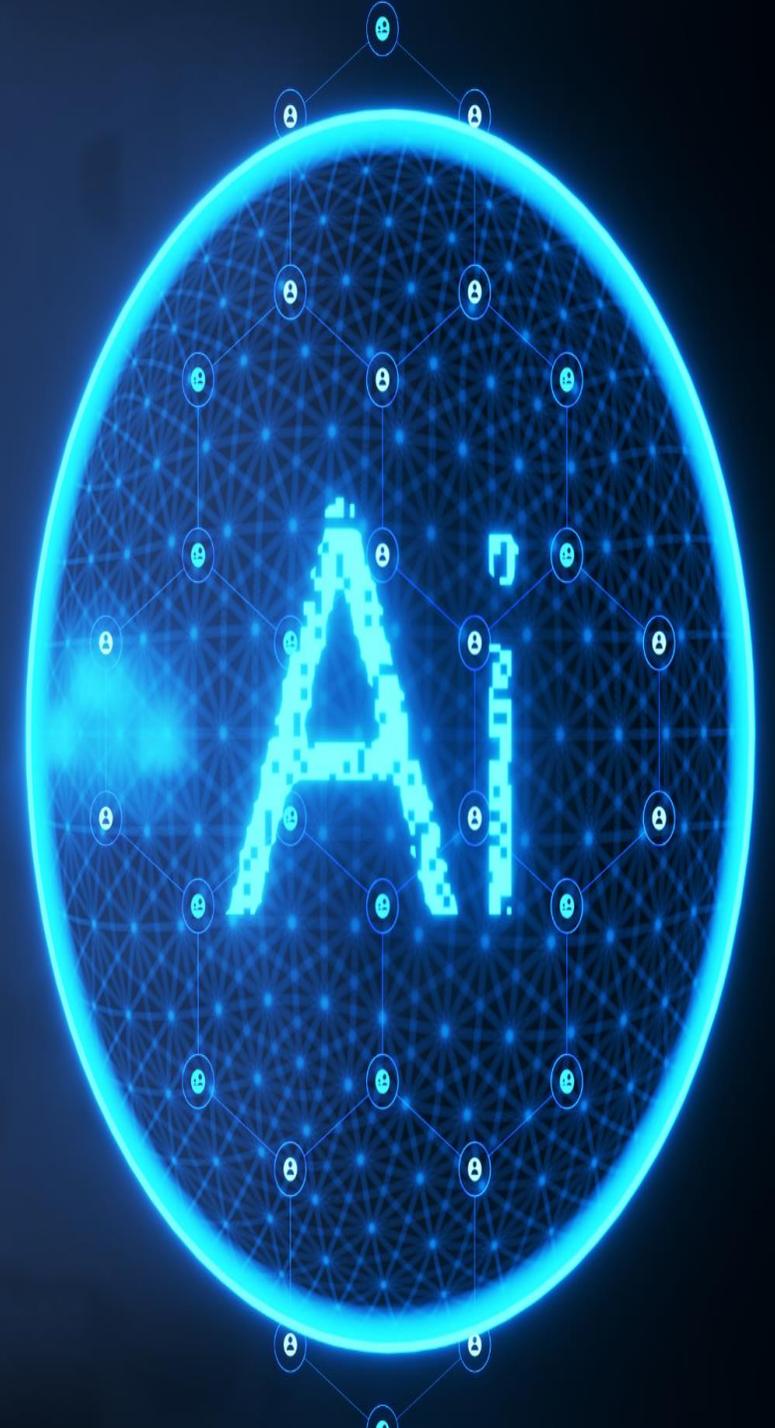


RefineM

Generative AI Webinar

Empowering Business with Generative AI: Solutions and Live Demonstrations



Introduction

Our Speakers



Narendra (NK) Shrivastava,
MBA, ICP-ACC, SPC, ACP, CSP,
PMP

- CEO of RefineM LLC
- Project Management ConsultantEnterprise Agile Coach



Aruna A
PMP, CSM, CSPO

- Director, AI Practice Head
- Project management, IT, Finance, and Generative AI

Agenda

Section	Topics
1	Overview of Generative AI
2	Benefits of Generative AI
3	DBQuery.AI-Database Assistant
3	Intellidoc.AI-Documents Assistant
4	Implementation Approach
5	Customer Success Stories
6	Conclusion, Q&A

What is new @ RefineM?

Making Gen AI useful and practical for Project Managers & Product Owners

- 1** Training
 - Gen AI for Project Managers – 2 days hands on training – <https://trainings.RefineM.com>
- 2** Tools
 - DBQuery.AI – Allows PMs, SMs, BAs, POs and other non techy members to query project database(s) in English language without knowing table structures or SQL.
 - Intellidoc.AI – Allows PMs, SMs, BAs, POs and other non techy members to query project documents in English language without knowing table structures or SQL.
- 3** POCs
 - Project Status Report Generation
 - Risk Management including development of a risk register
 - Earned Value Management with variances

What's New at RefineM

Upcoming Free Webinar	Date
Risk Management with GenAI	11/21/24

RefineM Products	Self-Paced Online Training
<u>Essential Gear for Project Managers</u> RefineM.com/products/	<u>Agile Fundamentals Self-Paced Course</u> RefineM.com/course/agile
<u>PMP® Exam Prep Test Simulator</u> Examprep.RefineM.com	<u>PM Fundamentals Self-Paced Course</u> Refinem.com/course/project-management-fundamentals/
<u>Agility Assessment</u> Agility.RefineM.com	<u>Agile BusReqs Self-Paced Course</u> https://vimeo.com/ondemand/refinembusreq
<u>PDU Bundle</u> https://vimeo.com/ondemand/refinempdus	<u>Backlog Grooming Self-Paced Course</u> Udemy.com/course/backlog-grooming-for-agile-requirements/

Generative AI Business Values

Expert AI System

Programmers teach AI exactly how to solve specific problem by providing precise instructions and steps

Machine Learning

The ability for computers to learn from experience or data without human programming

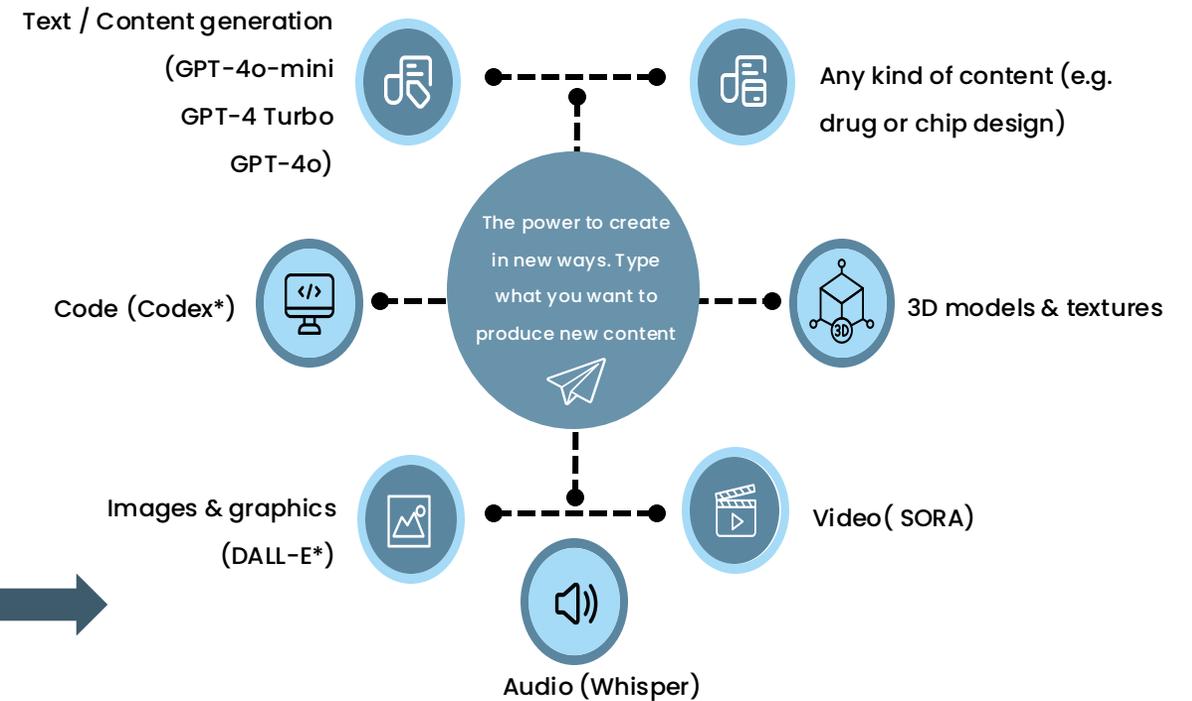
Artificial Intelligence

The theory and methods to build machines that think and act like humans

Deep Learning

Mimics the human brain using artificial neural networks such as transformers to allow computers to perform complex tasks

Generative AI Nutshell



*models available through Azure OpenAI Service

Defining Generative AI

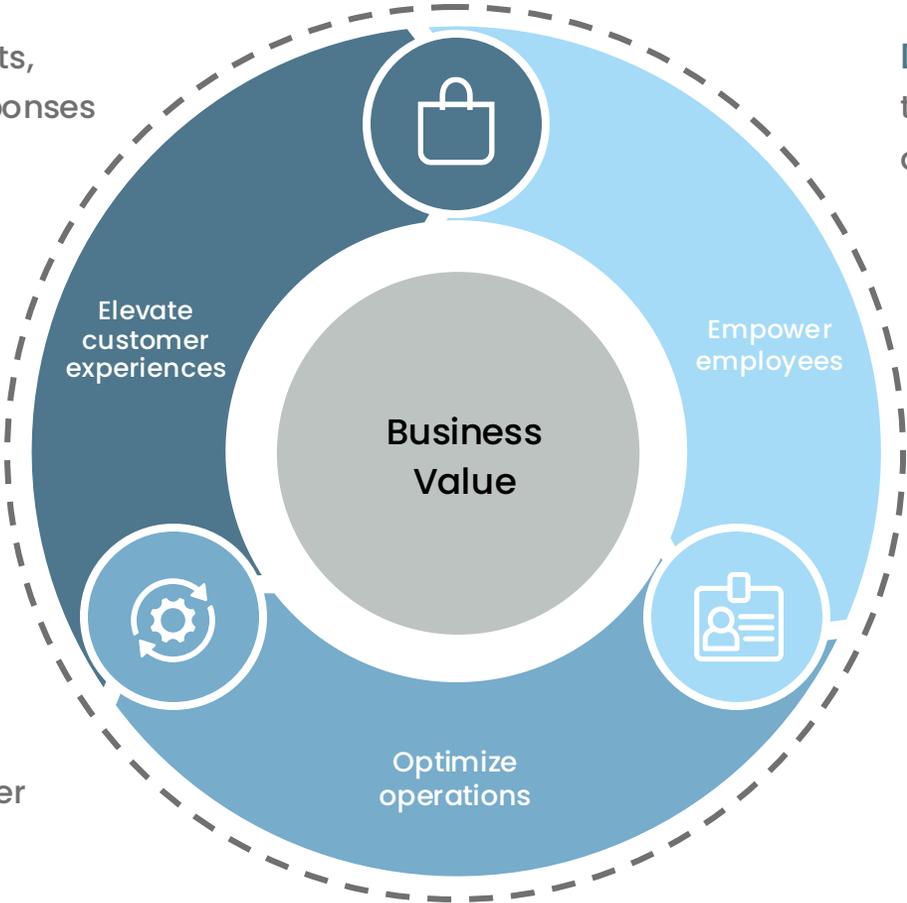
How Generative AI adds Business value

Customer Service: Self-service chatbots, smart routing, and automatic email responses for product questioning and complaints.

Content Generation at Scale: Producing high-quality content like product descriptions, blog posts, etc.

Enhanced Creativity: Generating new creative ideas.

Competitive Advantage: Offering innovative products, services, or customer experiences.



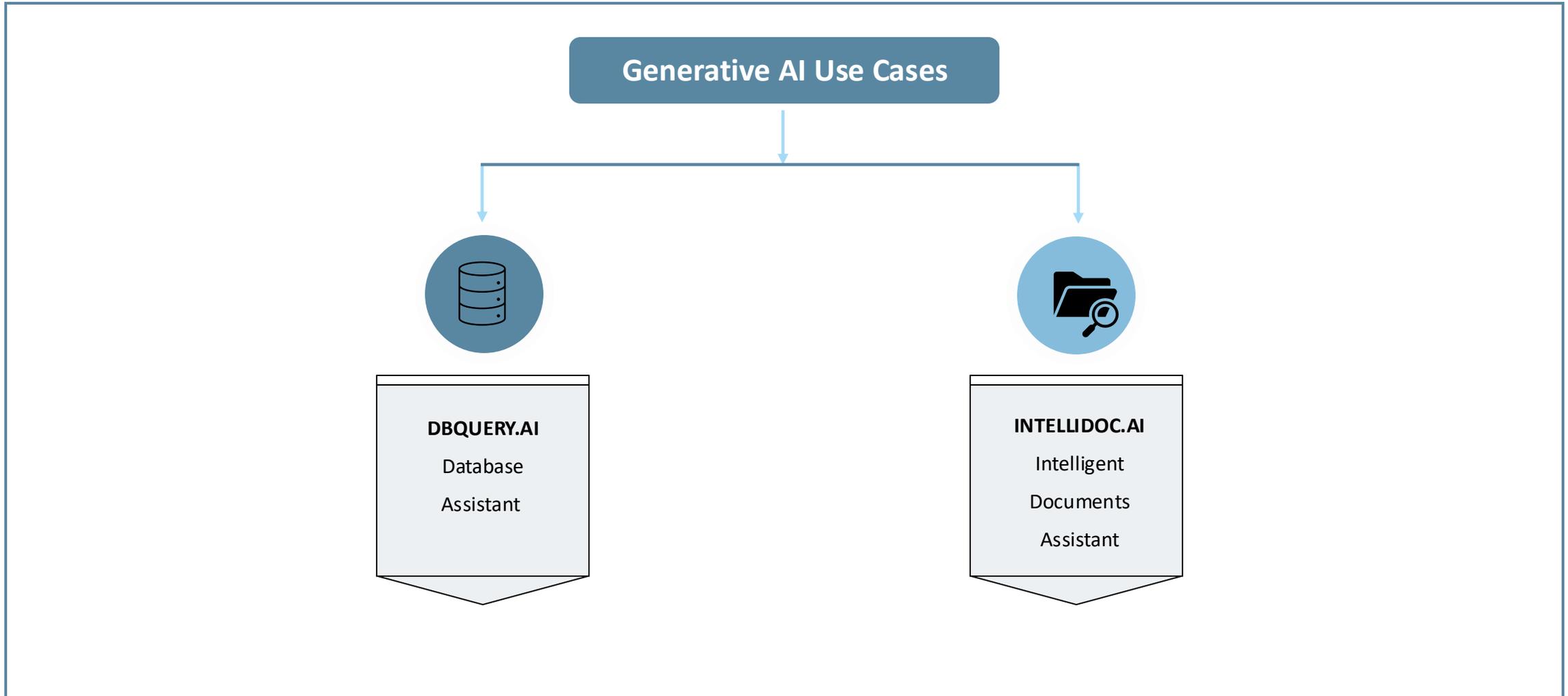
Data-Driven Decision Making: Analyzing data to generate insights for better marketing, sales, and product decisions.

Reduced Costs: Automating tasks, optimizing processes, and personalizing experiences.

Improved Operations: Answering customer inquiries and resolve issues.

Increased Efficiency: Automating repetitive tasks.

RefineM Gen AI Tools



RefineM Gen AI Prototypes

Domain

Manufacturing Industry

- Knowledge Extraction from Training Materials
- Incident Management to support tickets, research similar issues, find resolutions
- Streamlined Inventory Management

Healthcare

- Patients' Medical reports Analysis & Summarization
- Document assistant for Doctors and patents
- Healthcare Admin Data & Inventory Assistant

Functions

HR & Legal

- New Joiner HR Assistant
- Information Extraction from Policy/Contracts documents

Sales & Customer Support

- Policy & Training Knowledge Assistant
- Real time data assistant

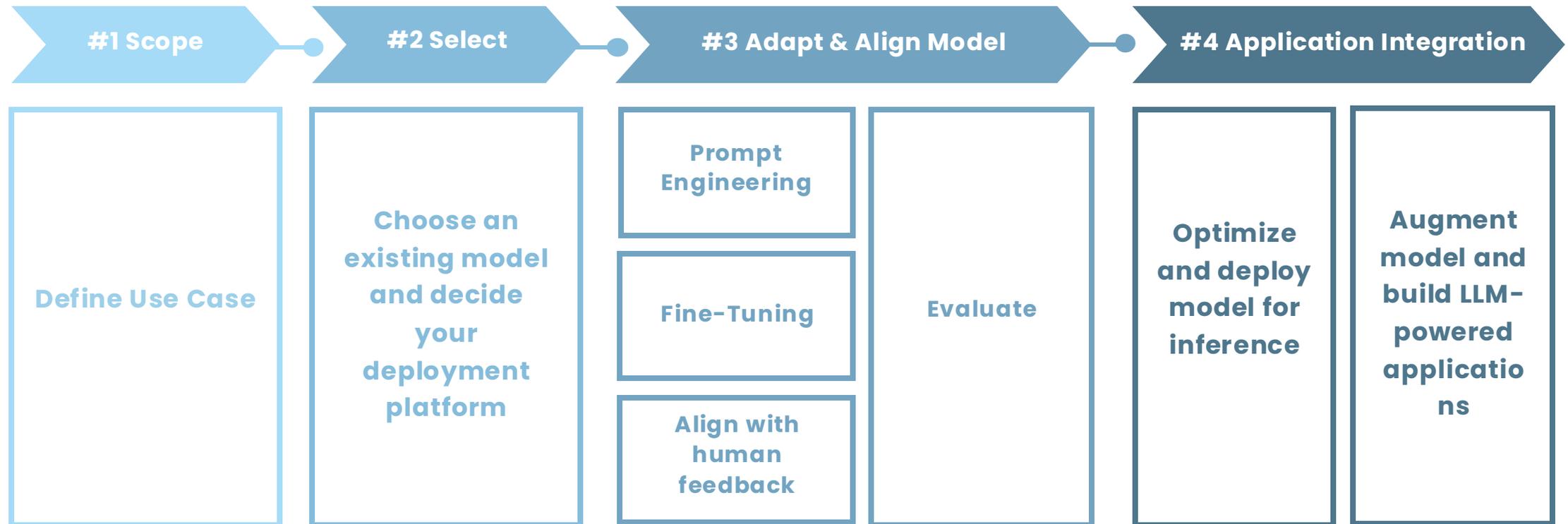
Financial Services

- Invoices and Receipts mgmt.
- Loan application & Insurance claims

Marketing & Media

- Augment content search & analysis

Generative AI Project Lifecycle



DBQUERY.AI - Database Assistant

Problem Statement: Non-technical users often require access to work-related data for decision making and analysis.

The current process of involving IT for every data request or adhoc query is time-consuming and hinders productivity.

Solution: A Gen AI tool that enables end users to query and analyze the data seamlessly in natural language, eliminating the need for SQL queries and help to optimize day-to-day operations.

Users can also perform data visualization and analysis, with the flexibility to generate graphs as per their requirements

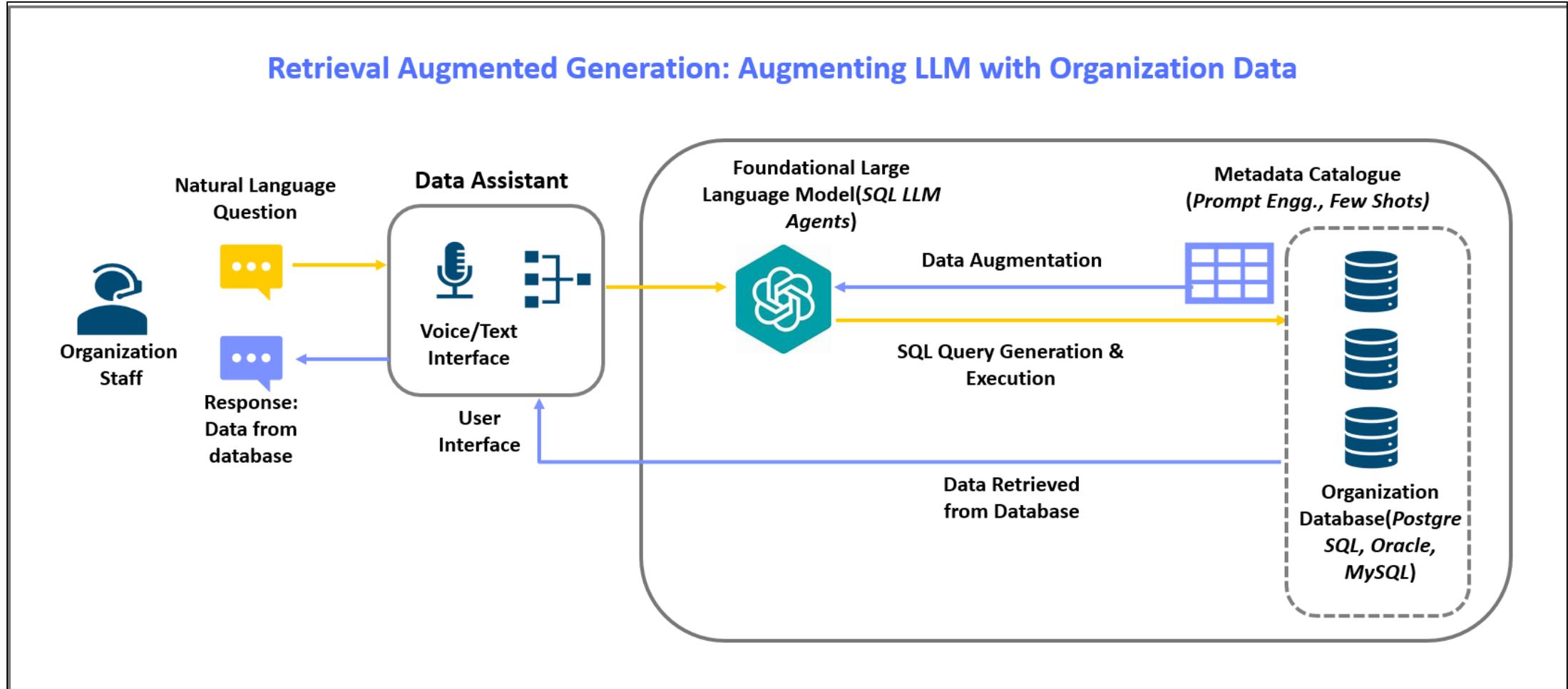
Key Features:

- Users doesn't have to have the [technical expertise](#) to write queries or dependent on technical team to provide data
- Inbuilt [data security](#) rules based on User Role provides the data privacy across roles and departments level
- Improves data accuracy by retrieving [real time data available 24/7](#)
- Generic functionality which can be extended to other departments like [Operations/Health Care/Finance](#)



DBQUERY.AI - Database Assistant

Retrieval Augmented Generation: Augmenting LLM with Organization Data



DBQUERY.AI - Database Assistant

The screenshot displays the DBQuery AI interface, which is divided into two main sections: an Evaluation Dashboard and a Query Setup screen.

Evaluation Dashboard: This section is located on the left side of the interface. It features five semi-circular progress indicators, each representing a different performance metric. A blue arrow labeled "Assessment" points to this section. The metrics and their approximate values are:

- Faithfulness:** 100% (green)
- Relevancy:** 100% (green)
- Precision:** 50% (yellow)
- Recall:** 50% (orange)
- Harmfulness:** 10% (red)

Query Setup Screen: This section is on the right side of the interface. It features the Lagozon Technologies logo and the title "DBQuery : Generative AI Assistant to your Database". The interface is divided into "SETUP" and "QUERY" tabs, with "QUERY" being the active tab. A blue arrow labeled "Subject Area Details" points to this section. The setup includes:

- Select a Subject Area:** A dropdown menu with "Inventory" selected.
- You selected:** Inventory
- Number of tables in Inventory:** 4
- Tables in this Subject Area:** A dropdown menu with "lz_items" selected.
- Click start recording to speak:** A "Start recording" button.
- Input field:** "What you would like to know about : Subject area - Inventory ?" with a "Clear" button below it.



DBQUERY.AI - Database Assistant

Speech to Text

Start recording

What you would like to know about : Subject area - Inventory ?

Clear

Relevant Tables: lz_item_onhand, lz_items

Item Onhand details along with item number

```
SELECT lz_item_onhand.*, lz_items.item_number FROM lz_item_onhand JOIN lz_items ON lz_item_onhand.inventory_item_id = lz_items.inventory_item_id
```

Data from lz_item_onhand:

	inventory_item_id	subinventory_code	onhand_quantity	last_update_date	item_number
0	2	WAREHOUSE-B	100	2024-06-09	DEF-456
1	3	ASSEMBLY-01	25	2024-06-08	MTR-000123
2	4	FINISHED-GOODS	15	2024-06-07	MTR-000789
3	7	RETAIL-STORE-2	1	2024-06-10	REV-A-002
4	6	WAREHOUSE-C	40	2024-06-06	COMP-XY-12
5	1	WAREHOUSE-A	50	2024-05-10	ABC-123
6	5	RETAIL-STORE-1	4	2024-04-10	P-WIDGET-001
7	12	PROD-MAIN-INV	5	2024-06-24	LZ-SAFE-FGHI
8	11	PIPE-YARD	400	2024-06-24	LZ-PIPE-678
9	13	SAFETY-STOCK	15	2024-06-24	LZ-CHEM-KLMN
10	10	CHEMICALS-INV	45	2024-06-24	LZ-PROD-ABC

Download as Excel

Was this response helpful?

SQL Query from User's input in Natural Language

Data Output



DBQUERY.AI - Database Assistant

Capturing User Response →

Was this response helpful?

👍 4 👎 1

Provide feedback here

Select X-axis for lz_item_onhand

subinventory_code

Select Y-axis for lz_item_onhand

onhand_quantity

Select Chart Type for lz_item_onhand

Bar Chart

Generate Chart for lz_item_onhand

Data Visualization →

subinventory_code	onhand_quantity
WAREHOUSE-B	100
ASSEMBLY-01	30
FINISHED-GOODS	20
RETAIL-STORE-2	40
WAREHOUSE-C	50
WAREHOUSE-A	10
RETAIL-STORE-1	10
PROD-MAIN-INV	10
PIPE-YARD	400
SAFETY-STOCK	20
CHEMICALS-INV	50



INTELLIDOC.AI - Documents Assistant

Problem Statement: A significant amount of valuable knowledge resides within various documents across various formats. However, accessibility and Readability to the data for any specific knowledge is challenging .

Solution: Implementation of an interactive tool that enables Q&A, creates new content, analyses & suggests and summarizes responses based on the user's needs from the given set of document metadata.

It helps to understand and summarize complex documents based on semantic, key word and relevant searches.

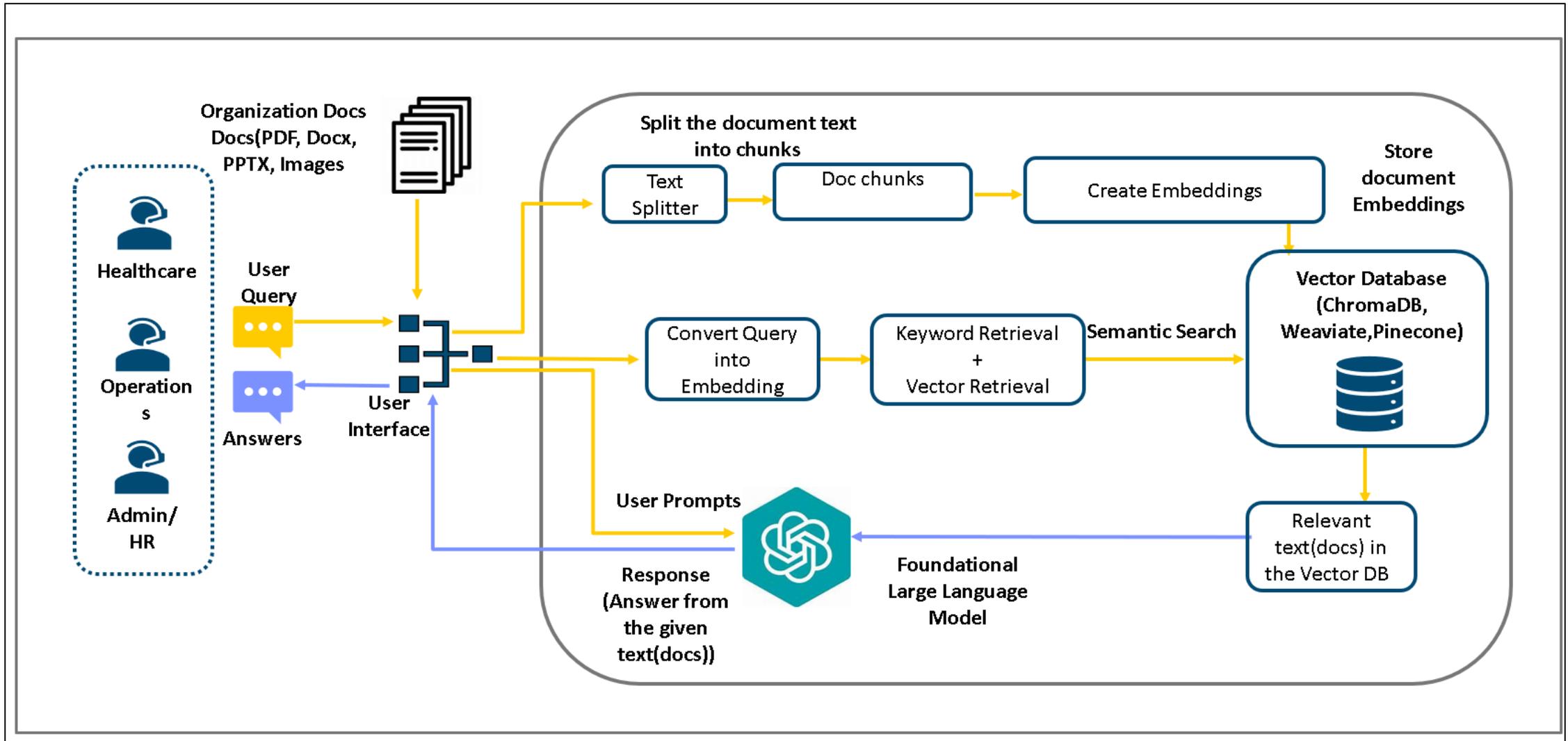
This empowers users with deeper insights and facilitates informed decision making.

Key Features:

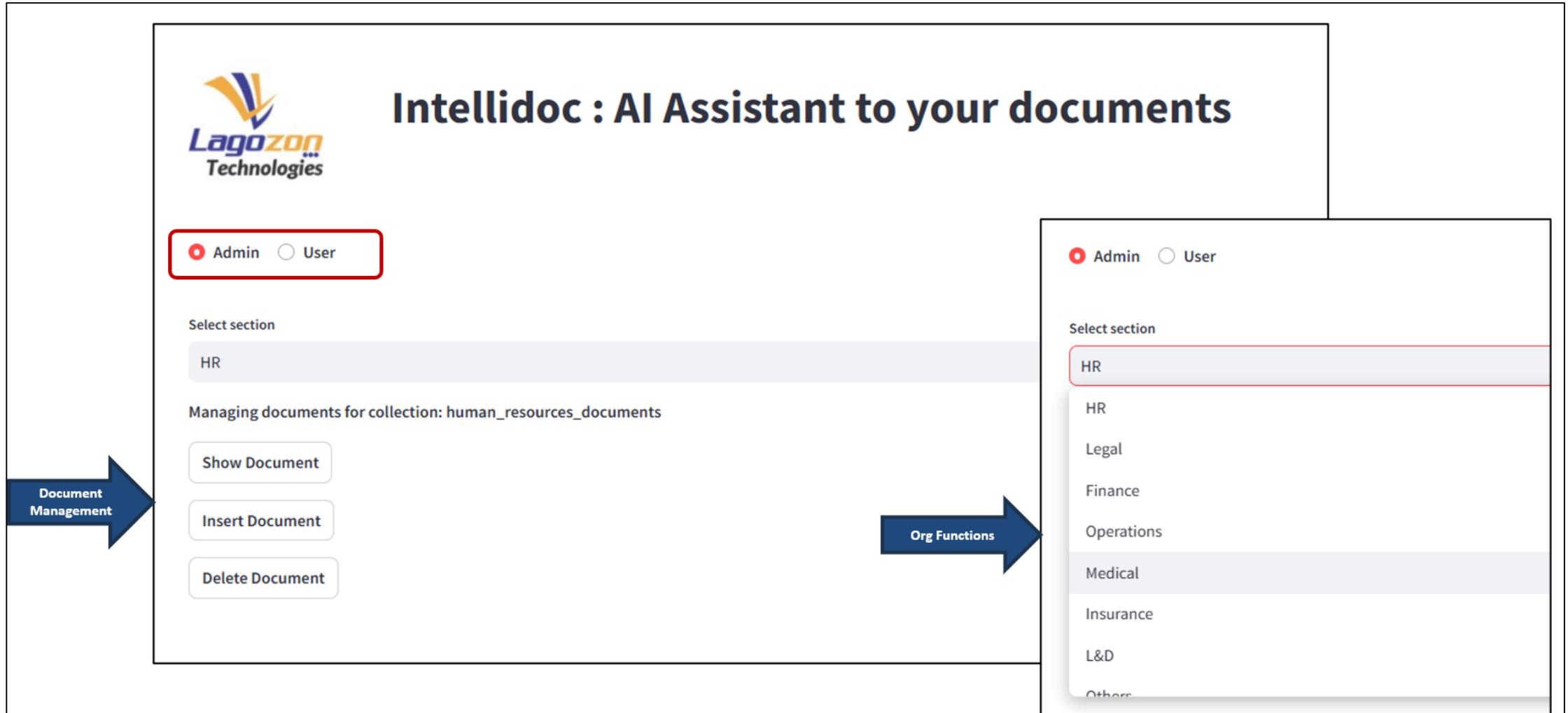
- System understands document content and context, enabling relevant data extraction significantly reducing manual data work and processing time
- Data from multiple data sources and in multiple data formats both structured and unstructured like PDFs, Scanned PDFs, Word, Excel, CSVs are supported
- Easy integration into the current ecosystem for any department which deals with large sets of documents



INTELLIDOC.AI - Documents Assistant



INTELLIDOC.AI - Documents Assistant



INTELLIDOC.AI - Documents Assistant

The screenshot displays the Intellidoc AI interface. On the left, a sidebar titled "Upload your temporary document" includes a "Choose a parser:" dropdown set to "LlamaParse", a "Selected Parser: LlamaParse" label, and a "Choose your files" section with a "Drag and drop files here" area and a "Browse files" button. A blue arrow labeled "Adhoc File Upload" points to this sidebar. The main content area features the "Lagozon Technologies" logo and the heading "Intellidoc : AI Assistant to your documents". Below this, there are radio buttons for "Admin" and "User" (selected), and a "Select your role" dropdown set to "HR Team". A "Show Document" button is visible. Underneath, there are radio buttons for "Text" (selected) and "Voice". A blue arrow labeled "Sample List of Documents stored for HR" points to a "Documents" dropdown menu in the bottom right, which is open to show a list: "1.GGAL.pdf" (highlighted), "1.GGAL.pdf", "human-rights-statement-INFY.pdf", and "records_retention_destruction_policy.pdf". A "Reset Chat" button is also present in the bottom right.



INTELLIDOC.AI - Documents Assistant

Lagozon Technologies

Intellidoc : AI Assistant to your documents

Admin User

Select your role

HR Team

HR Team Page

Show Document Reset Chat

How would you like to ask your question?

Text Voice

Give me top 10 points in the document

1. The document is a policy for records management. 2. The policy requires employees to create only necessary documents, retain them for the appropriate time per policies/procedures. 3. The policy requires compliance with legal requirements related to litigation, government/regulatory investigation, and audit. 4. roles and responsibilities for records management, with the Functional Head being SPA for all activities and Records Coordinator assisting them. 5. The policy of any document or record to manage them in accordance with the company's policies and required statutes. 6. The policy requires the storage of records at all 7. The policy requires the provision of a list of unwanted records to the Records Coordinator for destruction. 8. The policy requires proper filing of records requires the maintenance of details of assets given to employees for 5 years. 10. The policy requires the maintenance of internal audit reports for 5 years.,

Enter your question: ➤

Speech to Text

Q&A with the documents stored



Implementation Approach and Options

Approach -- Run a pilot, refine and show value then expand it with all the learnings from the pilot

Option 1 - Pure Cloud

- Quick start ready infrastructure
- Minimal upfront commitment
- Ease of access by Global team
- Preferred approach for pilot phase

Option 2 – Hybrid Cloud

- Preferred approach for production phase as cost effective in long run

Option 3 – On Premise

- Familiar data centre comfort
- Expensive for pilot to host local LLM (GPU based infra)
- Engineering required



Pilot phase specific components required:

- Gen AI Web App hosting and Storage
- Large language model LLM and embedding model service
- Vector Database (For Document AI)
- Parsing service (For Document AI)

Customer Success Stories



AUTOFURNISH
STYLE YOUR RIDE

Automotive Accessories Retailer

DBQuery.AI empowered Autofurnish with data democratization, enabling quick searches through their vast product and customer database.

This unlocked valuable insights for identifying trends, optimizing inventory, and personalizing recommendations, ultimately driving increased sales and customer satisfaction



RÖSTAN
Ignite Excellence.. Infinite possibilities

Technology Solutions Provider

Intellidoc.AI leveraged generative AI to extract actionable insights from their vast trove of documents.

By analyzing these documents, they were able to identify trends, optimize processes, and make data-driven decisions that fueled their digital transformation and improved overall business efficiency.

Questions?

PDU Code: 3990UDR9RS

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Tools & Technologies

1. RAG (Retrieval, Augmentation, Generation) framework

2. Large Language Models (Azure Open AI Services, OpenAI, Hugging Face)

3. LangChain for Application Development and LlamaIndex as Data Frameworks

4. Vector databases (ChromaDB, Pinecone etc.)

5. RAGAS and Langfuse for Evaluation Metrics and Logging

6. Databases (Snowflake, SQL Server, PostgreSQL)

7. Streamlit & Flask API for UI

8. Dynamic Prompt Engineering & Few Shots