



Uber Supply-Demand Gap Analysis

SUBMISSION

By Piyush Sharma



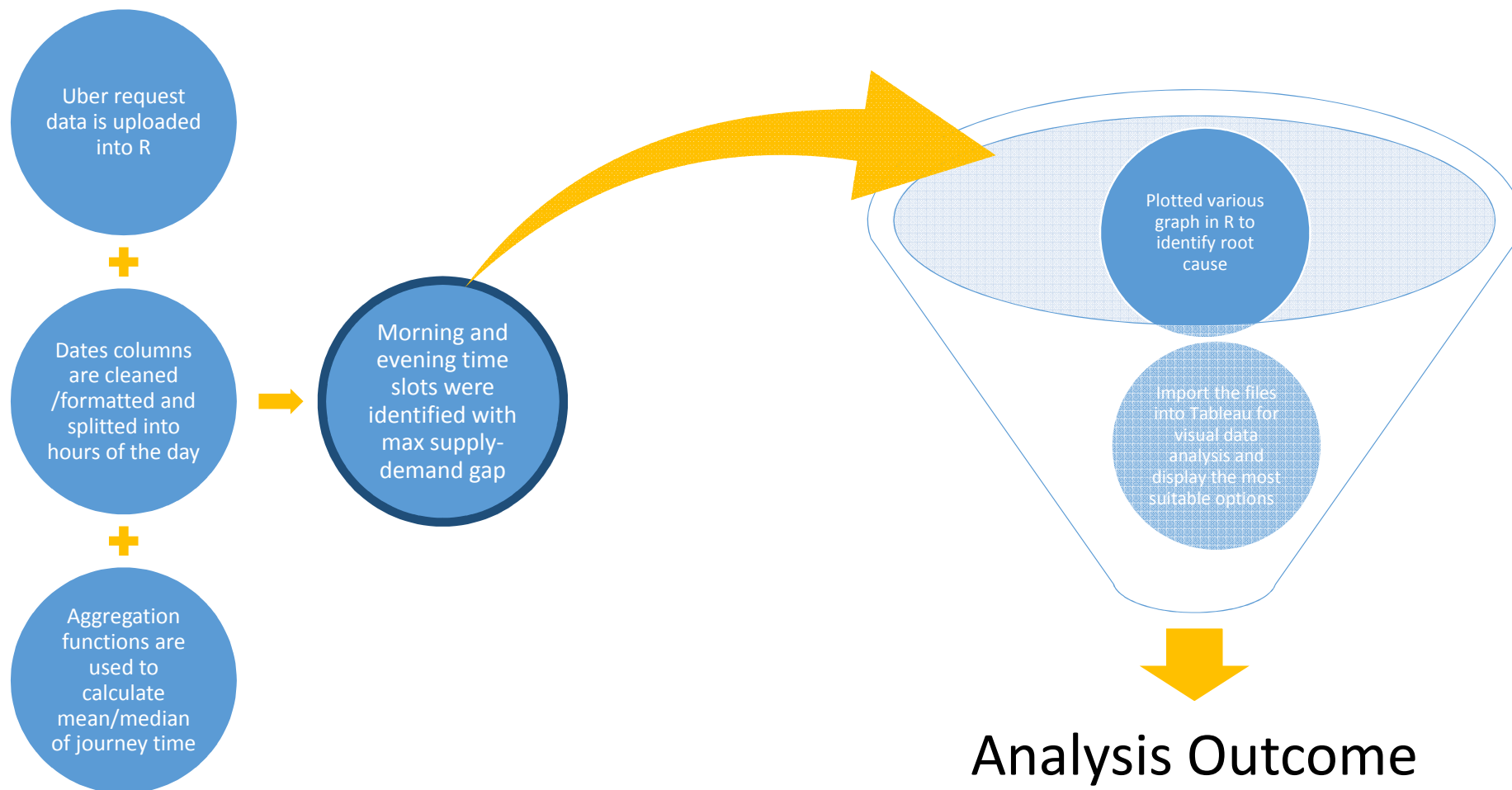
Case Study – Overview & Strategy

Objective - Uber wants to understand the root cause of Gap in Demand and Supply and ways to mitigate this problem of shortage of cars.

Approach – First , the raw data is cleaned, new columns are added

Second , plots are drawn against the time slots to identify problematic areas.

Third , root causes and solutions to the problem are identified.



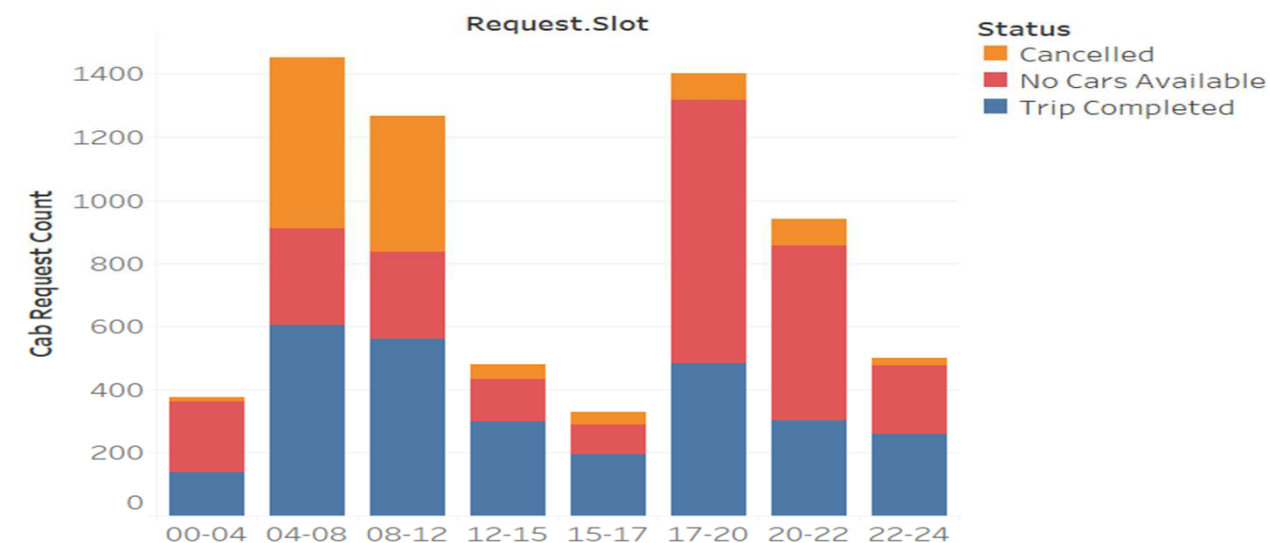


Analysis of Demand Supply Gap

Slots	Status	Frquency Of Request
04-08	Cancelled	541
	No Cars Available	307
	Trip Completed	604
	%Trip Completed	41.00
08-12	Cancelled	430
	No Cars Available	279
	Trip Completed	559
	%Trip Completed	44.00
15-17	Cancelled	43
	No Cars Available	94
	Trip Completed	193
	%Trip Completed	58.48
17-20	Cancelled	83
	No Cars Available	837
	Trip Completed	481
	%Trip Completed	34.00

% of Trip Completed is less then 50% in the morning and evening ; in the morning cancellation frequency is high ; while in the evening cars availability is less
Plots are shown in the subsequent slides to display the same

Cab Demand vs Time Slot



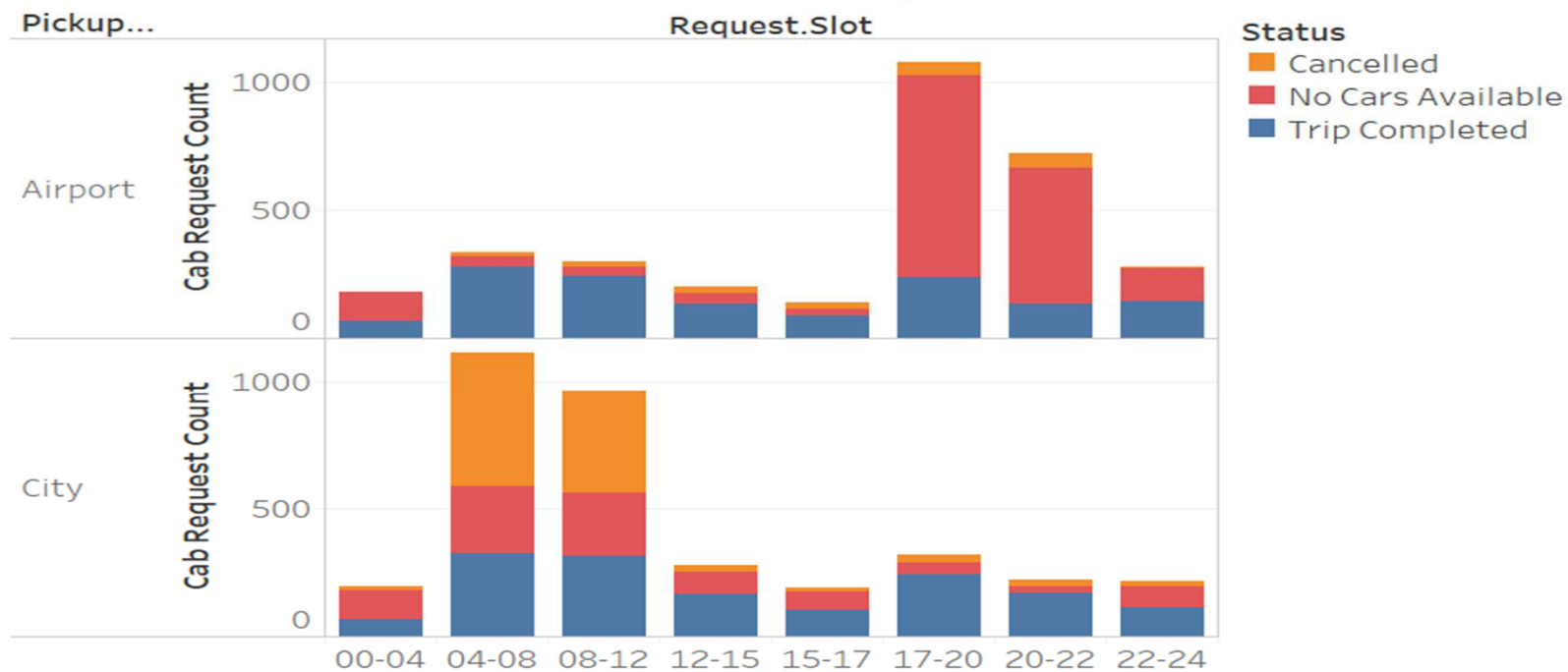
Plot to display frequency of cab request per slots ; and the status of request

Demand for cabs are high in the morning and evening ; as the incoming /outgoing flights are more during these hours.

More then 50% of cabs during these hours is either cancelled or not available.

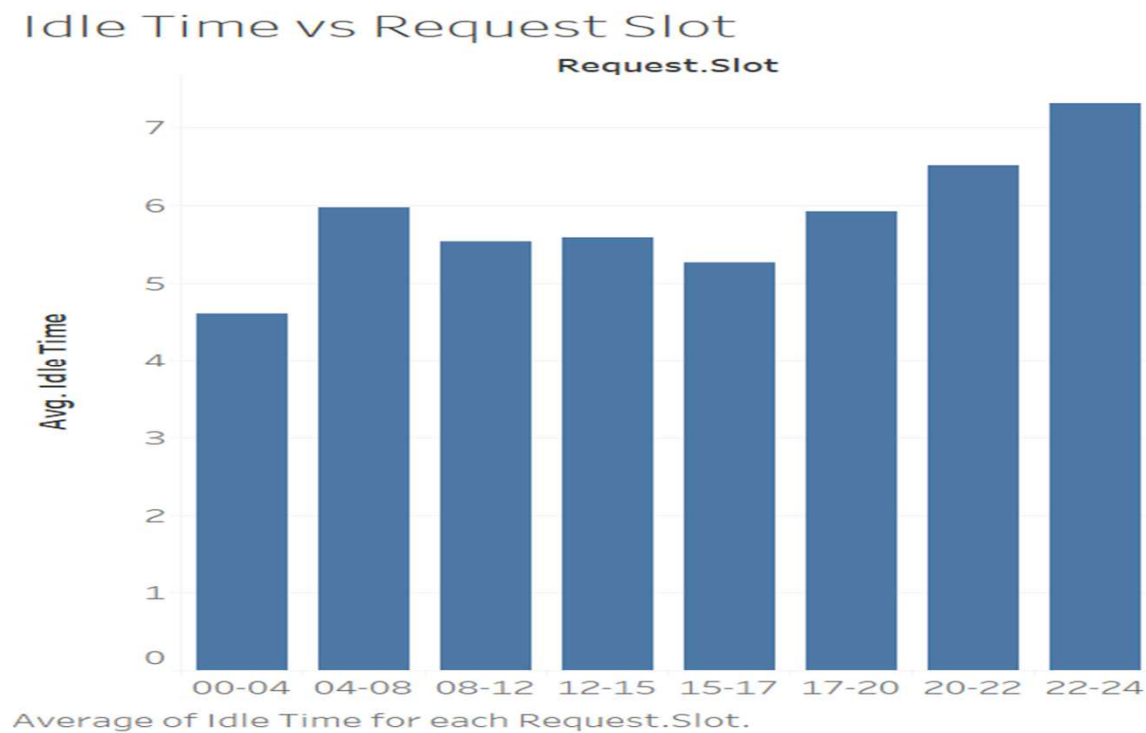
Cancellation is high in the morning ; 'Cars not available' status is high in the evening

Cab Demand vs Time Slot vs Pickup Point



Plot to display frequency of cab request per slots ; and the status of request.
 Demand supply gap is severe in the time slot of 04-08 and 08-12 (morning period) for city pickup
 Demand supply gap is severe in the time slot of 17-20 and 20-22 (evening and night) for airport pickup

Analysis for Driver's Idle Time at Airport



The avg idle time is higher in the evening . Driver had to wait around 5 hours even during peak hours

Analysis

- There is big gap in the supply and demand during the morning and evening period
- Cancellation are higher in the evening , but 'no cabs are available' in the morning is more higher
- % of Trip Completed is approx. 40% during peak hours
- From Airport Pickup , request are higher in the evening & cabs supply is less ; there's severe gap ; this may be due to high idle time
- From City Pickup, request are higher in the morning & cabs cancellation is higher ; there's severe gap; this may be due to higher travel time

Recommendation

- Uber need to increase the supply of cabs in airport in the evening
- Since the wait/idle time is higher ,Uber need to compensate the drivers with additional incentives
- Uber needs to look at cancellation of request and can deduct additional points for cancellation if the request destination is airport