

Problem Solution

	<div><div>1. CUSTOMER SEGMENT(S)<div>CS</div></div><div><div>✓ Industries</div><div>✓ Hospitals</div><div>✓ Mining</div><div>✓ Hotels</div></div></div>	<div><div>6. CUSTOMER CONSTRAINTS<div>C</div></div><div><div>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.</div><div><div>✓ Technical constraints</div><div>✓ Budget constraints</div></div></div></div>	<div><div>5. AVAILABLE<div>A</div></div><div><div>Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking</div><div>Existing systems are able to constantly monitor gas leakage along with storage of data in a database for predictions and analysis. The disadvantage of existing systems is the chance of malfunctioning of devices when dust, steam, or fog blocks the system. This would prevent the system from taking measurements.</div></div></div>	Explore AS
Define CS, fit into				
	<div><div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div></div><div><div>Which jobs-to-be-done (or problems) do you address for your customers?</div><div>Gas leakage is an important aspect to pay attention to as serious damage can result if ignored. When the gas level rises above a certain level, it is important to raise an alarm. A survey has found that gas leakage problems are common in the oil and gas industries, and that lack of proper notification often leads to safety hazards. IOT can be used to continuously monitor gas leaks on a large scale, from a great distance.</div></div></div>	<div><div>9. PROBLEM ROOT CAUSE<div>R</div></div><div><div>What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.</div><div>Improper maintenance of the system and carelessness results in gas leakage hazards. The following are few causes that paves way to gas leakage<div><div>✓ Unreliable metal-metal seals</div><div>✓ Improperly installed tube fittings</div><div>✓ Poor tubing selection preparation</div></div></div></div></div>	<div><div>7. BEHAVIOUR<div>B</div></div><div><div>What does your customer do to address the problem and getthe job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)</div><div><div>✓ Calculate usage and benefits of the system</div><div>✓ Customer volunteer work</div><div>✓ Take initiative steps towards problem if any in case.</div></div></div></div>	Focus on J&P, tap into BE, understand
Focus on J&P, tap into BE, understand				
	<div><div>3. TRIGGERS<div>TR</div></div><div><div>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</div><div><div>✓ Need for safety of lives & environment</div><div>✓ Reviews from customers</div></div></div></div>	<div><div>10. YOUR SOLUTION<div>SL</div></div><div><div>What kind of solution suits Customer scenario the best? Adjust your solution to fit Customer behaviour, use Triggers, Channels & Emotions for marketing and communication.</div><div>This system is an artificial monitoring system designed using IOT. The gas detector captures the knowledge about gas situations and posts this into a data pall. The detector detects the leakage of gas under colorful atmospheric conditions. As soon as gas leakage is detected, the alarm is raised within the form of the buzzer. this technique is also supported by an TV to display the position of leakage, alert the bystander, and spark the exhaust addict within the particular section to void blurtd gas..</div></div></div>	<div><div>8.1 ONLINE CHANNELS<div>CH</div></div><div><div>What kind of actions do customers take online?Extract online channels from box #7 Behaviour</div><div><div>✓ Stable internet connectivity required</div><div>✓ Check out for rescue measures</div><div>✓ Call emergency helplines</div></div></div></div>	
Define CS, fit into CL	<div><div>4. EMOTIONS: BEFORE / AFTER<div>EM</div></div><div><div>How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.</div><div>Anxiety, phobic -> Decisive mindset, calm, confident</div></div></div>		<div><div>8.2 OFFLINE CHANNELS<div>CH</div></div><div><div>What kind of actions do customers take offline? Extract offline channels from box #7 Behaviour and use them for customer development.</div><div><div>✓ Open all windows doors during gas leakage</div><div>✓ Ensure that main electrical supply is turned off</div><div>✓ Keep in reach of first aid kit & extinguishers</div></div></div></div>	Explore AS, differentiate