



Analytical and decision support platform for a CNS pharma company

About the Client

Our client is a US based computational sciences company focused on the research & development of proprietary therapeutics for neurobehavioral disorders. They pioneered a unique AI based digital clinical research platform to advance their robust pipeline of novel therapeutics.

Business Challenges

- Requirement of high performing infra design on cloud to support the decision support system.
- Challenging data integration from extremely complex dynamic datasets originated from multiple data pipelines.
- Heterogeneous data and metadata sources to be integrated into a single frame without any compromise on performance.
- Monitoring of real time clinical research activities on a mammoth multi terabytes datasets.
- Visualisation of the datasets generated from AI/ML scripts.

Flycatch's Solution

- Designed a near real time automated data integration and synchronization process to bring data from AWS S3 aligned with metadata in DynamoDB.
- Developed a dynamic administrative portal to drive varying subject areas which lists all provisional data units.
- Variety of data visualisation options made available through an interactive frontend application layer, which facilitate slice and dice and drill down options. This offers quick insight to the data content and makes appropriate decisions.
- Highly optimised aggregated PDUs (provisional data units) created to make quick turnaround on various reporting needs.
- Implemented Brain maps and Spider maps on complicated datasets to ease the decision making for the users on neurobehavioral clinical research outcomes.
- The end-to-end solution was based on AWS services such as Athena, EC3, S3, etc.

Business Benefits

- Drastically reduced the time spent on data preparation, assess the quality and generate outcome reports to make clinical research decisions.
- Offering a single platform for different business units to visualise co-related subject areas in one frame.
- The solution helped the client to climb a step to align with their strategic decision of being a data driven company.
- The solution offers a great cut down in time delay involved during data population which was a major concern of the client.