

Project Design Phase-1

Problem Solution Fit

Date	11 October 2022
Team ID	PNT2022TMID15778
Project Name	IoT based smart crop protection system for agriculture

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS Farmer's ! Who's not near his field	6. CUSTOMER LIMITATIONS <small>EG. BUDGET, DEVICES</small> CL 1)High adoption costs , security concerns. 2)Not aware of the implementation of IoT in agriculture.	5. AVAILABLE SOLUTIONS <small>PLUSES & MINUSES</small> AS Monitor different parameters and mobile or web application make easily to farm the crop field .	Explore AS, differentiate
	2. PROBLEMS / PAINS <small>+ ITS FREQUENCY</small> PR <ul style="list-style-type: none"> It's difficult to monitor and control It known if the application doesn't work properly. 	9. PROBLEM ROOT / CAUSE RC 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 profit.	7. BEHAVIOR <small>+ ITS INTENSITY</small> BE 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 Create opportunities to lift people out of poverty in developing nations. (Over 60%)	10. YOUR SOLUTION SL <i>"IoT based Smart crop protection system for agriculture" !!</i> It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity per hectare.	8. CHANNELS of BEHAVIOR CH ONLINE: The Data send through application for the farmers to know about the farms.	Extract online & offline CH of BE
	4. EMOTIONS <small>BEFORE / AFTER</small> EM BEFORE: Finances, Heavy work overload and conflict in relationship. AFTER: It will easier to make more yield in		OFFLINE: The control action is taken by the farmers to monitor the farms.	