

**1. CUSTOMER SEGMENT(S)****CS**

Who is your customer?

1. Specially abled persons.
2. People who lost their speech or hearing ability by birth or due to some factors.
3. People with deaf and mute disabilities who struggles in communication.

**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.

1. Low Budget, Proper Network Connections, Available devices for customer requirements
2. Difficult accessibility, not user friendly, more technical knowledge to handle.
3. There are so many choices available but due to these constraints, choice of solutions were limited.

**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

1. The first ever approach to sign language has only six sign gestures detection and using coloured hands for hand position recognition.
2. In this product, we provide feedback pop-up notifications frequently and an emergency purpose ping for people who have minimum knowledge about the application.

**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. Deaf and Dumb people couldn't able to convey their messages easily to normal people.
2. Deaf people cannot hear the words as others speak and they cannot express their feelings by words.
3. Concentrate on making their communication effective by means of concentrating more on listening and help them to live a normal life.

**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.

1. This kind of disabilities also occur genetically.
2. It can also be caused due to accidents, injuries, obesity, infections or other illness.
3. The old methods use traditional translators which take too much of time to process.

**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)

1. The customer should be provided with a customer care number and it gives many feedback pop-up notifications frequently which helps the customers to contact with us and get their jobs done.
2. In the device, there is an option named problem detection display in which can see the list of types of problem among them the customers should select their problem and the solution will be displayed for their respective problem.

**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.

1. Lack of communication with normal people will crack their mental strength
2. To advertise the product in specially abled schools and other places and creating awareness through social media.

**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 using this product specially abled people were in struggle to communicate with other people.  
But after using this product they are comfortable to communicate and led a usual life with happiness.

**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.

1. Voice recognition and predictive texting tools allow people to communicate easily using AI. We can also use AI sensors to monitor the health and save those data for future use.
2. In Particular, Using SSD ML algorithm recognizes the signs as words faster compared to old traditional translators. Because in old translators, every alphabet is to be recognized to form a whole statement.

**8. CHANNELS of BEHAVIOUR****CH**

**8.1 ONLINE**  
What kind of actions do customers take online? Extract online channels from #7  
Customers can use online voice assistants such as Siri, Google, Alexa to make use of their devices through online, which help them to make use their app everywhere through online.

**8.2 OFFLINE**  
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.  
Connecting with people might be difficult depending on the disabilities. Technology and AI leave no one behind and can benefit person with disability and able to learn sign language.