Project Title: Hazardous area monitoring for industrial plant powered by iot   **Project Design Phase-I**

PNT2022TMID26034

<table>
<tr><td>Define CS, fit into CC</td><td>1. CUSTOMER SEGMENT(S) <code>CS</code>

Employees who monitor hazardous area in industrial plants</td><td>6. CUSTOMER CONSTRAINTS <code>CC</code>

Smart beacon coverage area
Network access for beacon
Beacon to watch connectivity</td><td>5. AVAILABLE SOLUTIONS <code>AS</code>
Smart area monitoring sensors
Wifi connectivity for sensors

Pros: Successful monitoring of area
Cons: Network coverage for sensors can't be reached</td><td>Explore AS, differentiat</td></tr>
<tr><td>Focus on J&P, tap into BE, understand RC</td><td>2. JOBS-TO-BE-DONE / PROBLEMS <code>J&P</code>

To check and alert the humidity, Temperature,Infrared radiation and Air quality</td><td>9. PROBLEM ROOT CAUSE <code>RC</code>

It is important to note the employees safty. Working in hazardous area in industries are highly risk. Therefore, this project helps employee to know about their environment.</td><td>7. BEHAVIOUR <code>BE</code>

The employees have a wearable watch where they can see the required or specified details and act saftly according to it</td><td>Focus on J&P, tap into BE, understand RC</td></tr>
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<tr><td>Identify strong TR & EM</td><td>3. TRIGGERS <code>TR</code>

Successful execution of our solution will make even other industry to implement this solution</td><td>10. YOUR SOLUTION <code>SL</code>

We are going to monitor the area using suitable sensors in the beacons. We will connect our wearable to the beacons. We will send updates to online cloud from the beacon. From the cloud we will be accessing the reading and using that we will have a web page and a mobile application to display them. We will have sms service to alert abnormal readings</td><td>8.CHANNELS of BEHAVIOUR <code>CH</code>

8.1   ONLINE
All the informations will be stored in cloud. so the employees can see the cloud storage or mobile application for referring the details of surroundings.

8.2   OFFLINE
Employees used to wear a watch which captures the information of the surroundings.</td><td>Identify strong TR & EM</td></tr>
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4. EMOTIONS: BEFORE / AFTER EM

It will be easy for employees to identify or to know about their environment