Project Design Phase-I
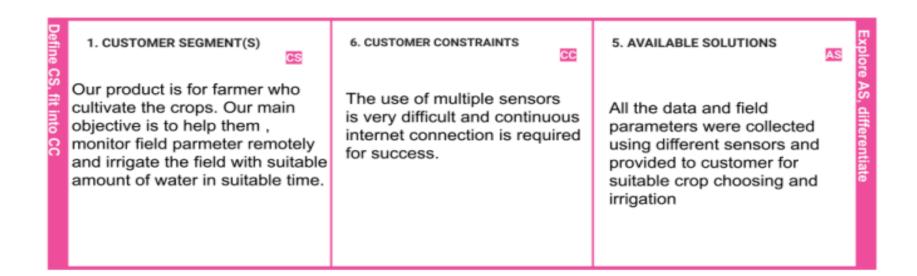
Solution Fit Template

Team ID: PNT2022TMID13187

Project Title: SmartFarmer - IoT Enabled Smart Farming Application

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

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.

3. TRIGGERS `TR`

Farmers struggle to provide adequate irrigation .Inadequate water supply reduces yields and affect Farmers profit level. Farmer have a hard time predicting the weather

10. YOUR SOLUTION

Our product collects all the data from various types of sensors andd send the value to our main server. It also collect weather data from the weather API . The final decision to irrigate the crop is

8. CHANNELS of BEHAVIOUR `CH`
8.1 ONLINE

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

4. EMOTIONS: BEFORE / AFTER   **EM**

BEFORE :- Lack of Knowledge in weather
first forecasting , then random
decision , finally result will be low
field

AFTER :- Data from reliable source , then
correct decision will be taken ,
finally result will high yield

made by the farmer using a mobile
application

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8.2OFFLINE

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