

## **Client Overview**

The client is a leading multi-national pharmaceutical manufacturer seeking to streamline data access and improve decision-making through Al-driven automation.

## Navigating Business Hurdles: Streamlining Data Access for Better Decisions

**Streamlined Data Access**: The client needed a solution that allowed quick access to project information for better decision-making.

**Enhanced User Interaction**: They sought to improve the user experience by enabling leadership and business users to interact directly with system data.

**Minimized Complexity**: The solution had to retrieve information with minimal clicks, reducing complexity and saving time.

Concise Data Summarization: The client wanted a clear summary of data, using visual charts for quick insights, with detailed table-based information for further analysis.



## Indium Unleashes: Low-Code Magic with an Al-Driven Data Pipeline

Indium implemented a powerful solution utilizing cutting-edge technologies, including Mendix, Mistral Al, and SQLCoder 7b, to address the client's needs:

- ▶ Low-Code Data Query Interface: Designed and developed a low-code application allowing users to input queries and receive instant, concise data visualizations and summaries.
- ▶ Text2SQL & Summarization Pipeline: Built a pipeline that leverages Text2SQL and text summarization to convert user queries into SQL commands and extract key insights in an easy-to-read format. This included auto-generated prompts for additional context, such as schema and column details.
- ▶ LLM-Powered Query Execution: Integrated the SqlCoder-7b-2 language model to generate SQL queries based on natural language prompts, ensuring the correct query for each user input.
- ► End-to-End Data Pipeline: Developed a robust system to run SQL queries, retrieve data, and apply Al-powered post-processing using Mistral 7B, extracting valuable insights and generating visual reports.

## Impact Delivered: Productivity Soars with Accurate Data Insights

Indium's solution delivered exceptional results for the client, significantly improving decision-making processes and productivity:

- **2X Quicker Data Access:** The solution provides fast access to critical data, enhancing the user experience with better visualization and real-time insights.
- **90% Accuracy:** Leadership was empowered with accurate, data-driven insights, improving the quality of decisions.
- **4X Increased Productivity:** Faster access to precise information enabled quicker decision-making, driving productivity across the organization.