THE SMOOTH FLOW OF HYDROCARBONS

Developing a geospatial management system for maintaining pipeline assets.

The client is a leading US-based multinational oil and gas corporation.



CHALLENGES

The client wanted to create and manage an ESRI enterprise pipeline data model for managing, interpreting, and integrating asset and inspection data associated with pipeline infrastructure that included the following imperatives:

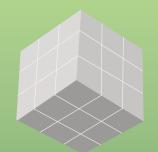
Geo-reference and digitize pipelines as well as transfer data into the enterprise pipeline integrity (spatial) model



Update the enterprise database with data on foreign line crossing the pipe assets, pipeline asset repairs, casing pipe, and piping using inputs from field engineers

Capture data, consolidate, and update depth of cover of pipelines to retrieve the relevant dataset for field mapping

Manage systems of record for pipeline centerlines along the right-of-way (ROW) and refine centerline assets based on survey data



SOLUTIONS

Infosys BPM deployed a team of geographic information system (GIS) domain experts who:

- Aligned blueprints / layouts based on the pipeline integrity
- Refined centerlines and updated depth of cover of network pipelines
- Updated the network asset related pipeline open data standard (PODS) database using a leading mapping platform
- Aligned pipeline asset and inspection GIS data to match the centerline
- Empowered field operators to quickly address corrosion risks and leaks with requisite background on repairs, replacements, or casing work
- Created specialty maps for pipeline assets
- Leveraged multiple technologies including a leading oil and gas pipeline software, PODS, and a robust GIS data management software

BENEFITS

Infosys BPM delivered the following outcomes for the client:



- ► Built an accurate pipeline database with reduced cost of operation
- ► Provided a way to monitor the pipeline health and the maturity of pipeline integrity
- ► Facilitated collection and validation of pipeline properties to be uploaded into PODS database resulting in specialty maps



Operational cost reduction



Pipe edits per month



Operational workflows delivered

For more information, contact infosysbpm@infosys.com

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