

UBI assisted a **Top Global Pharma Client** in developing a trial feasibility tool reducing months of planning efforts to < 10mins

Situation & Objective

- Feasibility analytics is one of the key steps in trial planning process, which enables study teams to meet trial objectives efficiently.
- Trial Feasibility Tool has been built with the view to provide support to study team with feasibility analytics process automatically carrying out various processes based on user inputs provided for the study under consideration.
- Traditional feasibility processes are time-consuming and resource-intensive.

Impact and Benefits

- **Time Savings:** Reduced planning efforts from months to < 10 minutes.
- **Scalability:** Expanded user base from a few developers to hundreds.
- **Data-Driven:** Ability to create, save, and compare feasibility scenarios.
- **Efficiency Gains:** Significant increase in efficiency and cost savings.
- **Precision:** Enhanced site and investigator selection.
- **ROI:** Substantial return on investment due to time and resource savings.

Solution Approach

- Developed a self-service platform using Plotly Dash as the front end.
- Utilizes PostgreSQL for quick data retrieval and transformation (small requests).
- Leverages Databricks API for resource-intensive tasks.
- ML algorithms registered as Models using MLFlow on Databricks.
- Algorithms triggered by Plotly application as jobs using Databricks API.

