

Project Design Phase-I

Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID38668
Project Name	Gas Leakage Monitoring And Alerting System For Industries
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

Template:

Problem-Solution Fit canvas

Purpose / Vision

Version:

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS		6. CUSTOMER LIMITATIONS <small>E.G. BUDGET, DEVICES</small> CL		5. AVAILABLE SOLUTIONS <small>PLUSES & MINUSES</small> AS		Explore AS, differentiate
	Workers in industry Owner of the industry		Small leaks can cost facilities thousands of dollars. Installation of the setup is expensive		Switch off the gas line Usage of sensors like MQ5, MQ6 to detect the gas		
Es or PR, tap into BE, understand RC	2. PROBLEMS / PAINS <small>+ITS FREQUENCY</small> PR		9. PROBLEM ROOT / CAUSE RC		7. BEHAVIOR <small>+ ITS INTENSITY</small> BE		
	Industrial development gives rise to harmful gas Releases Apart from polluting the atmospheric air, such leaks create hazards for worker		Lapses in prevention maintenance lead to faulty Pipelines & equipment Leakage at the connect points		Smell – Some gas has <u>smell</u> , Sight – Can also be seen Sound – Leakage sound of gas		
Identify strong TR & EM	3. TRIGGERS TO ACT TR		10. YOUR SOLUTION EM		8. CHANNELS of BEHAVIOR CH		
	Poor Ventilation 4. EMOTIONS <small>BEFORE / AFTER</small> <u>BEFORE</u> : The smell of sulfur or rotten eggs , A while cloud or dust cloud near a gas line <u>AFTER</u> : Breathing difficulties , dizziness , nausea , pain in the chest		Here we use MSP sensor which is the latest sensor detect the gas leakage accurately. The sensors sends message at the end of week to check the sensors work properly or not.		ONLINE The sensor detect the leakage and upload these data on cloud OFFLINE Buzzer and LCD Display		