Project Title: Fertilizer Recommendations System for Plant Disease Prediction

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

- Farmers
- Agricultural Scientists
- Agricultural Researchers
- Gardeners

6. CUSTOMER CONSTRAINTS — CC

Constraints preventing customers from taking action

- Non availability of strong network connection in rural areas.
- Less availability of devices to upload the plant images.
- Irregular power supply
- Insufficient knowledge about the use of devices and applications.

5. AVAILABLE SOLUTIONS — AS

Which solutions are available to the customers when they face the problem
or need to get the job done? What have they tried in the past? What pros &

- Farmers manually observe the plant diseases and make a guess based on their experience, sometimes the fertilizers chosen might not be appropriate to predict the diseases.
- Other schemes for Fertilizer recommendations may not be accurate for the specific plant disease.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

- Prediction of plant disease.
- Recommendation of accurate and appropriate fertilizers.
- Improvement of model using feedback

9. PROBLEM ROOT CAUSE — RC

- Inaccurate usage of fertilizers to control plant diseases...
- Low soil quality due to excessive use of fertilizers.
- Usage of infected seeds.
- Delay in the observation of disease leading to its spread of disease over the plants.
- Improper maintenance of plants.

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 the 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 > Clarified
Distressed >Satisfied

10. YOUR SOLUTION — SL

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