Project Design Phase-I
Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID50532
Project Name	Project – A Novel Method For Handwritten Digit Recognition System
Maximum Marks	2 Marks

Project Title: A Novel Method For Handwritten Digit Recognition System
Team ID: PNT2022TMID50532

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

A officer in a post office receiving letters and couriers in a written format.

6. CUSTOMER CONSTRAINTS

It is a difficult because most person's handwriting will
not similar, scanner or camera work perfect in perfect
light condition, It took to much time to process

5. AVAILABLE SOLUTIONS

Various people's handwriting should be used for train the AI. That should improve the accuracy. Traning the model in a proper way to get the better outcome.

Explore AS, differentiate

Focus on J&P, tap into BE, understand

2. JOBS-TO-BE-DONE / PROBLEMS

He/She Wants To Store The Pincode Or Mobile Number Etc... Into A Storage Space . So A Hand Written Digit Recognition System Is Needed To Solve Those Problems.

9. PROBLEM ROOT CAUSE

A small recognition error may cause the big

difference in the end result.

7. BEHAVIOUR

Before Processing The Image Application Should
Verify The Photo Was Taken In Correct Angle And
Correct Lighting. User Should Completely Aware Of
Instruction Of Application.

Focus on J&P, tap into BE, understand

Identify strong TR & EM

3. TRIGGERS

TR

To do the work in a efficient manner. So that the officer getting satisfied.

4. EMOTIONS: BEFORE / AFTER

EM

BEFORE: They eagerly wants to finish is work quickly and easily .

AFTER: If its working fine they feels better.

10. YOUR SOLUTION

SL

The handwritten recognition model takes an image as an input and compare the preprocessed digits with the trained datasets and give the output of digits as a text well as pen-up/pen format.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

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

8.2 OFFLINE

K-NN combined with preprocessing methods can achieve great performance apart from Neural Network when used as a classification algorithm in offline handwritten digit recognition.