



# Xiberlinc Inc.

Japan-Taiwan AI Mental Health Innovation Initiative:  
POC for an AI Counselor Solution for the Japanese Mental Health Market

## Purpose of the Project

### Project overview

This project conducts a proof of concept (POC) and validation of an **AI-powered digital mental health solution** in Japan. A smartphone-based “AI counselor” app delivers CBT-based, evidence-informed psychological support and encourages sustained user engagement.

### Challenges and needs

Demand for mental health support is increasing, while there is a shortage of qualified professionals. In Japan, social and cultural factors — such as stigma and hesitation toward in-person counseling — often delay care. Therefore, it is essential to validate the effectiveness of the AI counselor app through culturally appropriate localization.

### Expected results and methodology

Through the development of a Japanese-language UI, integration of an emergency hotline for crisis situations, and longitudinal multimodal data collection (questionnaires, voice, and EEG), the project aims to validate whether speech-based emotion metrics and EEG can quantitatively assess psychological states and detect early risk signals over time.

### Uniqueness and differentiation

- (1) AI trained on expertise from Japanese psychologists and psychiatrists;
- (2) estimating mental health severity using speech-based acoustic features during dialogue;
- (3) safety-by-design enabling escalation to human support when necessary.

## Details of Demonstration

### Xiberlinc (Tokyo)

- 1. Created and translated AI training data
- 2. Collected data
- 3. Analyzed and evaluated psychological and EEG data



### Bamboo Technology (Taiwan)

- 1. Shared system specifications
- 2. Developed the Japanese version of the app
- 3. Evaluated voice data

### Joint Activities:

Confirmed specifications, developed improvement proposals for the Japanese market, and explored joint development.

(Aug 2025 – Jan 2026)

Aug: Experiment design alignment; ethics preparation; recruitment plan; company meetings

Sep: Emergency hotline selection; CBT translation sharing; Specification review

Oct: Japanese UI revision; Android/iOS functionality testing; manual development

Nov: Participant recruitment; measurement experiment initiation

Dec: Data collection for 48 participants; data consistency checks; data analysis

Jan: Results consolidation; MOU discussions



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## Project Outcome

### Application

CBT-related materials required for AI training, including domestic case studies and dialogue examples, were compiled and translated in collaboration with Japanese clinical psychologists and psychiatrists. An AI model trained on expert knowledge was developed and implemented. The Japanese AI counselor app was refined through minor adjustments to language and UI, confirmation of translation consistency, and functionality testing on both Android and iOS. For safety, emergency hotlines available in Japan were evaluated and a suitable service was selected for user support.

### Pilot Study

Following research ethics approval, a recruitment framework was established and 48 participants were enrolled. Participants used the app for 8 weeks. EEG and questionnaire data were collected before and after use, with responses monitored every two weeks.

### Analysis Results

Psychological questionnaires results showed significant improvements. Data integrity checks were conducted on submitted datasets, including voice and questionnaire data.

Voice analysis demonstrated the feasibility of quantitatively assessing psychological states and detecting early risk signals.

EEG markers associated with psychological changes were identified, suggesting potential causal relationships with mental health states; further analysis is ongoing.

## Challenges and Solutions

### Challenges:

Preparing Japanese CBT materials for AI training took longer than expected, and additional work for Japanese text and UI adjustments delayed the completion of the final version of the app. As a result, participant recruitment and the start of the experiment were delayed, and analysis and reporting continued into the final project month, postponing further applied analyses.

### Solutions:

Following successful validation, we will continue specification review and refinement with Bamboo Technology, prioritize translation consistency and functional validation to ensure quality, and proceed with additional experiments and integrated analyses.

## Future Plans

Based on the insights obtained, we will finalize product specifications for the Japanese market and continue additional experiments and integrated analyses.

**Establishing a Japan Entity:** In line with commercialization progress, we aim to establish a joint entity in Japan to support sales, operations, and research collaboration.

**Business model:** We will focus on B2B deployment (employee support, wellbeing and employee benefits) as well as deployment in the public sector, while gradually introducing paid plans to drive monetization.

**MOU/partnership:** By continuing joint development and strategic collaboration with our Taiwan partner, we will leverage the operating model established in Japan and explore expansion into Taiwan and other regional markets.