

Project Design Phase -I

Problem Solution Fit

Date	27 October 2022
Team ID	PNT2022TMID22120
Project Name	Smart Farmer-IOT Enabled Smart Farming Application
Maximum Marks	2 marks

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Who is your customer? i.e. working parents of 0-5 y.o. kids The intended consumer for this product is a farmer who raises crops. Our goal is to support them by remote field monitoring conditions. This thing avoids the death of agriculture.	6. CUSTOMER CONSTRAINTS CC What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices. It is difficult to employ numerous sensors. Success necessitates unrestricted or continuous internet access connection.	5. AVAILABLE SOLUTIONS AS Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking The watering procedure is automated via IoT. The watering process will be automated by field elements, as well as meteorological information was gathered, processed. Efficacy is constrained. Data over short distances. Storage is difficult.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides. The purpose of this product is to use sensors to gather various field parameters and process them. Utilising a central processing unit IoT utilises the cloud to transmit data and maintain data. Farmers make use of Weather API to help with selection. By utilising mobile applications judges made by farmers.	9. PROBLEM ROOT CAUSE RC What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. Agricultural operations were challenging for farmers due to the frequently unpredictable and shifting weather, climate. Choosing whether or not to water your plants, because these crucial. Whenever a farmer is absent, it's challenging to monitor the field, which cause harm to crops.	7. BEHAVIOUR BE What does your customer do to address the problem and get the job done? i.e. Directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace) Use a proper drainage system to offset the effects of additional water from heavy rain via means of hybrid plants resistant to pests.	
Identify strong TR & EM	3. TRIGGERS TR What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news. It is difficult for farmers to supply enough irrigation. Reduced yields and lower profits are consequences of inadequate water supplies for farmers. Farmers struggle. Weather forecasting time.	10. YOUR SOLUTION SL If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour. Our product gathers information from several sensor kinds and transmits the values to our primary server. As well gathers meteorological information from the Climate API. The ultimate choice to the farmer creates irrigation for the crop. Utilising a smartphone app.	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. ONLINE: Giving the farmer access to information about the pH and moisture content of the soil by way of the internet. Online help will be given to the consumer in using the item. OFFLINE: Awareness campaigns will be held to explain the significance and benefits of the IoT and automation in the creation of agriculture.	Identify strong TR & EM
	4. EMOTIONS: BEFORE / AFTER EM How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design. BEFORE: Poor weather predicting skills-irrational choices-low yield. AFTER: Reliable source of data good judgement-high yield			