

## Project Design Phase- I

### Problem – Solution Fit

### Template

Date	02 November 2022
Team ID	PNT2022TMID29489
Project Name	Project – <b>Real - Time Communication System Powered By AI For Specially Abled</b>
Maximum Marks	2 Marks

### Problem – Solution Fit Template:

The Problem- Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

### Purpose:

- ❑ Solve complex problems in a way that fits the state of your customers.
- ❑ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ❑ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ❑ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ❑ **Understand the existing situation in order to improve it for your target group.**

### Template:

Problem-Solution fit canvas 2.0		Purpose / Vision		
Define C-S, fit into	<b>1. CUSTOMER SEGMENT(S)</b> <span style="float: right;">C-S</span> Who is your customer?  Our Project completely focus on disabled people <u>i.e.</u> deaf and dumb, who find extremely difficult in conveying necessary information and communicating with normal people.	<b>8. CUSTOMER</b> <span style="float: right;">C-C</span> What constraints prevent your customers from taking action or limit their choices of solutions? <u>i.e.</u> spending power, budget, no cash, network connection, available devices.  <u>Constraints:</u> <ul style="list-style-type: none"> <li>No awareness about this app/system?</li> <li>Will the app provide the guide to use it?</li> <li>Do I need to spend more amount in using the app?</li> <li>Will I need advance featured phone to use the app?</li> <li>Is internet always mandatory to use the</li> </ul>	<b>6. AVAILABLE SOLUTIONS</b> <span style="float: right;">A-S</span> 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? <u>i.e.</u> pen and paper is an alternative to digital/robotizing  Previously, <ul style="list-style-type: none"> <li>Customer take the assistance from others to convey the required information.</li> <li>Use pen and paper as a mode of conveying the information.</li> </ul> <u>Cons:</u> <ul style="list-style-type: none"> <li>No acceptance</li> <li>Uncalled for Pity and Sympathy.</li> <li>Inferiority complex lowers their self esteem with the <u>above</u> words</li> </ul>	Explore A-S
	<b>2. JOB(S)-TO-BE-DONE / PROBLEM(S)</b> <span style="float: right;">J-P</span> Which job(s)-to-be-done (or problem(s)) do you address for your customer? There could be more than one solution different ideas.  The problem occurs in <b>public areas such as Railway counters and Airports</b> , by the disabled ones in conveying the necessary information. Human interaction <u>i.e.</u> , <b>day to day conversations</b> , being part of group they crave for.	<b>9. PROBLEM ROOT CAUSE</b> <span style="float: right;">R-C</span> What is the real reason that this problem exists? What is the back story behind the need to do this job? <u>i.e.</u> <i>modernism has not let the barriers of the Physics in our lives</i>  Persons born with disabled is normal. It's not their fault. <u>Reasons:</u> <ul style="list-style-type: none"> <li>Always being a few seconds behind the conversation.</li> <li>Having a mind set that no one is willing to talk with them <b>freely</b>.</li> <li>Bullying and other humiliations on person's disability.</li> <li>Lack of effective support from their known</li> </ul>	<b>7. BEHAVIOUR</b> <span style="float: right;">B-E</span> What does your customer do to address the problem and get the job done? <u>i.e.</u> directly related find the right solar panel installer, calculate usage and benefits; indirectly associated customers saved time on volunteer work (i.e. Greenpeace)  By somehow, they feel to lead an independent life.  <u>List of activities done:</u> <ul style="list-style-type: none"> <li>Surf in the internet/play store regarding the launch of app in order to use.</li> <li>Get to know about their group's difficulty and how they handle them?</li> <li>Though apps are available, testing each and everyone that fits their requirement or not.</li> </ul>	
Identify strong TR & EM	<b>3. TRIGGER(S)</b> <span style="float: right;">T-R</span> What triggers customers to act? <u>i.e.</u> seeing their <u>broken</u> installing solar panels, reading about a more efficient solution in the news.  Seeing their disability, it triggers them to make an efficient way of communication by any means. <ul style="list-style-type: none"> <li>Curiosity about the launch of new app.</li> <li>Get the review from another customer who have used <u>it</u>, and satisfied with it's features.</li> <li>Getting to know, that with this app, they can lead an independent life.</li> <li>Supporting them in activities of daily living.</li> </ul>	<b>10. YOUR SOLUTION</b> <span style="float: right;">S-L</span> 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 <u>requirements</u> . <ul style="list-style-type: none"> <li>Convolution Neural Networks is to be used to take hand sign as an input to extract edges, corners.</li> <li>Dataset is used for training CNN. One dataset for hand detection and the other for gesture detection.</li> <li>Voice assistant is implemented that take input as speech patterns and convert the text to voice.</li> </ul>	<b>8. CHANNEL(S) OF BEHAVIOUR</b> <span style="float: right;">C-H</span> <b>8.1 ONLINE</b> What kind of actions do customers take online? Extract only key channels from #7 <ul style="list-style-type: none"> <li>Use online mode, mainly for surfing about different apps and getting their reviews.</li> <li>Chances of writing their own reviews based on the app's performance.</li> <li>Promote a concerned app through open sources and encouraging others to use it.</li> </ul> <b>8.1 OFFLINE</b> <ul style="list-style-type: none"> <li>Motivating others about the importance of using the app and promote this in local groups.</li> <li>Create public awareness about the need of using this app in <u>day to day</u> life.</li> <li>Concludes, that <u>this app provide us an independent life</u>.</li> </ul>	Extract online & offline C-H or BE

#### 4. EMOTIONS: BEFORE / AFTER



How do customers feel when they face a problem or a job and afterwards?

Before: lost, insecure > confident, in control - use it in your communication strategy & design.

Before using the System /app:

- Society. And it's questions like "How can you talk if you are deaf?" It's humiliating.
- Uncalled for Pity and Sympathy.
- Dealing with "do you understand?" Every single time. First few times, It feels good that you are making sure I get you. But ever single time?

After using the System /app:

- Lead an independent life with this app.
- Conveying required information effectively.
- Inferiority complex of disabled can be overcome.

 **AMALTAMA**



Problem-Solution is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License