

Project Design Phase-I

Problem Solution Fit

Date	09 October 2022
Team ID	PNT2022TMID22196
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. Suppliers of crops 	6. CUSTOMER LIMITATIONS CL <small>EG. BUDGET, DEVICES</small> <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 AS <small>PLUSSES & MINUSES</small> <ul style="list-style-type: none"> Monitoring of different parameters through the mobile or web application make easy to safe guard the crop field. Certain cultural practices can prevent or reduce insect crop damage. 	Explore AS, differentiate
	2. PROBLEMS / PAINS PR <small>+ ITS FREQUENCY</small> <ul style="list-style-type: none"> Difficulties in controlling it No information is available if the application doesnot work 	9. PROBLEM ROOT / CAUSE RC <p>What is the root of every problem from the list?</p> <p>eg. Poor soil conditions, lack of irrigation, etc.</p> <p>Factors affecting the crop's environment are the humidity, temperature and light intensity which is the serious cause.</p> <ul style="list-style-type: none"> Affecting the farmer's productivity will cause loss to the farmers. 	7. BEHAVIOR BE <small>+ ITS INTENSITY</small> <p>Direct related: trying to find a way to prevent the crops from the problem</p> <p>Indirect related: A rural location with poor internet connectivity might not enable the fast transmission speeds</p>	
Identify strong TR & EM	3. TRIGGERS TO ACT TR <p>Improve the lives of the people in developing the nation by providing them with the opportunities to break the cycle of poverty (Over60%)</p>	10. YOUR SOLUTION SL <p>If you are working on existing business- write down existing solution first, fill in the gaps and check how much does it fit reality.</p> <p>"IoT based Smart crop protection system for agriculture"!!</p> <p>If you are working on a new business solution then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</p> <p>It increases the productivity of the food and also the quality by protecting from animals and also monitoring the soil</p>	8. CHANNELS of BEHAVIOR CH <p>ONLINE</p> <p>ONLINE: Farmers can monitor the crops a through the web application developed and can access it from the home</p> <p>OFFLINE</p> <p>OFFLINE: Monitoring is done by the farmers.</p>	Extract online & offline CH of BE
	4. EMOTIONS EM <small>BEFORE / AFTER</small> <p>BEFORE: financial crisis and heavy work.</p> <p>AFTER: there will be more increase in the yielding easily</p>			