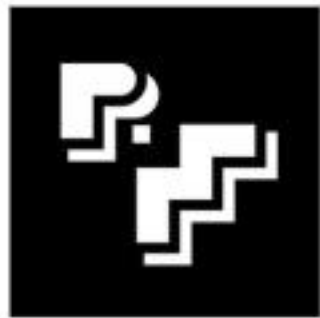
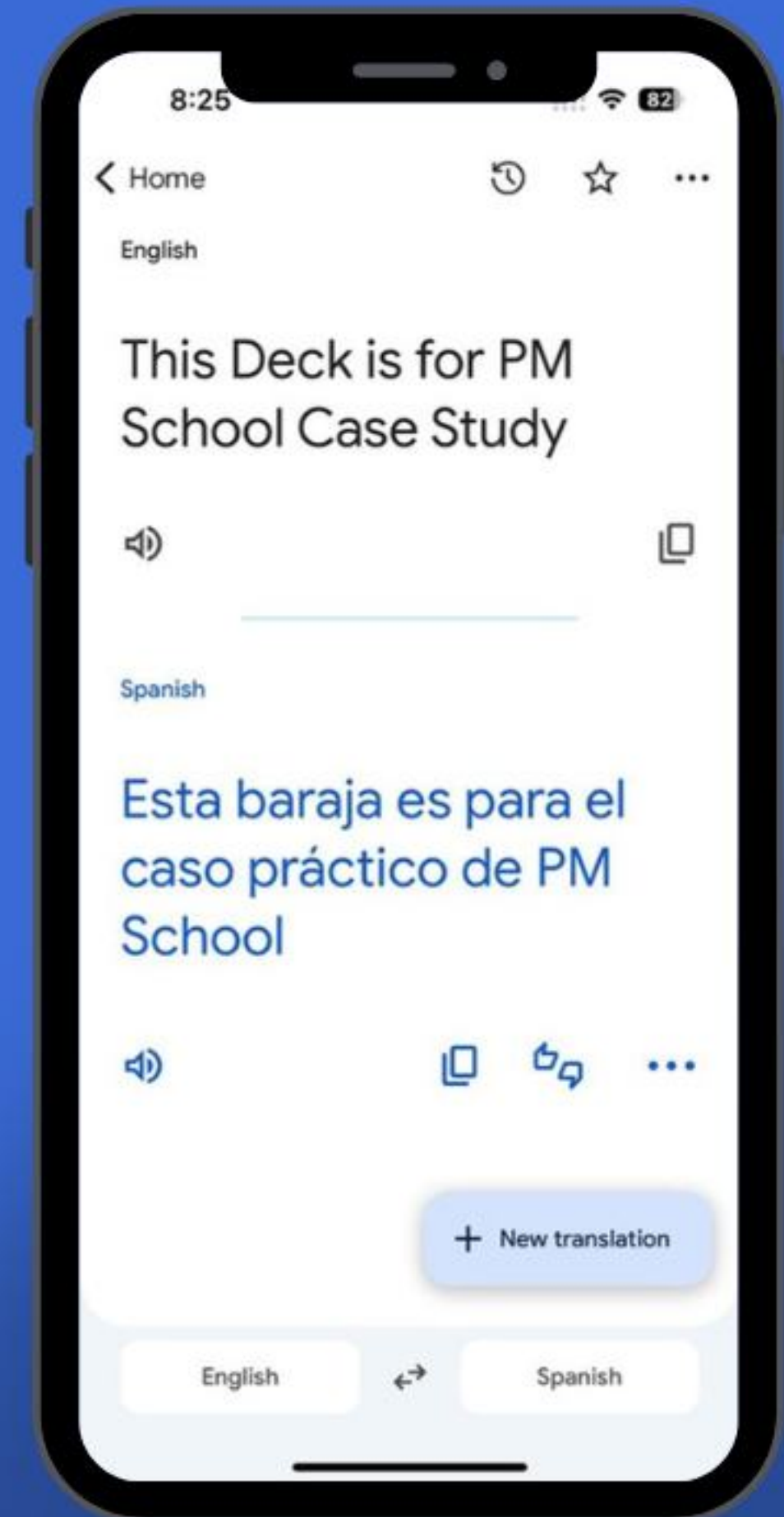


# Improving Google Translate for Tourists



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## ABOUT

Google Translator is a multilingual machine translation service launched by Google in **2006** to break language barriers worldwide and enable communication and understanding



**1 Billion**  
Install World Wide

**43.78 B** USD BILLION  
BY 2024



**200M**  
Monthly Active User



**243**  
Language Support



Uses **advanced neural machine translation technology** to provide fast and accurate translation

## Revenue Streams



## COMPETITORS



DeepL



Microsoft Translator



Yandex Translate



Amazon Translator

## OFFERINGS



### Text Translation:

It allows users to translate between any 2 languages by typing or writing on the screen.



### Image Translation

It allows users to take a picture of say, signboards, notice and translate it instantly by clicking the shutter button.



### Conversation

It allows users to talk in a regional language by translating it to the desired language of the end user. It can also auto-detect the language of the speaker, so one doesn't need to manually enter the language.



### Document Translation

It allows users to directly translate a document from an unknown language into the desired language. Users can upload the document as a PDF file, and it translates the whole document into the required language.







**Name:** David

**Age:** 35

**Occupation:** Businessman

### User Behaviour



Frequent business trips with extended stays in foreign countries.



Relies on Google Translate for quick daily translations but finds it repetitive.



Prefers learning local language basics for smoother communication.

### Pain Points



Relies on translation apps due to language barriers in professional and social settings.



Struggles to remember phrases and vocabulary due to limited time for language courses.



Seeks a quick, engaging way to learn essential language skills for better rapport.



**Name:** Emily

**Age:** 28

**Occupation:** Travel Blogger



Regularly visits new countries and explores diverse cultures for her blog.



Uses voice translation to communicate but struggles with accent recognition.



Values accuracy for reliable content and meaningful interactions.



Frustrated by incorrect translations due to poor accent recognition.



Requires accurate translations for interviews and conversations with locals.



Seeks a tool that adapts to accents for better communication and content.



**Name:** Nitish

**Age:** 32

**Occupation:** Tour Guide



Guides tourists in a bustling city with diverse linguistic backgrounds.



Often encounters fast-moving text in stations and on billboards.



Relies on apps for quick, accurate information for tourists.



Struggles to capture and translate rapidly changing text, missing information.



Needs seamless real-time translation of dynamic text for better tours.



Desires a tool for motion-based translation to match his fast-paced work.



## Feature 1: Gamified Language Learning Model

### Objective

Enable users to learn essential language skills for effective communication during extended stays in foreign countries.

### Description

Interactive two-week gamified module targeting basic phrases and vocabulary in a target language. The feature would be enabling users to learn a language in a more engaging and effective way, against the backdrop of their need to communicate with locals.

### How it Works



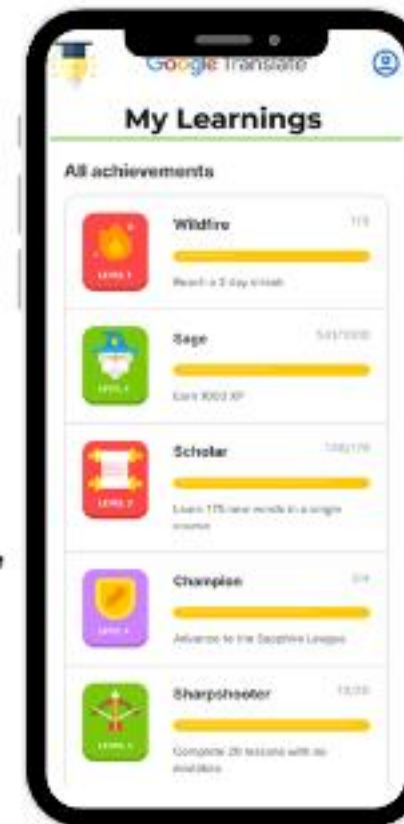
User click on the "Learn Button"



Users pick a language to learn.



Offers daily lessons, quizzes, and challenges on practical skills.



Display leaderboards, summary, streaks and achievements to retain users.



### Impact

1

Lessens reliance on translation apps by teaching basic language skills.

2

Boosts confidence in interacting with locals, enhancing travel experiences.

3

Promotes long-term retention through engaging, interactive learning.



## Feature 2: Accent Recognition for Improved Translation Accuracy

### Objective

Enhance the accuracy of voice translations by recognizing and adapting to different accents.

### Description

It improves speech recognition in Google Translate by learning and adapting to different accents, ensuring spoken words are translated correctly into the right phrases.

### How it Works

User opens the conversation tab in Google Translate



Utilizes advanced machine learning algorithms to analyze the accent of the speaker.



Adjusts the translation model dynamically to better match the speaker's accent and pronunciation.



Provides users with feedback on pronunciation and suggests alternative phrasing for clearer communication.

### Impact

**1**

Improves translation accuracy in diverse, multilingual settings.

**2**

Lessens frustration from misinterpretations due to accent variations.

**3**

Strengthens Google Translate as a reliable communication tool.



### Feature 3: Motion Translation

#### Objective

Enable real-time text translation in motion, providing users instant comprehension of motion content.

#### Description

Motion Translation allows users to capture and translate moving text, such as scrolling news headlines or moving signage, by recording video in the direction of motion.

#### How it Works

User opens Google Translate app, on home screen user clicks on "Video" button



User records the video which he wants to translate by holding the camera button



App records the video and uses OCR combined with translation algorithm to interpret the text



Translated video is displayed on the screen, and the user can click on the play button to understand the content.

#### Impact

1

Enables access to information in dynamic, fast-paced settings like public transport.















2

Expands Google Translate beyond static text to meet diverse user needs.

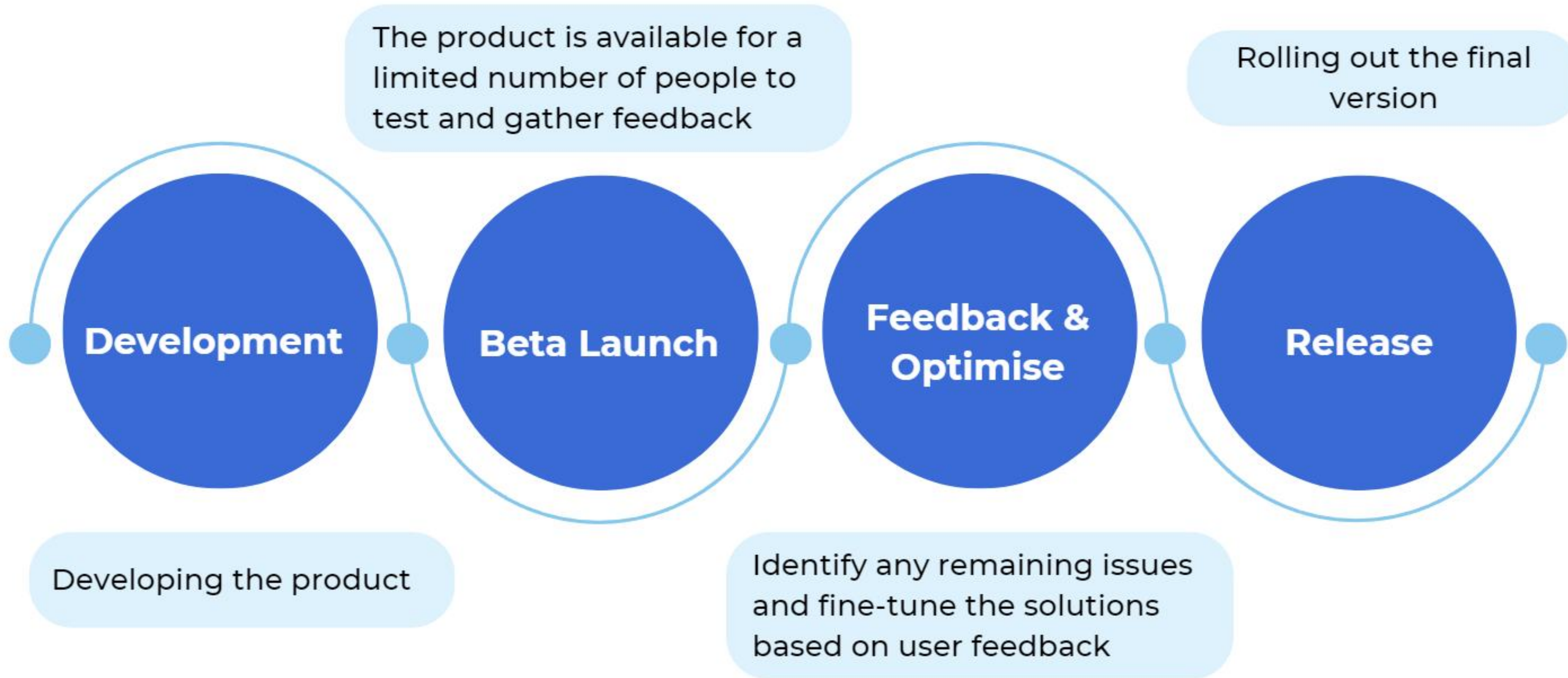
3

Enhances navigation and information-gathering for tourists and travelers.



RICE PRIORITISATION	R(each) 1-10: Low - High	I(mpact) 1: 5:Low - High	C(onfidence) 0-100%: Low - High	E(ffort) 1-5: Low - High	RICE Score
Gamified Language Learning Model	 7	 4	 70%	 3	 $7*4*7/3$ 65.33
Accent Recognition for Improved Accuracy	 8	 4.5	 60%	 4	 $8*4.5*6/4$ 54
Motion Translation	 6	 3.5	 70%	 3.5	 $6*3.5*7/3.5$ 42









## Gamified Language Learning Model

**Primary Metric:**  
User Engagement & Retention Rate

E.g.

1. Percentage of users completing the two-week module.
2. Average session duration (time spent on learning activities).

**Supporting Metrics:**

- Daily/Weekly Active Users (DAU/WAU):
- Learning Progress
- Churn Rate



## Accent Recognition for Improved Translation Accuracy

**Primary Metric:**  
Translation Accuracy Improvement

E.g.

1. Reduction in error rate for voice translations across different accents.

**Supporting Metrics:**

- Recognition Error Rate
- User Feedback Rating
- Time to Translate
- Accent Adaptation Success Rate



## Motion Translation

**Primary Metric:**  
Real-Time Translation Efficiency  
E.g.

1. Speed and accuracy of translating moving text compared to stationary text.

**Supporting Metrics:**

- Translation Latency:
- Accuracy of Moving Text Translations
- Feature Usage Frequency
- User Satisfaction Scores





**Thank  
You**

