

Project Design Phase-I

Problem – Solution Fit Template

Date	1 October 2022
Team ID	PNT2022TMID54031
Project Name	Project - Gas Leakage Monitoring & Alerting System for Industries
Maximum Marks	2 Marks

Problem – Solution Fit:

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none"> Industries working with inflammable gases. 	6. CUSTOMER CONSTRAINTS CC Budget, Spending Power, Cost of Deployment, Reliability, Network connectivity.	5. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none"> Hire any third party service providers to detect and control the gas leakage, if any. Appoint workers to frequently monitor for leakage of gases. 	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none"> To create a Gas Leakage and Monitoring System. To detect the leakage of any harmful/inflammable gas. To notify the customers as soon as possible in case of any gas leakage. Alarming System for workers in case of any gas leakage. 	9. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> Aging of gas pipelines. Improper maintenance of Industrial Infrastructure. No proper implementation of safety measures. Negligence. A threat to life. 	7. BEHAVIOUR BE <ul style="list-style-type: none"> Search for available service providers and get the service installed. Get any customized product to manage gas leakage and monitoring. Proper maintenance of Industrial Infrastructure. 	
Identify strong TR & EM	3. TRIGGERS TR Accidents due to gas leakages and loss of physical property and life.	10. YOUR SOLUTION SL <ul style="list-style-type: none"> To use microcontrollers and sensors to detect and alarm in case of any gas leakage. To create an online dashboard portal to monitor the status of the devices in Industry. 	8. CHANNELS of BEHAVIOUR CH B.1 ONLINE <ul style="list-style-type: none"> Monitor the status of the sensors. Notification in case of any gas leakage. 	Extract online & offline CH of BE
	4. EMOTIONS: BEFORE / AFTER EM Petrified, Insecure, Grievance, not in control, lost.		B.2 OFFLINE <ul style="list-style-type: none"> Prevent physical damage to sensors. Provide proper network and power supply to sensors. 	

References:

- <https://www.ideahackers.network/problem-solution-fit-canvas/>