CASE STUDY

Enhancing the Analysis of Well-Logs through Digitization for an Oil & Gas Company
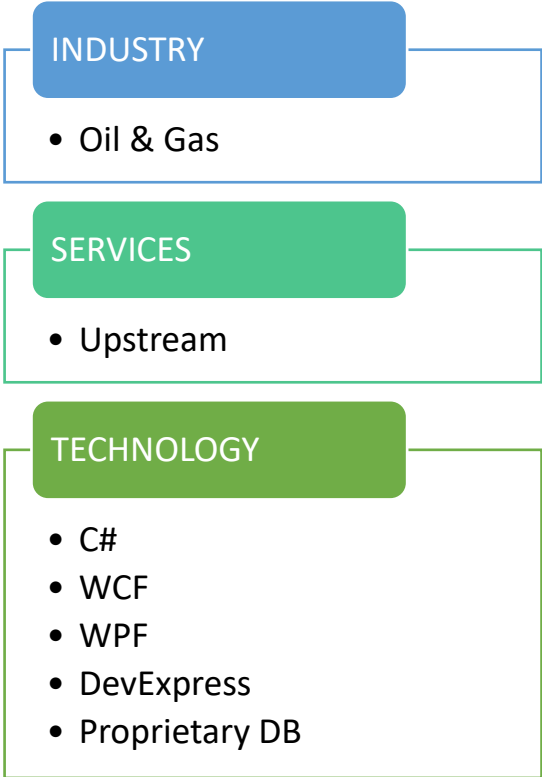
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CONTATA

OVERVIEW

The client is a multinational oil and gas products company and possesses the industry's largest collection of online well data in North America, South America, Europe, Russia, and Africa.

CHALLENGES

The client required a digitization tool that converts well-log documents into workable datasets for easy interpretation and analysis. This tool also tracks well logs and generates output data in industry-standard formats (LIS, LAS, etc.). Overall, the application aims to facilitate the efficient analysis of scanned documents containing critical oil well-related information. The system should also be able to trace log files automatically.

INDUSTRY
- Oil & Gas

SERVICES
- Upstream

TECHNOLOGY
- C#
- WCF
- WPF
- DevExpress
- Proprietary DB

SOLUTION

Contata thoroughly studied the requirements and created a desktop application that automates document analysis and classification. Scanned well logs are digitized and enriched with indexes and keywords to provide enhanced search capabilities on the metadata.

The system uses complex algorithms to track curves on scanned images and is capable of representing data in the form of reports and charts. The services offered include:

- Development
- QA testing
- Maintenance and support

The application digitizes well logs into workable datasets for analysis by geologists, thereby improving productivity and reducing manual efforts by 60-70%.

BENEFITS

- Optimized data analysis with accurate digital raster logs.
- Global availability of data in real-time.
- Quality control and accuracy through grid detection, calibration, and curve data vectorization techniques.
- Export digitized data in LAS, LIS, ASCII, or BIT format.

About Contata

Contata Solutions is a trusted leader in technology and digital innovation. Through our work in data engineering, data analytics, machine learning, marketing automation and app development, we deliver solutions that address complex problems in ways that are simple, insightful and impactful.

Our promise and value proposition to our customers is simple: we leverage our deep technical expertise and global presence to bring software products and data-driven decision capabilities to life.

Founded in 2000, Contata is a privately-held company headquartered in Minneapolis that serves clients globally from offices in the United States and India.