Project Design Phase-I
Problem – Solution Fit

Date	19 September 2022
Team ID	PNT2022TMID10864
Project Name	Real-time communication system powered by AI for specially abled
Maximum Marks	2 Marks

Problem – Solution Fit:

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.

Project Title: Real-time communication system powered by ai for specially abled   **Project Design Phase-I - Solution Fit Template**   **Team ID: PNT2022TMID10864**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)   CS

Our customers are specially abled people who are struggling to communicate with normal people

6. CUSTOMER CONSTRAINTS   CC

The basic necessity is they should have a mobile phone, and they must be aware of the sign language and it is necessary to show proper signs so that the application can able to convert it to human language.

5. AVAILABLE SOLUTIONS   AS

The available solutions are there are various separate applications for both sign language and human language.

Explore AS, differentiate

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

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

The main objective is to help the specially abled people to communicate without any hassle, therefore the main job is to convert the sign language to human language and vice versa

9. PROBLEM ROOT CAUSE   RC

Nomal people are not aware of the sign languages, therefore it becomes hard for the specially abled people to communicate with common people, to break this wall we built this app.

7. BEHAVIOUR   BE

This application works when the user gives sign language as input, it processes it and converts it into human language and vice versa

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

Identify strong TR & EM

3. TRIGGERS   TR

For example : A customer needs to convey his/her message to other people but he knows only sign language but the normal people are not aware of it.At that time it will boost our users to use this app for better communication without any hassle.

4. EMOTIONS: BEFORE / AFTER   EM

The users would feel excited after using our application, because they also feel getting involved in the conversation by bringing their ideas to everyone around them.

10. YOUR SOLUTION   SL

Our solution is to convert the sign language to human language and vice versa in one application simultaneously by using the keras and tensorflow in the CNN and openCV for image processing.So that it is easy to make communications easier between these kinds of people.

8.CHANNELS of BEHAVIOUR   CH

8.1 ONLINE
By using this application online the result of the inputs are processed earlier by the application and also it saves the time. He/She can able to convert sign-language to any type of language.

8.2 OFFLINE
The features available in offline is that they can covert the sign-language to human language under a particular location world wide access is not available in this mode.

Identify strong TR & EM