Project Design Phase-I

Proposed Solution
Template

Date	19 September 2022
Team ID	PNT2022TMID51719
Project Name	SmartFarmer –IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem tobe solved)	Farmer needs solution to double the food because demand for food is getting hard to meet.
2.	Idea / Solution description	Farmers need to meet demand of food, regardless of environmental challenges like unfavorable weather conditions and climate change. To meet the needs of that growing population, the agriculture industry will have to adopt new technologies. Here comes the role of smart Farming. IoT-based smart farming is highly efficient. In IoT-based smart farming, a system is built for monitoring the crop field with the help of sensors (light, humidity, temperature, soil moisture, etc.) and automating the irrigation system. The farmers can monitor the field conditions from anywhere.
3.	Novelty / Uniqueness	➓ Sensors are used to sense the surroundingsand collect information about the soil, temperature, humidity and so on. ➓ The information collected from sensors are sent to IoT based cloud platforms fordata analytics. ➓ Based on the analysis done the farmers

		make relevant decisions to generate betteroutputs.

		• When the tasks are operated the cyclerepeats itself from the beginning.
4.	Social Impact / CustomerSatisfaction	➓ The farmer does not even have to step onthe field. ➓ The cost of manual labour reduces. ➓ Integrates and connects the entire farm to improve quality and quantity of crops and other produce. ➓ Decrease in the waste generation and aphenomenal increase in productivity. • Increase in profitability by providing help toboth farmers and consumers.
5.	Business Model (RevenueModel)	• Key activities: • Product development Platform development, integration and maintain.
		• key resources: • Sensors • Cloud service(software) • IoT dedicated network • Digital platform
		• Value propositions: • Convenient • Customization • Performance
		• Customer relationships: • Self - service • Network effect • Support
		• Channels: • Internet • Mobile
		• Customer segments: • Farmers • Agribusinesses
		• Cost structure: • Digital infrastructure • Maintenance

		• Revenue streams: • Advertising • Subscription fees