Ideation Phase Define the Problem Statements

| Date | 19 September 2022 |
|---------------|--|
| Team ID | PNT2022TMID21352 |
| Project Name | Project – A Novel Method for Handwritten Digit |
| | Recognition System |
| Maximum Marks | 2 Marks |

Customer Problem Statement:

Handwritten digit recognition is very important as it will be very helpful to reduce human effort. As each individual has different handwritings for representing digits, the system should have a capability to identify every handwriting with maximum accuracy. Such a system will be useful to reduce human interventions in identification, as everything is being digitized. The main objective of this work is to ensure effective and reliable approaches for recognition of handwritten digits and make banking operations easier and error free. Handwriting recognition has gained a lot of attention in the field of pattern recognition and machine learning due to its application in various fields. Various techniques have been proposed to for digit recognition in handwriting recognition system.

The user has to just handwrite using the fingers on the smart screen of mobile of PC and the software of the device must be able to identify the handwriting. There should also be the feature of producing text out of the recognized contents and the user must be able to copy the contents and paste it to the desired locations.

Reference: https://miro.com/templates/customer-problem-statement/

Problem Statements:

| Problem | I am | I'm trying to But | | Because | Which makes me feel | | |
|----------------|------------|-------------------|-------------|---------------|---------------------|--|--|
| Statement (PS) | (Customer) | | | | | | |
| PS-1 | Android | Type texts in | It takes a | Many users | Exhausted | | |
| | users | documents | lot of time | are not | | | |
| | | | and there | fluent in | | | |
| | | | occurs a | typing and | | | |
| | | | lot of | the typing is | | | |
| | | | errors | error some | | | |
| PS-2 | Research | Type the | It takes a | Humans | Frustrated | | |
| | scholars | entire | lot of time | make | | | |
| | | research | and the | mistakes | | | |
| | | paper from | results are | sometimes | | | |
| | | handwritten | not so | | | | |
| | | notes | accurate | | | | |

| PS-3 | Archaeologist | From | the | They coul | d 7 | The | | They | may | fail | in |
|------|---------------|---------------------|------|-----------|-----|------------|-------|-----------------------|-----|------|-----|
| | | antiques, | | not | 6 | engravings | | research and may lost | | | |
| | | they can | | recognize | ā | are very | old, | the contents present | | | ent |
| | | recognize the | | the exac | t k | broken | and | in those engravings | | | S |
| | | exact | text | text fror | n t | the | | | | | |
| | | from the engravings | | the | á | archaeol | ogist | | | | |
| | | | | engraving | s r | may | not | | | | |
| | | | | at times. | ŀ | know | the | | | | |
| | | | | | 6 | exact | | | | | |
| | | | | language | | <u> </u> | | | | | |
| | | | | | ١ | written iı | n the | | | | |
| | | | | | ã | antique. | | | | | |