PROJECT TITLE: GAS LEAKAGE MONITORING AND ALERTING SYSTEM
PROJECT DESIGN: PHASE-I SOLUTION FIT
TEAM ID: PNT2022TMID22887

1. CUSTOMER SEGMENTS

CS

The customers are the people who work in the gas using industries, Our aim is to help to prevent an explosion or can help to prevent worker injury or exposure to toxic gases.

6. CUSTOMER CONSTRAINTS

Arranging huge number of sensors is difficult as the need of internet connection is unlimited or continuous

5. AVAILABLE SOLUTIONS

The safety of the workers are monitored using IOT. Analytic data and field parameters are obtained & processed to automate the process of monitoring. The drawbacks are high cost of maintenance and efficient only for short distance

2. JOBS-TO-BE-DONE PROBLEMS

J&P

The objective of this product is to obtain the different field parameters using sensor and process it using a central processing system. Cloud is used to store and transmit the data by using IoT.. The workers could be

9. PROBLEM ROOT CAUSE

RC

Flammable gas leakage dispersion may lead to secondary accidents such as fire and explosion, while toxic gas dispersion mainly leads to poisoning casualities.

7. BEHAVIOUR

BE

Using mobile we can get timely report updates. User is alerted by the appropriate device through the sensors.

3. TRIGGERS TR

Workers facing issues in detecting gaseous waste. Workers struggle topredict the leakage of gas

4. EMOTIONS: BEFORE / AFTER EM

BEFORE: *Lack of knowledge in gas leakage and safety measures→ Random decisions →low safety.*

AFTER: *Data from reliable source → correctdecision →high safety*

10. YOUR SOLUTION SL

Our product collects the data from differentgas sensors and it sends the value to themain server. The ultimate decision is to shield the workers from the harmful gases and safeguard their lives using mobile application

8. CHANNELS OF BEHAVIOUR CH

ONLINE: *Providing online assistance to the worker, in providing the measuring the amount of gas. Online assistance to be provided to the user inusing the device.*

OFFLINE: *Awareness camps to be organized to teach the importance and advantages of the automation and IOT in the assistance of gas leakage detection and monitoring.*