

Project Design Phase-I - Solution Fit Template

Project Title: Novel Method For Handwritten Digit Recognition

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Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Who is your customer? i.e. working parents of 0-5 y.o. kids People who are in the roles like postal mail sorting, bank check processing, data entry, fee payment, traffic rules management etc. mail sorting	6. CUSTOMER CONSTRAINTS CC What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices. Network connectivity issues, low quality blurry digits, devices with cameras are required.	5. AVAILABLE SOLUTIONS AS Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking Digit recognition app that are available in play store snapLogic website that recognizes handwritten digits	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides. 1. Recognize the number plates of vehicles which violate traffic rules. 2. Accelerate the cheque approval procedure. 3. Categorize the posts based on the pin code.	9. PROBLEM ROOT CAUSE RC What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. Handwritten digits are imperfect and can be generated in a variety of sizes, forms, and shapes. Everyone's handwriting is unique and not uniform.	7. BEHAVIOUR BE What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace) Customers must enter digits that are neatly and legibly written. Customer tries to identify the best software for handwritten digit recognition.	
Identify strong TR & EM	3. TRIGGERS TR What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news. To ease the manual time-consuming process.	10. YOUR SOLUTION SL If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour. The CNN model, which is used to locate the digits or expression in digital form, which is trained using an image dataset of numbers and symbols of various styles and forms.	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. ONLINE: using online tools that are compatible with internet connections. OFFLINE: using nearby assistants to recognise the tiny handwritten digits.	Identify strong TR & EM
	4. EMOTIONS: BEFORE / AFTER EM How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design. Before: Frustrated, Worried, Difficult After: Satisfied, Curious, User-friendly			