Problem-Solution fit canvas 2.0

Real-Time Communication System Powered by AI for Specially Abled

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)   `CS`

- Specially-Abled People.

- People who want to communicate with Specially-Abled people.

6. CUSTOMER CONSTRAINTS   `CC`

- Limited range of expression of sign language.

- Limited number of people who know sign language.

- Network availability.

Explore AS, differentiate

5. AVAILABLE SOLUTIONS   `AS`

- Sign Language Translator with gesture detection using 5DT gloves.

- DEF-ISL is a mobile app that makes learning of sign language easy and interesting.

- Google Live Transcribe uses ASR technology to offer real time Transcription of speech.

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

2. JOBS-TO-BE-DONE / PROBLEMS   `J&P`

- An efficient sign language communication system which is easy and user friendly so that anybody can use it to communicate with specially Abled people.

- There also needs to be an sign language translator which needs to translate speech into sign language in real time.

9. PROBLEM ROOT CAUSE   `RC`

- People who are not specially abled do not know sign language which results in limited interaction.

- Inability to express thoughts and expressions freely to others .

- High probability of miscommunication taking place.

7. BEHAVIOUR   `BE`

- Perform Lip - Reading.

- Use signs to communicate.

- Use text to convey messages.

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

Identify strong TR & EM

3. TRIGGERS   `TR`

- Seeing that others can lead a normal life.
- Frustrated over the fact that they are not able to integrate into society.
- Low chance of employment.

4. EMOTIONS: BEFORE / AFTER   `EM`

BEFORE:
- Isolated.
- Frustrated.
- Insecure.

AFTER:
- Motivated.
- Happy.
- Content.

10. YOUR SOLUTION   `SL`

The goal of the project is to develop an interactive system that can translate speech into acceptable sign language for the deaf and dumb, as well as sign language into a normal hearing voice to communicate a message to normal people.

8. CHANNELS of BEHAVIOUR   `CH`

8.1 ONLINE

- By text messages through a messaging app.

- By communicating using Sign language through Video call.

8.2 OFFLINE

- Through a mediator/translator.

Extract online & offline CH of BE