

*GeneXus™ Vision*

# Supercharge Business Innovation with AI

**Armin Bachmann**

Product Manager - GeneXus. November 2023.

[genexus.com](https://genexus.com)

# Introduction

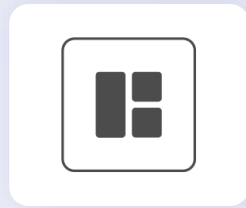
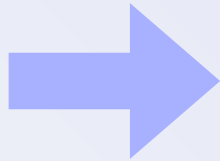
## 3 decades of AI

# GeneXus

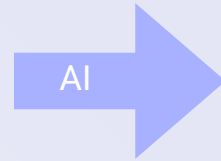
## Our approach



Business Reality



Knowledge Base



Programs



Database





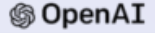



## GeneXus

### Our Journey

**+30 years** generating mission critical software using **Artificial Intelligence** + Code Generation

# The revolution: Large Language Models

# This is the current Foundational Models Landscape

	 		 				<small>NON-EXHAUSTIVE</small> <b>Startups, researchers, OSS contributors</b>
<b>Text / language</b>	BERT, Bard (LaMDA), PaLM, GLaM, Chinchilla, Gopher	AlexaTM, Titan LLMs	MT-NLG, GPT-4 / ChatGPT (GPT-3.5)	OPT-175B, LLaMA	MT-NLG		Dolly, Claude, Jurassic-1, Cohere, GPT-J, GPT-NeoX, BLOOM, Wu Dao 2.0, CTRL, Alpaca
<b>Code</b>	AlphaCode	Code-Whisperer	Copilot, CodeBERT, Codex				Replit, Polycoder, CodeGen, CodeT5
<b>Image</b>	Imagen, Parti, DreamBooth		Dall-E 2, CLIP, NUWA-Infinity	Make-a-scene, Dinov2	SPADE	Stable Diffusion	Midjourney, Waifu Diffusion
<b>Speech &amp; Music</b>	WaveNet, MusicLM		Muzic, Whisper, Jukebox			Dance Diffusion	WaveGAN
<b>Video</b>	Imagen Video, Phenaki		NUWA-Infinity	Make-a-video			CogVideo
<b>3D</b>	DreamFusion, 3DiM		Point-E		Get3D, Magic3D		Motion Diffusion Model

Proprietary  
Open source  
Private

## LLMs

Unlock 2 new worlds

Generative AI in  
Software Platforms

Generative AI in  
Business Applications

**How**  
to create Software

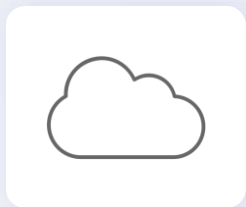
**What**  
Software to create

# HOW: Vision for Systems development

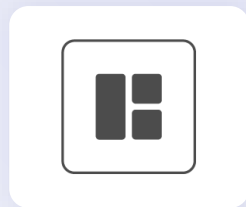
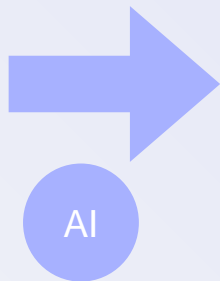


# GeneXus [Vision]

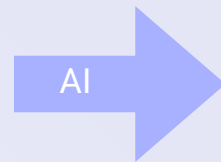
## Our approach



Business Reality



Knowledge Base



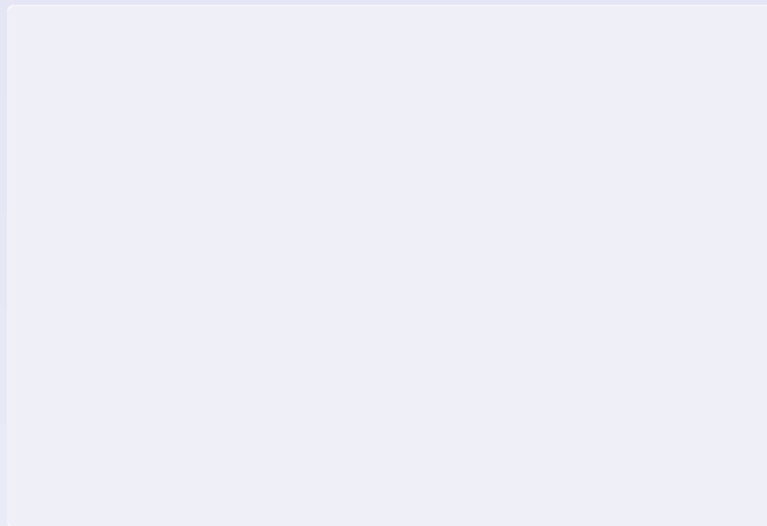
Programs



Database

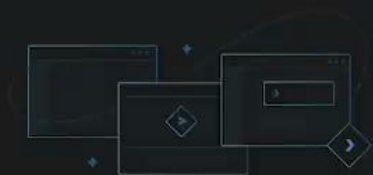


Describe what you need and let our AI Assistants and GeneXus deliver the solution for you.





DEMO



## Let's bring your back office to life!

Tell us about your business and we'll create a back office for it. The more details you provide, the better we can tailor it to your specific needs. [Show samples](#)

Type your message






## My Projects

[Create new Project](#)

**Movie Star** 



Video Club

 Please use these login credentials: username: **admin**, password:   

[Open in Browser](#)

**FilmZone** 

Video club

 Please use these login credentials: username: **admin**, password:   

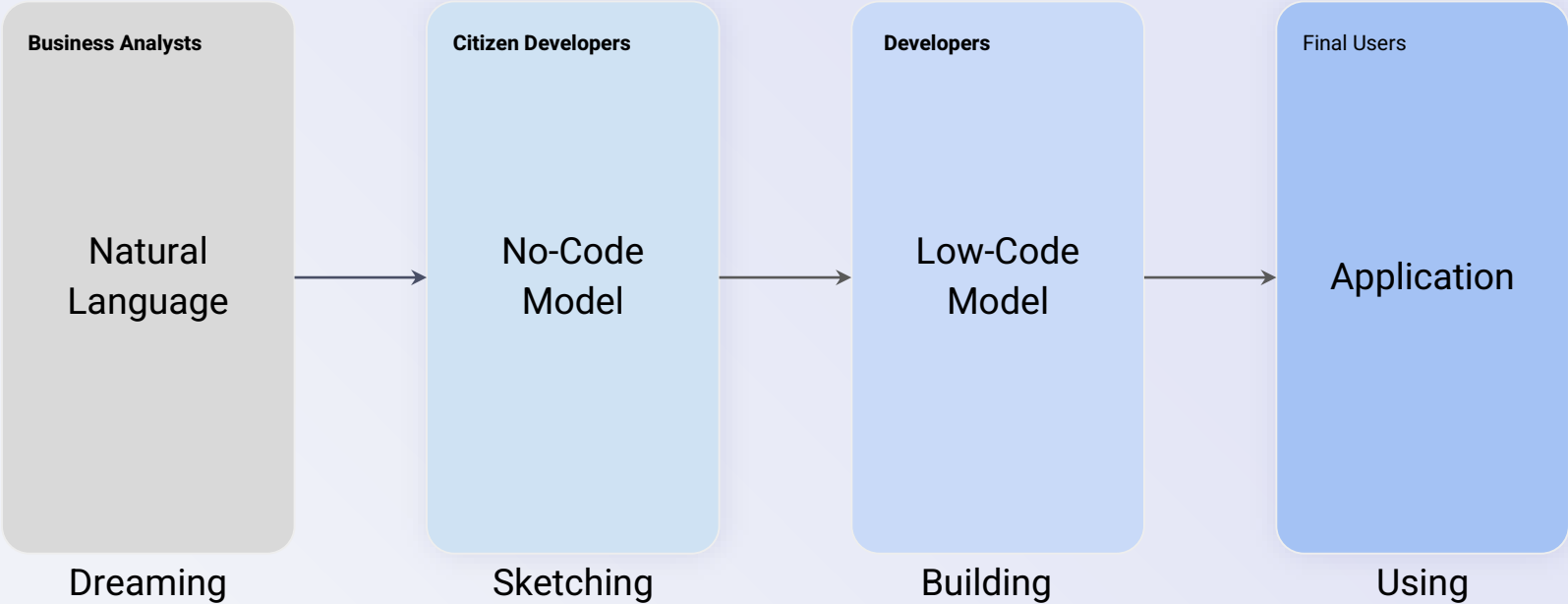
[Open in Browser](#)

**BankPro** 



# Beyond No-Code and Low-Code

The vision for the creation and maintenance of systems



# Assistants in IDEs

## New IDEs with Assistants

**GeneXus**<sup>™</sup>

DEMO

The screenshot displays the GeneXus web application interface. The browser address bar shows `localhost:3000`. The application has a dark theme and a menu bar with `File`, `View`, `Knowledge Manager`, `Selection`, `Build`, and `Tools`.

**KB EXPLORER** (Left Panel):

- Start Page
- Purchases
- KB05
  - Root Module
    - General
    - GeneXus
    - GeneXusUnanimc
    - Workflow
      - Bpm1
      - Bpm2
      - Cliente
    - Customer
      - Gx0010
      - KB05
      - WFWebObjects
    - Purchases**
    - Domains
    - Customization

**Diagram View** (Center):

The diagram area is currently empty. At the bottom of this panel, there are two tabs: `DIAGRAM` (selected) and `SOURCE`. Below the tabs, there is an `Output x` indicator.

**AI ASSISTANT** (Right Panel):

The AI Assistant panel is titled `Process:Purchases`. It features a vertical toolbar with icons for zooming and editing. At the bottom, there is a text input field with the placeholder `Type yor message...` and a `Send` button.



**Statement 1:**

Proper use of **AI simplifies**  
Software Development.

**Announcements:**

GeneXus powered by Generative AI

1. Using AI, GeneXus will assist every team member in the whole lifecycle.
2. GeneXus will be used by more personas: Business Analysts, Citizen Developers.

# LLMs

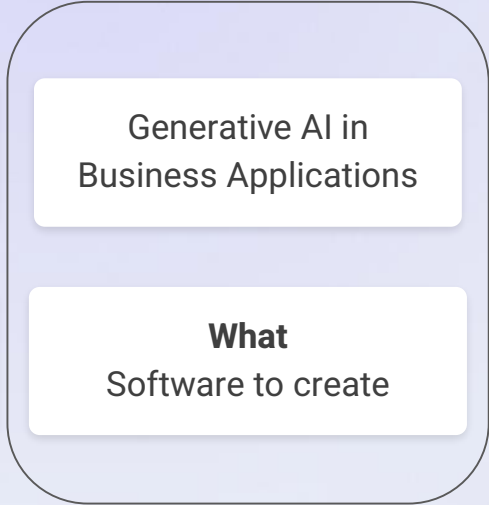
Unlock 2 new worlds

Generative AI in  
Software Platforms

Generative AI in  
Business Applications

**How**  
to create Software

**What**  
Software to create



# WHAT: Vision for Systems

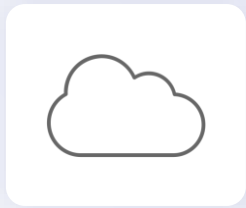
**What kind of systems**

Do we need to create?

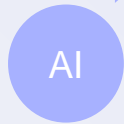
# AI Enterprise Systems

# GeneXus [Vision]

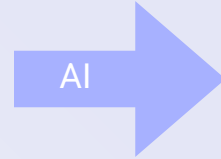
## AI everywhere



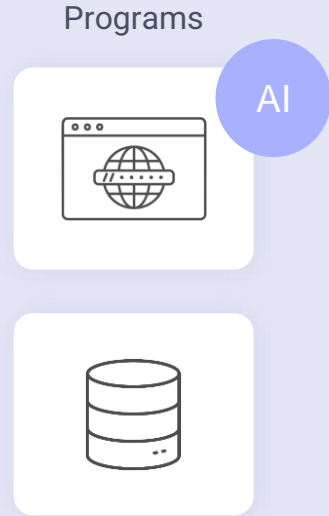
Business Reality



Knowledge Base



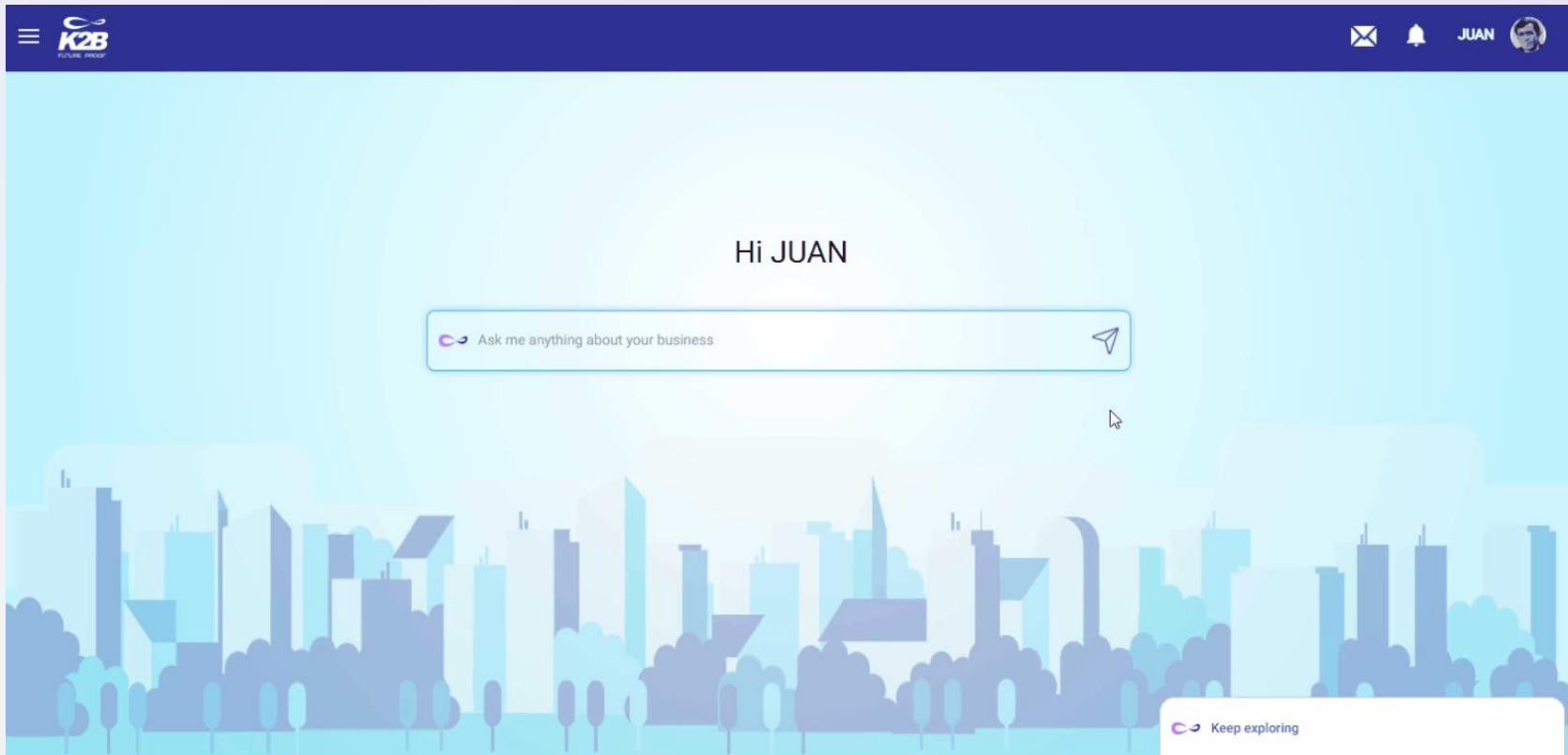
AI



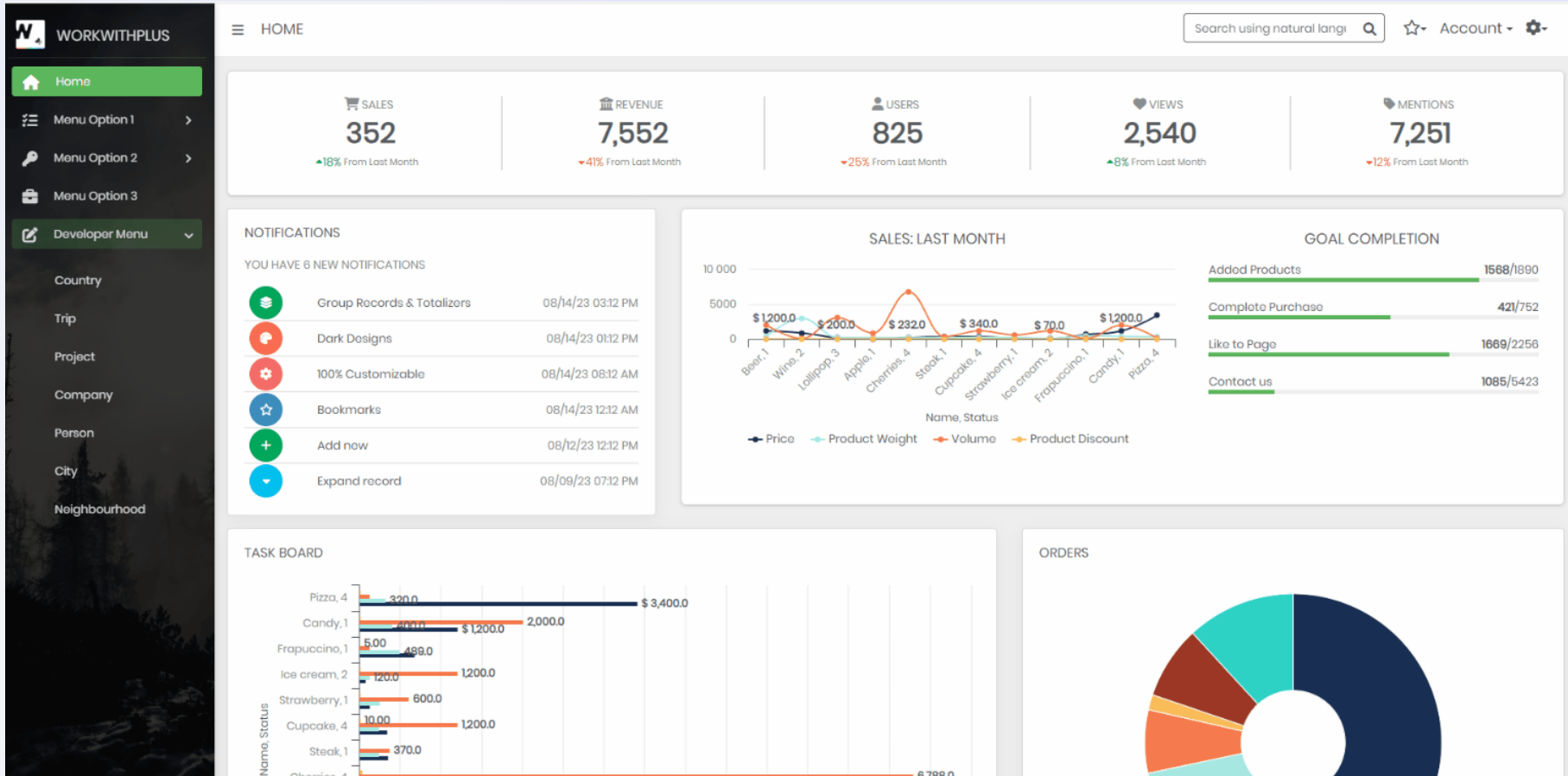
Programs

Database

# Intent based Navigation



# Intent based Navigation





# Chat with AI about your documents

**Globant** **GBrain Playground**

**Pinned chats**

- Political History of Urugu
- Transit rules
- Universal history

**Recent chats**

- Political History of Urugu
- Transit rules
- Universal history

**AI Search Assistant**

Domain: DomainName [NEW CHAT](#)

Source files: [Show First Source](#) [Show Second Source](#)

[Copy answer](#)

**Where did early humans live?**

Early humans lived in temporary settlements and used caves for shelter. They were nomads who moved every season, migrating with the animals they hunted. If they lived in a place without rock outcroppings, they made their homes out of available materials such as tents made of animal bones or wood covered with animal hides or turf. Evidence of early human settlements has been found in places such as Zhoukoudianzhen Cave in China, Pincevent in modern-day France, and Çatalhüyük in modern-day Turkey.

Source files: [Show First Source](#) [Show Second Source](#)

[Copy answer](#)

**What is a hominid?**

A hominid is a humanlike creature that walked upright.

Source files: [Show First Source](#) [Show Second Source](#)

[Copy answer](#)

[REGENERATE ANSWER](#)

Ask me a question about the documents you have uploaded...

MADE WITH GIFOX

# Power autocomplete

The image shows a social media interface with a search dropdown menu. The search input contains the text "eugenio garcia". Below the input, there is a search icon and a "Colleagues" filter. The search results list "Eugenio Wilson Garcia". Below the results, there are two buttons: "Discover Colleagues" and "Advanced Search".

The background interface includes a "KUDOS" button, a profile card for "Armin Mario Bachmann Hein" with a "Send a star" button, a "Trending hashtags" section with "#CyberGlobant", "#KeepRocking", and "#YouRock", and a post by "Armin Mario Bachmann Hein" with a "Team Player" badge. The post text reads: "Armin, I wanted to take a moment to recognize your incredible value as a team player. Your consistent willingness to help and mentor other team members in both technical and soft skills is truly commendable. You go above and beyond to promote a collaborative and supportive work environment, and it does not go unnoticed. Your dedication to constantly developing new skills in order to bring greater adaptability to the team is also incredibly valuable and appreciated. Thank you for all that you do to make our team stronger and more successful." The post is attributed to "By Eugenio Wilson Garcia".

# Enterprise Chat on Multiple Systems

The screenshot displays a web browser window with the URL `localhost:3000`. The application is titled "SAIA" and uses the "GPT-4" model in a "Neutral" style. The main content area features a list of four articles:

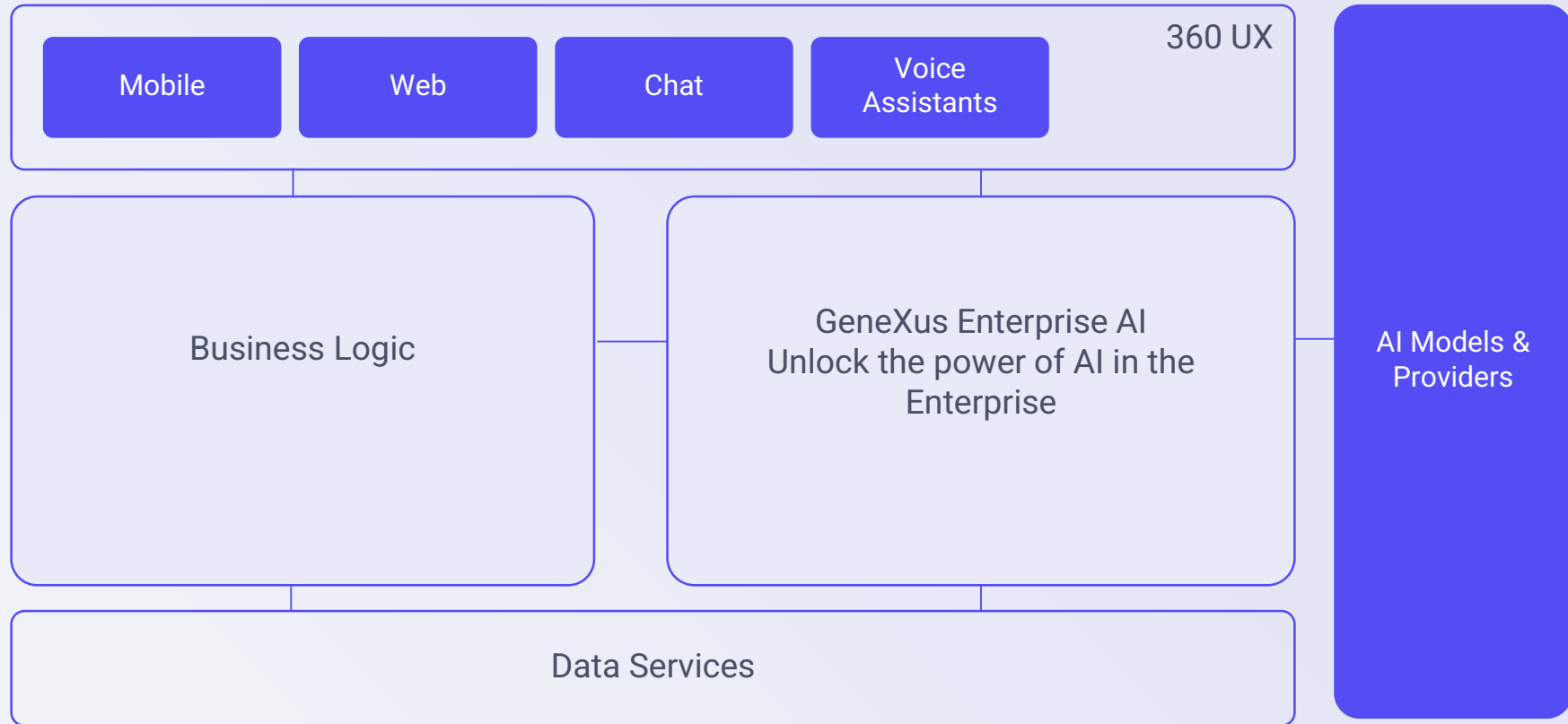
- The Inter-American Development Bank (IDB) and the World Bank are set to announce a groundbreaking partnership on August 31, aimed at maximizing development impact in Latin America and the Caribbean **4**.
- IDB and the Brazilian Development Bank are investing \$900 million in Amazon's small businesses through the PRO-AMAZÔNIA program, which aims to foster sustainable development **4**.
- IDB Invest has been supporting various initiatives, including boosting MSMEs financing in Chile, increasing access to affordable health services in Brazil, and supporting Wonder Brands' expansion to strengthen Latin America and the Caribbean Digital Economy **2**.
- Public and private sector leaders have discussed how to bolster public-private partnerships (PPPs) and expand their role in high-priority sectors to achieve greater social impact and contribute to climate action **1**.

The chat interface shows a sequence of messages:

- User: hi
- SAIA: Hello! How can I assist you today?
- User: who are you
- SAIA: I am a conversation assistant designed to help employees with their tasks and answer their questions to the best of my ability.

At the bottom, there is a "Regenerate response" button and a text input field with the placeholder "Type a message or type '/' to select a prompt...". The status bar at the very bottom indicates "Talking with Chat with LLMs".

# AI Enterprise Systems

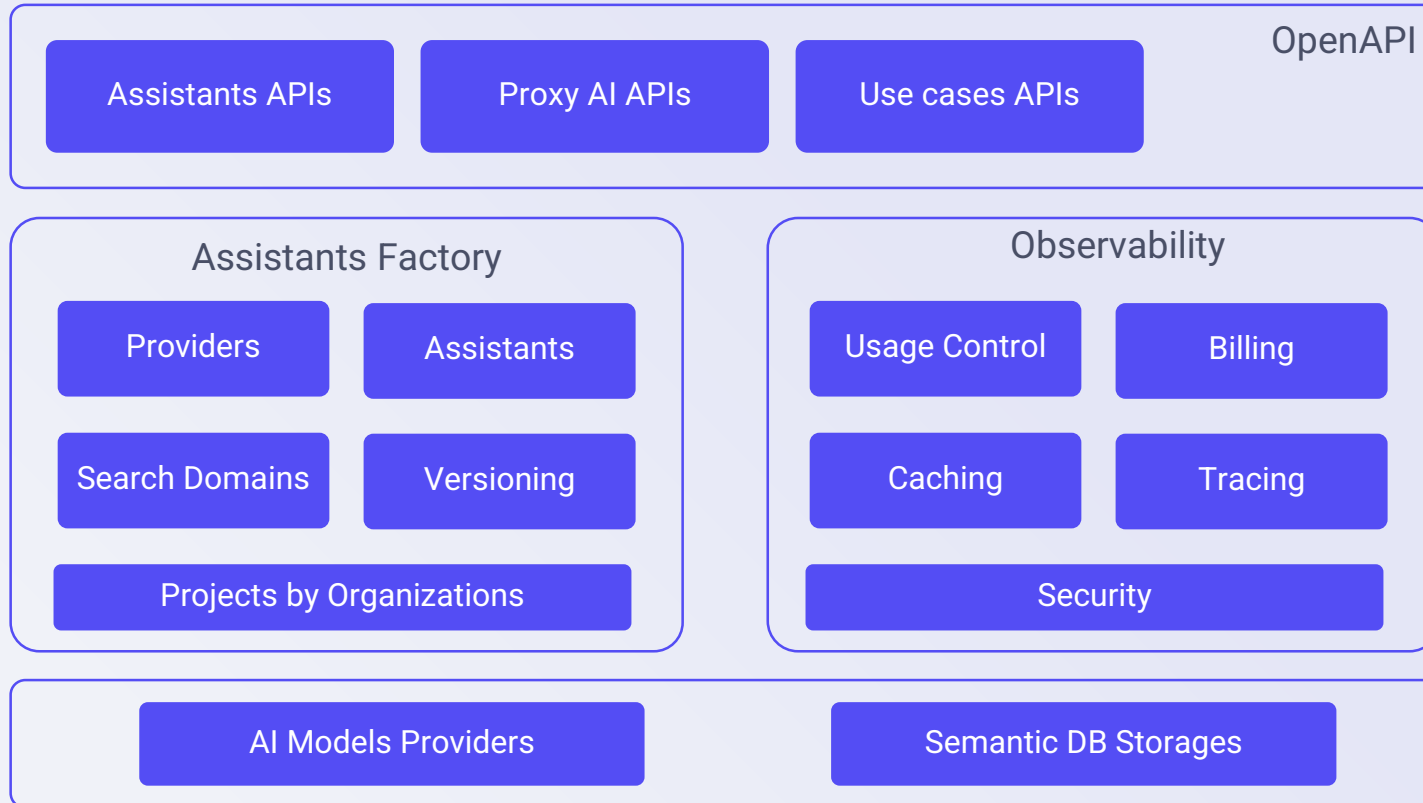


## GeneXus Enterprise AI Demo

# SAIA

**The Spine of AI Applications**

# Understanding GeneXus Enterprise AI



**Statement 1:**

Proper use of **AI simplifies** Software Development.

**Statement 2:**

Proper use of **AI simplifies** any Software.



**Announcements:**

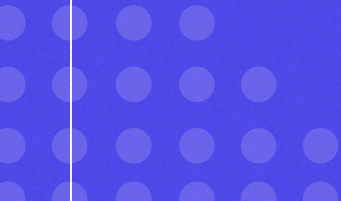
Enterprise Systems powered by Generative AI

1. GeneXus Enterprise AI is a new product of the GeneXus platform
2. This new product will simplify the use of LLMs in your Software System and Enterprise.
  1. It will be part of the Software Systems you create with GeneXus.

Try GeneXus Next -



# Summing up



## GeneXus

Our philosophy

### **A user centric approach**

to development + Artificial  
Intelligence + Code Generation

We believe that **code should be a consequence of user needs**, business needs, processes and realities.

## GeneXus

What our clients value

- Higher productivity
- Multi-Experience
- Agile, incremental approach
- Easier to learn
- **Future-proof**

## Takeaways

- Don't rely on code. Model and Generate using AI.
- Build AI Enterprise Systems. Create an AI Enterprise.
- Don't panic, but Run. **Supercharge Business Innovation.**

The logo for GeneXus, featuring the word "GeneXus" in a white, italicized sans-serif font. The letter "X" is stylized with a thin white line that curves over the top of the letter. A small "TM" trademark symbol is positioned to the upper right of the "s".

*GeneXus*<sup>TM</sup>

[genexus.com](https://www.genexus.com)

GX

GeneXus by Globant