PROJECT DESIGN PHASE-I

PROBLEM SOLUTION FIT

Date	2 November 2022
Team ID	PNT2022TMID22879
Project name	Project-Smart Farmer-IoT enabled smart farming application

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS
Who is your customer?
i.e. working parents of 0-5 y.o. kids

Farmers are customers

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

1. Limited nutrient availability
2. Inadequate crop protection

5. AVAILABLE SOLUTIONS — AS
Which solutions are available to the customers when they face the problem.
ie. 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 note taking

1. Promote welfare of farmers
2. Promote local food consumption and improve distribution

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.

1. Planting, cultivating
2. Supervising farm labor
3. Monitoring climate conditions

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.

Helps to reduce overall costs and improve the quality and quantity of products

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)

To monitor agricultural land, temperature and soil moisture

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.

1. Loss of agricultural land
2. Decrease in variety of crops

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.

1. Unavailability of good quality of seeds
2. Poor irrigation facilities
3. Lack of modern equipment

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.

1. Improving quality of rural life
2. Provide better irrigation facilities
3. Invest in farm productivity
4. Adopt and learn new technologies

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.

1. Farmers can see and manage all data and equipment using one device in real-time without going on the field
2. Reduces dislocation and migration

Identify strong TR & EM