



A DIGITAL TRANSFORMATION FOR THE OIL & GAS INDUSTRY



Texas-based oil refinery business faced a dire situation: update its outdated inventory management system or risk losing its position in the market. But it was a job too big for just any off-the-shelf solution.

ROVISYS

The refinery needed nothing short of a complete digital transformation across its entire inventory management system to succeed. Off-the-shelf products only resolved 40% of the behemoth job. RoviSys, recommended by OSIsoft as a partner, carried the technical expertise and extensive experience in the Oil & Gas industry the company needed, with resources ready to develop the custom solution the job demanded.



Texas-based oil refinery relied on hand-line measures and time-consuming manual information gathering to monitor its inventory at sites stretched across multiple states. To stay competitive and adapt in a quickly changing industry, it needed a custom-built solution that could transform its inventory management into a digital, 21st century system.



THE PROBLEM

This Tyler, TX-based oil refiner was stuck in the 20th century. Every four hours, operators would set to work with hand-lines, paper, and pencils to measure the volume of its crude and refined products inventory in 164 tanks across two sites. The job could take an entire shift to complete and presented significant opportunity for error, loss, and damage. Once collected, all of this data was then stored and calculated in an outdated database that the current staff could no longer maintain. The database developer had long since left the company and the



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underlying software platform prevented crucial operating system updates that exposed the entire refinery to security risks.

The situation was dire: update or risk falling behind.



THE SOLUTION

Utilizing out-of-the-box features of the modern OSIsoft platform, RoviSys developed a flexible and extensible template of data and real-time calculations which was applied to every tank across all sites, bringing manual, automatic and calculated data into the system. With this information finally available from a single source, a custom web-based visualization was created to provide easy tracking and visibility of key information, such as total inventories, blends, feedstocks, and oil movements.

Together, this provided the company with a fully digital operation, customized to its particular needs and industry.



THE RESULTS

The new solution resulted in a living, maintainable system that is constantly evolving and improving right along with the business. For the first time, the oil refiner has access to real-time inventory that is traceable and auditable all the way through the process. It can closely and accurately monitor procurement levels of the refinery, while providing full visibility through the greater business so it can more effectively meet its contractual obligations.

The system is also designed to help enable growth for the business. By providing a quick, easy process to connect new assets and new refineries into the system, the solution can be adapted for new sites in just 10 minutes per tank.

And, of course, the automated system means the company's workers are no longer shackled to notepads, spending hours recording inaccurate logs. Instead, the business can deploy its staff focused on growth, productivity, and real value-add action.