Project Design Phase-I

Problem Solution Fit

Date	**01 October 2022**
Team ID	**PNT2022TMID17220**
Project Name	IOT Based Signs with smart connectivity for better road safety

Define CS, fit into CL

1. CUSTOMER SEGMENT(S) CS

Traffic signs are necessary to give information for routes, directions, and warnings for drivers.

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES CL

data is retrieved and displayed on the sign boards accordingly.

1) Arduino IDE 2) Embedded C 3) Hardware used

5. AVAILABLE SOLUTIONS PLUSES & MINUSES AS

According to the World Health Organization road safety report of 2018, the number of road traffic deaths increased to 1.35 million in 2016

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY PR

1)The long distant journey could not be possible in a short time.

2) Damages prone

3) Impact of seasons

9. PROBLEM ROOT / CAUSE RC

With access to smart road devices that collect and analyze data in near-real time, cities can reduce roadway congestion, manage traffic flow, and improve pedestrian safety.

7. BEHAVIOR + ITS INTENSITY BE

One or more of the fundamental data to guarantee road safety of the connected cars is the geolocation.

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT TR

Delay in goods transit due to loading and unloading of goods can be avoided and they can be transported on time.

4. EMOTIONS BEFORE / AFTER EM

Handling costs can be avoided.

10. YOUR SOLUTION SL

1)Best for a short-distance journey

2)The cost of maintenance and construction is low

8. CHANNELS of BEHAVIOR CH

ONLINE: These incorporate a large number of sensors that establish communication with the cloud,

OFFLINE: Smart connected Signs for Improved Road Safety

Extract online & offline CH of BE