

**Project Design Phase-I**  
**Problem – Solution Fit Template**

Date	27 September 2022
Team ID	PNT2022TMID18947
Project Name	Smart Farmer - IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

**Problem – Solution Fit Template:**

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

**Purpose:**

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

Define CS, fit into

1. CUSTOMER SEGMENT(S)  
Who is your customer?

Farmers who want to use modern technology Beginner farmers

6. CUSTOMER  
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.

Initial Invest cost  
Internet Access  
Unable to access right resources  
Don't know whether the product will work or not

5. AVAILABLE SOLUTIONS  
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

Incorporate new technology in agriculture.  
Need to gather information from various farmers  
Need to use things that improve soil quality

Explore AS,

Focus on J&P, tap into BE, understand

2. JOBS-TO-BE-DONE / PROBLEMS  
Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Maintain Crops and increase yield production Provide remote access to their land

9. PROBLEM ROOT CAUSE  
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.

No Modernization  
Sticking to the old things  
Cope with climate change  
Decrease in soil

7. BEHAVIOUR  
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)

Make sure that they know their requirements  
Make sure that product meets their requirements  
Cost of the product and performance  
Scalability of the product  
Customer service

Focus on J&P, tap into BE, understand

Identify strong TR & EM

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

Farmers know to improve their soil quality and improve productivity.

4. EMOTIONS: BEFORE / AFTER  
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 - Low production, Need to visit land daily.  
After - High Production, No need to visit land daily.

Extract online & offline CH of BE

10. YOUR SOLUTION  
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.

To design an application which helps to monitor and controls the land operations.  
By using various sensors data are used to provide suggestions and current status of land.  
To improve production, soil quality through our app.  
Our solution allows the farmers to incorporate new technology.

8. CHANNELS of BEHAVIOUR  
8.1 ONLINE  
What kind of actions do customers take online? Extract online channels from #7  
Remote Access and Security  
8.2 OFFLINE  
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.  
Make sure whether the product provides best solution and provides control to most of things.  
Crop inspection and check their production.

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