Project Title: Signs with smart connectivity for better road safety

Project Design Phase-I - Solution Fit

**Team ID:** PNT2022TMID19801

## 1. CUSTOMER SEGMENT(S)

Passenger who wants to travel safely irrespective of type of transport on the roads.

### 6. CUSTOMER CONSTRAINTS

Proper network connection. Data Accuracy. Availability of proper devices. Fear of budget.

### 5. AVAILABLE SOLUTIONS

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By replacing the static signboards, smart connected signboards are used. Based on traffic and fatal situations. Smart Connectivity has enabled for road and people safety with the help of digital signboard, openweather api and web application used to user can know the weather conditions anywhere .IOT based Signs with smart connectivity for better road safety is more effective for people.

### 2. JOBS-TO-BE-DONE / PROBLEMS

Provide better safety for travelers by providing information about the weather conditions speed limitations and nearby places.

### 9. PROBLEM ROOT CAUSE

Lack of proper awareness about road safety and no proper knowledge about traffic rules.

### 7. BEHAVIOUR

User can use this technology and gain information about traffic and weather conditions etc and travel accordingly.

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#### 3. TRIGGERS

Over speed driving, rash driving, violation of rules, failure to understand signs, fatigue, alcohol and inclement weather that causes the possible accidents. As the result it also affects the public, work life and these problems can be reduced by using smart connectivity signboards or user interface.

### 4. EMOTIONS: BEFORE / AFTER

Road ways traffic causes a lot of problems in daily life, it affects daily lives of workers, can't reach the destination on time, affects work life, increases the rate of accidents and other problems. In order to overcome this we implement smart connectivity for better road safety to avoid traffic and decrease speed limit while raining, thus reducing possible accidents.

# 10. YOUR SOLUTION

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To come up with a solution using smart linked sign boards as an alternative to static signboards. With the help of a weather API, these intelligent connected sign boards automatically update with the current speed limits .The speed may rise or fall in response to variations in the weather. The display of diversion signs is determined by traffic and potentially fatal situations. There are also signs that warns of hospitals, schools ahead.

### 8. CHANNELS of BEHAVIOUR

Online: Notify the information about of weather / traffic in web application,/ The departments can receive direct emails or messages from customers. (Officers on nearby patrol).

Offline: Following directions is one of the main tasks for the traveler, but they can utilize the smartboard signs to check the state of the road from wherever they are.