

Uber Supply-Demand Gap Analysis

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Uber Supply-Demand Gap Abstract

Project Brief

Uber wants to make identify root cause of problem and possible hypotheses of the problem(s) and recommend ways to improve the situation which are leading to loss of potential revenue.

Business and Data Understanding

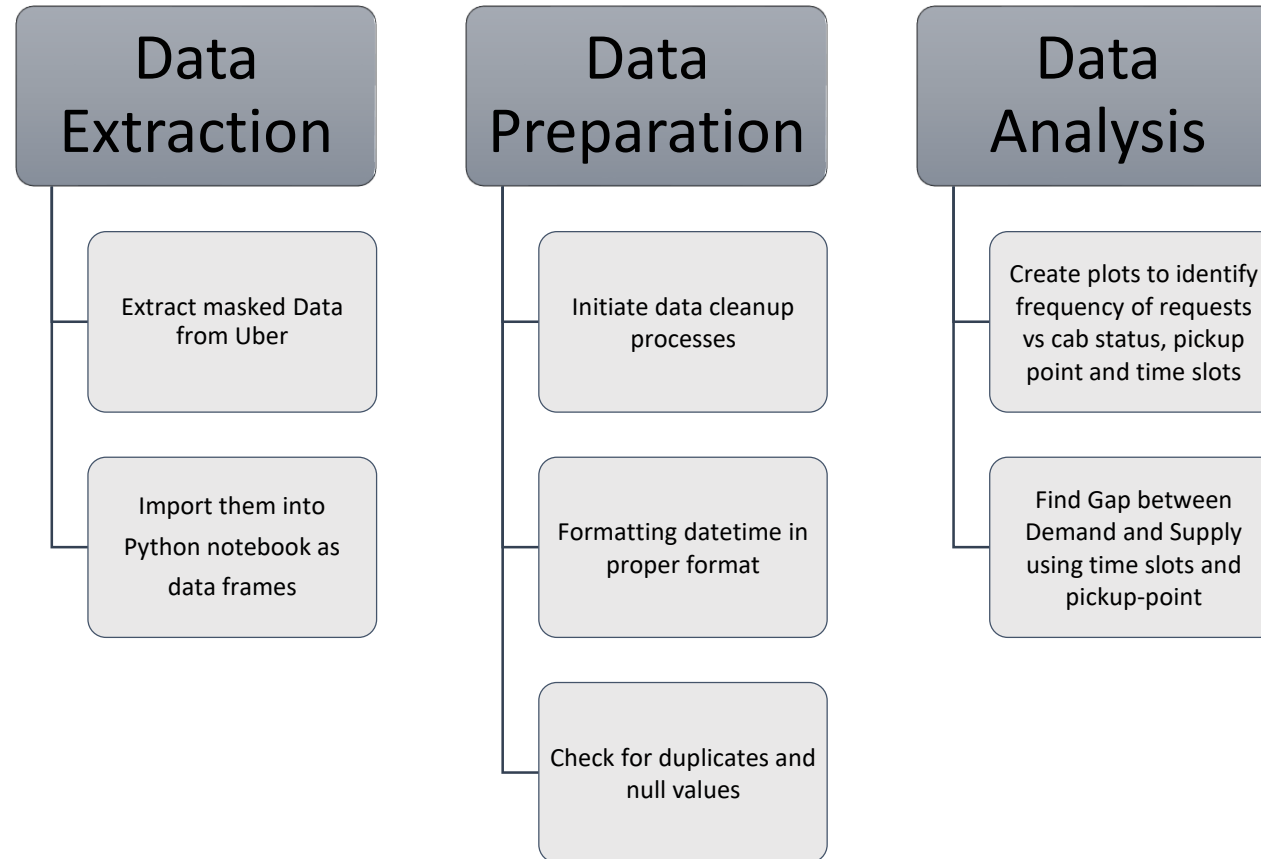
- Only the trips to and from the airport are being considered.
- Data Ingestion:- Taken masked data set from uber

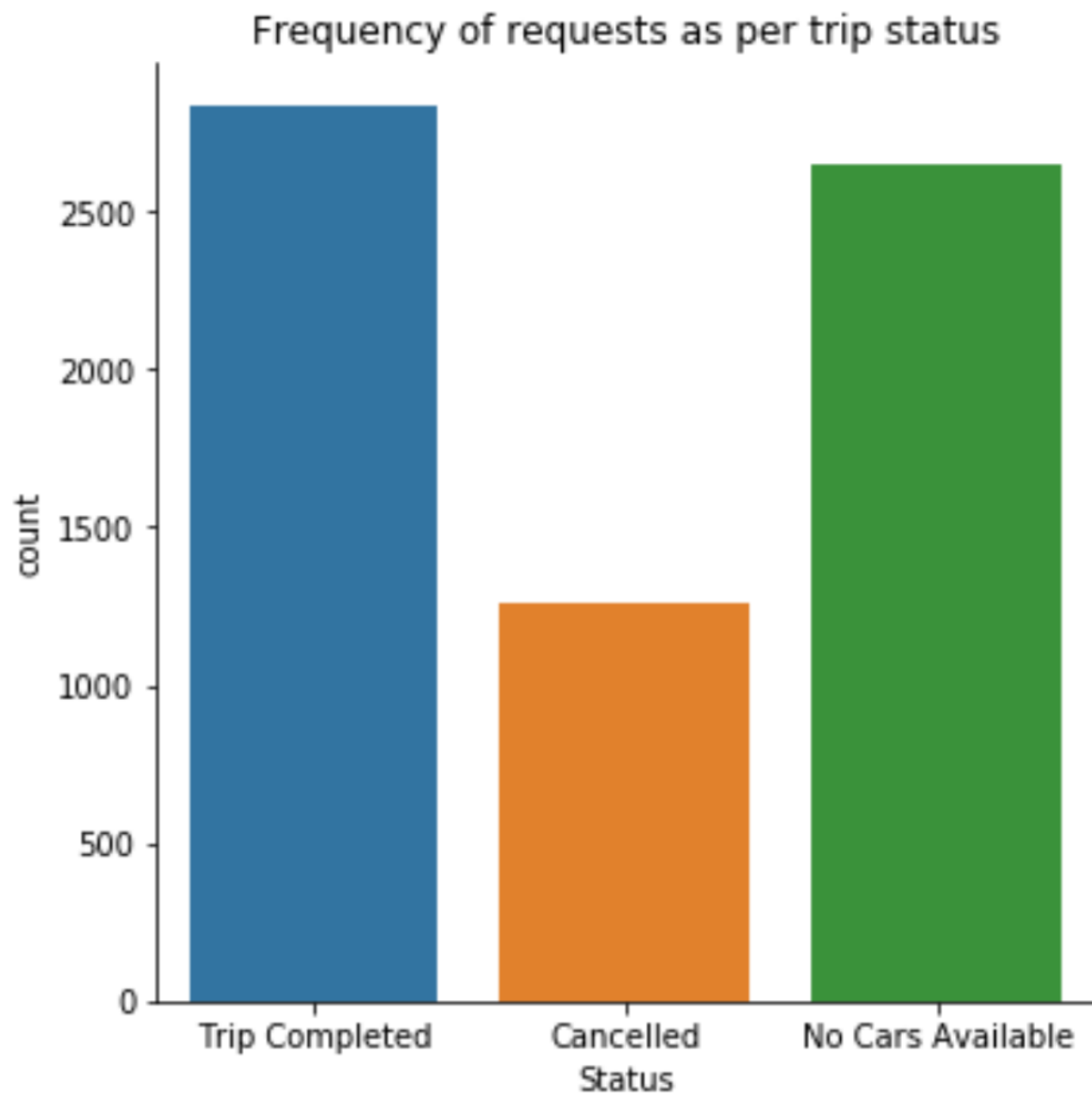
Business objective

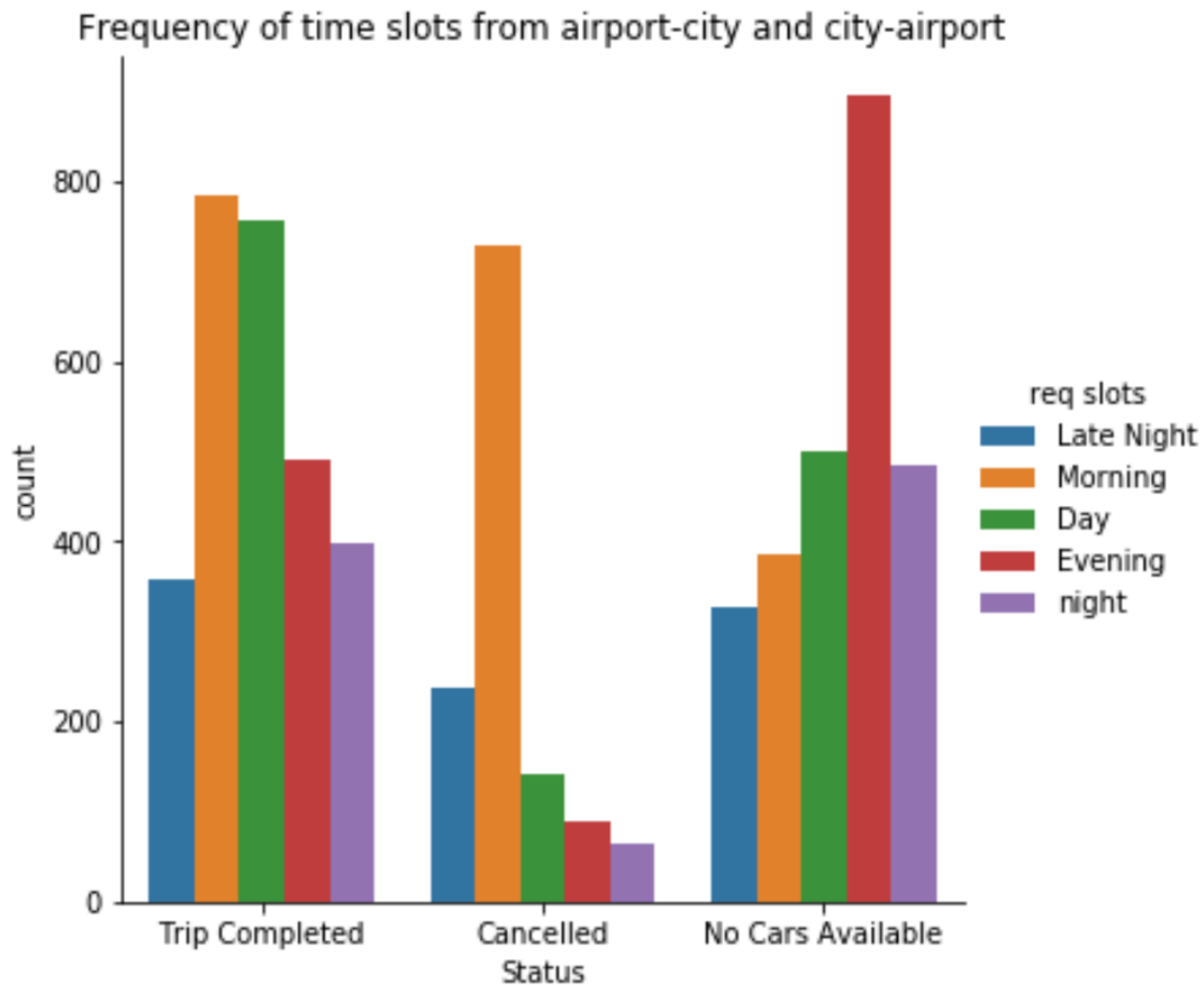
Identify root cause of problem and possible hypotheses of the problem(s) and recommend ways to improve the situation

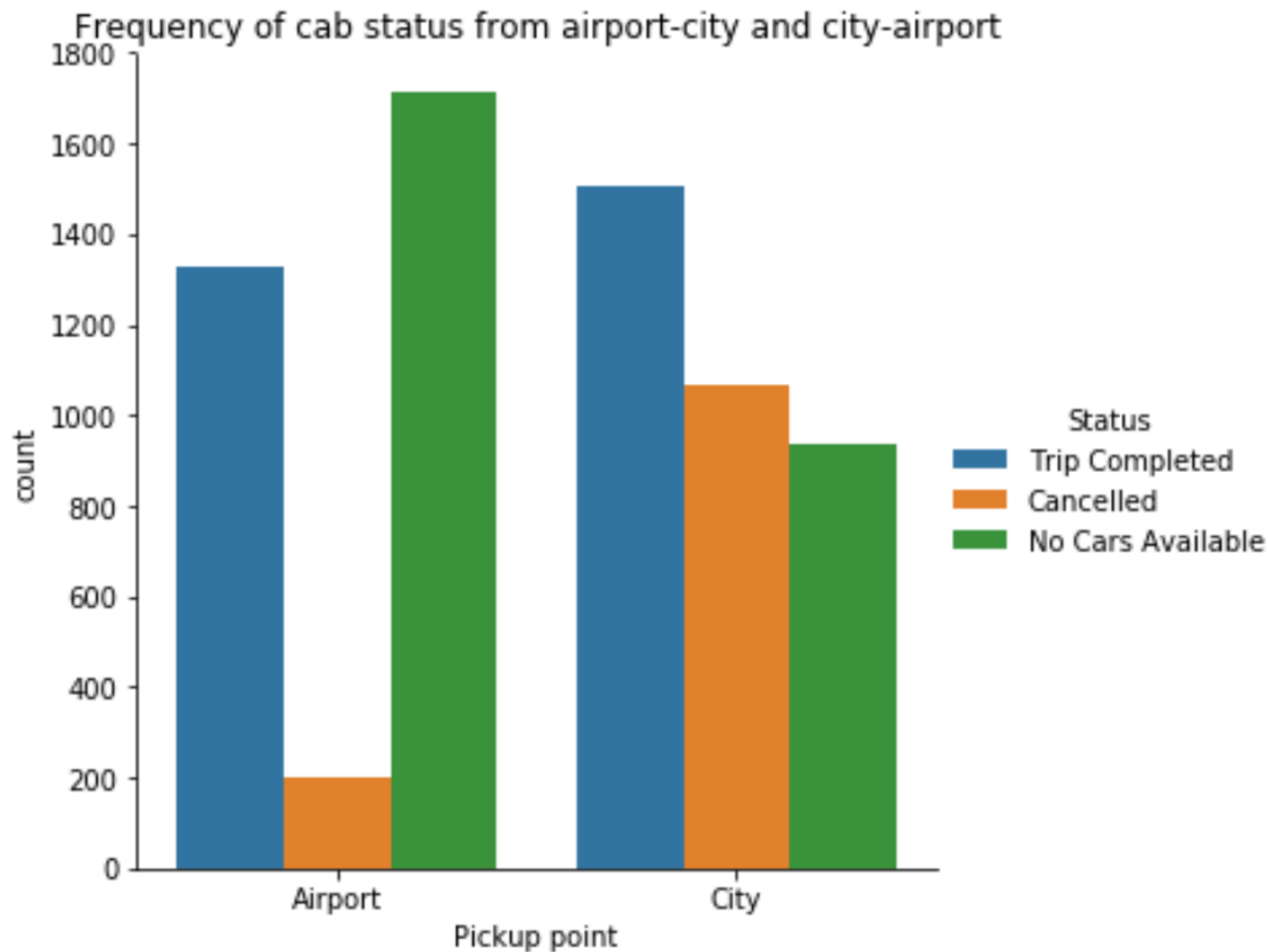
Goal of data analysis:-

- Cab status type analysis –Cancellation and non-availability of cars
- Supply and Demand Analysis – Time slots and type of request(city to airport or airport to city) where highest gap exists

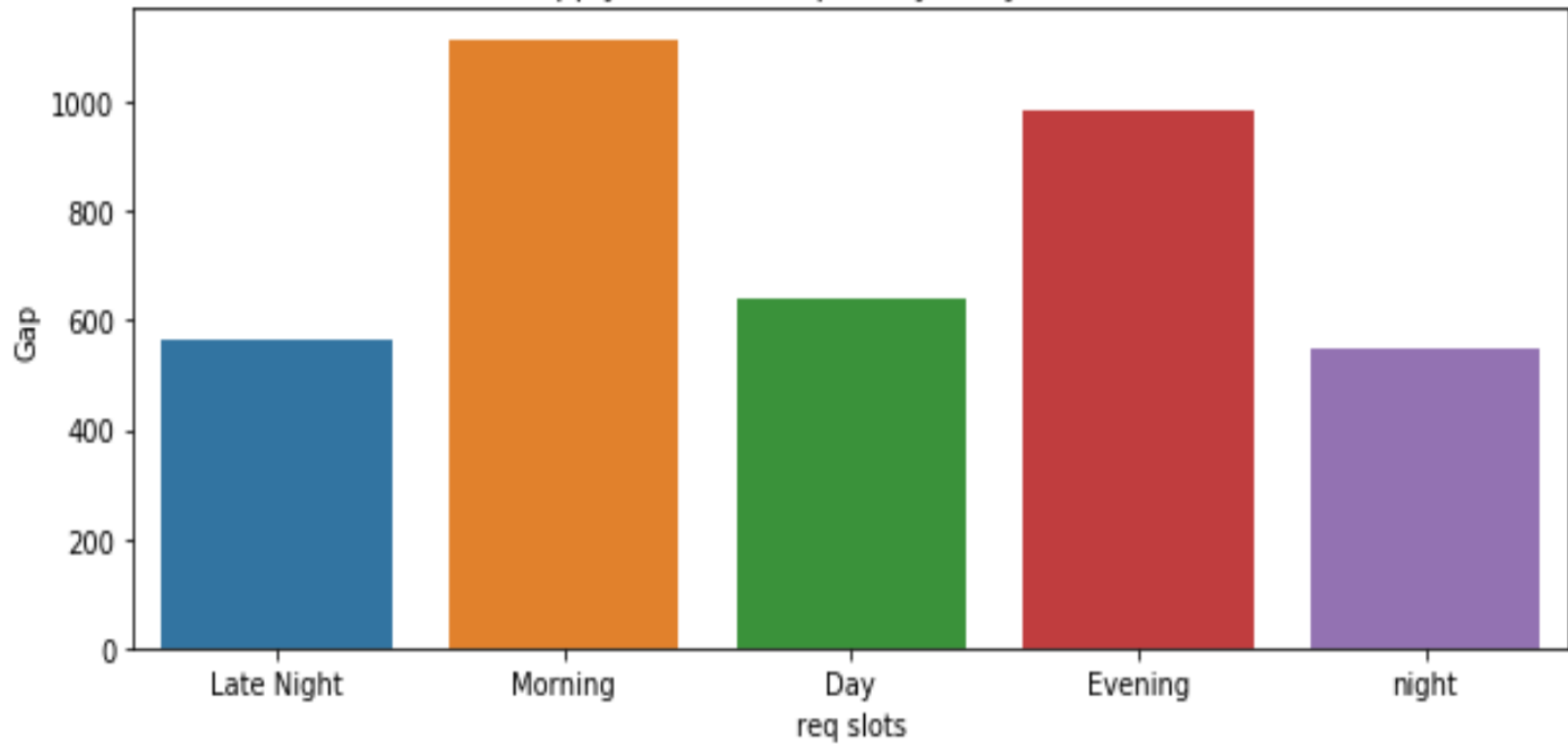




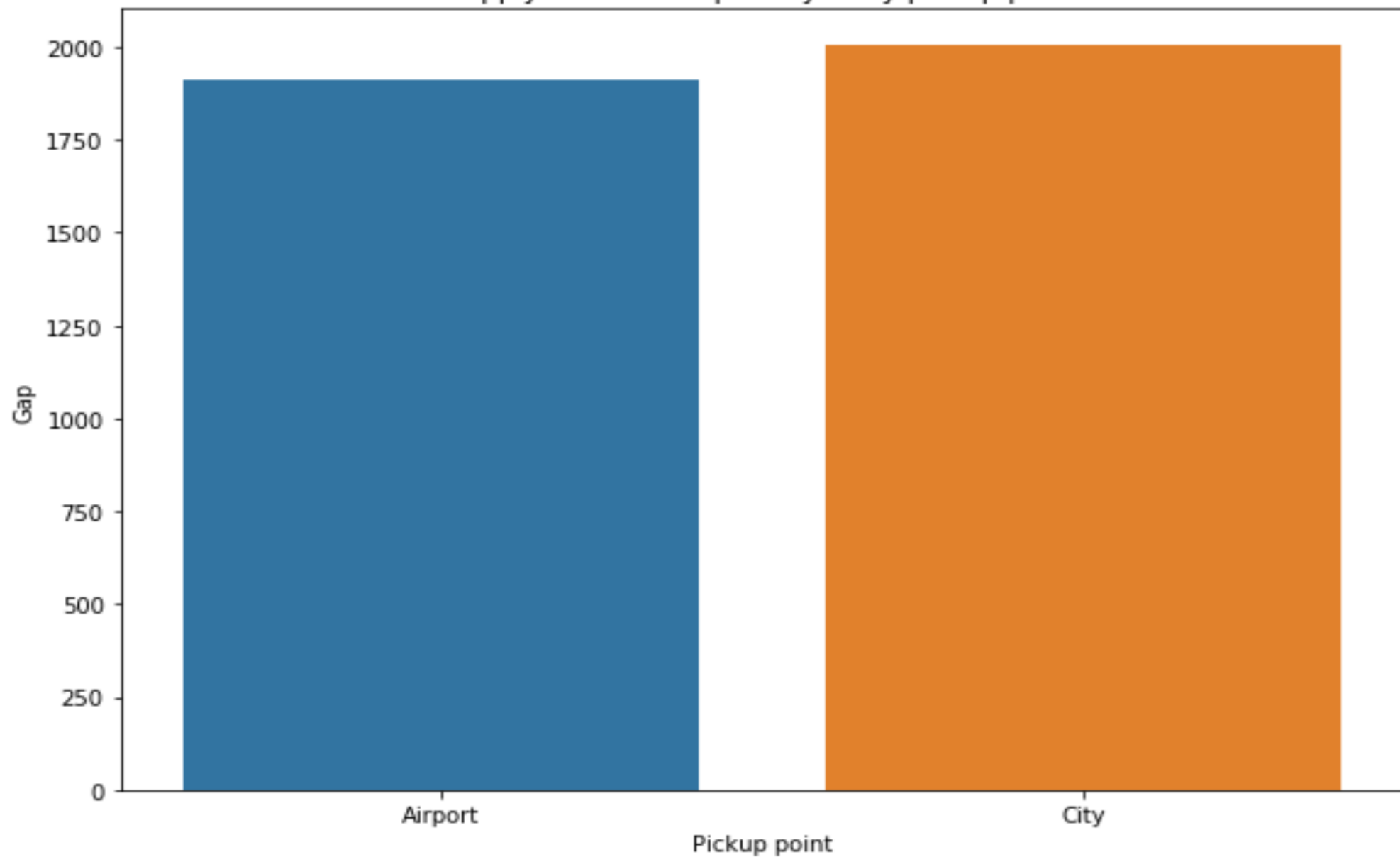


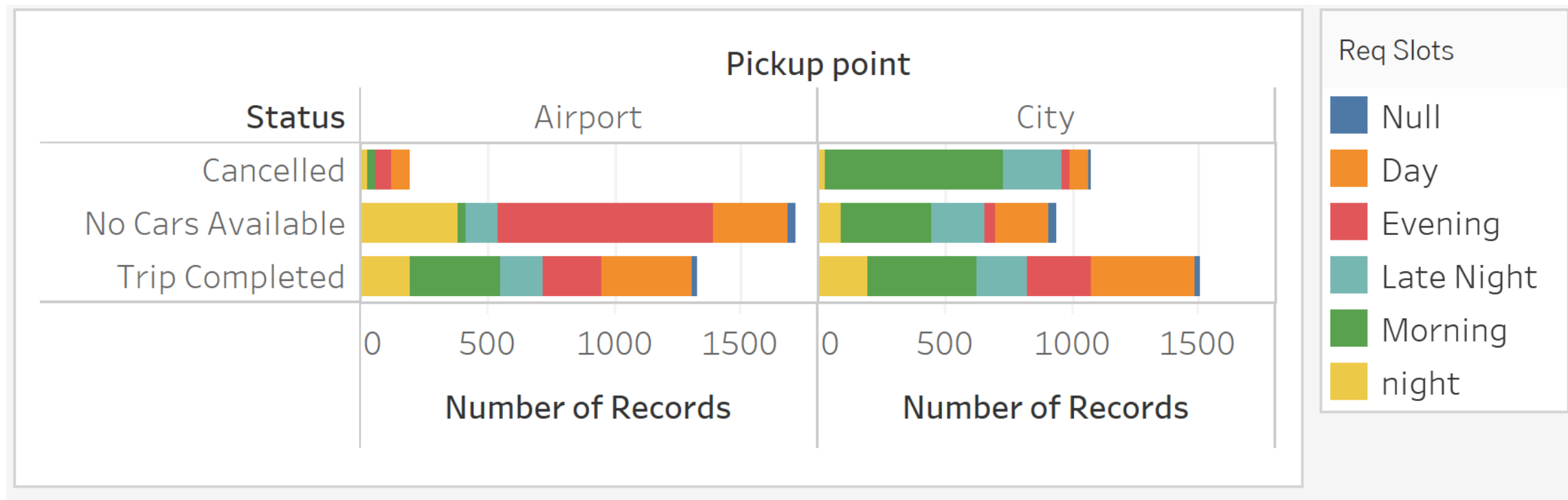


Supply Demand Gap Analysis by time slots

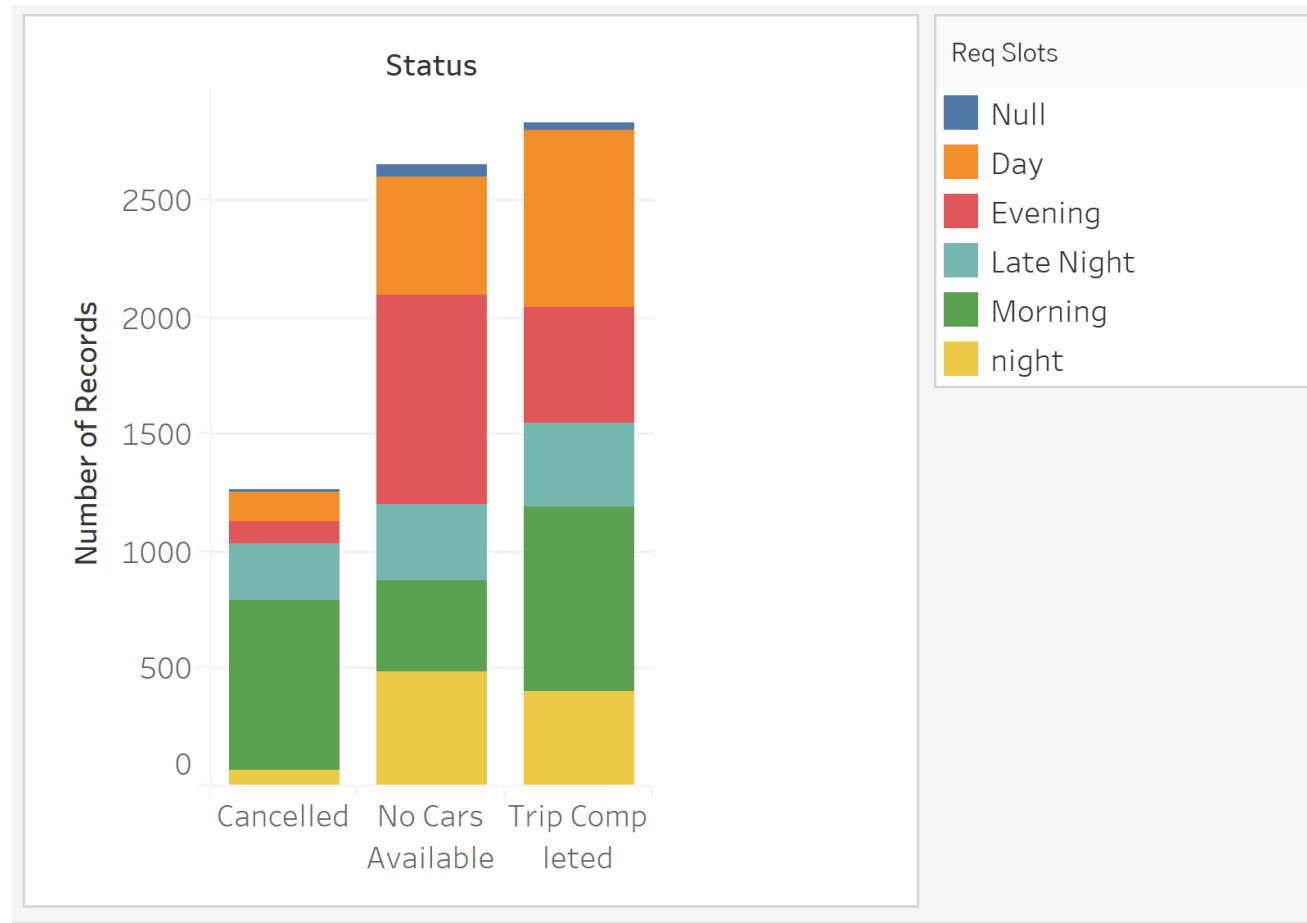


Supply Demand Gap Analysis by pickup point



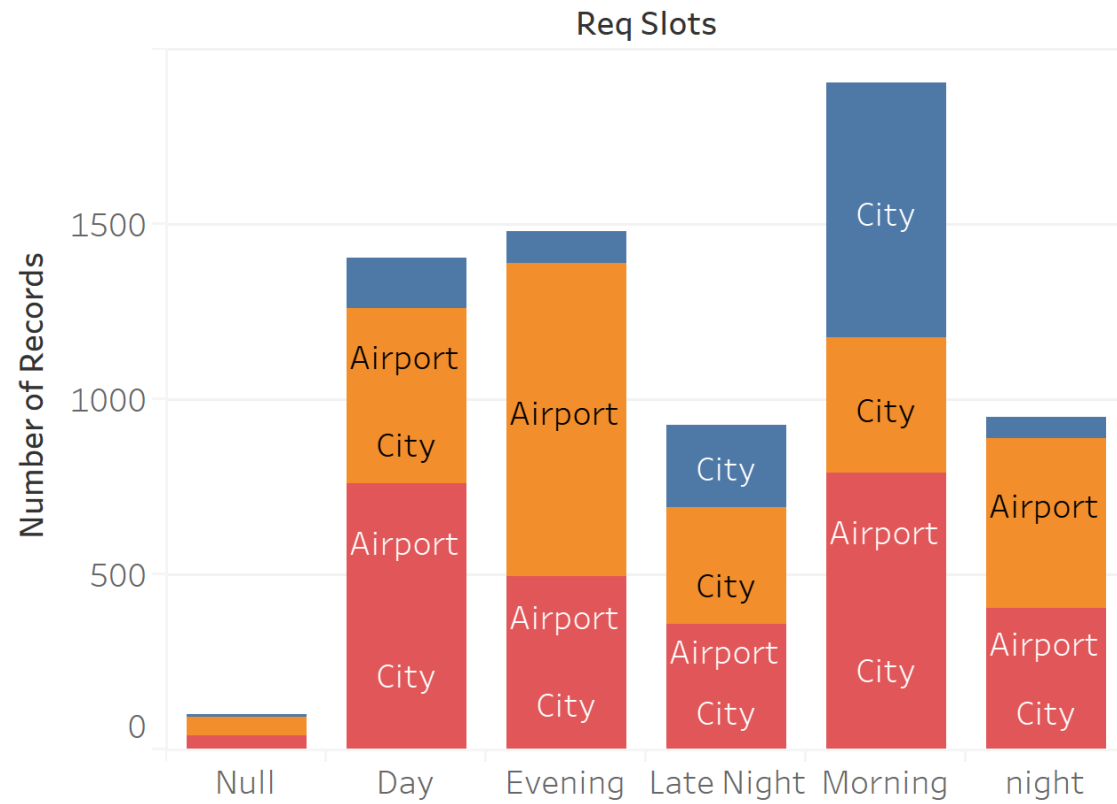


Results



Results

Gap Analysis between pickup point



Results

Reasons for Supply Demand Gap

- From previous graph we can derive the conclusion that there is shortage of cabs from airport to city during evening time which may be due to high traffic jams in city or during this interval there are no flights scheduled either for arrival or departure.
- In morning maximum gap is from city to airport which may be due to large distance between city and airport for which drivers are cancelling the request coming from airport.
- Also it can be inferred that maximum unavailability cars are from city only which may be due to large distance between city and airport.

Solution to resolve Supply Demand Gap

- Some way to resolve this supply-demand gap is to create special category for airport cabs which are paid more than city cabs.
- We can also have surge pricing during morning and evening time interval when demand is high.