

Date	10 October 2022
Team ID	PNT2022TMID34110
Project Name	Smart Farmer - IoT Enabled Smart Farming Application.
Maximum Marks	4 Marks

<https://app.mural.co/t/ashikar6064/m/ashikar6064/1664728229819/e79ac7e870edc9e4d0862f01767ec312f9c2d1c6?sender=u854e4a823eb1c764ca726390>

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Template

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

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

📄 Share template feedback

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.

Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) →

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM

Farmers need solution to double the food because demand for food is getting hard to meet

Key rules of brainstorming

To run an smooth and productive session

Stay in topic.

Encourage wild ideas.

Defer judgment.

Listen to others.

Go for volume.

If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

🕒 10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

A.ARSHITHA

E-fences can be used to save crops from animals.

Maintain higher standards of crop quality and growth capacity through automation.

sprinkler irrigation system can be used to increase the output by up to 50%.

Sensors collect various data from the environment for monitoring the climate conditions.

Nitrogens are applied to crops in the form of fertilizer to help them grow stronger and better.

Drones for monitoring soil and crop health.

JANISHA.M

GPS tracking to gather and store historical data on preferred grazing spots

Monitor crop growth and abnormalities to prevent diseases.

Automated weeders to remove weeds

Soil is tested to know the nutrients and pH level

Realtime weather forecasting

Air compressors to clean equipment and production areas

E.ABINI BREEN

Automated off loading on farms to collect harvests.

Electrochemical sensors used to provide information for soil nutrient detection.

Temperature tracking to determine peak of mating season of livestock.

Weeds are removed by spraying herbicides by drones.

Water sensors to monitor water tank levels remotely.

Developing high yield varieties.

ASHIKA.R

Monitoring the livestock in realtime to quickly treat & prevent spread of illness.

Growing cover crops that add organic matter to the soil.

Using Genetically modified plants

Ag-robots are used to farm,spray and harvest without help

Prediction of crop harvesting period

Automated irrigation and fertilisation

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

SENSORS

Sensors collect various data from the environment for monitoring the climate conditions.

Water sensors to monitor water tank levels remotely.

Monitoring the livestock in realtime to quickly treat & prevent spread of illness.

GPS tracking to gather and store historical data on preferred grazing spots

AUTOMATION

Automated weeders to remove weeds

Maintain higher standards of crop quality and growth capacity through automation

Automated irrigation and fertilisation

Automated off loading on farms to collect harvests.

CROP MONITORING

Monitor crop growth and abnormalities to prevent diseases.

Drones for monitoring soil and crop health.

Nitrogens are applied to crops in the form of fertilizer to help them grow stronger and better.

sprinkler irrigation system can be used to increase the output by up to 50%.

Prediction of crop harvesting period

Electrochemical sensors used to provide information for soil nutrient detection.

Using Genetically modified plants

Developing high yield varieties.

INCREASE OF YIELD

Step-3: Idea Prioritization

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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

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the H key on the keyboard.



