

Project Design Phase-I

Problem Solution Fit

Date	21 October 2022
Team ID	PNT2022TMID25614
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 CL <small>EG. BUDGET, DEVICES</small> 1)High adoption costs , security concerns. 2)Not aware of the implementation of IoT in agriculture.	5. AVAILABLE SOLUTIONS AS <small>(PLUSES & MINUSES)</small> 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> <ul style="list-style-type: none"> It's difficult to monitor and control Ain't 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	7. BEHAVIOR BE <small>+ ITS INTENSITY</small> 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.	
Focus on PR, tap into BE, understand RC	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	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 EM <small>BEFORE / AFTER</small> BEFORE: Finances, Heavy work overload and conflict in relationship. AFTER: It will easier to make more yield		OFFLINE: The control action is taken by the farmers to monitor the farms.	