PROBLEM STATEMENT

Title **:** A Novel Technique for Handwritten Digit Classification System

Domain : Artificial Intelligence

Team Mentor : Vasanthi R

Team Members : Arthiya A P (Team Leader)
Atherai C
Bujitha Ra
Dharani V

Problem Statement Description :

1. Banks need an automation tool to recognize digits in a cheque to speed up the cheque approval process which usually takes time with high accuracy.

2. Postal agencies need an automation tool to sort out mails using pin code to increase profit by cutting man power and speed up the delivery process to gain customer trust.

3. Companies need a data entry tool to reduce manual data entry errors and improve entry speed with high accuracy to increase profit, reduce manual work and improve performance.

4. The Department of traffic enforcement needs a number plate digit recognition tool to integrate with traffic monitoring system to remove manual monitoring which is error prone and impose penalty for speeding online.

Problem :

Cheque transactions account for almost 2 - 3 % of the total transactions in India. Almost more than half a billion cheques are being processed each year. Manual cheque processing leads to delay in processing cheques causing customer dissatisfaction. The department of traffic enforcement does manual monitoring which is error prone. Integrating digit recognition tool with image processing software leads to automatically imposing penalty online for speeding, enforcing law to prevent accidents and ensure road safety.

What would happen when it is fixed :

Business Model

Speed up the cheque approval process

Store transaction records

Social impact

Ensure road safety by identifying the owner of the speeding vehicle by using the registration number of that vehicle.

Why is it important to fix this issue :

Automating these tasks removes the need for human effort which is error prone in performing these kinds of tedious works and improves speed as well as efficiency.