


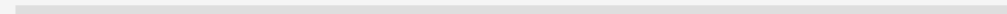


Brainstorm & idea prioritization

For Smart Farming - IoT enabled
Smart Farming Application

-  **10 minutes** to prepare
-  **1 hour** to collaborate
-  **2-8 people** recommended



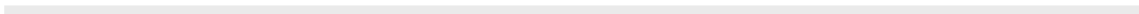
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Problem Statement for Smart Farming



PROBLEM

Farmers are under the pressure of increasing production of more food while using low energy and water in the process. A monitoring and control system will help farmers to deal with these problems



Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

SUBHAN BASHA Z

One of the Benefits of using IoT in agriculture is the increase agility of the process Thanks to Real--Time Monitoring and predictions systems. Farmers can quickly respond to any change in weather,humidity, air quality as well as the health of crops and soil in the field

In Farming Watering the plants is one of the difficult process and they have to wait for the whole filed to pour water.

Soil health analysis helps in determining the nutrient value and drier areas of farms, soil drainage capacity, or acidity, which allows to adjustment of the amount of water needed for irrigation and the opt most beneficial type of cultivation.

SARAVANAN M

Overuse of pesticides and fertilizer in agricultural fields leads to destruction of the crop as well as reduces the efficiency of the field increasing the soil vulnerability toward pest. IoT applications may be used to update the farmer/user about type & quantity of pesticide required by the crop.

Smart farming based on IoT technologies enables growers and farmers to reduce waste and enhance productivity ranging from the quantity of fertilizer utilized to the number of journeys the farm vehicles have made, and enabling efficient utilization of resources such as water, electricity, etc.

The biggest challenges faced by IoT in the agricultural sector are lack of information, high adoption costs, and security concerns, etc. Most of the farmers are not aware of the implementation of IoT in agriculture.

SEETHARAMAN A

smart farming is a management concept focused on providing the agricultural industry with the infrastructure to leverage advanced technology-including big data,the cloud and the internet of things(IoT)-for tracking monitoring,automating and analyzing operations

Sensors placed along the farms monitor the crops for changes in light, humidity, temperature, shape, and size. Any anomaly detected by the sensors is analyzed and the farmer is notified. Thus remote sensing can help prevent the spread of diseases and keep an eye on the growth of crops.

The data collected by sensors in terms of humidity, temperature, moisture precipitation, and dew detection helps in determining the weather pattern in farms so that cultivation is done for suitable crops.

SUNIL S

it consists of Temperature sensor, Moisture sensor, water level sensor, DC motor and GPRS module. When the IOT based agriculture monitoring system starts it checks the water level, humidity and moisture level

Cope with climate change, soil erosion and biodiversity loss. Satisfy consumers' changing tastes and expectations. Meet rising demand for more food of higher quality. Invest in farm productivity.

One of the biggest biosecurity problems in the farming history is the infection of the flock of birds or herd of animals. Biosecurity will provide resistance to the environment. They will give antibiotics and immunizations to prevent the animals from being infected.

Group ideas

🕒 20 minutes

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Smart farming is a management concept focused on providing the agricultural industry with the infrastructure to leverage advanced technology – including big data, the cloud and the internet of things (IoT) – for tracking, monitoring, automating and analyzing operations.

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes

