

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

The Customers who deal with handwritten digits like Banking sectors schools, colleges, railways firms etc.

6. CUSTOMER CONSTRAINTS

CC

They believe that the alternatives will result in errors and faults and will be inconvenient.

5. AVAILABLE SOLUTION

Traditional systems of handwriting recognition have relied on handcrafted features and a large amount of prior knowledge.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

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

9. PROBLEM ROOT CAUSE

RC

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

7. BEHAVIOUR

BE

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

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS

TR

When there is need for recognition of handwritten digits

4. EMOTIONS: BEFORE / AFTER

EM

Feels frustrated and sad when numbers are not entered.

10. YOUR SOLUTION

In Handwritten digit recognition system, which uses a picture of a digit and recognises the digit present in the image. Convolutional Neural Network model built with PyTorch and applied to the MNIST dataset to recognise handwritten digits.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

Extract online channels from behaviour block

8.2 OFFLINE

Extract offline channels from different handwriting styles

Extract online & offline CH of BE