

**Tiger Analytics powered a large energy industrial investment firm to **reduce development efforts by 40% with an ML platform****

Tiger Analytics implemented a powerful Self-Service ML platform that acted as a single gateway for portfolio companies and others to leverage key data services. It enabled a wide range of business users to prepare data, conduct feature engineering, and train/deploy Machine Learning models. The solution reduced the time to production by 40%, leveraging reusable components and Tiger Analytics' Accelerators.

# The Background

Our client is a large Energy Industrial Investment company based in the US with a proven legacy track record. They wanted to enhance their digital and data service capabilities through an Enterprise Cloud platform. This ML platform was expected to act as a single-stop destination for portfolio companies and others to consume data services, reducing costs and improving efficiencies. The client also looked to ensure different users could participate in building ML-driven capabilities with the help of key modules.

## Key Challenges

- \ **No user-friendly interface:** There was a need for simplicity and ease of use for amateur data science users.
- \ **No production-grade platform:** The current system could not support ML Lifecycle Management, including deployment, governance, redeployment, and evaluation.
- \ **Lack of use case versatility:** The client was also unable to accommodate a broad spectrum of ML use cases while operating at a lower TCO.



# Our Solution

Tiger Analytics designed and delivered a centralized, Self-Service platform to support Data Analysts, Data Scientists and Engineers throughout the entire data lifecycle.

The team leveraged Azure Cloud for core infrastructure capabilities and Secure Services and Apache Spark for the core Data Processing. The platform supported several Open-Source ML Packages and used MLFlow for Tracking. The platform also integrated Core Tiger Accelerators across the ML Lifecycle for Development Acceleration.

The team achieved close integration with multiple services and user interface elements with a Stateful Front-End Application Design on Angular. They also added a high-performance Microservices Layer to support ML Services and Pipeline Orchestration.



## Tech Stack

**/ Azure**

**/ Databricks**

**/ Tiger ML**

**/ Angular**

**/ Python APIs**

# Value Delivered

**A uniform architecture** and implementation pattern was developed for a large number of use cases through an ML platform.

**The time to production was reduced by ~40%**, and the development roadmap was accelerated by leveraging reusable components and Tiger Analytics' Accelerators.

**The development efforts were reduced by 40%** by onboarding multiple ML use cases.

**The platform was friendly for non-DS technical users** by introducing Model Interpretation/ Explainability and Codeless Feature Engineering.



## 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.