Oil and Gas and ERP in the Experience Economy
Key Business Drivers in Oil and Gas

87% of the oil and gas companies in the Forbes Global 2000 are SAP customers

90% of industry growth is captured by companies that offer engaging experiences

>50% of organizations will rely on AI to drive supply chain transformation

STRATEGIC PRIORITIES

- **Extend Beyond the Barrel**: Generate additional revenue streams, capture new value with products and services, and reduce exposure to oil market volatility and global demand variability
- **Digitize Production and Delivery**: Quickly react and adapt your supply chain to changing market conditions in real-time; enable automation and touchless transactions
- **Compete as an Ecosystem**: Eliminate siloed operations and deliver end-to-end visibility for your employees, business partners, and customers
- **Unlock Value with Technology**: Make data a strategic asset and fast-track innovation; gain real-time operational insights and data transparency for improved project and operations effectiveness, safety, and profitability

“Quickly adapting to change – foreseen and otherwise – is the critical, central capability for every organization. Systems and technology must be an enabler to this change, not an impediment.”

Simon Ellis, Program Vice President, IDC
Oil and Gas Companies Are Driving New Business Models

Oil and gas companies have changed, moving “beyond the barrel” to the emergence of new business models. They aim to take advantage of opportunities for sustained, value-added relationships with customers seeking “outcomes” rather than just “products.” It’s all about building long-term relationships based on a deep, frequently real-time understanding of their evolving wants and needs, securing supply and delivering as needed.

From ...

- Managed infrastructure
- Static, one-size-fits-all experience
- Standardized transport and delivery
- Infrastructure management

To ...

- Highly collaborative partner management
- Dynamic, highly personalized experience
- Optimized delivery networks
- Real- and full-time predictive maintenance
Traditional Processes Are No Longer Good Enough
Example: Asset Maintenance
Inspection report filed in batches / end of day, service tasks assigned based on asset engineering plan or individual inspector knowledge.

Delays in mitigating critical risks identified.

Inspection triggered maintenance.

Assign inspection resources.

Operations maintenance schedule.

Time-based scheduling, manual condition inspection required, unknown real-time risk profile.

Manually assign inspection resource to physically review asset, disconnected finance, asset management, and HR systems.

Difficulty executing inspections on time.

Declining asset performance.

Inspection report filed in batches / end of day, service tasks assigned based on asset engineering plan or individual inspector knowledge.

Perform maintenance.

Manual resource assignment, multiple documentation sources per asset, no optimization of cost, risk, and performance.

Higher cost and risk, lower-performing assets.
Enabling Better Customer Experiences in Oil and Gas
Example: Reimagine Maintenance – Product and Service Digitalization
Key capabilities delivered

Asset health monitoring
- Real-time monitoring of sensor data
- Predictive analysis from SAP® Predictive Maintenance and Service
- Failure prediction and impact simulation

Maintenance scheduling
- Just-in-time triggering of maintenance orders
- Intelligent resource identification and assignment
- Real-time analysis of asset health

Maintenance execution
- Risk identification and mitigation
- Integrated asset documentation
- Real-time maintenance activity status
- Optimized service parts inventory

Intelligent technology outcomes

Real-time monitoring and prediction reduces unplanned downtime

Just-in-time scheduling increases resource utilization

Integrated maintenance planning and execution reduces costs and optimizes asset performance

SAP S/4HANA® customer achieve

44% reduction in unplanned downtime

28% higher return on assets

25% increase in first-time fix rates

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What Industry Leaders Are Doing Today

Examples
“We needed a partner for future solutions and trusted collaboration, and we found it in SAP. Today, we have given ourselves a technology and operating foundation that can take us forward.”

Ali A. Al-Hazmi, President, Saudi Aramco Shell Refinery Company
Challenges
C&J Energy Services is a provider of onshore well construction and intervention, well completions and well services. It is one of the largest completion and production services companies in the US with operations across major oil and gas producing regions.

In order to offer custom-designed solutions to enhance production and profitability throughout the life of the well, C&J Energy Services needed to re-evaluate its IT to unlock new business models; it also needed a digital application to allow rig supervisors to accurately capture job information and synchronize to SAP S/4HANA.

SAP S/4HANA Innovations
C&J Energy Services chose SAP S/4HANA for the company’s intelligent digital core because of the platform’s market-leading position for in-memory computing and real-time business and ability to be extended into new business models with the SAP Cloud Platform. With SAP S/4HANA, C&J Energy Services was able to manage operations with complete visibility and the ability to manage changes in industry models.

Benefits
C&J Energy Services has been running its business on SAP S/4HANA, seeing an incredible return on investment:

- Visibility into finances and operations boosting efficiency and reducing overheads
- Managing new business models
- Raised the return on investment across the organization

C&J Energy Services found one integrated platform that could increase cost efficiency, enable an industry-leading operating model, provide transparency in running the business, and lay the foundation for digital transformation.
INDUSTRY
Oil and Gas

REGION
NA, United States

Challenges
Murphy Oil Corporation is an independent exploration and production company with a balanced portfolio of global offshore and onshore assets. Murphy produces oil and natural gas in the United States and Canada, and conducts exploration activities worldwide.

Murphy Oil Corporation needed to quickly implement a system to manage all global assets and provide visibility for tracking, management and finance. Previously, with no SAP solutions or services, the company engaged Accenture to implement a rapid-deployment solution called “Upstream Direct” that used templates to expedite implementation. As a result, Murphy went from zero SAP software to all global assets running SAP S/4HANA in 25 weeks.

SAP S/4HANA Innovations
Murphy Oil Corporation was able to implement a rapid-deployment solution called “Upstream Direct” that used templates to expedite implementation.

Benefits
Murphy Oil Corporation has been able to manage its global assets. This has brought the following benefits:

• Visibility to all assets and their management and maintenance
• Better use and reuse of assets and their status
• Managing new business models

What Industry Leaders Are Doing Today
Murphy Oil