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# **The Impact on AI & LLM on the Life Sciences Landscape - A Consultant's Perspective**

**It's about TECH #8 - 25 June 2024**

# Our mission



## Building the Bridge between Business and IT

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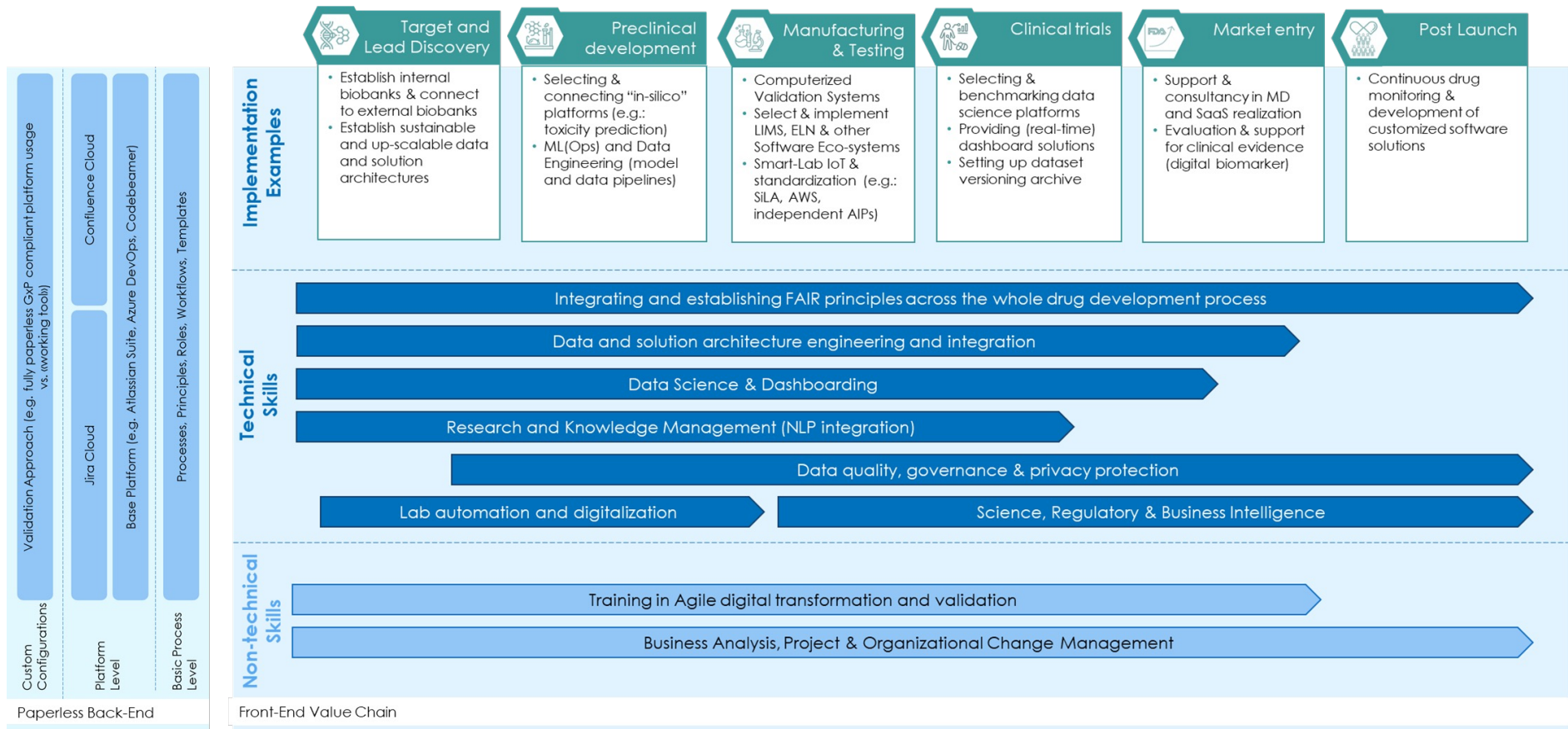
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# Agenda




1. wega Informatik AG - Our core services and coverage
2. Broader Customers Requests – Consulting Scope
3. Framework of AI implementation
4. Operating by looking at the overall picture
5. LLM in pre-clinical and clinical space
6. Implementation of (Generative) AI
7. Knowledge Graph
8. AI and LLM tools in the Pre-clinical or Clinical space

# wega Informatik AG - Our core services and coverage



# Broader Customers Requests – Consulting Scope



- Classical Lab Automation support
  - LIMS and ELN implementations
  - Lab-Tool evaluation & implementation
  - Computerized System Validation
- 
- System connectivity and Cloud Architecture
  - Data & Infrastructure Management
  - Global Business Processes & Policies
  - Medical Devices

#scalability #governance #knowledge #visualization #decision support #cloud architecture  
#platform creation #digital maturity #DevOps services

# Broader Customers Requests – Consulting Scope



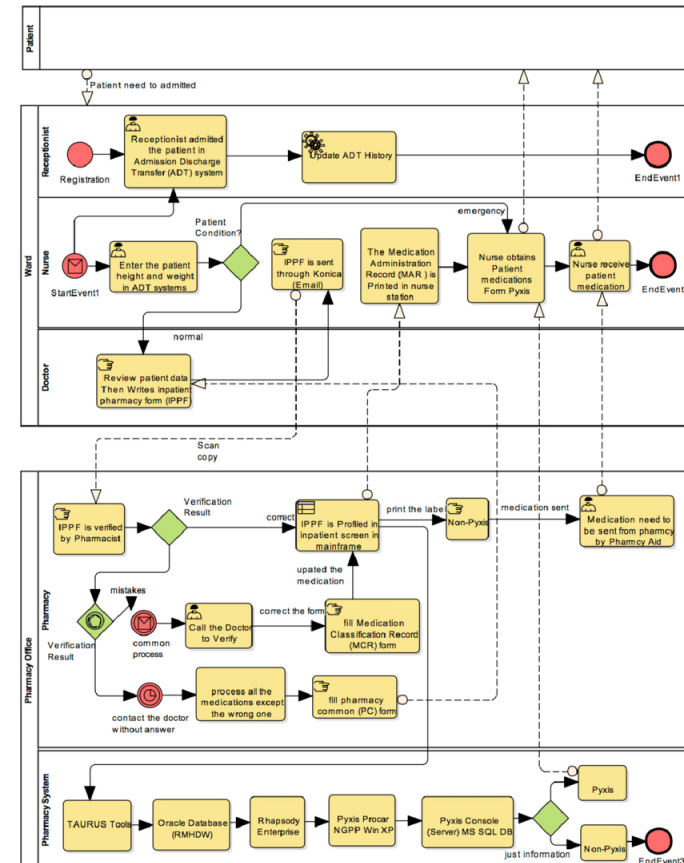
- Classical Lab Automation support
- LIMS and
- Lab-Tool e
- Computer
- System connectivity and Cloud Architecture
- Management
- & Policies

**AI and LLM tools need  
across all**

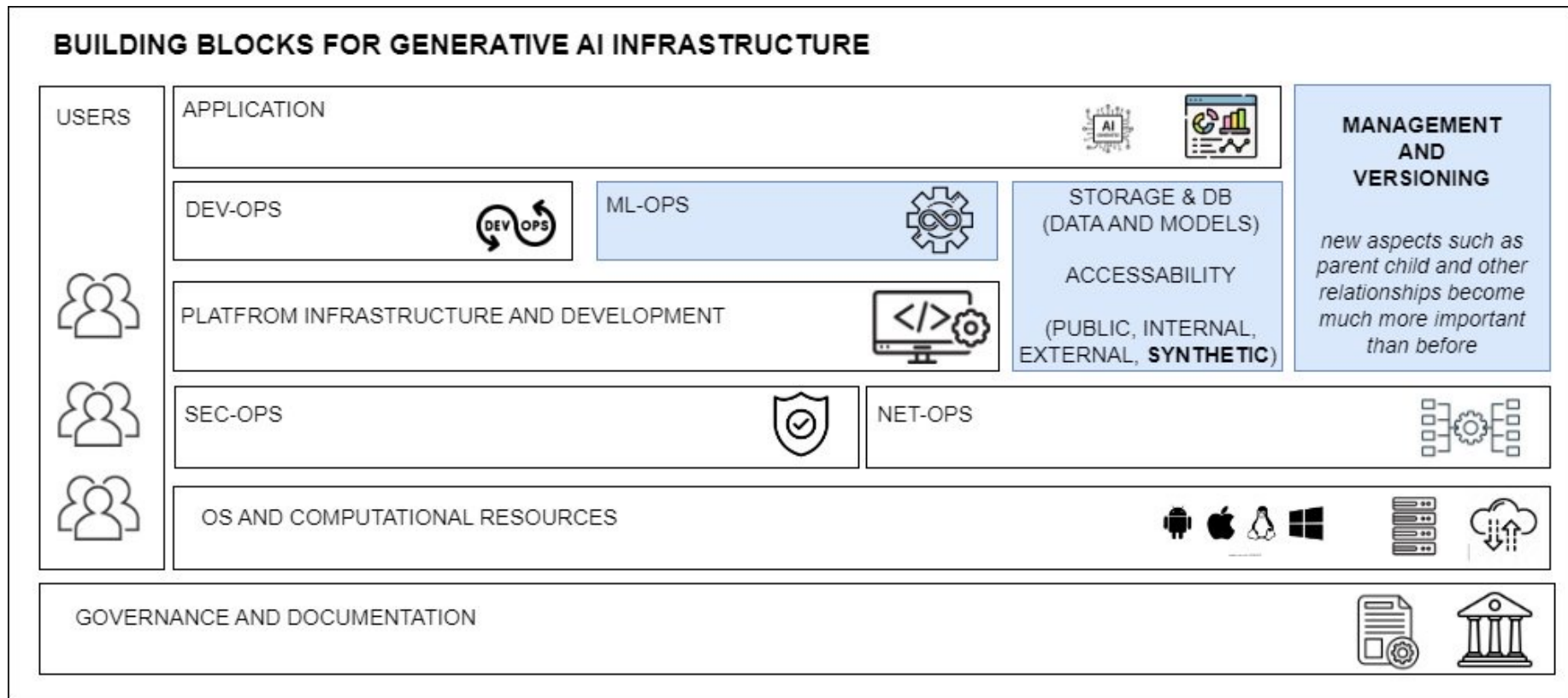
#scalability #governance #knowledge #visualization #decision support #cloud architecture  
#platform creation #digital maturity #DevOps services

# Framework of AI implementation

- Business Analysis of Processes
  - Business process mapping
  - Assessing digital maturity
- Possibilities of AI / LLM implementation
  - Selecting tools vs developing custom scripts
  - Risk-based approach
- Maintenance and Governance
  - Writing policies and SOPs
  - Handing-over and working on ownership

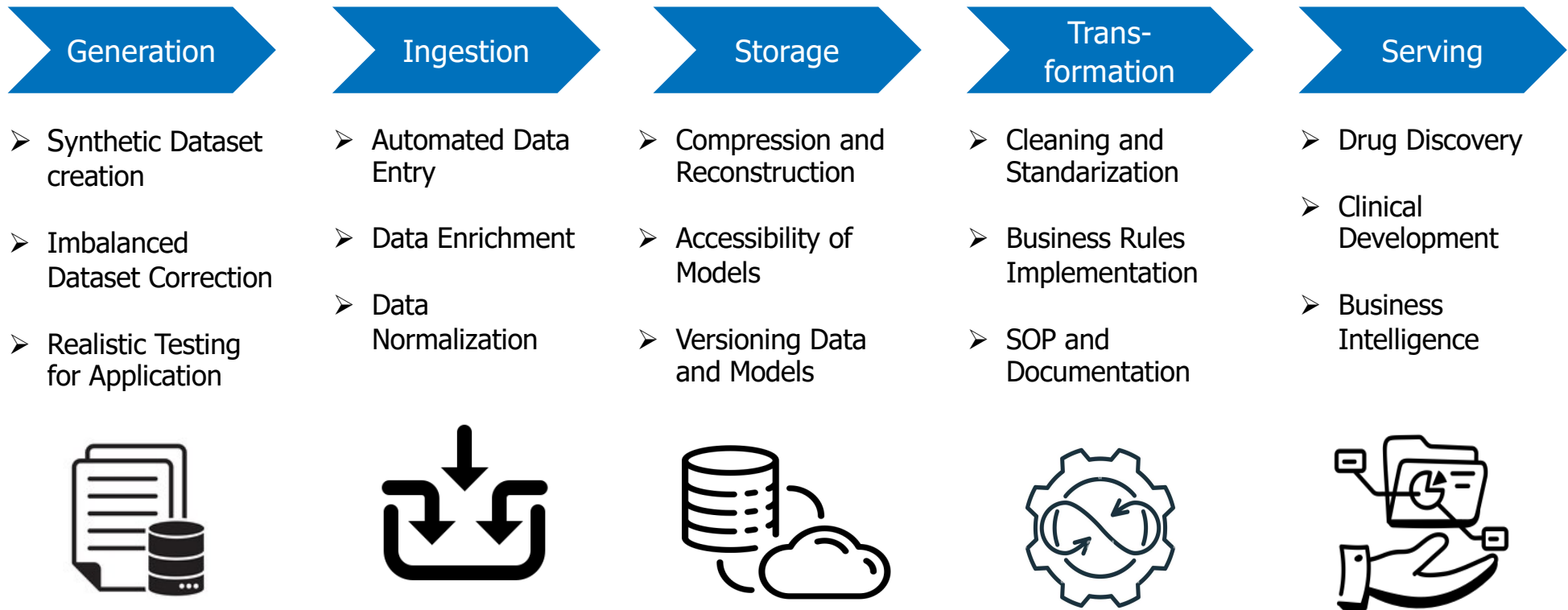


# Operating by looking at the overall picture





# Implementation of (Generative) AI

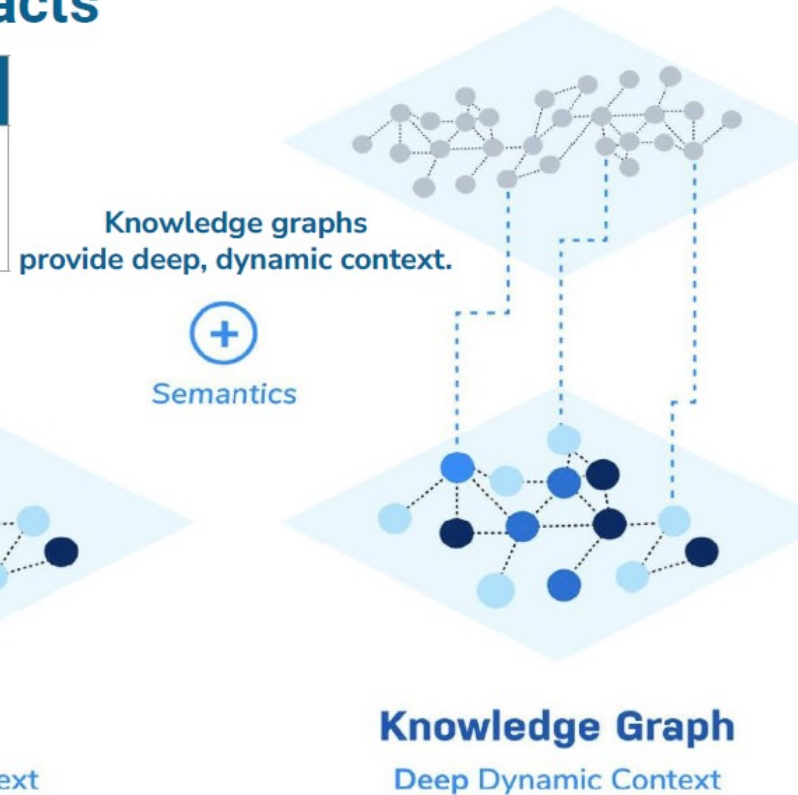


# Knowledge Graph

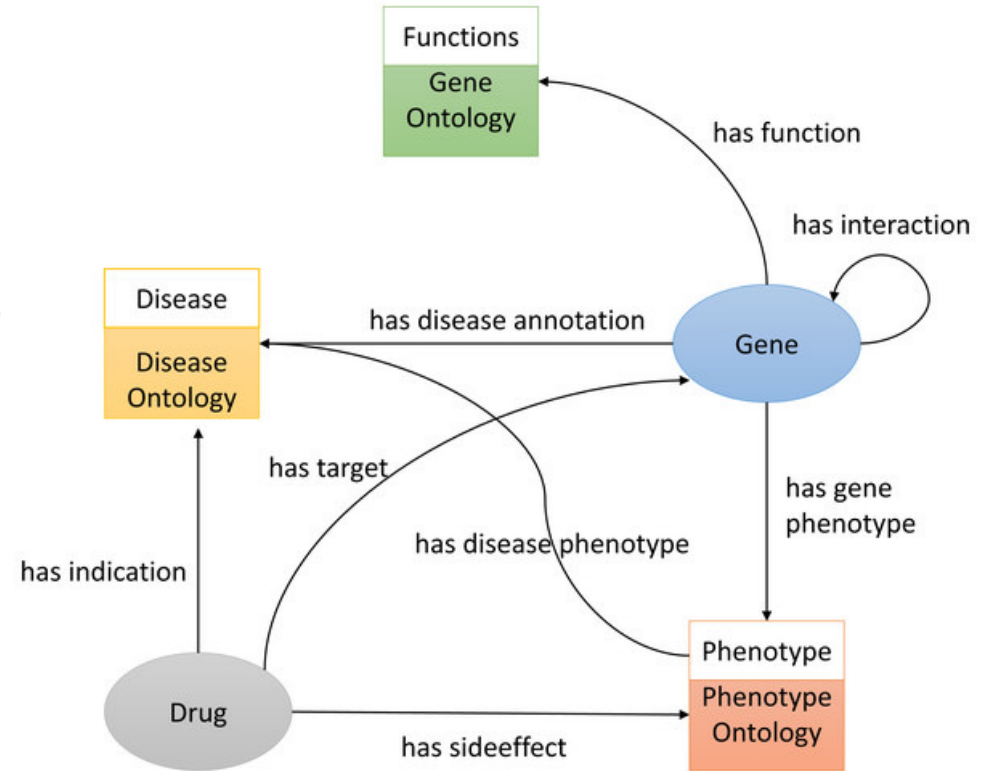
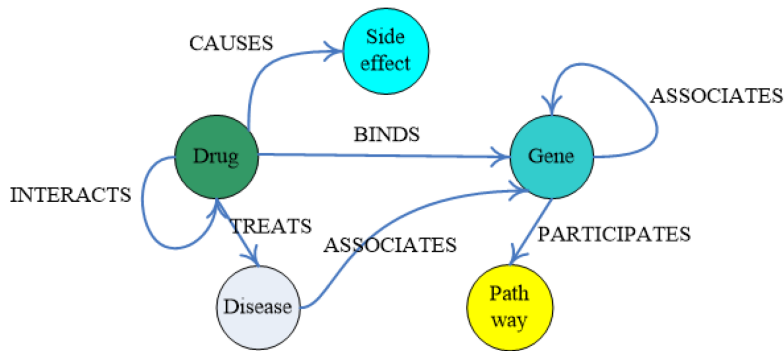
ONTOLOGY + DATA = KNOWLEDGE GRAPH

## Knowledge Graphs Give you Facts

Ontology	Data	Knowledge Graph
Defines features, attributes, and relationships from the real world	Key Value pairs of events that happened or relationships that exist	Real world data mapped to an ontology that computers can use for reasoning



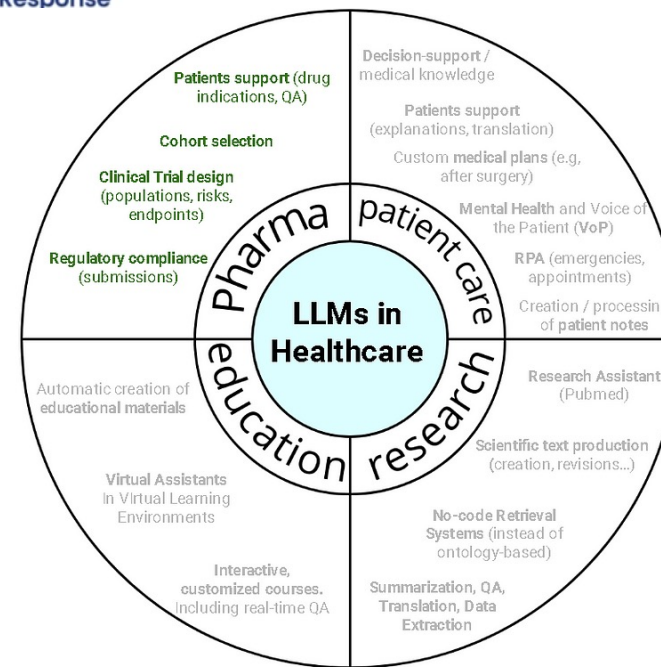
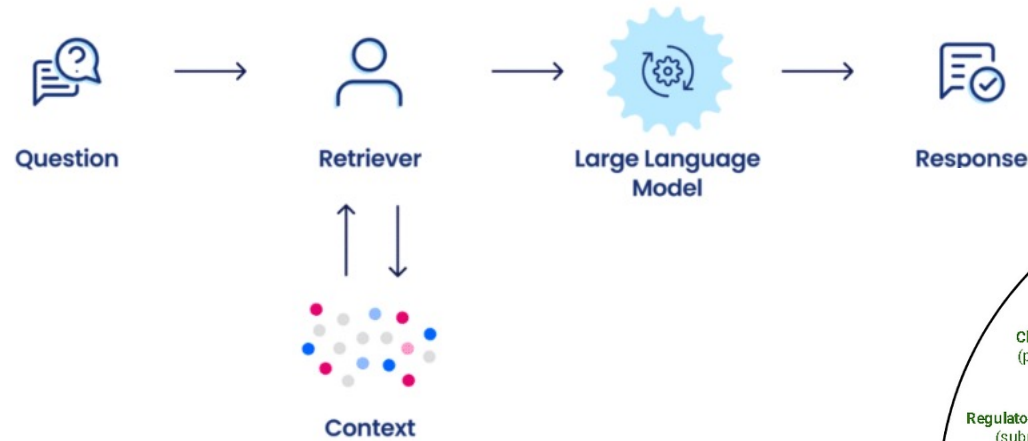
# Knowledge Graph and Drug Discovery



# AI and LLM tools in the Pre-clinical or Clinical space



## Retrieval Augmented Generation



**Payers&Providers**

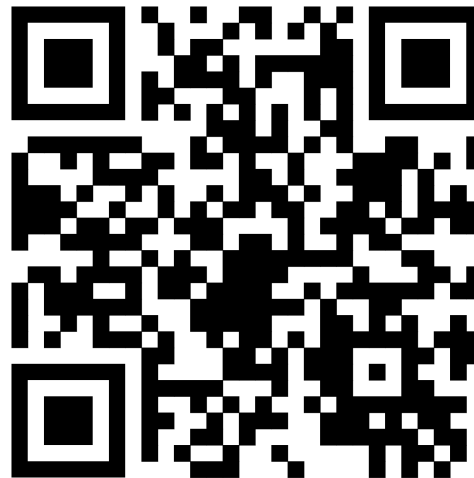
- Support for users of insurances (QA, co-pays, etc)
- Cost optimization for providers (fee / coverage calculation, groups, cohorts...)

## Get in touch

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