# 1. CUSTOMER SEGMENT(S)

CS

### 6. CUSTOMER CONSTRAINTS

CC

### J. AVAILADLE JULU HUNJ

One who wants to extract digits from handwritten textimages

Unclear image will not giveaccurate results.

Traditional systems of handwriting recognition haverelied on handcrafted featureand a large amount of prior knowledge.

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

# 9. PROBLEM ROOT CAUSE

## 7. BEHAVIOUR

People can struggle to read others' handwriting. The handwritten digits are not alwaysof the same size, width, orientation as they differ from writing of person to person, so the general problem would be while classifying the digits.

The issue is that there's a wide range of handwriting -good and bad. This makes ittricky for programmers to provide enough examples ofhow every character might look.

Customers must try with clear image and neat handwriting to get accuracyin digits

# 3. TRIGGERS

TR

### 10. YOUR SOLUTION

8. CHANNELS of BEHAVIOUR

CH

When there is need for recognition of handwrittendigits

It uses Artificial Neural Networkto recognize them. Neural Network is used to train and identify written digits. After training and testing, the accuracy rate reached 99%. This accuracy rate is very high.

# 4. EMOTIONS: BEFORE / AFTER

EM

frustration, exhausted, curious, satisfied

### 8.1 ONLINE

Extract online channels frombehaviour block

### 8.2 OFFLINE

Extract offline channels fromdifferent handwriting styles