

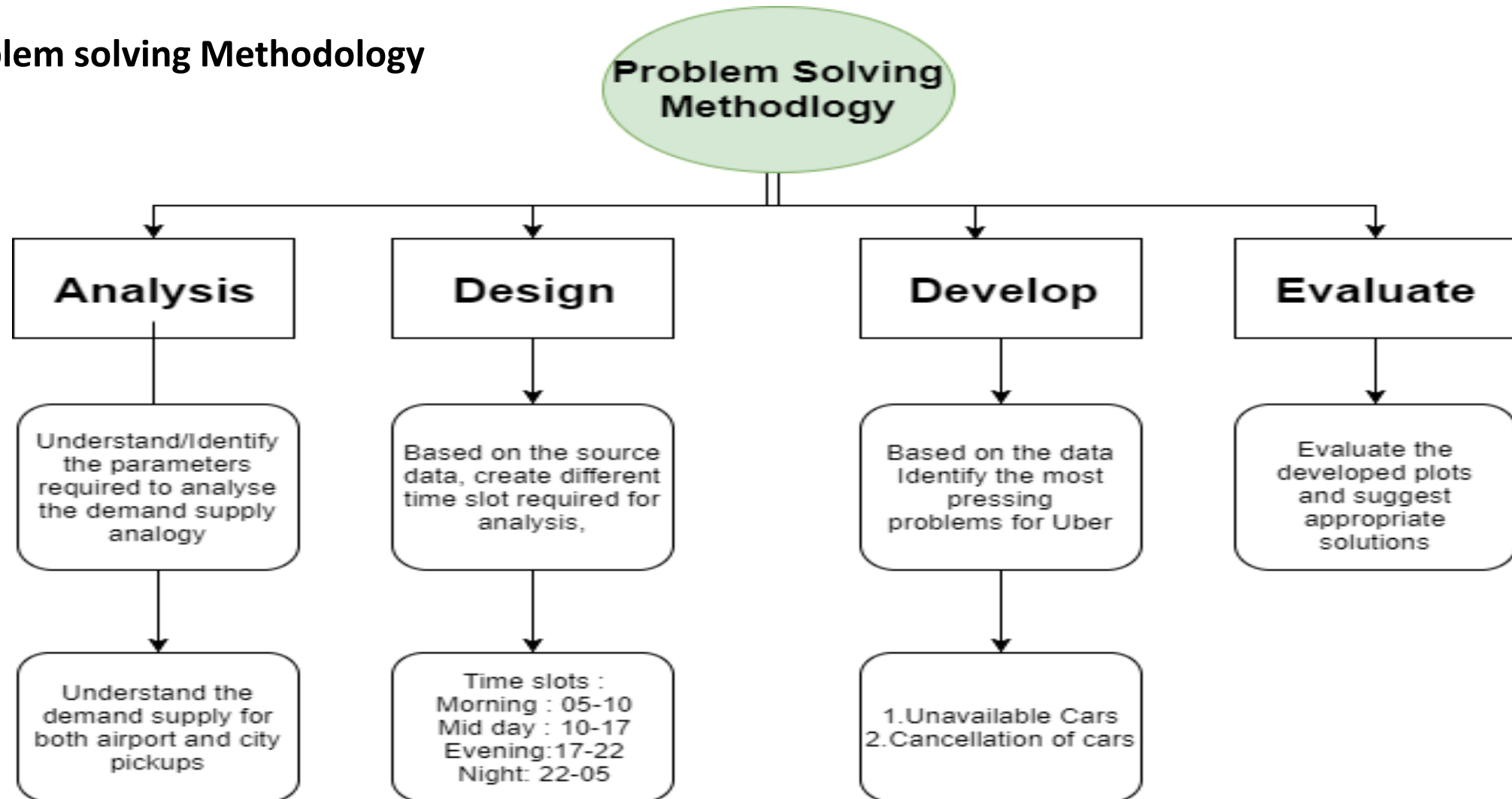
Uber Supply – Demand Gap Assignment

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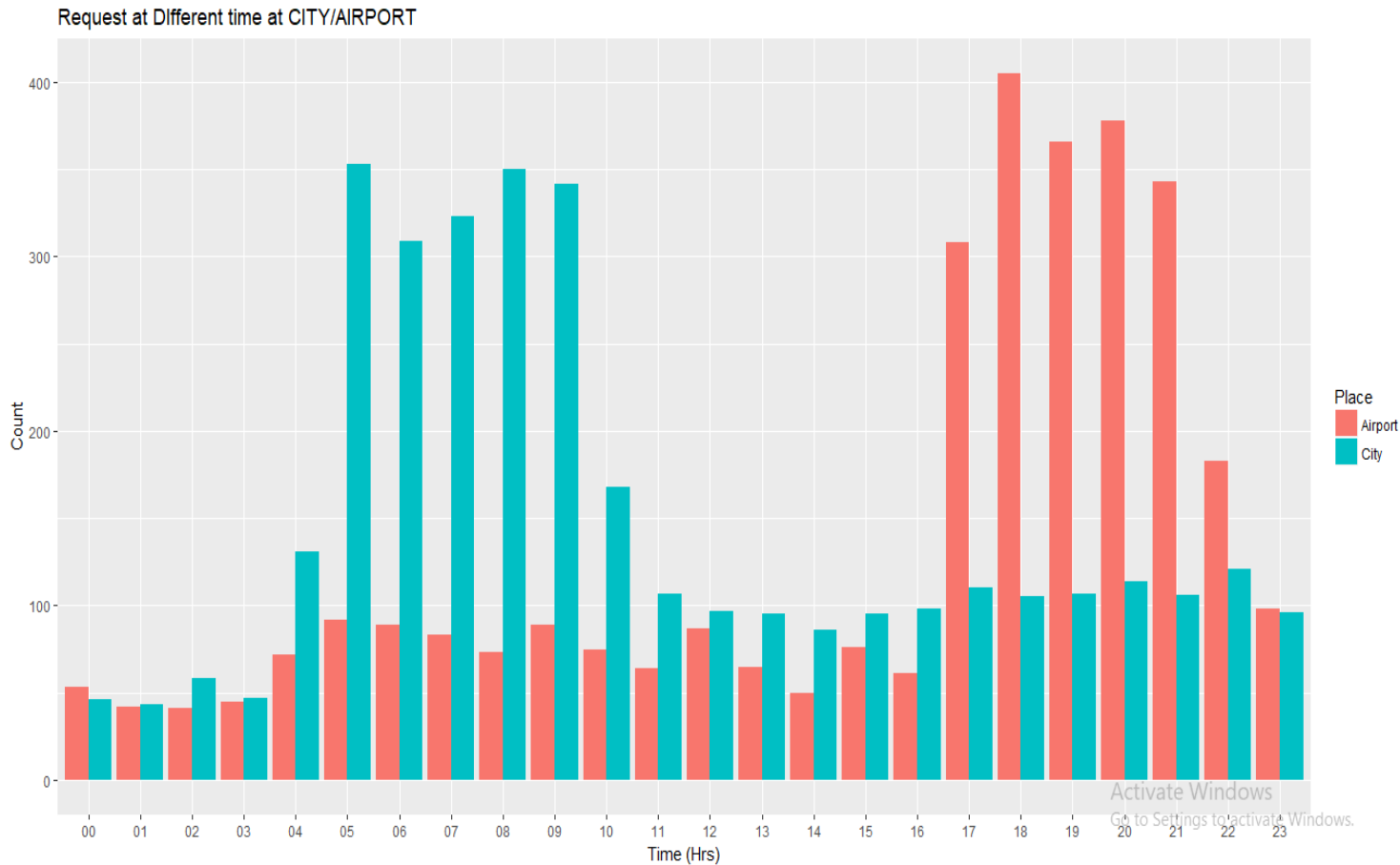
Abstract

- **Aim:**
 - The Objective is to Identify Supply – Demand Problems at Airport – City travels for Uber
- **Problem Statement:**
 - Uber an online rental cabs service provider faces a few issues with Supply – Demand for the cabs travelling from or to the Airport.
 - Wants to see the trends of demand supply at different time slots at both the location pickup
- **Approach:**
 - The primary approach is to check which time has higher demands
 - Make clusters of time slots to make better decision based on similarity of demand – supply
 - Check which is the major problematic combination for uber based on status,demand and supply at both pickups

Problem solving Methodology



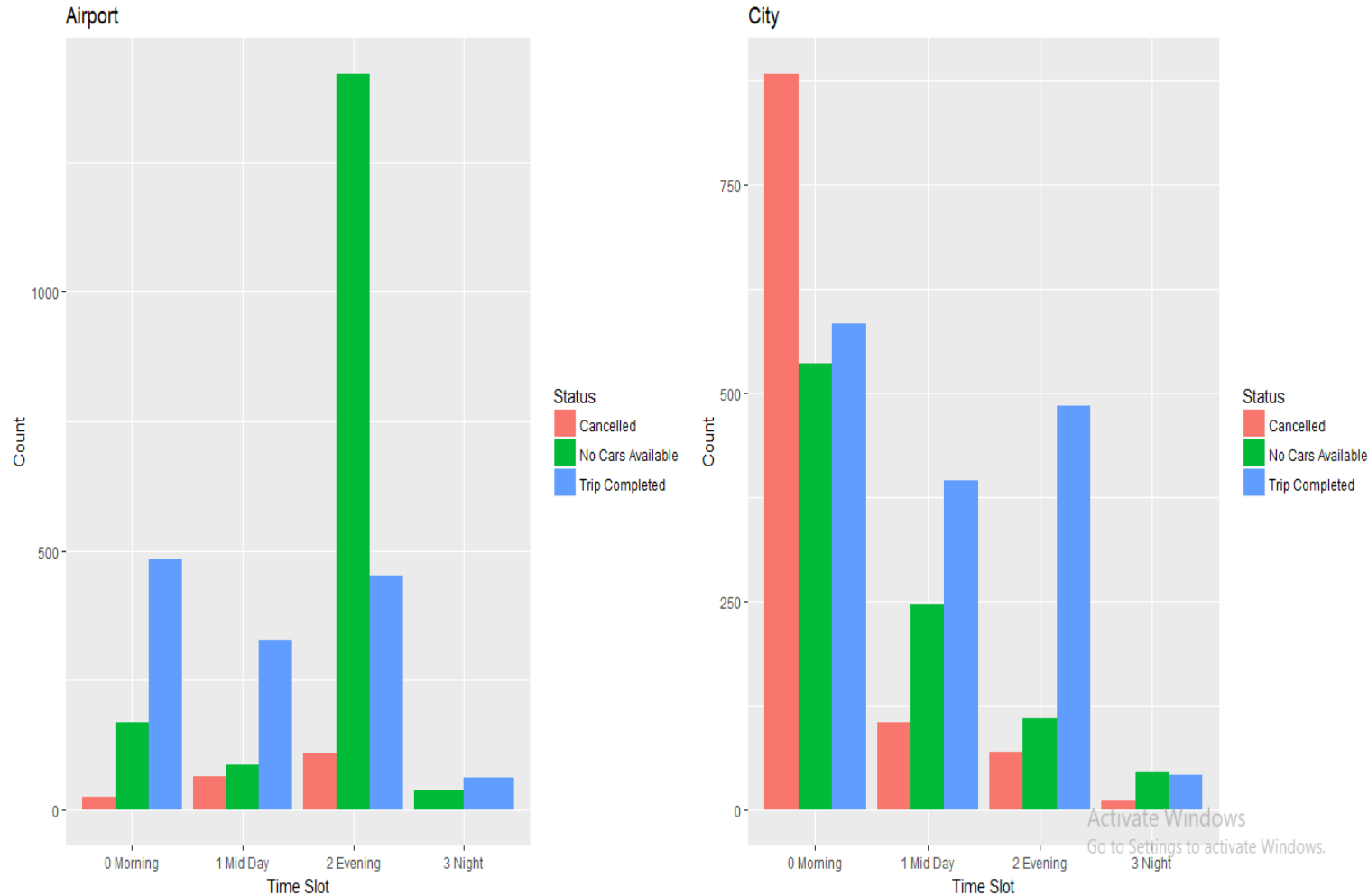
Request at different hours at City/Airport



Trend

- Morning 5 - 10 has the highest demand in the city
- Evening 5-10 has the highest demand in the Airport
- Mid-day(10-17) and Night(00-5 and 23-00) have relatively lower demand both at airport and city

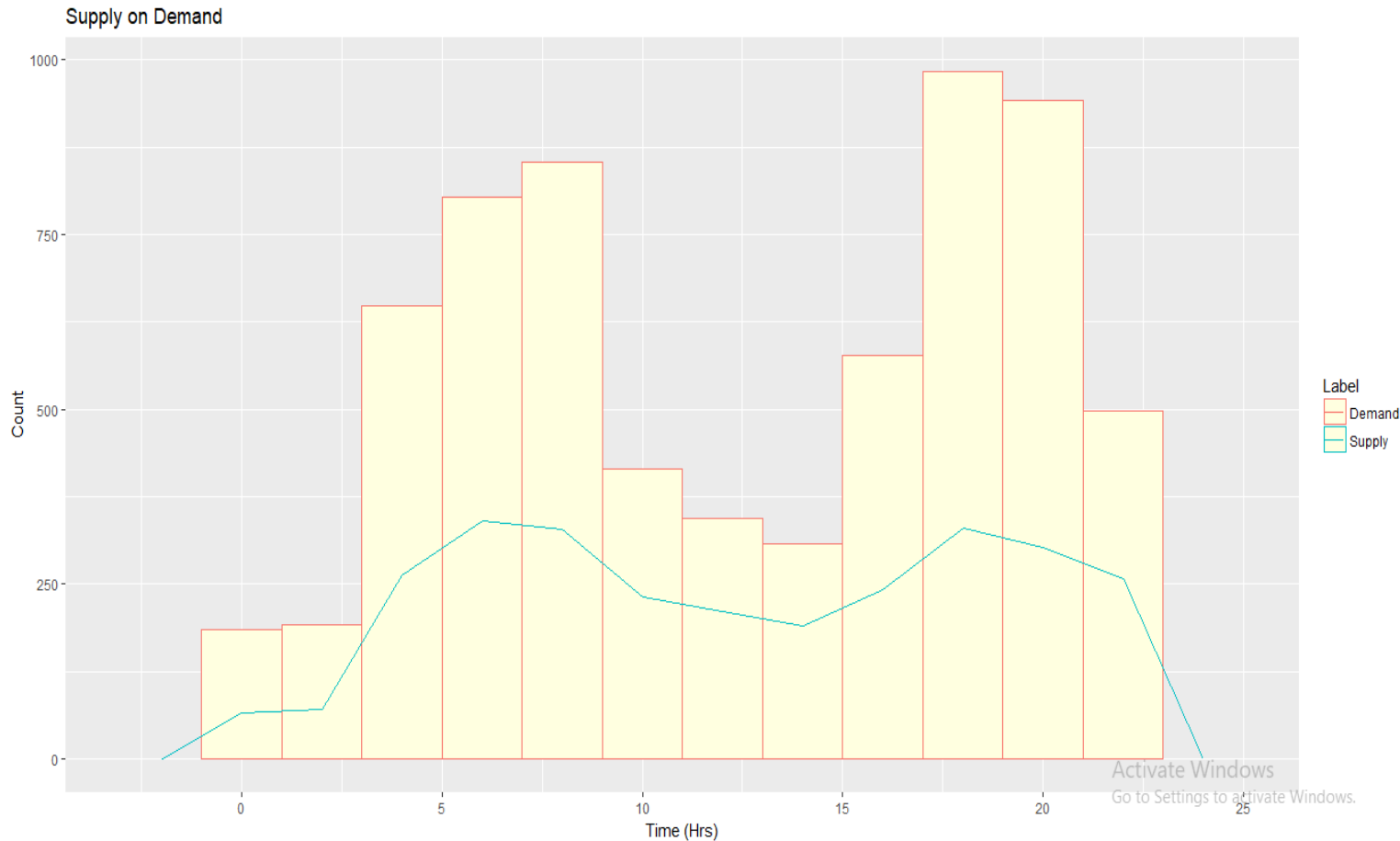
Most Pressing Problems for Uber



Most Pressing problems:

- 1.No cars available in evening at the airport
- 2.Cancellation in the morning at the City
- 3.No cars available in the morning at the City

Supply – Demand Gap



- Time slot to target is during the peak hours Morning and evening
- Highest Gap is around 6 in the evening
- This is the time when no cars are available coming from airport
- Next highest gap to look at is morning 8 o'clock
- This is the time when highest cancellation takes place going from city to airport

Reasons for Supply demand Issue (Assumptions Made)

- Morning Cancellation in the city
 - Takes time to travel from city to airport
 - Demand is less in the airport during morning and Mid day
 - Hence lot of idle time
- No cars Available in the evening at the Airport
 - Since not many flights take off in the evening there is not much organic supply
 - Lot of incoming international flights late evening
 - Day ends for most drivers during late evening hence not many drivers available there

Solutions:

- One reason why cabs cancel in the morning might be because they have worked overtime previous night and don't want to go for a long trip this early
- Solution for this might be reserve previous night overworked drivers for short trips within the city, so that fresh drivers can take longer trips
- Give higher remuneration during peak hours
- Decrease the no of cancellation, as we see this is major problem in morning going to airport
- Cancellations can be discouraged, a fine can be collected
- Club up with part time drivers for exclusive peak time only, since most drivers working for firms start late mornings (say 9) and finish early evenings (say 6) they can be clubbed up for peak hours from 5-9 morning and from 6-10 evening
- This can reduce no cars available
- A small pay can be given for the drivers idle time as well

Conclusion

After carrying the analysis , the following can be concluded

- **Highest demand hours:** Morning 5-10 for the airport pickup and evening 5-10 for the city Pickup
A small (negligible) rise is seen for the above time even for the counter part
- **Most pressing problems:**
 - No cars available in evening at the airport
 - Cancellation in the morning at the City
 - No cars available in the morning at the City
- **Supply –Demand :**
 - Highest Gap is around 6 in the evening
 - Next highest gap to look at is morning 8 o'clock
- **Solution:**
 - Discourage cancellations
 - Small remuneration for drivers idle time
 - Priorities drivers, which driver to which destination, within city or to airport