

Project Design Phase-I

Proposed Solution

Date	15 OCTOBER 2022
Team ID	PNT2022TMID47521
Project Name	IOT based smart crop protection system for agriculture
Maximum Marks	4 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	✓ protecting the crop from the animals and birds which destroy the crop. Develop a efficient system to alert the farmers in different ways
2.	Idea / Solution description	✓ This system also helps farmers to monitor the soil moisture levels in the field ✓ Sense the temperature and humidity values near the field ✓ The motors and sprinklers in the field can be controlled using the mobile application.
3.	Novelty / Uniqueness	✓ Alerts the farmers as soon as possible ✓ User friendly ✓ Using sensors and automotive irrigation system can easily monitorfield conditions from anywhere
4.	Social Impact / Customer Satisfaction	✓ Easy installation and user friendly ✓ Can work without fear ✓ Time efficient ✓ Water conservation ✓ Remote monitoring ✓ Increased quality of production

5.	Business Model (Revenue Model)	<table><tr><td><small>Key Partners</small> Govt. Data Providers Farming Consultants</td><td><small>Key Activities</small> Refine data Visualize data <small>Key Resources</small> Open data IP & Talent</td><td><small>Value Proposition</small> Better Crop Performance Time saving Cost saving Less risk</td><td><small>Customer Relationships</small> Personal assistance In-app hints <small>Channels</small> Dealer/co-op network App/Web</td><td><small>Customer Segments</small> Farmers -L -XL</td></tr><tr><td colspan="2"><small>Cost Structure</small> R&D Data centers Marketing</td><td colspan="3"><small>Revenue Streams</small> Usage fees</td></tr></table>	<small>Key Partners</small> Govt. Data Providers Farming Consultants	<small>Key Activities</small> Refine data Visualize data <small>Key Resources</small> Open data IP & Talent	<small>Value Proposition</small> Better Crop Performance Time saving Cost saving Less risk	<small>Customer Relationships</small> Personal assistance In-app hints <small>Channels</small> Dealer/co-op network App/Web	<small>Customer Segments</small> Farmers -L -XL	<small>Cost Structure</small> R&D Data centers Marketing		<small>Revenue Streams</small> Usage fees		
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6.	Scalability of the Solution	<p>✓ This system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This ensures complete safety of crops from animals thus protecting the farmer's loss</p>										