

Project Design Phase-I

Problem Solution Fit

Date	03 October 2022
Team ID	PNT2022TMID15739
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 in corporate,SME and farmer.	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. 3) Use it according to the climate change	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 <ul style="list-style-type: none"> Control system of the mechanism is difficult Ain't known if the application doesn't work properly. 	9. PROBLEM ROOT / CAUSE RC If temperature ,PH level ,humidity & light intensity makes the serious cause for the environment.	7. BEHAVIOR <small>+ ITS INTENSITY</small> BE Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds. The customer will give the proper products in the crop.	
Identify strong TR & EM	3. TRIGGERS TO ACT TR Create opportunities to lift people out of poverty in developing nations.smart farming reduces the ecological footprint	10. YOUR SOLUTION SL "IoT based Smart crop protection system for agriculture" It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity per hectare. the sensorsand drones sensed information from field and protect the crop.	8. CHANNELS of BEHAVIOR CH ONLINE: The Data send through application and sensor data will send to the farmer. OFFLINE: The control action is taken by the farmers to monitor the farms.through the immediate reaction.	Extract online & offline CH of BE
	4. EMOTIONS <small>BEFORE / AFTER</small> EM BEFORE: Finances, Heavy work overload and conflict in relationship. AFTER: people get more info about crop protection make esay to yeild.			