

Ideation Phase

Brainstorm & Idea Prioritization Template


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|---------------|---|
| Date | 15 September 2022 |
| Team ID | PNT2022TMID20086 |
| Project Name | Estimation of crop yield using data analytics |
| 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.

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

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.

[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 Statement


The estimation of crop yield at a small scale is crucial to food security and harvest management. Based on previous crop forecasts and soil quality analysis, machine learning is applied to achieve high yields throughout the technology solution. A major purpose of this project is to predict crop yield, which is extremely useful for farmers in planning for harvest and selling their grain harvests. Predict the optimal crop for our country's corresponding regions and crop seasons using a machine learning algorithm. This project aims to predict yields based on location and weather data. According to the climate and soil parameters, this study looks at which crops will yield high yields within the given area.





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: Brainstorming, Idea listing and Grouping

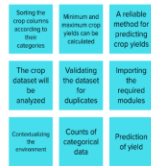
2

Brainstorm

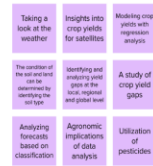
Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

Swetha S



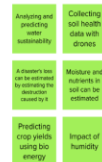
Vaishnupriya S



Serena Sofranica P



Preethi R



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

Proposed System



Architectural components



Parameters in Dataset



Crop model engine



Advantages



Limitations



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

As a consequence of the problem

Gathering Data

Developing algorithms for evaluation

Accurately finding information

Simulation of the model

Phases of data collection and analysis

Preparation of the system for testing and training

Algorithm identification based on the data

Control environment test

Scoping work

Run in cloud growth mode

Prevalent environmental factors

Old module

Climate module

Management module

Quantify module

Weather forecast module

Predicting the productivity

Identifying crop diseases

Providing assistance to farmers

Weather forecast

Recommendations for farmers

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

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 **H** key on the keyboard.

Feasibility

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

Quick add-ons

A

Share the mural

Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.

B

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 →

Share template feedback