

Marathon Oil is a leading American petroleum and natural gas exploration and production company headquartered in Houston, Texas and incorporated in Ohio. The company is headquartered in Houston, Texas and focused on four of the most competitive resource plays in the U.S., complemented by a world-class integrated gas business in Equatorial Guinea.

Business Challenge



Lack of real time visibility into pipeline parameters



Lack of unified view of pipeline network



Lack of timely alerts and notifications to the technicians



Complexities of pipe network – inaccessible pipelines



Emphasis on safety and environmental compliance (ESG score).

Pipeline Analytics

Solution

- Build a production-ready application to provide users with an end-to-end data picture of pipelines.
- The visibility will be achieved by consolidating pipeline segments, leaks, and corrosion data
- Data Analysis and machine learning predictive models to support leak identification and pipeline segment replacement decision-making process and identify factors affecting corrosion
- Build a dashboard with all KPIs including no. of high-risk pipelines, unifying data silos and providing real time operational insights

Outcome

- Extended life of existing assets by optimizing the pipeline inspection plans
- Operational efficiency gains
- Improves the overall pipeline performance and integrity with real time insights and analytics
- Minimizes or eliminates downtime by quickly responding to early warnings of asset failure
- Facilitates better collaboration and visualization by centralizing asset performance data



