Project Degin Phase-I

Problem –Solution Fit Template

Date	27 October 2022
Team ID	PNT2022TMID52260
Project Name	A Novel Method for Handwritten Digit Recognition System
Maximum Marks	2 Marks

Problem –Solution Fit Template

Problem-Solution fit canvas 2.0 — Purpose / Vision

1. CUSTOMER SEGMENT(S) — CS
Define CS, fit into CC
One who wants to extract digits from handwritten text images

6. CUSTOMER CONSTRAINTS — CC
Unclear image will not give accurate results.

5. AVAILABLE SOLUTIONS
Traditional systems of handwriting recognition have relied on handcrafted feature and a large amount of prior knowledge.

Explore AS, differentiate

2. JOBS-TO-BE-DONE / PROBLEMS — J&P
Focus on J&P, tap into BE, understand RC
People can struggle to read others' handwriting. The handwritten digits *are* not always of the same size, width, orientation as they differ from writing of person to person, so the general problem would be while classifying the digits.

9. PROBLEM ROOT CAUSE — RC
The issue is that there's a wide range of handwriting - good and bad. This makes it tricky for programmers to provide enough examples of how every character might look.

7. BEHAVIOUR — BE
Customers must try with clear image and neat handwriting to get accuracy in digits

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

3. TRIGGERS — TR
Identify strong TR & EM
When there is need for recognition of handwritten digits

4. EMOTIONS: BEFORE / AFTER — EM
frustration, exhausted > curious, satisfied

10. YOUR SOLUTION
It uses Artificial Neural Network to recognize them. Neural Network is used to train and identify written digits. After training and testing, the accuracy rate reached 99%. This accuracy rate is very high.

8. CHANNELS of BEHAVIOUR — CH
8.1 ONLINE
Extract online channels from behaviour block

8.2 OFFLINE
Extract offline channels from different handwriting styles

Extract online & offline CH of BE

AMALTAMA