

A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION

Hand written digit recognition, is the ability of a computer to recognize the human handwritten digits from different sources. In handwritten recognition digits, characters are given as input. The model can be recognized by the system. A simple Artificial Neural Network (ANN) has an input layer, an output layer and some hidden layers between the input and output layer.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended

DESIGNED BY:

D.V.Bharathi
Prasad(TL)
Prashanth.R
Thirukumaran .PK
TharunRaj.K

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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

Handwriting number recognition is a challenging problem researchers into this area for so long especially in the recent years. In our study there are many fields concern with numbers for example, checks in banks or recognizing numbers in car plate, the subject of digit recognition appears. A system for recognizing isolated digits may be as an approach for dealing with such application.



Key rules of brainstorming

To run an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- If possible, be visual.

2

Brainstorm

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

10 minutes

Bharathi Prasad DV(TL)

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

POSTAL MAIL SORTING

It can sort the mails using the pincode

Requires minimum man power

Used to recognize handprinted digits

Helps to recognize the postal codes

Thirukumaran .PK

Ensure effective and reliable approaches for recognition

Evaluated on self generated data set of bank cheque

Make banking operation easier and error free

A cheque processing system becomes commercially efficient when error rate is low

BANK CHECK PROCESSING

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

Prashanth.R

Helps to recognize the data from images

It allows automated alerts while making the mistakes

Accuracy of real time analytics

Enhances the parking management

AUTOMATIC LICENSE PLATE RECOGNITION

Helps to reduce the errors which are made by man

Enhanced security and safety

Helps to stop criminal behaviour

Easier management of resources

TharunRaj .K

It can be used to store the data in efficient way

It tries to provide a error free solutions

It handles form processing in a large scale for fast

Recognize the data from the images

FORM DATA ENTRY

It helps to decrease the man power

Keeps the saved form open for further editing

Identifies information being incorrectly put into the system

It saves the form information

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.

APPLICATION

Requires minimum man power

Helps to eliminate the human errors

It improves the speed of reading digits

Processed with minimal human intervention

RECOGNITION

Helps to recognize the data from images

Used to recognize handprinted digits

Ensure effective and reliable approaches for recognition

SECURITY

Saves the data for future

Helps to improve the accuracy rate

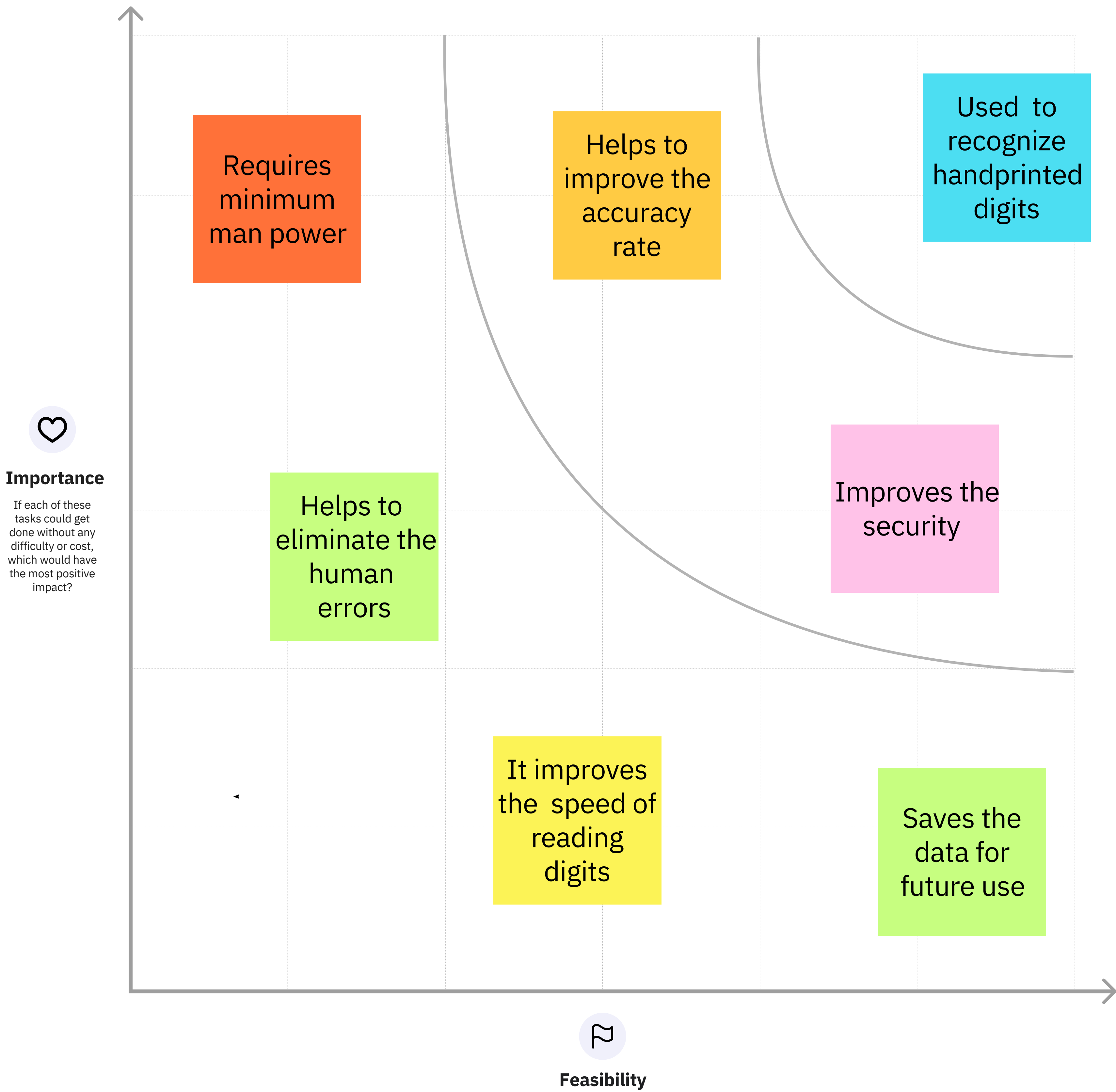
Improves the security

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



After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

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