

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

Who is your customer?
i.e. working parents of 0-5 y.o. kids

**People who want to read digitized handwritten digits/numbers in various sectors including government and private sectors.
Bank cashier, who wish to read the numbers on cheque leafs.**

CS

6. CUSTOMER CONSTRAINTS

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.

**Lack of good quality cameras to take pictures of the handwritten digits.
Each customer has a unique handwriting.
lack of availability of proper devices to upload the images to the model/ machine.**

CC

5. AVAILABLE SOLUTIONS

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

**the currently available solutions are not that efficient to be used for real-time applications due to various reasons: the volume of currently available dataset is not sufficient, the probability of always facing a new data (as each person has a unique handwriting) and failing to recognize it.
Also, when uploading the images, if the user is not able to upload good quality images, the system fails to recognize or gives incorrect prediction.**

AS

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers?
There could be more than one; explore different sides.

JOBS: recognize different digits handwritten by different people

PROBLEMS: low image quality, each person has unique handwriting style

J&P

9. PROBLEM ROOT CAUSE

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.

**to take images with good pixel quality, the cameras are expensive.
uniqueness of each handwritten digit makes it even more difficult to train the machine.
lack of infrastructure and internet services to take pictures and upload them.**

RC

7. BEHAVIOUR

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)

**Customer can obtain good quality cameras or rent them in case if it's too expensive.
Proper internet connectivity can be established with the help of various fibernet providers.**

BE

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

Identify strong TR & EM

3. TRIGGERS

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

accuracy of the prediction

TR

4. EMOTIONS: BEFORE / AFTER

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.

customers can increase their work productivity as the time taken for the numbers recognition is now reduced as its handled by the machine.

EM

10. YOUR SOLUTION

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 proposed solution aims to increase the accuracy in prediction and also, reduce the time taken to do the prediction as compared to the existing solutions in the market, thereby improving the customer productivity and saving their time.

SL

8. CHANNELS of BEHAVIOUR

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

good network connectivity (internet connection) is required to upload and process the images.

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

install devices that help in uploading and/or recognizing real-time handwritten digits.

CH

Extract online & offline CH of BE