Gas leakage Monitoring and Alerting System

Project Design Phase-I
Problem Solution Fit

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1. CUSTOMER SEGMENT

- In this system detect the leakage of gas and alert the owner about the leak by sending SMS and email to his personal mobile to alert him.
- Our aim is to proposing the gas leakage system for society where each flat have gas leakage detector hardware.

6. CUSTOMER CONSTRAINTS

- We offer them to our customers at budget friendly prices
- The project builds a low-cost system for your house

5. AVAILABLE SOLUTIONS

- 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

- When leakage occur, it is necessary to control the risk effectively before causing damage to the residencies
- Gas sensor detect leakage and send signal to the controller and indicates the respecter person

9. PROBLEM ROOT CAUSE

- There are three main causes of residential gas leaks: poor or degraded fittings
- connections between the gas line and a specific appliance, lack of proper appliance maintenance and appliance malfunctions.

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 the leak and identify the warning.

3. TRIGGERS

- MQ gas sensor trigger the LED and buzzer to alert people when gas leakage is detected
- Gas leakage detection essential to prevent accident and to save human lives.

4. EMOTIONS: BEFORE / AFTER

- Before the action is taken the user feels deceived and cheated
- After the problem is resolved user feel the sincerity of the developer.

10. YOUR SOLUTION

- 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 in case of any gas leakage.

OFFLINE

- Prevent physical damage to sensor.
- Provide proper network and power supply to sensors.
- Complaint letters.