

Project Title: SmartFarmer - IoT Enabled Smart Farming Application

Team ID: PNT2022TMID17368

Project Design Phase-I - Solution Fit Template

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) Farmers are the main customers of our problem solution. CS	6. CUSTOMER CONSTRAINTS Network, power consumption, need for several IoT devices and affordability challenges are the constraints. CC	5. AVAILABLE SOLUTIONS There are already several IoT-based smart farming solutions on the market, but they are all influenced by network and power consumption problems, which are the main problems farmers confront. Even if this decreases the need for manpower, IoT devices are still quite expensive. AS	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS To make it easier for farmers to become more productive by efficiently managing their resources and reaping a larger crop with the help of IoT and AI/ML. By including Internet of Things (IoT) sensors, such as those required for automation, such as humidity, temperature, light-dependent resistors, moisture, and air quality. J&P	9. PROBLEM ROOT CAUSE Smart farming enables farmers to have a deeper understanding of crucial elements like water, topography, aspect, vegetation, and soil types. This enables farmers to decide how to manage scarce resources in their production area in a way that is both economically and environmentally sustainable. RC	7. BEHAVIOUR Using IoT sensors, such as those required for automation, such as moisture, temperature, light dependent resistor, humidity, and air quality. A unique algorithm that also compares sensor data and modifies the watering and fertiliser consumption. BE	
Focus on J&P, tap into BE, understand RC	3. TRIGGERS Farmers are pushed to implement smart farming techniques since they can't earn a profit and can't stop soil degradation or use water effectively. TR	10. YOUR SOLUTION To facilitate the ability for the farmer to increase productivity by effectively managing the resources and obtaining a greater harvest with the aid of Internet of Things and AI/ML. Real-time data are statistical measures that can be displayed graphically and provide a clear report on the cultivation. SL	8.CHANNELS of BEHAVIOUR 8.1 ONLINE Farmers may find technical information quickly and easily thanks to the Internet, which can lower the cost of their information search. 8.2 OFFLINE IoT can assist farmers in using water effectively, maximising inputs and treatments. CH	Identify strong TR & EM
	4. EMOTIONS: BEFORE / AFTER EM Before: Depressed, lost, angry and agitated. After: Happy, encouraged, satisfied and accomplished.			