

# Quadrant AI Capabilities

# About Us



**15+**  
Years of Industry  
Experience

**100%**  
Managed Services

**10+**  
Countries

**3000+**  
Professionals

**1000+**  
Projects

**24/7**  
Project and Support Services

Microsoft Solutions Partner

certified WBENC WOMEN'S BUSINESS ENTERPRISE

Inc. 5000 AMERICA'S FASTEST GROWING PRIVATE COMPANIES

HIPAA Health Insurance Portability and Accountability Act

GDPR

500 Technology Fast 500 2021 NORTH AMERICA Deloitte 2019, 2020, 2021 3 TIMES IN A ROW

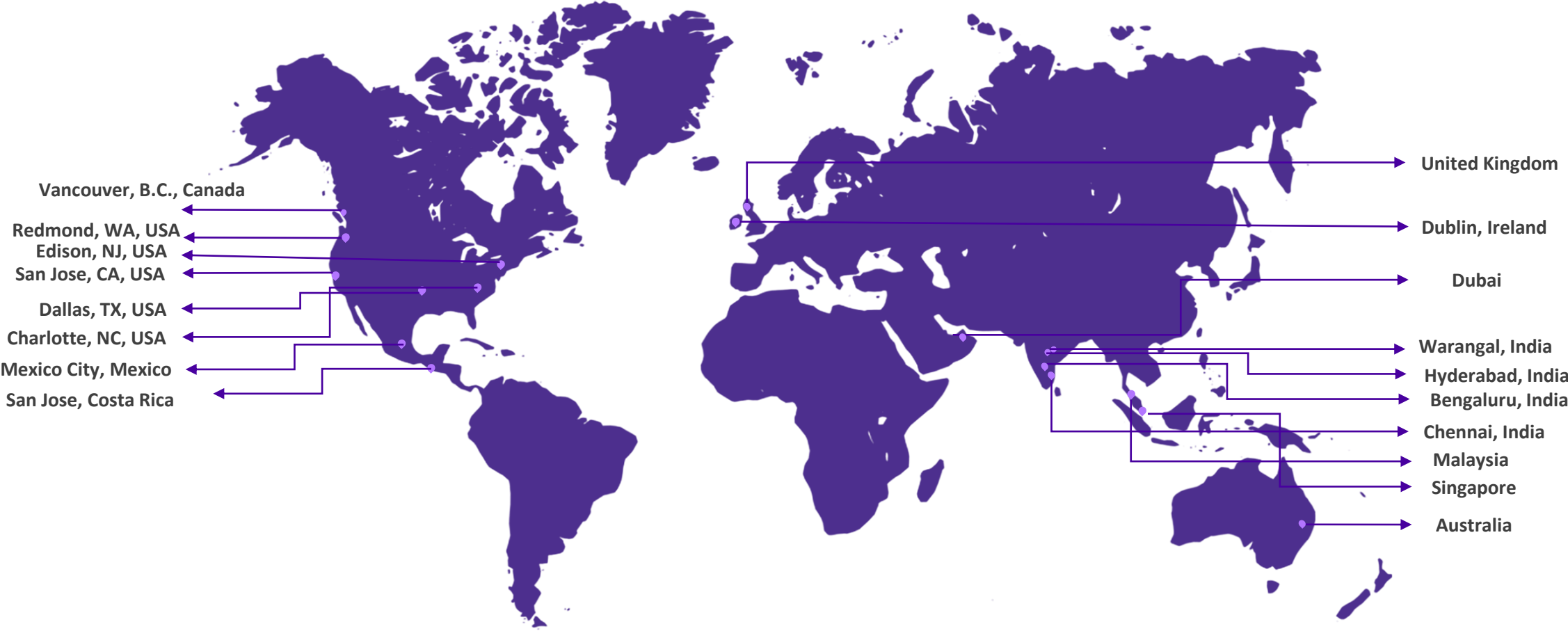
ZIPPRIA BEST Companies To Work For 2019

ISO 27001

## Awards & Recognitions

- #5 in Best Technology Companies to Work For in Redmond, WA
- Ranked #59 on Deloitte's Technology Fast 500 North America in 2020
- Consecutive 3 times into Deloitte's Fast 500 list
- Ranked #67 by Inc 5000 as the fastest-growing company in America, 2021
- Ranked #16 on Zippia as one of the top 20 companies to work in 2019
- Ranked #25 by Inc 5000 in Top software companies' category across the USA in 2019

# Our Locations



# Our Clients

## Health Care



**ATHLETICO** PHYSICAL THERAPY

**HMA**



**UHS**



## BFSI



**TATA AIA**  
LIFE INSURANCE



**stripe**

## Retail



**amazon**



## Hi -Tech



Microsoft



**ORACLE**



servicenow



## Aviation



## Others



# Our Service Offerings



## Cloud Operations

- Design and Development of Cloud Native Services
- Cloud Migrations
- Cloud Observability
- Design and Implementation of monitoring services
- Cloud Security Implementation
- BOTs



## Digital Marketing

- Web application development and support
- Mobile application development and support
- Content management systems
- Accessibility
- UI/UX development



## IOT

- Data Collection and Processing
- IoT Application Development
- Device Connectivity and Management
- Security and Privacy
- Azure IoT Hub



## Dev Ops

- 24\*7 Support with In-depth Technical Support
- Site Reliability Engineering
- Automation and Scripting
- CI/ CD Implementation.
- Buildouts



## Power Platform

- Power BI
- Power Apps
- Power Automate
- Microsoft CoPilot Studio



## AI & ML

- Generative AI services
- AI and ML Model Training
- Natural Language Processing (NLP) Services
- AI and ML Model Monitoring and Maintenance



## Infra Managed Services

- End User Computing Services
- Infrastructure Maintenance
- Data Centre Management
- Enterprise Systems Management
- Converged Network
- Service Desk and Management
- Application Management
- Managed Security



## Data and Analytics

- Data Migration
- Telemetry Data Curation
- DWH Architecture
- Data Pipeline Development
- Building Analytical Data Models
- Reporting
- Data Mining

# Quadrant – AI Capabilities

AI



Generative AI / LLMS



Computer Vison (OCR)



Imaging (Image & Video)



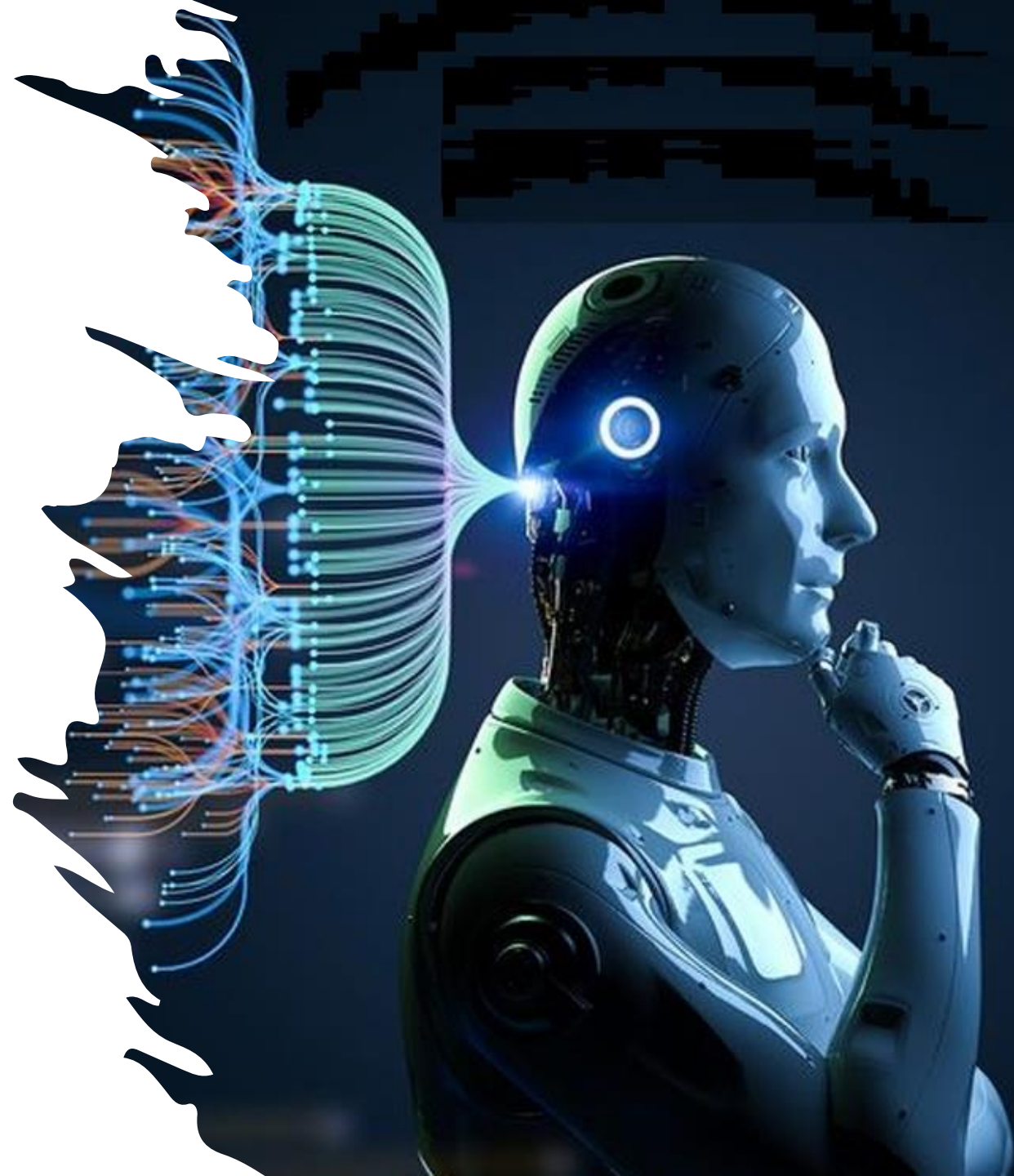
Speech to Text & Text to Speech



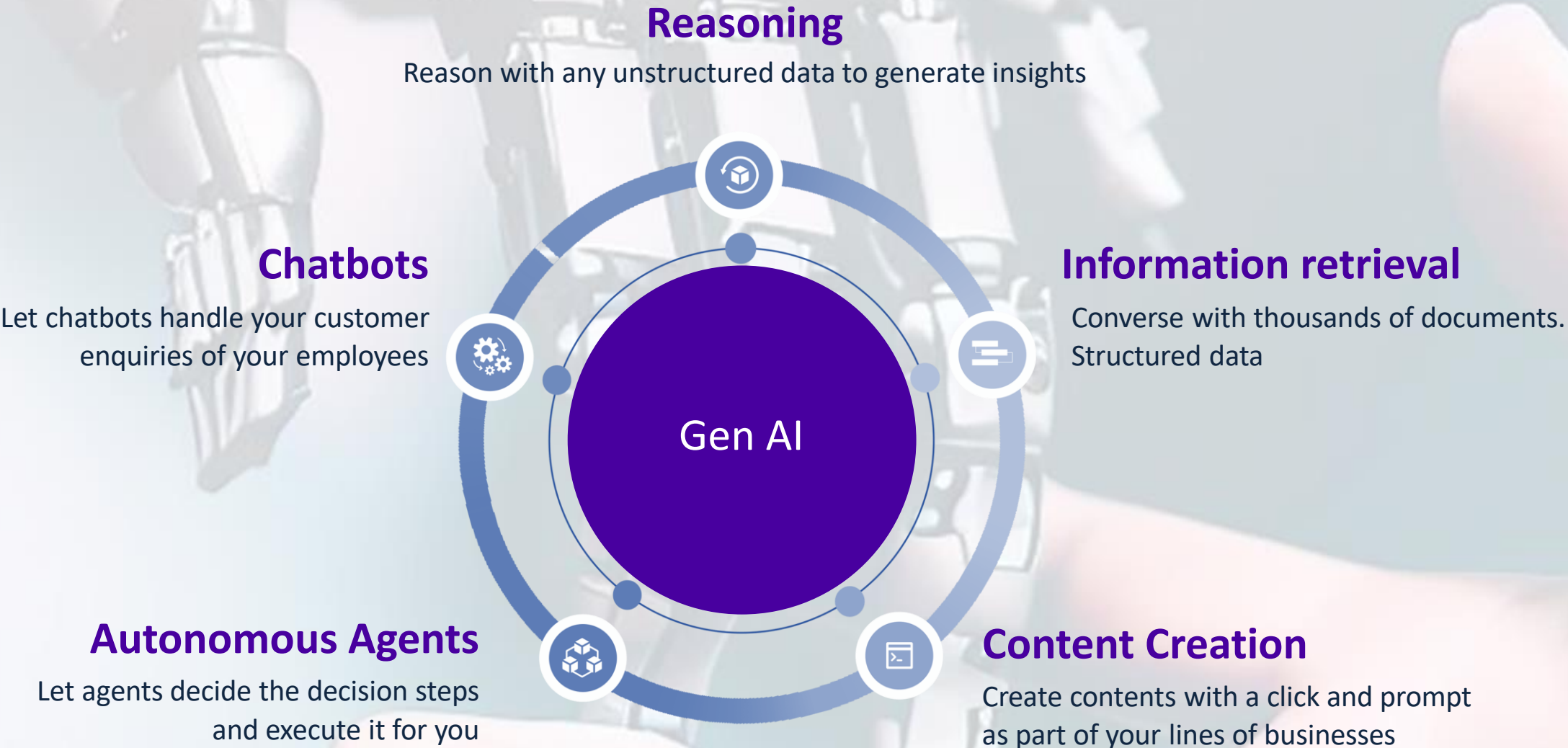
Cloud based AI Solutions (MLOps)



AI Model Assesment & Prompt Engineering



# Quadrant Generative AI



# Quadrant Gen AI Layers

Modules that are instantly available to put together to create any innovative Gen AI solutions

## Back-end

### Foundation Models

Core algorithms trained on extensive datasets for generalized tasks.

### Document Parsers

Specialized models for understanding the structure and layout of documents.

### Multi-Modal models

These models are capable of processing and integrating multiple types of data to perform more complex tasks.

### LLM Apps & Ops

Centralizes the deployment and operational management of Large Language Models across enterprise workflows.

## Middle-end

### Prompt Libraries

Curated sets of queries or commands designed to guide Large Language Models in generating specific, targeted outputs.

### Vector Databases

Specialized storage systems for high-dimensional vectors, enabling fast retrieval and similarity checks to enhance model performance.

### Auto fine-tuning

Automated processes for adapting pre-trained models to specific tasks, improving accuracy and reducing time-to-value.

### Agent creation

Deploy intelligent agents, often driven by LLMs, to automate specific tasks or interactions within enterprise systems.

## Front-end

### Monitoring Dashboards

Real-time analytics platforms that provide insights into model performance, usage, and health, facilitating informed decision-making.

### Chatbots

Automated conversational agents that handle user queries or tasks, powered by LLMs to provide natural, efficient interactions.

### Intelligent Search

Advanced search algorithms powered by AI, offering contextual and semantic understanding to retrieve highly relevant results.

### Autonomous workflows

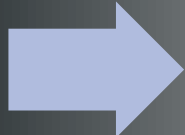
Self-managing processes that leverage AI to automate decision-making and task execution, enhancing operational efficiency.



# Quadrant Gen AI Offerings

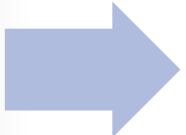
## Leverage ( Pre-Trained LLMs )

- Chat/Summarize/Extract/Classification Training Pipeline
- Single or Multiple Documents
- Feedback loop inbuilt
- Prompt labs & Library
- Integrated Vector DB
- Dynamic Context window
- Secure & Private Cloud
- Complex Chains



## Create ( Fine-tuned LLMs )

- Domain-specific LLMs
- Choose/Switch Foundation Models
- Adapt to any use case with examples
- Self-hosted LLMs
- Rapid Adaptation layer
- Secure Private Cloud
- Optimized Inference Engine

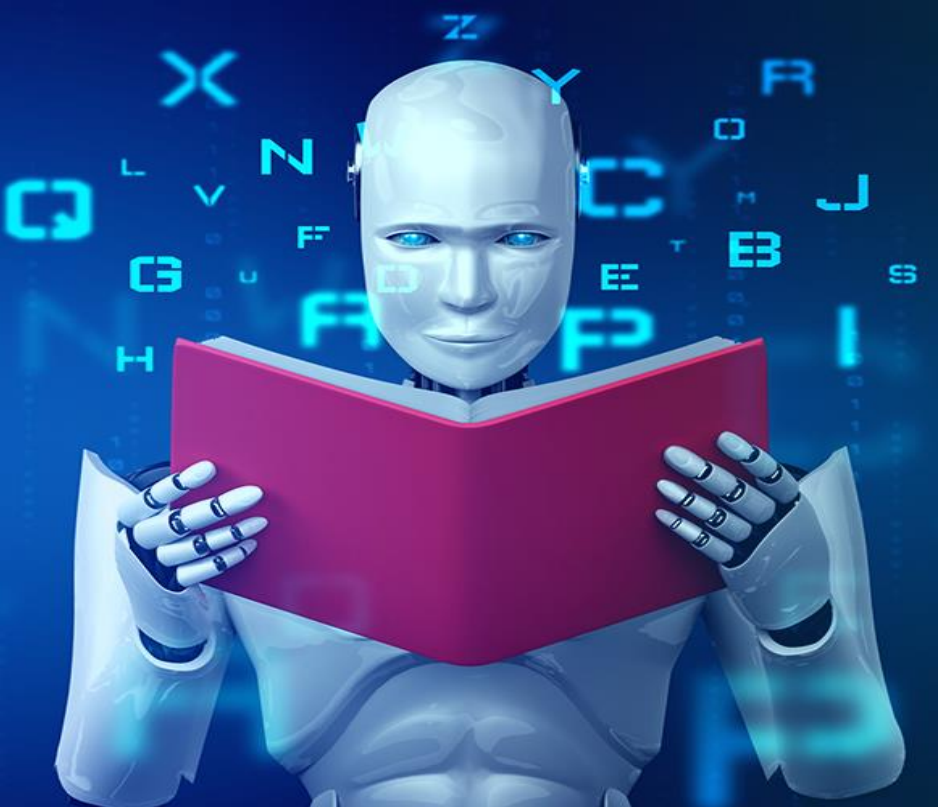


## Co-Develop ( LLM Powered Agents )

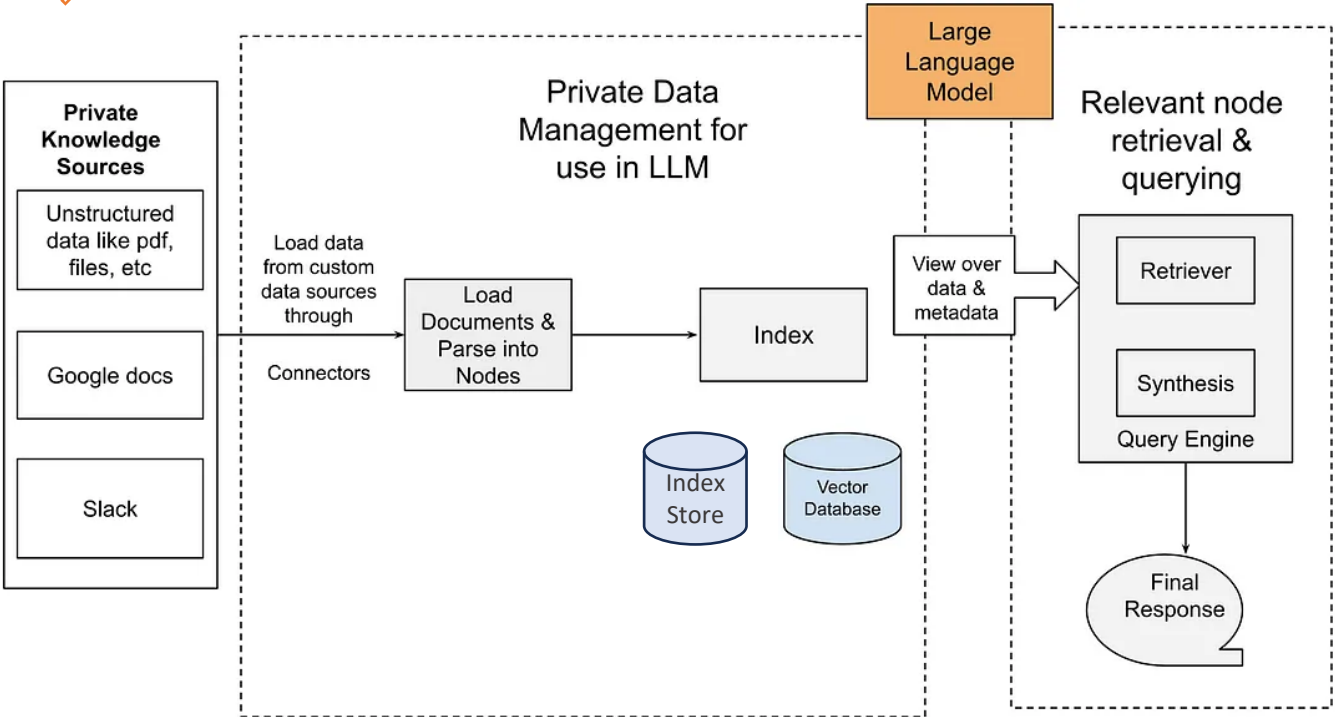
- Advanced chains
- Enable LLM to interact with tools
- Autonomous decision making
- Auto GPT
- Agent Framework
- Multi-LLM Ensemble
- No Code Agent Configuration

# Quadrant using Generative AI to solve Operations Challenges

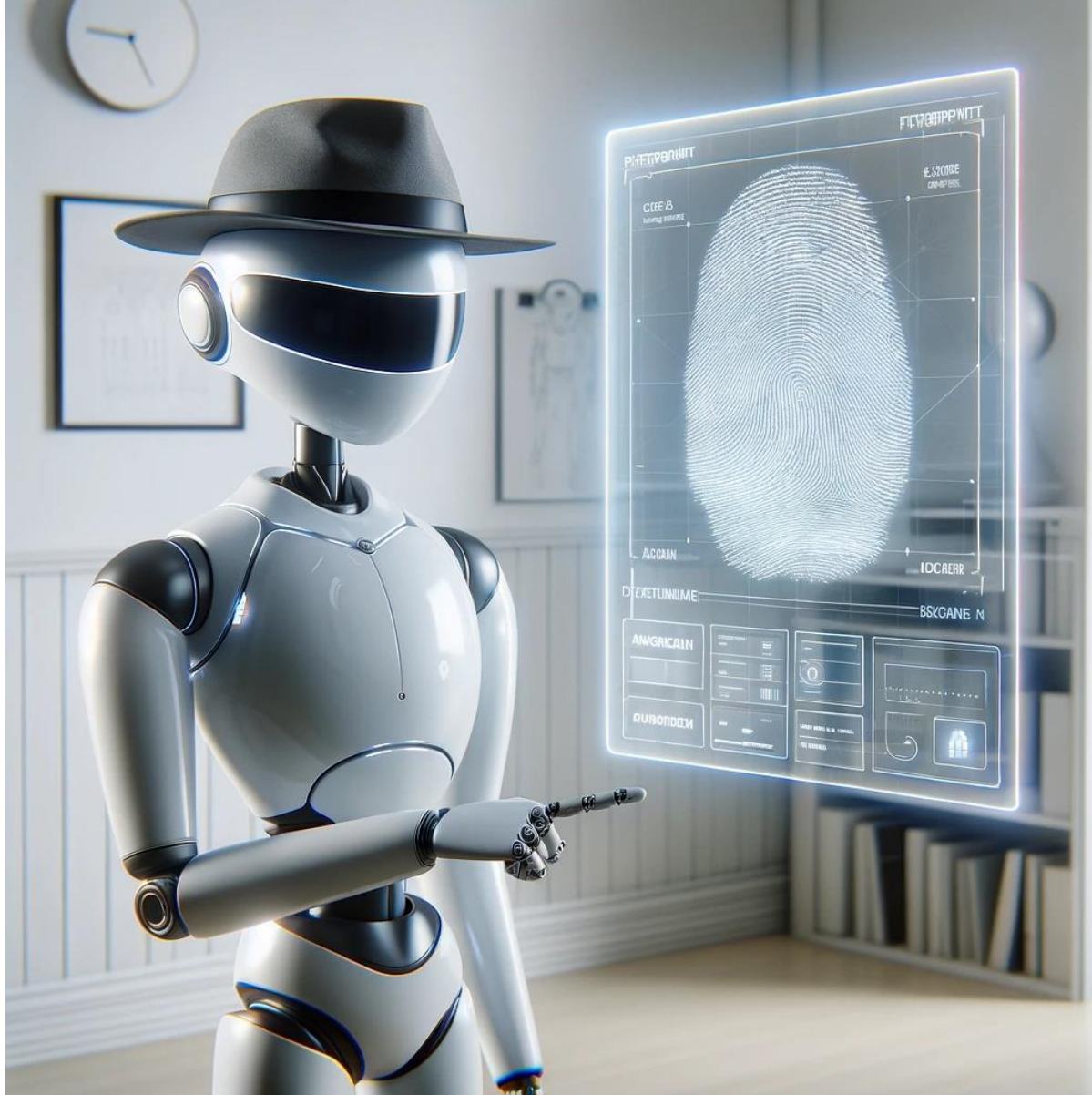
Quadrant leverages generative AI and LLMs (Language Model Models) to efficiently solve IT operations problems. Quadrant enables intelligent automation, proactive monitoring, and effective decision-making for streamlined IT operations management.



- Contextual Relevance
- Efficient Storage and Retrieval
- Scalability
- Compliance with Privacy Regulations
- Privacy Preservation



# Use Case – Investigation helper for NCB Hyderabad



**Problem Statement:** Hyderabad Police Narcotics department is looking to use GenerativeAI to help their officers build watertight FIRs when investigating Narcotics related offences. The Investigating officers are expected to follow the Policies, Procedures and best practices laid down in the NDPS act and other related documentation available with them.

**Business Solution:** Quadrant and Microsoft partnered to help build a BOT platform using OpenAI/GPT4, which can help answer queries raised by the officers. Quadrant Indexed there publicly available NCB act content and the internal private process content and case content to build the query response model.

## Benefits:

- **Quick Access:** Quick access to all procedure information and guides on how to approach the case.
- **Efficiency:** Guide officers to series of actions to be taken on the incident.
- **Access from any ware:** The BOT is accessible over internet
- **Watertight FIR's:** Help officers build watertight FIRs when investigating Narcotics related offences.

# Use Case – Automated Table Description Generation using OpenAI



**Problem Statement:** Manually describing complex database tables is time-consuming and error-prone, hindering efficient data analysis and decision-making. There's a need for an automated solution to generate accurate table descriptions from schemas and table names.

**Business Solution:** Our solution address the challenges associated with manual table description generation through the implementation of an automated system that utilizes OpenAI's advanced language model, ChatGPT. The system will generate accurate and coherent table descriptions by analyzing the schema, column names, and data contained within the table.

## **Benefits:**

- **Time Efficiency:** Rapid table description generation saves time for data professionals.
- **Consistency:** Automated descriptions ensure uniform and accurate information.
- **Scalability:** Solution adapts to various table structures and business needs.
- **Informed Decisions:** Clear descriptions empower data-driven insights.

# Use Case – Improving CosmosDB BoT by NLP



**Use Case:** CosmosDB Operations team has TSG's for the ICM resolutions. As team is not effectively utilizing them as its time taken to search in documents. Quadrant to index TSG's using LLM's improve the BoT so that user can prompt and get required resolutions.

## Phase 1 (POC):

- Picked ~5 TSGs which are related.
- Indexed TSG's using different LLM models from OpenAI / Huggingface
- Compared the prompt response results and identify the right LLM model.
- Fixed anomalies, If TSG's needs some structuring, and re index them for desired results.
- Achieved 80% accuracy of responses

## Phase 2(Implementation)

- Implement in Realtime environment
- Index all CosmosDB TSG's in MS environment using LLM model which is identified in POC stage
- Enhance current BOT and integrate LLM model to it
- Test and validate the prompt and responses
- and deploy.

Azure  
Cosmos DB



# Overcoming Gen AI Key Challenges

<b>Personalization</b>	<b>No Hallucination</b>	<b>Business Rules</b>	<b>Compliance</b>	<b>Governance</b>
<p>Implement targeted personalization through Quadrants' adaptable Gen AI models, designed to understand and respond to individual user needs, enhancing engagement and conversion</p>	<p>Robust validation and verification systems, minimizing content hallucination by ensuring that generated content is grounded in accurate and reliable data sources</p>	<p>Infuse business rules into the Generative AI process with Quadrants' customizable models, aligning generation with organizational strategies and industry standards for tailored efficiency</p>	<p>Compliant-driven approach, where models are designed to meet regulatory requirements, maintaining alignment with legal and ethical standards</p>	<p>Integrate stringent security protocols and governance, to mitigate risks and maintain the integrity of communications and data handling</p>

# THANK YOU



**QUADRANT RESOURCE**  
ACHIEVE MORE TOGETHER

**Phone** - +1 (425) 296 - 1122

+91 (040) 4019 8484

**Email** - [info@quadrantresource.com](mailto:info@quadrantresource.com)

**Website** - [www.quadrantresource.com](http://www.quadrantresource.com)