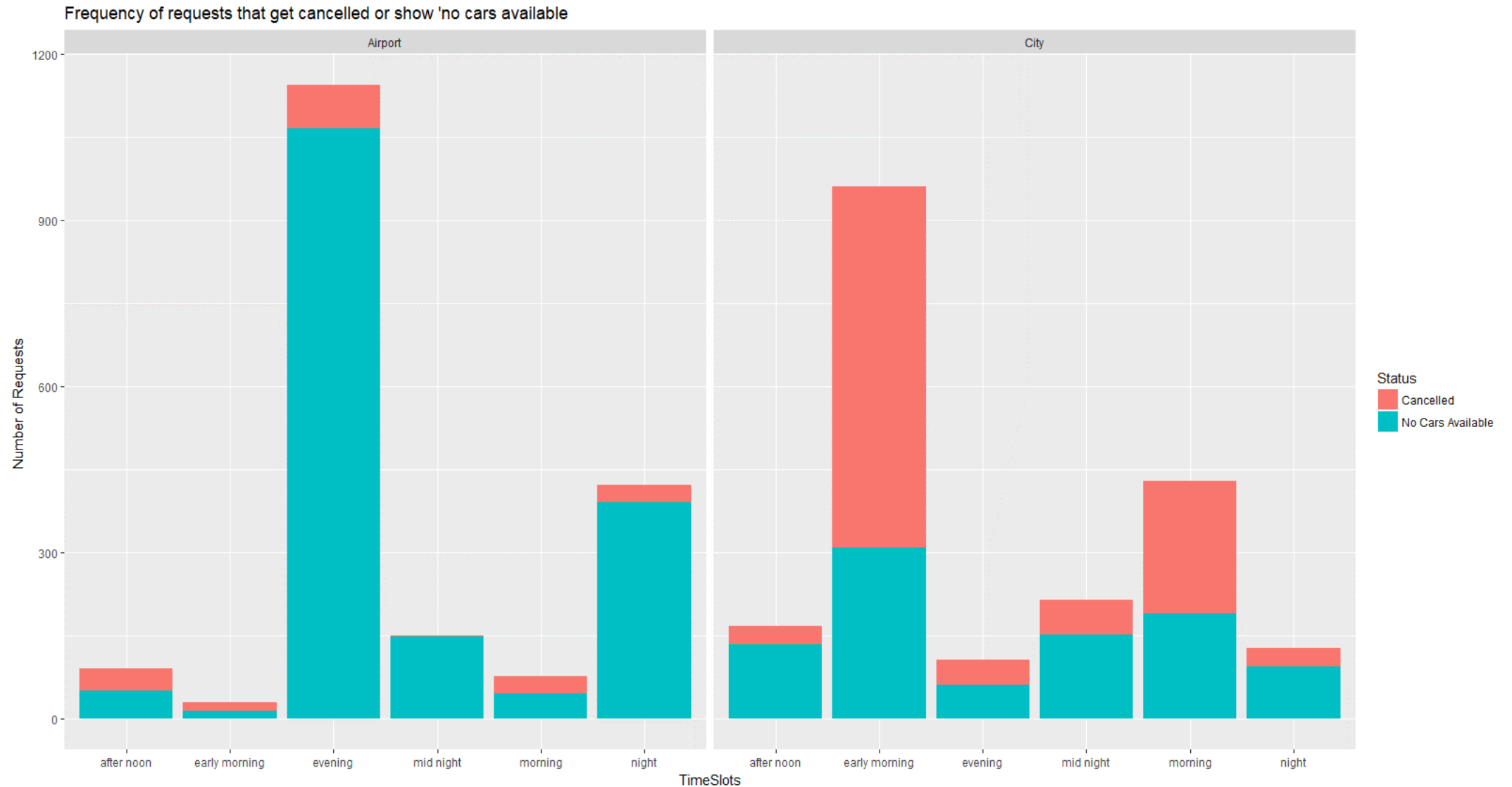
Requests at different hours at City and Airport



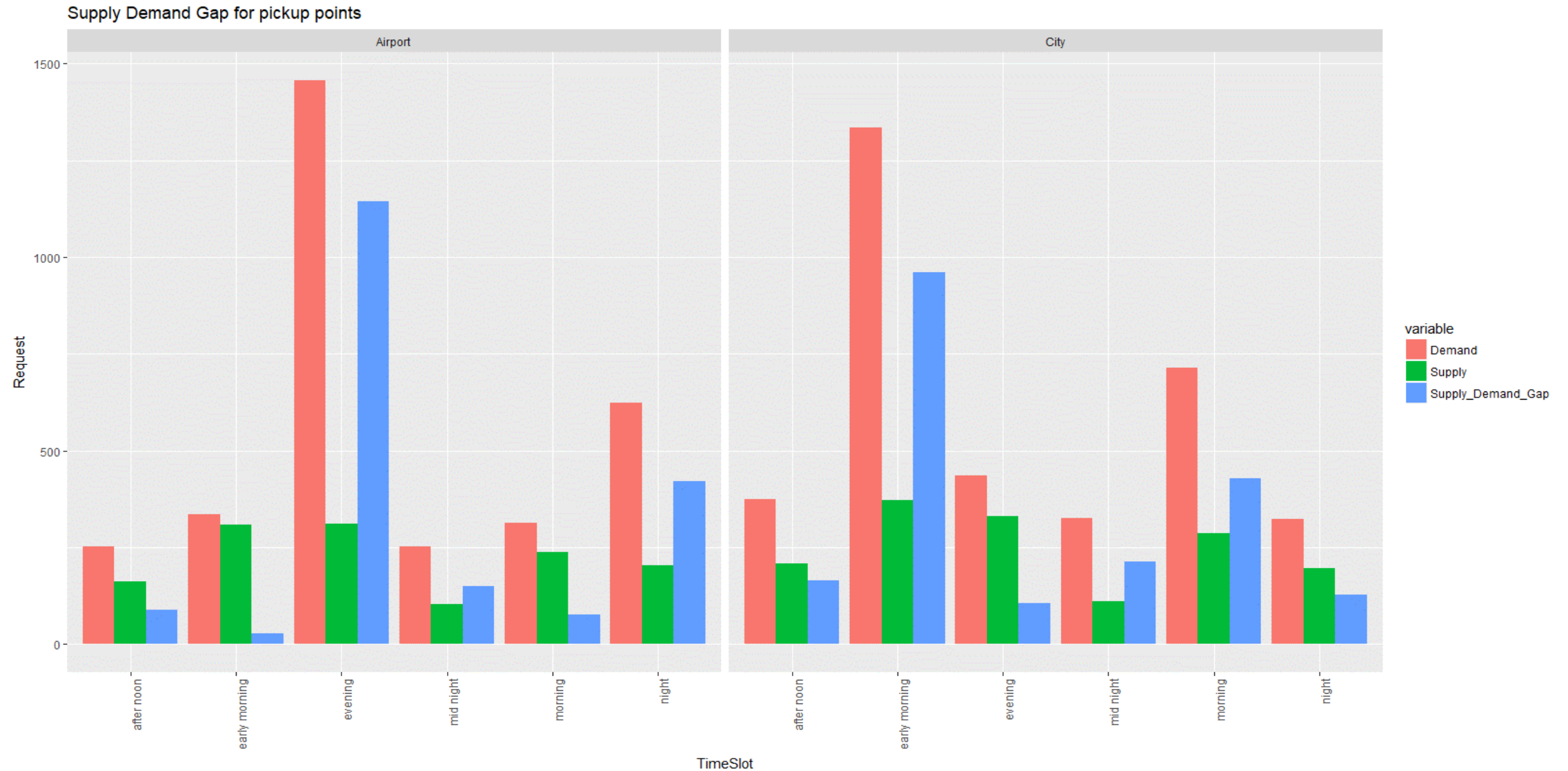
Plot Trend :

- Highest demand time slots:
 - Early morning 05-09am from City
 - Evening 05-09pm from Airport

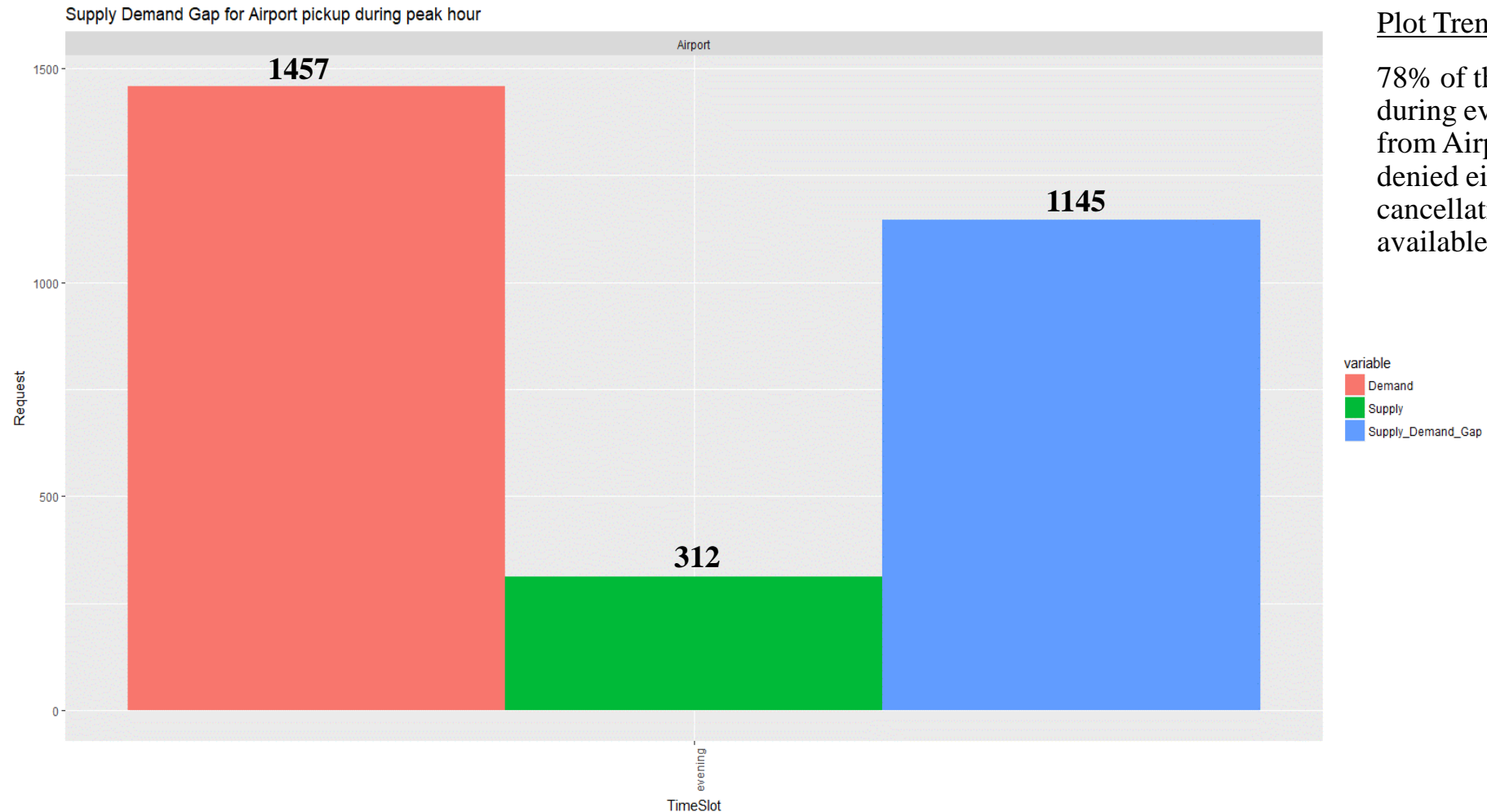
Most Pressing Problems for Uber



Supply Vs. Demand- Gap Analysis



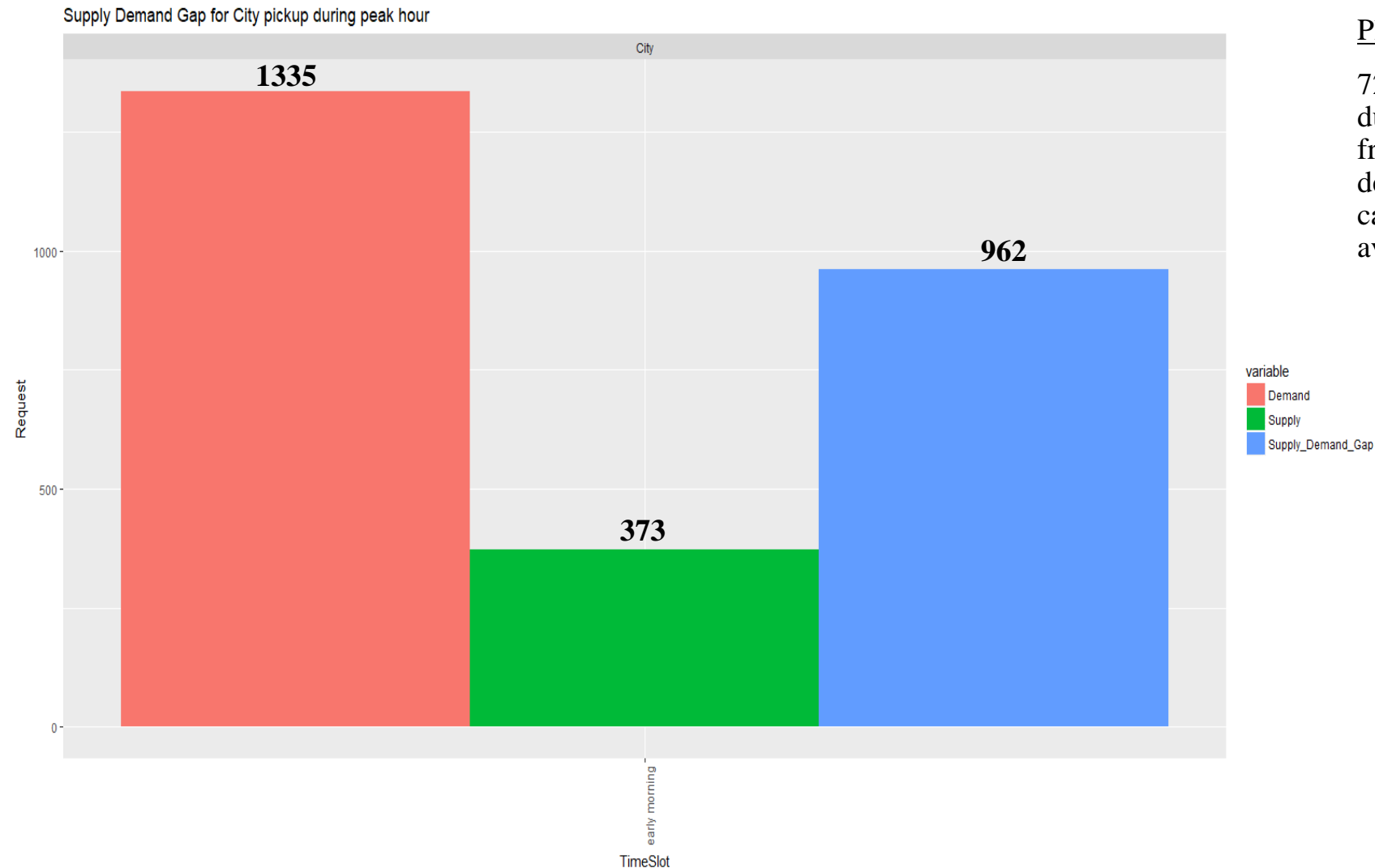
Highest gap timeslot for Airport



Plot Trend:

78% of the requests booked during evening time slot from Airport pickup was denied either due to cancellation or no cabs available.

Highest gap timeslot for City



Plot Trend:

72% of the requests booked during evening time slot from City pickup was denied either due to cancellation or no cabs available.

Reasons for Supply-Demand gap

Airport Pickup Supply-Demand gap

- Inflow of Uber cabs to the airport is less during late mornings and Mid day which results in lesser available cabs from airport for evening drops.
- Driver needs to be idle for longer time to get booking back to city.

City Pickup Supply-Demand gap

- Chances of getting pickup is way more than that from Airport.
- Driver may get multiple chance of requests within city runs to complete his daily target, which might be the reason for cancellation for airport travels.
- For most drivers end of day would be late evening
- Travel from city to airport and vice-versa is time consuming due to heavy traffic in cities during peak hours.

Recommendations

- Car pool service can be introduced to serve the multiple requests in rush hours
- Provide incentives for airport trips during peak time
- Impose penalty for cancellation of requests by Driver and set threshold for maximum number of cancellations per day
- Provide base price for drivers idle time or to comeback to city with empty passengers.
- Cab pre book options can be initiated thus benefiting both customers and drivers as drivers would be sure of getting pickup from airport.
- Promote to and from airport rides with more incentives for continuous 3-4 trips.