**Project Design Phase-I**

**Problem – Solution Fit Template**

Date

19

September

2022

Team ID

PNT2022TMID08478

Project Name

Real time communication system powered by AI for specially abled

Maximum Marks

2

Marks

**Project Title: A Novel Method For Hand Written Digit Recognition**

**Team ID:**

PNT2022TMIDxxxxxx

**BE**

**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.

**RC**

**. PROBLEM ROOT CAUSE**

**9**

A small recognition error

may cause the big

difference in the end result.

**J&P**

**. JOBS-TO-BE-DONE / PROBLEMS**

**2**

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.

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**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.

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

.

**CC**

**6**

**. CUSTOMER CONSTRAINTS**

**CS**

**1**

**)**

**. CUSTOMER SEGMENT(S**

A officer in a post office receiving letters and

couriers in a written format.

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**&**

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**M**

**3**

**. TRIGGERS**

**TR**

To do the work in a efficient

manner. So that the officer

getting satisfied.

**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.

**4**

**. EMOTIONS: BEFORE / AFTER**

**EM**

BEFORE: They eagerly wants to finish is work

quickly and easily .

AFTER: If its working fine they feels better.