

UBER SUPPLY-DEMAND GAP

CASE STUDY

By:

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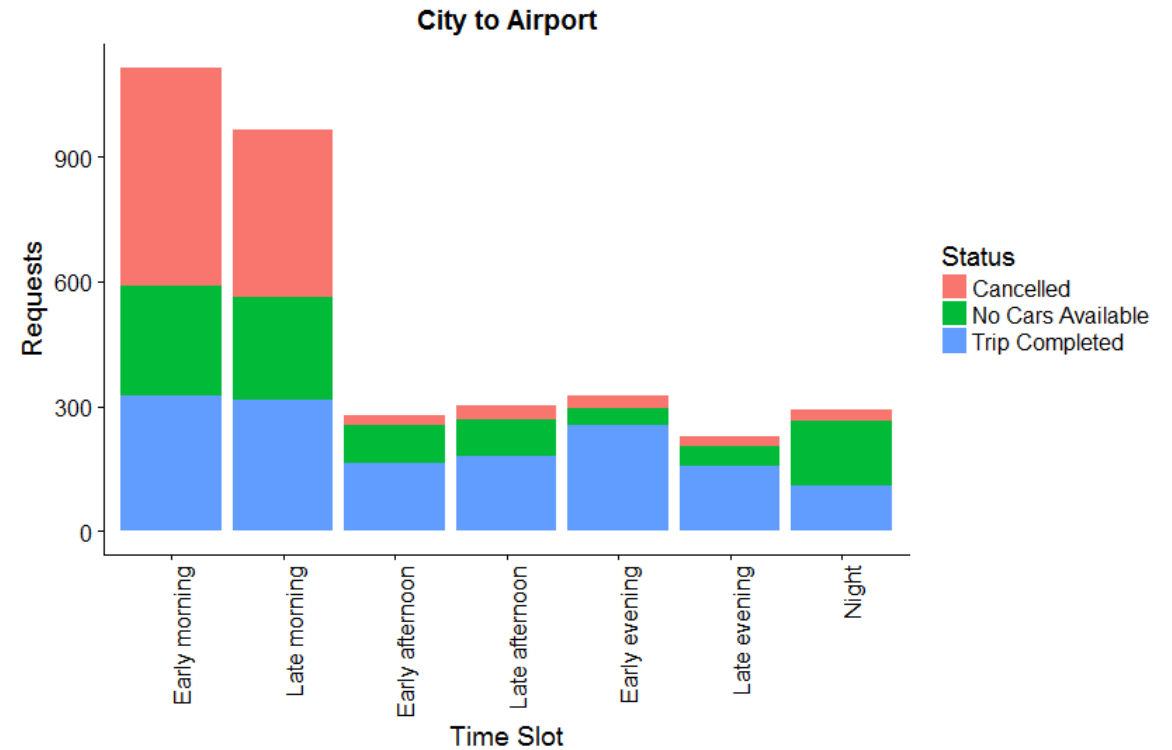
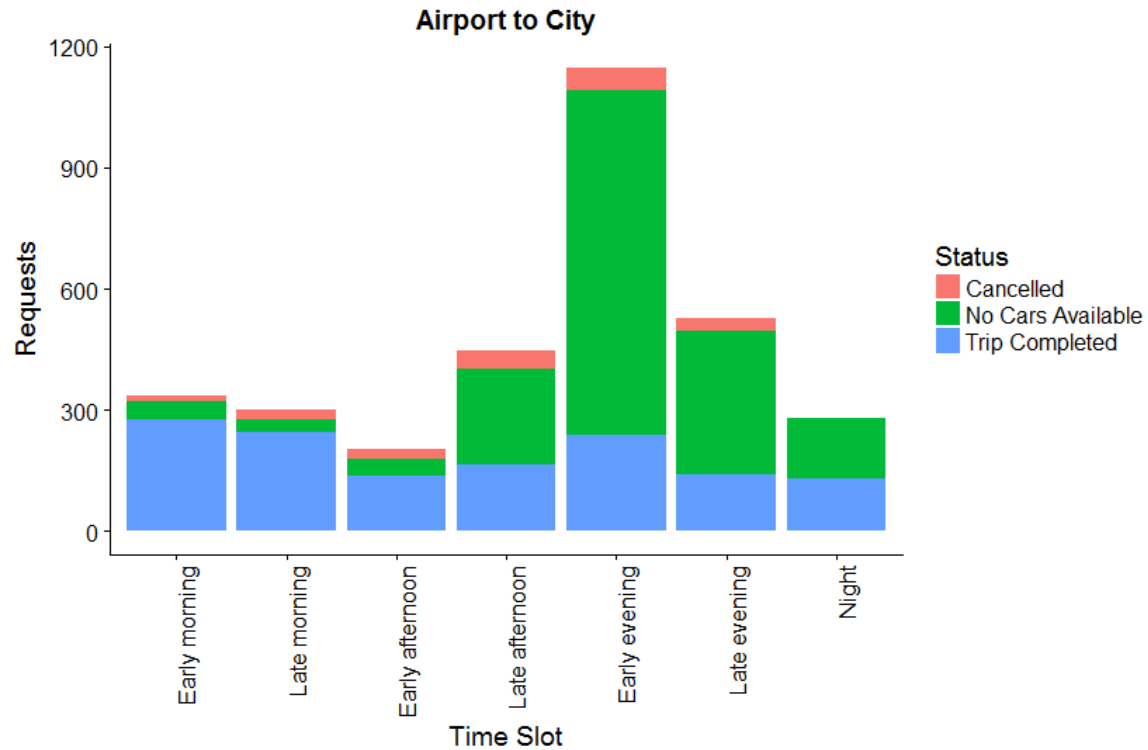
Abstract

Analysis of problem faced by Uber - driver cancellation and non-availability of cars leading to loss of potential revenue. The aim of analysis is to identify the root cause of the problem (i.e. cancellation and non-availability of cars) and recommend ways to improve the situation. Analysis should conclude by providing root cause(s) and possible hypotheses of the problem(s) and recommend ways to improve them.

Problem Solving Methodology

Data set provided by Uber will be analyzed and problem will be systematically and solved using Exploratory Data Analysis and data visualization.

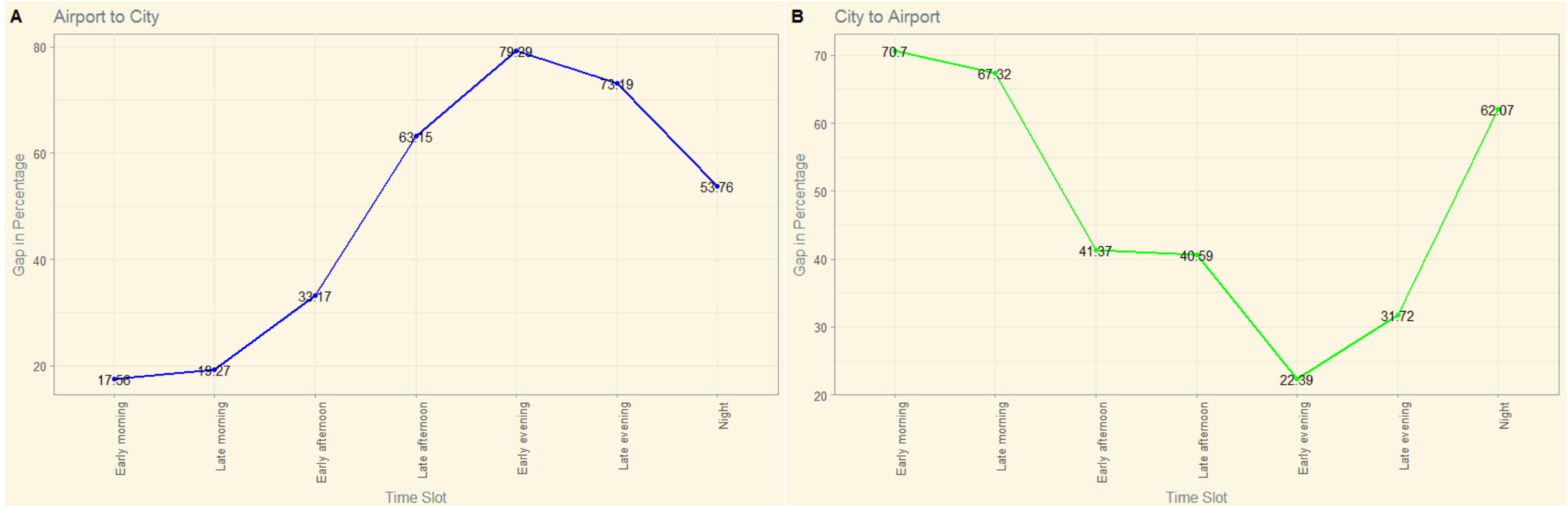
Analysis of Data Set



Issues identified

1. High demand during early evening between 6:00 PM to 9:00 PM from Airport to City but availability is very low
2. High demand during morning between 4:00 AM to 12:00 noon from City to Airport, but high number of trip cancellations results in revenue loss and dent on Uber's reputation.

Supply – Demand Gap



- Supply-demand gap is very high in Airport pickup during Early Evening between 6:00 PM to 9:00 PM, around 80%
- Supply-demand gap is very high in City pickup during Early Morning between 4:00 AM to 8:00 AM, around 70%

Prominent Issue

- Non availability of car in Airport during Early Evening between 6:00 PM to 9:00 PM
- Only 21% of requests are getting completed
- 74% of requests end-up without car being allocated.

Cause for Supply-Demand Gap

- Low requests observed from Airport to City during early afternoon between 12:00pm to 3:00 pm and even during morning slots. This discourages drivers from taking Airport trip who has to wait long in Airport to get his next trip.
- Since Uber drivers have minimum number of trips to complete per day to get their incentives, they prefer not to wait in Airport during low request period and hence tend to cancel trips to Airport during morning timeslots.
- From 12 noon there is low number of requests for airport trips from city. This is resulting in no car during high demand timeslot in Airport.

Proposed Solution

- Ensure more cars are available during high demand timeslots.
- If drivers wait in Airport during shallow request time, relax the minimum number of trips.
- Provide additional incentives to drivers who take Airport trip.