

# Ideation Phase

## Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID41897
Project Name	Smart waste management system for Metroplitan cities
Maximum Marks	4 Marks

### Brainstorm & Idea prioritization

Use this template in your own brainstorming sessions to generate ideas and prioritize them. It's a template, so you can adapt it to your own needs.

10 minutes to complete

- 1 hour to collaborate
- 1 hour to present

**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.

1. **Team ID:** PNT2022TMID41897

2. **Team members:** Arunadevi, Nandhakumar, Shivani, Azhagu pandi

3. **Team goal:** To create a smart waste management system for metroplitan cities.

4. **Team challenge:** To create a smart waste management system for metroplitan cities.

**Define your problem statement**

What problem are you trying to solve? Frame your problem as a clear, specific statement. This will be the focus of your brainstorm.

10 minutes

**Problem statement:** How can we create a smart waste management system for metroplitan cities?

**Key ideas for brainstorming:**

- Use sensors to detect waste levels
- Use GPS to track waste bins
- Use IoT to connect bins to a central system
- Use a mobile app to manage bins

**Brainstorm**

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

10 minutes

**Brainstorming session:**

- Arunadevi:** Placing Ultrasonic sensor to detect level of bins
- Nandhakumar:** Enable GPS function to locate bins easier
- Waste generation analysis to understand cities usages**
- Shivani:** Load cell on bottom of bins
- shivani:** Visual fill status indicators on top of bins
- Azhagu pandi:** when bins fill, alert message to the authorized person
- using by GSM in bins achieve wireless communication with bins and managing center**
- solar panels for power supply for IOT devices**

**Group ideas**

Take turns sharing your ideas while clustering similar or related ones as you go. Once all ideas have been shared, give each cluster a common title card. If a cluster is bigger than six sticky notes, try and break it up into smaller sub-groups.

10 minutes

**Grouped ideas:**

- Smart garbage maintenance server**
- Transparency and sustainable solution than normal garbage bins**
- Optimized trash collection route**
- Collect only degradable and non-degradable wastes**
- IOT alert authorized person when bins going to fill**

**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.

10 minutes

**Importance:** A scale of ideas from least important to most important.

**Feasibility:** A scale of ideas from least feasible to most feasible.

**Waste generation analysis to understand cities usages**

**Raspberry-pi with ultrasonic, GPS, Load cell, are configured**

**How:** Brainstorming session with team members to generate ideas and prioritize them. It's a template, so you can adapt it to your own needs.

**After you collaborate**

You can expect the most of an idea or goal to share with members of your team who might find it helpful.

**Quick actions**

- Share the goal:** Share a new idea or goal with stakeholders. Keep them in the loop about the direction of the work.
- Report the goal:** Report a copy of the goal as a PDF or PPT to email to email, mobile to a table, or use in your drive.

**Keep working forward**

- Strategy & Support:** Define the components of a new idea or strategy.
- Customer experience journey:** Understand customer needs, motivations, and obstacles for an ongoing service.
- Identify a strategy, weaknesses, opportunities, and threats (SWOT):** Identify a strategy, weaknesses, opportunities, and threats (SWOT) for ongoing service.