

BUSINESS CASE		
Proposed Project	VisuSpeak - ASL-English bidirectional translation application	
Date Produced	October 18, 2023	
Background	<p>Many people with special needs, particularly those with vocal and hearing impairments, rely on American Sign Language (ASL) as their primary mode of communication. However, there is frequently a significant communication gap between ASL users and those who speak or understand English primarily. This gap can lead to misunderstandings, limited opportunities, and exclusion for ASL users in various areas, such as education, employment, healthcare, and social interactions.</p> <p>Our proposed project will enhance accessibility for individuals with vocal and hearing impairments by providing a reliable tool for communicating with English-speaking individuals, thereby reducing communication barriers and fostering inclusion. This application can facilitate communication between ASL Users and English speakers in educational settings.</p>	
Business Need/ Opportunity	<p>Our team aims to create an innovative ASL-English bidirectional translation application for the capstone project. This application will aim to bridge the communication gap between ASL users and English speakers. This application will enable seamless real-time translation from ASL to English, allowing people with special accessibility needs to communicate effectively with others and gain access to essential services and information.</p>	
Options	<p>Option 1: Build a web application which will have the capability to translate ASL to English and voice and vice versa in real-time.</p> <p>Option 2: Build a mobile application to compliment the web application.</p> <p>Option 3: Do nothing</p>	
Cost-Benefit Analysis		
Option No.	Benefit	Drawback
Option 1: Build a web application which will have the capability to translate ASL to English and voice and vice versa in real-time	<div><input type="checkbox"/> Will facilitate seamless communication between ASL users and English speaking users.</div>	<div><input type="checkbox"/> Will require a team of software developers of 3 as well as additional resources such as datasets to train the required model, cloud/server resources and any other resources that may be required.</div>

Option 2: Build a mobile application to compliment the web application	<input type="checkbox"/> Users will benefit as they will be able to easily utilize the application from a hand-held device	<input type="checkbox"/> Will require more resources and time to develop
Option 3: Do nothing	<input type="checkbox"/> Free <input type="checkbox"/> No commitment	<input type="checkbox"/> No solution for will be developed to help ASL users to communicate freely and gain equal opportunities and services.
<b>Recommendation</b>		
Option 1 is recommended for this project.		