Project Title: Gas leakage monitoring and alerting system   **Project Design Phase-I** - **Solution Fit**   **Team ID:** PNT2022TMID27405

<table>
<tr>
<td rowspan="2">Define CS, fit into CC</td>
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1. CUSTOMER SEGMENT(S) `CS`

- Engineers
- Industrialists
- Safety control personals

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6. CUSTOMER CONSTRAINTS `CC`

- According to the square feets, the devices should be installed.
- Network connection
- Affordable budget

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5. AVAILABLE SOLUTIONS `AS`

- Upgrade to premium network plan.
- Man-power is used to monitor the leakage.
- Availing network connection from a reliable service provider.

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<td rowspan="2">Explore AS, differentiate</td>
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2. JOBS-TO-BE-DONE / PROBLEMS `J&P`

- The device's ability to withstand harsh environments is questionable.
- Due to a network problem, the data could not always be uploaded to the cloud.

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9. PROBLEM ROOT CAUSE `RC`

- The quality of the material from which the device is made plays a crucial role in the device's ability to function in harsh environments.
- If the workers do not control properly, the gas may pose a high risk to their health or industrial property.
- The installation location of device & the network map used by the user pose the cause of network problem.

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7. BEHAVIOUR `BE`

- A hostile environment is only prevalent in certain industries; therefore, the frequency of such a problem is low. In such a case, the customer complains several times to get attention.
- The network problem is wide spread as most of the industries are located in the country side. Here is the contact to both the developers and the service providers.
- If the leaked gas is very toxic, there is a possibility of causing hereditary health problems.

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Left vertical labels: Define CS, fit into CC | Focus on J&P, tap into BE, understand RC

Right vertical labels: Explore AS, differentiate | Focus on J&P, tap into BE, understand RC

3.TRIGGERS TO ACT   TR

- Severe damage or more serious health problems from toxic gases force them to seek a solution as soon as possible.
- Device usage is displayed in the newsfeed may trigger the people to install it.

4. EMOTIONS: BEFORE / AFTER   EM

- Before: user feels insecure and deceived.
- After: user feels confident, secured and sincerity of developers.

10. YOUR SOLUTION   SL

- Device can be manufactured in various standards based on the environment.
- Develop an economical system and an application which will monitor and alert the users.

8.CHANNELS of BEHAVIOUR   CH

8.1 ONLINE
- Virtual community
- Social community
- Email to developer

8.2 OFFLINE
- Complaint letters