



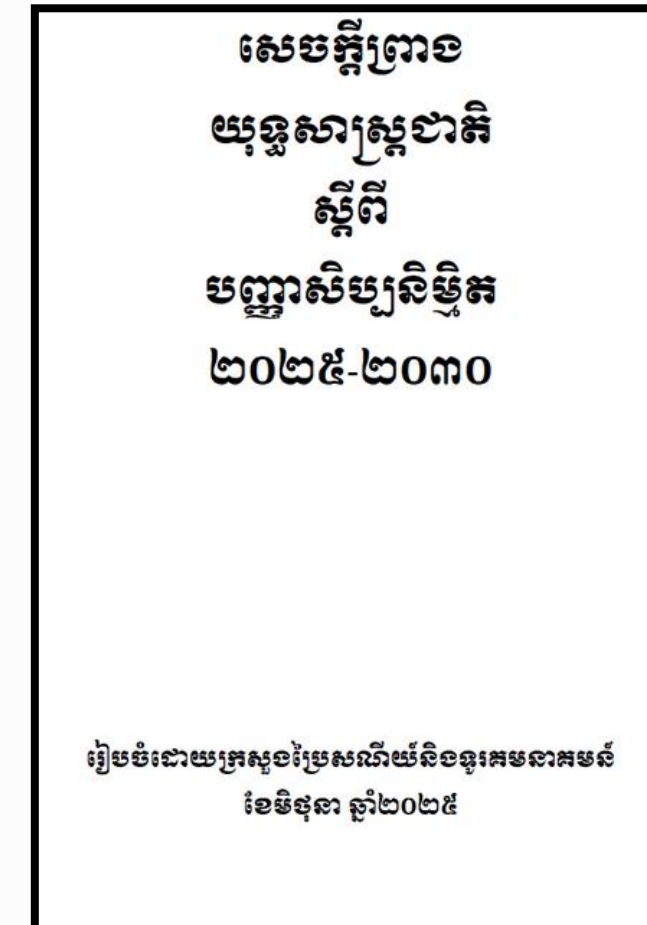
Khmer Intelligent Document AI Agent (KIDAI-A)

*Advancing Khmer-Native AI Solutions
By Khmer For Khmer*

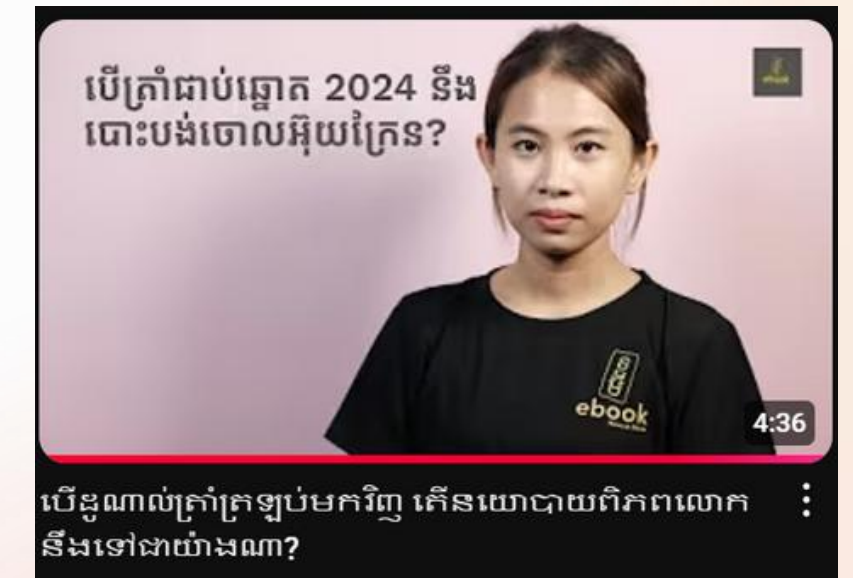
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Mr. CHENDA Sovisal

Problems

- **Documents (e.g., text, speech, image):**
 - a means of communication & knowledge acquisition
 - an integral part of our working and personal lives
- **Available 'Document AI' Systems:**
 - work well in English
 - underperform in Khmer (low-resource language)
- ***Can we close this GAP?***



PDF Document



Speech Document

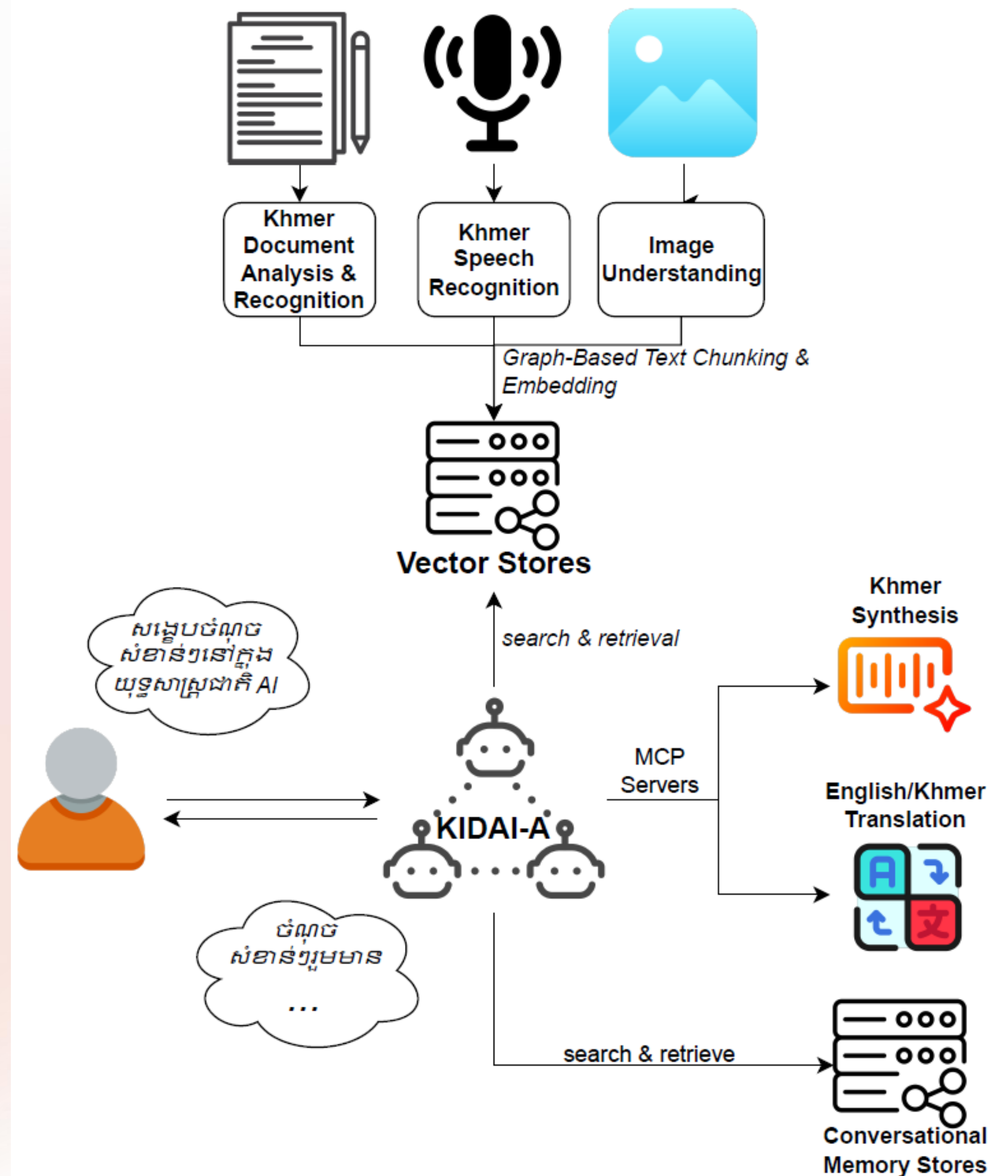


Image Document

KIDAI-A

Khmer Intelligent Document AI Agent

- **Multimodal Understanding:**
 - Processes English/Khmer text, speech, and images for document, voice, and visual comprehension.
- **Knowledge Embedding & Retrieval:**
 - Converts information into vector representations for efficient search and reasoning.
- **Intelligent Response Generation:**
 - Delivers Khmer/English answers through synthesis, translation, and conversational agents.



Our Strengths

Building on solid and strong Khmer-Native AI models by Khmer and for Khmer

Khmer Document Analysis & Recognition



- In-house document layout analysis model → locating text regions
- In-house Khmer/English text recognition model → recognizing text regions

Khmer Speech Recognition & Synthesis



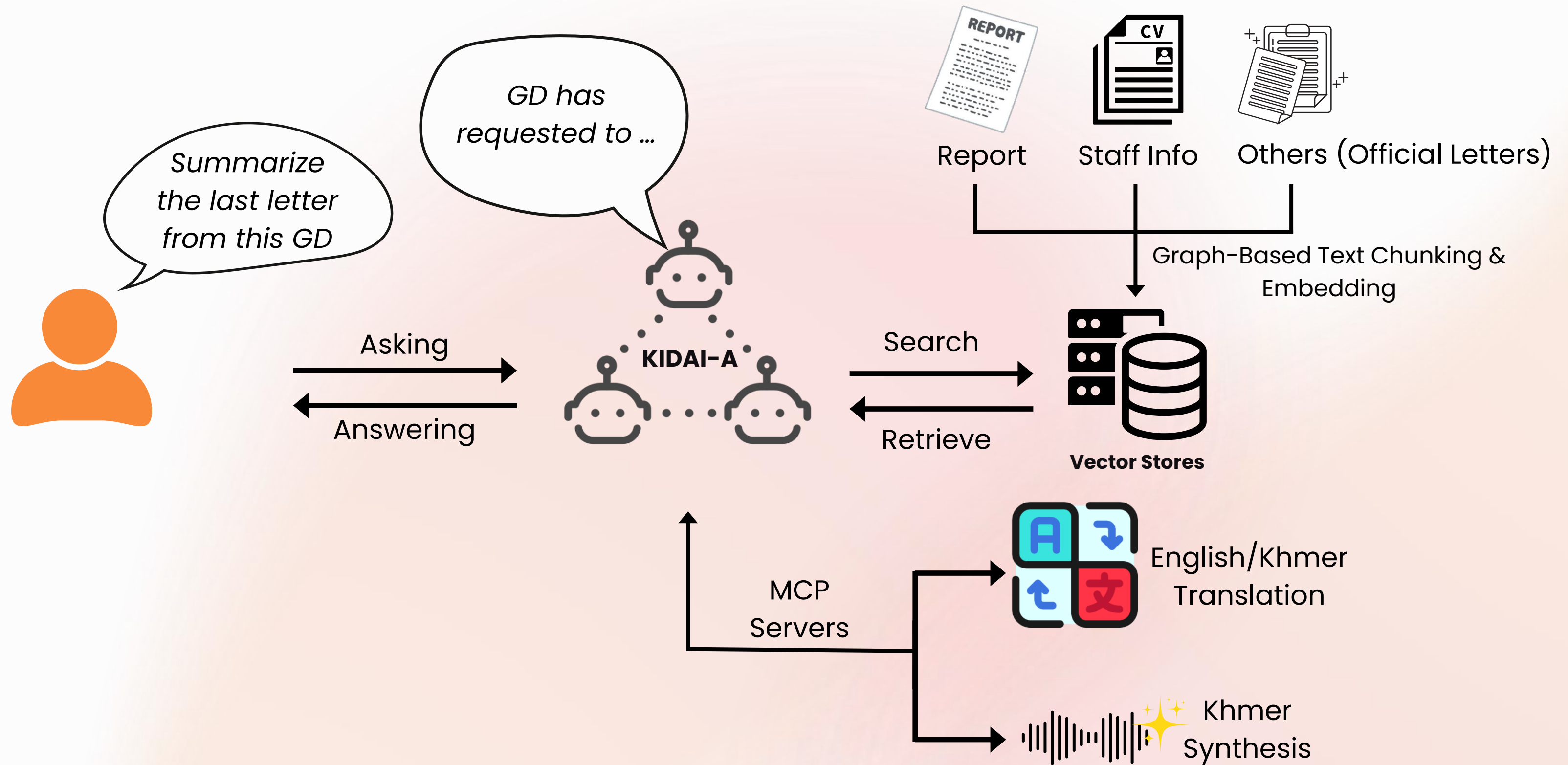
- In-house Khmer speech recognition model (trained on 500h data) → transcribing Khmer audio to text accurately.
- In-house Khmer speech synthesis model → synthesizing Khmer audio reliably.

Khmer/English Machine Translation

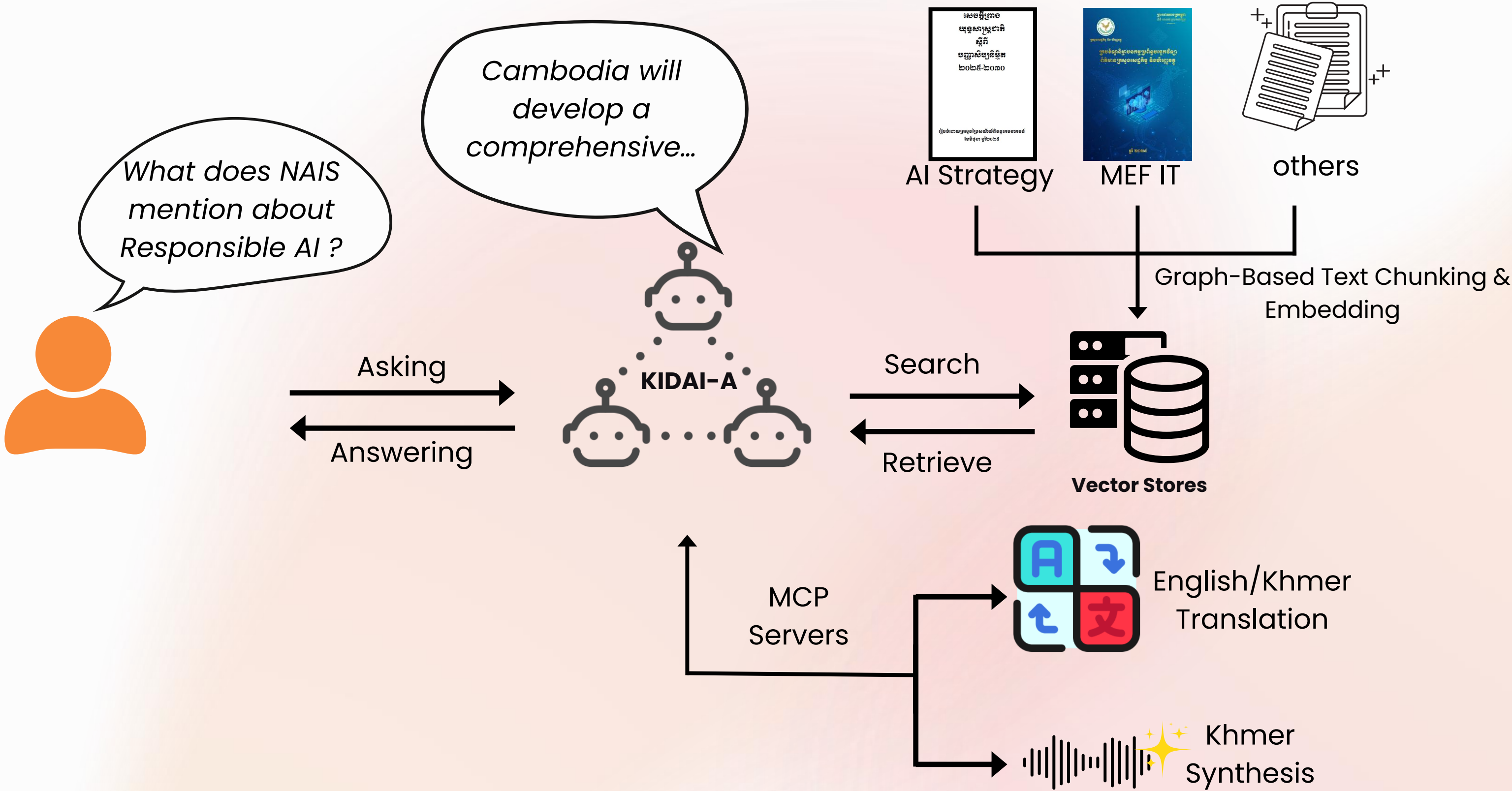


- In-house Khmer/English machine translation model → allowing translating to/from Khmer and English.
- Supporting other translations such as Vietnamese, Laotian, and Thai.

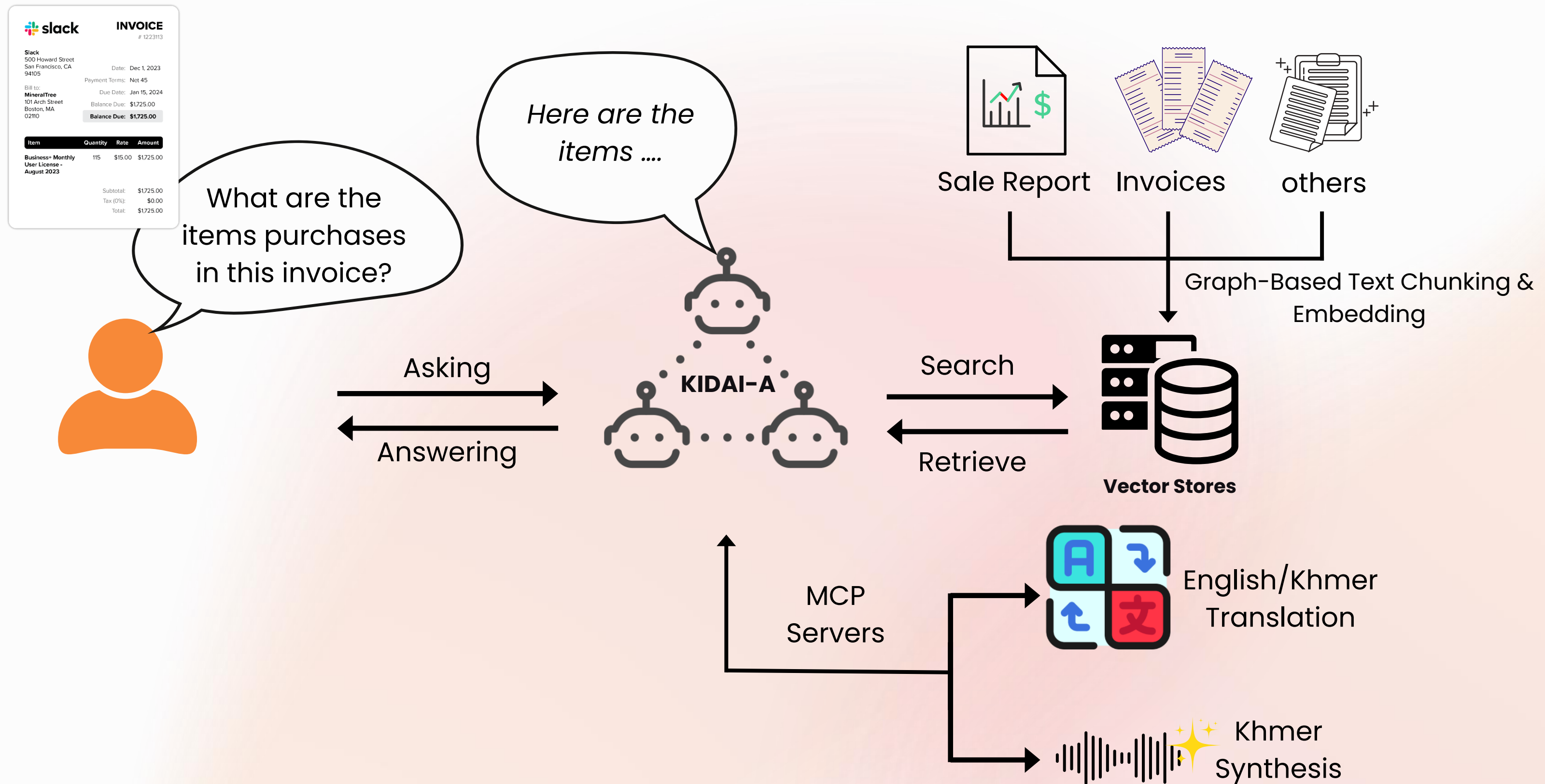
Use Case 1: KIDAI-A as an Admin Assistant



Use Case 2: KIDAI-A as a Policy Assistant

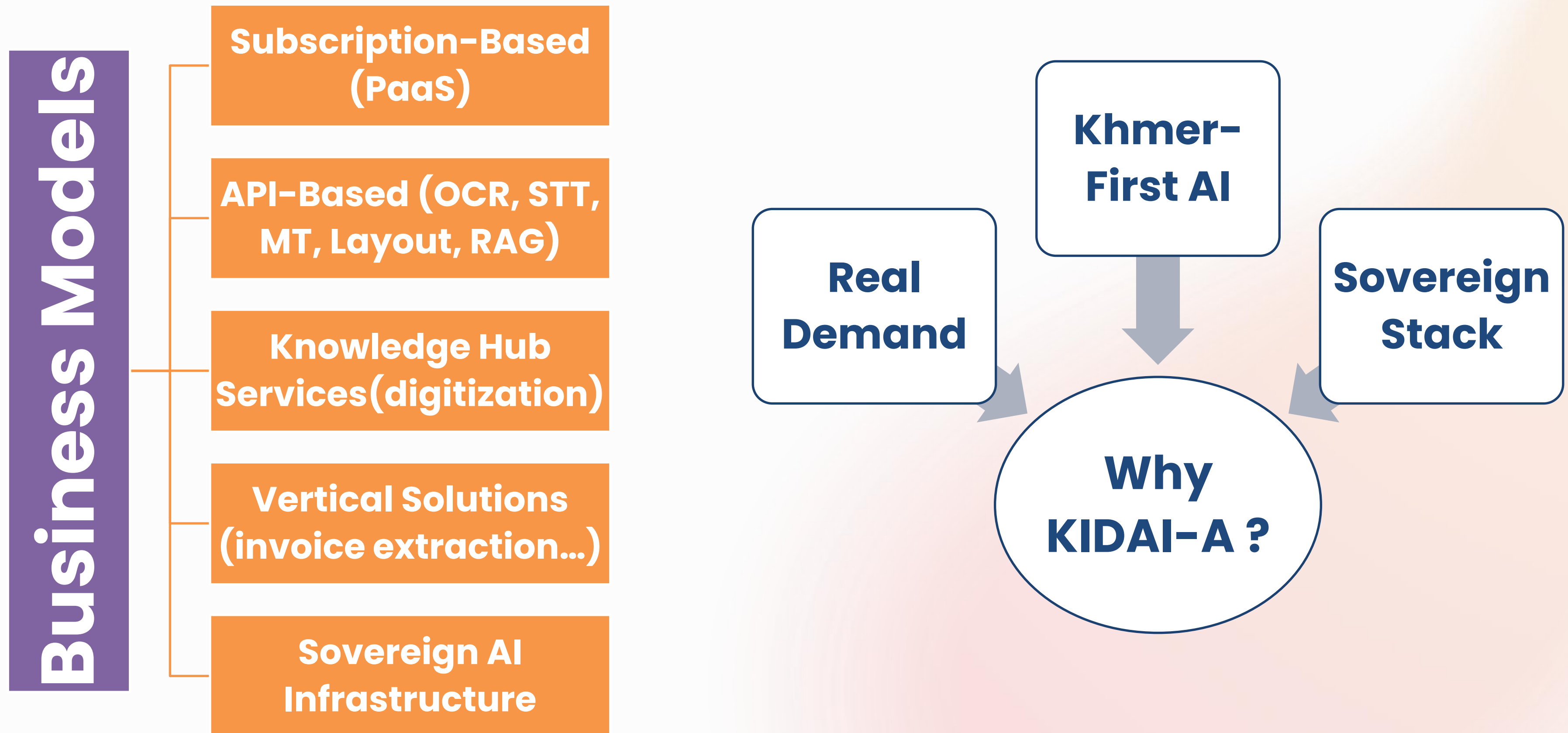


Use Case 3: KIDAI-A as a Data Entry



Business Models & Why KIDAI-A

Core Principle: "Sovereign AI"



Target Users & Customers



**Government
Agencies**



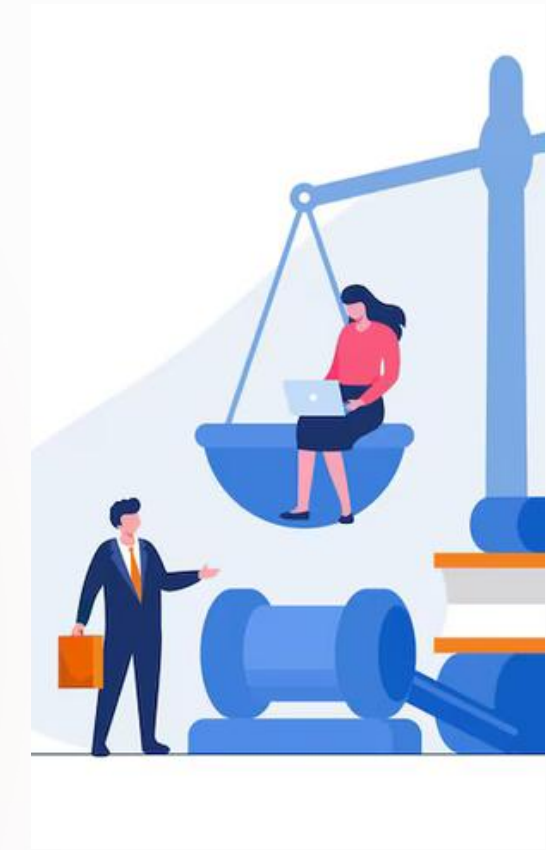
**Education &
Research Institutes**



**Economic &
Finance Sector**



**Enterprises &
SMEs**



**Legal & Professional
Services**

Let's Build Together

KIDAI-A is not just a product; it is a movement to advance Khmer-Native AI Solutions.

If we don't build our 'Sovereign Khmer AI', then who would ?



Running Memory Management

Memory Status

Memory is empty

Check Memory

Clear Memory

Vector Store Management

Vector Store Status

Status: ☒ Ready with 406 documents

Check Vector Store

Clear Vector Store

Available Document Sources

****Unique Document Sources (16 documents):******** AUDIO (1):****

- Speech of His Excellency Dr. Aun Pornmoniroth on the Official Launch of the Business Registration.mp3

**** PDF (15):****

- DPM-Speech-Launch-Ceremony-Digital-Social-Protection-Platform.pdf
- DPM-s-Speech-Launching-Key-Reforms-Vision-8-July-2025.pdf
- DPM_Intervention_PFM RP_Workshop_2024.pdf
- DPM_Speech-Annual-Conference-Securies-2025-16

Type your message here... (e.g., 'Translate this to English', 'Generate an image of...', 'Convert to speech')

Voice Input

Record

Microphone Arra...

Send

Upload Files (Images, PDFs, Audio, Documents, Data files, etc.)

Drop File Here
- or -
Click to Upload

Compute Resources

- **Continuous Training & Deployment:**

- Khmer document analysis and recognition (text detection/recognition)
- Khmer Speech Recognition & Synthesis
- Khmer/English Machine Translation

- **Locally-hosted LLMs Deployment**

- Qwen/GPT-OSS/Gemma etc.

A GPU Server of 8 NVIDIA GeForce RTX 3090 (24VRAM) or higher			
Khmer Document Analysis & Recognition	Khmer Speech Recognition & Synthesis	Khmer/English Machine Translation	LLMs



Let's Build Together