

Project Design Phase- I Proposed Solution Template

Date	16 October 2022
Team ID	PNT2022TMID26579
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Gas leakage prompts different mishaps coming about into both monetary misfortune as well as human wounds. In human's everyday existence, the environment gives the main effect on their medical problems. The risk of firing, explosion, suffocation all depend on their actual properties such as combustibility, harmfulness and so on. The number of deaths because of the blast of gas cylinders has been expanding as of late. The justification behind such explosions is because of sub-standard cylinders, old valves, worn-out regulators and absence of mindfulness utilizing gas cylinders add to the dangers.
2.	Idea/Solution description	Workers who are engaged with a busy industry work with gas either harmful or harmless need a way to monitor their gas pipelines continuously and detect early if there is any leakage of gas in their surroundings so that they can work efficiently on major crises rather than worrying about monitoring or leakage of gas. This will indeed reduce the manpower of that industry and create a peaceful environment.
3.	Novelty/Uniqueness	Even though there are many existing solutions for this problem, they failed to satisfy the needs of customer. Some of the solutions are only detecting some gases where some others failed to alert the main department and other solutions are with some delays.
4.	Social Impact/Customer Satisfaction	Our solution will be very helpful for the workers and the society which is associated or located nearby the industries. Our solution will prevent great disasters like Bhopal Gas Tragedy so that so many lives can be saved. Through this project, the workers' mental pressure will be reduced so that they can concentrate on other works or by relaxing them. It is cost-efficient and easy for installation.

5.	BusinessModel(RevenueModel)	The main target of our solution is Industries so we have planned to visit industries and explain them about the benefits of our products. So that they can be aware of the importance of this solution and use it properly for their safest organization.
6.	Scalability of the Solution	Our solution can be integrated for further future use because the solution we have provided will be beyond the basic or initial stage of any upgrade version. It will give the accurate values.