BE

Explore

### 1. CUSTOMER SEGMENT(S)

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

- Marginal Farmers,
- Commercial Farmers.
- Persons involved in agricultural sectors.

## CS

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**CONSTRAINTS** 

# 6. CUSTOMER

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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

- Market information, Market access:
- Price of inputs, for example fertilizer and herbicides;
- Availability of inputs;
- Irrigation, Cost of transport,
- Labour cost gets reduced.

#### 5. AVAILABLE SOLUTIONS

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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

The integration of Digital technology into farming practices are able to increase yields, reduce costs, experience less crop damage, earn more profit and minimize water, fuel, and fertilizer usage.

#### 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

- Farmers who grow crops and the hurdles caused by animals, birds and environmental factors.
- The problems happening in the fields are immediately intimated to the land owners.
- Tracking the location of the field with GPS.

#### 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.

- **Birds** Wild Animals and destroying the fields,
- Adverse Climate Conditions,
- Pests and Weeds resistance to chemicals.
- Poor farming practices,
- Loss of Soil Quality in the fields.

#### 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)

- Manpower usage is less.
- Cost Effective.
- Gain more yield,
- Farmers can earn more profit from the crop production.
- The end user can get the crop products easily available.

#### 3. TRIGGERS

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

- Farmers can solve their issues using IOT smart crop protection system.
- The problems can be easily detected.

# 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 :Unpredictable Weather, Time Constraints.
- ➤ After : Real Time Crop Monitoring, Analysis of Soil , Reducing Pests , Rain Sensor.

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#### 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.

- Motors and sprinkler irrigation in the field can be monitored through mobile app.
- Usage of LED bulbs in the field is easy to catch insects.
- PIR Sensor to detect the entry of wild animals in the field.
  - Cost effective.

#### 8. CHANNELS of BEHAVIOUR

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

The crop protection system is integrated with IBM cloudant services, which improves scalability and to store data.

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

Extract online & offline CH Customers can directly contact the farmers in offline mode and they can ask about their feedback, development use, requirements which are needed. AMALTAMA

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