Project Title: **A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM**   **Project Design Phase-I - Solution Fit Template**   **Team ID: PNT2022TMID37085**

1. CUSTOMER SEGMENT(S) `CS`

- The user wants system to recognize the shape, text, pictures by itself instead of spending some effort and time for the system (UI) to understand.

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES `CL`

- There is no possibility or obtaining information about the type or the Inputs.
- It is not done in real time as a person writes and therefore not appropriate for immediate text input.

5. AVAILABLE SOLUTIONS PLUSES & MINUSES `AS`

- Important libraries and load the dataset.
- Preprocess the data.
- Create GUI to predict digits.

2. PROBLEMS / PAINS + ITS FREQUENCY `PR`

- The working process conceeds more time and less efficient.
- People who are lack in computer knowledge cannot utilize the resources.
- The ability to understand the styles and text recognition is challenging as it is done by human.

9. PROBLEM ROOT / CAUSE `RC`

- It is the hard task for the machine because handwritten digits are not perfect and can be made with many different flavors
- Because of the handwriting problems such as having mixed handwritings can cause various health issues

7. BEHAVIOR + ITS INTENSITY `BE`

- To convert handwritten digits in machine readable formats.
- To ensure effective and relatableapproaches for recognition of hand written.

3. TRIGGERS TO ACT `TR`

- By learning the brand new ideas and technologies that has been used in other fields to solve various challenging problem
- By seeing the people suffering from problems related to this.

10. YOUR SOLUTION `SL`

- The handwritten digits recognition system is the solution to this problem which uses the image of the digit and recognize the digit present in the image.

8. CHANNELS of BEHAVIOR `CH`

ONLINE
- Use online apps or any TV channels to introduce about this handwritten digits recognition system.

OFFLINE
- Create awareness about methods for handwritten digit recognition system in your surrounding.

4. EMOTIONS BEFORE / AFTER `EM`

- Show less intensity and interest in doing work progress.
- Mental frustration and depression
- Having confidence that we have

Sidebar labels:
- Define CS, fit into CL
- Focus on PR, tap into BE, understand RC
- Identify strong TR & EM