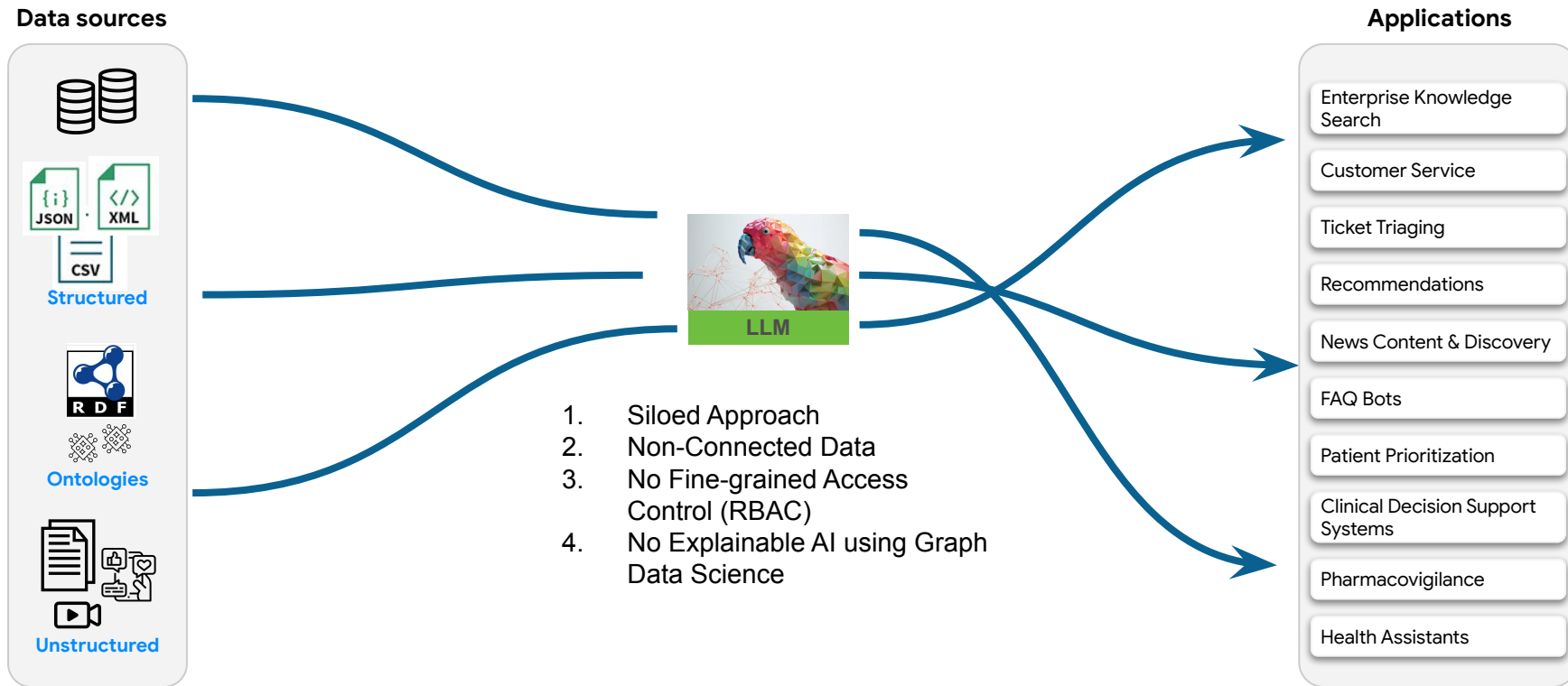




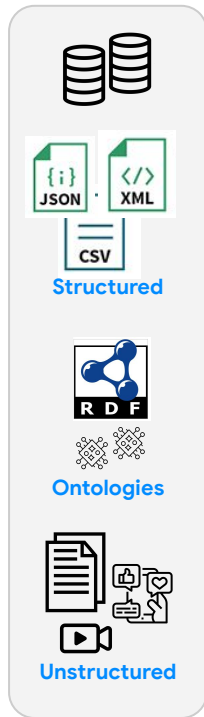
Neo4j and Generative AI

Pure Consumption Model



Introducing Knowledge Graphs

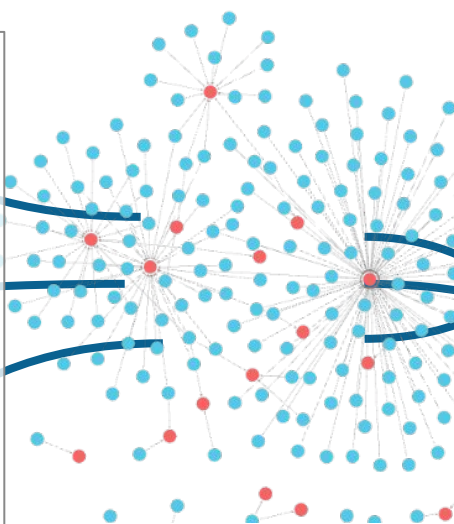
Data sources



NEO4J KNOWLEDGE GRAPH

Why Neo4j

- **Connect** related unstructured and structured data from multiple sources
- **Explainable AI & More predictability** with Graph Data Science
- **Vector Embedding Support**



Why Neo4j

- Grounded Knowledge that is **Contextual, Factual, Explainable** and easy to trace the lineage
- **Grounded Facts, No Hallucinations!**
- Fine-grained Access Control (RBAC)

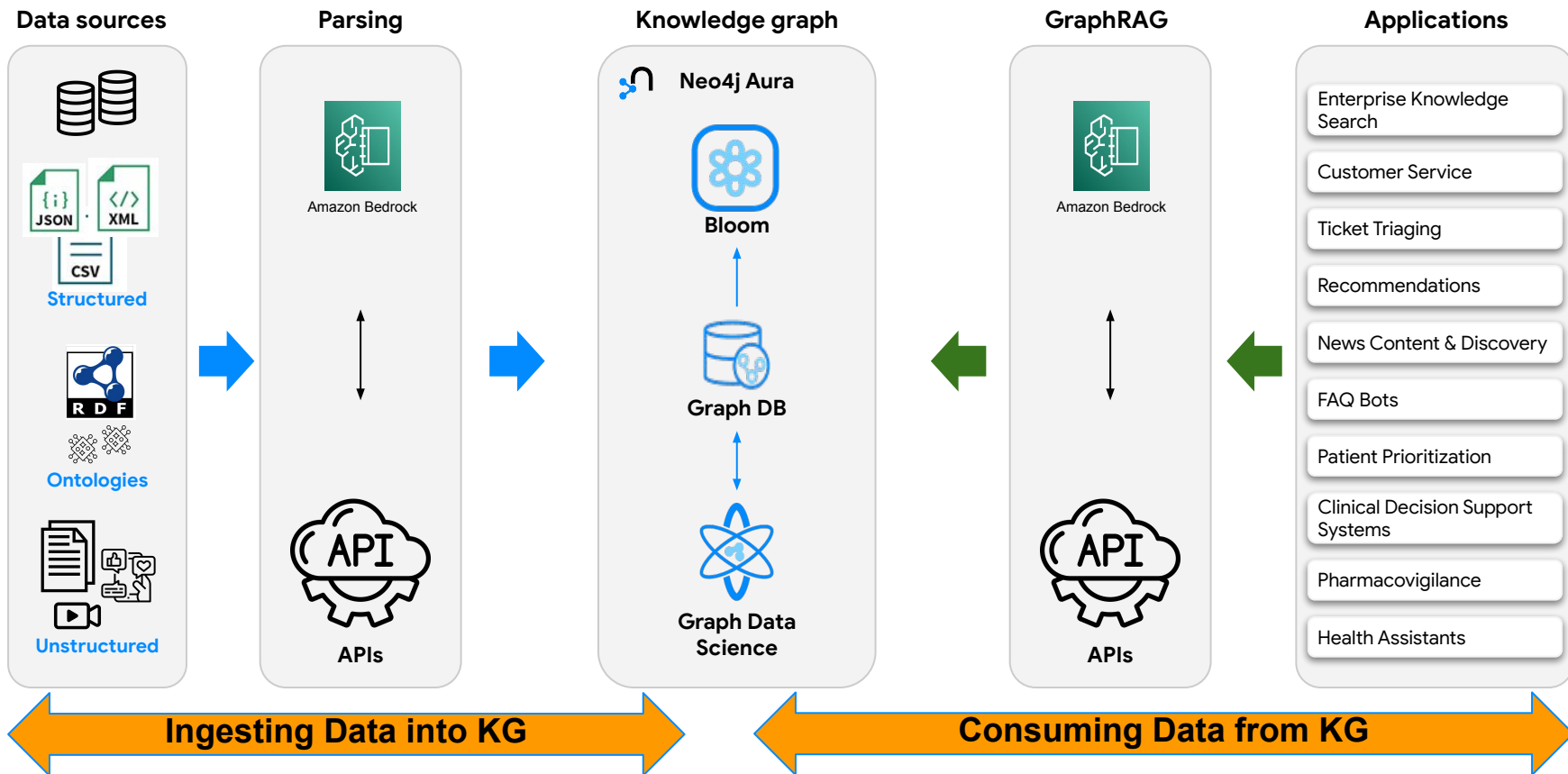
Applications

- Enterprise Knowledge Search
- Customer Service
- Ticket Triaging
- Recommendations
- News Content & Discovery
- FAQ Bots
- Patient Prioritization
- Clinical Decision Support Systems
- Pharmacovigilance
- Health Assistants

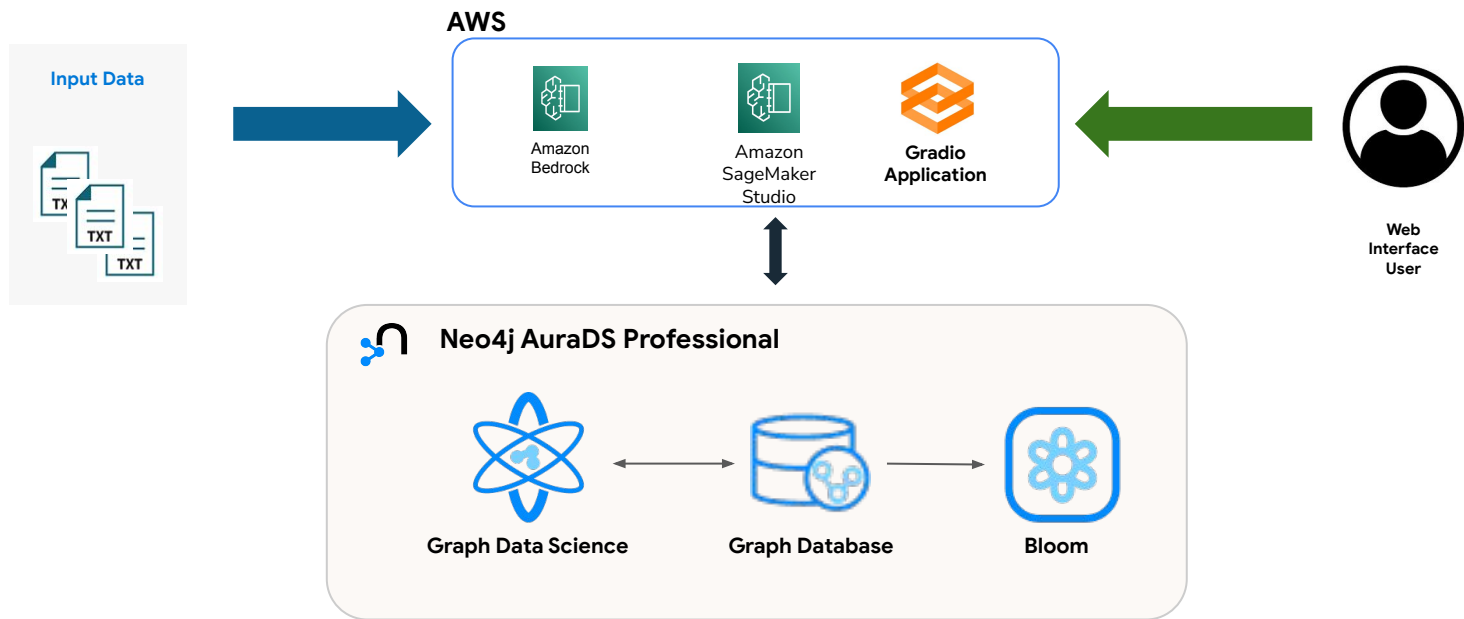
Ingesting Data into KG

Consuming Data from KG

Neo4j and Generative AI Reference Architecture

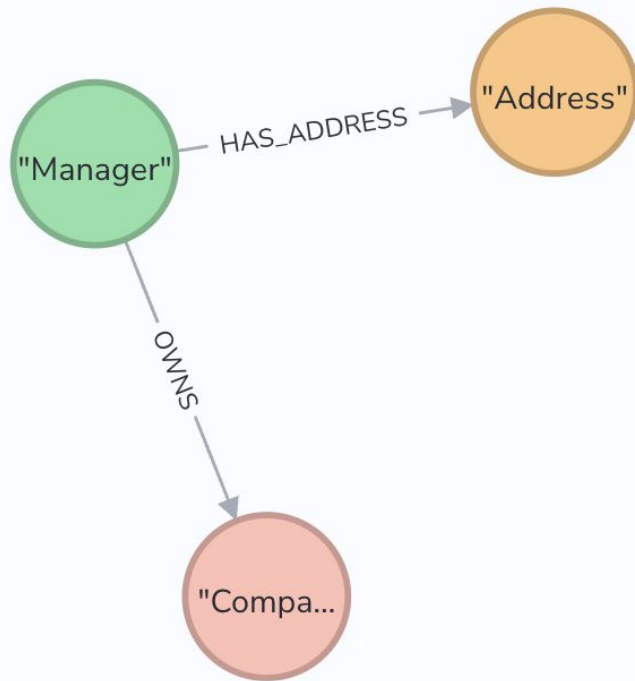


Demo Architecture



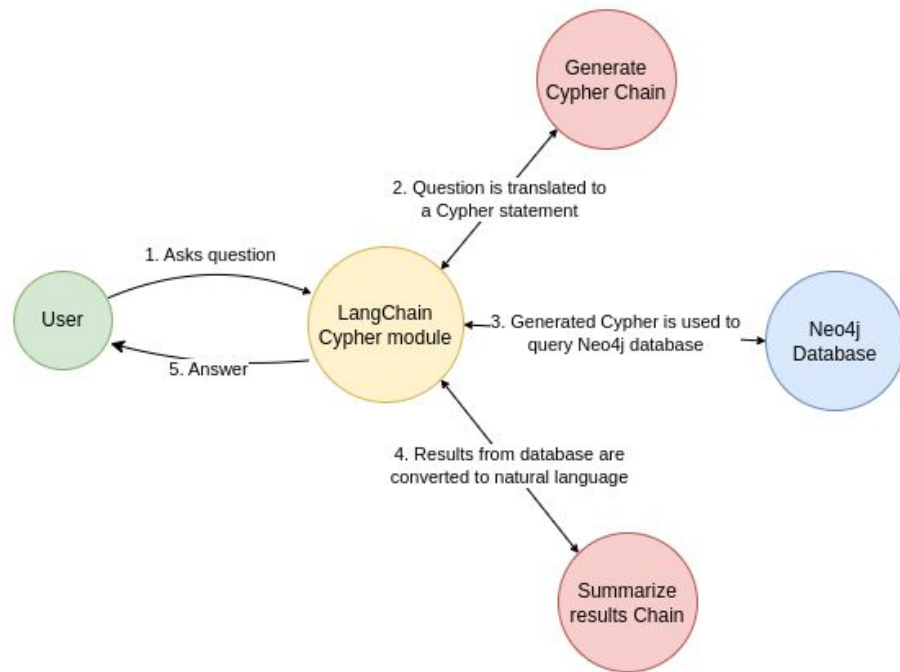
Lab 5 - Parsing

- Zero-shot with a simple prompt with the LLM
- Extract SEC EDGAR filing information in accordance with a Neo4j data model



Lab 6 - Chatbot

- Translates English to Cypher
- Consumption using LLM with few shot prompting
- Data augmentation from Neo4j response



Lab 7 - Knowledge Graphs and Semantic Search

If your focus is analyzing documents on a file system, then vector indexing and search on text embeddings may be sufficient.

If you need to retrieve and make inferences about people, places, and things connected to those documents, knowledge graphs can help.

