

## Leading Upstream's digital transformation with Gen-AI

Discover how an oil & gas company integrated AI to modernize asset management and reshape decision-making in well construction.

### Problem

Well construction required complex real-time decisions that relied on the expertise of personnel to process lots of data and reference events, which took hours, affecting the efficiency of the process.

### Objective

Implement AI to reduce the processing time of structured and unstructured data on wells and benchmark events to seconds and make this information accessible across several channels.

### Challenge

Build an AI platform that can interpret and process information sources without errors and delays, enabling informed, documented, and agile decision-making to improve quality and accuracy.

## Solution

The solution first consisted of **building a DataLake to ensure both the access and quality of data from a variety of sources**, including real-time transactional operations, planning, manual logs, and costs.

Then, **GeneXus Enterprise AI** was implemented to create a **Drilling Assistant that, through multiple accesses to LLMs, would analyze this unstructured data**. The assistant would also generate **instant reports from natural language queries** that include references to their sources.

Developing this AI solution with GeneXus Enterprise AI ensured:

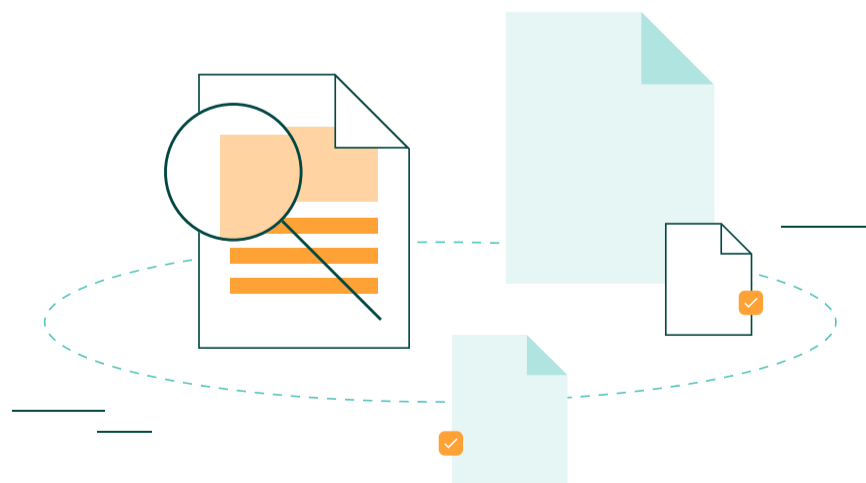
- Significantly **accelerate** implementation times
- **Data security and privacy** in handling and processing.
- **Enhanced efficiency and accuracy** in processing complex relationships and patterns to extract valuable insights.

## Results

The client was able to **improve the quality and accuracy of their operations by significantly reducing data processing times**.

Thanks to **GeneXus Enterprise AI's capabilities** to quickly analyze unstructured data with high accuracy, well construction technicians can now **chat with data and generate instant reports to make and document informed decisions** in a more agile way.

The implementation of GeneXus Enterprise AI and the DataLake was key to generating substantial value by **avoiding costly errors and unnecessary delays**.



## Shape your AI journey

Get in touch