PROJECT DESIGN PHASE-I
PROBLEM SOLUTION

Date	19 September 2022
Team ID	PNT2022TMID48721
Project Name	Project - signs with smart connectivity for better road safety
Maximum Marks	4 Marks

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) `CS`

Who is your customer?

- Highway division

6. CUSTOMER

What constraints prevent your customers from taking action or limit their choices of solutions?

The impact of the network on the tests was a significant and unexpected element. Given the quantity of sensors, this IoT-based system was successful in simulating a large-scale smart sign board.

5. AVAILABLE SOLUTIONS `AS`

Which solutions are available to the customers when they face the problem

Along roadways, static signs with clear directions are put as potential fixes.

Explore AS, different

2. JOBS-TO-BE-DONE / PROBLEMS `J&P`

Which jobs-to-be-done (or problems) do you address for your customers?

Among its many duties, the Smartboard Connectivity is in charge of keeping correct temperature sensor readings and informing the board of the speed of the customer's vehicle.

9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists? What is the back story behind the need to do this job?

No Sensor readings from the weather would alter the speed restriction if there was no internet connection. Unnecessary pressing of the accident indicator button by some people could lead to problems.

7. BEHAVIOUR

What does your customer do to address the problem and get the job done?

As a teacher, the IOT cloud updates the smartboard on the condition of the roads on a regular basis.

3. TRIGGERS `TR`

What triggers customers to act?

· Poor weather conditions prevail.
The vehicle should be moving at threshold
speed. The sensor value should be shown on
the smart board to alert the customer.

10. YOUR SOLUTION `SL`

We employ smart linked sign boards as an alternative to static signboards. With the help of a web app and weather API, these intelligent connected sign boards automatically

8. CHANNELS of BEHAVIOUR `CH`

8.1 ONLINE
What kind of actions do customers take online?

The departments can receive direct emails or messages from customers. (Officers on nearby patrol).

8.2 OFFLINE

4. EMOTIONS: BEFORE / AFTER `EM`

How do customers feel when they face a problem or a job and afterwards?

Clients will feel better after selecting an operation mode with the use of smartboard connectivity, and they will then follow the instructions on the smartboard.

update with the current speed limits. The speed may rise or fall in response to variations in the weather. The display of diversion signs are determined by traffic and potentially fatal situations. As appropriate, there are also signs that read "Guide (Schools), Warning, and Service" (Hospitals, Restaurants). Using buttons, it is possible to choose from a variety of operating modes.

What kind of actions do customers take 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.