Project Title: Fertilizers Recommendation System For Disease Prediction **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID00322

Define CS, fit into CCrr

1. CUSTOMER SEGMENT(S)

CS

Farmers are the main customer for this application. Farmers can easily use this application and get suggestions for the best and appropriate fertilizers for their crops.

6. CUSTOMER CONSTRAINTS

CC

Availability of good networks. Capturing the image in the required pixels to get an accurate prediction of disease in the plant.

5. AVAILABLE SOLUTIONS

AS

Hyperspectral Imaging, Thermography, Fluorescence Imagine are some of the available techniques for identifying diseases using leaves.

Explore AS, differentiate

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

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

This application focuses on helping the farmer who needs a better recommendation of fertilizer on the infected plants.Identifying the disease is one of the biggest problem here.

9. PROBLEM ROOT CAUSE RC

Various diseases on the plant can lead to reducing the quality and quantity of the crops productivity. The insects on the plants can spread the disease .

7. BEHAVIOUR BE

Directly:

Farmers can identify the disease using the application and learn about the recommended fertilizers.

Indirectly:

Farmers can learn more about the disease online in order to understand it better.

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

Identify strong TR & EM

3. TRIGGERS TR

Seeing that other farmers adopt different methods to take extreme care of their plants

4. EMOTIONS:

BEFORE- Low self-confidence, frustrated EM

AFTER- Optimism, Hope ,Happiness

10. YOUR SOLUTION SL

Using Deep learning with neural networks, to build an application that will identify the disease(s) present in the plant from the leaf images and suggest an appropriate fertilizer to treat the affected plants.

8.CHANNELS of BEHAVIOUR CH

8.1 ONLINE :

Basic knowledge of the plants, diseases and fertilizers

8.2 OFFLINE

People try to identify the disease by the quality of the leaf.

Identify strong TR & EM