

Tiger Analytics helped a top PE firm achieve incremental annual revenue of \$4M through data ingestion and advanced automation



Tiger Analytics built a fully automated solution to capture key business information. It maximized the oil extraction capabilities of one of the client's portfolio companies. The solution ultimately ensured a more efficient steam injection process, leading to the elimination of executor bias and a bump in the daily recall metrics from 0.75 to 1.



The Background

Our client is a Private Equity firm investing in companies linked to energy sectors (primarily oil and gas). One of their portfolio companies leveraged steam injection to extract oil from shallow reservoirs containing high-viscosity (typically heavy) crude oil. So, the client wanted to help automate this process of identifying completion needs to be put on stream next based on various parameters.

Key Challenges

- \ **Heuristic-based system:** The system was manual and heavily reliant on heuristics, which triggered delays and inconsistencies. It also proved to be expensive and time-consuming.
- \ **Executor bias issues:** The methods were susceptible to executor bias, leading to inconsistencies between different individuals.
- \ **No standardization:** There was a lack of standardization as selection heuristics were not captured in the corporate knowledge base.



Our Solution

Tiger Analytics created and deployed a solution that seamlessly automated Data Ingestion, Model Operations (MLOps), and the Azure Environment.

The team first set up pipelines that automatically collected data from the oil well every 15 minutes, including information about oil production, temperature, PSI, etc. A solution was then created to monitor the data from the oil well, ensuring the models worked correctly. If any issues were detected, corrective actions could be taken to fix them.

Finally, the team automated the process of provisioning and managing the production environment using Microsoft Azure.

Tech Stack

\ Azure

\ Databricks

\ Power BI

Value Delivered

Over \$4M annual incremental revenue was achieved by reducing the time-to-decision and minimizing reliance on manual processes for selecting steam candidates daily.

Executor bias was eliminated with a structured decision-making approach documented in the corporate knowledge base.

Daily recall metrics ranged from 0.75 to 1, demonstrating a strong performance of deployed models.



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.

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