

## **Run Field Operations from a Single Pane of Glass: How a Unified Production Operations System Improves Efficiency and Boosts Your Bottom Line**



The oil and gas industry has officially gone digital. While we weren't the first to adopt emerging technology like cloud computing, we have now begun to digitize processes and workflows that have long relied on pen and paper (or at best, Excel.) This digital transformation can and will deliver meaningful business benefits, from greater efficiency to streamlined operations to cost savings to improved safety. But it also comes with growing pains: while it seems like we have a digital tool for everything, that wide assortment of software has introduced its own challenges.

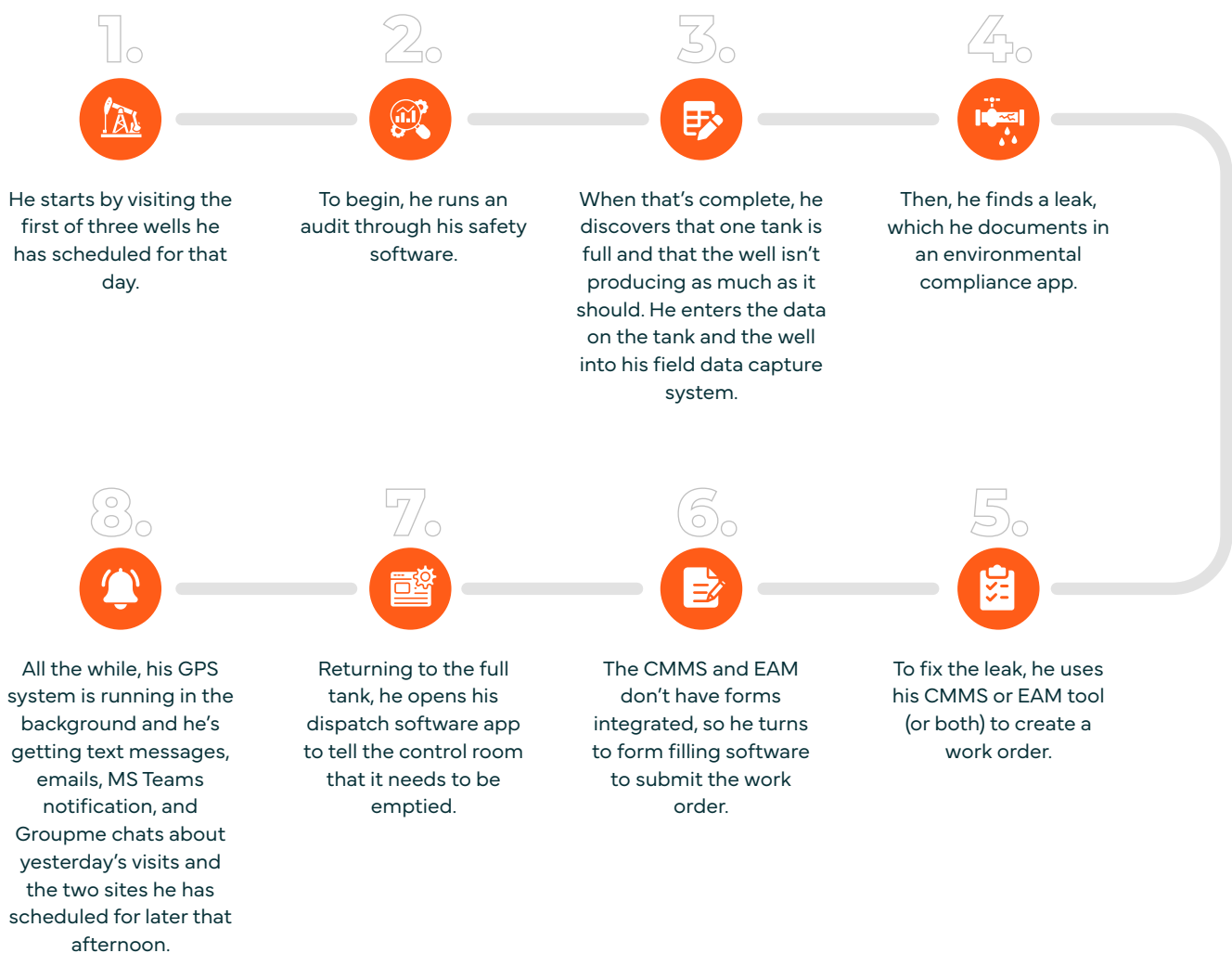
Upstream oil and gas teams must now juggle dozens of disparate applications that mostly support a one-off use case and struggle to talk to each other. Information comes in through some channels and gets processed out of others, like a digital game of telephone. This disconnect not only leads to inefficient communications and an increased administrative burden, it has a profound impact on core business operations. Without reliable, accurate, timely, and transparent data, organizations waste critical time, money, and resources.

Fortunately, there is a better way. The W Energy production offering unites field service management and field data gathering into a single pane of glass, simplifying field operations on one user-centric platform. Let's take a closer look.

## THE CHALLENGE: DISPARATE FIELD APPLICATIONS LEAD TO INEFFICIENCIES, DELAYS, AND LOW BOTTOM LINE VALUE

Upstream organizations always start with good intentions: to digitize and streamline work processes in the field. Along the way, however, they fall into the trap of deploying use-case-specific applications, which can add up fast. Eventually, they've digitized most things – the IT transformation project was successful, in that sense – but the field is left with a hodgepodge of systems that are difficult to use and don't play well with each other. The result, predictably, is poor adoption and low bottom line value.

To understand the full impact of using many disconnected systems, it's helpful to see how different departments interact with their software tools to perform their jobs. Let's start by walking through a typical day in the life of a field operator.



To close the loop on this one routine site, it takes ten (or more) systems and at least half an hour. That's an extra 30 minutes that the tank continues to fill, backing up the well. It's 30 minutes that he's now running behind to the next site, where when the same thing happens, he's now an hour late for site #3. Our field operator is spending his time plugging data into software instead of doing his actual job: running and maintaining field sites. It's no surprise that adoption and accuracy are an issue.

## Why field operators face serious cognitive burnout

Say a field worker gets eight requests from four people across four systems on two interfaces, a phone and a laptop. He then manages those requests back through four interfaces – phone, laptop, notebook, and sticky note – which push the data through to six more systems.

This all translates to incredible complexity. In fact, when you do the math ( $8 \times 4 \times 4 \times 2 \times 1 \times 4 \times 6$ ), it adds up to 6,144 “nodes,” or operations that the brain has to complete. And that’s just on the administrative side: the operator hasn’t even started the actual work in the field.

The remote operations center (ROC) doesn’t have it much better. They’re looking at the CMMS and EAM to monitor work orders as well as the GPS system to see where each field operator is located. In addition, they’re communicating with vendors, who don’t use any common tools, to dispatch trucks and maintenance crews. This requires emails and phone calls and offers very limited insight into what work was actually performed when. With no real-time visibility, they’re running blind. If Vendor X says it took 30 hours to fix a tank, they have to take their word for it and pay accordingly.

Speaking of paying, this affects accounting as well. Volume accountants are charged with reconciling the data from the field capture software into their own system to run the allocations. To do this successfully and on time, all the data must be accurate – but it’s often 8am the next day before the accountant finds an error. The accountant calls up the field operator, identifies the error, and sends him back to yesterday’s site to get the missing piece of information. This, of course, slows down his day even further, and means that accounting can’t close the books on time. The effect is cumulative: every mistake further snowballs into additional delays and incidents.

Finally, IT must manage, maintain, and pay for all of these applications on the back end. They’re charged with building or buying complex, time-consuming integrations that can cost hundreds of thousands of dollars, take 6-8 months, and require an army of consultants. User training falls to IT as well, so they must dedicate resources to training all the folks in the field on all the different interfaces, which no one wants to learn, because they don’t want to use them in the first place.

**The theme here is clear: the smorgasbord of software approach is not only failing to help streamline field operations, it’s causing significant delays, inefficiencies, administrative burden, and financial impact.**

## How much does a field delay cost?

ACME well operator has a production target of 100,000 barrels per day. Today, the field team finds that their wells are only producing 85,000 barrels. Half of the missing 15,000 barrels are due to legitimate downtime, but the rest could be back up and running if the field operators and ROC could identify and react to problems more quickly – they could get to the tanks faster, prevent shutdowns due to safety and compliance, not back up their wells, etc.

Even if we conservatively assume that only .5% of the missing production volumes results from administrative friction, that's 750 barrels of oil. At \$80/barrel, ACME is losing \$40,000 every day.

**Field data capture, environmental inspections, work orders, form fills, GPS, dispatch, production accounting, even logins for vendors: W Energy brings them together behind a single pane of glass.**

## THE SOLUTION: A UNIFIED, FIELD-FIRST, CLOUD-BASED PRODUCTION OPERATIONS SYSTEM

Some of the complexity we explored in the examples above is inherent to the oil and gas industry. Field operations will always involve multiple moving parts, players, and systems. It does not, however, need to be so cumbersome and error-prone to navigate those complexities.

The W Energy production offering is a unified software platform that combines field data capture, field services, field maintenance, and allocations into a single application. Built to be "field first" – we based the platform on how the field operates and then extended into the back office, unlike other systems – our production offering replaces manifold one-off apps with one real-time interface.

## W Energy is the only field-first production operations system that:



Provides a single pane of glass for both production data capture and field service maintenance



Delivers real-time allocations for production accounting



Creates transparency between the field, the back office, and production accounting to ensure seamless execution across every department that supports



What do we mean by “real time”? With W Energy, allocations happen immediately as numbers come in from the field or SCADA. That means everyone, from the foreman to the operators to the engineers to the accountants, is always on the same page throughout the day. Issues or errors are uncovered instantly, not at 8am the next morning, so they can be addressed quickly and efficiently.

Uniting these capabilities into one easy-to-use app delivers a number of benefits to upstream operators.

## 10 benefits of a real-time, unified field operations platform:



### Increased field production capacity/less downtime

By aligning the entire workstream in real time, W Energy’s production offering enables organizations to minimize downtime and produce more barrels, more efficiently.



### 15-20% more employee bandwidth

W Energy gives field operators back one, two, even up to three hours every day. That means they can get more work done, so your company can accomplish more with the same number of (or even fewer) full-time employees.



### 400% faster allocations

With W Energy’s first-of-its-kind, lightning-fast allocations tool, you can cut allocation time from 10 days down to two – a 400% improvement.



### Cross-platform compatibility

Our production offering works with both iOS and Android, so everyone within your ecosystem can connect through one standard interface.



### Lower licensing costs

Because W Energy replaces one-off apps like form fillers, safety systems, and environmental compliance, IT can eliminate unnecessary software and slash licensing costs, maintenance burdens, and procurement headaches.



### Automatic upgrades to the latest functionality

As a software-as-a-service (SaaS) platform, the W Energy production offering runs completely in the cloud. That means you automatically get the latest features and functionality with every update, plus no longer have to provide care and feeding for other applications.



### Ongoing innovation

At W Energy, we collaborate tirelessly with our customers to ensure that we’re always bringing new capabilities to the platform. We don’t do R&D just for the sake of it – every update adds incremental value to our customers.



### Zero off-book tasks

Our production offering brings everything into one place, so there is never work getting done in the field that you don’t know about. As a result, you can make better projections, understand costs more effectively, and increase ROI and profit margins.



### 300% better field visibility

By getting all employees, contractors, and vendors on the same system, our customers have reported that they have 300% more visibility into what’s happening in the field. That visibility translates to more accurate contract labor field estimates and field expenses, which directly impacts the bottom line.

## Dramatically reduce field operators' cognitive load with W Energy

Remember those 6,144 mental hoops that the field operator had to jump through with the multi-app approach? W Energy's unified system brings that number down to 32. The operator gets eight requests from four sources in one system and one interface. He manages those requests through the same interface, where they're uploaded to the cloud to distribute to the appropriate system.

That's more than a 99% reduction in cognitive load.

W Energy reduces the  
cognitive Load of field  
operators by

**99%**



## IMPROVE EFFICIENCY AND BOOST YOUR BOTTOM LINE WITH FIELD-FIRST PRODUCTION OPERATIONS FROM W ENERGY

As oil and gas gets increasingly complex and competitive, organizations must find ways to work smarter, not harder. With a unified, user-friendly field operations application from W Energy, you can do exactly that.

To learn more about the W Energy production offering, [visit our website](#) or [get in touch](#) to schedule your custom demo.



[Learn more](#)

