

**Ideation Phase**  
**Literature survey on the selected project and information**

Date	19 September 2022
Team ID	PNT2022TMID38131
Project Name	Project - SmartFarmer -IOT Enabled smart farming application
Maximum Marks	4 Marks

**Literature survey on the selected project and information**

In the literature there are numerous examples of versatile IoT application oriented studies. In

- [1], an example of control networks and information networks integration with IoT technology has been studied based on an actual situation of agricultural production. A remote monitoring system with combining internet and wireless communications is proposed.
- [2] Furthermore, taking into account the system, an additional information management sub-system is designed. The collected data is provided in a form suitable for agricultural research facilities. In their work Liu Dan et al.
- [3] take a CC2530 chip as the core and present the design and implementation of an Agriculture Greenhouse Environment monitoring system based on ZigBee connectivity.
- [4] Additionally, the wireless sensor and control nodes take CC2530F256 as a core to control the environment data. This system comprises front-end data acquisition, data processing, data transmission and data reception.
- [5] The ambient temperature is real-time processed by the temperature sensor of the terminal node and is sent to the intermediate node through a wireless ZigBee based network. Intermediate node aggregates all data, and then sends the data to the PC through a serial port.
- [6] At the same time, staff may view, and analyze the data, storage of the data on a PC is also provided. The realtime data is used to control the operation of fans and other temperature control equipment and achieve automatic temperature control in the greenhouse. Kun Han et al.
- [7] proposed the design of an embedded system development platform based on GSM communications.
- [8] Through its application in hydrology monitoring management, the authors discuss issues related to communication reliability and lightning protection, suggest detailed solutions, and also cover the design and realization of middleware software.