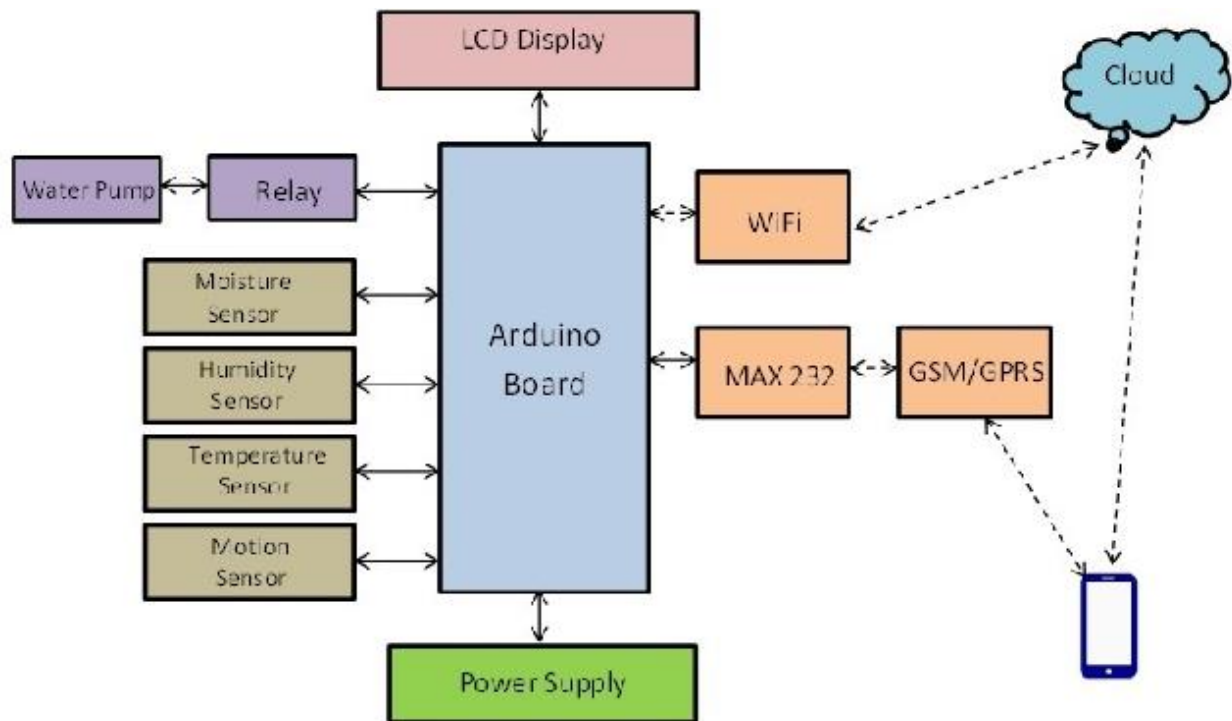


PROJECT DESIGN PHASE-1

SOLUTION FIT DOCUMENT AND SOLUTION ARCHITECTURE

| | |
|--------------|---------------------------------------|
| DATE | 3 OCTOBER 2022 |
| TEAM ID | PNT2022TMID51460 |
| PROJECT NAME | IOT ENABLED SMART FARMING APPLICATION |

SOLUTION ARCHITECTURE



1.CUSTOMER SEGMENT(S)

Farmers can be sub-segmented under three categories micro, small, or marginal; emerging and large; or commercial farmers either based on farm surplus, gross revenue, or land under cultivation.

4.EMOTIONS:BEFORE/AFTER

Before: Farmers feel very insecurity about crops while they growing.

After: Farmers can monitor All the sensor parameter by using A web or mobile application even if they not near the field.

6.CUSTOMER CONSTRAINT(S)

At the time of raising farm production, the basic constraints are land (primarily the fixed land), modern technologies, irrigation, money, and machinery.

5.AVAILABLE SOLUTION

By now, most of us are quite familiar with reports on population growth, global warming, consumer demands, etc., and the pressure on our planet's supply of food, water and land. It is worth noting that farmers have long leveraged technological breakthroughs to adapt agricultural practices to changing times, and this era is no exception, particularly with the emergence of Smart Agriculture.

2.JOBS TO BE DONE/PROBLEMS

- Invest in farm productivity
- Adopt and learn new productivity
- Cope with climate changes , soil erosion and biodiversity loss.

7.BEHAVIOUR

Farming is a behavior in which an organism promotes the growth and reproduction of other organism in or on a substrate as a food source. A number of trace fossils have been suggested to record the occurrence of farming behavior.

9.PROBLEM ROOT CAUSE

Root Cause Farm is a non-profit organization growing community solutions to hunger and working towards a just, equitable, and resilient food system where all types of hunger are nourished..

3.TRIGGERS

Agricultural communities developed approximately 10,000 years ago when humans began to domesticate plants and animals. By establishing domesticity, families and larger groups were able to build communities and transition from a nomadic hunter-gatherer lifestyle dependent on foraging and hunting for survival.

8.CHANNELS OF BEHAVIOR

Farmers producing agricultural produce are scattered in remote **villages** while consumers are in semi-urban and urban areas.

10.YOUR SOLUTION

The main goal of this project is to create the farmers to monitor the sensor parameter by using a web or mobile application even if they not near the field.