Project Title: SmartFarmer - IoT Enabled Smart Farming Application

Project Design Phase-I - Solution Fit
TeamID: PNT2022TMID41877

1. CUSTOMER SEGMENT(S) `CS`

Farmers are the primary target customer along with them small Industrial Workers may also be the customer in some cases.

5. AVAILABLE SOLUTION `AS`

Manual monitoring of crops by recognizing changes in leaf quality and sick patches, people can assess a plant's level of illness. In similar way weather and Quality of soil are recognized, Irrigation Control is done by making the water paths to the crops manually.

8. CHANNELS OF BEHAVIOUR `CB`

Online :
Basic understanding of plants, Soil quality, and Control the irrigation of the crop through the application

Offline :
People attempt to diagnose diseases based on the condition of the leaves.

2. JOBS-TO-BE-DONE / PROBLEMS `J&P`

This application focuses on Crop Monitoring, Local weather Monitoring, Soil Quality Monitoring and Irrigation Control.

6. CUSTOMER CONSTRAINTS `CC`

Access to a reliable internet connection. To acquire a precise prognosis of disease in the plant, the image must be captured in the necessary pixels. More sensors should be used and make the farmers to access the application in a easy way.

9.PROBLEM ROOT CAUSE `RC`

Having poor drainage, the soil lacks water and nutrients like phosphate and nitrogen that cause disease.

3. TRIGGERS `TR`

Factors such as Climate change, population growth and food security concerns have propelled the industry into seeking more innovative approaches.

7. BEHAVIOUR `B`

Directly : The tool makes it simple for farmers to monitor the crop, weather conditions and quality of the soil, and they don't need any further expertise in disease prediction.

Indirectly: Online results may be accessed instantly by farmers, who can also expect good crop growth and irrigation system.

10. SOLUTION

By making farming more connected and intelligent, precision agriculture helps reduce overall costs and improve the quality and quantity of product.

4. EMOTIONS: BEFORE / AFTER EM		
Before : Losing confidence, Miserable, Stressed. After : Self-assured, Relief, Happy		