Project Design Phase-I
problem Solution Fit

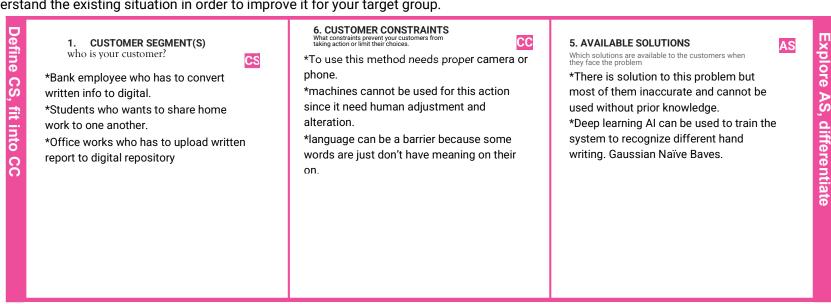| DATE	12 October 2022
Team	PNT2022TMID21878
Project Name	A novel method for handwritten digit recognition system
Maximum Marks	2 Marks

Problem – Solution Fit solution:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and Why.

Purpose:

❏ Solve complex problems in a way that fits the state of your customers.

❏ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.

❏ Sharpen your communication and marketing strategy with the right triggers and messaging.

❏ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.

❏ Understand the existing situation in order to improve it for your target group.

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) who is your customer? **CS** *Bank employee who has to convert written info to digital. *Students who wants to share home work to one another. *Office works who has to upload written report to digital repository	6. CUSTOMER CONSTRAINTS What constraints prevent your customers from taking action or limit their choices. **CC** *To use this method needs proper camera or phone. *machines cannot be used for this action since it need human adjustment and alteration. *language can be a barrier because some words are just don't have meaning on their on.	5. AVAILABLE SOLUTIONS **AS** Which solutions are available to the customers when they face the problem *There is solution to this problem but most of them inaccurate and cannot be used without prior knowledge. *Deep learning AI can be used to train the system to recognize different hand writing. Gaussian Naïve Baves.	Explore AS, differentiate

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.

*It is not done in real time as a person writes and therefore not appropriate for immediate text input.
*To be able to recognize running letters which is written by human.
*Recognizing and ascertaining the handwritten digits.
*Hard to recognize digits, dim light, weak eyesight.

9. PROBLEM ROOT CAUSE   `RC`

What is the real reason that this problem exists? What is the back story behind the need

*Hand-written digits are in varying fonts and sizes; thus they are becoming increasingly difficult to ascertain due to various factors such as weakening eye-sight, time constraint. Etc.,
* Every person does not have the same hand writing and different stroke.

7. BEHAVIOUR   `BE`

What does your customer do to address the problem and get the job done?

*Customers seeks quality cameras and stable internet connection services.

*customer may also need devices such as mobiles and cameras.

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3. TRIGGERS   `TR`

What triggers customers to act? i.e. seeing their neighbour installing

- Converting documents to digital reports becomes more Easy and accessible to every . heavy man power is not Needed to do the work.

4. EMOTIONS: BEFORE / AFTER   `EM`

How do customers feel when they face a problem or a job and afterwards?

BEFORE: Import the libraries and load the dataset.

AFTER: SVM classifier is the most accurate.

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.

- As they are not based on probabilities the degree of Correctness cannot be determined. But we can use Software layer to the network, which turns numbers into Probability.

8. CHANNELS of BEHAVIOUR   `CH`

8.1 ONLINE

The data send through application for the digital to know about the handwritten.

8.2 OFFLINE

The control action is taken by the network monitor to make it easy to understand.