|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Template** | **Brainstorm**  **& idea prioritization**  For Smart Farming - IoT enabled Smart Farming Application  **10 minutes** to prepare  **1 hour** to collaborate  **2-8 people** recommended  [**Share template feedback**](https://muralco.typeform.com/to/CiqaHVat?typeform-source=app.mural.co) | **1**  **Problem Statement for Smart Farming**  **PROBLEM**  Farmers are under pressure to produce more food and use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures. | **2**  **Brainstorm**  Write down any ideas that come to mind that address your problem statement.  **10 minutes**  **KAVIPRIYA M S**  majority of Indian farmers use In Farming Watering Soil health analysis helps in  traditional tools for the plants is one of determining the nutrient agriculture such as plough, value and drier areas of sickle, etc. This leads to the the difficult process farms, soil drainage  wastage of energy and and they have to wait capacity, or acidity, which  manpower and less yield per for the whole filed to allows to adjustment of the capita labour force. Only little amount of water needed for use of the machine is seen in pour water. irrigation and the opt most  irrigation, harvesting and he had to check the beneficial type of  transportation. field for 30 min once cultivation.  **VASANTH N**  Overuse of pesticides and Smart farming based on IoT The biggest challenges  fertilizer in agricultural fields technologies enables growers faced by IoT in the **SELVA BHARTHI A**  leads to destruction of the and farmers to reduce waste agricultural sector are lack  crop as well as reduces the and enhance productivity of information, high IoT in agriculture uses robots,  efficiency of the field ranging from the quantity of adoption costs, and  increasing the soil vulnerability fertilizer utilized to the number security concerns, etc. Most drones, remote sensors, and toward pest. IoT applications of journeys the farm vehicles of the farmers are not computer imaging combined may be used to update the have made, and enabling aware of the with continuously progressing farmer/user about type & efficient utilization of implementation of IoT in machine learning and analytical  quantity of pesticide required resources such as water, agriculture. tools for monitoring crops,  by the crop. electricity, etc. surveying, and mapping the  fields, and providing data to farmers for rational farm management plans to save both time and money.  **SWATHY MM**  One of the benefits of using  Remote sensing in agriculture Sensors placed along the The data collected by sensors IoT in agriculture is the  is revolutionizing the way data farms monitor the crops for in terms of humidity, increased agility of the  is acquired from different changes in light, humidity, temperature, moisture processes. Thanks to real-time nodes in a farm' IoT-based temperature, shape, and size. precipitation, and dew monitoring and prediction remote sensing utilizes Any anomaly detected by the detection helps in determining systems, farmers can quickly sensors placed along with the sensors is analyzed and the the weather pattern in farms respond to any significant  farms like weather stations for farmer is notified. Thus remote so that cultivation is done for change in weather, humidity,  gathering data, which is sensing can help prevent the suitable crops. air quality as well as the health  transmitted to analytical tools spread of diseases and keep of each crop or soil in the field.  for analysis an eye on the growth of crops.  Smart farming is a management concept focused  **BALA** on providing the agricultural  industry with the infrastructure  to leverage advanced technology – including big  it consists of Temperature Cope with climate change, One of the biggest biosecurity data, the cloud and the  sensor, Moisture sensor, soil erosion and problems in the farming internet of things (IoT) – for  water level sensor, DC biodiversity loss. Satisfy history is the infection of the tracking, monitoring,  motor and GPRS module. consumers' changing tastes flock of birds or herd of automating and analyzing  animals. Biosecurity will  When the IOT based and expectations. Meet provide resistance to the operations.  agriculture monitoring rising demand for more environment. They will give  system starts it checks the food of higher quality. antibiotics and immunizations water level, humidity and Invest in farm productivity. to prevent the animals from moisture level being infected. | **3**  **Group ideas**  **20 minutes** |  |
| **4**  **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**  In Farming Watering the plants is one of the difficult process and they have to wait for the whole filed to pour water.  he had to check the Smart farming is a  field for 30 min once 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.  Temperature sensor, Moisture sensor, water level sensor, DC motor and GPRS module it made farming to ease. When the IOT based agriculture monitoring system starts it  **Importance** checks the water level,  humidity and moisture level  If each of these tasks could get done without any difficulty or cost, which would have the most positive impact  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.  **Feasibility**  Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.) |
| In Farming Watering Temperature sensor,  the plants is one of Moisture sensor, water level  the difficult process sensor, DC motor and  and they have to wait GPRS module it made  for the whole filed to farming to ease. When the IOT based agriculture  pour water. monitoring system starts it  he had to check the checks the water level,  field for 30 min once humidity and moisture level  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. |
|  | |  |  |  |  |

**Need some inspiration?**

See a finished version of this template to kickstart your work.

[**Open example**](https://app.mural.co/template/e5a93b7b-49f2-48c9-afd7-a635d860eba6/93f1b98d-b2d2-4695-8e85-7e9c0d2fd9b9)

