Project Title: Signs with Smart Connectivity for Better Road Safety

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID08042

<table>
<tr>
<td rowspan="2">Define CS, fit into CC</td>
<td>

1. CUSTOMER SEGMENT(S) CS

- Highway Division
- Passenger

</td>
<td>

6. CUSTOMER CONSTRAINTS CC

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 agricultural setting.

</td>
<td>

5. AVAILABLE SOLUTIONS AS

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

</td>
<td rowspan="2">Explore AS, differentiate</td>
</tr>
<tr>
<td>

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

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.

</td>
<td>

9. PROBLEM ROOT CAUSE RC

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

</td>
<td>

7. BEHAVIOUR BE

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

</td>
</tr>
</table>

Focus on J&P, tap into BE, understand RC

3. TRIGGERS   TR

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.

4. EMOTIONS: BEFORE / AFTER   EM

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.

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 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. 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.

8. CHANNELS of BEHAVIOUR   CH

8.1 ONLINE

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

8.2 OFFLINE

Following directions is one of the main tasks for the traveller, but they can utilise the smartboard signs to check the state of the road from wherever they are.