Project Title: Fertilizer Recommendation System For Disease Prediction **Project Design Phase-I - Solution Fit** **Team ID:** PNT2022TMID24293

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

- Faímeís
- Agíicultuíal Scientists
- Agíicultuíal Reseaícheís
- Gaídeneís

6. CUSTOMER CONSTRAINTS CC

Constíaints píeventing customeís fíom takingaction

- Non availability of stíong netwoík connection in íuíal aíeas.
- Less availability of devices to upload the plant images.
- Regulaí poweí cuts.
- Insufficient knowledge about the use of devices and applications.

5. AVAILABLE SOLUTIONS AS

- Faímeís manually obseíve plant diseases and make a íough guess based on theií expeíience, sometimes the feítilizeí chosen might not be appíopíiate
- Otheí schemes foí feítilizeí íecommendation may not be accuíate foí a specific disease.

Explore AS, differentiate

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

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

- Píediction of plant disease
- Recommendation of appíopíiate feítilizeís
- Impíovement of model using feedback

9. PROBLEM ROOT CAUSE RC

- Incoíiect usage of feítilizeís in the past.
- Low soil quality due to excess use of feítilizeís.
- Usage of infected seeds.
- Delay in the obseívation of disease leading to its spíead
- Impíopeí maintenance.

7. BEHAVIOUR BE

Directly related: Farmer can easily identify the disease by the application and they don't need any extra knowledge on the disease prediction

Indirectly related: Farmer can be able to get result through online immediately.

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

Identify strong TR & EM

3. TRIGGERS TR

- Observing fields and the crop yield
- Learning about alternate solutions on the internet
- Seeing their crops are being infected by disease and facing huge loss in quantity and quality

4. EMOTIONS: EM

When the crop gets affected by the disease the farmer feels
Before: losing self-confidence, distress
After: gaining self-confidence, relief

Confused > Claiified
Distíessed > Satisfied

10. YOUR SOLUTION SL

Our Application use the image of the infected plant by identifying the disease and suggest the good fertilizer for the disease By training the model numerous times to make it accurate enough to predict various new diseases in less time.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

- Reading articles online to improve knowledge about various plant diseases and appropriate fertilizers.
- Gathering information online about various fertilizer recommendation sources.

8.2 OFFLINE

- Manual observation of other fields and the fertilizers used by other farmers
- Talking to agricultural researchers in person about plant diseases.

Identify strong TR & EM