

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	10 October 2022
Team ID	PNT2022TMID48908
Project Name	Emerging Methods for Early Detection of Forest fire
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://www.mural.co/templates/empathy-map-canvas>

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



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

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

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

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

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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 [your problem statement]?

Key rules of brainstorming

To run a smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- 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 start with a sticky note and let the good questions search look to start drawing!

Pranav Raj N K

- Optical and infrared sensors can be used
- Officers should be provided with statistics of most vulnerable areas
- CNN should be used to train ML model
- Heat map generation using infrared sensors attached to drones

Selvakumar

- Influx of regular satellite data
- well trained openCV based ML model
- use IIR sensors and lidar sensors for depth tracking
- using the YOLOv3 software for image processing

Ganesh S

- Regular removal of the dry leaves
- data collection can be done by flying drones around the forest
- Detecting the forest fires by temperature monitoring at regular intervals
- Detecting Forest fire by carbon dioxide and black carbon

Pravin Kumar

- Detecting forest fire using movement of birds animals
- Monitoring the forest with drones in regular intervals
- alert system to alert the authorities
- Monitoring the carbon trace regularly in most vulnerable areas

3 Group ideas

Team huddle 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

- Detecting fire using temperature monitor
- Terrestrial image based 3D modelling
- Detecting fire using YOLOv3
- Using drones to monitor most vulnerable areas
- Infrared cameras for producing heat maps
- Alert systems to alert the necessary authorities

Step-3: Idea Prioritization

4 Prioritize

Your team should all be on the same page about what's important. Voting is used. Place your ideas on this grid to determine which ideas are feasible and which are less so.

20 minutes