

## Project Design Phase-I

### Problem – Solution Fit Template

Date	08-10-2022
Team ID	PNT2022TMID18424
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	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> Workers in industry Owner of the industry	<b>6. CUSTOMER LIMITATIONS</b> <span>CL</span> <small>EG. BUDGET, DEVICES</small> <u>Small</u> leaks can cost facilities thousands of <u>dollars</u> . Installation of the setup is expensive	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span> <small>PLUSES &amp; MINUSES</small> Switch off the gas line Usage of sensors like MQ5, MQ6 to detect the gas	Explore AS, differentiate
	<b>2. PROBLEMS / PAINS</b> <span>PR</span> <small>- ITS FREQUENCY</small> Industrial development gives rise to harmful gas Releases Apart from polluting the atmospheric <u>air</u> , such leaks create hazards for worker	<b>9. PROBLEM ROOT / CAUSE</b> <span>RC</span> Lapses in prevention maintenance lead to faulty Pipelines & equipment Leakage at the connect points	<b>7. BEHAVIOR</b> <span>BE</span> <small>+ ITS INTENSITY</small> Smell – Some gas has <u>smell</u> , Sight – Can also be seen Sound – Leakage sound of gas	
Focus on PR, lap into BE, understand RC	<b>3. TRIGGERS TO ACT</b> <span>TR</span> Poor Ventilation	<b>10. YOUR SOLUTION</b> <span>EM</span> Here we use MSP sensor which is the latest <u>sensor</u> , <u>detect</u> the gas leakage accurately. The sensors sends message at the end of week to check the sensors <u>workly</u> , <u>properly</u> or <u>not</u> .	<b>8. CHANNELS of BEHAVIOR</b> <span>CH</span> <span>SL</span> ONLINE The sensor <u>detect</u> the leakage and upload these data on cloud OFFLINE Buzzer and LCD Display	Identify strong TR & EM
	<b>4. EMOTIONS</b> <span>EM</span> <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 <u>cheast</u>			