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J&P

# 1. CUSTOMER SEGMENT(S)

Who is your customer? i.e. working parents of 0-5 y.o. kids

> The problem of gas leakage and fire is often encountered in our day-to-day life. LPG, Liquified Petroleum Gas, is highly flammable gas used as fuel in heating appliances

## 6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available

The smell helps us to detect when there is a leak, which is very important for safety purposes

### 5. AVAILABLE SOLUTIONS

Which solutions are available to the customers when they face the 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

The main aim of this paper is to design an IOT based Smart Gas Management System that will be able to detect gas leakage and fire. With the help of load sensor

# 2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Gas sensors are good or bad, the most important factor to determine the performance of a device.

# 9. PROBLEM ROOT CAUSE

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.

> Leakage of this gas raises the risk of building fire, suffocation or an explosion

## . BEHAVIOUR

RC

What does your customer do to address the problem and get the 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)

> natural gas can leak when it's ignored or not noticed in the first place. In fact, gas leaks can lead to carbon monoxide poisoning, fatalities

#### 3. TRIGGERS

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

> With the help of load sensor, automatic booking of a gas cylinder is also facilitated

# 4. EMOTIONS: BEFORE / AFTER

Howdo 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.

when there's a gas leak, it increases the risk of a fire or explosion

#### 10. YOUR SOLUTION

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.

> IOT based industrial plant safety gas leakage detection system

#### 8. CHANNELS of BEHAVIOUR

8.1 ONLINE

What kind of actions do customers take online? Extract online channels from #7

#### 8.2 OFFLINE

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

> Leakage of this gas raises the risk of building fire, suffocation or an explosion



