

# Wipro Enterprise Generative Al

**Conversational AI-HR Assistant** 

Powered by Azure OpenAl

### **Overview**



### Intelligent Conversational Al Assistant Powered by Azure OpenAl

The Wipro Enterprise Generative AI can understand and respond to natural human like language queries, using state of art Azure OpenAI Large Language Models. Unlike traditional chatbots, which are rule-based and require a pre-define set of questions and answers, this chatbot can generate responses on the fly, based on the context of the conversation.

System is able to understand the nuances of human language and generate responses that are more human-like in nature. This makes the conversation more engaging and natural, which can lead to a better user experience. Our proprietary Query deflection engine and prompt engineering can orchestrate response generation from various Azure OpenAl models and legacy chatbots.

Additionally, this chatbot includes smart content moderation module for query and respone which is customizable for Enterprise Data. System extensively uses various secured Azure components such as Azure OpenAl, Azure Kubernetes Services, Azure Functions, Azure CosmosDB, Azure Cognitive Services to ensure privacy, security and scalability.



## **Key Features**



- Natural Language Understanding: Understand and process human language, allowing users to ask questions in a conversational manner
- Azure OpenAl Integration: Embedding generation & Chat completion using AOAI embedding models
- Advanced Semantic Search: Enables semantic search through Large Volumes of structured and unstructured data, including
  databases, documents etc. Also, supports auto data indexing using Azure and Custom Al/ML based data processing for efficient
  embedding.
- Intelligent Deflection Logic: Proprietary Al/ML based query deflection logic for routing queries to legacy Chatbots and different AOAI Models
- Content Moderation: Smart content filtering and moderation engine for Query & Response trainable on Enterprise specific data
- Integration: Can be integrated with various data sources within an organization, including CRM, ERP, and other proprietary systems, to access and analyze data.
- Role-based access control: The system can be set up with role-based access control, ensuring that users can only access and query data that they are authorized to view.



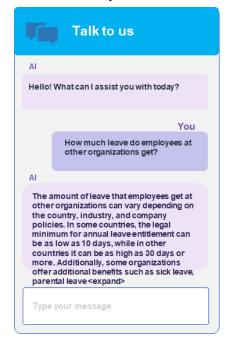
### **Traditional VS Wipro Generative AI Experience**



#### **Traditional FAQ Chatbot**



### Direct Azure OpenAl Response



#### **Wipro Generative AI**



Prompt Engineering + Content
Moderation + \*LM domain finetuning

## Generative AI for Metaverse – Pluggable Interface

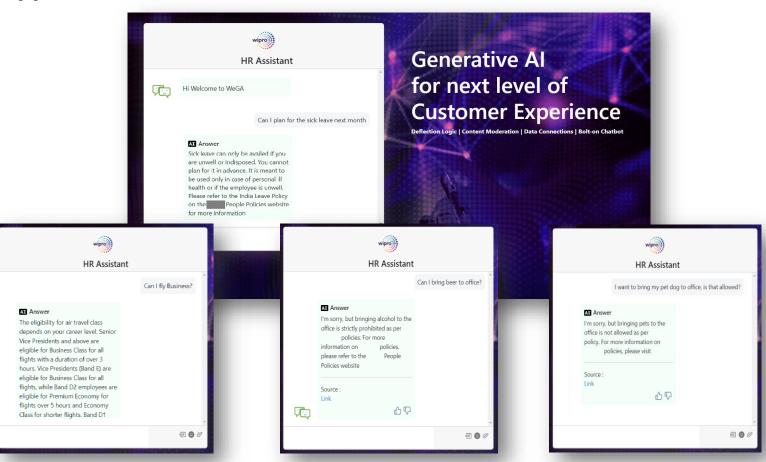
- · Al enabled Dynamic Digital Interacting Avatar
  - Al powered Non-Playing Characters (NPC), with ability to interpret languages, perform text & voice based interactions.
  - Dynamic placement of these NPCs is decided by AI, based on multiple factors like other character movements, navigation patterns, your conversation history.
  - Meta's conversational AI will not solve domain centric requirements
- Personalized Experiences (Smart Marketing)
  - · Personalized product displays and theme within shop
  - Contextual ad display boards, signages and videos
- · Live Event Analytics (Behavior shaping, Revenue tracking)
  - People behavior during live events (concerts, special screenings etc)
    - Sentiments
    - hand gestures
    - gaze
    - fashion patterns of people
    - Performance/speech relation to people behavior
  - Nudge user behavior using digital NPCs







### **Actual Application Screenshots**







# Why Wipro?



### Strengths of Wipro as a Trustworthy Al Partner

Partnership to innovate in the field of generative AI by providing following range of services and solutions & help our clients improve operations, create new products and services, and gain a competitive advantage in the market.











Al Consulting services

Al Solution development

Al Support and maintenance

Data engineering and cloudification

Al led digital transformations

Identify opportunities: Identify the areas where generative AI can bring the most value to businesses, such as automating tasks, creating new products and services, and improving the customer experience.



Al Lab for Foundational Model: Setting up AI Lab for building capabilities around large foundational models

Create a platform for



Develop a joint go-tomarket strategy:

Exploring possibilities of offering different Industry vertical business solutions & Develop a joint go-tomarket strategy that leverages their respective strengths





customer engagement Create a platform for customer engagement to keep customers informed of the latest developments, to gather feedback, and to share success stories.



Projects: Identify Top use cases with measurable business returns. implement and validate solutions for prod. scale



### Generative AI – Use cases & Tech we are working on...















Healthcare		
Create patient data for medical simulations		
Like weke we well alone		

Literature mining Clinical research: Text

Simulate clinical trials

summarization



**Banking & Finance** 

Generate data for

financial

simulations

Generate

Applicant-Friendly

Denial

**Explanations** 

Generate

**Mortgage Product** 

**Campaigns** 

**Create borrower** 

profiles

#### **Manufacturing**

**Generative Al** models to optimize delivery truck routing **Event Simulations,** Simulate manufacturing quality Simulate material efficiency. simplicity &

increase production speed



#### **Retail & Marketing**

Create unique content for websites, product descriptions, brochure, ad campaigns etc.

**Product Image** generation from title & descriptions

> Search engine optimization

#### Metaverse

Create virtual worlds and characters e.g. medical training simulations. factory floor trainings

**3D Product** generation for **VR/Metaverse** 

Generate energy leak events for better planning

#### **Data & Coding**

Generating **Documentation for** Code usage, code generation Data

anonymization & data privacy

Information mining from technical documents

#### **Shared Services**

Legal/Contract **Document Generation & staff** trainings

**Knowledge Mining** /search, Summarization

Virtual Assistance

GAN

Gaussian GAN

Percuro Health

VAE TabGAN+

CTGAN

**GPT** 

Sty leGAN

CycleGAN

**GAN-BERT** 

MS Azure OpenAl

Dall-E GPT4

Microsoft Azure

models

**NVIDIA NeMo** 

**HuggingFace** 

**NVIDIA DGX** 



Technology

Use cases

## Wipro customer case studies on Generative Al

Client	Description & business outcomes	Benefits
A global media giant	Automated the generation of contextualized abstracts/summaries of news article to our customer's clients.	Cost savings of 33% and improved productivity of existing personnel.
Swedish multinational networking and telecommunications company	Generate high quality synthetic data ensuring preservation underlying data patterns, so that privacy aspects of data is preserved, but easily shared for data monetization use cases.	Easily monetize value from data assets while ensuring privacy and security preservation.
USA based chocolate manufacturer	SEO Optimization & text generation for Ecommerce channels.	Improved searchability in e-commerce websites such as Amazon, leading to greater business visibility and revenues.
A leading Human Capital Solutions provider	Automated processing of over 5 million documents with varying scan qualities. Generative AI enhanced low resolution document images, enhanced bridge broken characters in low quality images uplifting the performance of OCR recognition.	Reduced manual efforts by 60% Savings of USD 400 million Improved process efficiency by 50%
A global pharma major	Al to generate & recommend Standard Response document on the topics of drugs, products or clinical trials in response to physician requests.	Reduced man hours spent in gathering and nailing down precise / referenceable information.
	Synthetic handwritten data generation to equip downstream AI / OCR with enough training data.	Increased accuracy of OCR models, leading to reduced need of "human in loop".

