Project Title: Smart Farmer – IoT Enabled Smart Farming Application

Project Design Phase-I Solution Fit

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Define CS, fit into CC

1. Customer Segment(S)

CS

Who is you customer?
i.e. working parents of 0-5 you. kids

the customer for this product is a farmer who grows crops. Our goal is to help them, monitor field parameters remotely. this product saves agriculture from extinction.

6. Customer Constrains

C

What constraints prevent your customers from taking action of limittheir choices
of solutions? i.e., spending power, budget, no cash, networkconnection, available devices.

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

5. AVAILABLE Solution's

AS

Which solutions are available to the customers whenthey face the problem

of need to get the job done? What have they tied in the past?What pois & cons do these solutions have? i.e. pen and paper

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

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Which jobs-to-be-done (of problems) do you address foryour customers? there could be more than one; explore different sides.

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 faímeís make decisions. Farmers can make decisions through mobile applications.

9. PROBLEM ROOT CAUSE

What is the ideal reason that this problem exists? What is the back story

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 installed, calculate usage and benefits; indirectly associated: customers spend freetime on volunteering work (i.e. Greenpeace)

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

Focus on J&P, tap into BE, understand RC

3. TRIGGERS

TR

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 time predicting.

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 →lowyield.
AFTER: Data from reliable source →
collect decision →high yield

10. YOUR Solution

SL

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 behavior.

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 usage mobile application.

8. CHANNELS of BEHAVIOUR

CH

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.