


## Ideation Phase

### Brainstorm & Idea Prioritization

|              |   |
|--------------|---|
| Date         | 19 September 2022                                       |
| Team ID      | PNT2022TMID31932  |
| Project Name | A Novel Method for Handwritten Digit Recognition System |
| 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 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

The Main goal is to correctly identify the handwritten digits from the training dataset and using deep learning algorithms.



#### 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

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### 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!

#### DINAKARAN M

|  |   |   |
|--|---|---|
| Helps to reduce the mail sorting time                  | It improves the speed of reading digits | Helps to eliminate the human errors     |
| It can be used to sort both incoming and outgoing mail | <b>Posted Mail Sorting</b>              | It can sort the mails using the pincode |
| Requires minimum man power                             | Used to recognize handprinted digits    | Helps to recognize the postal code      |

#### ROSAN S

|  |                                    |   |
|--|------------------------------------|---|
| Varied handwriting of each and every person              | Noise removal for greater accuracy | Easy and efficient UI provides better understanding |
| Helps solving complex things and make human life easier. | <b>Flexibility</b>                 | Shape Analysis                                      |
| Machine understandable format.                           | Easy to access                     | Finer clarity of images.                            |

#### MAHESHWARAN P

|  |  |  |
|--|--|--|
| Ensure Effective and reliable approaches for recognition                         | Evaluated on self generated data set of bank cheques                             | Make banking operation easier and error free               |
| A cheque processing system becomes commercially efficient when error rate is low | <b>Bank check processing</b>   | Complexity and effort will be less while processing cheque |
| Provides high fault tolerance and parallel architecture.                         | Largely automate the system by reducing workload, time and cost per transaction. | Processed with minimal human intervention                  |

#### MANOJ A

|   |   |  |
|---|---|--|
| It can be used to store the data in efficient way | Keeps the saved form open for further editing | Identifies information being incorrectly put into the system |
| It tries to provide a error free solutions        | <b>Form data entry</b>                        | Recognize the data from the images                           |
| It handles fortssing in a large scale for fas     | It helps to decrease the man power            | It saves the form information                                |

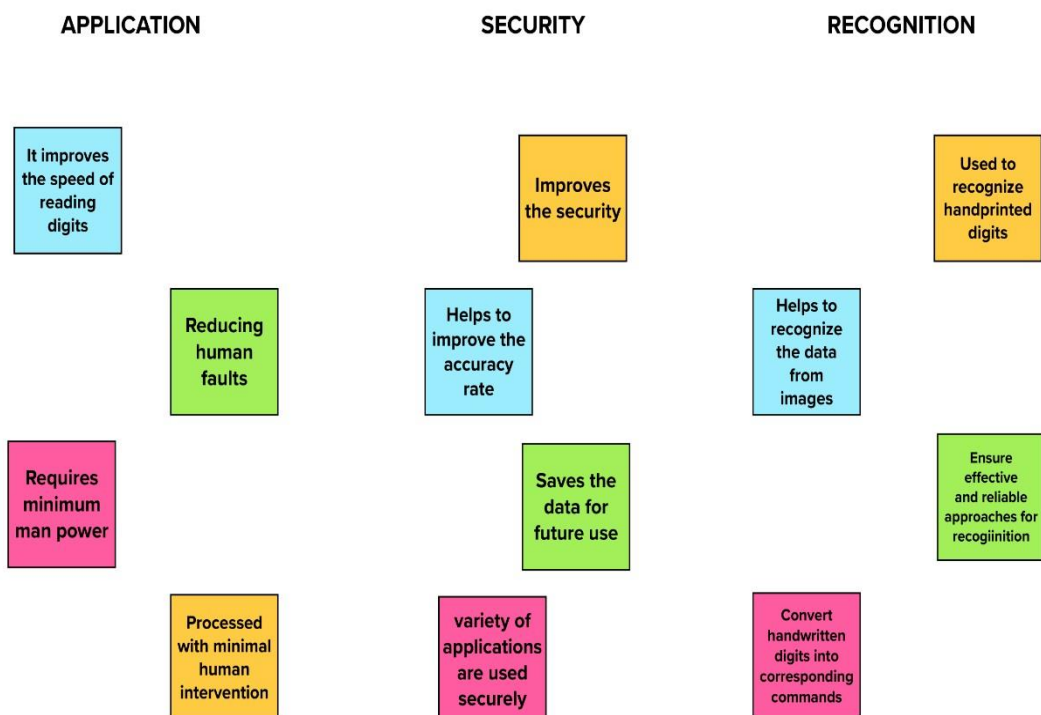
## Step-3: Idea Listing and Grouping

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



## Step-4: 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

