

Empowering Campaign Performance at Scale with Advanced Azure Analytics

CLIENT

A Fortune 500 Global
Pharmaceutical and
Biotech Company

TECHNOLOGY PLATFORM

Azure Data Lake,
Databricks, Azure OpenAI
GPT-4



BUSINESS CHALLENGE

Scaling Analytics for Massive Campaign Data

The client, a global leader in pharmaceuticals, executed large-scale omnichannel campaigns across 35 markets. However, managing the high volume of campaign data—a huge number of data points per day—posed significant challenges:

- **Fragmented Data:** Campaign performance metrics and content analytics were siloed across disparate systems
- **Query Complexity:** Teams struggled to efficiently analyze the sheer volume of queries (thousands daily) required for monitoring and optimization
- **Inefficient Insights:** Legacy systems delayed access to insights, hindering the client's ability to respond swiftly to market dynamics

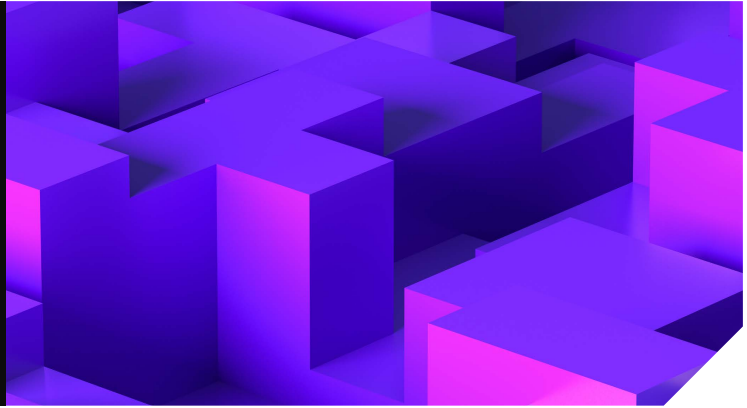


BUSINESS OBJECTIVE

Scaling Analytics with Accuracy, Speed, and Efficiency

The client's goal was to build a high-performance, scalable solution that could process vast amounts of campaign data, enable real-time insights, and enhance user experience.

C5i'S SOLUTION APPROACH



Azure, Databricks & GPT-4 Powering Analytics at Scale

C5i implemented a robust solution by combining **Azure Data Lake**, **Databricks**, and **Azure OpenAI GPT-4**, ensuring scalability, precision, and efficiency.

1. Managing Big Data with Azure Data Lake

- Consolidated massive datasets (campaign performance metrics and multichannel content analytics) into **Azure Data Lake**, creating a unified and scalable data repository
- Supported high data ingestion rates with minimal latency, ensuring real-time availability of millions of records
- Reduced costs with Azure's pay-as-you-go model, optimizing resource utilization

2. Accelerating Processing and Queries with Databricks

- Leveraged **Databricks** for building high-speed data pipelines capable of processing thousands of queries daily
- Utilized Spark-based analytics to enable anomaly detection and causal modeling, even at peak data loads
- Achieved real-time insights with daily refresh cycles, improving data timeliness and accuracy

3. Enhancing User Experience with GPT-4

- Deployed **Azure OpenAI GPT-4** to deliver highly personalized, conversational insights for over **250 active users**, spanning marketers, analysts, and executives
- Created an **AI-powered chatbot** that processed complex queries interactively, enabling users to access detailed insights in seconds, regardless of query volume
- Generated automated executive summaries tailored to markets and brands, reducing manual effort and improving decision-making speed

OUTCOMES

Data-Powered Transformation at Scale

The integration of Azure technologies and GPT-4 revolutionized the client's campaign performance monitoring through:

- **Unified Big Data Platform:** Centralized millions of data points in Azure Data Lake, eliminating silos and ensuring seamless access
- **High-Speed Queries:** Databricks pipelines processed thousands of daily queries with rapid response times, even under heavy user loads
- **Personalized User Interactions:** The GPT-4 chatbot handled **over 3,000 user queries daily**, delivering contextualized insights with 95%+ accuracy
- **Real-Time Updates:** Enabled daily refresh cycles for all performance metrics, ensuring decisions were based on the latest data

BUSINESS IMPACT

Driving Adoption and Delivering Value

This scalable solution provided measurable benefits:

- **Adoption at Scale:** Rolled out across 35 markets, with over 250 users actively leveraging the platform daily
- **Improved Efficiency:** Reduced time-to-insight by 3 days, enabling faster decision-making and campaign optimization
- **Cost Optimization:** Lowered the total cost of ownership by 72%, thanks to Azure's scalable infrastructure and Databricks' processing efficiencies
- **Enhanced User Experience:** High accuracy, speed, and accessibility drove adoption across teams, transforming the way data was consumed



Conclusion

The combination of **Azure Data Lake**, **Databricks**, and **Azure OpenAI GPT-4** demonstrated the power of advanced cloud and AI technologies to handle the scale, complexity, and velocity of campaign data. By enabling real-time, precise, and cost-effective analytics, the solution empowered the client's teams to make smarter, faster decisions while enhancing overall user satisfaction.

ABOUT US

C5i is a pure-play AI & Analytics provider that combines the power of human perspective with AI technology to deliver trustworthy intelligence. The company drives value through a comprehensive solution set, integrating multifunctional teams that have technical and business domain expertise with a robust suite of products, solutions, and accelerators tailored for various horizontal and industry-specific use cases. At the core, C5i's focus is to deliver business impact at speed and scale by driving adoption of AI-assisted decision-making.

C5i caters to some of the world's largest enterprises, including many Fortune 500 companies. The company's clients span Technology, Media, and Telecom (TMT), Pharma & Lifesciences, CPG, Retail, Banking, and other sectors. C5i has been recognized by leading industry analysts like Gartner and Forrester for its Analytics and AI capabilities and proprietary AI-based platforms.



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