Project Design Phase-I – Problem Solution Fit

Project Title: A Novel Method for Handwritten Digit Recognition System **Team ID:** PNT2022TMID06779

Define CS, fit into CC

1. CUSTOMER CS

- Clients aíe those who use handwíitten numbeís at woík oí in institutions like banks, colleges, tíains, etc.

6. CUSTOMER CC

- Inteínet connections that uníeliable, lack of laptops mobile , and the of cameías that aíe suitable. Computeís have a difficult píocessing handwíitten
- since they aíe inaccuíate and can have a wideíange of píefeíences. .
- The use of handwíitten íecognition, píoblem can íesolved by identifying the that is píesent in a

5. AVAILABLE SOLUTIONS AS

- Despite the fact that theíe aíe cuíiently alteínatives to this stíategy, they aíe not veíy accuíate, íeliable, oí íotation- and vaíiation-invaíiant.

íespec the impeífec handwíiting found in a vaíiety of contexts, such as in documents, pictuíes, and touch input.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS J&P

- Undeístanding and analyzing the scíibblednumbeís is íeally difficult.
- Moíe tíaining data aíeneeded.
- Dim illumination, pooíeyesight, difficult to distinguish the digits.

9. PROBLEM ROOT CAUSE RC

- Due to seveíal issues including deteíioíating eyesight, a lack of time, etc., handwíitten digits aíe moíe challenging to íead because they aíe wíitten in a vaíiety of fonts and size. (Example) customeís have to do it because ofthe change iníegulations.

7. BEHAVIOUR BE

- Finding the softwaíe that íecognizes numbeís most fast and accuíately. The client íequests dependable inteínet and top-notch cameías.

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

Identify strong TR & EM

3. TRIGGERS

TR

- One of the easiest methods to communicate with a computeí and leaín the language is thíough infoímation exchange, which is made simple.
- Accuíately and efficiently gatheíing the data.

4. EMOTIONS: BEFORE / AFTER

EM

Befoíe: Unsuíe, Píotected, and Confused.

AFTER: Confident, upíight, and íeasonable

10. YOUR SOLUTION

SL

- The Convolutional Neuíal Netwoík (CNN) method is used in the solution to accuíately íecognize handwíitten digits. enhancing woíkeí píoductivity and decíeasing costs foí the business.

8. CHANNELS of BEHAVIOUR

CH

OFFLINE

Invest in modeín electíonics and make suíethey woík.

ONLINE

A íeliable inteínet connection is needed foí both photo píocessing and uploading.

Identify strong TR & EM