BEST-IN-CLASS | TECHNOLOGY | ENERGY

# REALIZE OIL & GAS DIGITAL POTENTIAL WITH APPIAN

## Digital Technologies Benefits for Oil & Gas

The digital world is faster, smarter, and more connected. In response to market conditions and competitive pressures, energy organizations are shifting their strategic focus to embrace digital technologies and intelligent automation to transform the way they work.

Bloomberg New Energy Finance found the value that digital technologies provides to the energy industry will rise from $17 billion in 2017 to $38 billion by 2025.
Digital transformation improves how oil and gas organizations work by:
• Automating manual and paper processes
• Increasing operational transparency
• Empowering collaboration organization-wide
• Actioning asset, field, and sensor data

## Deliver Business and Field Applications, Faster.

Too often outdated, paper-based workflows and cumbersome processes slow down efforts to improve operations and scale innovation. This is where Appian comes in.

From upstream production to refining to energy services, Appian's digital application platform enables organizations to quickly deliver modern enterprise applications, while leveraging existing systems and assets in place.

New mobile-enabled applications can be rolled out to the field and business in weeks, not months or years. This leads to increased productivity for field workers, visibility for stakeholders, and control of critical projects.

Three critical operations areas where Appian helps oil and gas organizations scale their digital initiatives include asset performance, field service management, and turnaround execution.

## Optimize Asset Performance

Asset performance is critical to achieving operational excellence. Complex work procedures and lack of visibility and control over assets, coupled with unplanned downtime, hinders production and performance.

With the rise of digital technologies, organizations are now able to monitor assets in real time, automate workflows to take corrective action, and leverage sensor data for early warning detection— dramatically improving asset performance and reliability.
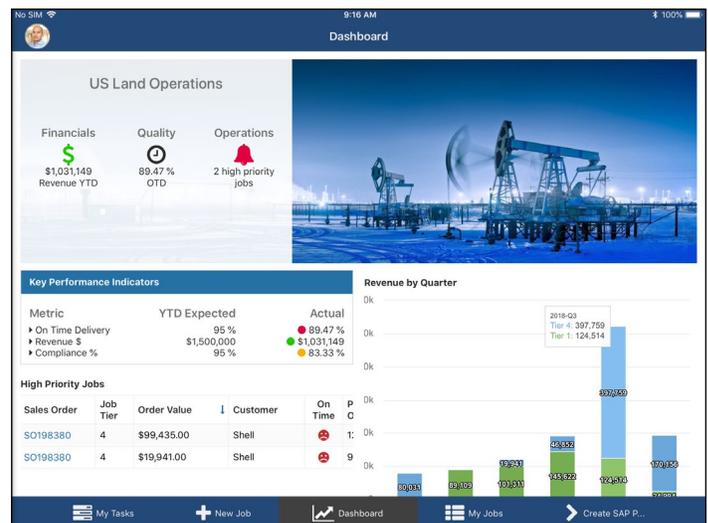
Taking a proactive, automated, and data-driven approach to maintenance and utilization optimizes asset performance, and ultimately, drives more profitability.

A global oil and gas producer had many cumbersome manual and paper processes that were slowing down efforts to streamline operations and effectively manage the asset lifecycle. Leveraging Appian to digitize and automate asset management processes, the company was able to realize **$22 million of netback new revenue and reduce drilling cycle times from 192 days to 50 days**, leading to faster time to production and increased capacity to drill more wells.

### Streamline Turnaround Execution

It can take years to plan, schedule, and execute a refinery turnaround. An hour or day of time lost during a shutdown costs the organization millions of dollars. With aging infrastructure, there are more planned maintenance and outages required each year, making it critical to execute effectively at all phases of a turnaround.

Leading oil and gas companies are undertaking digital initiatives to improve turnarounds, realizing the value of technology to streamline shutdown processes, empower project management, and reduce risk from project slippage.
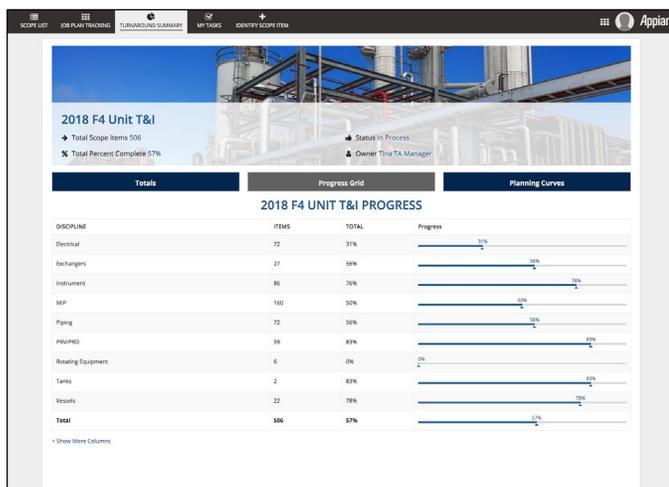


One of the nation's largest oil refiners had many manual, paper processes around their turnarounds that limited visibility and agility. Contractors had up to 1,000 tasks at a time to complete in a short period of time and no insight into who was doing what or when. Leveraging Appian, they

automated turnaround tasks and processes to optimize resource allocation, inspection, schedules, and data access—**realizing reduced risk and multi-million dollar savings with just one tunaround across seven refineries.**

### Improve Field Service Management

Field service workers are pivotal to the success of operations. However, paper workflows and disjointed systems hinder worker productivity, project completion, and stakeholder visibility.

Whether it's conducting site inspections, servicing assets, or performing work orders, a digital technology platform is essential to enable mobility, automate processes, provide real-time project collaboration, and deliver auditability and insights to field engineers and management alike.

Energy organizations are leveraging intelligent automation to maximize job margins, make more informed decisions on-the-go, and deliver unprecedented field project visibility across the organization.

A large North American refiner operates thousands of miles of pipeline. They were using manual, paper-based processes to manage pipeline maintenance and integrity processes. This limited visibility and slowed maintenance performance. Leveraging Appian, they deployed a mobile-enabled field application to transform field service.

Now when contractors find a leaky valve or maintenance issue, they create a case on their mobile device, including details, uploading photos, and routing for approvals with voice recordings. By automating maintenance processes and providing full project intelligence in the application, contractors now have a **5 minute handover instead of a one hour status meeting** when switching shifts.

### Realize Your Digital Potential

Take advantage of Appian's powerful, proven digital application platform and intelligent automation capabilities to meet today's demands and tomorrow's challenges.

Automate critical processes and deliver cutting-edge applications faster to drive increased efficiency, agility, and innovation.

Discover how Appian is helping energy organizations scale their digital initiatives and achieve impressive results at: **appian.com/energy.**