

## PROBLEM - SOLUTION FIT:

PROJECT NAME : A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

TEAM ID : PNT2022TMID19491

### 1.CUSTOMER SEGMENT(S):

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

### 6. CUSTOMER CONSTRAINTS

They think that the alternative things may give error and faults and may not be convenient.

### 5.AVAILABLE SOLUTIONS

There are no popular softwares to detect the handwritings , they check with the other people to confirm what number it is .

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

Sometimes , the Handwritten digits are very hard to understand and interpret . It may lead to errors while dealing with rugged handwritings.

### 9.PROBLEM ROOT CAUSE

In Handwritten number recognition, we face numerous challenges . because of different styles of jotting of different peoples as it is not an Optic character recognition. This exploration provides a comprehensive comparison between different machine literacy and deep literacy algorithms for the purpose of handwritten number recognition

### 7.BEHAVIOUR

Finding the right software which detects accurate digits in a more efficient way.

### 3.TRIGGERS:

To get the numbers accurately and in a fast manner.

### 4.EMOTIONS:BEFORE/AFTER

Feels frustrated and sad while the numbers are not entered in a correct form and also gets angry and arrogant.

### 10.YOUR SOLUTION:

The Handwritten digit recognition system is a way to tackle this problem which uses the image of a digit and recognizes the digit present in the image. Convolutional Neural Network model created using PyTorch library over the MNIST dataset to recognize handwritten digits.

### 8.CHANNELS OF BEHAVIOUR

Taking softwares which are available in the online market .

Getting help from the persons nearby in order to recognize the digits written by their customers.