### **Team ID: PNT2022TMID02619**

## 1. CUSTOMER SEGMENT(S)

Industrialists who run industries

that are prone to fire and gas leak

Activate exhaust fans and water

Activate exhaust fans during gas

Send alert message to customers and nearby fire stations.

sprinklers during fire accidents.

CS

# 6. CUSTOMER CONSTRAINTS CC

RC

### 5. AVAILABLE SOLUTIONS

Frequent maintenance is required

Lack of awareness

Requires specialized experts for maintenance.

AS

Usage of sensors to detect industrial accidents and buzzers to alert workers.

# **Explore AS, differentiate**

### 2. JOBS-TO-BE-DONE / **PROBLEMS**

leakage.

accidents.

J&P

Improper maintenance of gas containers and pipelines leads to gas leakage.

9. PROBLEM ROOT CAUSE

Due to the presence of flammable substance in the industry and carelessness of the workers involved leads to fire accidents.

### 7. BEHAVIOUR



- Usage of temperature and smoke sensor to detect fire accidents.
- Usage of MQ6 sensor to detect gas leakage.

Qο

# 3. TRIGGERS

TR

Witnessing loss of life and property in the industry due to fire and gas leakage accidents.

### 4. EMOTIONS: BEFORE / AFTER



Before:

Frustrated and distressed due to loss of life and property in the industry.

After:

Felt relieved due to immediate response to industrial accidents.

### 10. YOUR SOLUTION



SL

Usage of temperature and smoke detection sensor to detect fire accidents and MQ6 sensor to detect gas leakage, along with buzzers, LEDs and LCD display to alert workers during accidents. Activation of exhaust fans and water sprinklers during accidents. Sending immediate alerts to the customers and nearby fire stations.

### 8. CHANNELS of BEHAVIOUR



### 8.1 ONLINE

Notify customers and nearby fire station by sending alert messages if any accidents is detected.

### 8.2 OFFLINE

- Real time monitoring using sensors.
- Alerting working using buzzers, LEDs and LCD display.