

**Project Title: A Novel Method for
Handwritten Digits**

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Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Who is your customer? i.e. working parents of 6-5 y.o. kids The customer segment consists of users of bank ,post office ,colleges, schools etc.	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. Clarity of the input	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 networking. Previously people needed to recognize the written digits and organize them . Now the hand written digit recognition tool will help to recognize and organize hand written digits efficiently.	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. The algorithm must be in such a way that the user finds the tool easy to use. The inefficient techniques used in past must be avoided.	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. Recognizing handwritten digits manually is too much exhaustive, time consuming and not efficient.	7. BEHAVIOUR BE What does your customer do to address the problem and get the job done? i.e. directly related: find the right value, parcel, mistake, calculate usage and benefits, indirectly associated: customers spend less time on volunteering work (i.e. Greenpeace) Technical issues are handled by the technical team. The hand written digit recognition tool is easy to handle and accurate.	
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. The success of this hand written digit recognition tool will lead many banks ,post offices ,schools and colleges adopting this method	10. YOUR SOLUTION SL If you are working on an existing business, write down your current solution first, fill in the service, 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. Webpages can be used instead of applications for more interaction. The scanning should be able to done in such a way that the hand written digits can be recognized easily.	8. CHANNELS of BEHAVIOUR CH ONLINE What kind of actions do customers take online? Extract online channels from #7 To upload the images for recognition OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. Stored digitalized output images can be viewed	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. Digitalization of hand written digits is done efficiently and easily without human interaction			

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