Explore AS, differentiate

# 1. CUSTOMER SEGMENT(S)

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Who is your customer?

Define

CS, fit into

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The customers for this product are farmer. The goal of the product is to help them, monitor field parameters remotely. This product can saves agriculture from extinction.

### 6. CUSTOMER CONSTRAINTS



What constraints prevent your customers from taking action or limit their choices

Using many sensors is difficult. An unlimited or continuous internet connection may be required for success.

### 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 irrigation process is automated and the data collected from the sensors and the weather data can be used by the farmers

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



Which jobs-to-be-done (or problems) do you address for

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 decisions. Farmers can make decisions through mobile applications. your customers? There could be more than one; explore different sides.

## 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?

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.

## 7. BEHAVIOUR



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

## 3. TRIGGERS

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

Farmers find it difficult to provide correct amount of irrigation. Inadequate water supply reduces yields and affects farmers' profit levels. Farmers have a hard time predicting the weather.

### 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 weather predicting and forecasting  $\rightarrow$  Random decisions  $\rightarrow$  low yield. AFTER: Data from reliable source  $\rightarrow$  correct decision  $\rightarrow$  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.

The app 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 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. 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.

