Project Design Phase-I - Solution Fit

Project Title: Gas Leakage Monitoring and Alerting System

Team ID: PNT2022TMID44793

TEAM MEMBERS :

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1.CUSTOMER SEGMENTS	6. CUSTOMER CONTRAINTS	5. AVAILABLE SOLUTIONS
For industry owner-Ensuring the safety of workers is the main thing. Sometimes it is hard to identify the area where the leakage occurs. The detection of leakage prevents the loss of lives	Proper maintenance should be taken atleast once in a month and this prevents the customers from taking actions in gas leakage problem.	Usage of sensors to sense gas Leakage. Buzzer to indicate the leakage. GSM module helps us to get notification when there is a gas leakage.

2. JOBS-TO-BE-DONE / PROBLEMS

Capability of the device to withstand in harsh environment is questionable.

Due to network issue data couldn't be uploaded to the cloud at all times.

9. PROBLEM ROOT CAUSE

Sometimes sensor doesn't work properlywhich can cause the major problem.

Location of the device installation and the network plan used by the user are the root cause of the network issue.

7. BEHAVIOUR

Network issue is very common as most of the industries are located at the country side. Here contact both the developers and the service providers.

To determine the gas characteristics and solve the issue, they will locate theleak and identify the warning.

3.TRIGGERS

Accidents due to gas leakages and loss of physical property and life.

Safe precautions for the workers to work without fear.

4.EMOTIONS:Before/After

Before the action is taken the user feels deceived and cheated.

After the problem is resolved user feels the sincerity of the developer

10.YOURSOLUTION

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

Network strength must be boosted in the device.

Device can be manufactured in multiple standards based on the environment.

8. CHANNELS OF BEHAVIOUR

ONLINE

Monitor the status of the sensors

Notification incase of any gas leakage.

OFFLINE

Prevent physical damage to sensor.

Provide proper network and power supply to sensors.

Complaint letters.