



ORACLE

OCI Generative AI Agent Service

Nabil Nawaz, AI Walker

Enterprise Cloud Architects

NACI, Oil & Gas vertical



Safe Harbor Statement

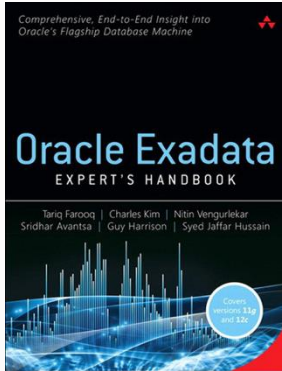
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Nabil Nawaz

ORACLE®
Certified Professional



- Oracle Architect with 25+ years of experience, working with Oracle Database since version 7
- Certified in Oracle & AWS Cloud; OCI GenAI Certified Professional
- Contributing Author of *Oracle Exadata Expert's Handbook*
- Expertise in performance tuning, architecture, and delivering Cloud & Engineered systems like Exadata
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A huge Cowboys fan! 





SaaS Apps

AI Services

Data

Infrastructure

Partners

Oracle brings AI to
the enterprise at
every layer of our
stack

OCI Generative AI Overview

Models –

Latest Cohere, Meta LLMs

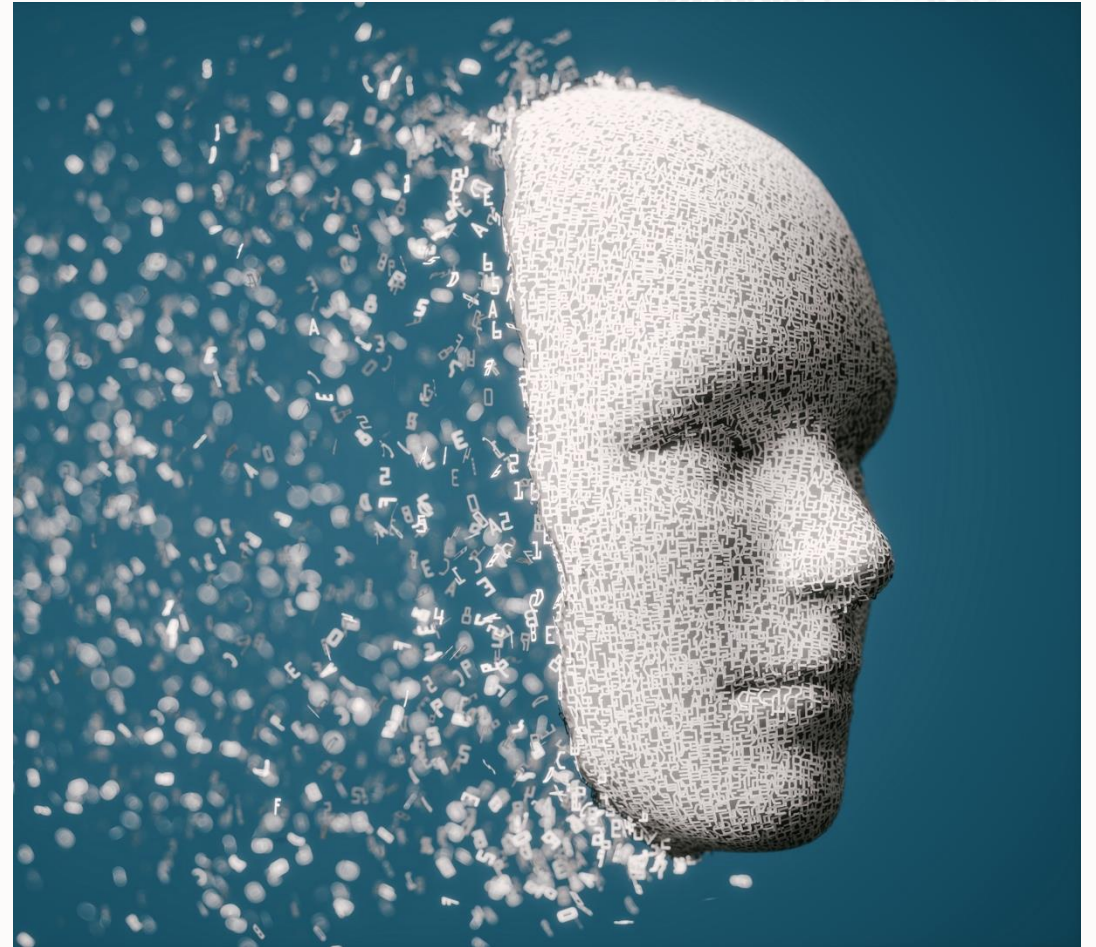
Dedicated AI Clusters –

Dedicated GPUs that are private to you

LangChain/LlamaIndex integration –

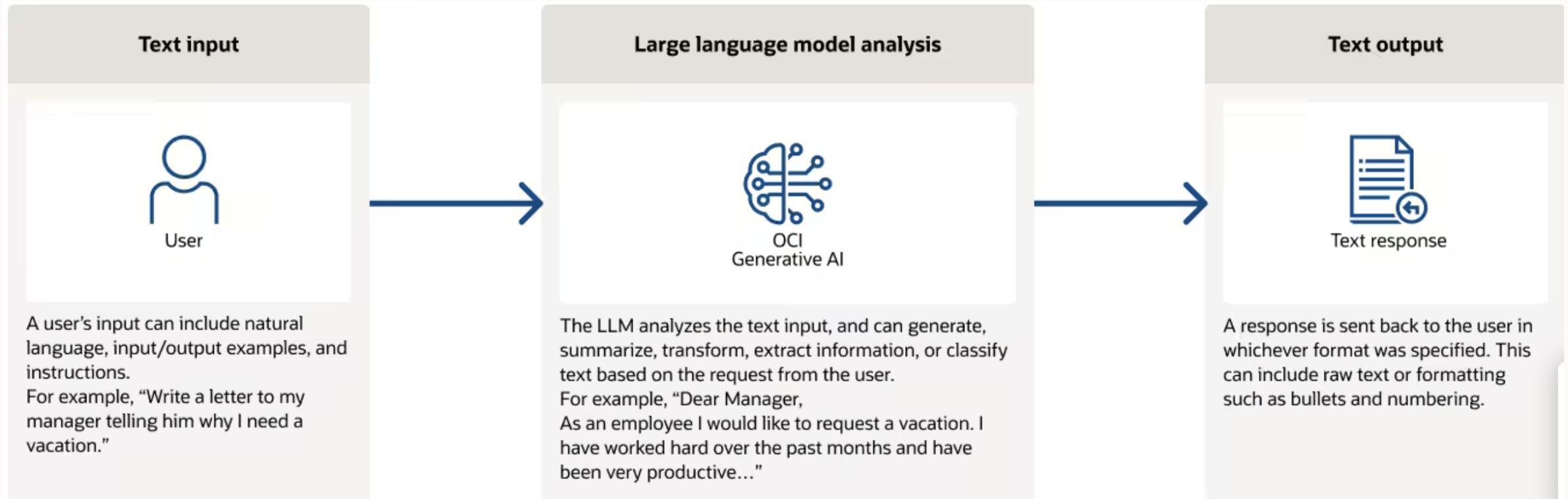
Frameworks to develop GenAI Applications

Generative AI Agents!



How OCI Generative AI Works

Ask questions and get insights from siloed sources across your company through natural conversations



OCI GenAI Agent Intro



Summary: Key Features of OCI Generative AI RAG Agent

Flexible Knowledge Base Types –

Service-Managed Option

OCI Object Storage files

Bring Your Own (BYO) Data Options

- Oracle Database 23ai or Autonomous Database 23ai vector store
- OCI Search with OpenSearch ingested and indexed data

Context-Aware Responses: The service delivers contextually relevant answers by searching your knowledge base to provide precise and accurate information.

Advanced Hybrid Search: Combines lexical and semantic search for highly accurate and relevant results.



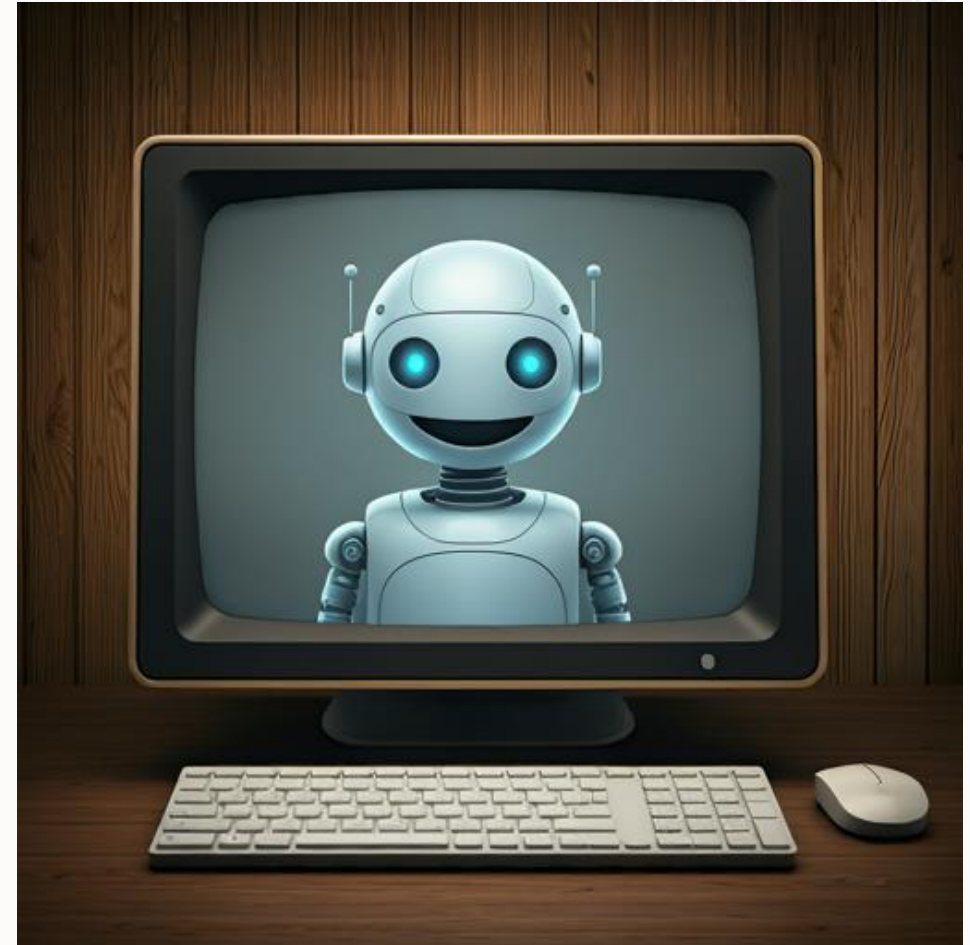
Summary: Key Features of OCI Generative AI RAG Agent

Content Moderation: Offers input and output filtering to maintain a safe and respectful chat environment.

Multi-Turn Conversations: Handles follow-up questions seamlessly, considering the context of previous queries and responses.

Visual Data Interpretation: Understands and interprets data from two-axis charts and reference tables in PDFs without requiring detailed descriptions of visual elements.

Hyperlink Extraction: Identifies and retains hyperlinks in PDF documents, displaying them as clickable links in chat responses.



GenAI Use Cases: What we heard from Customers?

Oil & Gas Industry



Helpdesk/Support Agent Chatbots

Document Summarization / Insights

Production Forecasting and Optimization

Asset Management and Equipment Lifecycle

Industrial Safety Analysis and Best Practices

Crude Oil Production Data Analysis

Intelligent Contracts

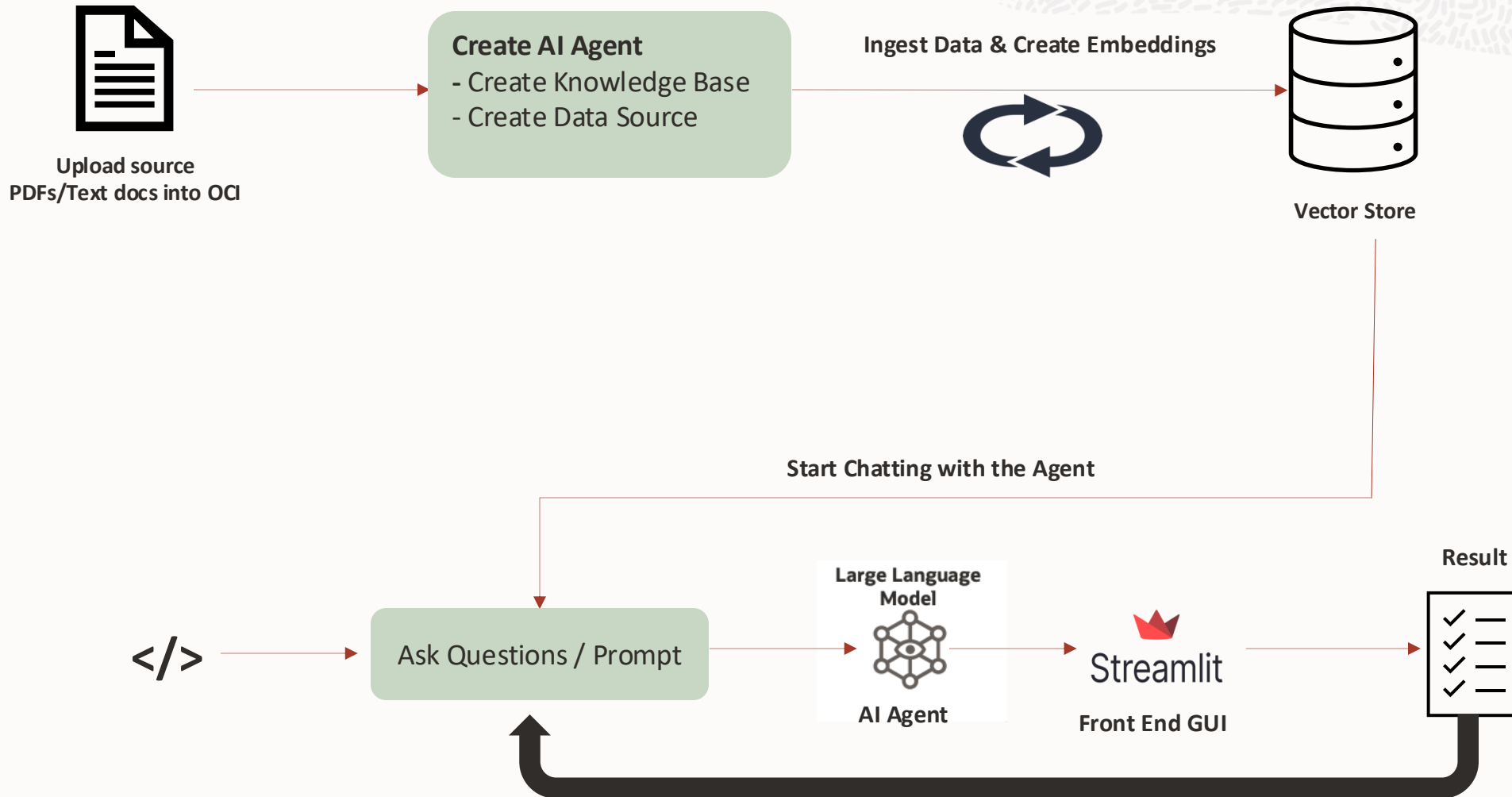
Risk Assessment and Incident Management

Regulatory Compliance Automation

Proposal Development

OCI GenAI Chatbot Setup Process Flow

RAG based Conversational AI



Chatbot Demo – Streamlit + OCI GenAI Service

[Home](#)
[LLM Playground](#)
RAG Agent

Reset Chat

This RAG agent is designed to answer questions related to the documents in its knowledge base of Oracle Cloud services and US Federal Government policies and guidance. If there is no reference it can pull from, it will tell you it can not answer the question.

Try asking "What is m-21-31?"

Oracle GenAI Agent Chat

Powered by Oracle Generative AI Agents

This RAG agent answers questions about Oracle Cloud. Click on the home tab to learn more.



Hello user, I am an AI agent. Please ask a question.



How does energy consumption vary across different energy sources (e.g., natural gas, petroleum, renewables) within each sector for summer 2024?

The data provided offers a glimpse into energy consumption trends across various sectors for summer 2024. Natural gas consumption stands at 2.965 quadrillion Btu in the transportation sector, with additional usage in other sectors. Petroleum remains a significant energy source, especially in transportation, with a consumption of 25 quadrillion Btu. Renewable energy consumption is also notable,



Generative AI Agent Future

Actions based on Triggering events



GenAI Agent Service Value

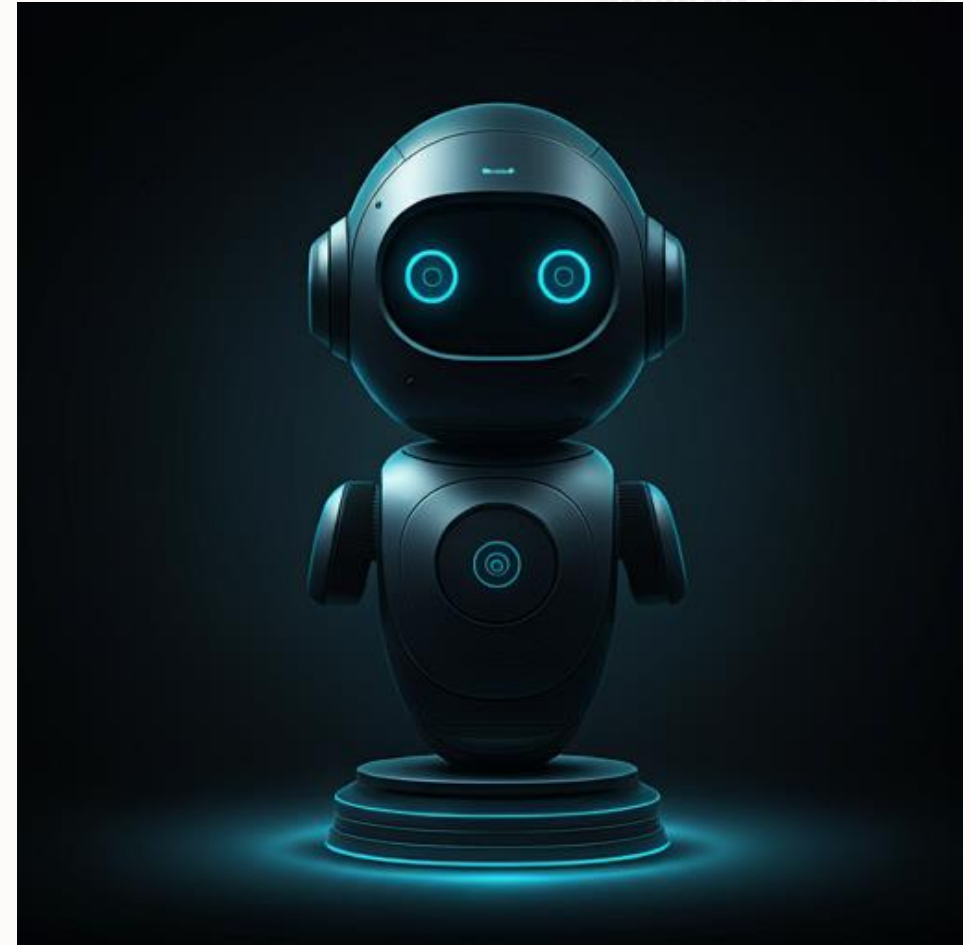
Complete Managed Service:

Easy to setup a chatbot to access your private data

Converse directly with your enterprise knowledge bases: Use plain language to gain insights easily

Up to Date: Receive dynamic, real-time responses, even on fast-changing enterprise data stores

Secure: Data is always private



Next Steps: Demo



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