Project Title: A Novel Method for Handwritten Digit Recognition System
Project Design Phase-I - Solution Fit Template   **Team ID: PNT2022TMID03792**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

One who wants to extract digits from handwritten text images.

6. CUSTOMER CONSTRAINTS — CC

They feel that such options may result in errors and defects. In order to obtain reliable findings, the image must be clear.

5. AVAILABLE SOLUTIONS — AS

Traditional handwriting recognition systems have been imprecise because they rely on handmade features and a substantial quantity of past information.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

The handwriting of others might be difficult to read. Since handwriting varies from person to person and the handwritten numbers are not always the same size, breadth, or orientation, identifying the digits poses a general challenge..

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

Developing the best software using a customer's image of their handwriting to efficiently and reliably identify the handwritten digits.

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

Identify Strong TR & EM

3. TRIGGERS — TR

To acquire the handwritten digits/numerals efficiently and accurately.

4. EMOTIONS: BEFORE / AFTER — EM

When digits are not integrated and read precisely by customers, they become frustrated and exhausted.

10. YOUR SOLUTION — SL

The Handwritten Digit Recognition System is the solution to the problem of identifying handwritten text's digits.
The model is trained using the MNIST dataset. Using the MNIST dataset, the convolution neural network algorithm is applied to detect the handwritten digits.

8. CHANNELS of BEHAVIOUR — CH

8.1 Utilizing the software that is available on the internet.
8.2 Getting aid from the neighboring people to identify the digits that the customers have written.

Identify Strong TR & EM