THINK ACT

BEYOND MAINSTREAM

September 2015

Retooling for the "new normal" Oil & Gas industry environment

Oilfield equipment and services

Roland Berger

THE BIG 3

1. NEW NORMAL OIL ENVIRONMENT

Lower prices - USD 50/bbl could be the new USD 100, higher volatility, and shorter cycles.

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2. FUNDAMENTAL CHANGE

... is needed across the industry with only about 20% of E&P operators and 5% of oilfield suppliers returning their cost of capital in recent times.

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3. FOUR THEMES FOR SUPPLIERS

... to retool their strategy, operations, and organizations for success in this new reality.

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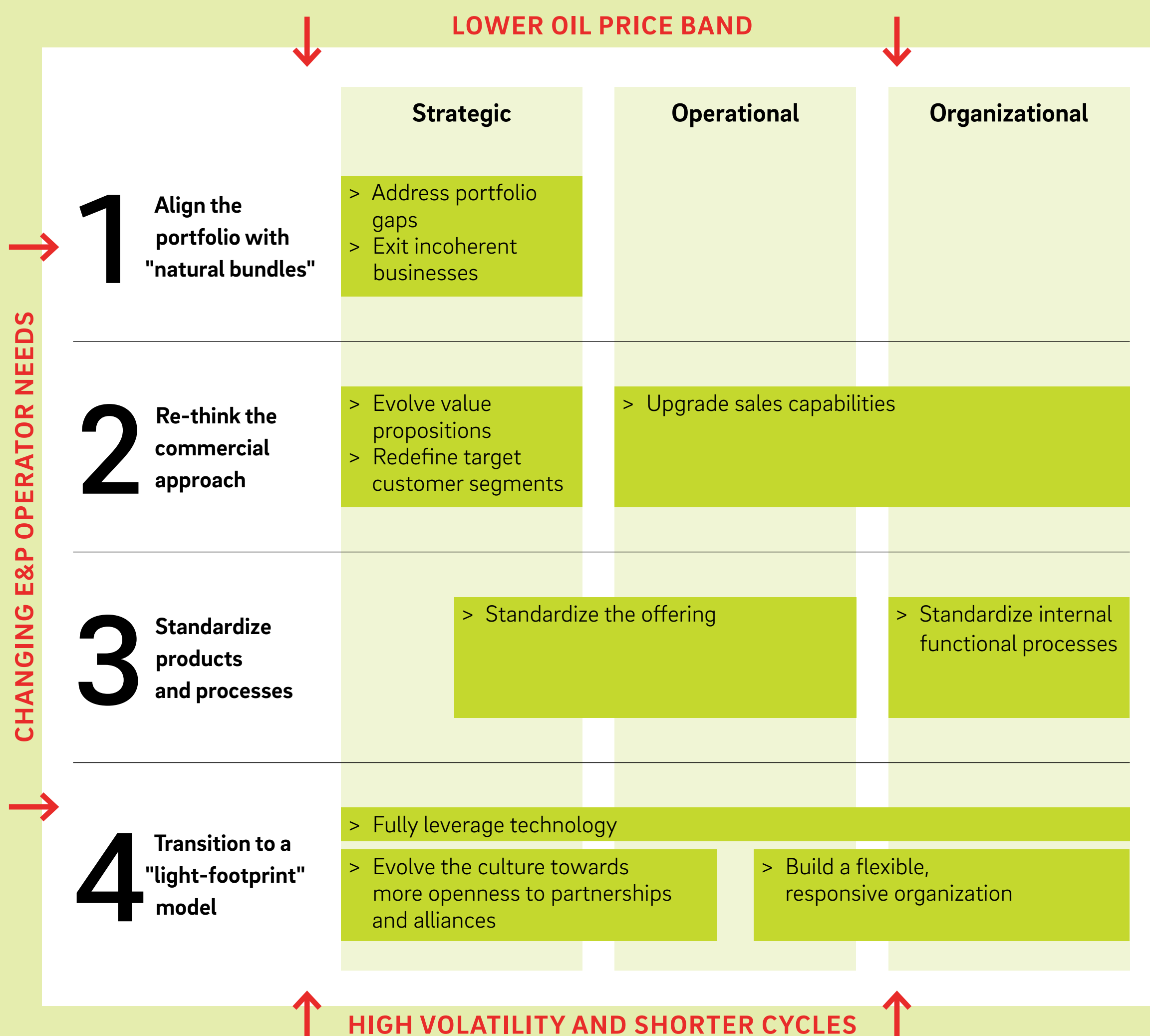
A

RETOOLING FOR THE "NEW NORMAL" OIL ENVIRONMENT

The "new normal" future oil industry environment will be characterized by lower prices, higher volatility and shorter cycles. E&P operators are pursuing strategies to improve resource productivity, lower total operating costs, and reduce risk exposure. Oilfield suppliers, in turn, need to adapt to these changing operator needs. We see four themes around which suppliers can rethink their strategies, operating models, and organizations.



	Strategic	Operational	Organizational
1 Align the portfolio with "natural bundles"	> Address portfolio gaps > Exit incoherent businesses		
2 Re-think the commercial approach	> Evolve value propositions > Redefine target customer segments	> Upgrade sales capabilities	> Upgrade sales capabilities
3 Standardize products and processes	> Standardize the offering	> Standardize the offering	> Standardize internal functional processes
4 Transition to a "light-footprint" model	> Fully leverage technology > Evolve the culture towards more openness to partnerships and alliances	> Fully leverage technology > Evolve the culture towards more openness to partnerships and alliances / > Build a flexible, responsive organization	> Fully leverage technology > Build a flexible, responsive organization

Source: Roland Berger

Fundamental change needs to happen across the industry to address the "new normal" oil environment.

The change in oil supply associated with US light tight oil growth and OPEC's decision to stop managing oil supply has driven a collapse in oil prices. The immediate response of players along the Oil & Gas value chain – Exploration & Production (E&P) operators and suppliers – has been to make large cuts in capital spending, downsize workforces, and aggressively negotiate prices down from their respective suppliers. In the more recent short-lived oil price downturns of 2002 and 2008, this approach generally succeeded in keeping the majority of players afloat until oil prices and activity recovered. Much of the downsized workforce was quickly rehired, and supplier discounts were gradually phased out: in the end the oil & gas industry did not fundamentally change. This downturn is different, though. Its supply-driven nature and the likely new role of tight resources as marginal supply point to a "new normal" oil price environment going forward, characterized by:

A lower oil price band: Until recently, most industry analysts expected oil prices to revert to USD 75 per barrel by the end of 2015. With oil prices approaching USD 40 in late August and the downturn already outlasting previous ones → B, a new reality is setting in that, absent external shocks, a protracted period of low oil prices is most likely. As many recent industry reports have pointed out, when it comes to the price of a barrel of oil, USD 50 is the new USD 100.

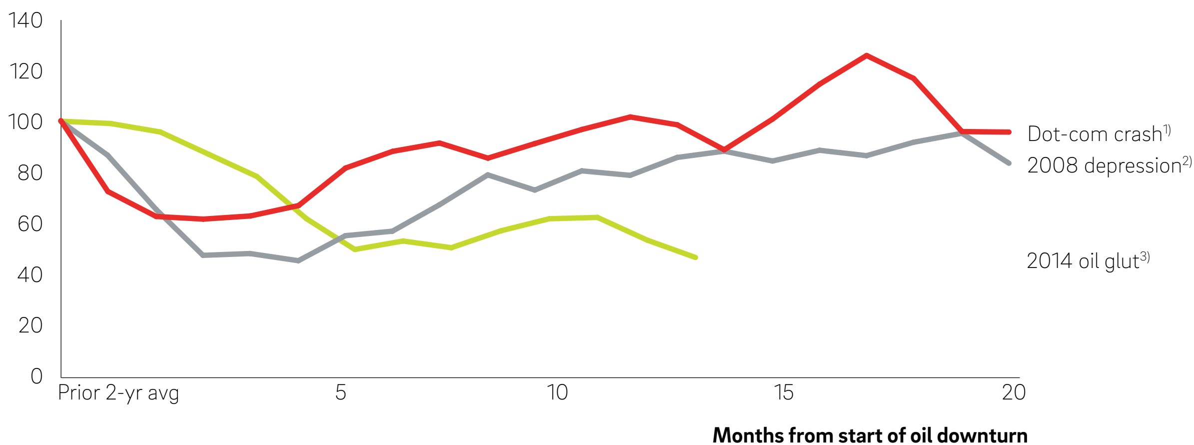
A high level of price risk: In the short-term, significant volatility due to uncertainty around the response of tight oil production levels to lower oil prices, China growth and the global geopolitical situation (e.g. Iran supply). In the medium-term, the potential for shorter price cycles than before, given tight oil's position as the new marginal resource (previous marginal supply used to consist of oil sands and other long-term, capital-intensive resources), on the right-hand side of the global oil supply curve and the ability of tight oil producers to quickly adjust production in response to oil price changes → C.

Short-term responses are therefore unlikely to be sufficient this time around: deeper, more fundamental change is required across the industry. From our conversations in the industry, it appears that E&P operators have recognized this new reality: they are now pursuing strategies which address three objectives: higher productivity, lower total operating costs, and lower risk exposure. Growth in reserves and production, once the primary objective of operators, is clearly taking a backseat. Oilfield suppliers need to adapt to the new normal and address these changes to operators' needs. With less than 10% of oilfield equipment and services providers earning their cost of capital, there is urgency for them to rethink their strategies, operations, and organizations to succeed in the new normal environment . We see four themes for suppliers to consider.

B

CURRENT OIL PRICE DOWNTURN ALREADY OUTLASTING 2001 AND 2008 CRISES

WTI crude oil price normalized to 2-year average



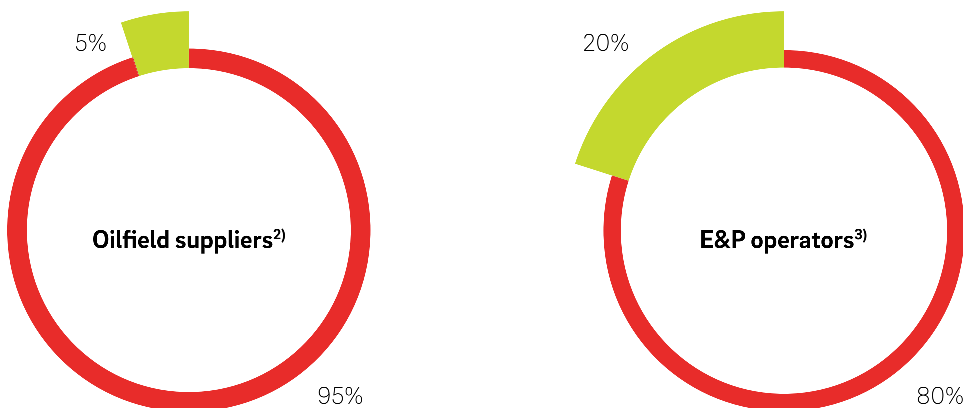
1) Normalized to Oct 1999-Sep 2001, month 1 = Oct 2001;
2) Normalized to Oct 2006-Sep 2008, month 1 = Oct 2008;
3) Normalized to Aug 2012-Jul 2014, month 1 = Aug 2014

Source: EIA

C

ONLY 5% OF OILFIELD SUPPLIERS AND 20% OF E&P OPERATORS HAVE RECENTLY EARNED THEIR COST OF CAPITAL

% of companies earning their cost of capital in the last 12 months[1)]



Not returning cost of capital | Returning above cost of capital

1) Ending June 30, 2015; 2) Based on 126 publicly traded oilfield suppliers; 3) Based on 134 publicly traded operators

Source: Capital IQ, Roland Berger

Four themes for oilfield suppliers.

1. ALIGN THE PORTFOLIO TO "NATURAL BUNDLES"

In the 10-year oil supercycle which ended mid-2014, many oilfield suppliers aggressively added or acquired commodity business lines, like tank rentals for hydraulic fracturing, to deliver the growth expected by investors and to position themselves as "one-stop-shops" for their customers. Our analysis reflects that the better performing suppliers took a more cautious and sophisticated approach to extend their portfolios, by focusing on building "natural bundles", i. e. groups of businesses that are either complementary or sequential parts of the customer's activity. By bundling these offerings, suppliers could achieve significant cost savings or optimize hydrocarbon recovery via better integrated planning, seamless transitions, and efficient transfers of knowledge. Part of these savings was passed on to the operator.

The current oil & gas downturn has heightened E&P operator demands for such productivity improvements. This is driving wide performance differences across oilfield supplier portfolios. "One-stop-shop" suppliers unable to deliver such cost savings are struggling to maintain margins as their offerings are unbundled by operators – some, like Key Energy Services, are on the verge of bankruptcy. Portfolios aligned with natural bundles, like One Subsea, a JV of Cameron and Schlumberger which provides the full suite of subsea products and services from "pore to process" to deliver significant total cost savings, are showing strong resilience to the downturn as compared to their direct competitors → D. In our view, the strategic driver behind Schlumberger's recent move to acquire Cameron is its need to own this subsea bundle. As the industry continues to shift from a "security of supply" to a "value" mindset, oilfield suppliers will need to take a detailed look at their portfolios and decide which pieces have clear competitive advantage and the potential to drive incremental bundle value, and what kind of portfolio additions are required to offer a natural bundle. The remaining parts of the portfolio will need to be divested to higher value owners.

2. RE-THINK THE COMMERCIAL APPROACH

The buying behavior of E&P operators is evolving: previously, relationships typically played a key role in awarding business; now, operators are primarily looking for demonstrated ability to deliver value. As a result, oilfield suppliers need to rethink their commercial approaches:

Evolve value propositions to align with operator needs: Oilfield suppliers have already started to evolve their value propositions in response to the changing needs of operators. For example, Schlumberger is pushing performance-based contracts – where it discounts integrated services in exchange for a share in production risk – to deepen its reach with operators which may be strapped for cash. In geophysical services → E, an oilfield services industry segment that has been struggling since 2013 due to reduced off-

D

ONESUBSEA JV'S "NATURAL BUNDLE" SIGNIFICANTLY OUTPERFORMING COMPETITORS IN THE DOWNTURN

Subsea EBIT margin % of revenues, H1 2015 vs. H1 2014

Cameron **Subsea peers[1]**

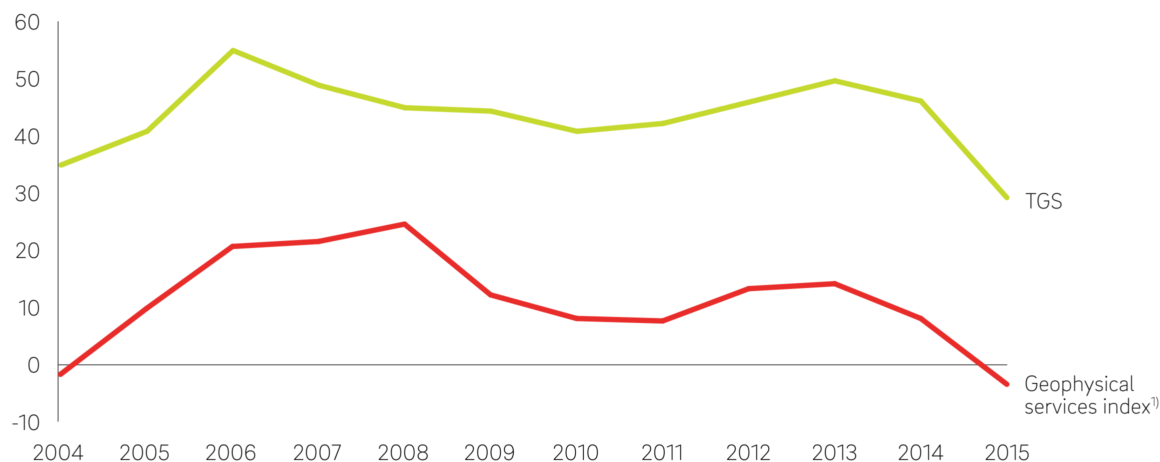
1) Peers include Subsea businesses of Technip, Subsea 7, Fugro, Aker Solutions, Forum energy, Helix and Dril-Quip

Source: Capital IQ, Roland Berger

E

TGS'S LIGHT FOOTPRINT MODEL DRIVING CONSISTENTLY ATTRACTIVE MARGINS DESPITE THE DOWNTURN IN GEOPHYSICAL SERVICES

EBIT % of revenues



1) Index includes CGG, PGS, IG Seismic Services, Polarcus, Dophin Group, Dawnson Geophysical, Ion Geophysical, and Geospace Technologies

Source: Capital IQ, Roland Berger

shore exploration, TGS, a Norway-based company, has been significantly outperforming its competitors by focusing on multi-client seismic data sales, recognizing the lower cost and risk to operators versus the contract-based approach.

Redefine target customer segments: previously targeted customers and preferred channels are becoming irrelevant as companies' sizes and behaviors change. Operators that were formerly served via distributors or partners may become large enough to warrant being served directly. For manufacturers of equipment or materials traditionally selling to oilfield services providers, certain E&P operators may become potential direct customers. Operators with significant internal capabilities may have downsized technical staff and require a higher degree of service than before. Customers focused on uneconomic oil & gas resources due to the collapse in oil prices, such as oil sands pure-play operators, can become the prime targets for innovative offerings, despite their reduced E&P spend.

Upgrade sales capabilities to shift the sales conversation from relationship – to value-based – where the customer understands what value the suppliers' offering delivers and is willing to pay for that value. This may require significant investment in recruiting and training. Suppliers with sufficient scale are also digitalizing their business, investing in data analytics to measure and more effectively communicate performance, as Halliburton is doing with its Landmark platform.

3. STANDARDIZE PRODUCTS AND PROCESSES

"High oil prices have supported many sins", an oilfield services industry executive recently told us. One of these sins has been the nearly systematic customization of equipment and services for each oil & gas project – in line with the oil patch adage that every well is different. Another sin has been the exponential growth in sales, general and administrative (SG&A) costs across the industry (11% compounded annual growth rate over 2006-2014). Suppliers have scrambled to build overheads functions such as Finance or Human Resources to handle and administer the large amount of new employees, and to aggressively expand their sales departments in anticipation of continued future growth. With the new oil price "normal," suppliers' initial cost cuts will likely prove to be insufficient to maintain margins. Standardization of products and processes represents a significant opportunity for suppliers to remove inefficiency and complexity:

Standardize the offering to reduce the cost-to-serve. Top-performing oilfield suppliers are driving the standardization of their SKUs and service offerings, to improve margins or capture share through passing through savings to customers. Helmerich & Payne (H&P) has followed a disciplined approach to standardize its equipment and processes by building a highly automated, standardized rig fleet, entirely assembled in-house and steering clear of acquisitions to avoid introducing different equipment standards. It has harmonized operating procedures, and invested in knowledge management and information systems to leverage know-how across its rig fleet. This has helped H&P maintain greater efficiency and consistency in service delivery and quadruple its US land drilling market share since 2001 (4%) to 2015 (17%), taking the lead spot from rival Nabors. FMC Technologies, a leading subsea systems provider, is rationalizing its SKU portfolio, re-engineering certain products towards modular designs, and collaborating with multiple operators to create standards for subsea production systems.

Standardize internal functions and processes to right-size SG&A spend. With the low-hanging-fruit, i. e. sales force downsizing or reduction in travel and entertainment spend, largely already captured and not sufficient to offset continued margin pressures, oilfield suppliers are looking for new ways to drive incremental SG&A cost reductions. Many oilfield suppliers are taking lessons from other mature industries like Chemicals by driving efficiencies in their indirect costs by standardizing functional processes and deploying them consistently across their businesses, centralizing functions that report to the corporate center, or outsourcing/offshoring vendors depending on strategic importance and cost.

4. TRANSITION TO A "LIGHT-FOOTPRINT" MODEL

In the new normal environment, oilfield suppliers need to have the supply chain and resource flexibility to quickly respond to rapid, unpredictable changes in demand for their products and services, while retaining key assets and core competencies. Taking from Roland Berger's Light Footprint Management ap-

proach, which enables companies to succeed in the Volatile, Unpredictable, Complex and Ambiguous (VUCA) ▸ world that we are in (and of which the oil & gas industry is a striking example), suppliers can:

Build a responsive, flexible organization with the right balance between centralization and decentralization and less dependency on unique field resources. For most oilfield service companies today, a significant amount of experience, technical know-how, and customer relationships resides with individuals at the field service level. These assets are lost when field headcount is reduced to cut costs, and may not be easily regained when the industry recovers due to high demand for field-level talent. Suppliers may be well served by adopting franchise-like models where the delivery of the offering is driven by self-directing, self-improving, and self-adjusting decentralized hubs or teams, but where key know-how, relationships, and technology are centralized – field resources becoming more of a commodity. EOG, a large independent oil company, is a good example: each basin has its own organization with its own decision-making authority, and can therefore quickly respond to local business needs. Key EOG assets such as completions know-how, customer experience, or frac sand supply are centralized and can be leveraged quickly across basins, to onboard and train new employees or start development activities.

Evolve the culture towards more openness to partnerships and alliances, with suppliers, customers, or even competitors, in order to enhance competencies and secure access to talent with minimal capital investment. Such arrangements have already become prevalent in the subsea space: amongst suppliers (OneSubsea, the Aker–Baker Hughes alliance, or the Forsys JV between Technip and FMC Technologies) as well as between suppliers and customers (FMC Technologies with BP, Shell). In geophysical services, TGS has "variabilized" its fixed costs by leveraging its competitors' underutilized marine seismic fleets in periods of overcapacity to build its multiclient data assets. This has enabled the Norwegian company to consistently deliver strong returns despite the offshore exploration slowdown in 2009-2011 and since 2013. While such arrangements may reduce suppliers' financial exposure, they require a complete change in mindset in an industry where suppliers are traditionally highly entrepreneurial and want to do everything on their own. They also require different approaches to managing operational risk as suppliers may not be in control of the delivery of their offering end-to-end.

Fully leverage technology to improve capital and resource efficiency. Earlier, we talked about how investments in data analytics and knowledge management enable the standardization of offerings as well as more effective commercial approaches and organizations. Investments in data analytics can also drive better planning of production workflows, ultimately improving asset utilization and capital returns.

Which themes are most relevant to your company and what are you doing about it?

To summarize, it appears more and more likely that immediate responses to improve cash flow and profitability will not be sufficient for oilfield service and equipment suppliers. Following the example of several industry leaders, oilfield suppliers need to revisit their strategies and their operational and organizational setups to address the new "normal" of lower oil prices characterized by shorter cycles and high uncertainty.

ABOUT US

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FURTHER READING

A NEW AGE DAWNS FOR OILFIELD SERVICES

Oilfield services players will need to adapt to a lower oil price environment due to anticipated consolidation in the oil & gas industry and changes in operator buying behaviors. Different oilfield services models can benefit – the most agile players will take advantage of a highly dynamic oilfield services environment over the next few months to evolve and merge as new industry leaders in select categories, with the ability to compete against the giants, Schlumberger and Halliburton.

RISK RE-AWAKENS

Roland Berger's study discusses how OPEC's decision to abandon its role as market manager amidst the current low price environment and oversupply context creates a new and increased level of risk for upstream operators.

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