Project Title: IoT Based Smart Crop Protection System for Agriculture

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID11461

Define CS, fit into

1. CUSTOMER SEGMENT(S)

Who is your customer?
i.e. Farmers and agriculture associate brands

6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices
of solutions? i.e. lack of information, high adoption costs and security concerns etc

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. Monitoring of climate conditions, Greenhouse automation, crop management, cattle monitoring, End to end farm management etc.

Explore AS, differ

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems)? The biggest challenges faced by IoT in the agricultural sector are lack of information, high adoption costs and security concerns, etc.

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. The climate changes, soil erosion and biodiversity loss an from consumers changing tastes in food and concerns about how it is produced. It uses robots, drones, remote sensors and computer imagine combined with continuously progressing machine learning.

7. BEHAVIOUR

What does your customer do to address the problem and
i.e. It uses the robots, drones, remote sensors and computer imaging combined with continuously progressing machine learning and analytical tools for monitoring crops, surveying and mapping the fields and providing data to farmers for rational farm management plans to save both time and money.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS

What triggers customers to act? i.e. Large landowners and small farmers must understand the potential of IoT market for agriculture by installing smart technologies to increase competitiveness and sustainability in their productions.

10. YOUR SOLUTION

The purchases are for smart watches, electronics, television system, virtual reality and health tracking. By using devices to control and track their lifestyle. The sensor and robots can be used for monitoring.

8. CHANNELS of BEHAVIOUR

8.1 ONLINE

What kind of actions do customers take online? IoT smart agriculture products are designed to help monitor crop fields using sensors and by automating irrigation system.

8.2 OFFLINE

What kind of actions do customers take offline? The storage should be increased and sufficient water supply should be given. The needed care for crops should takes place

Identify

4. EMOTIONS: BEFORE / AFTER

EM

How do customers feel when they face a problem or a job and afterwards?

i.e. Main problems often faced by farmers are less use of modern farming equipment, ,poor storage facilities, high interest rates, lack of information etc. Wearable IoT technology enables remote health monitoring. Most of farmers are not aware of the implementation of IoT in agriculture.