Project Title: Smart Farmer -IOT Enabled Smart Farming Application

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID22393

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

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

Our customer is the farmers who yield crops. Our goal is to help them to monitor their field remotely to save their time.

6. CUSTOMER CONSTRAINTS — CC

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.

Providing proper internet connection is difficult for them. Using a large number of electronic components is risky.

5. AVAILABLE SOLUTIONS — AS

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 farming process is automated using IoT devices. Meteorological data land field parameters were collected and processed to automate the process.

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 purpose of this product is to use sensors to acquire various field parameters. The cloud is used to store and transmit data using IoT. Farmers can make decisions through mobile applications.

9. PROBLEM ROOT CAUSE — RC

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.

Unpredictable weather and climate changes made it difficult for farmers to engage in agriculture. This factors play an important role in deciding whether to water their field.

7. BEHAVIOUR — BE

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)

Usage of proper drainage system to overcome the effects of excess water stagnant in the field.

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 Farmer's profit levels. Farmers should be more Confident about their crop.

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 device collects data from various types of sensors And snds the values to our main server. It collects Weather data from the weather API.

8. CHANNELS of BEHAVIOUR — CH

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

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 humidity and moisture Level of the soil.

Identify strong TR & EM

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 forecasting, Random Decisions, low yields.
AFTER: Data from reliable souce, correct decision, High yield.

OFFLINE: Camps to be organized to make awareness Of the importance and advantages of the automation and IoT in the development of agriculture.

Identify strong TR & EM