

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

### **A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM**

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| <b>1.CUSTOMER SEGMENT(S):</b><br><br>The Customers who deal with handwritten digits like Banking sectors , schools , colleges , railways , firms , etc.                       | <b>5. AVAILABLE SOLUTIONS</b><br><br>There are no widely used software's to detect handwriting; instead, they check with other people to affirm what number it is. | <b>8. CHANNELS OF BEHAVIOUR</b><br><br>Using software that is available on the internet. Obtaining assistance from those nearby in order to recognise the digits written by their customers.   |
| <b>2. JOBS-TO-BE-DONE/PROBLEMS:</b><br><br>Handwritten digits can be difficult to understand and interpret at times. It may cause errors when dealing with rough handwriting. | <b>6.CUSTOMER CONSTRAINT(S):</b><br><br>They believe that the alternatives will result in errors and faults and will be inconvenient.                              | <b>9. PROBLEM ROOT CAUSE</b><br><br>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                     |
| <b>3. TRIGGERS</b><br><br>To obtain the numbers accurately and quickly.   | <b>7. BEHAVIOUR</b><br><br>Finding the best software for detecting accurate digits in a more efficient manner  | <b>10. YOUR SOLUTION</b><br><br>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. |
| <b>4. EMOTIONS :BEFORE/AFTER</b><br><br>Feels frustrated and sad when numbers are not entered.  |  |  |