

White Paper

Putting People First: Enhancing Workforce Life and Visibility in Remote Oilfields

The Overlooked Challenge

Oilfields are built for efficiency, safety, and production. But for the thousands of engineers, drillers, and support staff who live and work in remote camps, daily life remains logistically complex, isolating, and heavily manual.

The industry has made huge strides in operational systems – from incident reporting and safety management to rota planning and performance tracking. Yet in many camps, workers still rely on spreadsheets, noticeboards, or radio calls for essential updates.

Across the sector, one consistent challenge keeps surfacing:

“We need a better way of knowing who’s in camp – right now.”

Even where detailed rotas and HR systems exist, **real-time presence data is missing**. During emergencies, roll calls can take time. Contractors may come and go without digital trace. Catering and transport are often planned on estimates rather than facts.

This gap between planned workforce and actual presence limits operational efficiency, safety responsiveness, and workforce wellbeing.

Why it Matters

Visibility of your people isn’t just an operational concern – it affects safety, cost, morale, and compliance.

- **Safety and accountability:** Instant headcounts during incidents and verified attendance across sites.
- **Efficiency:** Smarter logistics for catering, housekeeping, and transport based on live data.
- **Cost control:** Reduced waste and over-allocation from inaccurate rosters.
- **Compliance:** Timestamped records for audits, reporting, and insurance.
- **Workforce experience:** Confidence and transparency for staff and supervisors alike.

When you know exactly who is on site, off rotation, or travelling, you can run operations that are safer, smarter, and more sustainable.

The Opportunity for Innovation

Digital transformation in oilfield operations has traditionally focused on production, compliance, and safety reporting.

The human side of operations – how people live, move, and stay connected – has often been overlooked.

Many companies already use enterprise or subscription-based platforms to manage operations, incident reporting, or timesheets. These systems are valuable but limited by design – they track planned or historical activity, not what’s happening in real time.

What’s missing is a human visibility layer – a live check-in/out system that shows who’s actually in camp, on site, or off rotation at any moment.

A digital presence solution fills that gap, connecting daily workforce activity with structured operational data. It complements existing systems rather than competes with them – extending their value through real-time visibility.

Real-time visibility strengthens safety, improves efficiency, and turns everyday data into measurable results.

Scale of the Opportunity

Remote workforces are vast – and often city-sized in scale.

- At major projects such as the Tengiz expansion in Kazakhstan, the workforce peaked at around 90,000 jobs, spread across 94 rotation camps with 4–8-week hitches¹ – a clear example of how complex managing “who’s on site right now” can be.
- In Western Australia’s resources sector, over 135,000 workers were on site in 2024², most supported by FIFO and camp accommodation models. While mining-led, it illustrates the magnitude of logistics common to resource regions shared with oil and gas.
- Globally, the upstream petroleum industry employs between 3.9 and 6 million people³, depending on the source and definition. Even if only a small fraction of these work in remote rotations, that still represents tens of thousands of individuals operating from camp environments that lack real-time visibility today.

The Case for Bespoke, App-Based Platforms

Off-the-shelf platforms are rarely designed for the realities of oilfield life – rotational schedules, challenging environments, variable connectivity, and diverse workforce needs.

A bespoke, app-based platform goes further by aligning digital tools with how your workforce actually lives and works.

Advantages of a bespoke, app-based approach include:

- **Built around your operations:** Reflects your sites, schedules, and workflows.
- **Offline-ready:** Reliable even in low-connectivity environments.
- **Integration-ready:** Connects with HR, rota, and safety systems already in use.
- **Scalable and data-rich:** Expands from a single pilot camp to multiple sites.
- **Owned by you:** A long-term asset built for your needs, not a generic subscription.

The result is a solution that fits naturally into your operations – improving safety, efficiency, and workforce experience while producing data that drives continuous improvement.

App-Based Options for Workforce Visibility

Every operation is different, and the right presence-tracking approach depends on your infrastructure, connectivity, and workforce habits.

Mobile Check-In App (QR / NFC)

Workers check in and out using a secure mobile app. Presence data syncs instantly to a cloud dashboard for supervisors and HSE teams.

Best for: Camps with Wi-Fi or cellular coverage that want a fast, fully app-based solution.

Tablet Kiosk App

A shared kiosk or tablet at camp reception allows workers to scan a code or tap to log their status.

Best for: Sites where not every worker carries a personal device – shared access, fully digital.

GPS / Geofencing App

Automatically records entry and exit when workers cross defined geofence zones around camps or worksites. No manual action required.

Best for: Open-area or mobile operations where crews move between locations frequently.

Integration with HR / HSE Systems

Presence data connects directly with existing HR, rota, or safety software through secure APIs.

Best for: Companies seeking unified reporting and automated compliance tracking.

Hardware-based systems such as RFID gates or card readers can be integrated through local providers.

Oilfield Digital can coordinate those partnerships or act as your digital systems lead, ensuring seamless connectivity between physical and digital infrastructure.

Our Approach – Consultancy First, Technology Second

Every operation is unique. Workforce size, camp layout, connectivity, and culture vary widely, so a one-size-fits-all product rarely works.

Our approach begins with understanding your operation, then designing technology to fit.

Discovery: We work alongside your teams to map daily life in camp – arrivals, transfers, accommodation, shift changes, and reporting flows.

Design: Together, we define requirements and co-create an app that solves real operational challenges.

Integration: The solution connects directly with existing systems, avoiding duplication and ensuring easy adoption.

Pilot and Scale: Start small, refine based on feedback, then expand across camps and regions.

Optimise: Analyse data from usage and outcomes to continually improve safety, wellbeing, and efficiency. We don't resell pre-packaged products – we design digital tools that fit your people and your operations.

The Power of Workforce Data

"If you can't measure it, you can't improve it." (Peter Drucker)

Real-time workforce data unlocks visibility that was previously out of reach:

Early insight: Identify risks or bottlenecks before they escalate.

Continuous improvement: Measure the impact of operational changes over time.

Safety performance: Combine incident reports with presence data for a complete risk picture.

Engagement tracking: Monitor morale and satisfaction across camps.

Demonstrable ROI: Link workforce wellbeing and efficiency directly to measurable outcomes.

Presence data turns the daily movement of your workforce into actionable intelligence – enabling better planning, safer operations, and measurable performance improvements.

Industry Leadership

In a sector defined by safety and productivity, leadership will increasingly be measured by how companies support and protect their people.

Those who invest in bespoke, integration-ready platforms demonstrate not only operational excellence, but genuine care for their workforce – backed by data.

This is more than a technology upgrade. It's a step toward a safer, more transparent, and more sustainable way of managing remote operations.

It's an opportunity to:

- Strengthen safety culture through real-time accountability.
- Reduce waste and cost through accurate data.
- Enhance ESG and workforce wellbeing performance.
- Set a new benchmark for living and working conditions in remote oilfields.

A Call to Action

Every company is different, and every workforce has its own challenges.

By investing in made-to-fit, app-based solutions, oilfield operators can transform camp life, improve safety, and strengthen their reputation as responsible employers.

If you're ready to explore what real-time workforce visibility could do for your operations, let's start the conversation.

It's time to put people – and real-time visibility – at the centre of the oilfield.

References

1. Project reports; Energy Institute Journal, 2021
2. Department of Training and Workforce Development, Western Australia, 2024
3. IBISWorld Global E&P Employment Report, 2024; ILO Energy Sector Employment Data, 2023