

PROJECT DESIGN PHASE-I

PROBLEM SOLUTION FIT

Date	18 October 2022
Team ID	PNT2022TMID14113
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 1) It's difficult to monitor and control 2) Farmer known't About their crops 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 and production of source.	7. BEHAVIOR <small>+ ITS INTENSITY</small> BE Main related: Tries to find a solution to prevent this problem Others 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 65 %)	10. YOUR SOLUTION SL <i>"IoT based Smart crop protection system for agriculture"!!</i> It helps 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. OFFLINE: The control action is taken by the farmers to monitor 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 in field			