

**Project Design Phase-I**  
**Problem – Solution Fit Template**

Date	19 September 2022
Team ID	PNT2022TMID50840
Project Name	Gas leakage monitoring and alerting system
Maximum Marks	2 Marks

**Problem – Solution Fit :**

- There comes a need to install smart systems to accurately identify combustible, flammable and toxic gases along with detecting oxygen depletion in industry premises for improved safety.
- The latest versions of gas sensors are powered with IoT concepts to create live alerts in case of a gas leak or toxic atmosphere.

**Purpose:**

- This system will not only able to **detect the leakage of gas but also alerting through audible alarms.**
- Presence of excess amounts of harmful gases in environment then this system can notify the user.
- System can notify to society admin about the condition before mishap takes place through a message.
- There comes a need to install smart systems to accurately identify combustible, flammable and toxic gases along with detecting oxygen depletion in industry premises for improved safety.

**Template:**

1.customer segment  
People

2.Job to be done/ Problems

**When the gas meets a source of ignition it can burn or explode.**  
Cylinders can explode if involved in a fire.

3.Triggers  
**gas leak from the cylinder or regulator gets mixed with air, forming a combustible mixture.**

4.Emotion:before/after  
To increase gas level

5.Available solutions

Put off all flames, lamps, incense sticks etc. Put the safety cap back on the cylinder.

6.customer constraints  
paper mainly focuses on the detection of gas leakage and providing security when the user is around or away from home.

7.behaviour  
**Smell**

In its natural state, gas is odorless. To help customers detect leaks, company adds special odorant to the gas so that even small leaks can be detected quickly.

8.Channels of behavior  
Online:Online consumer buying behavior is the behavior displayed by consumers in searching for, purchasing, using and evaluating of products or services that they expect will satisfy their needs through web media

9.problem root cause  
LPG vapours can run for long distances along the ground and can collect in drains or basements. **When the gas meets a source of ignition it can burn or explode.** Cylinders can explode if involved in a fire.