

Project Design Phase-I

Problem Solution Fit

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Team ID	PNT2022TMID44577
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 <p>What is the root of every problem from the list? eg. Poor soil health, lack of water, lack of sunlight and so on. If you do too expensive (L.L), and possible changes to the law might influence the return of investment, and so on.</p> <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>If you are working on existing business, write down existing solution first, fill in the gaps, and then come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</p> <p>"IoT based Smart crop protection system for agriculture"!!</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>ONLINE</p> <p>ONLINE: The Data send through application for the farmers to know about the farms.</p> <p>OFFLINE</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>			