**Team ID: PNT2022TMID52603** 

Define

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fit into

on J&P, tap into BE, understand RC

## 1. CUSTOMER SEGMENT(S)



Bank officials for check processing, Officials for recognizing license plates

#### 6. CUSTOMER CONSTRAINTS



The usage of computers and software makes it difficult to be used by the people who are not used to work with technology.

#### 5. AVAILABLE SOLUTIONS

There are rarely many solutions and many algorithms (ANN, CNN, SVM, etc.) available for handwriting recognition. Each depends on its optimality and accuracy.

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



- Real time handwritten digit recognition
- To analyze various solutions
- To choose the optimal solution
- To provide accurate results
- To make it work for huge amounts of data

#### 9. PROBLEM ROOT CAUSE



SL

- The absence of standard format of writing
- Every person having their own style of hand writing
- Having multiple languages and sub dialects
- No accuracy test available

# 7. BEHAVIOUR



- The customer has to give an image with their handwriting.
- With the results, the customer or any other user easily recognizes despite different handwriting styles
- The result can be used for bank check processing, license plate recognition, etc.

#### 3. TRIGGERS



People with bad handwritings might scribble which can cause confusion to the customers.

#### 4. EMOTIONS: BEFORE / AFTER



ΕM

The solution is to make a model which can predict the text from any written format to its respective digital form. A model with neural network is designed which predicts the handwritten digits. A web application can also be developed to improve user interaction. The system should also be updated regularly for bug fixes and stability improvements.

### 10. YOUR SOLUTION

# 8.1 ONLINE

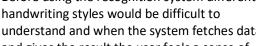
8. CHANNELS of BEHAVIOUR



Upload input data to the application The result of the captured data record is stored in the system in different formats as per the user's needs.

### 8.2 OFFLINE

After prediction the users can use them for easy recognition of bank checks, license plates, etc.



satisfaction

Before using the recognition system different understand and when the system fetches data and gives the result the user feels a sense of