



FUELLING EFFICIENCY

SOLUTIONS FOR THE OIL AND GAS INDUSTRY

We at RheinBrücke deliver industry-specific functionality combining the world-class service automation capabilities of Epicor Oil and Gas Field Service solution which helps all aspects of financial, operational and field service management. Our solution enhances the flow of business information while connecting dispersed field employees, customers and partners. Your organization's strategic growth initiatives can be met while reducing response times, lowering costs and increasing customer satisfaction.



RheinBrücke
IT Consulting

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Oil and Gas Industry

The oil price collapse, which began in June 2014, triggered a wave of cost reductions among upstream businesses. Global oil and gas companies slashed capital expenditures by about 40 percent between 2014 and 2016.

However as oil prices recover, can international oil companies hold on to the benefits of cost reduction? Companies will need to examine the role that digital technologies can play in improving their performance. To survive the current era of cheap oil, tools like AI, automation, and IoT can help the industry stay competitive.



In a marketplace where speed and flexibility are important, oil and gas companies need to introduce cloud computing, automation, and other technologies to transform their back-office systems, operations, and product and platform offerings. Achieving a continually evolving operating model will require new approaches to operational transformations, skill sets, and ways of working among the people who will make it happen.

Fuelled by digital innovation, the new core trend presents a host of valuable opportunities for oil and gas companies to redefine heart-of-the-business work. The question remains, will 2018 be the year for the digital revolution take-off, transforming talk into lucrative plans to help drive growth?

Oil Field Services

Within the industry, oilfield service providers are under pressure to create efficiencies and operate with sustainability in mind. Companies are looking to pursue the right technologies that reduce wastage of scarce resources to have a competitive edge.

The industry has been a laggard in the adoption of digital oilfield solutions due to legacy barriers, however the evolving market structure is game-changer. Studies shows that the industry is currently in a state of technology disruption that is fundamentally changing the way the sector operates. The top two approaches they are taking to deal with this disruption is by using to data to drive their innovation programs and by creating a safe environment within their operations for employees to innovate.



Imagine an oilfield where all the components integrate and communicate constantly on a platform from which companies can manage, measure, and track all of the data coming from all over the oilfield.

The investment to make this happen is occurring now. According to Oil and Gas Investor, total upstream energy IT support spending is about \$0.25 per barrel of oil. Experts at Booz Allen Hamilton believe digital oilfield technologies could increase the net present value of oil and gas assets by 25 percent.

Our customers in the Oilfield services industry operating in the Middle East offer end to end services across the entire value chain.

Efficiency Solutions for the Oilfield Services Industry offered by our customers

- Production Facilities Management
- Yard & Equipment Maintenance
- Consumables Management
- Project Management
- Integrated Oilfield Services
- Cementing & Tools
- Open Hole Logging
- Directional Drilling
- Mud Logging
- Managed Pressure Drilling
- Drilling & Completions Fluids
- Waste Management
- Solid Control
- Completions
- Artificial Lift
- Wellhead Maintenance
- Slickline
- Well Testing
- Cased Hole Logging
- Coiled Tubing
- Stimulation

PROBLEM STATEMENT



No Real-Time access:

A majority of the field service engineers are on the move and have to spend considerable time searching for tools and information to resolve service requests. Field personnel find it difficult to know the availability of inventory positions at rig locations to execute the service job. Without real-time access to the organization's network at the point of activity, field technicians have to resort to capturing and re-entering the information manually. This could lead to errors.

The problem can get more severe for chemicals used on service jobs that require Lot tracking have shelf life & expiry attributes. Access to quality control data on equipment and equipment performance is a major bottleneck. Accurate information availability is key to deliver operational efficiencies and to support quality initiatives enforced by operators on field service contracting companies.



Inconsistent service quality:

Operators and service providers alike face the challenge of ensuring consistent service quality from field service technicians. Efficiency of oil and gas field operations is an extremely critical parameter in ensuring optimal performance and efficiency of all field engineers and assets. Activities such as service ticketing, time registration for field personnel, equipment standby/operating hours etc. are not automated which results in the wastage of efforts and underutilization of field assets and inventory.

01

02

Remote Locations:



Lack of connectivity is a major challenge faced by upstream oil and gas industries as offshore drilling rigs are often located at remote areas where there is no access to cellular coverage. The safety of field engineers is also an area of concern.

03

Higher outstanding payments:



With a manual invoicing process, the time between the service provided and the time to receive payment from the customer for those services is longer since the payment term does not start until the date of the invoice. Without an automated system, field engineers have to wait till they are back in the office to provide this information. Thus, the outstanding receivables is larger, and the cash collected is smaller. Companies suffer significant delays compounded due to errors on service tickets, since they are manually entered through field coordinators.

With many oilfield service providers, the secret to a healthy cash flow is in how fast you can get an accurate invoice to the customer. The increase in cash flow can be significant. In fact, just by invoicing 10 days faster, cash increases \$273,972 for every \$10 million in annual revenue. We've found that companies can often justify the purchase of a full back office ERP solution with mobile field data capture based on the improvement in their cash flow alone.

04

No integration with Asset, Inventory and financial modules:



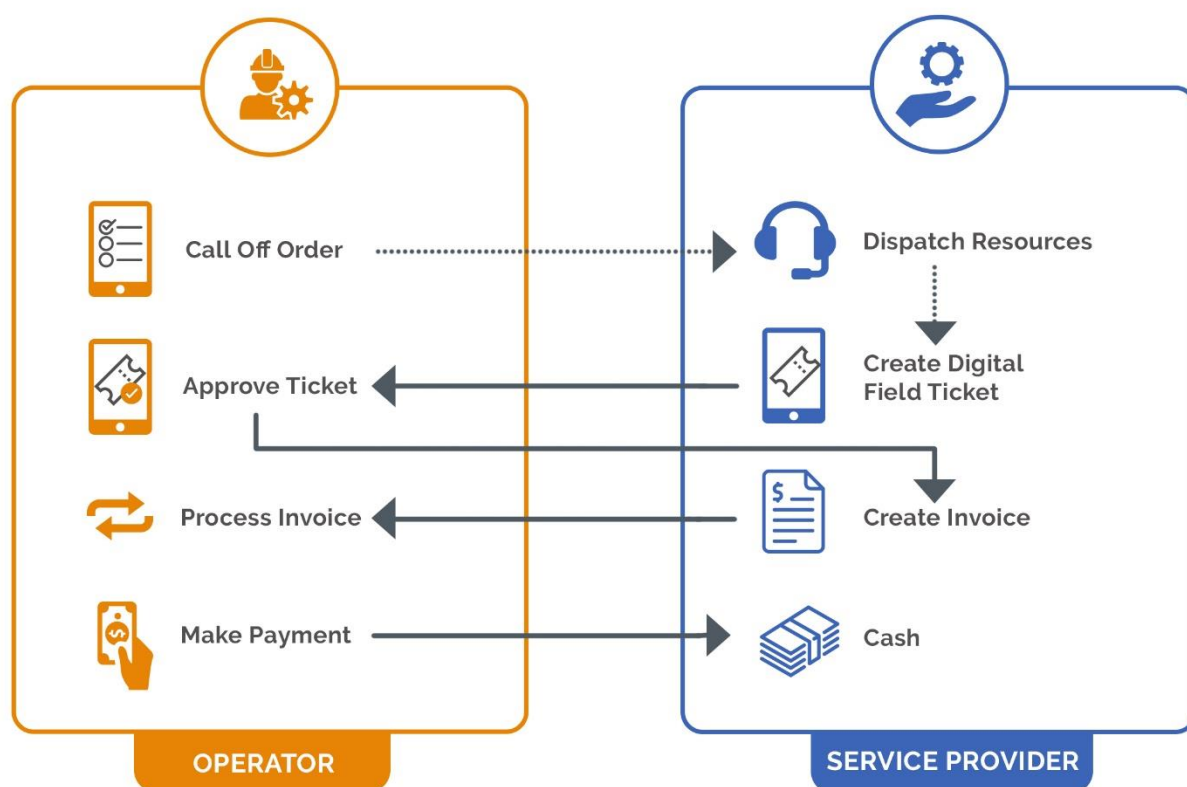
No integration between the Field Service system and the Asset, Inventory and financial data lower the efficiency of service provided by the field technicians. Technicians find it difficult to create the service ticket without knowing the latest prices of products, day time charges and service job charges etc. It also reduces the speed at which information moves through the supply chain, causing delays in information availability that may be critical for problem-solving, repair and redeployment.

05

OUR SOLUTION

With significant reductions in E&P expenditures across the globe over the past two years, it has become imperative for all players in the E&P value chain to focus on end-to-end performance, overall process efficiency & cost optimization.

As a vital part of mobile workforce management solutions, the **RheinBrücke Oil and Gas Mobility Solution** enables field ticketing or work orders to be automatically distributed to field personnel from the office which contains the entire task list to be performed for the day or the job as the case may be. **RheinBrücke's Enterprise Mobility solutions** helps boost productivity, efficiency, and obtain real-time data to inform business decision-making.



The **Materials Management Suite** supports inventory management including quality control, Lot control, and expiry date tracking for chemicals together with its integration to the procurement cycle support use of chemicals, cement and other such inventory items that get eventually consumed during job execution. These are fully integrated to the field service solution enabling automation and efficiencies in job execution.



The **Document Management Suite** & document integration enables field supervisors to submit digitally signed tickets by the customer electronically from the field. Signed documents are available for review on the electronic approval engine by base managers and other authorised personnel supported by a multi-level approval engine and automatically archived into the document management suite.



Seamless integration with Epicor ERP: The integration between Epicor ERP and Epicor Field Service Automation delivers a comprehensive solution across the full process life cycles. Epicor ERP serves as the main data repository covering key areas like customer, sales, and financial management. Epicor FST manages the customer and field service operations, providing a First-class service scheduling and mobility experience.

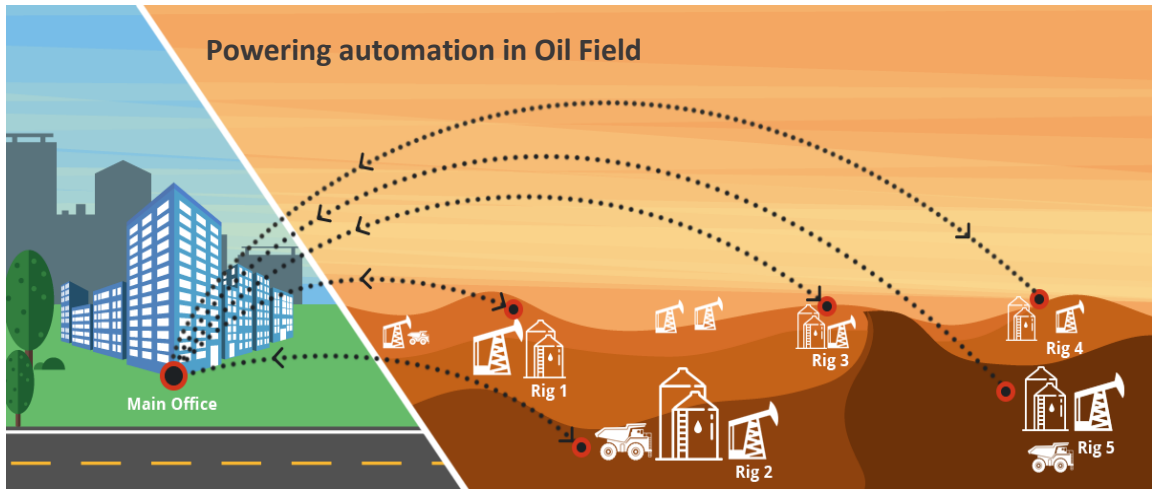
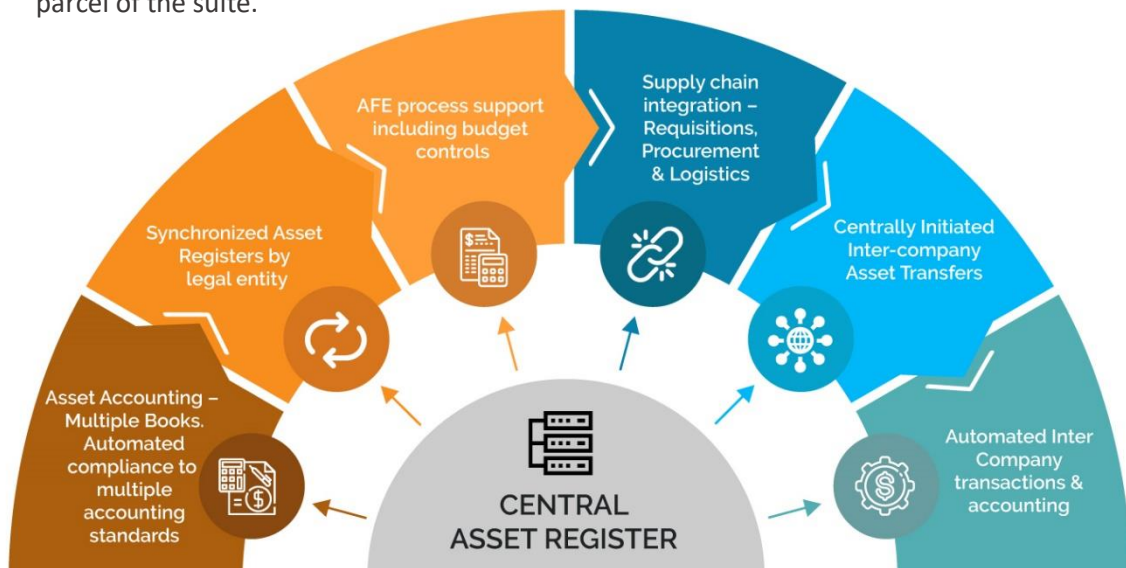


Image: Powered by our Field Service Ticket (FST) solution, field personnel can complete assigned work and submit digital field tickets back to the office. FST empowers service providers with the ability to give 100% visibility to operators assigned to all jobs across contracts simultaneously. This delivers huge logistical savings to the operator which previously could only be accomplished by physical collation of the information by the operator's field operatives.



AFE Control & Centralized Asset Management Suite: provides comprehensive budgeting & approval capability including AFE revisions, integration into the procurement cycle, asset capitalization, maintenance, and depreciation and disposal cycles. The centralized asset management suites enables centralized control over assets across multiple legal entities including triggering asset transfers, procurement and disposal processes. The suite also enables Asset Utilization reporting and allows users to gather, consolidate and analyse real-time data from every point of operations to provide better, faster and more informed decisions. Automated financial accounting for statutory & management books maintenance is enabled ensuring compliance to statutory accounting standards while at the same time also supports corporate reporting supported by automated multiple book management capabilities. Comprehensive management accounting, transfer pricing functionality & centralized asset dashboards are part & parcel of the suite.



FIELD TICKETING AUTOMATION SOLUTION:

Powered by disconnected computing technology and seamless integration to back office ERP, the Field Service Ticket solution digitizes the field ticketing process. It enables operators and service providers to collaborate to generate, review, and approve digital field tickets. The Field Service Ticket application:



Enables the user to login and create the Service Ticket at Rig Locations with the latest updated information.



Enables the user to link each Price List to the contract and uses the existing functionalities to setup different Price Lists.



Enables the user to maintain different charges like Products, Blend, Day Time Charges (Person and Equipment) and Service Job charges.



Enables the user to link each charge line mentioned above with the Business Line within a single Price List.



Enables the user to create a ticket and add the inventory components (Products) based on the availability at the job location.



Enables the user to setup the Template FST and create a new ticket quickly and easily.



Enables the user to create tickets and retrieve partially completed tickets using the Push and Retrieve Ticket functionalities of FST



Enables the users to create a ticket with the latest available information as FST is integrated with Employee, Assets, Inventory Components, Blend items, CRM, Contracts and Price List setup of Epicor.



Enables quick and easy approvals of invoices as the Business Line Approval Workflows maintained in Epicor for Field Service Tickets enables easy review and assigned approvals of invoices.



Enables clear visibility of Job Service tickets of different statuses using dashboards in FST.

PRE-CONFIGURED SOLUTION:

Our expertise as an Epicor Platinum Partner and extensive experience in oilfield services enables us to create a pre-configured solution for the sector. Our pre-configured solution covers all functional processes like finance, order management, inventory management, logistics, project execution, planning, procurement, equipment management & maintenance, scheduling, field operations and ticketing analytics and reporting.

Further our pre-configured solution is customized to adapt to changing dynamics of the oil and gas industry and in particular our client's needs, considering the critical paths necessary within the workflow of oil and gas exploration and production. This cutting-edge E & P workflow mapping and pre-conceptualization design helps us get ahead of the implementation cycle. The pre-configured components of our solution coupled with our proprietary eFusion® Methodology Implementation customized for the oil and gas sector enables our implementation to be smooth, cost-effective and reap faster benefits for our clients.

BUSINESS BENEFITS



Recouped ROI within 9 months of implementation of the comprehensive suite of solutions including deployment of field mobility capabilities.



ABOUT RHEINBRÜCKE

RheinBrücke focuses on offering consulting technology and outsourcing solutions and services that enable clients to stay competitive and achieve quick growth and profitability. With operational headquarters in Cologne, Germany, the company has a strong focus on the SME Market, with a deep understanding of what it takes for SMEs to succeed. RheinBrücke helps clients adapt to a changing marketplace by ensuring their IT ecosystems are relevant, efficient and perfectly tuned.

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