

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID22012
Project Name	A Novel Method For Handwritten Digit Recognition
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Physically composed digits are of an alternate size, thickness, position and bearing. The machine has a troublesome obligation on the grounds that written by hand digits are not perfect and can be created with various flavours. The Handwritten digit recognition is the capacity of PC applications to perceive the human transcribed digits. The solution for this issue is written by hand digit acknowledgment, which utilizes a picture of a digit and distinguishes the digit addressed in the picture.
2.	Idea / Solution description	It is the capacity of a PC to fete the mortal manually written whole numbers from various sources like pictures, papers, contact guards. It permits client to decipher every one of those mark furthermore, notes into electronic words in a text report organization and this information just expects far less actual space than the capacity of the actual duplicates.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> <li>To enhance the accuracy, we provided more datasets.</li> <li>The uniqueness and combination in the synthesis styles of different people furthermore impact the model and presence of the digits.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>The really friendly effect of this work is to guarantee successful and solid methodologies for acknowledgment of transcribed digits and make banking activities simpler and mistake free.</li> <li>Clients will feel calm, as it is simple and advantageous to utilize.</li> <li>As the precision is acceptable, this can have numerous applications.</li> </ul>
5.	Business Model (Revenue Model)	This novel method for Handwritten Digit Recognition System can be approached by many industries which needs this application

		<p>including, programmed bank checks, postal locations and tax documents and so on.</p> <p>Humans recognizing the handwritten digits with their naked eye can be difficult at times as it of different sizes, thickness, direction and ca also lead to making errors due to these factors. This is when our proposed solutions comes into help. We provide different data sets which helps in recognition with accuracy, so that human making errors can be avoided respectively.</p>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• Ability to recognise digits in more noisy environments.</li> <li>• Financial and other business organizations such as banks are facing issues in Recognizing written digits such as in cheques etc.</li> <li>• Our proposed solution is scalable as it is dynamic and also trained using AI and deep learning Models.</li> </ul>