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|------------------------|---|---|---|---------------------------|
| Define CS, fit into | <div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>✓ Oil, Gas, Polymer Industries</div> <div>✓ Hospitals</div> <div>✓ Mining</div> <div>✓ Chemical Industries</div> | <div>6. CUSTOMER CONSTRAINTS<div>C</div></div> <div>✓ Technical constraints</div> <div>✓ Budget constraints</div> | <div>5. AVAILABLE<div>A</div></div> <div>Existing systems provides constant monitoring and detection of gas leakage along with storage of data in database for predictions and analysis. The drawback of existing system’s includes chance of malfunctioning of devices (i.e) when dust, steam, fog blocks the system, it will not be able to take measurements</div> | Explore AS |
| | <div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div></div> <div>Gas leakage is an important aspect to be noted as it cause major damage when ignored. It is important to raise an intimation when the gas level surpasses certain threshold value. Survey's state that in the Oil & gas industries, gas leakage problems occur frequently and lack of proper intimation at those situation leads to hazards. IOT can be utilized for efficient and easy monitoring of gas leakages on a continuous basis and from any distance.</div> | <div>9. PROBLEM ROOT CAUSE<div>R</div></div> <div>Improper maintenance of the system and carelessness leads to 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>7. BEHAVIOUR<div>B</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> | |
| Define CS, fit into CL | <div>3. TRIGGERS<div>TR</div></div> <div>✓ Need for safety of lives & environment</div> <div>✓ Reviews from customers</div> | <div>10. YOUR SOLUTION<div>SL</div></div> <div>This system is an industrial monitoring system designed using IOT. The gas sensor captures the information about gas levels and posts this into a data cloud. The sensor detects the leakage of gas under various atmospheric conditions. As soon as gas leakage is detected, the alarm is raised in the form of the buzzer. This system is also supported by an LCD to display the location of leakage, alert the observer, and activate the exhaust fan in the particular section to evacuate leaked gas.</div> <div>If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</div> | <div>8.1 ONLINE CHANNELS<div>CH</div></div> <div>✓ Stable internet connectivity required</div> <div>✓ Check out for rescue measures</div> <div>✓ Call emergency helplines</div> | Explore AS, differentiate |
| | <div>4. EMOTIONS: BEFORE / AFTER<div>EM</div></div> <div>Anxiety, phobic -> Decisive mindset, calm, confident</div> | | <div>8.2 OFFLINE CHANNELS<div>CH</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> | |