6. CUSTOMER CONSTRAINTS

## Define CS. fit into

8

## 1. CUSTOMER SEGMENT(S)

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

cs

J&P

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

Using a large number of sensors is difficult. An unlimited or continuous internet connection is required for success.

## 5. AVAILABLE SOLUTIONS

CC

RC

Which solutions are available to the customers when they face the problem

need to get the job done? What have they tried in the past? hat pros & cons do these solutions have? i.e. pen and paper

The irrigation process is automated using Meteorological data and field parameters were collected and processed to automate the process. irrigation Disadvantages are efficiency only over short distances, and difficult data storage.

extinction.

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

The customer for this product is

a farmer who grows crops. Our

goal is to help them, monitor field

product saves agriculture from

parameters remotely.

The purpose of this product is to use sensors to acquire various field parameters and process them using a central processing system. The cloud is used to store and transmit data using IoT. The Weather API is used to help farmers make Farmers can make decisions. through decisions mobile applications.

9. PROBLEM ROOT CAUSE

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

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.

hat does your customer do to address the problem and what aces your customer as to address the problem and qet 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)

Use a proper drainage system to overcome the effects of excess water from heavy rain. Use of hybrid plants that are resistant to pests.

CH

Explore AS, differentiate

3. TRIGGERS

vield.

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

Farmers struggle to provide adequate irrigation. Inadequate water supply reduces yields and affects farmers' profit levels. Farmers have a hard time predicting the weather

4. EMOTIONS: BEFORE / AFTER

EM 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 decisions →low

AFTER: Data from reliable source → correct decision →high yield

10. YOUR SOLUTION

TR

If you are working on an existing busin solution fire, fill in the canyas, 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 carvas and come up with a solution that fin within customer limitations, solves a problem and marches customer behaviour.

Our product collects data from various types of sensors and sends the values to our main server. It also collects weather data from the 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 across do customers take offline? Extract offline clunnels 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. Online assistance to be provided to the user in using the product

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