

Ideation Phase

Define the Problem Statement

Date	19 September 2022
Team ID	PNT2022TMID33440
Project Name	Smart Farmer -IoT Enabled Smart farming application
Team members	Sruthi. M, Ranjini., T Safiya Sanofer. K, Shiva sree. K

Problem Statement:

I am Farmer who has some problems in the traditional method of farming and looking for enabling smart farming applications and to reduce the manual work.

with the rapid growth of population and the increasing demand for food worldwide, improving productivity in farming procedures is essential. Smart farming is a concept that emphasizes the use of modern technologies such as the Internet of Things (IoT) and artificial intelligence (AI) to enhance productivity in farming practices. In a smart farming scenario, large amounts of data are collected from diverse sources such as wireless sensor networks, network-connected weather stations, monitoring cameras, and smartphones. These data are valuable resources to be used in data-driven services and decision support systems (DSS) in farming applications. However, one of the major challenges with

these large amounts of agriculture data is their immense diversity in terms of format and meaning.

I am	Farmer with some problems that hinder the production yield.
I'm trying to	Increase the crop yield that will automatically increase my profit rate and also want to deliver good quality products
But	The different services and technologies in a smart farming ecosystem have limited capability to work together due to the lack of standardized practices for data and system integration
Because	These issues create a significant challenge in cooperative service provision, data and technology integration, and data-sharing practices
Which makes me feel	Annoyed and makes me aim at introducing the platform approach concept for smart farming and reviewing the requirements for this approach



Problem Statement (PS)	I am	I'm trying to	But	Because	Which makes me feel
PS-1	Farmer	Make smart farming more efficient without any hindrances	Some of the ideas that has been adopted for the smart farming doesn't work	Spoiled soil quality and climate changes	Poor yield and less profit
PS-2	Farmer	provide a system that is cost effective and provides the functionalities that are required by the Indian farmers	the quality of manually collected crop performance data is very low.	because it does not consider earlier conditions that have not been observed by the human operators but is essential to filter out collected data that will lead to invalid conclusions	Confused and this encourages me to enable IOT enabled smart farming techniques in my farm.