

Smart LPG Leakage Detector

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- **Problem:** LPG leakage results in fatal and non – fatal accidents effecting many people who used them. Inspite of safety factors set by government.
- **Product:** A device which monitors the gas leakage around the cylinder. It shuts down the electrical main supply and alerts user & fire station department with an sms and location along with alarm.

Initial Prototype: A prototype which contains three components that would detect leaked gas, turn off the main supply and alerts through an alarm.

Business:

Higher income group people and restaurants were interested in using such product.
The product will be sold for Rs.1500/-
This product can be sold by direct selling and through LPG companies and dealers.

Technology:

- NodeMCU
- MQ6 sensor
- Relays.
- Arduino IDE.
- IFTTT

Customer Stories:

Mr. Ali owner of Green Bawarchi hotel said : “ This sounds really soo good. Excited for these kind of technology.”
Mrs. Kamala a house hold said, “this kind of technology gives a great confidence and removes the fear of LPG explosions. “

Progress:

- Week1 – Took review of the prototype and analyzed prototype’s function.
- Week2 – Gathered information about LPG explosions added required features to the product.
- Week3 – Done a survey both online and offline which revealed that about 65% of people are interested and accepted our idea.
- Week4 –Prepared a business model canvas and estimated cost of the product.
- Week5 – Finalized the product with some required changes and features.

Contributors:

- Dr. Vijaya lakshmi suggested us to use components that are free from sparks. Asked us to not use any kind of motors.
- Praveen sir (cse faculty of VJIT), made us to know that we can send sms without using GSM module.
- Mentor Sandeep sir made us to know how to pitch our idea and helped in improving our presentation skills.

