

Establishing An Internal Knowledge Base for Q&A and Generative Capabilities in Pharma

As part of a long-standing relationship between Clarkston and a biopharmaceutical company that treats rare diseases, Clarkston developed an application that allows the client to ask questions over its data and generate new assets quickly.

The client's existing corpus consisted of many unstructured PDFs – draft emails geared toward Healthcare Professionals (HCPs). By employing a large language model (LLM) over this internal data, the resulting Q&A bot enabled sales representatives to get up-to-speed more quickly on the company's flagship drugs, prominent studies, and featured experts. Using a novel technique to infer metadata from the user question, the bot gives faster, more pertinent, and more comprehensive responses. Additionally, the bot can cite its sources and quickly generate new disease and drug-specific emails with Fair Balance statements, among other generative capabilities.

Clarkston's data scientists and data engineers delivered a completely bespoke and secure application for a fully-fledged, seamless Q&A user experience. The team worked with the client's business analytics executive leadership to productionize the new application, as well as provided thorough documentation and an ongoing framework that allows for on-the-fly updates of their internal knowledge base.

Life Sciences Case Study

PROJECT OVERVIEW



INDUSTRY:



Life Sciences

PRODUCTS AND SERVICES :



Rare Diseases

PRIMARY OBJECTIVES:

- Create a completely bespoke Q&A bot familiar with the client's internal assets and practices.
- Work with business analytics executive leadership and data engineers to productionize new Q&A application for field use.

RESOLUTION:

- Converted existing assets into useable text.
- Collated new metadata for a more structured knowledge base.
- Formulated a new, comprehensive schema of underlying assets for efficient Q&A.
- Utilized a vector store with a novel, single-step metadata querying system for more effective similarity search.
- Ensured quality responses with extensive prompt engineering, tuning, and testing.

KEY BENEFITS:

- Deployed a brand new, custom, and fully fledged Q&A bot application complete with Single Sign-On (SSO), guidance, and documentation.
- Increased transparency and reliability of bot responses via automated source citations
- Created a simple, but feature-rich user interface for seamless adoption by the field.
- Improved knowledge dissemination and understanding, making use of existing assets that had largely gone underutilized.

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