Project Title: SMARTFARMER- IoT Enabled Smart Farming Application **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMIDxxxxxx

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 person who is engaged in agriculture, raising living organisms for food or raw materials

*Middle aged people,

*Old aged people,

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.

Climate uncertainity challenges the livelihoods of farmers.
The smart agriculture needs availabiility of internet continuously.
Rural part of most of the developing do not fulfill this requirement.
Moreover internet connection is slow.
The smart farming based equipments require farmers to understand and learn the use of technology.

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

Smart farming has enabled farmers to reduce waste and enhance productivity with the help of sensors eg: light,humidity, temperature,soil moisture,etc...and automation of irrigation systems. With the help of these sensors, farmers can monitor the field conditions from everywhere.

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 challenges of a smart agriculture system include the integration of these sensors data to the analytic driving automation and response activities.

The purpose of this project is to create an embedded-based soil monitoring and irrigation system that will reduce manual field monitoring and provide information via a mobile app.

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.

Cope with climate change,soil erosion and biodiversity loss,
Satisfy consumer's expectations,
Adopt and learn new technologies,

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)

Choose the best and cheap product for using smart farming, calculate the benefits.
Choose the best network, involving themselves to adopt new technologies.

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.

Increasing use of information and communcitaion technology (ICT) in agriculture.

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.

Farmers tend to get really excited when we discusss what we're doing, because just like any business, they're looking for efficiency.

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 IoT based agriculture system helps the farmer to monitoring different paramters of his field like soil moisture,temperature and humidity using some sensors by using a web or mobile application. It will notify the users about the parameters.

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.

Sometimes farmers wrestle with understanding what technology will work for them, how to use that technology, what's important for their crop at the time, and what delivers good results.

Identify strong TR & EM