Project Title: A Novel Method for Handwritten Digit Recognition System **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID32324

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

A person from 5-100 years

6. CUSTOMER CONSTRAINTS CC

Handwritten Digit Recognition not only has professional and commercial applications but also practical applications in our daily life. It can be great help to the visually impaired to make the lives easier.

5. AVAILABLE SOLUTIONS AS

Handwritten Digit Recognition is the ability of a computer system to recognize the handwritten inputs like digits ,character,etc …from a wide variety of sources like emails,papers,images,letters etc.. This has been a topic of research areas include signature verification , bank check processing , postal address interpretation from envelopes etc..

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS J&P

Handwritten Digit Recognition has various real-life time uses.

To detect the vehicle number, banks for reading cheques, post offices for arranging letter, and many other tasks

9. PROBLEM ROOT CAUSE RC

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

7. BEHAVIOUR BE

Characteristics include word spacing, line quality, Consistency ,Connecting strokes ,pen lifts ,cursive letters writing pressure

Complete letters ,diacritics ,embellishments, slants and baseline habits

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

TR & EM

Identify strong TR & EM

recognition.

check processing, etc. The goal of our work is to create a model that will be able to recognize and classify the handwritten digits from images by using concepts of Convolution Neutral Network.

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Identify

	4. EMOTIONS: BEFORE / AFTER EM The way of thought can be changed and the fear before writing the account number and the rupees In the cheques can be easily managed .The fear will be reduced.			