

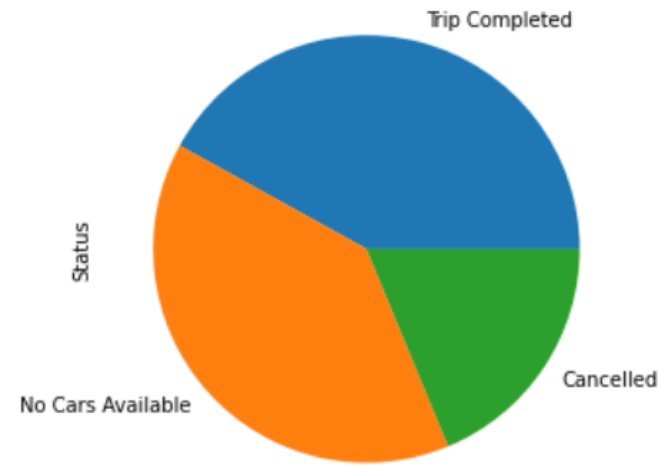
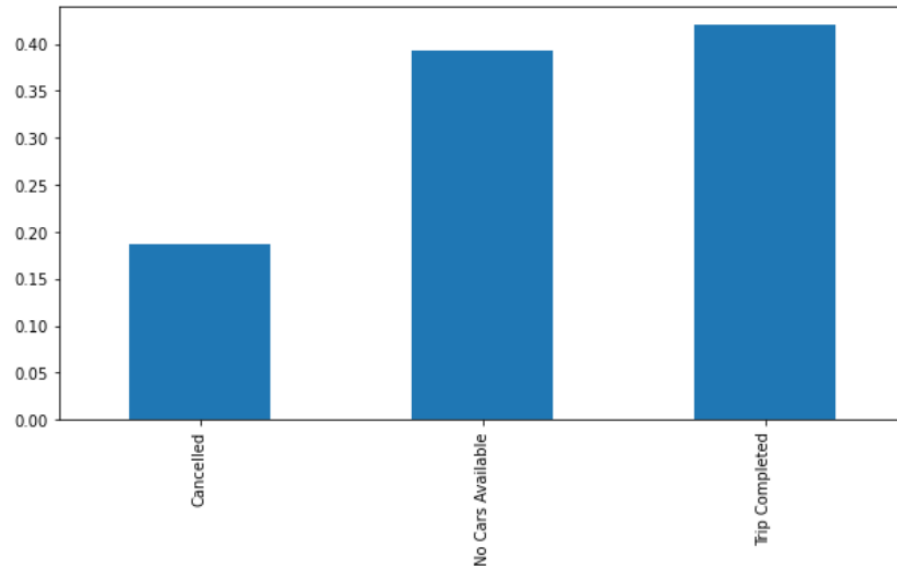
EXPLORATORY DATA ANALYSIS ON UBER SUPPLY DEMAND GAP



An abstract graphic on the left side of the slide. It features a dark green background with a grid of lighter green lines. Overlaid on this grid are numerous purple circles of varying sizes, some of which are connected by thin, light blue lines, creating a network-like structure.

TOPICS

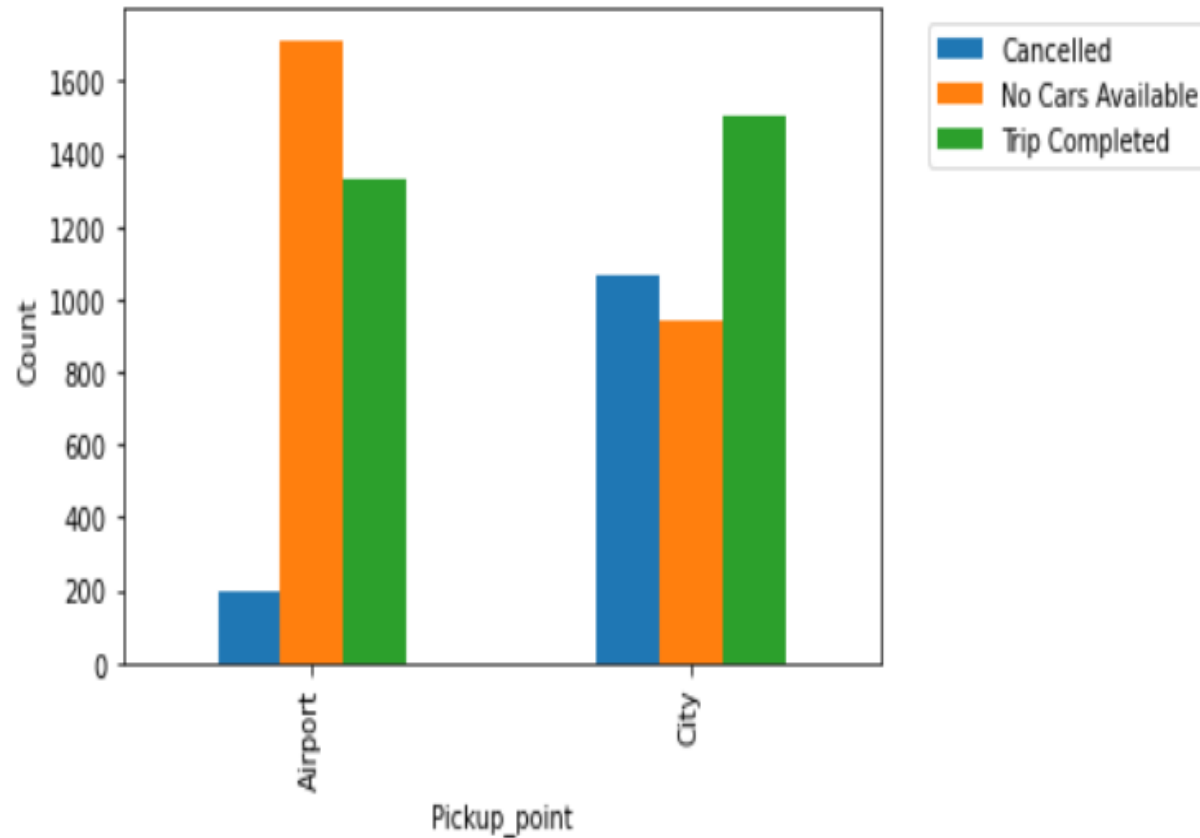
1. Frequency of requests that gets “canceled” or show “no cars available”.
2. Most problematic types of requests (city to airport/airport to city) .
3. Time slots with high frequency for "Cancelled" and "No Cars Available”.
4. Gap between Supply and Demand.
5. Time slots with the highest gap of Supply and Demand.
6. Request type having highest gap of Supply and Demand in accordance with Time slots.
7. Reason for issues in supply-demand.
8. Recommendations to resolve the supply-demand gap.



FREQUENCY OF REQUESTS THAT GETS "CANCELED" OR SHOW "NO CARS AVAILABLE".

Through Data Analysis we see that "No Cars Available" frequency is more than "Cancelled"

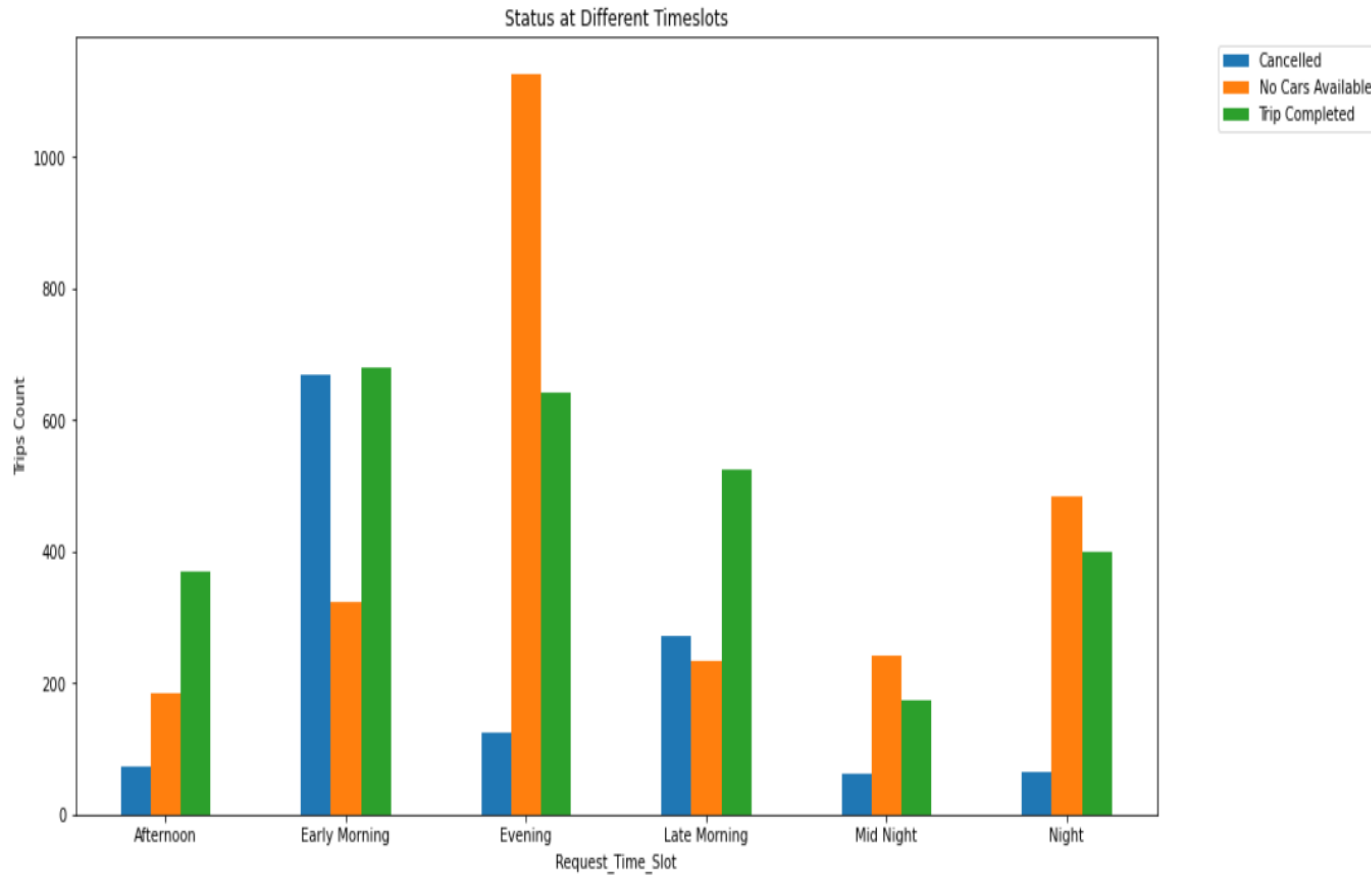
MOST PROBLEMATIC TYPES OF REQUESTS (CITY TO AIRPORT/AIRPORT TO CITY)



Most problematic types of requests based on pickup points are :

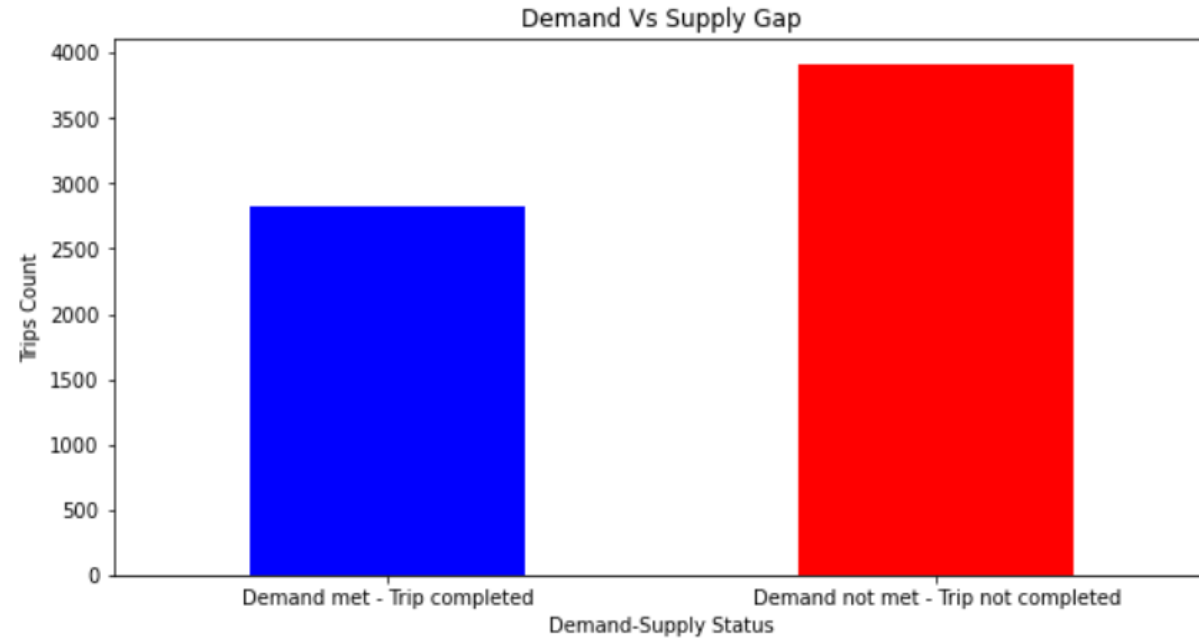
1. From Airport to City there is high frequency for Status = 'No cars available'
2. From City to Airport there is high frequency for Status = 'Cancelled'

TIME SLOTS WITH HIGH FREQUENCY FOR "CANCELLED" AND "NO CARS AVAILABLE" STATUS



Through data analysis we see that:

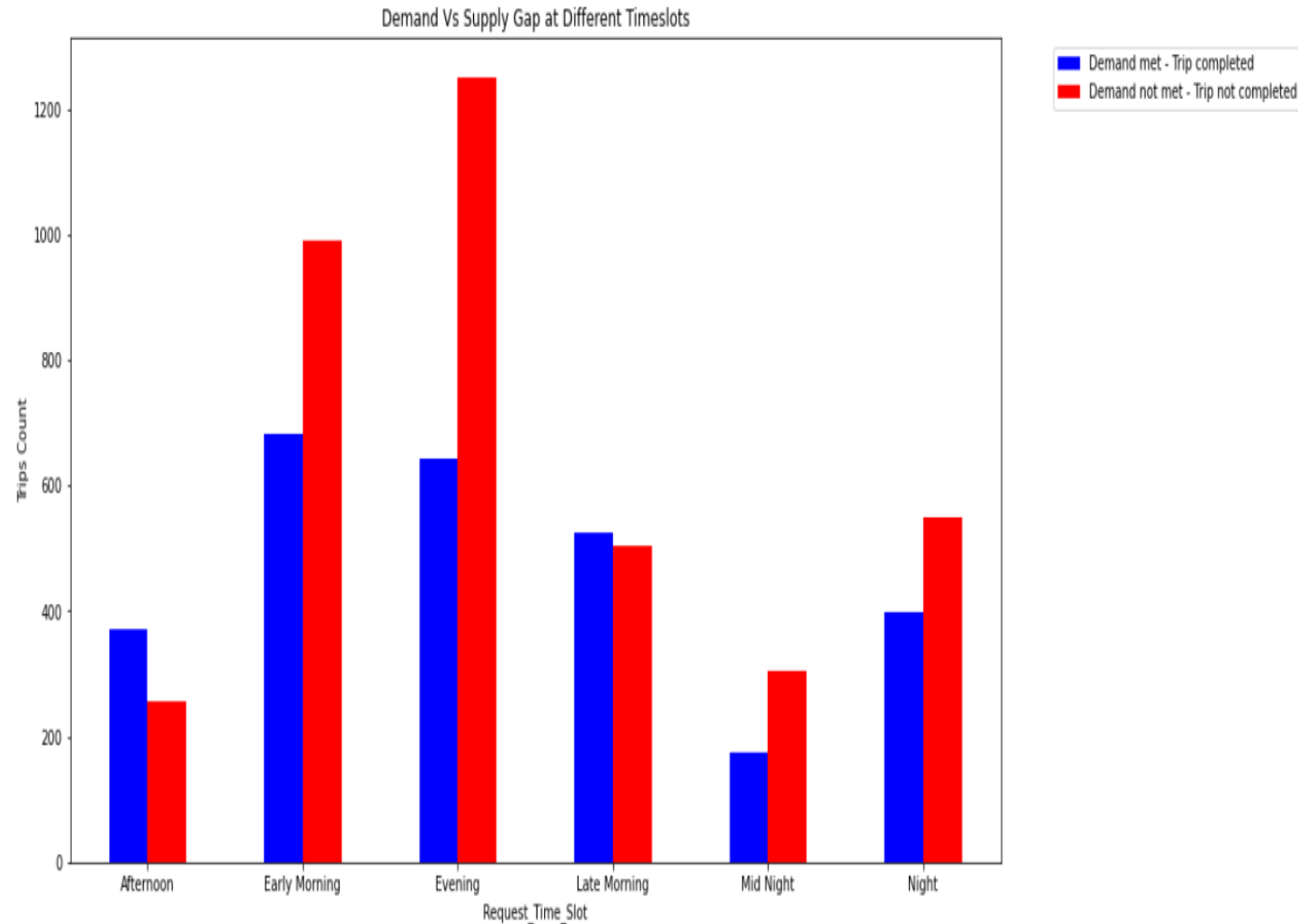
1. "Cancelled" frequency is high during Early Morning (5 am -8 am)
2. "No Cars Available" frequency is high during Evening (17 pm - 20 pm)



GAP BETWEEN SUPPLY AND DEMAND

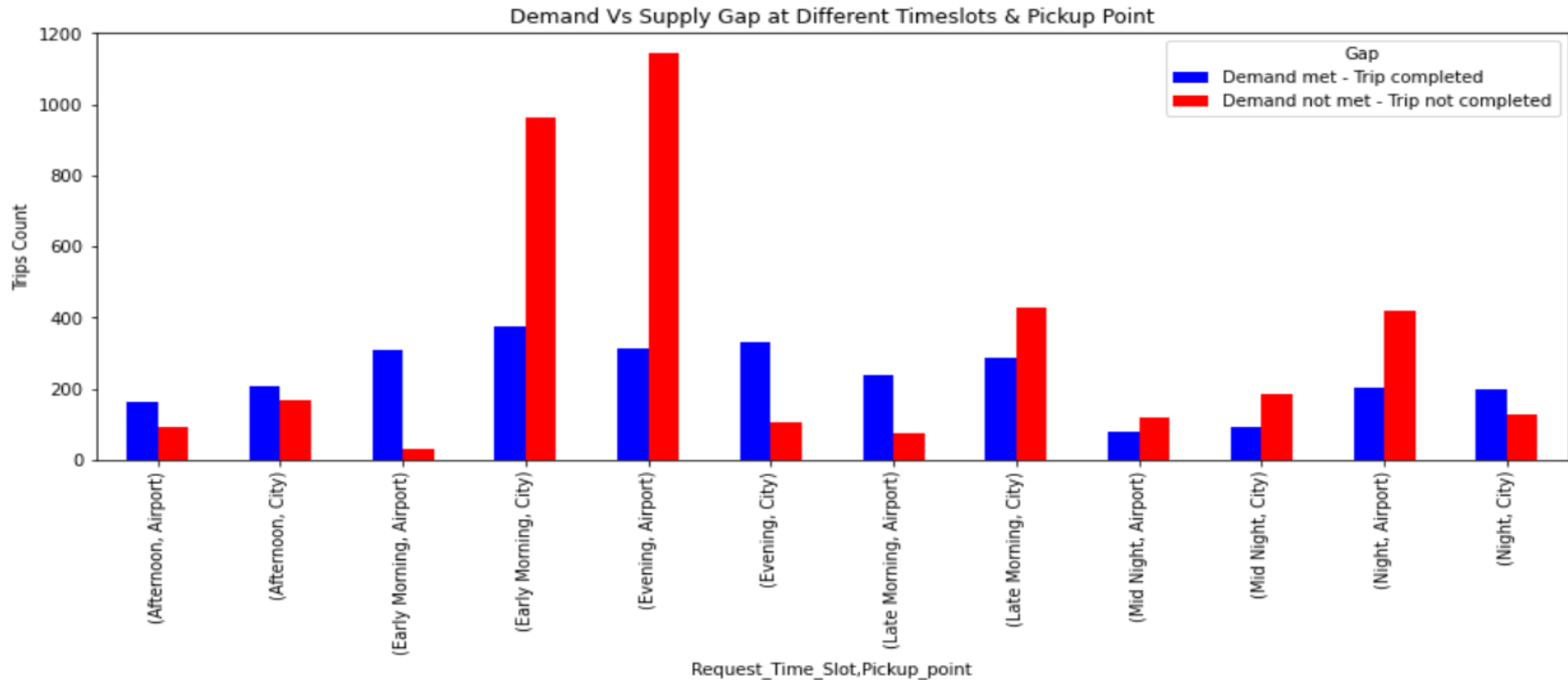
More Trips not completed (Demand not met) than Trips Completed (Demand met)

TIME SLOTS WITH THE HIGHEST GAP OF SUPPLY AND DEMAND



Demand-Supply Gap exists highest at the following Time Slots:

1. **At Early Morning (5 am -8 am)**
2. **At Evening (17 pm - 20 pm)**



REQUEST TYPE HAVING HIGHEST GAP OF SUPPLY AND DEMAND IN ACCORDANCE WITH TIME SLOTS

Demand-Supply Gap exists highest at the following Time Slots & types of requests (city-airport or airport-city)

1. At Early Morning (5 am - 8 am) when Pickup_point = 'City'
2. At Evening (17 pm - 20 pm) when Pickup_point = 'Airport'

REASON FOR ISSUES IN SUPPLY-DEMAND

From the analysis done till we encounter the following issues:

Issue-1 : Demand-Supply Gap exists highest at Early Morning (5 am -8 am) when Pickup_point = 'City' were the requests are being "Cancelled" more by drivers.

Reasons :

1. Airports are situated in the outskirts of the city, during Early Morning (5 am -8 am) drivers tend to have inter city rides rather than travelling longer distance drop points such as Airports which results in longer wait time in getting a ride from Airports, hence cancels rides to "Airport" from "city".
2. Whereas during these hours, since most of the offices, schools and universities open, drivers tend to pick such rides which give them shorter wait time in getting next ride, hence cancels rides to "Airport" from "city".

Issue-2 : Demand-Supply Gap exists highest at Evening (17 pm - 20 pm) when Pickup_point = 'Airport' were the requests are "No Cars Available".

Reason :

1. This clearly shows that not enough cars are available at Airports, one of the reasons might be that, during these hours i.e., Evening (17 pm - 20 pm) a driver would get far more rides in city, since these are again peak hours where people tend to travel back to home after work.

Recommendations to resolve the supply-demand gap

Recommendations to resolve the supply-demand gap issues:

Issue-1 : Demand-Supply Gap exists highest at Early Morning (5 am -8 am) when Pickup_point = 'City' were the requests are being "Cancelled" more by drivers.

Recommendations:

1. Provide extra incentives to drivers during Early Morning (5 am -8 am) hours, if drop point is "Airport", this will motivate drivers to accept rides from "city" to "Airport" without hesitation.
2. Provide monthly reward points and recognition for drivers, which will give popularity among other drivers.

Issue-2 : Demand-Supply Gap exists highest at Evening (17 pm - 20 pm) when Pickup_point = 'Airport' were the requests are "No Cars Available".

Recommendations:

1. Start dedicated "Airport" Taxis/Cabs which are available at "Airport" stand. Maintain minimum Taxis/cabs at "Airport" consistently during Evening (17 pm - 20 pm) hours.
2. Make advertisements on how Uber is now having exclusive Taxis/Cabs for people travelling towards city.
3. Have some 6-seater big cars also available, because people travelling back tend to have larger luggage, also families tend to receive them from airport.



THANK YOU

MOHAMMED AZHAR KHAN