

Project Design Phase

Problem – Solution Fit

Date	09 February 2026
Team ID	LTVIP2026TMIDS66199
Project Name	TransLingua: AI-Powered Multi-Language Translator
Maximum Marks	2 Marks

Problem – Solution Fit:

The **Problem–Solution Fit** for *Explore with AI* focuses on addressing the common challenges faced by travelers in planning personalized trips efficiently and without stress.

Purpose:

- To solve the problem of language barriers by providing an AI-powered automated translation solution.
- To improve user adoption by aligning with modern behavior, where users prefer quick, web-based, and intelligent digital tools for real-time communication.
- To clearly communicate the value of AI-driven, context-aware translation as a faster and more reliable alternative to manual or traditional translation methods.
- To reduce common user frustrations such as inaccurate translations, high translation costs, time-consuming manual efforts, and lack of multilingual accessibility.
- To understand user communication needs and enhance the experience by delivering accurate, real-time, and multi-language translation through an easy-to-use web interface.

Template:

TransLingua: AI-Powered Multi-Language Translator			
Understand User Needs for Real-Time, Accurate Text Translation			
Define GS & fit into CC	1. CUSTOMER SEGMENTS(S) CS <ul style="list-style-type: none"> International travelers Business professionals working globally Students & researchers collaborating internationally Content creators handling multilingual audiences 	2. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none"> Rely on slow or inaccurate translation methods Difficulty finding reliable real-time translators High costs of professional translation Juggle multiple translation apps 	3. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none"> Google Translate Bing Translator Translation devices Asking bilingual friends for help
Identify for GS & fit into CC	4. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none"> Translate text in real time Understand conversations in foreign languages Communicate easily in multiple languages Find accurate translations quickly 	5. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> Inconsistent translation quality Limited support for context-aware translation Switching between tools is inefficient Lack of all-in-one translation platform 	6. BEHAVIOUR BE <ul style="list-style-type: none"> Switch between translation apps Ask bilingual friends for help Translate phrase-by-phrase to make sense Double-check translations manually
Define GS & fit into CC	7. TRIGGERS TR <ul style="list-style-type: none"> Upcoming international trip Cross-border business opportunity Multilingual academic research 	8. EMOTIONS: BEFORE / AFTER EM <ul style="list-style-type: none"> Overwhelmed Frustrated Insecure Inefficient 	9. YOUR SOLUTION CH <ul style="list-style-type: none"> Web application (Streamlit) Select text and languages Click "Translate Now" Instantly receive translated text
Identify for GS & fit into CC	7. TRIGGERS TR <ul style="list-style-type: none"> Upcoming international trip Cross-border business opportunity Multilingual academic research 	8. YOUR SOLUTION SU <ul style="list-style-type: none"> Ai-powered web application for real-time text translation 	10. CHANNELS & BEHAVIOUR CH <ul style="list-style-type: none"> Web application (Streamlit) Select text and languages Click "Translate Now" Instantly receive translated text

References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>