

# **Power BI - Project Report**

## ***Supply & Demand Gap*** ***Analysis on Uber Request*** ***Data***

**By**

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### ***Project Insight:***

1. Aim.
2. Problem statement.
3. Methodology.
4. Analysis.
5. Insights.
6. Recommendations.
7. Conclusions.

## **Aim:**

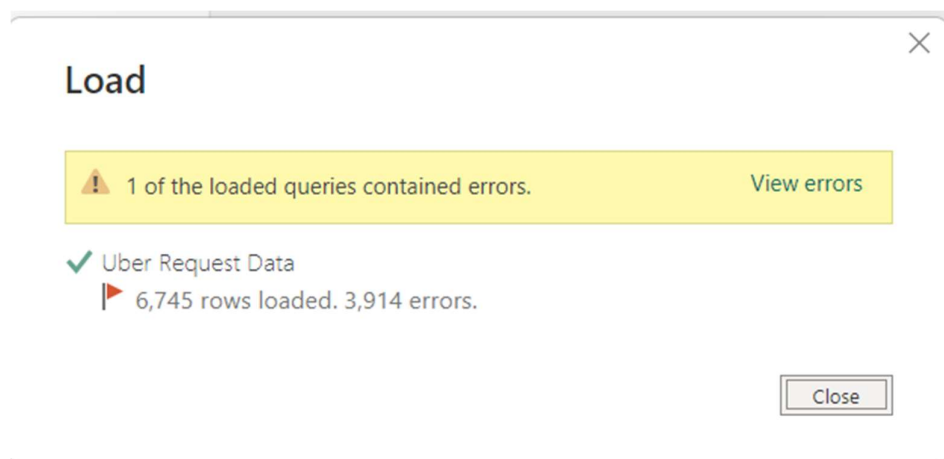
To analyse Supply & Demand Gap Analysis on Uber Request Data and provide a solution for better improvement to reduce demand.

## **Problem Statement:**

- Uber is an app-based transportation network and taxi company. In its Airport rides in a particular city, many of its users face the problem of cancellation by the driver or non-availability of cars.
- These very issues impact the business of Uber and it loses out on its revenue.

## **Methodology:**

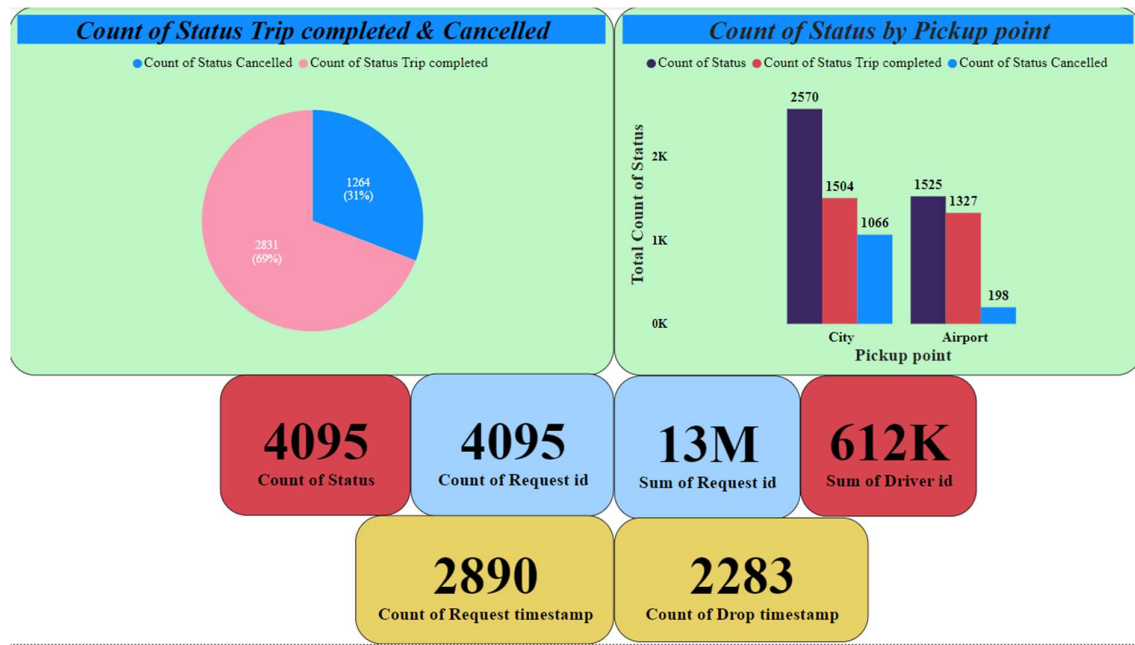
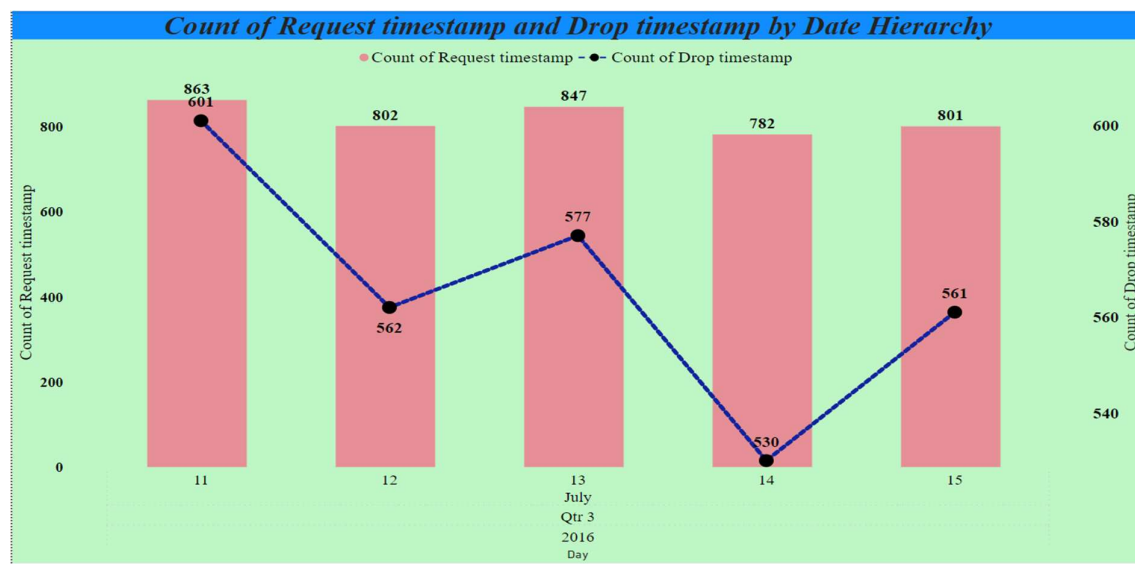
- **Data Pre-processing / Cleaning:**
  - ❖ While loading the dataset to Power BI, it shows 3914 errors where the errors are referred to “NA” values in cells of respective columns.
  - ❖ To clear these errors, open the dataset in excel or csv format.
  - ❖ Add filter to all the columns, keep only “**No Cars Available**” in Status column, delete all the filtered rows. The error will be reduced.



- ❖ According to my analysis, status of no cars available is like the trip hasn't done so I consider it as unwanted data.

- ❖ Still the remaining columns contain “NA” values. To clear that, create 2 new columns named Status Completed, Status Cancelled.
- ❖ Apply conditional statement to Status Completed column where Status = completed, it returns Completed and to Status Cancelled column where Status = Cancelled, it returns Cancelled.
- ❖ Leave else condition as blank.
- ❖ In Drop Timestamp column, replace error or NA values to “null”.
- ❖ Click Apply & close, the errors will be resolved.

## Analysis:



### **Insights:**

- The count of request timestamp is literally high when compared to drop timestamp. This can be due to trips cancelled.
- Count of trips completed is 69% where as trip cancelled is 31%.
- Count of status in City is 2570 among that 1504 trips were completed and 1066 are cancelled.
- Count of status in Airport is 1525 among that 1327 trips were completed and 198 are cancelled.

### **Recommendations:**

- ❖ The reason of cars unavailable could be due to the cars completing other trips hence its recommended to provide more cars in order to fill the gap.
- ❖ The reason of unavailability of cars could be due to cars not being at service to customers i.e., they are off duty, then it is recommended that those cars which are not present in the trip data at those timeslots must be investigated for the reason of being off duty.
- ❖ This count of request id is 418 at 1700hrs and number of driver ids is 186 which shows that all 300 cars are not at service in that hour and if they are at service then they are not present in these two pickup points Problematic Timeslots with huge supply demand gap.
- ❖ Cancelling the requests is not due to cars being in transit for serving other requests but there is some other unknown reason which is evident from the fact explained in next point. It is recommended to check why cancelling requests is in such high numbers.

### **Conclusion:**

Feedback should be given from Customer & Driver. Drivers feedback is based on availability and customer feedback is on drivers reporting & drop time, reasonable pay, comfortability.

Even when the cars are present at the pickup point, and possible if they are cancelling a request to serve other requests then that is not happening in reality.