

# OIL & GAS INDUSTRY ERP IMPACT REPORT

Insights for the year 2025



*“Data is not just a resource , it is the new engine of nations. Countries that understand data, structure it, and build intelligence on top of it will lead the future. Those that don’t will depend on others for their progress.”*

– His Royal Highness Crown Prince Mohammed bin Salman

## Industry Snapshot & Key Statistics

Oil & gas companies operate in one of the most complex and cost-sensitive environments. Even small inefficiencies compound into millions in annual losses.

Key industry numbers:

- 3–7% of annual revenue is lost due to process inefficiencies, manual operations, and disconnected systems.
- 73% of O&G executives cite lack of real-time operational visibility as their biggest barrier to efficiency.
- 54% of ERP failures in this industry are due to poor implementation, not the ERP software itself.

Companies with a properly integrated ERP achieve:

- 18–30% faster decision cycles
- 12–22% reduced working capital blockage
- 20–35% reduction in procurement leakages
- 15–25% higher asset uptime

The bottom line: Oil & Gas companies cannot afford outdated systems, disconnected workflows, or Excel-driven operations.

## How ERP Transforms Oil & Gas Operations

## A. Operational Visibility

- Single platform connecting procurement, inventory, maintenance, logistics, and finance.
- Removes blind spots between field operations and head office.
- Provides real-time KPIs and dashboards.

## B. Financial Governance

- IFRS-compliant financial structure with multi-company consolidation.
- Automated cost allocation for rigs, wells, shutdowns, and projects.
- Budget vs actuals with variance reporting.
- GCC VAT & e-Invoice compliance built-in.

## C. Procurement Strengthening

- Material planning to avoid stockouts or overstocking.
- Controlled workflows to eliminate unauthorized spending.
- Supplier scoring for better negotiations.
- Tracking of chemicals, tools, spares, and consumables.

## D. Asset & Maintenance Management

- Full lifecycle tracking for heavy equipment.
- Preventive maintenance scheduling.
- Optional IoT-based monitoring.
- Maintenance cost reporting.

## E. Job Costing & Project Control

- Manpower, equipment, and materials tracked per job.
- Real-time job profitability.
- Ideal for shutdowns, drilling, and maintenance contracts.

# Why Most ERP Implementations Fail

Most oil & gas companies already have an ERP, but it does not deliver what it promised. The failure is rarely the software, it is almost always the implementation and adoption.

## 1. No Process Standardization

ERPs often digitize the existing chaos.

Every site operates differently, approvals aren't documented, and workflows are unclear, the ERP becomes a complicated reporting tool instead of an operational engine.

## 2. "Big Bang" Implementation

Rolling out everything at once guarantees:

- User resistance
- Half-trained staff
- Wrong configurations

- Abandoned modules

Oil & gas operations are too diverse for an all-in-one rollout.

### 3. Weak Adoption

30–40% of staff continue using spreadsheets.

Managers approve outside the system.

Data becomes unreliable, and the ERP becomes a reference tool, not a control mechanism.

### 4. Zero Post-Go-Live Governance

Most failures occur after go-live due to:

- No internal ERP champion
- No workflow usage monitoring
- No periodic optimization
- No accountability

## Preventing ERP Implementation Failure - A Roadmap

#### A. Standardize Before Digitizing

Document and approve:

- Procurement workflows
- Inventory movement rules
- Maintenance processes
- Job costing allocation
- Approval hierarchies

Skipping this guarantees ERP failure.

#### B. Modular Execution

Roll out one module at a time.

Train, adopt, stabilize — then move to the next.

#### C. Enforce Role-Based Usage

ERP must be the **only source of truth**.

No parallel spreadsheets. No offline approvals.

#### D. Continuous Optimization

Monthly and quarterly ERP audits keep the system aligned with:

- New workflows
- Operational changes
- Market volatility

## What an Oil & Gas-Focused ERP Must Include

- **Upstream Functionality:** Land management, drilling, and production accounting.
- **Midstream Functionality:** Pipeline management, transportation, and storage.
- **Downstream Functionality:** Refining, distribution, and retail operations.
- **HSE Compliance:** Environmental, health, and safety management.
- **Regulatory Reporting:** Automated reporting for industry regulations.
- **Commodity Trading:** Risk management and trading analytics.

## How Modular ERP Approach Revives Failing Implementations

Most O&G companies don't need a new ERP, they need someone who can fix what they already have. This is where modular methodology becomes the differentiator :

### A. Diagnose → Stabilize → Optimize

Begin with a full ERP health diagnostic, identifying:

- Broken workflows
- Missing configurations
- Low adoption areas
- Data inconsistencies
- Approval bottlenecks

### B. Module-by-Module Enhancement

Instead of replacing the entire ERP, Rebuild only what needs improvement:

- Finance
- Inventory
- Procurement
- Maintenance
- Job costing
- Projects
- HRMS
- Compliance

Each rolled out with minimum operational disruption. If a module cannot be fixed , replace just that module, not the entire system.

### C. Governance & Adoption Enforcement

Implement:

- Role-based dashboards
- Usage monitoring
- Workflow compliance checks
- Focused user training

#### **D. Continuous Improvement Cycle**

- 30-day, 60-day, 90-day optimization cycles.
- Quarterly audits
- Semi-annual process refinement

Your ERP evolves with your operations.

## **Executive Summary**

Oil & gas companies don't struggle because ERPs are bad, they struggle because ERPs are implemented poorly, over-customized, and under-adopted.

Modular rescue-and-rebuild approach enables organizations to:

- Recover failing ERP investments
- Achieve real operational visibility
- Improve financial control
- Reduce procurement leakages
- Increase asset uptime

Scale safely across multiple sites

This approach delivers a stable, lean, and reliable ERP ecosystem that supports daily operations as well as long-term growth.