Date	01 october 2022
Team ID	PNT2022TIBMID49530
Project name	Project- IOT based smart crop protection system
Maximum marks	2 marks

Problem-Solution fit canvas 2.0

Purpose / Vision

Focus on J&P, tap into BE & CH, understand RC. Define fit into CS

Identify strong TR & EM | Extract online & offline CH of BE

1. CUSTOMER SEGMENT(S)

1. Farmers who need improved yield with smart automation will use this technique.
2. Gardeners also make this choice to improve their farm to improve their

6. CUSTOMER

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

1. Pest control over the internal process.
2. Agricultural sector lack information of high adoption in IOT .
3. For security implementation of automation ,cost are not satisfied by farmers

5. AVAILABLE SOLUTIONS

Which solutions are available to the customers when they face the job or need to get the job done? What have they tried in the past? What pros & cons dothese solutions have? i.e. pen and paper is an alternative

1. Ask for customer needs and preferences
2. Offer a solution.
3. Understand the needs of farmer.
4. Pros:
   Wide spread to all.
   Increased profit.
5. Cons:

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your

Jobs to be done
1. Setting the apparatus and maintaining.
2. Proper monitoring for energy resource.

Problems
1. Environment and social impact of automation in agriculture- This cause reduction of human empowerment.
2. Distribution- Hard to reach in remote villages.
3. Cost – Setting the system in low budget is difficult.

9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists? What is the back story behind the

1. Analyzing and giving solution.
2. The most common mistake people makes when equipment error or human error is to be identified.

7. BEHAVIOUR

What does your customer do to address the problem and get the i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering

1. Identify the troubles.
2. Understand the problems arising.
3. Make suitable choice of solutions.
4. Implement in field.
5. Monitor continuously.

3. TRIGGERS

What triggers customers to act? i.e. seeing their neighbour installingsolar panels, reading about a

1. Through advertisements customers are triggered in automation.
2. Automation in agriculture are influenced by cinema ,government programs and by social platforms.

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 inthe canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

1. Environment and social impact of automation in agriculture – make profit by innovative agriculture in smart way.
2. Distribution – make awareness in rural areas and make wider.
3. Cost – use cooling systems,high quality

8. CHANNELS of BEHAVIOUR

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

This article highlights the potential of wireless sensors and IOT in agriculture, as well as challenges expected to be faced when integrating this technology

8.2 OFFLINE
What kind of actions do customers take

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
1. Crops were severely affected by extreme heat, heavy rainfall,animal grazing and other factors.
After
1. By this method,plants are protected from all factors that affect plants.

offline? Extract offline channels from #7
and use them for customer development.

1. This project will provide protection from animals through sound system.
2. Kills insects through automatic spray system.
3. We protect crops from excessive heat through bogie system.
4. Crop yield can be increased by monitoring

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