

Project Design Phase-I

Problem Solution Fit

Date	09 October 2022
Team ID	PNT2022TMID30932
Project Name	IoT based smart crop protection system for agriculture

Define CS, fit into CL	1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none"> Farmers, who's not near his field. Crop importers 	6. CUSTOMER LIMITATIONS <small>EG. BUDGET, DEVICES</small> CL <ul style="list-style-type: none"> High adoption costs, security concerns. Prevent the unnecessary use of this device. Use it according to the climate change 	5. AVAILABLE SOLUTIONS <small>PLUSES & MINUSES</small> AS <ul style="list-style-type: none"> Monitor different parameters and mobile or web application make easily to farm the crop field. Certain cultural practices can prevent or reduce insect crop damage. 	Explore AS, differentiate
	2. PROBLEMS / PAINS <small>+ ITS FREQUENCY</small> PR <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 <ul style="list-style-type: none"> If temperature,PH level ,humidity & light intensity makes the serious cause for the environment. Farmer affected by less productivity which will affect in their profit. 	7. BEHAVIOR <small>+ ITS INTENSITY</small> BE <p>Direct related: Tries to find a solution to prevent this problem</p> <p>Indirect related: Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds.</p>	
Identify strong TR & EM	3. TRIGGERS TO ACT TR <p>Create opportunities to lift people out of poverty in developing nations. (Over 60%)</p>	10. YOUR SOLUTION SL <p><i>"IoT based Smart crop protection system for agriculture"!!</i></p> <p>It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity per hectare.</p>	8. CHANNELS of BEHAVIOR CH <p><small>ONLINE</small></p> <p>ONLINE: The Data send through application for the farmers to know about the farms.</p> <p><small>OFFLINE</small></p> <p>OFFLINE: The control action is taken by the farmers to monitor the farms.</p>	Extract online & offline CH of BE
	4. EMOTIONS <small>BEFORE / AFTER</small> EM <p>BEFORE: Finances, Heavy work overload and conflict in relationship.</p> <p>AFTER: It will easier to make more yield in</p>			