Project Title: **Smart Farmer- IOT Enabled Smart Farming Application** **Project Design Phase-I - Solution Fit Template**

Team ID: PNT2022TMID18911

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Who is your customer?

Adoption of smart farming methods through technology and innovation in the agriculture sector may prove to be a game changer in the days to come by substantially raising farmers' income.

6. CUSTOMER CONSTRAINTS CC

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

The major constraints to the various adaptation strategies were inadequate finance, scarcity of labor, poor agricultural extension services, inadequate access to climate information, nonavailability of resistant varieties, poor agricultural program, inaccurate agro-meteorological information, high cost of labor.

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?

Smart irrigation provides optimal water delivery to crops while ensuring there is minimal to no wastage in water used for agriculture.For farms with low mechanization, crop harvesting is the most labor-intensive activity of the season.

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?

IoT-based agriculture system helps the farmer in monitoring different parameters of his field like soil moisture, temperature, and humidity using some sensors.

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?

Smart farming helps farmers to better understand the important factors such as water, topography, aspect, vegetation and soil types.

7. BEHAVIOUR BE

What does your customer do to address the problem and get the job done?

automation is changing the ways that farmers make decisions on-farm. They have greater insight into the potential opportunities, challenges and constraints. Farmers can also be more efficient and innovative in their approach, growing more with less.

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

3. TRIGGERS TR

What triggers customers to act?

With smart farming, you can maximize productivity in production.

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?

Smart farming can provide a concerted path out of locked-in technologies and practices characterized by strong polarization and market segmentation.

10. YOUR SOLUTION SL

- Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers.
- They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

controls motor pumps through online mode, via monitoring weather conditions.

8.2 OFFLINE

random checking of fields.