

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">Clients are those who use handwritten numbers at work or in institutions like banks, colleges, trains, etc.	6. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none">Internet connections that are unreliable, the lack of laptops and mobile devices, and the inaccessibility of cameras that are suitable.Computers have a difficult time processing handwritten numbers since they are frequently inaccurate and can have a wide range of preferences.Through the use of handwritten digit recognition, this problem can be resolved by identifying the digit that is present in a picture of a digit.	5. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none">Despite the fact that there are currently alternatives to this strategy, they are not very accurate, reliable, or rotation- and variation-invariant.A computer's capacity to respect the imperfect handwriting found in a variety of contexts, such as in documents, pictures, and touch input.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none">Understanding and analyzing the scribbled numbers is really difficult.More training data are needed.Dim illumination, poor eyesight, difficult to distinguish the digits.	9. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none">Due to several issues including deteriorating eyesight, a lack of time, etc., handwritten digits are more challenging to read because they are written in a variety of fonts and size. (Example) customers have to do it because of the change in regulations.	7. BEHAVIOUR BE <ul style="list-style-type: none">Finding the software that recognizes numbers most fast and accurately. The client requests dependable internet and top-notch cameras.	
Focus on J&P, tap into BE, understand RC				Focus on J&P, tap into BE, understand RC

Identify strong TR & EM	<p>3. TRIGGERS TR</p> <ul style="list-style-type: none"> One of the easiest methods to communicate with a computer and learn the language is through information exchange, which is made simple. Accurately and efficiently gathering the data. 	<p>10. YOUR SOLUTION SL</p> <ul style="list-style-type: none"> The Convolutional Neural Network (CNN) method is used in the solution to accurately recognize handwritten digits. enhancing worker productivity and decreasing costs for the business. 	<p>8. CHANNELS of BEHAVIOUR CH</p> <p>OFFLINE Invest in modern electronics and make sure they work.</p> <p>ONLINE A reliable internet connection is needed for both photo processing and uploading.</p>	Identify strong TR & EM
	<p>4. EMOTIONS: BEFORE / AFTER EM</p> <p>Before: Unsure, Protected, and Confused. AFTER: Confident, upright, and reasonable</p>			