IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

PROBLEM SOLUTION FIT

TEAM ID: PNT2022TMID02415

1.CUSTOMER SEGMENTS

All farmers

2. JOBS TO BE DONE

Most farmers grow crops without understanding what the appropriate temperature and humidity are. This crop system displays the temperature and humidity using sensors. It would also recommend which crops might thrive at that temperature. Furthermore, animals and birds frequently cause crop damage. This crop system supports farmers in safeguarding their crops against predation by animals and birds.

3. TRIGGERS

Changes and modification of working methods, products and farm systems, as well as increase or modification of existing knowledge are become triggers.

4.EMOTIONS: BEFORE/ AFTER

BEFORE

Farmers' main issue is that they produce crops without understanding the optimum temperature and humidity. They cannot constantly keep animals and birds away from their crops.

AFTER

The farmer is overjoyed since this crop protection system has tremendously benefited him. It measures temperature and humidity. It also saved farmers time because they didn't have to spend hours preserving their crops from animals and birds.

5. AVAILABLE SOLUTIONS

This crop system displays the temperature and humidity using sensors. It would also recommend which crops might thrive at that temperature. Furthermore, animals and birds frequently cause crop damage. This crop system supports farmers in safeguarding their crops against predation by animals and birds.

6. CUSTOMER CONSTRAINTS

When we have a large amount of data, the speed is not always consistent. Also it costs very much

7. BEHAVIOUR

This crop system measures temperature and humidity. It would also propose which crop is appropriate for that temperature and humidity. This crop system supports farmers in safeguarding their crops from animals and birds that feed on them.

8. CHANNELS OF BEHAVIOUR

In this project, all the process are happened in offline

9. PROBLEM ROOT CAUSE

If temperature and humidity have a substantial impact on the environment. Farmers' profits will suffer as a result of lower production. Farmers are also impacted by animals and birds, which cause agricultural damage.

10. YOUR SOLUTION

The Dth11 sensor measures temperature and humidity. The ground sensor monitors soil moisture and, using an LCD display, suggests which crop is most suited to that temperature. This technology employs a motion sensor to detect wild animals approaching the field. The sensor directs the microcontroller to operate in this instance. The microcontroller now emits an alarm to attract the animals away from the field, alerting the farmer to the situation and allowing him to respond.