


Tiger Analytics helped one of the largest US Industrial companies democratize data using an NLP-based Virtual Assistant



Tiger Analytics made it effortless for hundreds of the client's data consumers and business users to leverage a cutting-edge solution to discover all available datasets. It helped understand the metadata of the datasets while extracting and ingesting them into a Lakehouse platform. The solution lowered implementation time by 60% and reduced overall operational costs.

The Background

Our client is a large North American Industrial company serving the Agriculture and Infrastructure markets through Utility, Transportation, Telecom, Solar, Coatings, Irrigation, and Agricultural Technology. They manufacture products in 85 facilities spread across six continents. As they dealt with an unprecedented volume of data during the journey, the client wanted to become more AI-driven. They also wanted to leverage advancements in the cloud and implement a highly scalable, modern Data and Analytics (D&A) platform for achieving key business goals.

Key Challenges

- \\ **Need for periodic NLP data refresh:** The current NLP-based Virtual Assistant Analytics solution requires regular data refresh to provide optimal results.
- \\ **Data access and democratization:** Different users wanted access to different data sets. However, true democratization could happen only when end users could explore what was available and ingest newer data sets.
- \\ **Time-intensive data processing:** The entire ingestion to insight generation process was very time-consuming.
- \\ **Lack of data governance assurance:** There was a need to ensure data management without compromising governance.

Our Solution

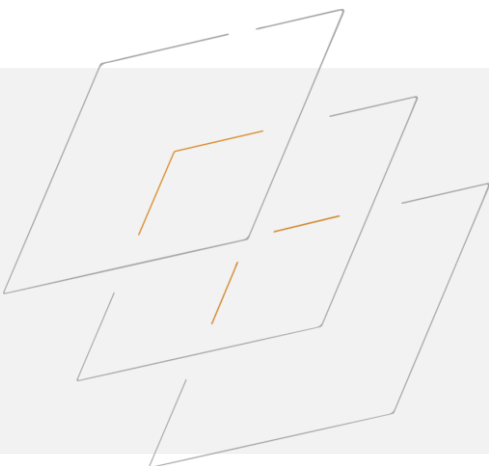
Tiger Analytics developed an Intelligent Lakehouse Accelerator called Tiger Data Fabric using the industry-proven Azure PaaS and open-sourced Big Data services to ensure the client can overcome these challenges. This accelerator brought powerful self-service and governance capabilities, using OpenAI's ChatGPT for some of its intelligent data analysis capabilities.

The Azure-Tiger Data Fabric is an accelerator for implementing modern Data Lake and Lakehouse solutions on Microsoft Azure and Azure Databricks, with powerful governance, observability, and self-service capabilities.

The team ensured datasets were discoverable across the client's ecosystem in various source systems. The interface was also simple and intuitive, empowering all relevant stakeholders (developers, data scientists, business users, power users, etc.).

Some of the solution's other key tenets were:

- ✓ Easy implementation via a web/chatbot interface
- ✓ Setting up interactive pipelines without writing a single line of code to ingest structured datasets on Azure (Using Lakehouse Architecture)
- ✓ Running pipelines on a demand/scheduled basis
- ✓ Monitoring pipeline and data load status.



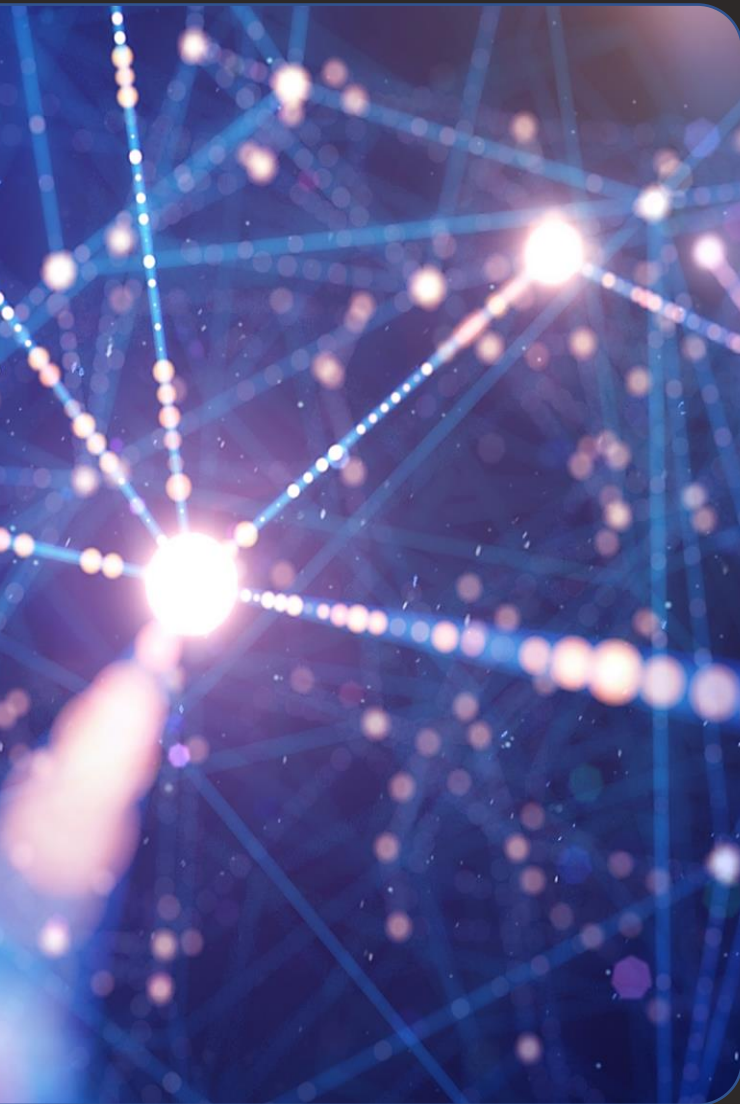
Tech Stack

✓ Microsoft Azure

✓ Azure Databricks

✓ ADF

Value Delivered



The self-service platform made it easy to understand the metadata of the data sets and extract and ingest data sets into a Lakehouse platform, later performing exploratory analysis.

Governance and observability features were implemented to monitor the entire data supply chain.

Implementation time was reduced by 60%, thus lowering the cost and time-to-market.

The platform was **secure and compliant**, backed by powerful governance features.

Operational costs were reduced with cloud integration and the use of **PaaS services**.

About Us

Tiger Analytics is a global leader in AI and Analytics, helping Fortune 500 companies solve their toughest challenges. With over 4000 data technologists and consultants spread across offices in the US, Canada, UK, India, Singapore, and Australia, we help our customers accelerate their AI and Analytics journey in sectors like CPG, Retail, Insurance, BFS, Manufacturing, Life Sciences, and Healthcare. Tiger Analytics is a Great Place to Work Certified and a 'Leader' in the Forrester Wave: Customer Analytics Services Report 2023.

Visit <https://tigeranalytics.com>. to see how Tiger Analytics provides certainty for a better tomorrow.