Project Design Phase-I
Problem – Solution Architecture

Date	01 October 2022
Team ID	PNT2022TMID08020
Project Name	Project - Gas Leakage monitoring & Alerting system for Industries
Maximum Marks	2 Marks

Project Title : Gas Leakage Monitoring and Alerting System

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

The business owners who employ gases in their manufacturing.

6. CUSTOMER CONSTRAINTS — CC

Due to expensive installation costs for alternative products, they have moved away from current technology.

5. AVAILABLE SOLUTIONS — AS

-Automatic shutoff valve.
-In past they identify the leakage by smell which causes the delay i taking actions.
-Pros & Cons they easily identfy the locations and neccessary actions.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

People are concerned about gas leaks after the work is done or are unsure if they closed it or not.

9. PROBLEM ROOT CAUSE — RC

-Industries without enough training frequently use faulty valves.
-Industries without enough training frequently use faulty valves without control.without control.

7. BEHAVIOUR — BE

To determine the gas's characteristics and solve the issue, they will locate the leak and identify the warning.

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

Identify strong TR & EM

3. TRIGGERS — TR

Safe precautions for the workers to work without any fear.

4. EMOTIONS: BEFORE / AFTER — EM

If they faced a problem or a situtaion, they could confidently handle the situation and ease to access.

10. YOUR SOLUTION — SL

Low cost IoT based device that can be easily accessed and fixed by people.

8. CHANNELS of BEHAVIOUR — CH

Promoting through social media. With the help of social media entrepreneurs.

8.2 OFFLINE

The identification of the area of leakage and take precautionary actions

Extract online & offline CH of BE

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