

# Project Design Phase-I-Solution Fit Canvas

Project Title : Real-Time Communication System Powered by AI for Specially Abled

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Define CS, fit into CC	<div><div><div>1. CUSTOMER SEGMENT(S)<div>CS</div></div><div><ul style="list-style-type: none"><li>Normal People, Who needs to communicate with specially abled.</li><li>Deaf People</li><li>Dumb People</li></ul></div></div></div>	<div><div><div>6. CUSTOMER CONSTRAINTS<div>CC</div></div><div>Artificial Intelligence technology solutions, discover how accessibility for people can be enhanced.</div></div></div>	<div><div><div>5. AVAILABLE SOLUTIONS<div>AS</div></div><div><ul style="list-style-type: none"><li>Voice Conversion system with hand gestures recognition and translation will be very useful to have a proper conversation between a normal people and an impaired person in any language.</li><li>An app is built which enables deaf and dumb people to convey their information using signs.</li></ul></div></div></div>	Explore AS, differentiate
	<div><div><div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&amp;P</div></div><div><p>To predict the delay of the flight</p><ul style="list-style-type: none"><li>Input is given as Hand gestures image, which undergoes image preprocessing and voice recognition.</li><li>In Neural network, the hand gestures are trained by Convolution Neural Network.</li></ul></div></div></div>	<div><div><div>9. PROBLEM ROOT CAUSE<div>RC</div></div><div><ul style="list-style-type: none"><li>Communication between deaf-mute and a normal people has always been a challenging task.</li><li>It is very difficult for mute people to convey their message to normal people.</li><li>Normal people are not trained on hand sign language, and in emergency times it is very difficult.</li></ul></div></div></div>	<div><div><div>7. BEHAVIOUR<div>BE</div></div><div><p>What do to address the problem</p><ul style="list-style-type: none"><li>Artificial Intelligence model that converts sign language into a speech that can be understood by normal people.</li><li>An application built for efficient usage.</li></ul></div></div></div>	

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

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**3. TRIGGERS****TR**

- The benefit of the system that converts the sign language into a human hearing voice in the desired language to convey a message to normal people.
- As well as convert speech into understandable sign language for the deaf and dumb.

**4. EMOTIONS: BEFORE / AFTER****EM**

BEFORE: Normal people are not aware of hand signs and Communication is difficult between the normal people and specially abled.

AFTER: Communication is good and efficient between the normal people and specially abled and Normal people can learn sign language.

**10. YOUR SOLUTION****SL**

- An application for deaf and dumb people to convey their information using signs.
- By using voice conversion system with hand gesture recognition and translation will be very useful to have a proper conversation.

**8.CHANNELS of BEHAVIOR****CH****8.1 ONLINE**

- A simple and beautiful user interface is used and supports different languages.
- Accurate prediction and used speech to text & text to speech.

**8.2 OFFLINE**

- Communication is made between the normal people and specially abled.
- Normal people used to learn sign language.