

Define CS, fit into

1. CUSTOMER SEGMENT(S)

A person who needs to read postal addresses, bank check amounts, and forms

6. CUSTOMER CONSTRAINTS

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

5. AVAILABLE SOLUTIONS

The capability of a computer to fete the mortal handwritten integers from different sources like images, papers, touch defences

Explore AS,

Focus on J&P, tap into BE, understand

2. JOBS-TO-BE-DONE / PROBLEMS

Offline handwriting recognition systems are less accurate than online systems because only spatial information is available for offline systems, while both spatial and temporal information is available for online systems.

9. PROBLEM ROOT CAUSE

It is easy for the human to perform a task accurately by practising it repeatedly and memorizing it for the next time

7. BEHAVIOUR

Behavioral characteristics through text processing and handwriting recognition, with the objective of incorporating the obtained results with futuristic artificial intelligence systems that can employ text processing and handwriting recognition as individualistic signatory features

Focus on J&P, tap into BE, understand

Identify strong TR & EM

3. TRIGGERS

The live recognition rate highly depends on the digit skew, as automatic de-skewing was not implemented, but manually performed.

4. EMOTIONS: BEFORE / AFTER

Handwriting and signature biometrics have a long history in the literature, especially in terms of identity recognition and/or verification; nevertheless, it reveals more information therefore provides more opportunities for personal characteristics estimation, particularly, emotional state

10. YOUR SOLUTION

We integrated the handwritten recognition model into the full text recognition system by augmenting the script identification model with an additional classification between printed text and handwritten text.

8. CHANNELS of BEHAVIOUR

8.1 ONLINE

Online handwriting recognition involves the automatic conversion of text as it is written on a special digitizer or PDA, where a sensor picks up the pen-tip movements as well as pen-up/pen-down switching.

8.2 OFFLINE

The K-NN combined with preprocessing methods is capable of achieving great performance apart from Neural Network when used as a classification algorithm in offline handwritten digit recognition.

Extract online & offline CH of BE