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

C

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

C

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.

The Crops are being destroyed because of not getting the exact data about the crops. It consumes high data storage

5. AVAILABLE SOLUTIONS

A

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

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

Automated irrigation using Iot. The Meteorological data and field parameters are being collected andprocessed and those data's are automatically updated to the device.

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 (or problems) do you address for your customers? there could be more than one; explore different sides.

The main objective of this project is to obtain a automated device which stores the data of crops and the use sensors to acquire various field parameters and process them using a central processing system.The cloud is used to store and transmitdata using

9. PROBLEM ROOT CAUSE

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

The Problem is raised due to Frequent change in climate 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 light solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

It is best to 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

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 crops to get high profit levels. Farmers have a hard time predicting

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem of 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 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 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 farmer, in providing knowledge regarding the pH and moisture level of the soil. Online assistance to be provided to the use the product

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