Team ID: PNT2022TMID32324

BE

# 1. CUSTOMER SEGMENT(S)

Define CS, fit into CC

A person from 5-100 years

#### 6. CUSTOMER CONSTRAINTS

CC

Handwritten Digit Recognition not only has professional and commercial applications but also practical applications in our daily life. It can be great help to the visually impaired to make the lives easier.

#### 5. AVAILABLE SOLUTIONS

Handwritten Digit Recognition is the ability of a computer system to recognize the handwritten inputs like digits ,character,etc ...from a wide variety of sources like emails,papers,images,letters etc.. This has been a topic of research areas include signature verification , bank check processing , postal address interpretation from envelopes etc..

## 2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Handwritten Digit Recognition has various real-life time uses.

To detect the vehicle number, banks for reading cheques, post offices for arranging letter, and many other tasks

## 9. PROBLEM ROOT CAUSE

RC

It is hard task for the machine because handwritten digits are not perfect and can be made with many different flavors. The handwritten digit is the solution to this problem which uses the image of a digit and recognizes the digit present in the image.

## 7. BEHAVIOUR

Characteristics include word spacing, line quality, Consistency ,Connecting strokes ,pen lifts ,cursive letters writing pressure

Complete letters ,diacritics ,embellishments, slants and baseline habits

## 3. TRIGGERS



Due to some sickness and nervous problem and for old people may have difficulty in writing so this can help them to write and the written digit can be recognized through handwritten digit recognition.

# 10. YOUR SOLUTION



The handwritten digit recognition system is away to tackle this problem which uses the image of a digit present in the image. Number recognition has numerous operations like number plate recognition, postal correspondence sorting, bank check processing, etc. The goal of our work is to create a model that will be able to recognize and classify the handwritten digits from images by using concepts of Convolution Neutral Network.

## 8. CHANNELS of BEHAVIOUR



8.1 ONLINE

We can search for digit recognition apps or channel OPPLINE

We can go search for handwritten digit recognizer.

# 4. EMOTIONS: BEFORE / AFTER



The way of thought can be changed and the fear before writing the account number and the rupees
In the cheques can be easily managed .The fear will be reduced.