Project Title:Fertilizers Recommendation System For Disease Prediction **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID42096

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Farmer is the first customer.crop disease are major threat to food security.plants are affected by leaf disease then it reduce the growth.finding the leaf disease and recommended the suitable fertilizer for the disease leaf.

6. CUSTOMER CONSTRAINTS CC

Capturing the image in a required pixels to get a accurate prediction of disease in the leaf.

5. AVAILABLE SOLUTIONS AS

CNN algorithm is used to predict leaf disease and recommended the fertilizers.

Merits:
Monitoring of large fields.

Explore AS, differentiate

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

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

Collecting the datasets,then we have to scan the leaf and analyze the disease through pattern matching of the current datasets then the suitable fertilizer is recommended for te disease.

9. PROBLEM ROOT CAUSE RC

- Lack of affected plant.
- They did not know about the plant.
- Also insects on the plants can spread the disease.

7. BEHAVIOUR BE

Farmers implements scan the disease leaf to predict the disease and recommend the fertilizers.this technique is used to accuracy of leaf disease prediction and more flexible.

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

3.TRIGGERS

Leaves are affected by bacteria, fungi and so on. Using CNN algorithm classifies the lead image as normal or affected.Then recommended the fertilizers.

4. EMOTIONS: BEFORE / AFTER EM

Before: The farmer did not identify the plant disease accurately.so, they will lose the field.

After: Our project recommended the fertilizer at its earliest stage.

10. YOUR SOLUTION

In this problem solution a Convolution Neural Network in Deep Learning based approach is proposed for predicting lead disease.This approach was evaluated with actual datasets collected from the images while capturing the crops. The evaluation process is conducted with manually labeled data and the proposed active deep learning shows a favorable performance.

The accuracy of leaf disease prediction is to be above 95% using the Neural Network algorithm.

8.CHANNELS of BEHAVIOR CH

Online:

Information about the disease leaf and recommended fertilizers.

Offline:

People trying to identify the disease by the quality of the leaf is difficult.