

Project Design Phase – I

Proposed Solution Fit

Date	06 October 2022
Team ID	PNT2022TMID02509
Project Name	Gas leakage monitoring and alerting system.

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

In the automotive industries like oil and gas, hotels, and places where flammable gases are used in abundance, a gas detection system is a basic requirement for safety.

CS

6. CUSTOMER LIMITATIONS

This law, LD346, now requires “at least one approved fuel gas detector in every room containing an appliance fueled by propane, natural gas or any liquified petroleum gas” in commercial businesses, hotels, non-profit organizations, shelters, and rental properties

CL

5. AVAILABLE SOLUTIONS

The sensor-enabled solution helps prevent the high risk of gas explosions and affecting any casualties within and outside the premises. The gas sensors help detect the concentration of the gases present in the atmosphere to avoid hazardous consequences like fire breakouts.

AS

Explore AS, differentiate

Focus on J&P, tap into BE, understand

2. JOBS-TO-BE-DONE / PROBLEMS

- Most of GAS explosions are caused by undetected gas leakage in the pre-detection condition.
- So that, Gas Leakage Monitoring and Alerting detection system is needed.
- The purpose of this system is to detect gas leakage, neutralize it, and prevent the explosion.

PR

9. PROBLEM ROOT CAUSE

- Gas detectors can be used to detect combustible, flammable and toxic gases, and oxygen depletion. This type of device is used widely in industry and can be found in locations, such as on oil rigs, to monitor manufacturing processes and emerging technologies such as photovoltaic.

RC

7. BEHAVIOUR

Using manpower as the source of monitoring the leakage causes high hazards. If the gas leaked is heavily toxic, there is a chance of causing hereditary health issues too.

BE

Focus on J&P, tap into BE, understand

Identify Strong TR & EM

3. TRIGGERS TO ACT

Most of Gas explosions are caused by undetected gas leakage in the pre-detection condition. So that, Gas leakage monitoring and alerting system is needed.

TR

4. EMOTIONS BEFORE/AFTER

Before: The heavy losses due to the leakages made them feel of guilt due to reduced reputation of their products.
After: Increased the level of confidence and feel

10. YOUR SOLUTION

In several areas, the gas sensors will be integrated to monitor the gas leakage. If any area gas leakage is detected the admins will be notified along with the location. In the web application, admins can view the sensor parameters.

SL

7. CHANNELS of BEHAVIOUR

ONLINE

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

OFFLINE

- Newspaper advertisements.

CH

Extract Online and Offline CH of BE

