

Uber Supply-Demand Gap Analysis—Insights Report

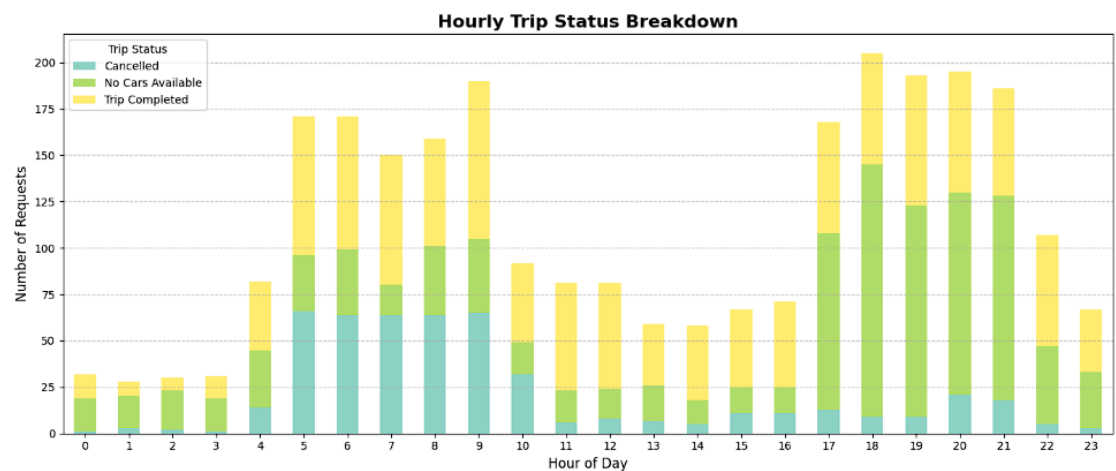
♦ 1. Problem Statement

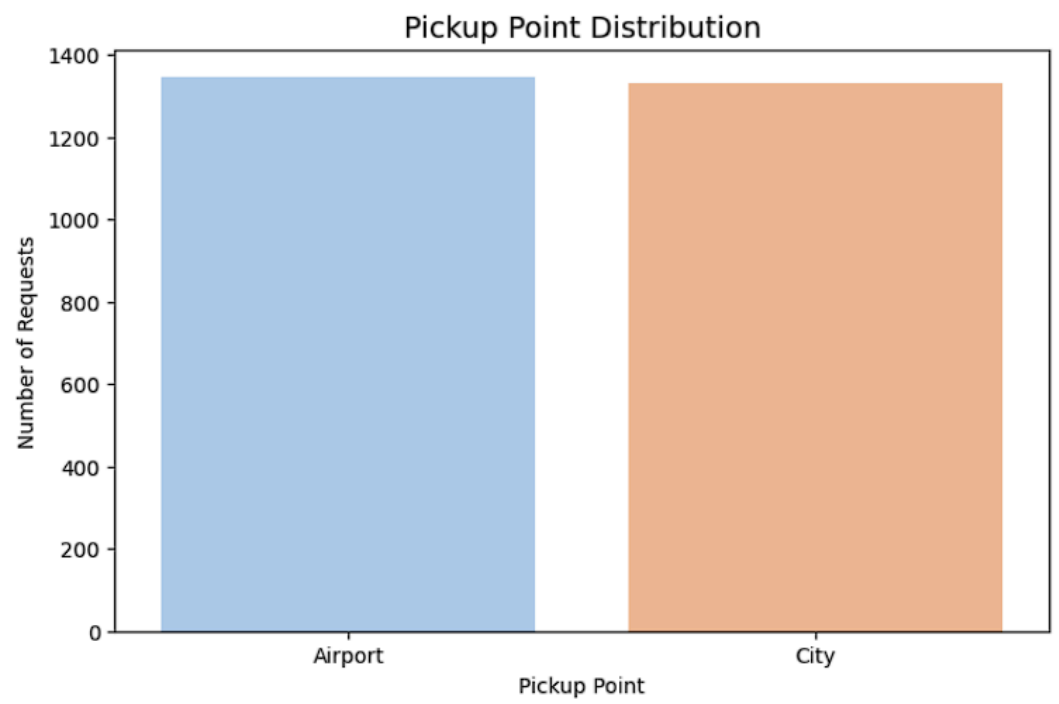
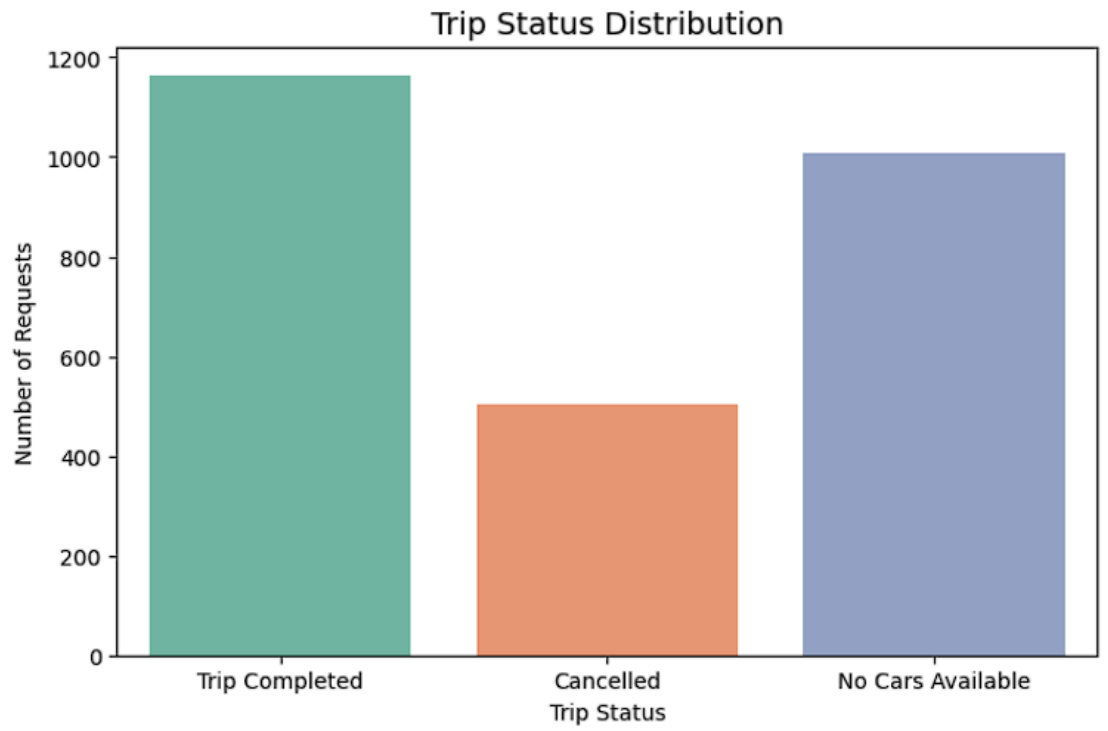
Uber is facing unfulfilled trip requests during peak hours. The objective is to analyze the ride request data to identify where and when supply fails to meet demand and suggest operational solutions.

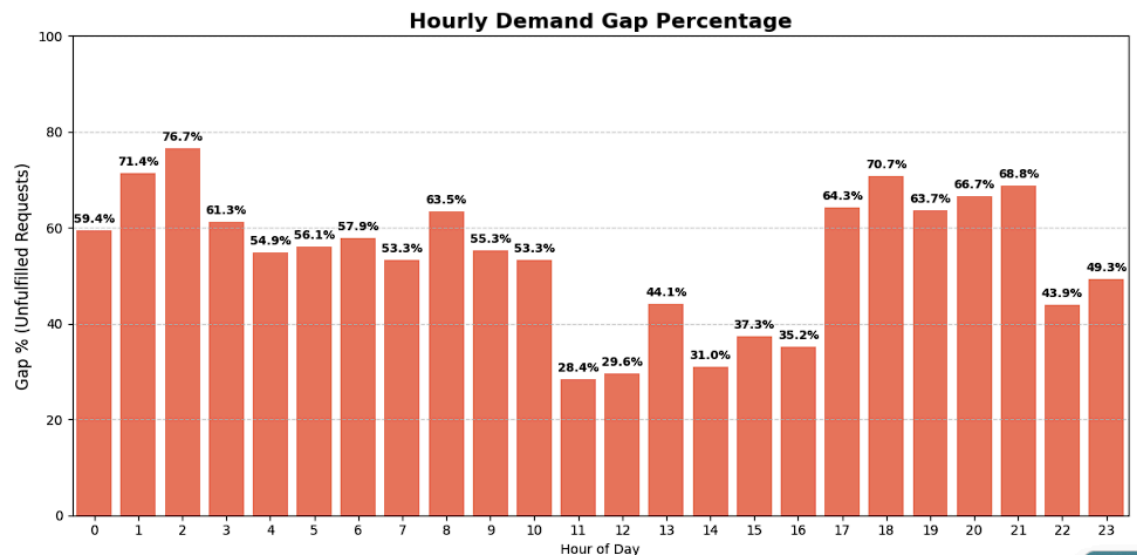
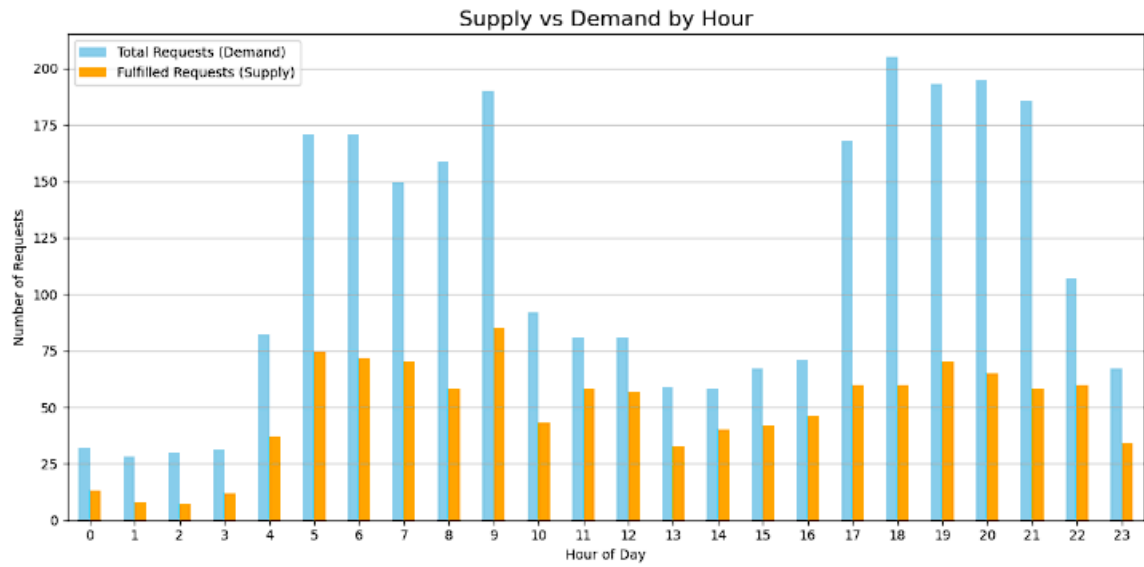
♦ 2. Tools Used

- Python (Pandas, Seaborn, Matplotlib)
- Jupyter Notebook
- Excel (Dashboard & Pivot)
- SQL (for querying demand/supply patterns)

)







Uber Ride Requests Analysis Dashboard


Overview

This dashboard provides a comprehensive overview of Uber ride request patterns, driver engagement, trip outcomes, and status distributions. Use these insights to identify peak demand periods, service gaps, and operational trends across pickup locations and timeframes.

Insights

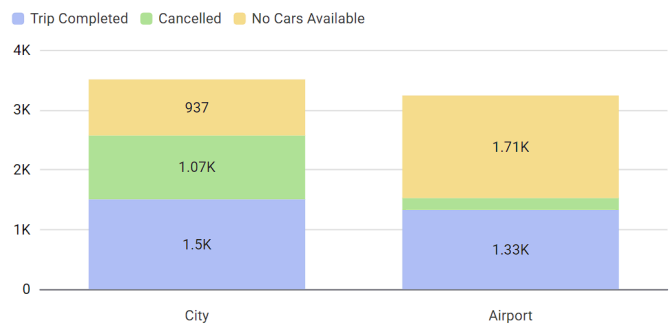
- Airport pickups experience a higher number of "No Cars Available" requests (1,710) compared to city pickups (937), indicating capacity constraints at the airport.
- City pickups have more completed trips (1,500) than airport pickups (1,330), suggesting better service fulfillment in urban areas.
- Cancellations are significantly higher in the city (1,070) than at the airport (198), reflecting different user behaviors or cancellation policies.
- Overall, "Trip Completed" requests make up the largest share at 41.97%, closely followed by "No Cars Available" at 39.29%, indicating a major service gap.
- Cancellations account for 18.74% of all requests, representing a notable drop-off before ride assignment.


Total Requests
6745


Completion Rate
0.41971831


Unique Drivers
301

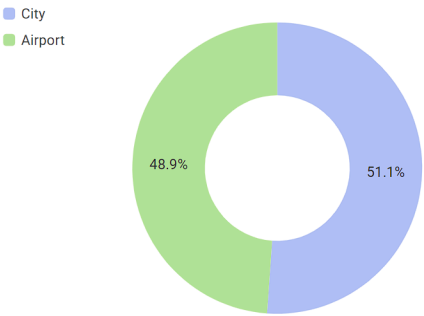
Total Requests by Status and Pickup Point



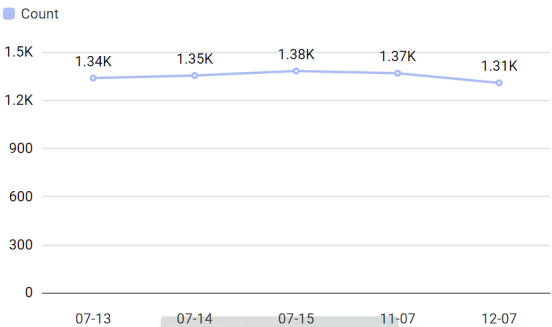
Key Insights

- Airport pickup sees a higher proportion of "No Cars Available" requests (1.71K) than City (937), indicating capacity constraints at the airport
- City pickups have more completed trips (1.50K) than the airport (1.33K), suggesting better fulfillment in urban areas
- Cancellations are notably higher in the city (1.07K) compared to the airport (198), pointing to different user behavior or cancellation policies

Trip Completion Rate by Pickup Point



Request Volume Over Time



Key Insights

- Trip Completed accounts for the largest share at 41.97%, but closely followed by No Cars Available at 39.29%, highlighting a major service gap
- Cancellations represent 18.74% of all requests, signalling a smaller yet significant drop-off before ride assignment

Status Summary

| Status | Count | Percentage |
|-------------------|-------|------------|
| Cancelled | 1264 | 18.74% |
| No Cars Available | 2650 | 39.29% |
| Trip Completed | 2831 | 41.97% |

Top Drivers By Trips

| Driver id | Trip Count |
|-----------|------------|
| 22 | 16 |
| 233 | 15 |
| 184 | 15 |
| 126 | 14 |
| 107 | 14 |
| 105 | 14 |
| 212 | 14 |
| 109 | 14 |
| 24 | 14 |
| 23 | 14 |