PROBLEM STATEMENT

A Novel Method for Handwritten Digit Recognition System

DEFINITION:

Machines are becoming more smart and intelligent by using machine learning and deep learning techniques so that they can perform tasks similar to humans. With the help of these techniques human effort can be reduced in recognizing, learning, predictions and many other areas. The goal of this project is to correctly identify digits from a dataset of tens of thousands of handwritten digit images and use different machine learning algorithms to learn first-hand what works well and gives the highest accuracy. This algorithm can then be used in various places like in postal services, banking services, etc.

Problems:

Banking services don’t have a proper computerized system for the processing of cheque leaf.

Postal services don’t have a computerized system for segregation of letters and parcels based on the Pin-code of the sending address.

QUESTION	DESCRIPTION
Who Does the Problem Affect?	It affects old aged people, banking services, postal services in understanding the handwritten digits.
What Are the Boundaries of The Problem?	The boundaries are different styles of handwritten digits, high accuracy in the prediction process.
What is the Issue?	Since everyone's handwriting is different, it maybe difficult for some to identify what one has written. Especially in banking and postal services where digits are important.
When does the issue occur?	It occurs when the handwriting of a person is difficult to read or recognize.
Where is the issue occurring?	The issue is occurring in various places from banking sector to industries.
Why is it important that we fix the problem?	It improves the readability and also prevents errors.