

Project Design Phase-I

Proposed Solution Template

Date	24 September 2022
Team ID & Members	Team ID: PNT2022TMID38652 Members: S. Vishnu Prasath, K. Pugazhenth, A. Balasubramanian, S. Santhosh.
Project Name	SmartFarmer - IoT Enabled Smart Farming application
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Farmers are under pressure to produce more food and use less energy and water in the process. A remote monitoring and control system will help farmers effectively with these pressures. Irrigated farms typically deploy a single pump to irrigate 80 to 100 acres of land.
2.	Idea / Solution description	Smart farming is an emerging concept that refers to managing farms using technologies like IoT, robotics, drones and AI to increase the quantity and quality of products while optimizing the human labour required by production.
3.	Novelty / Uniqueness	Unlike genetic resources found in the natural world, agricultural crops are truly a human mediated form of biodiversity. Through the process of domestication, human beings have for over 10,000 years been selecting and breeding plant species from the wild and creating new diversity adapted specifically for cultivation.
4.	Social Impact / Customer Satisfaction	It determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to best improve or changes its products and services.
5.	Business Model (Revenue Model)	Subscription based application for providing analysis of crops and fields. The smart farming devices designed in such a way that should be profitable compared to traditional farming methods and the device should be reusable.
6.	Scalability of the Solution	Easy and simple setup is required and less number of connections and sensors are used for efficient performance. Everything can be controlled from anywhere through cloud.