Project Title: A Novel Method for Handwritten Digit Recognition System **Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID28601

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.