Project Title: SmartFarmer - IoT Enabled Smart Farming Application

Project Design Phase-I - Solution Fit

Team ID: PNT2022TMID44735

- **AVAILABLE SOLUTION**

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 makingthe water paths to the crops manually.

8. CHANNELS OF BEHAVIOUR

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

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

2. JOBS-TO-BE-DONE / PROBLEMS

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

J&P

- **CUSTOMER CONSTRAINTS**

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 thefarmers to access the application in a easy way.

9.PROBLEM ROOT CAUSE

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

TR

3. TRIGGERS
10. YOUR SOL

3. TRIGGERS	**7. BEHAVIOUR** B	**10. SOLUTION**
Factors such as Climate change, population growth and food security concerns have propelled the industry into seeking more innovative approaches.	**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 diseaseprediction. **Indirectly:** Online results may be accessed instantly byfarmers, who can also expect good crop growth and irrigation system.	By making farming more connected and intelligent, precision agriculture helps reduce overall costs and improve the quality and quantity of product.