

Case study

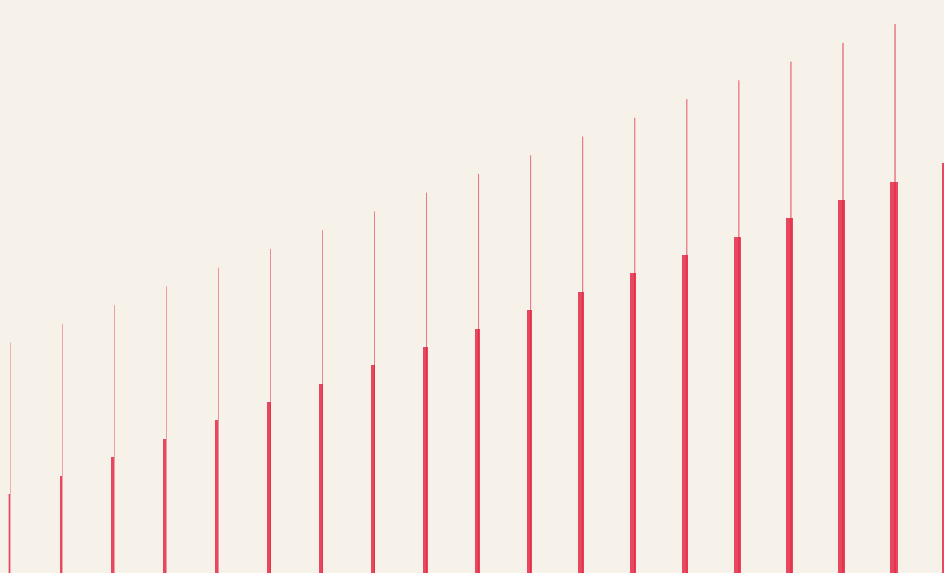
O&G Major Saves \$7.5M and 7,300 hours Annually via Automated Data Operations



Overview

A global oil and gas (O&G) major struggled with manual data burdens that distracted rig personnel from critical operational tasks. By partnering with us to establish an automated, 24/7 Wells Data Center, the energy supermajor centralized operations, standardized global reporting, and achieved significant cost reductions. This transformation freed engineering teams to focus on safety and core drilling activities.

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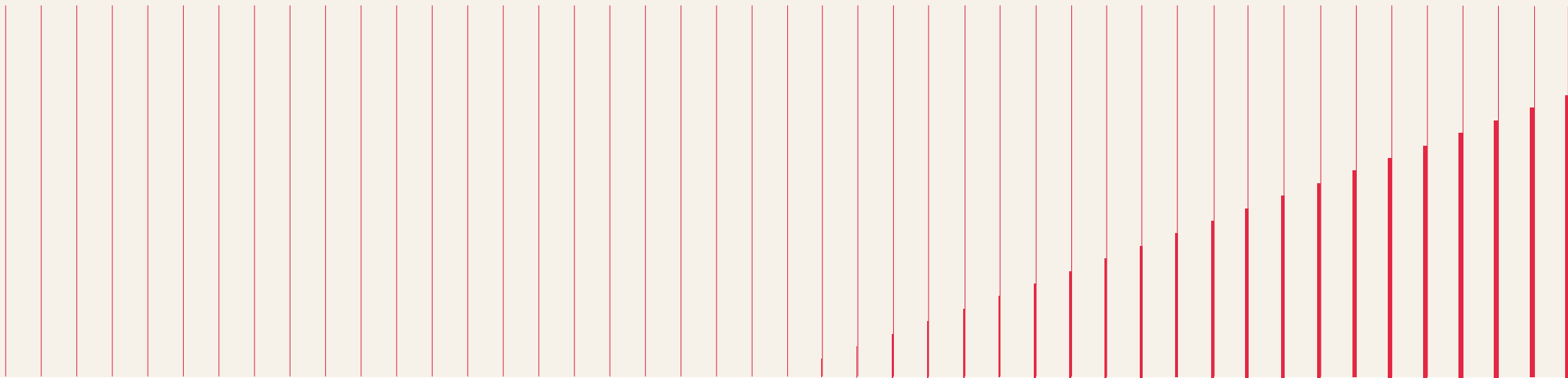


Client Background and Challenges

This global energy supermajor spans upstream, downstream, and chemical segments, with a strategic focus on energy innovation and a carbon-neutral future. Despite their scale, the O&G major's drilling operations faced severe data inefficiencies. Rig Supervisors and Engineers were spending approximately two hours daily on manual data entry rather than on critical oversight. The lack of a centralized data strategy led to:

- Operational Risk: Difficulty managing handoffs across four shifts and multiple time zones.
- Data Fragmentation: Inconsistent rig naming conventions, duplicate records, and “drift” in the wells information management system and system of record.
- Technical Constraints: Network issues are degrading sensor streaming and disparate reporting templates across rigs.

The organization required a partner with deep upstream domain expertise to establish a real-time data monitoring center, stabilize its systems, and free its engineering workforce from administrative burdens.



Our Approach and Solution

We implemented a Wells Data Center (WDC), a centralized 24/7 support model operating across four shifts to ensure continuous global oversight for the energy major. Combining human domain expertise with advanced automation, we transformed their data landscape:

- **Intelligent Automation:**

We deployed UiPath RPA bots to populate 18 distinct tables in the wells information management system, automating the processing of 350-450 attributes per rig daily.

- **Advanced Scripting:**

We utilized Python scripts for data analytics to handle complex data extraction, quality checks, and reusable data transfer.

- **Real-Time Monitoring:**

Our team established dashboards for real-time rig sensor monitoring and data quality management (DQM), ensuring immediate triage of low-latency rig data.

- **Standardization:** We harmonized reference data and standardized global daily reporting templates to eliminate discrepancies between systems.

This solution treated the Wells information management system as the absolute System of Record (SoR), ensuring integrity across the O&G major's drilling and completion assets.



Business and Community Impact

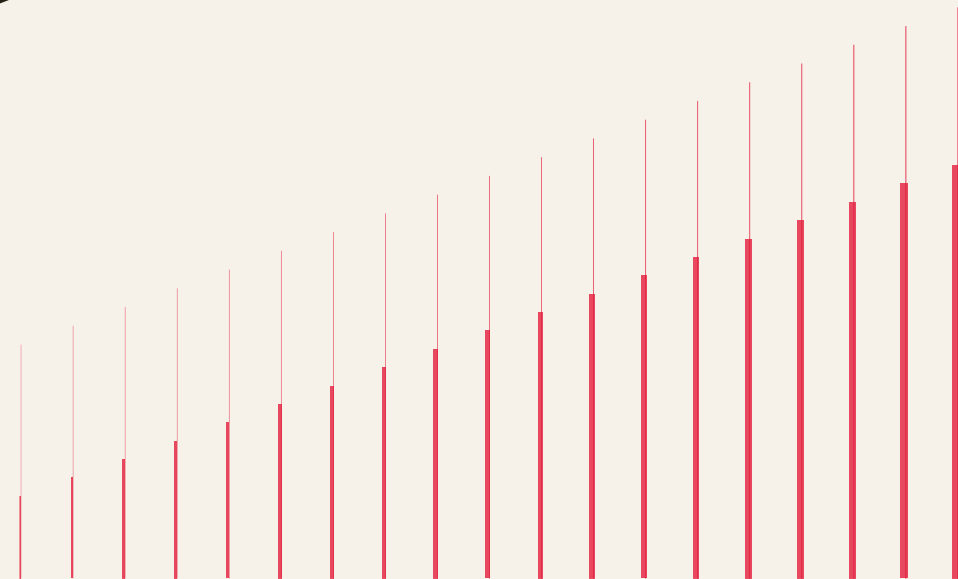
By shifting the data burden from rig personnel to the Wells Data Center, the energy supermajor achieved immediate operational relief and structural cost reductions.

Quantitative Impact:

- \$7.5 Million Saved: Achieved cumulative savings of approximately \$7.5 million since 2016.
- 95% Time Reduction: RPA bots reduced data entry time from 2-3 hours to under 10 minutes per rig/day.
- 7,300 Hours Returned: Freed up ~7,300 hours annually for rig supervisors across 10 rigs.
- 99% Data Quality: Maintained across 20+ data types and 200+ attributes.

Qualitative Impact:

Rig supervisors and engineers can now focus entirely on critical well operations and safety without administrative distraction. Additionally, real-time access to reliable, quality-controlled data has accelerated decision-making across the upstream business, directly supporting the O&G major's strategic priorities.



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