PROJECT DESIGN PHASE -I
PROBLEM-SOLUTION FIT TEMPLATE

TEAM ID	PNT2022TMID27693
PROJECT NAME	A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

Problem-Solution fit canvas 2.0

Purpose/Vision

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Who is your customer?
i. e. working parents of 0-5 y.o. kids

The customers want to use the system

6. CUSTOMER CONSTRAINTS — CC

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

i.Lack of resources
li.Lack of datasets

5. AVAILABLE SOLUTIONS — AS

Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

i.Collect different writing styles
ii.Using high speed processor

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

To train and test the models

9. PROBLEM ROOT CAUSE — RC

What is the real reason that this problem exists?
What is the back story behind the need to do this job?
i. e. customers have to do it because of the change in regulations.

i.No optical character recognition
ii.Different styles of writing

7. BEHAVIOUR — BE

What does your customer do to address the problem and get the job done? i. e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

i.Periodically training the datasets

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

Identify strong TR & EM

3. TRIGGERS — TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

When the writing is not clearly recognizable

4. EMOTIONS: BEFORE / AFTER — EM

How do customers feel when they face a problem or a job and afterwards?
i. e. lost, insecure > confident, in control - use it in your communication strategy & design

Before:Disappointment,vexation,anger
After:joyful,satisfaction.

10. YOUR SOLUTION — SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

i. This system will be useful for the recognition of digits
ii.It is mainly used in the field of number plate recognition,postal code correspondence sorting

8. CHANNELS of BEHAVIOUR — CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

i. Collecting the latest datasets from different sources

3.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

ii.building a model

Extract online & offline CH of BE