Project Design Phase-I - Solution Fit Template

Project Title: SmartFarmer - IoT Enabled Smart Farming Application

Team ID: **PNT2022TMID04707**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Our product is for farmer who cultivate the crops. Our main objective is to help them , monitor field parmeter remotely and irrigate the field with suitable amount of water in suitable time.

6. CUSTOMER CONSTRAINTS CC

The use of multiple sensors is very difficult and continuous internet connection is required for success.

5. AVAILABLE SOLUTIONS AS

All the data and field parameters were collected using different sensors and provided to customer for suitable crop choosing and irrigation

Explore AS, differentiate

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

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

The main purpose of this product is to use sensor to acquired various field parameter and process them using a central processing system.

9. PROBLEM ROOT CAUSE RC

Frequent changes climate and unpredictable weather made it difficult for farmers to engage in agriculture. It is difficult to monitor when the farmer is not at the field, leading to crop damage

7. BEHAVIOUR: BE

Use a proper system to overcome the effect of excess water from heavy rain.

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

3. TRIGGERS TR

Farmers have struggle to predict weather and provide adequate irrigation to the crop field.Inadequate and excess water supply leads to damage of crops and reduces crop yield.

4. EMOTIONS: BEFORE / AFTER EM

BEFORE :- Lack of Knowledge in weather forecasting and selection of suitable crop which lead to yield reduction

AFTER :- Data from reliable source is considered and decision is taken according to it. Finally, yield will be high.

10. YOUR SOLUTION SL

Our product collects all the data from various types of sensors and send the collected information to the main server. It also collect weather data from the weather API . The final decision to irrigate the crop is made by the farmer using a mobile application.

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8.CHANNELS of BEHAVIOUR CH

8.1 ONLINE

Providing knowledge regarding the moisture level of the soil and providing online assistance to the farmer. Online assistance to be provided to user in using products

8.2OFFLINE

Awareness camp to be conducted to teach the importance and advantage of automation and Iot in the field of agriculture