

Project Design Phase-I

Problem Solution Fit

Date	21 October 2022
Team ID	PNT2022TMID10536
Project Name	IoT based smart crop protection system for agriculture

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS Who is your customer? Farmer's ! Who's not near his field	6. CUSTOMER LIMITATIONS CL <small>EG. BUDGET, DEVICES</small> What limits your customers to act when problem occurs? 1)High adoption costs ,security concerns. 2)Not aware of the implementation of IoT in agriculture.	5. AVAILABLE SOLUTIONS AS <small>PLUSES & MINUSES</small> Which solutions are available to the customer when he/she is facing the problem? Monitor different parameters and mobile or web application make easily to farm the crop field .	Explore AS, differentiate
	2. PROBLEMS / PAINS PR <small>+ ITS FREQUENCY</small> Which problem do you solve for your customer? It's difficult to monitor and control Ain't known if the application doesn't work properly.	9. PROBLEM ROOT / CAUSE RC What is the root of your problem from the past? 1) If temperature ,PH level, humidity & light intensity makes the serious cause for the environment. 2) Farmer affected by less productivity which will affect in their	7. BEHAVIOR BE <small>+ ITS INTENSITY</small> Which behavior is related to the problem? Direct related: Tries to find a solution to prevent this problem Indirect related: Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds.	
Identify strong TR & EM	3. TRIGGERS TO ACT TR What triggers customer to act? Create opportunities to lift people out of poverty in developing nations (Over60%)	10. YOUR SOLUTION SL If you're working on existing business - write down existing solution first, fill in the gaps! "IoT based Smart crop protection system for agriculture" !! It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity	8. CHANNELS of BEHAVIOR CH ONLINE: The Data send through application for the farmers to know about the farms. OFFLINE: The control action is taken by the farmers to monitor the farms.	Extract online & offline CH of BE
	4. EMOTIONS EM <small>BEFORE / AFTER</small> Which emotions do people feel before/after this problem is solved? BEFORE: Finances, Heavy work overload and conflict in relationship. AFTER: It will easier to make more yield			