## 1. CUSTOMER SEGMENT(S)



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

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Customers are the farmers and they are of types Marginal Farmers, Small Farmers, Semi-medium, Medium and Large. Farmers with large hectares of land require Smart-farming assistance to make things easy and reliable.

### 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 devices.

Improper irrigation, Productivity issues, Difficulty in the management of inputs and outputs for farming activity, also climatic conditions affect the farmers, Reliability is less in traditional farming.

### 5. AVAILABLE SOLUTIONS



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

Smart Farming has increased the productivity, and management of farming activity and timely reaction towards moisture, temperature, & climatic prediction. Automation via app/web app has made it more sustainable than before.

### 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.

Smart farming includes the Internet of things and this integrates the hardware and software part helping to make the automation easy like the irrigation facilities on timely basis and also prediction of climatic conditions before in hand gives the farmer a warning and to be prepared for the change.

## 9. PROBLEM ROOT CAUSE



What is the real reason that this problem exists? What is the back story behind the need to do

i.e. customers have to do it because of the change in

Frequent changes and unpredictable weather and climate made it difficult for farmers to engage in agriculture .These factors play an important role in deciding whether to water your plants .Fields are difficult to monitor when the farmer is not at the field, leading to crop damage.

### 7. BEHAVIOUR



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)

The climatic condition and changes prediction is literally hard for the farmers and via smart farming its resolved.

# 3. TRIGGERS



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

Growing the awareness among people by showing up some ads or poster and also arranging campaigns to teach about Smart farming and also showing an example of it.

## 4. EMOTIONS: BEFORE / AFTER



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.

BEFORE :Lack of Knowledge in weather forecasting--> random decision--> low yield. AFTER:Data from reliable source--> correct decision--> high yield.

### 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.

To collect data from various types of sensors and send the values to main server.it also collect weather data's from weather API. The final decision to irrigate the crop is made by the farmer using a mobile application.

## 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.

ONLINE: Providing online assistance to the farmer in providing knowledge regarding the pH and moisture level of the soil.

OFFLINE :Awareness programs to be organized to teach the importance and advantages of the automation and IoT in development of agriculture.