An integrated oil and gas company involved in exploration and development of reservoirs sought to streamline upstream data. The exploration team used several methods to extract core and subsurface data, including wireline logging, Logging While Drilling (LWD), and Measurement While Drilling (MWD) data.

The company faced a business imperative: address the prohibitive cost of cleansing data by developing a system that manages and shares granular data. It embarked on a data management transformation program focused on easy access to information for geologists, petro-physicists, field engineers, and other specialists. A global system would facilitate seamless collaboration across disciplines for informed and prompt business decisions.

The oil and gas company partnered with Infosys to implement the data management program. We established project processes and identified program deliverables across multiple phases. We collaborated with product vendors as well as third-party data providers for a smooth implementation.
Adopt a 360º data approach
At the outset, Infosys analyzed existing processes from a business context. It helped us define new data standards and processes. We optimized workflows in consultation with business and IT stakeholders.

We created a solution framework for simplified data management and sustainable data operations management. Our governance framework supports decisions on standards, and incorporates exception rules for processes and workflows. The data management solution addresses performance management and organizational change management.

Focus on data integrity
Infosys ensured a ‘single version of the truth’ for data by automating data acquisition, enrichment, transfer, and storage. We implemented a data repository and integrated it with diverse sources of data. Our data management system incorporates a single point of data entry and governance rules to validate data.

A web-based application with advanced search functionality helps search and download data from the repository. In addition, it enables transfer of data to geological, geophysical and petrophysical toolkits. Our approach ensures data integrity by validating data from different sources and rectifying anomalies to provide high quality data. A de-duplication solution eliminates duplicate data and ensures that redundant data is never uploaded to the system.

Realize tangible gains
The Infosys data management system helps the oil and gas company:

- Save approximately US$800,000 annually
- Reduce data retrieval time by 40%-50%
- Improve productivity through accurate querying
- Minimize the effort of IT and business support teams for data loading, classification and quality control

For more information, contact askus@infosys.com