Project Title: Estimate the Crop Yield Using Data Analytics **Project Design Phase-I - Solution Fit** **Team ID:** PNT2022TMID23562

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Customer segment(s) is the process of dividing the customer into segments based upon the characteristics and needs.
Any number of customers (FARMERS) can use and fit into the solution.

6. CUSTOMER CONSTRAINTS CC

The constraint that prevent the customers to take action or limit their choices are due to the high cost, change of climatic conditions, network connection.

5. AVAILABLE SOLUTIONS AS

Customers are not satisfied through inappropriate data analytics. So with the help of some algorithms we can able to solve the customers need which will give the appropriate answer to them by featuring and modelling. There may be some slight variation on the solution that may occur during performing the metrics.

Explore AS, differentiate

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

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

The problems to be addressed to our customers are the change in the yield of the crop due to the climatic change, amount of rainfall, mostly the crops are sensitive to the changes that happens.

9. PROBLEM ROOT CAUSE RC

The problem is mainly caused due to the soil fertility, availability of water amount, climatic changes, and diseases or pests in the crop which affects the yield of the crops.

7. BEHAVIOUR BE

Customers can use the existing market research and can take the measures to be done to solve the problem. They must always have some other plan if another one fails and they need to be selective.

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

Identify strong TR & EM

3. TRIGGERS TR

What triggers customers to act? They must have great understanding of environmental changes and can plan accordingly to reduce the impact, so that they can increase the profit and yields.

10. YOUR SOLUTION SL

With the help of different algorithms that are existing in our data world we can solve our problem using those. First we need to preprocesses our data and then it needs to be featured and the data needs to be trained and tested. After that data is fitted into the models (algorithm) which will give the best performance and in turn we can able to estimate the yield of the crop.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

They can use various methods to solve the problem and select the best which estimates appropriately.

8.2 OFFLINE

They can analyze the various climate changes and availability of the water and diseases that occur and can make some measures

4. EMOTIONS: BEFORE / AFTER EM

Before they must be worried about the decrease in the yield and it is difficult to evaluate manually the yield rate. But after the solution provided they can easily able to know the increase or decrease amount and they will no difficulties for them to estimate.

which will increases their yield and give them profit.

Identify strong TR & EM