


# Ideation Phase

## Brainstorm & Idea Prioritization Template




Date	22 September 2022
Team ID	PNT2022TMID54092
Project Name	Gas leakage monitoring and alerting system for industries
Maximum Marks	4 Marks

### 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

---


-  **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**

Gas leakage leads to various accidents resulting in financial loss as well as injuries to human. In routine life, the environment has the most significant effect on human health.

 5 minutes


---


PROBLEM


When the equipment is installed and used correctly, natural gas is safe and convenient. But gas leaks can occur. These leaks can lead to physical symptoms and in some cases, the gas can cause poisoning in people and animals.


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.

### 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!

DIVYADHARSHINI J A

Developing system should be user friendly

Response should be Accurate

Sensor like MQ2, MQ3, MQ6 can be used to detect the gas leakages

Increasing efficiency by various approach

BASWAREDDY VEDIKA

Alarms can be used to alert the workers

Low Sensor drift

Notifications can be sent to control rooms

Reliable technology

SENTHAMIL SELVI D

Cost effective installation

Have to monitor the gas level

System should be operated even in harsh environment

Ensure the worker's health

ULAGESWARI S

Extremely precise repeatability

Using IOT application to detect gas leakage

Data analytics for improved decisions

Prevents free hazards and explosions

3

## Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, 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

## Grouping based on the dataset

Data analytics for improved decisions

Cost effective installation

High accuracy and reliable technology

Prevent free hazards and explosions

Monitor the Gas Concentration level

Ensure the worker's health

Extremely precise repeatability

## Step-3: Idea Prioritization

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.

Importance

if each of these items were gone there would be no safety or health, which would have the most positive impact?

1) Data analytics for improved decisions  
2) Cost effective installation  
3) Reliable technology

1) Prevent free hazards and explosions  
2) Monitor the gas concentration level  
3) Extremely precise repeatability

1) Ensure workers health  
2) High accuracy and repeatability

Feasibility

regardless of their importance, which risks are most feasible (the others? Gas, time, effort, complexity, etc.)