

## Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID34035
Project Name	Project – smart farmer
Maximum Marks	4 Marks

### Solution Architecture:

The main goal of this Smart Farming is to optimize the harvesting land per unit by Using modern methods to achieve best in terms of quality, quantity and financial return. The term smart farming is also known as Precision Farming which uses a wide range of Technologies, including GPS services, sensors and etc. These technologies are very much Required in agriculture sector includes with climate forecasting, robotics, science based Solutions, environmental controls and etc.

*1. Different agricultural parameters like Temperature, Wind, Humidity, and Moisture can be controlled and monitored by using sensors.*

*2. Generates and Schedules a plan for irrigation and fertilization.*

*3. Data can be obtained through wireless speckles.*

*4. Provides external memory interface for the purpose of feeding and desertification.*

*5. Provides awareness to the farmers by alerting while he is away from the field.*

*6. controls the equipments in the field through sensor devices like mobile phones, Tablets, computers etc.*

### STAKEHOLDERS NETWORK

In view of the technical changes brought forth by Big Data and Smart Farming, we seek to understand the stakeholder network around the farm. The literature suggests major shifts in roles and power relations among different players in existing agri-food chains. We observed the changing roles of old and new software suppliers in relation to Big Data and farming and emerging landscape of data-driven initiatives with prominent role of big tech and data companies like Google and IBM.

### CHARACTERITICS

*1. Passion and Commitment.*

*2. Sales and Marketing Skills. Ingenuity,*

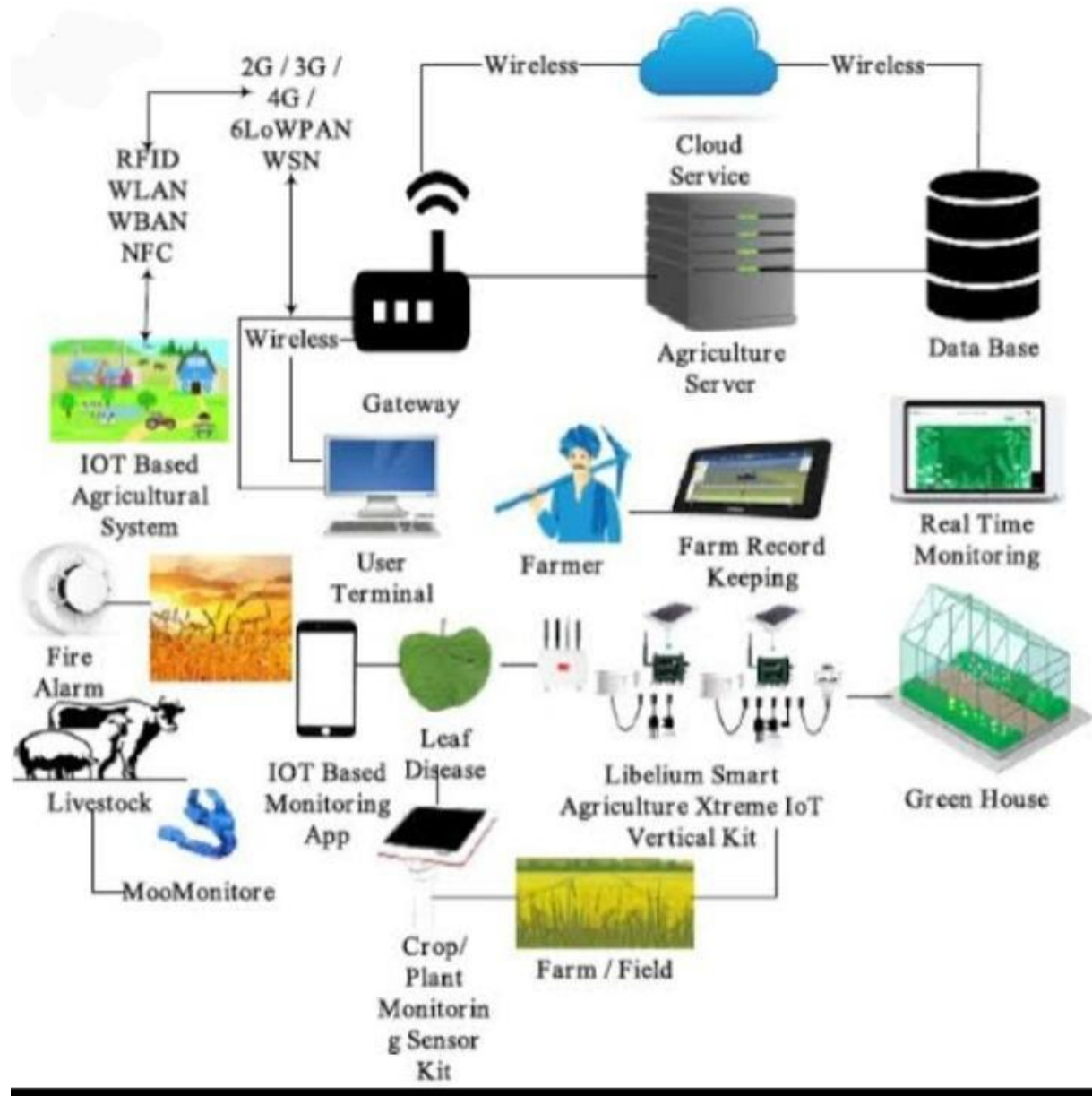
*3. Creativity and Adaptability.*

*4. Life-long Learner. Skills and Abilities.*

### FEATURES

- 1. Livestock tracking and Geo fencing.*
- 2. Smart logistics and warehousing.*
- 3. Smart pest management.*

**Example – Solution Architecture Diagram:**



**DEVELOPMENT PHASES:**

*Research and product development.*

*Demonstration and market validation.*

*Commercialization.*

**REFERENCE:**<https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>

