

Project Design Phase-I

Problem Solution Fit

Date	15 OCTOBER 2022
Team ID	PNT2022TMID26579
Project Name	Gas Leakage Monitoring and Alerting System for Industries

Define CS, fit into CL	<div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>The industrialists who use gases fortheir manufacturing.The detection ofleakage preventsthelossoflives.</div>	<div>6. CUSTOMER LIMITATIONS<div>EG. BUDGET, DEVICES</div><div>CL</div></div> <div>High budget in installing other productsmake them to move far from moderntechnologies.</div>	<div>5. AVAILABLE SOLUTIONS<div>PLUSES & MINUSES</div><div>AS</div></div> <div>Buzzer to indicate the leakage.GSMmodulehelpsustogetnotificationwhenthere isagasleakage.Usageofsensorstosensega leakage.</div>	Explore AS, differentiate
	<div>2. PROBLEMS / PAINS<div>+ ITS FREQUENCY</div><div>PR</div></div> <div><ul style="list-style-type: none">Suffering from many losses due togasleakage.Havingnopropersystemforcontrollin gormonitoringtheleakage.Facingheavybudgetproblemsinbuyi ng and installing a system formonitoringandcontrolling.</div>	<div>9. PROBLEM ROOT / CAUSE<div>RC</div></div> <div><ul style="list-style-type: none">Sometimesensordoesn'tworkp roperly which can cause themajorproblem.Man power could reduceelectricity cost and monitorproperly, it may cause high riskfortheirlife.Thereisalsoacause ofsomeerrorsduetomanpower.</div>	<div>7. BEHAVIOR<div>+ ITS INTENSITY</div><div>BE</div></div> <div><ul style="list-style-type: none">Ifthegasleakedisheavilytoxic,therei sachanceofcausinghereditaryhealt hissuestoo.Todeterminethegascharacteristics and solve the issue,theywilllocatetheleakandiden tifythewarning.</div>	Focus on PR, tap into BE, understand RC
Identify strong TR & EM	<div>3. TRIGGERS TO ACT<div>TR</div></div> <div>The heavy damages or higher health issuesduetothe toxicgasesurgesthemtofindou tasolutionas soonastheycouldpossible.</div>	<div>10. YOUR SOLUTION<div>SL</div></div> <div>Develop an efficient system & anapplication that can monitor and alert theworkers. Low cost IOT based device thatcan be easily accessed and fixed bypeople.Network strength must beboosted in the device. Device can bemanufacturedinmultiplestandardsbase dontheenvironment.</div>	<div>8. CHANNELS of BEHAVIOR<div>CH</div></div> <div><div>ONLINE</div><div>Promoting through social media..Monitorthestatus of the sensors .Notification incaseofanygasleakage.</div><div>OFFLINE</div><div>Prevent physical damage tosensor.Through newspaperadvertisementsandcompla intletters</div></div>	Extract online & offline CH of BE