

Asia's Leading regional Bank Enhances Customer Service with Tetherfi's Edge AI Solution

Company

Asia's Leading regional Bank, renowned for its innovation and customer-first approach, is a top financial institution committed to redefining the banking experience through digital transformation and AI-driven service excellence.

Location

Headquartered in Singapore, operating for Asia

Tetherfi Solution Deployed

Real-Time Speech-to-Text (STT) Transcription Engine integrated with GenAI-Powered Customer Service Ecosystem using Tetherfi EDGE AI models

CHALLENGES

As part of their GenAI innovation roadmap, the bank launched an initiative aimed at elevating customer service experiences by empowering their Contact center agents with **real time STT transcription, emotion detection, intelligent interaction assistance, and post-call summarization**. A critical component for success was the need for accurate, low-latency transcription of live conversations between agents and customers.

The client's environment required a solution that could perform efficiently within existing infrastructure constraints. With limited GPU resources, the focus shifted to deploying a transcription engine that was **fully optimized for CPU performance on the Edge**, while maintaining speed and accuracy. The project also involved capturing audio streams from the existing voice gateways and ensuring smooth integration with downstream AI components for real-time processing. This challenge highlighted the need for a flexible, resource-conscious approach that delivered consistent and reliable results

BENEFITS

 Delivered real-time, high-accuracy transcription without reliance on costly GPU infrastructure.

 Enabled AI-powered emotion detection and contextual agent assistance during live interactions.

SOLUTIONS

Tetherfi developed **Edge AI**, our lightweight, real-time audio capture and transcription solution specifically designed for CPU environments. Key elements included:

- **Tetherfi Audio Capture Layer** integrated seamlessly with the bank's Avaya voice infrastructure, capturing audio directly from the gateway, transcoding it, and streaming separate customer and agent audio channels to the **Neural Engine**.
- **Neural Engine** powered by Tetherfi's Speech Recognition models for efficient, chunked inference processing, delivering live transcription with optimized latency and exceptional accuracy & summarizing the entire conversation to help their agents reduce their After Call Work.
- **Containerized deployment** for seamless integration into the bank's existing GenAI ecosystem, ensuring easy scalability and horizontal expansion to other business units. This intelligent design allowed real-time transcription during calls, ensuring that downstream AI applications, such as emotion analysis and agent assist modules that received timely, structured data inputs.

Through Tetherfi's solution, Asia's Leading Regional Bank accelerated its GenAI transformation, overcoming critical speech-to-text input challenges. The project delivered measurable benefits, including significant reductions in infrastructure costs, enhanced agent productivity, and improvements in customer experience with timely, intelligent support. Moreover, the deployed transcription service established a scalable, reusable framework that can now power additional AI-driven initiatives across the organization.