

Project Design Phase-I

Proposed Solution Fit

Team ID	PNT2022TMID18536
Project Name	Gas leakage alerting and monitoring system

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS <p>The industrialists are the users or customers, who are engaged with the production of gases for their manufacturing. Here industrial worker is the user or customer, who are engaged with gas related production.</p>	6. CUSTOMER CC <p>High cost of installing the products make them to move far from recent technologies. It is difficult to know failures. Ability to detect the wide range of gases</p>	5. AVAILABLE SOLUTIONS AS <p>The monitoring and detecting the leakage of gas could be done by the manpower. Automatic cut off gas supply. In early days they used to identify the leakage of gas by sensing the smell of particular gas. Even though man power could reduce electricity cost and monitor properly, it may cause high risk for their life.</p>	Explore AS, differentiate
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Focus on J&P, tap into BE, understand	2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none"> Gas leakage leads to many diseases and also increases the fatality rate. Heavy budget problems on buying and installing a gas detecting system Having no proper maintenance or monitoring the system Flammable gas leakage may lead to Secondary accident such as fire and explosion, while toxic gas. 	9. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> Improperly installed tube fittings /poor tubing selection. Improper use of gas furnace, stove, or appliance, including leaking due to gas lines being hooked up incorrectly. Use of defective equipment. Behind this gas leakage problem there could be many reasons like atomic reactions between molecules and material quality. 	7. BEHAVIOUR BE <ul style="list-style-type: none"> If the gas leaked is heavily toxic, there is a chance of causing hereditary health hazards. Monitoring the system regularly. To determine the gas leakage area and alerts through by warning message or alerting sound. Using manpower as the source of monitoring the leakage causes high hazards. 	Focus on J&P, tap into BE, understand
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Identify strong TR & EM	3. TRIGGERS TO ACT TR <p>Identification of gas leakage will be done immediately and urges them to find out a solution as soon as possible. Health issues due to the toxic gases urges them to find out a solution</p>	10. YOUR SOLUTION SL <ul style="list-style-type: none"> Develop a cost efficient IoT based gas leakage detecting system which can be easily accessed by the workers. If there is gas leak then it will alert the workers by sending SMS. 	8. CHANNELS OF BEHAVIOUR CH <p>ONLINE: Promoting through social media, With the help of social media influencer. Users can also easy to monitor the live reports.</p> <p>OFFLINE: Identifying the leakage area and take precautionary actions manually. It makes call to user. Frequently check the leakage of gas</p>	Extract online & offline CH of BE
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