

### 1. CUSTOMER SEGMENT(S)

Who is your customer?

People who lost their speech or hearing ability by birth or due to some other factors.

CS

### 6. CUSTOMER

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.

Difficult accessibility, not user friendly, need more technical knowledge to handle, cost,...etc. There are so many choice of solutions available but due to these some constraints, choice of solutions were limited.

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 first ever approach to sign language it has only 6 sign gestures detection. Using colored hands for hand position recognition. But our model is trained to detect different sign languages without any colour gloves, using bare hands only.

AS

### 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.

Deaf and dumb people couldn't able to convey their messages to the normal people easily. Deaf people cannot hear the words as others speaks and dumb people cannot express their feelings by words.

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.

In Previously developed solution, they have to use coloured hand gloves for hand position recognition. Also, the old method uses traditional translators which take too much of time to process.

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)

In our device, there's an option called problem detection display in which our customer can able to see the type of problem occurs & solution will be displayed.

BE

### 3. TRIGGERS

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

By comparing normal people, Specially Abled people should depend on others and want to live their life independently like other people

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

BEFORE: It is very difficult to convey the message to normal people.

AFTER: They overcome their reluctance to have communication with normal people.

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.

Using SSD ML algorithm recognizing the signs as words instead of old traditional translators, that are very slow and take too much since every alphabet as to be recognized to form the whole statement in old methods.

SL

### 8. CHANNELS of BEHAVIOUR

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

Advertise on online with influencers to test the product and promote it also on blog channels

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

On offline, we have our product experience stores where our customer can experience the product in real

CH