

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID00234
Project Name	Machine-Learning Based Predictive Analytics For Aircraft Engine
Maximum Marks	4 Marks


Brainstorm & Idea Prioritization Template:

Reference:

<https://app.mural.co/t/ibm1943/m/ibm1943/1666064294958/cf70ead847f0adec23de4b95f26cd6c3d0ed3ed0?sender=ua653ffd2572d65bd5d3c5194>




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

 **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

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


Causes lot of time and cost more funds to take repair measures


**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!

Anto Mithun

By using the RTD sensor we can detect excess heat in advance

Elastic-net regression used to compare the values

We can use the random forest algorithm to make the prediction

Using DNN for the engine maintenance

Naveen Prasath M

Using the Linear Regression we can make prediction for numerical values

Usage of light GBM classifier

CatBoost recognize the sound and pictures

To ensure the correct level of humidity using sensors

Jeffrey J

Usage of Ridge regression for finding true value

Ensemble method used to predict the best value

Using the probabilistic reasoning for the prediction

By using the Decision Tree algorithm we can make the yes/no prediction

Jairo J

We can use the Naive Bayes algorithm for the prediction

Lasso regression goal is to acquire a subset

We can use different algorithms for finding the efficient algorithms

Using PCA algorithms which can be used for feature extraction

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 can break it up into smaller sub-groups.

🕒 20 minutes

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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

