PROJECT DESIGN PHASE – 1

PROBLEM SOLUTION FIT

TEAM ID: **PNT2022TMID52302**

Project Name: **Gas Leakage Monitoring & Alerting System for Industries**

1. PROBLEMS:

- Lack of a suitable system for regulating or keeping track of the leak.
- Enduring numerous losses as a result of gas leaks.
- Having significant financial difficulties when purchasing and installing a monitoring and control system.

2.CUSTOMER CONSTRAINT:

- Expensive installation of additional products.
- Businesspeople who manufacture things with gases. The prevention of fatalities is achieved by leak detection.
- The difficulty of installation.

3.CUSTOMER SEGMENT:

- Hospitals.
- Gas, Polymer Industries.

4. AVAILABLE SOLUTIONS:

- Moving up to a premium network package.
- A buzzer to signal a leak. We can receive notifications when there is a gas leak thanks to the GSM module. using sensors to detect gas leaks

5. PROBLEM ROOT CAUSE:

- The user's network plan and the location of the device installation are what are causing the network problem.
- Human labour could monitor properly and minimise the cost of electricity, but there may be a great risk to their lives. Some faults can also be attributed to human error.

6. BEHAVIOUR:

- They will find the leak and recognise the signal in order to ascertain the gas properties and address the problem.

- Because the majority of industries are situated in rural areas, network problems are particularly common. Here, they get in touch with both the service suppliers and the developers.

7.CHANNELS BEHAVIOR:

• Network issues are particularly prevalent because most industries are located in rural areas. They communicate with both the service providers and the developers here.