## **PROBLEM - SOLUTION FIT: PROJECT NAME:**

# A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

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## 1.CUSTOMER SEGMENT(S):

The Customers who deal with handwritten digits like Banking sectors , schools , colleges , railways , firms , etc.

## 5. AVAILABLE SOLUTIONS

There are no widely used software's to detect handwriting; instead, they check with other people to affirm what number it is.

#### 8. CHANNELS OF BEHAVIOUR

Using software that is available on the internet. Obtaining assistance from those nearby in order to recognise the digits written by their customers.

## 2. JOBS-TO-BE-DONE/PROBLEMS:

Handwritten digits can be difficult to understand and interpret at times. It may cause errors when dealing with rough handwriting.

## 6.CUSTOMER CONSTRAINT(S):

They believe that the alternatives will result in errors and faults and will be inconvenient.

## 9. PROBLEM ROOT CAUSE

We face numerous challenges in handwritten number recognition. because of different people's jotting styles and the lack of Optic character recognition This investigation offers an in-depth comparison of various machine literacy and deep literacy

## 3. TRIGGERS

To obtain the numbers accurately and quickly.

#### 4. EMOTIONS :BEFORE/AFTER

Feels frustrated and sad when numbers are not entered.

#### 7. BEHAVIOUR

Finding the best software for detecting accurate digits in a more efficient manner

#### 10. YOUR SOLUTION

A solution to this problem is the Handwritten digit recognition system, which uses a picture of a digit and recognises the digit present in the image. Convolutional Neural Network model built with PyTorch and applied to the MNIST dataset to recognise handwritten digits.