ML & AI for Oil and Gas

Mosaic is the ideal data science partner for an oil and gas operator looking to inform strategic and operational decisions with AI derived insights. We have developed and deployed advanced machine learning models and decision support capabilities for a variety of oil and gas customers.

Potential Machine Learning & Artificial Intelligence Applications

Upstream Operations

AI can help upstream operators estimate the potential value of reserves, taking into account the cost of acquisition, production, and transportation, and more. It can make recommendations on whether it's better to explore and develop further or walk away, either saving or creating investment value.
Customers -> ExxonMobil, Exelon, Suncor Energy, Encana

Fuel Price Forecasting

Enterprise AI can predict supply and demand for commodities and compare against forecasts it creates for price trends. This insight allows traders to maximize profit by leveraging arbitrage opportunities across place and time.
Customers -> ExxonMobil, Devon Energy

Midstream & Downstream Operations

Midstream and downstream operators can utilize machine learning in all areas of their business – from optimizing the processing of raw inputs to transport strategies between production locations and refining/processing locations. Highly accurate predictive models can forecast the need for maintenance to minimize downtime of critical operating equipment.
Customers -> PPL, Suncor Energy, ExxonMobil, Devon Energy, Spire

Computer Vision & NLP

Oil and gas firms can train deep learning models to identify machine degradation, adverse weather, fraud, and other events in their operations. NLP models can be trained to extract, interpret and generate human text. Combined these flavors of AI can extract information from millions of scanned documents.
Customers -> Exelon, US Navy, NASA, ExxonMobil

AI-Driven Loyalty

Mosaic helps utilities create better customer experiences through the application of AI & ML. For gas station operators, Mosaic has run custom A/B tests that inform marketing decisions and increase the volume of goods sold.
Customers -> Levi's, Citgo, Suburban Propane, Spire Energy, Atmos Energy

mosaic
DATA SCIENCE