

Project Design Phase-I - Solution Fit Template

Project Title: A Novel Method for Handwritten Digit Recognition System

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Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none">Fintech IndustriesSupply Chain ManagementMedical data TranscriptionsScientific and Space Research	2. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none">Speed and Accuracy of the systemSize of the vocabularySpatial layoutLack of feedback-based system	3. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none">Free OCR APIHuman centric data feed	Explore AS, differentiate

Focus on J&P, tap into BE, understand RC	4. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none">To design a system that recognizes a wide range of handwriting scriptsML based approach to identify the character quickly and accuratelyAdaptive learning module to learn from its own instances and gets updated	5. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none">In cases where distinct characters look very similar making it hard for a computer to recognize it accurately.Different styles of cursive handwriting is another challenge that requires a support system based on vocabulary	6. BEHAVIOUR BE <ul style="list-style-type: none">In handwriting recognition (HWR), the module interprets the user's handwritten script into an appropriate digital format sProvision for real-time handwritten update in case if the application used by fixed and same usersKnow the market trends and adapt accordingly	Focus on J&P, tap into BE, understand RC

Identify Strong TR & EM	7. TRIGGERS TR <ul style="list-style-type: none"> Longer and more in scale, the system understood better With its rich vocabulary, it has a support system to autofill the suggestions based on user input 	9. YOUR SOLUTION SoLN <ul style="list-style-type: none"> Deep learning. Intelligent feedback and support system based on neural network making the system more robust 	10. CHANNELS of BEHAVIOUR CH <p>1. ONLINE</p> <ul style="list-style-type: none"> online handwriting recognition consists of interpreting handwriting represented either by the trajectory of the pen or by scanning the script <p>2. OFFLINE</p> <ul style="list-style-type: none"> Offline handwriting recognition consists of interpreting the handwritten scanned document. 	Extract Online and offline CH of BE
	8. EMOTIONS: BEFORE / AFTER EM <ul style="list-style-type: none"> Before: Sometimes character look similar so digit identification process is tedious and time consuming. Also, inaccurate sometimes. . After: Using deep learning, identification is faster and relatively more accurate. 			