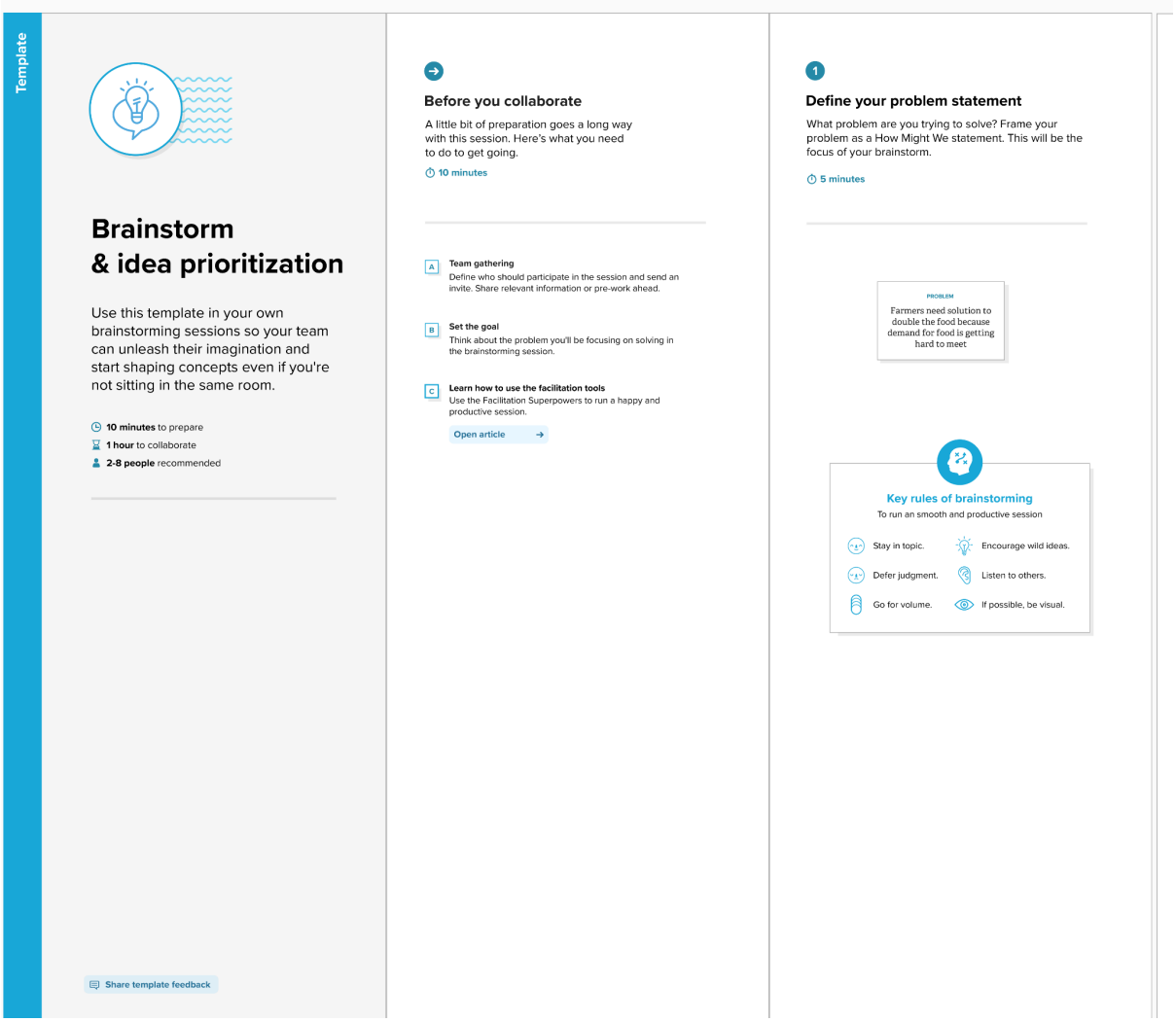
Ideation Phase
Brainstorm & Idea Prioritization Template

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

Brainstorm & Idea Prioritization Template:

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

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



Step-2: Brainstorm, Idea Listing and Grouping

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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

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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 and 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.

Prediction of crop harvesting period

Electrochemical sensors used to provide information for soil nutrient detection.

INCREASE OF YIELD

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%.

Using Genetically modified plants

Developing high yield varieties.

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.