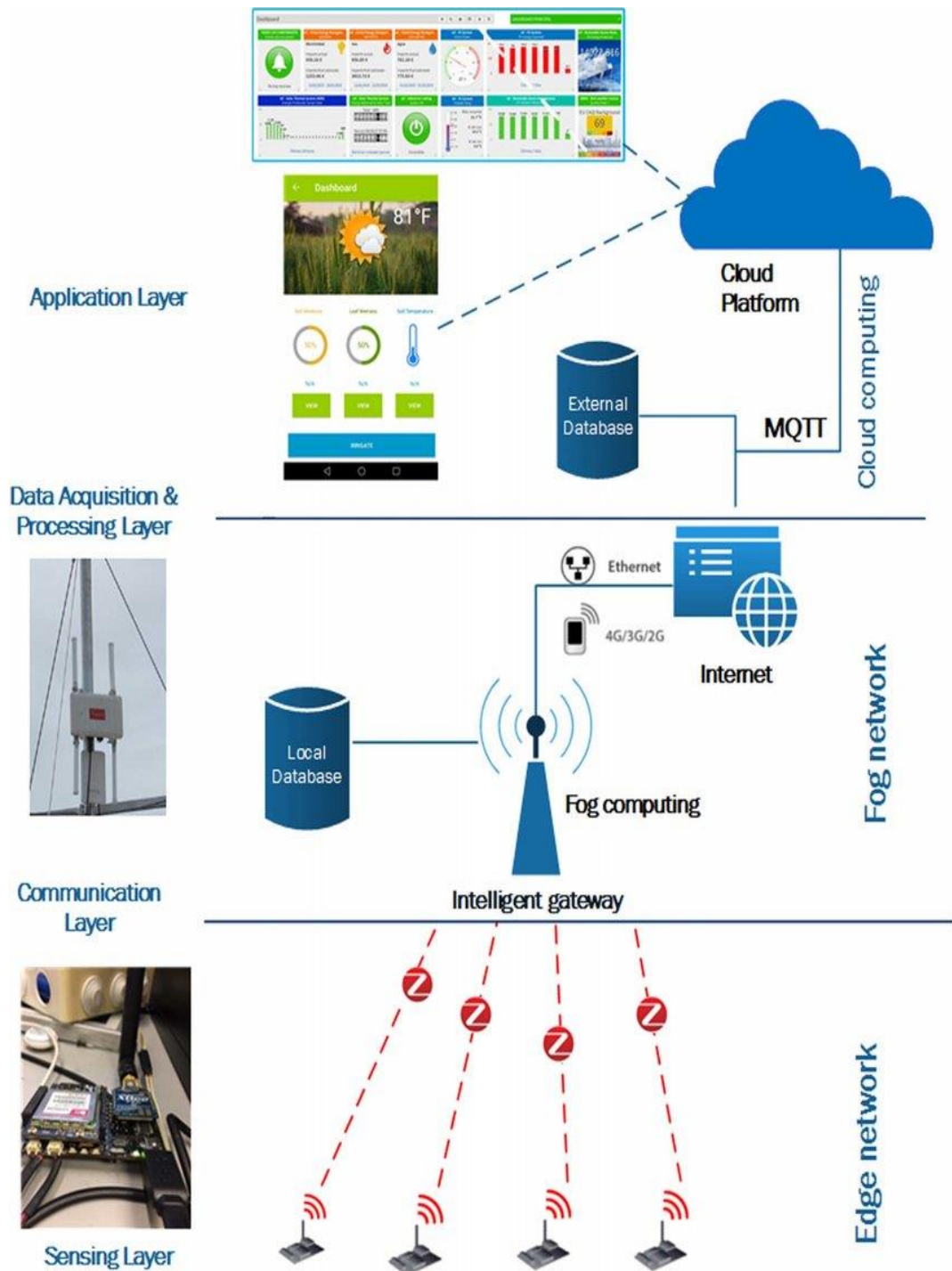


Project Design Phase – I

Solution Architecture

Project Title	Smart Farmer-IOT Enabled Smart Farming Application
Team ID	PNT2022TMID51073



- IoT-based agriculture system helps the farmer in monitoring different parameters of the field like soil moisture, temperature, and humidity using some sensors. Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near the field.
- Watering the crop is one of the important tasks for the farmers. They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself.
- The parameters sensed using different sensors and their obtained value is stored in IBM cloud. Arduino uno is used as a processing unit which processes the data obtained from sensors and weather data from weather API.
- MQTT protocol is followed for communication. It collect knowledge from the field ambience for continuous analysis and also to develop and deploy a smart technology for agriculture sector for improving environmental and agricultural sustainability to improve crop traceability and to increase overall yield.
- Thus IoT enabled smart farming application helps the farmer make environmental variables and informed decisions for the farm.