**Define CS, fit into CC**

## 1. CUSTOMER SEGMENT(S)    CS

Who is your customer?

The Customers who deal with handwritten digits like Banking

## 5. CUSTOMER CONSTRAINTS    CC

What constraints prevent your customers from taking action or limit their choices of solutions?

They believe that the alternatives will result in errors and faults and will be inconvenient.

## 8. AVAILABLE SOLUTIONS    AS

Which solutions are available to the customers when they face the problem or need to get the job done?

There are no widely used software's to detect handwriting; instead, they check with other people to affirm what number it is.

**Explore AS, differentia**

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

## 2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) J&P do you address for your customers?

Handwritten digits can be difficult to understand and interpret at times. It may cause errors when dealing with rough handwriting.

## 6. 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?

We face numerous challenges in handwritten number recognition. because of different people's jotting styles and the lack of Optic character recognition This investigation offers an in-depth comparison of various machine literacy and deep literacy

## 9. BEHAVIOUR    BE

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

Finding the best software for detecting accurate digits in a more efficient manner.

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

## 3. TRIGGERS

**TR**

What triggers customers to act?

To obtain the numbers accurately and quickly.

## 7. YOUR SOLUTION

**SL**

A solution to this problem is the Handwritten digit recognition system, which uses a picture of a digit and recognizes the digit present in the image. Convolutional Neural Network model built with PyTorch and applied to the MNIST dataset to recognize handwritten digits.

## 10. CHANNELS of BEHAVIOUR

**CH**

**8.1    ONLINE**

What kind of actions do customers take online?

Using software that is available on the internet.

**8.2    OFFLINE**

What kind of actions do customers take offline?

Obtaining assistance from those nearby in order to recognize the digits written by their customers.

## 4. EMOTIONS: BEFORE / AFTER

**EM**

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

Feels frustrated and sad when numbers are not entered.