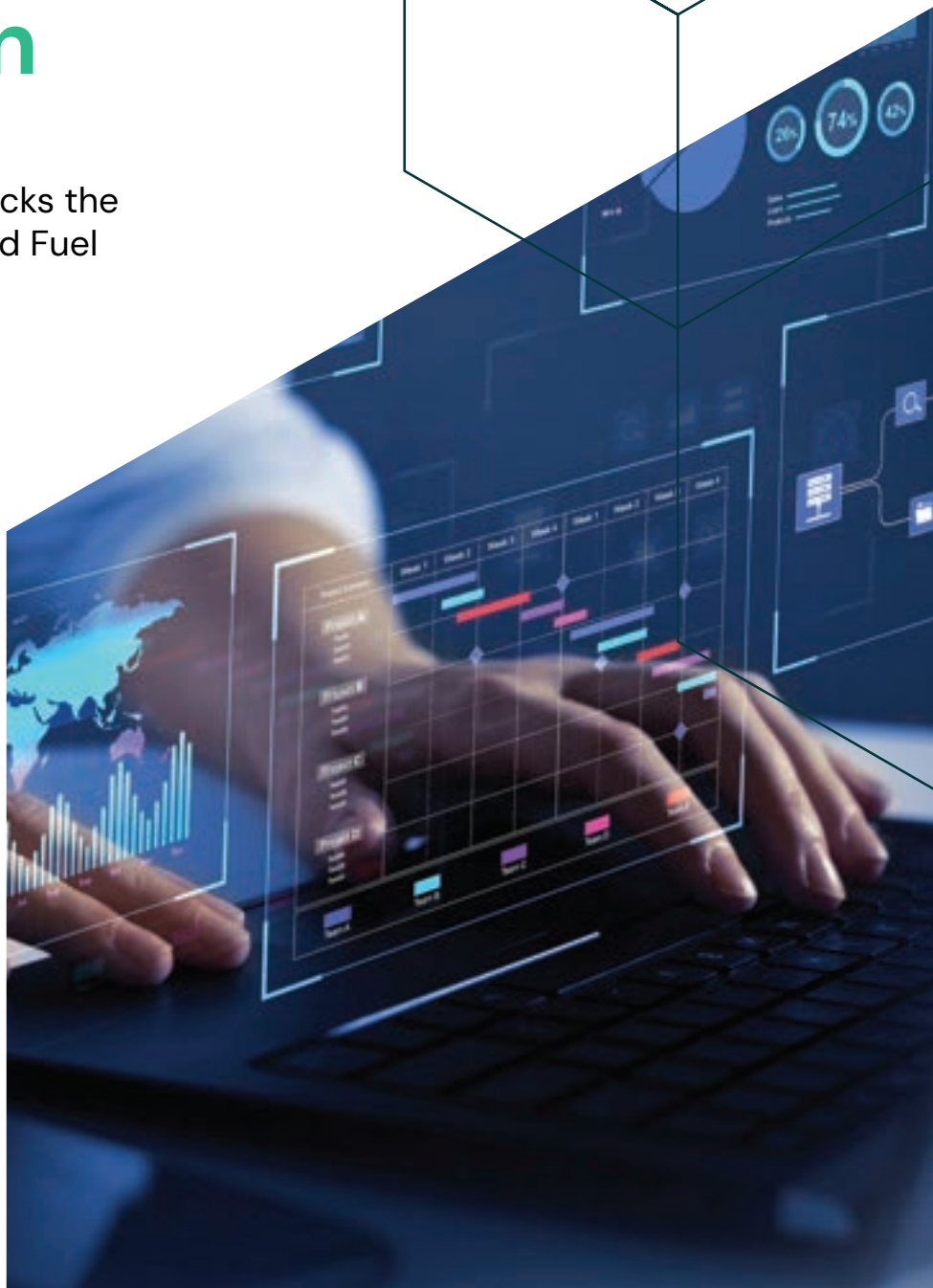
TitanCloud™

A Comprehensive Guide to Enterprise-Wide Fuel Asset Optimization

Learn How Integrated Data Unlocks the Full Potential of your End-to-End Fuel Asset Management Strategy



Managing fuel assets and supply chain logistics has grown increasingly complex in recent years. From unpredictable weather conditions and environmental concerns to inventory variance and fuel theft, fuel retailers have more concerns and responsibilities than ever before. With so much at stake, it's increasingly clear that siloed legacy fuel management systems are simply not up to the task.

Yet, compared to the tens of millions of dollars larger c-store owners spend annually on real estate, equipment and testing, many still aren't investing in technology to monitor their critical assets and optimize revenue.

Comparatively, the cost of such innovation is nominal and can eliminate fractured, disparate systems, the remnants of outdated fuel management processes that lead to lost sales, higher overhead costs, and the potential for non-compliance penalties.

Luckily, the potential exists to teach an old industry new tricks, with innovative technologies that provide the real-time data needed to operate with unprecedented efficiency.

In this e-book, we'll delve into the intricacies of modern fuel asset management. From understanding the complexities fuel merchants face, to unveiling the transformative power of unified workflows, you'll learn how you can benefit from deploying a unified, multi-pronged approach to overseeing and optimizing the operation, maintenance, logistics and compliance of your liquid fuel assets—increasing your efficiency and earnings in the process.

A complex landscape for c-stores, fleets and service providers

Compared to other retail sectors, the fuel industry has traditionally lagged behind when it comes to integrating digital technologies to optimize workflow. Many businesses in the fuel operations space continue to manage their critical operations using paper, spreadsheets, and outdated, inefficient in-house systems.

For convenience store fuel retailers, fuel supply chain inefficiencies can negatively impact the customer experience or cost excess downtime. Fleet operators risk missing compliance details that can lead to incomplete reporting or issues requiring remediation, or can spend undue time and cost attending to non-critical alarms. For service providers, antiquated operational systems can mean difficulty tracking and responding to customer needs.

"We partnered with Titan Cloud to streamline our operations and to leverage a single source of data for our fuel site needs. Titan's support and services have been instrumental as we continue to scale and add sites throughout North America."

- Tom Cacciola, SVP & Chief Real Estate Officer at EG Group

Fuel Asset Optimization technology is here

Fortunately, data-driven innovation now addresses the unique needs of businesses within these spaces.

The Titan Cloud integrated platform provides a centralized, single source of truth providing real-time data insights for every step of the fuel asset management workflow, regardless of how many sites are monitored, and is scalable for retailer growth.

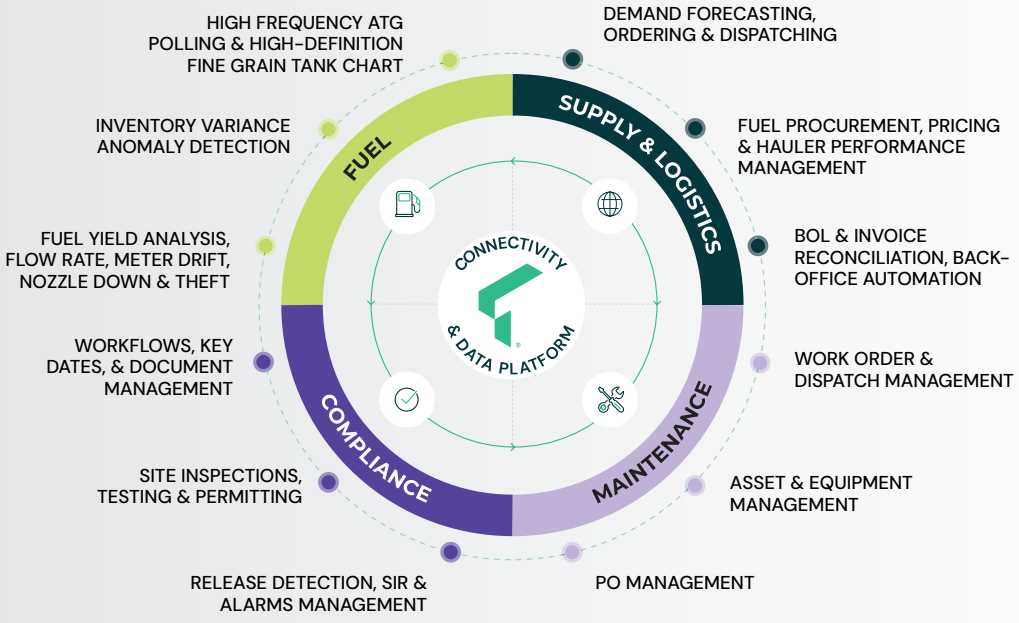
C-store giant 7-Eleven has more than 50,000 stores across multiple continents and more than 5,000 users of Titan Cloud software, including 4,000 Speedway stores integrated into the platform in just two months following acquisition. The retailer uses our platform to monitor more than 100,000 sensors and manages over 600,000 test records in the database.

From vendor sourcing to procurement, order dispatch logistics, and invoice matching, the Titan Cloud solution provides a fast and secure way to achieve best buy, assess problems, engage service contractors, and track back-office functions--even remotely. For example, following several acquisitions, Titan Cloud customer Haffner's needed to centralize what had begun to feel like individual self-governing bodies, rather than one cohesive organization. By using our platform to quickly unify a diverse, fragmented group of departments and management systems under one single source of truth, they were able to centralize their environmental compliance, licensing and permitting, monitoring and management, transitioning from 0% to 91% remote connectivity within seven months.

In an industry where disparate systems have long been the norm, centralizing data benefits everyone by highlighting issues impacting multiple teams and enabling cross-functional collaboration. Data-driven systems also put the control of fuel assets into the hands of the retailer, giving them the tools to configure, manage, assess and optimize their systems without needing to rely on third-party vendors, saving time and cost.

Zero in on key priorities with end-to-end connectivity across systems and real time data to inform your business decisions.

OPTIMIZE EVERY ASPECT OF YOUR FUEL OPERATIONS WITH END-TO-END VISIBILITY AND REAL-TIME DATA



The pump: A valuable first impression

People want fast, reliable service, and your fuel pump is often the first impression that influences whether they'll give you their business, today or in the future. Moving at today's rapid pace, potential customers who spot a yellow bag on a pump may decide instantly to move on, or to bypass your station next time.

Once at the pump, issues like poor fuel flow, long connection times, and POS terminal issues can easily trigger customer frustration and prevent repeat business. Keeping your pumps in top working order is first and foremost for sustaining satisfied customers, who are then more likely to continue their interaction by coming into your store. Operational efficiency is critical to enforcing this positive experience.

Wills Group is a good example. With over 300 c-store and fueling stations in the mid-Atlantic, the company proactively sought to avoid customer frustration by remediating fuel variance discrepancies using Titan Cloud's solution. By eliminating manual reconciliation methods and moving to our platform, they were able to quickly identify and address meter inaccuracies, reducing operating costs by 57% and keeping their pumps at optimal functionality for their customers.

Getting a handle on compliance

Government regulation of liquid fuel assets is getting more rigid in an effort to increase safety and environmental compliance. To adhere to current and emerging regulations, your fuel assets—liquid assets or the hardware and software that moves it from vendor to customer—need to not only fully comply with all local, state and federal codes, but also be able to prove that compliance at any given time. Any breach can lead to significant fines, costly repairs or even a business shutdown.

Streamlining maintenance by prioritizing alarms

A recent Titan Cloud assessment of a fuel service chain with 700 sites found that only 6.7% of ATG alert messages were actionable; and only 1% required a service call. Though startling, these numbers are not uncommon. Fuel retailers deal with hundreds of alerts per day, and often spend time and money on those that could have been deprioritized. In fact, even with the implementation of automated tank gauging (ATG) technology, modern alarm systems are still sensitive to every possible trigger (leaks, water, temperature, etc.), inundating fuel operations managers with emails and text messages alerting them to potential problems—the majority of which may not require an immediate response. Every service contractor call represents a hard cost, respondents may not have the parts necessary to fix the problem, and they often conclude the issue was simply an improper configuration of the ATG software.

ATG-RELATED DISPATCHES

Customer Study: 90% reduction in "hot alarms" dispatches in just 2 months

"Nearly 30,000 alarms were detected over the course of just 60 days. Our analysis of those alarms showed that only 17,000 were compliance-related issues, and of those, only about 2,000 were actionable issues. Of those, only about 350 required a field service dispatch. That's only about 1% of all the alarms detected."

- Titan Cloud analysis of retailer with 700 locations

Get to the root cause of fuel loss

Inventory variance is a significant challenge across the fuel service industry today due to inaccurate tank charts and limited visibility into root causes of variance at the dispenser level. One such cause is meter drift, which contributes to lower revenue, higher operating costs, and excessive fuel write-offs.

Using Titan Cloud's fuel asset optimization technology, retailers benefit from a precise fine grain tank chart, real-time BOL reconciliation, root cause analysis/anomaly detection, and meter drift predictive analysis to identify variance in order to address issues quickly.

CUSTOMER A — METER DRIFT DETECTION

Four failed meters as starting point (two at same facility)

Facility	Product	FP	Meter	Meter Error (cu in/ 5-gal, Prover unit)	Uncalibrated Actual Dispensed	Calibrated Expected Dispensed	Meter Error Loss (gal)
Facility A	Regular (Ethanol)	11	0	46	5,643	5,417	**226**
Facility B	Regular (Ethanol)	3	4	45	14,777	14,205	**572**
Facility C	Regular (Ethanol)	5	4	47	22,475	21,564	**911**
Facility D	Regular (Ethanol)	9	0	72	28,740	27,706	**1,034**

Note: Volumes are represented in Gallons, at the meter level (July 2023)

A Note on Fine Grain Tank Charts

Titan Cloud's fine grain technology has pioneered micro-level accuracy, leveraging high frequency data capture and fractional measurement points, far and away surpassing the level of accuracy of traditional tank charts and tank strapping capabilities. While traditional charts rely on 4 to 20 input points to extrapolate a chart, our fine grain tank charts use 40,000 – 50,000 points, measured at 1/8-inch increments for unsurpassed granularity.

Optimized fuel supply chain logistics

Integrated technology solves the supply chain workflow puzzle by replacing the outdated processes, delayed information, and disparate systems that plague traditional procurement-to-payment fuel logistics. Cutting-edge platforms empower fuel operators with streamlined data feeds that eliminate manual touchpoints and the human errors they introduce.

Centralizing supply chain logistics within a single intelligence center further supports load optimization, fuel procurement, pricing and hauler performance management, whether fuel workflows are direct or carrier-managed.

Finally, tech automated back-office workflows streamline BOL reconciliation and invoice matching to speed up billing processes and get everyone paid faster.

For example, Bazco Oil Company, one of the largest fuel distributors in the state of Michigan and owners of Chillbox Stores, was struggling to monitor disconnected systems while orchestrating fuel pickups and deliveries across nearly 200 sites. In addition, alerts were slow, leaving little time to address issues before a runout at one of their 35 c-store locations.

Integrating Titan Cloud into their existing back-office system, Bazco was able to centralize inventory, forecasting, and dispatch logistics. Data-driven technology has improved forecasting, while billing staff and drivers are now synchronized with accurate information, expediting the invoice and payment cycle.

A multi-pronged approach to fuel asset optimization

The Titan Cloud enterprise software platform for fuel asset management offers comprehensive insight into the health of your fuel supply chain, provides specific details required to resolve issues, and backs it all up with the documentation you need to reconcile orders, expedite billing, and prove compliance at any moment.

This is our enterprise-wide approach. We've revolutionized fuel asset management by reducing operational costs, minimizing inventory variance, addressing environmental compliance, and driving fuel sales to make sure that the first impression your customer gets of your business is the best one.

Titan Cloud features fully secure, streamlined data sharing, harnessing IoT data from tanks, facilities, and other fuel management hardware and software to deliver actionable insights and measurable ROI. Our integrated APIs break down data siloes, empowering operators to manage data from a single source of truth using dynamic, customizable dashboards, reports, and workflows.

By providing early detection of fuel loss, Titan Cloud can cut remediation costs by as much as 80%. By putting the knowledge and control into the hands of your operation team, Titan Cloud streamlines your fuel supply chain and saves costs associated with hiring third-party vendors by as much as 30%. All while delivering more efficient, profitable, and sustainable operations across all your pumps and locations.

Put the power of data-driven decision-making in your hands

The fast-paced world we live in is driven by data and technology. The key to succeeding in this environment lies in data-driven decision-making to propel fast growth and efficient processes. Titan Cloud's platform prepares your business for today's competitive landscape by providing enterprise-level capabilities with the power, scope, scalability, and adaptability to sustain your success. Harness the power of the Titan Cloud unified workflow and experience data-driven fuel asset optimization.

As businesses manage against unpredictable demand, increased volatility, and rising costs, leaders across industries are turning to Titan Cloud technology to gain unprecedented connectivity, visibility, and control into their fuel assets and operations.

Learn more at titancloud.com

Call 1-615-372-6000 or email ROI@titancloud.com