

IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

TEAM ID : PNT2022TMID04647

SCENARIO Browsing, booking, attending, and rating a local city tour	Entice How does someone initially become aware of this process?	Enter What do people experience as they begin the process?	Engage In the core moments in the process, what happens?	Exit What do people typically experience as the process finishes?	Extend What happens after the experience is over?
Steps What does the person (or group) typically experience?	Seeing advertisement Advertisement in newspaper and media which creates interest in farmers	Start installing Farmer contact the dealer to install the system Complete payment Complete full payment to the dealer Confirm installation After installation, can see the summary of system and confirm it	Detection of birds and animals The animals and birds that destroy the field and kept away by using alarm Control motors and maintain water levels Using mobile application farmer can control the motors Measure humidity, moisture, temperature Using sensors various physical parameters required for plant growth	Complete relief from animals The farmers felt completely relief as their crop have protected in safe manner watering of plants became easy Watring of plants can be done from mobile	Better performance in crop protection New solution provides a better crop protection and results in high crop yield Personalized recommendations Informs about the new recommendations related to the crop protection
Interactions What interactions do they have at each step along the way? ■ People: Who do they see or talk to? ■ Places: Where are they? ■ Things: What digital touchpoints or physical objects would they use?	Contacting dealer directly for installation Interaction with salesman at demo	Payment using cards or mobile banking application Information provided at demo	Information can be shared with others The physical parameters were measured by using sensors	The overall crop production system function using IBM wats on service Feedback form filling and giving to the dealer	IBM Services Recommendation span using websites
Goals & motivations At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")	Help me to know about the better new method of crop protection Give idea to find new solution to the existing solution	Makes confident that purchase is finalized and tell what to do next Helps to get through payment part without too much hassle	Help me make irrigation for my plants much simpler. Had more profit to improve cultivation	Economic well being Achieving better crop yields	Well maintained farm Resources increases
Positive moments What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?	Enhance productivity Real time data Production insight	Accurate farm and field evaluation Remote monitoring Greater number of resources	Quality control improvement and process monitoring Reduced environment footprint Easy to maintain	Equipment monitoring Zero waste Reduce waste	Protect the environment Increase the fertility of the soil Easy accomplishment
Negative moments What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?	Continuous internet connection Increasing cost of devices	Water contamination Noise contamination	Animal damage Impact the environment	Sensor affected by the water Incase of short circuit	Incase of malfunction Cloud Warning issue
Areas of opportunity How might we make each step better? What ideas do we have? What have others suggested?	Drones Wireless network	Wireless Sensors Costless crop pretection	Solar power devices Unproductive efforts	Less amount of energy conserving Protecting apps	Crop protection program Sustainability development