

Project Design Phase-I - Solution Fit Template

Project Title: SmartFarmer - IoT Enabled Smart Farming Application

Team ID: PNT2022TMID04704

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <small>CS</small> 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 <small>CC</small> The use of multiple sensors is very difficult and continuous internet connection is required for success.	5. AVAILABLE SOLUTIONS <small>AS</small> 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.

<p>3. TRIGGERS TR</p> <p>Farmers struggle to provide adequate irrigation .Inadequate water supply reduces yields and affect Farmers profit level. Farmer have a hard time predicting the weather</p>	<p>10. YOUR SOLUTION SL</p> <p>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 made by the farmer using a mobile application</p>	<p>8.CHANNELS of BEHAVIOUR CH</p> <p><u>8.1 ONLINE</u></p> <p>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</p> <p><u>8.2OFFLINE</u></p> <p>Awareness camp to be conducted to teach the importance and advantage of automation and lot in the field of agriculture</p>
<p>4. EMOTIONS: BEFORE / AFTER EM</p> <p>BEFORE :- Lack of Knowledge in weather first forecasting , then random decision , finally result will be low field</p> <p>AFTER :- Data from reliable source , then correct decision will be taken , finally result will high yield</p>		