

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	10 November 2023
Team ID	591647
Project Name	Project- <b>Machine Learning Approach For Predicting The Rainfall</b>
Maximum Marks	4 Marks

#### Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

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.

#### Reference:

<https://app.mural.co/t/machinelearningapproachforra0976/m/machinelearningapproachforra0976/1700491865492/9461bb8384a837065a65b0ca660f1695e4559e7d?sender=ufcfe1545e8c4bf1d5d5b4077>

## 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

➔

#### 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](#) ➔

1

#### 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

"How might we integrate real-time weather data from various sources to create a more dynamic and responsive rainfall prediction system?"

PROBLEM

"How might we improve the accuracy of rainfall prediction models using advanced machine learning techniques?"

Key rules of brainstorming

To run a smooth and productive session

🗨️ Stay in topic.

💡 Encourage wild ideas.

👂 Defer judgment.

👂 Listen to others.

🗨️ Go for volume.

👁️ If possible, be visual.

PROBLEM

"How might we incorporate satellite data and meteorological information to improve the spatial accuracy of machine learning-based rainfall predictions?"

PROBLEM

"How might we develop adaptive machine learning algorithms that continuously learn and update predictions based on new data and changing climate conditions?"

PROBLEM

"How might we develop a user-friendly interface for farmers to access localized and timely rainfall predictions to optimize agricultural practices?"



#### Need some inspiration?

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

[Open example](#) ➔

## 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!

Person 1

Machine Learning Models

Time Series Analysis

Ensemble Methods

Remote Sensing Data

Person 2

Geospatial Analysis

Hydrological Models

Real-time Data Integration

Deep Learning Architectures

Person 3

Feature Engineering

Transfer Learning

User-Friendly Interface

Incorporate Climate Indices

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 mind.

Machine Learning Models

Time Series Analysis

Remote Sensing Data

Ensemble Methods

Geospatial Analysis

Hydrological Models

Real-time Data Integration

Deep Learning Architectures

User-Friendly Interfaces

Incorporate Climate Indices

Transfer Learning

Feature Engineering

Real-Time data integration

1

2

3

4

1

2

3

4

1

2

3

4

## Step-3: Idea Prioritization

4

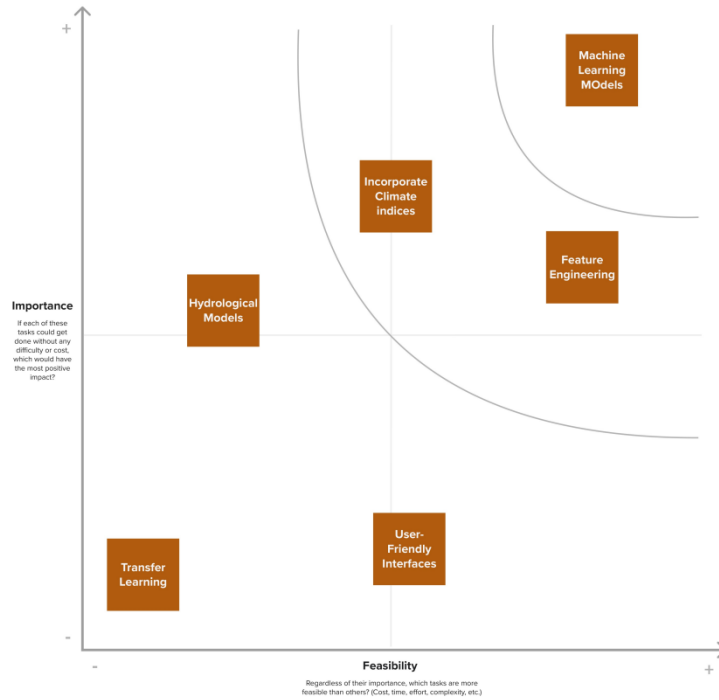
### Prioritize

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

#### 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.



→

### After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

#### Quick add-ons

- Share the mural**  
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.
- Export the mural**  
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

#### Keep moving forward

- Strategy blueprint**  
Define the components of a new idea or strategy.  
[Open the template →](#)
- Customer experience journey map**  
Understand customer needs, motivations, and obstacles for an experience.  
[Open the template →](#)
- Strengths, weaknesses, opportunities & threats**  
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.  
[Open the template →](#)

