# IDEATION PHASE

# BRAINSTORMING AND IDEA PRIORITIZATION

| | |
|---|---|
| Date | 13 October 2022 |
| Team ID | PNT2022TMID00340 |
| Project Name | Hazardous Area Monitoring for Industrial Plant powered by IoT |
| Maximum Marks | 4 Marks |

## 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

**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 ›ductive session.

pen article

Preethi Govindaraj

Shreelakshmi R.I

Hazardous area Monitoring for Industrial Plant Powered by IoT

Priyadharshini. M

Shriya Mukundan

### 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
What are the high-priority parameters that needs to be monitored ?

PROBLEM
What are the essential features that needs to be integrated into the wearable device ?

**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.

PROBLEM
How to integrate all essential features into one device cost-effectively ?

PROBLEM
How well can it minimize the rate of accidents in Industrial plants ?

# Step-2: Brainstorm, Idea Listing and Grouping

**2 Brainstorm**

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

⏱ 10 minutes

**Preethi Govindaraj**

- Use of cloud to store large amounts of collected data from continuous monitoring.
- Alert system to alert the user when exposure exceed critical limit
- Sudden and persistent changes in the vitals of personnel should be monitored as it is an indication of exposure to radiation.

**Shreelakshmi R I**

- Cloud connectivity enables automatic equipment status monitoring in real time.
- The range of detection must be at least five meters.
- Monitoring of the vital parameters through integrated mobile application

**Team ID**
**PNT2022TMID00340**

**Priyadharshini M**

- Continuous monitoring of Critical elements inside and outside the plant.
- LoRa can be used to send the alerts.
- Performance prediction tools on the cloud platform help identify problems early

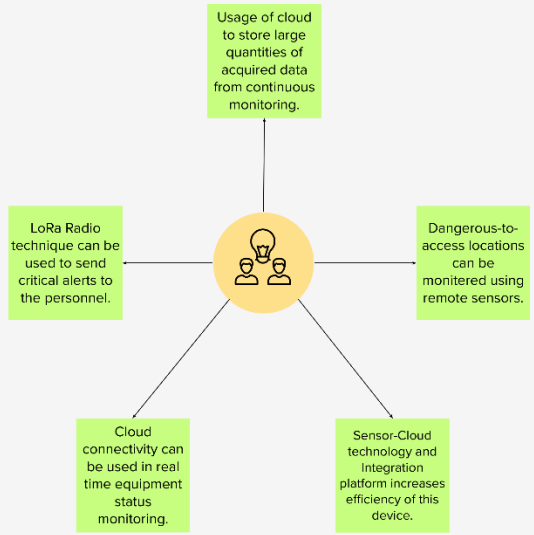
**Shriya Mukundan**

- The health information of the employees should be recorded.
- Use of Remote sensing will reduce the risk of being exposed to hazardous substances.
- Dangerous-to-access locations can be safely monitored from a distance using smart sensors

**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 and break it up into smaller sub-groups.

⏱ 20 minutes



# 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