Project Title: Estimate the crop yield using data analytics **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID06880

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

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

A farmer who is in need to estimate his crop production

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.

- **Is this product trust worthy?**
- **Lack of network connection**
- **Proper future yield estimation**

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

- **Accurate prediction of future crop yield with agricultural experts suggestions.**
- **Highly interactive chatbots.**
- **Aesthetic dashboard for more user understanding.**

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.

- **Farmers can get analysis of crop yield in the form of visualisations.**
- **Farmers can get the suggestions from experts.**
- **And also they can ask their queries.**

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.

The root cause is manually keeping track of the previous years crop yield is really hard and future prediction has to be correct for better yield.

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)

- **Check all the crops which gives better yield.**
- **Hearing suggestions from the other farmers and agricultural experts.**

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.

Seeing the increased productivity of other farmers.

New techniques which gives more productivity to others.

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.

Frustrated, confused and depressed

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.

- **Creating interactive chatbots.**
- **Attractive dashboard with aesthetic visualization.**
- **Providing expert suggestions to farmers.**
- **Predicting the future crop yields.**
- **Storing the past crop yield datas.**
- **Helping the farmers to choose which crop has to be sown in that particular season for better yield.**

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

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

Finding trust worthy estimation of crop yield online.

8.2 OFFLINE

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Can use the estimation models for identifying which crop has to be sown and implementing it in the real time.

Extract online & offline CH of BE