CitiusTech

Shaping Healthcare Possibilities

Research & analytics platform for a leading pharma organization

Business Challenge

A leading biopharmaceutical company providing therapeutic solutions and medicines. The client is focused on improving patients' quality of life through personalized treatment.

To achieve its patient-centric strategies, the client wanted to:

- Create an integrated platform supporting research analytics, patient engagement, real-world evidence, commercial analytics, and data-driven insights throughout the pharmaceutical value chain.

- Build a portfolio of predictive solutions and capabilities to enable providers and healthcare institutions to leverage big data with epilepsy-specific interfaces to improve clinical decision-making.

CASE STUDY

CITIUSTECH SOLUTIONS

CitiusTech assembled cross-functional teams comprising of cloud engineers, BI engineers, data scientists, DevOps engineers, and design experts to develop and support the research & analytics platform on Microsoft Azure stack using a phased approach. The platform, with its out-of-the-box dashboards and exploratory tools, enabled key stakeholders to address analytics questions. The platform was also designed to provide data and analytics outcomes to HEOR, R&D, commercial, regulatory, and safety functions, enhancing collaboration among stakeholders, researchers, and data scientists.

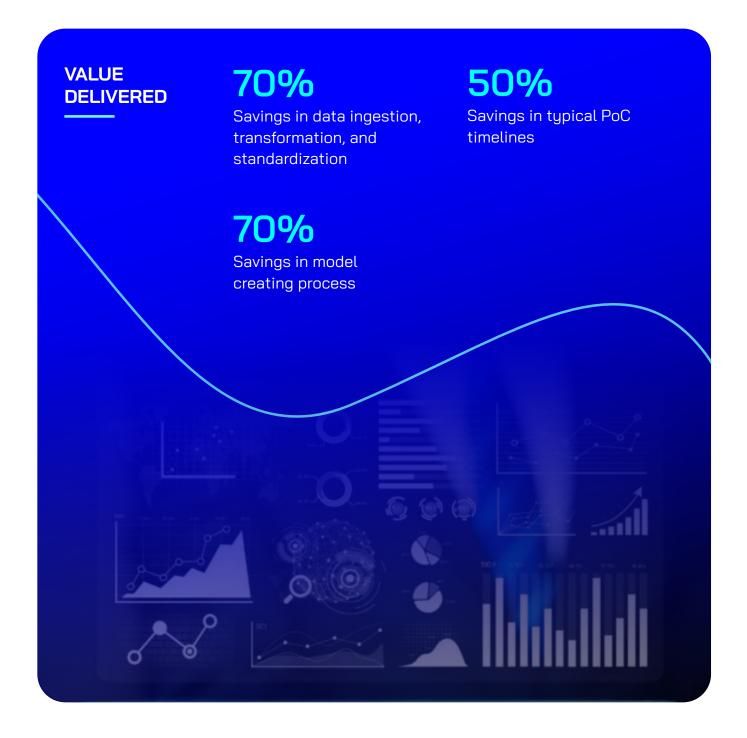**CitiusTech solutions components & highlights included:**

- Azure Blob storage to store claims and EMR data from Truven, IMS, Health Verity, and other sources.

- Optimal configuration of HDInsight cluster and ADF activity to run MapReduce program on HDInsight cluster.

- Data Adaptor for consuming clinical and claims data into Observational Medical Outcomes Partnership (OMOP) model.

- MapReduce program to convert uncompressed source files and convert .SAS into .CSV.

- Observational Health Data Sciences and Informatics (OHDSI) tools to perform for healthcare data analytics.

- Natural Language Processing (NLP) for research analytics.

- Microsoft PowerBI for reporting and visualization.

- Descriptive statistics on an on-demand basis. e.g., metadata analysis, treatment cost burden, stratification of patient cohorts etc.

- Open-source tools such as R, H2O for model development and deployment in real-time.

THE OUTCOME

By partnering with CitiusTech, the client was able to:

- Build a unified environment for data storage, research, analytics, and reporting.

- Provide secure access to interactive analytics reports to multiple stakeholders.

- Develop a flexible, scalable solution that could adapt to changing business needs.

VALUE DELIVERED

70%
Savings in data ingestion, transformation, and standardization

50%
Savings in typical PoC timelines

70%
Savings in model creating process

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CitiusTech is a global IT services, consulting, and business solutions enterprise 100% focused on the healthcare and life sciences industry. We enable 140+ enterprises to build a human-first ecosystem that is efficient, effective, and equitable with deep domain expertise and next-gen technology.

With over 8,500 healthcare technology professionals worldwide, CitiusTech powers healthcare digital innovation, business transformation and industry-wide convergence through next-generation technologies, solutions, and products.

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