translator to convey their

Available hearing aids are

very expensive and require

proper maintenance and

Project Title: Real Time Communication SystemPowered by Al for Specially Abled

**Team ID: PNT2022TMID48284** 

1.CUSTOMER SEGMENT(S)

Deaf and mute people and anyone who wants to understand sign language can communicate with

others.

6.CUSTOMER CONSTRAINS

They need to find a

message.

RC

5. AVAILABLE SOLUTION **Available Solutions:** 

AS

Interpreters translate sign language to voice, hearing aids, text-to-speech converters.

Disadvantages: Interpreter dependent, expensive devices cannot be afforted by everyone, not userfriendly.

2.JOBS-TO-BE-DONE/PROBLEMS

Limitations that deaf and hard of hearing people often face when participating in social issues are prevailing problems.

J&P 9.PROBLEM ROOT CAUSE

timely replacement.

The difficulty faced by the deaf and mute people is that they cannot express their feelings to ordinary people because they do not know sign language.

**7.BEHAVIOR** 

Direct: They try to find alternative ways of writing their feelings or typing to communicate to common people.

Indirect: They usually try to avoid common people conveying their message and try to find an interpreter in case of emergency and avoid hanging out which will set them back all the way.

BE

3.TRIGGERS

Urgent situations, raising awareness of opportunities available, friends starting to use the app, feeling included or waiting to be understood.

**10.YOUR SOLUTION** 

EM

We are making use of a convolution neural network to create a model that is trained on different hand gestures.

An app is built which uses this model. This app enables deaf and dumb people to convey their information using signs which get converted to humanunderstandable language and speech is given as output.

**8.CHANNELS of BEHAVIOR** 

**Online: Creating more** awareness among people about available solution. Provision of special equipment to enhance educational services to improve them.

Offline: By encouraging everyone to participate in all social and educational activities with equality and to have all the same opportunities as ordinary people.

4.EMOTIONS:BEFORE/AFTER

anxious, hopeless, depressed, loneliness.

After: independent, self confident, able to express without the peer helps, chat with others very easily.

Before: Helpless, depressed,