



Comprehensive Artificial Intelligence Platform to Amplify Business Productivity

FPT Smart Cloud









support@fpt.ai

Artificial Intelligence Platform

Amplify business productivity



CONTENTS 02

About FPT.AI

03
FPT.AI Conversation

FPT.AI Virtual Agent for Call Center

FPT.AI Reader

15
FPT.AI Speech

19 FPT.AI eKYC

Case study
Virtual Assistant
"Sau Tai Chinh"

22

Case study Vietnam's First Virtual Agent for Call Center

23
Testimonials

25
Partners

26
Milestones

About FPT.AI

Leveraging state-of-the-art Artificial Intelligence (AI) innovations and cutting-edge technologies, the comprehensive Artificial Intelligence Platform FPT.AI offers a variety of business process automation solutions to optimal performance in automation processes and human - machine operations, allowing businesses to:

1. Enhance customer experience

Personalize customer experience with immediate and uninterrupted connection capability, 24/7/365.

2. Disrupt business processes

Automate business processes, reduce repetitive tasks and operational expenses.

3. Constitute future values

Amplify flexibility and adaptability of organizations, diversify competitive advantages, assist enterprises to break through and lead the industry.





A conversational platform that provides smart chatbot creation, automated conversations with customers, and seamless omnichannel integration.

Equipped with the most advanced Vietnamese Language Natural Language Processing technology and Dialogue Management system, FPT.AI chatbot is a smart customer service solution for businesses. The platform enables automated conversations with customers, helps improve business performance, allows agents to focus on complexed tasks with higher intricacy.



Natural conversation in multiple languages

Accurately understand users' Intents with a variety of expressions in 03 languages: Vietnamese, English, Japanese, and respond with contextually relevant answers. Throughout operation, chatbots can undergo self-learning and grow more intelligent under human supervision.



User interface

Administrators can easily follow, update, and customize scenarios to satisfy actual business demands.



Omnichannel integration

Synchronous management of internal enterprise portals, applications, or common conversation platforms like webchat and SNS (Facebook, FB@W, Zalo, Viber).



Compatibility and Scalability

Easy integration with business systems through APIs, flexible deployment whether on-cloud or on-premise.

Technology

Being developed on the state-of-the-art Natural Language Processing technology in the market, FPT.AI Conversation is capable to identify correctly Intents and Entities in users' expressions, thus provides appropriate responses in different scenarios.

FPT.AI Conversation platform allows building 03 levels of chatbots, especially Natural Language Processing (NLP) and Dialog Management chatbot that can self-learn and become smarter over time under agent supervision, meeting even the strictest business requirements.

NLP + Dialogue Management

Comprehensive chatbot for accurate understanding of customers' Intents and conversational context memorization.

NLP bot

Natural language conversations without context memorization.

Clicking bot

Easy communication via button clicking.

*03 levels of chatbots

Applications

- Smart Q&A assistant, 24/7
- Product and service consultation, recommendation, searching, and quotation per customer demand
- Online transaction and payment
- Ordering, appointment reservation, room booking, ticket purchasing, etc.
- Effective customer attraction when integrated with marketing campaigns
- Internal enterprise assistant

Outstanding performance







Requests successfully processed



Sale revenue earned via chatbot



Customer satisfaction score





FPT.AI Virtual Agent for Call Center



A Virtual Agent building platform for two-way communication with customers, integrated over corporate call centers.

FPT.AI Virtual Agent for Call Center is a Virtual Agent building platform that allows two-way communication with customers, integrated over corporate call centers. It enables automated conversations including inbound calling, outbound calling, and smart call steering (Smart IVR), freeing call agents for more intricate tasks (consultation and sales), improving productivity and reducing business expenses.

The application of Voice Recognition & Synthesis technologies, along with acoustic models optimized for call center conversations, empowers FPT.AI Virtual Agent to automate two-way communication with up to 92% accuracy.



Smart automation

Eliminate long waits with 24/7 operation



Natural conversation

Accurately identify customers' intents and respond with relevant answers in natural tones



Cost optimization

Automate repetitive tasks, lessen customer care expenses



Instant scalability

Fluidly scale call capacity, especially during peak hours



Quick integration

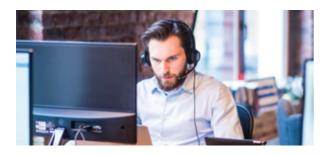
Integrate seamlessly with existing corporate call centers or other call center services



Insight Analytics

Provide detailed analysis of call content, deliver statistics and other performance indicators in real time

Technology



Voice Recognition

Powered by leading Deep Learning algorithms, FPT.AI Speech-to-Text service offers recognition of linguistic variants based on regional accents, ages, and the use of non-native Vietnamese words with up to 95% accuracy.



Voice Synthesis

FPT.AI Text-to-Speech (TTS) service enables errorless text to speech conversion with a wide range of natural-sounding voices, regional accents and intonations, along with correct pronunciations of names and numbers.



Natural Language Processing

Deployed base on Natural Language Processing (NLP) model optimized for Vietnamese Language communication, the service can understand user Intents accurately and answer appropriately to different scenarios.



Acoustic and language models

Customized for effective call center activities, helps recognize typical dialog features and frequently asked questions in customer service conversations.

Outstanding performance

92%

Call completion rate

50%

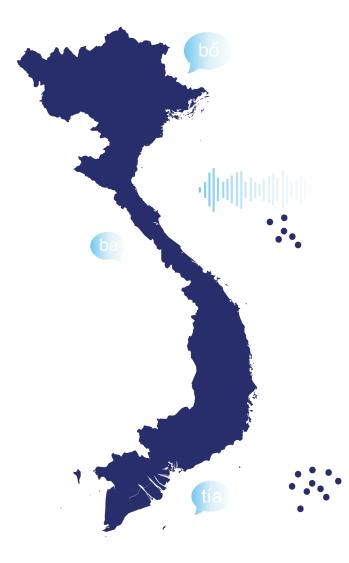
Operational expenses saved

40%

Boost in call agent's productivity

2,000,000

Calls processed per month



10



FPT.AI Reader

Information Identification & Extraction from Images

Acceleration & Accuracy

A solution to error-free information identification & extraction from images, and accelerated document digitalization

FPT.AI Reader enables exact identification and content extraction from images of personal documents (i.e. National ID card, Passport, Driver's License, Marriage Certificate, Family Register, etc.), VAT bills (i.e. electric, water, telecommunication, retail), or any other text formats.

State-of-the-art Recognition

Extract contents from diverse text formats with accuracy up to 98%

High-speed extraction

Shorten information identification and extraction duration to under 1 second

User Interface

Create, update, and customize text templates for multiple use cases effortlessly on a drag-and-drop interface with low-code or no-code capability

Scaling and Integration

Minimize deployment time using APIs, achieve fluid on-demand expansion

11 12

Technology

Deployed on the base of Optical Character Recognition (OCR) and Artificial Intelligence technologies, FPT.AI Reader allows computers to receive and pre-process digital images from various text templates, recognize entities and extract information in accordance with desired output.

98%

Identification accuracy

08

Nations deployed

80%

Boost in productivity

10%

Data input errors reduced





FPT.AI Speech

Vietnamese Language Text & Speech Conversion

Automated voice recognition, Speech-to-Text, and Text-to-Speech.

Voice Recognition:

Powered by cutting-edge Deep Learning algorithms, FPT.AI Speech-to-Text (STT) technology offers recognition of linguistic variants based on regional accents, ages, and the use of non-native Vietnamese words with up to 95% accuracy.

Voice Synthesis:

FPT.AI Text-to-Speech (TTS) service delivers faithful conversion results with natural-sounding voices, varied regional accents, correct pronunciation of names and numbers, natural pauses, fluency when reading long sentences, and plenty voice options.







Accurate recognition

Recognize voices based on ages, regional accents, and the use of non-native Vietnamese words.

.....



Diverse voice options

Synthesize a wide range of voices from different genders and regions (North, Middle, South) Provide automatic pauses combined with expression in different accents.



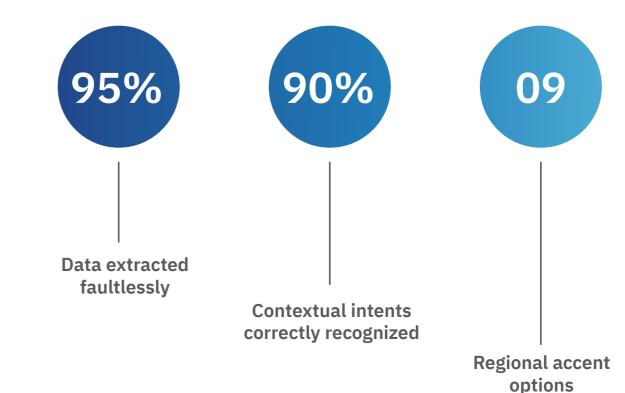
Effortless connection

Convert directly on users' web display or via connection with FPT.AI's APIs.



Inclusive support

Accept both direct recording and pre-recorded audio input.



Applications

Audio transcription

Automatic Customer Support call center

Automatic voice-over for movies, news, and audiobooks

Device voice control



A perfect eKYC solution for businesses to better understand customers, avoid operational risks, and generate novel customer experiences. The utilization of advanced Deep Learning algorithms empowers comparisons between ID photos and other images for identification, resulting in instant customer identification and verification.



Flexible deployment

Flexible model adaptable for both on-cloud and on-premise deployment



High-speed verification

Real-time eKYC on the base of existing corporate databases

.....



Multiple applications

Accurate customer portrayal, cross-sale facilitation, service enhancement



Amplified experience

Significant improvement of customer satisfaction and retainment

Technology

Optical Character Recognition

Information extracted from personal documents with up to 98% accuracy

Liveness Detection

Differentiation between real live people and facial pictures or videos

Face Identification

Comparison between ID photos and other portrait images

Fraud Detection

Detection of fraudulent personal documents and face spoofing (using 3D masks, deepfake, etc.)

Applications

Assistance for swift eKYC processes

Integration with digital banking/finance solutions



Project Smart Virtual Assistant "Sau Tai Chinh"

Expand target audience with smart chatbot

A virtual assistant that can resolve inquiries regarding:

- + Cash loans, interest rates, loan limits.
- + Online loan application.
- + Loan processes, payment procedures, loan reimbursement.

Integrated on web interface as well as the social network site Facebook, "Sau Tai Chinh" chatbot enables the accurate understanding of users' intents and immediate resolution to hundreds of simultaneous customer requests, 24/7 at your convenience.

The utilization of this smart chatbot is a stepping stone in SHB's initial effort to become a finance corporation with innovative and unique experiences, at the same time expand their customer

After 03 months of deployment:

60% customers received loan consultant after working hours

96% customers enjoyed thorough experiences from initial queries to loan application

6,000 customers serviced **24/7**

Vietnam's First Virtual Agent for Call Center Project



Automated welcome calls and pre-collection calls



Welcome call and Pre-collection call for over 8.54 million customers across over 63 cities and provinces.



Removal of repetitive tasks in call agent procedures and enhancement of productivity in Customer Support centers.



Elevated efficiency in human-machine operations.

After 03 months of deployment:

2,000,000 calls performed every month, at maximum duration of 2 minutes

Call center capacity equivalent to 500 employees

40% boost in call center efficiency

21



Technological application for customer experience amplification is among Home Credit's digital transformation strategies. And our Virtual Agent for Call Center project, partnered with FPT, is part of our strategic roadmap. The implementation of smart call center allows us to simultaneously approach and assist large quantities of customers, at the same time refine service quality and improve customer experience. Home Credit and FPT had found common grounds along the collaboration, and together birthed the first Virtual Agent for Call Center in Vietnam. This marks an important accomplishment for Home Credit in particular and for the whole consumer finance sector in general.



Mr. Branislav Vargic Chief Operations Officer, Home Credit Vietnam



Partners













































Milestones



2017

Launched in 2017



200,000,000

Annual service requests



30,000

Annual developers users



11,000,000

End users are beneficial from FPT.AI services



70+

Trusted by leading domestic and international enterprises