Project Design Phase-I Problem – Solution Fit

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| Date | 24 October 2022 |
| Team ID | PNT2022TMID54187 |
| Project Name | Fertilizers Recommendation System For Disease Prediction |
| Maximum Marks | 2 Marks |

**1. CUSTOMER SEGMENT(S)**

**CS**

The foremost users of the application are going to be the Farmers and people interested in farming

**6. CUSTOMER CONSTRAINTS**

**CC**

* Financial instability is a fundamental reason for technological improvement
* Networking capabilities may be insufficient in remote areas

**5. AVAILABLE SOLUTIONS**

* To predict the disease plant image have to be uploaded

**AS**

* Some past tries of the farmer include manual detection of disease and fertilizer purchase
* Pros of the solution include fast and reliable fertilizer recommendation

1. **JOBS-TO-BE-DONE / PROBLEMS**

* Crops/plants get affected by insects or by any other plant disease
* Leaves/roots of the plant may get affected by its own nutrition deficiency
* Plants may also be spoiled by extreme weather conditions
* Irrespective of external conditions, irregular/dull manual maintenance can cause delays in plants

1. **TRIGGERS TR**

Social media platforms and daily television/new or newspaper impact people mentality to upgrade into a new and easy life lifestyle of automation and seeing their neighbor using new technology, reading about a more efﬁcient solution in the news

1. **PROBLEM ROOT CAUSE**
   * One of the reasons that this problem exists is because of the poor understanding of the requirements of the crop/plant

**RC**

* + As there is a decrease in the yield of many Indian varieties, the software system would be indispensable
  + The farmers can adapt their culture to automation for the betterment of yield

1. **YOUR SOLUTION SL**

Finding cause and recommending fertilizer by detecting the image instantly and displaying the nearby fertilizer shops. Recommending crops based on the soil condition

1. **BEHAVIOUR**
   * Farmers can use the web application functionalities like computer vision to detect the plant disease and recommend the correct fertilizer

**BE**

* + Thereby finding the necessary features in the application is significant

1. **CHANNELS of BEHAVIOUR CH**

**E**

**x**

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* 1. **ONLINE**
     + Customer can upload the image of the diseased plant and wait for the processed recommendation from the system.
     + They can view the nearby fertilizer shop
  2. **OFFLINE**



**Identify strong TR & EM**

**4. EMOTIONS: BEFORE / AFTER EM** Customers may get stressed after facing a technical error, fertilizer does not render anexpected yield or slow processing of the system

People may get an assistance of experienced people to know the disease and then look for homemade remedies to cure the infected plants