

Project Design Phase-I
Proposed Solution Template

Team ID	PNT2022TMID52947
Project Name	A novel method of handwritten digit recognition system

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Digits that are manually written range in size, thickness, placement, and orientation. To identify the problem of handwritten digit recognition, numerous issues must be taken into account.
2.	Idea / Solution description	In order to address this issue, we will put into action a classification algorithm to identify the handwritten digits. This approach will work well for distinguishing between digits with various compositions.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">➤ Accurately recognise the digits.➤ Helps in recognizing the broken edges, strokes.➤ It will also help in streamlining the existing processes.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">➤ The primary societal benefit of our effort is to provide efficient and trustworthy methods for handwritten digit recognition and facilitate error-free financial transactions in banking sector.➤ To reduce the number of cancelling and bouncing cheques due to insufficient money.
5.	Business Model (Revenue Model)	Numerous sectors that require this application, such as those that deal with programmed bank checks, postal addresses, and tax documents, can turn to this unique way for Handwritten Digit Recognition System. When reading handwriting, it can be challenging for humans to distinguish the digits with their unaided eyes because they can vary in size, thickness, direction, and accuracy. This is where our suggested solutions can be useful. We offer different data sets that aid in accurate recognition in order to prevent human error where applicable.
6.	Scalability of the Solution	<ul style="list-style-type: none">➤ Banks and other financial and commercial entities are having trouble reading written numbers on things like checks and other documents. As companies expand into new business categories, this may be managed by our handwritten digit recognition project without degrading performance.➤ Ability to recognize the hand written digits in noisy environment