

## Project Design Phase-1 Our Problem SolutionFit

Date	15 October 2022
Team ID	PNT2022TMID36606
Project Name	Project – A Novel Method For Handwritten Digit Recognition System

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