Project Title:SmartFarmer - IoT Enabled Smart Farming Application **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID27262

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Who is your customer?

The main customers are the farmers who are going to grow different variety crops on different season. By the data collected they can use to check what types of crops can be grown which may result in better cultivation

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.

Due to lots of sensors a lot of power and internet is needed to store the data and they may feel difficult if they don't have a great knowledge in using this data. It should also fulfill constraints like cost, space etc...

5. AVAILABLE SOLUTIONS AS

or need to get the job done? What have they tried in the past? What pros &

The irrigation can be made automated using iot. Like when the amount water required after rain is not enough it can provide it through iot the farmers no need to go daily and irrigate the field using this the field can be irrigated

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

The main aim of the product to obtain different parameters using sensors to calculate certain factors like moisture and store them in cloud. Which will be a great resource for the farmer to cultivate right type of crops at right time

9. PROBLEM ROOT CAUSE RC

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

Due to frequent change in weather, it is difficult for farmers to know the right amount of water to be done for plants. Due to lack of instruments for measuring soil moisture they may over give or lack of water for plants.

7. BEHAVIOUR BE

i.e. directly related: find the right solar panel installer, calculate usage and

Many It companies are ready to install this setup on the fields. The farmer can use proper irrigation techniques which may increase production and reduce time.

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

Identify strong TR & EM

3. TRIGGERS TR

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

The easy accessibility and reliability make the farmers use it properly and by the application the cultivation of farmers may increase and the production increase which results in profit

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.

The solution of this application is to collect data through sensors and store it in the cloud storage and using iot producing automated

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

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

Proper assistance and guidance should be given to the farmers about this application so it will be user friendly. Knowledge about the moisture level and irrigation techniques can be given.

8.2 OFFLINE

What kind of actions do customers take offline? Extract offline channels from #7 and

Identif

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 prediction→Random decision→Less yield→Low profit **After:**Data collection from sources and knowledge in weather →Correct decision→Great yield→Great profit	irrigation technique according to the climatic condition like automatic on/off of water pump through application	use them for customer development. Awareness camps can be organized to boost people's knowledge about iot and explain the advantages and impacts of it in farming.