A Sea Change: Emerging from a downturn

How will the oilfield service sector emerge from the crisis to position itself for future success in a new world?

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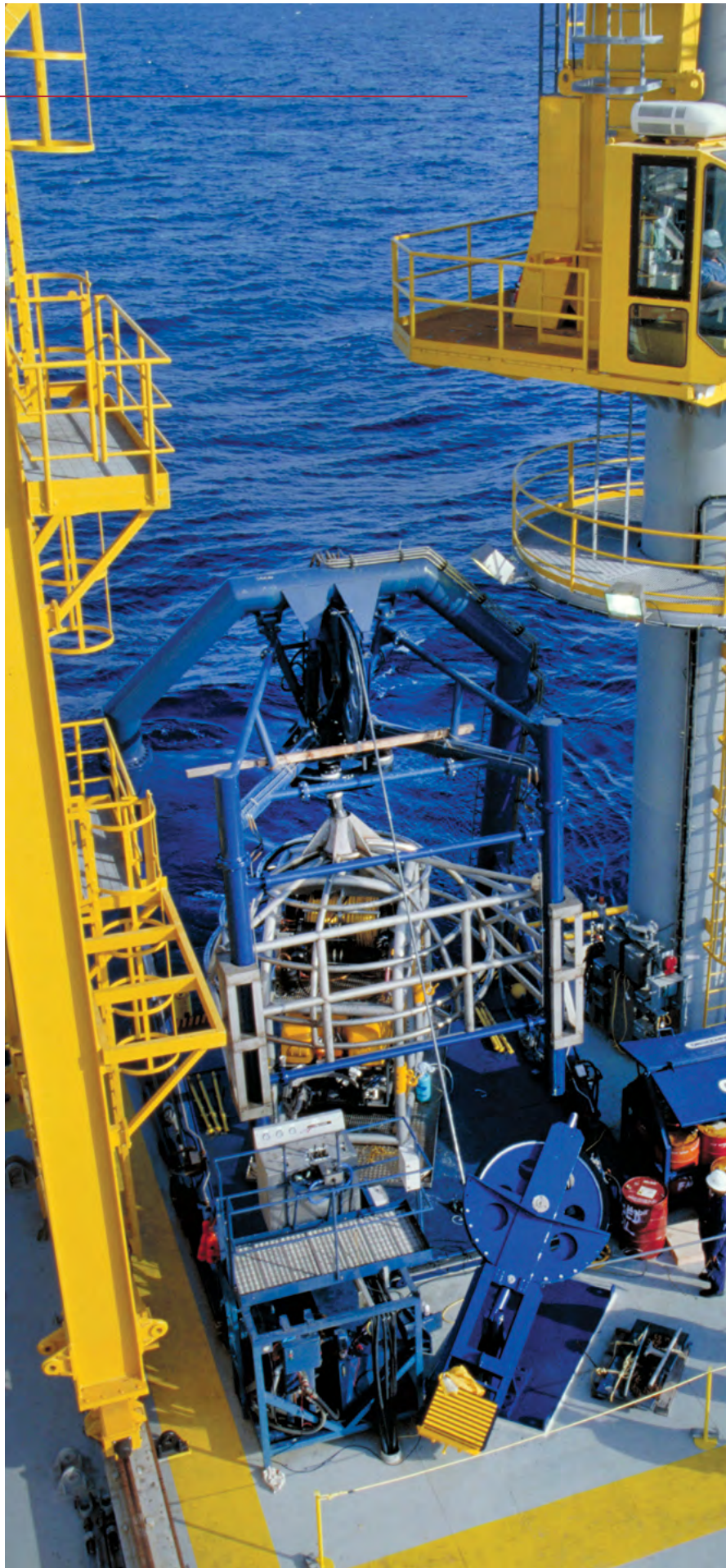

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>
> ***Paal Kibsgaard***
> CEO Schlumberger

Oscar Wilde once said, *"We are all in the gutter, but some of us are looking at the stars."* And to some extent that sentiment must resonate with many oilfield service (OFS) companies. The past two years has been a torrid time for the sector. With operators across the global oil patch scaling back dramatically on upstream capex spend and deferring major projects, OFS has responded by pulling the traditional cost reduction levers in a downturn: cutting capex and headcount massively, while minimising operating expenditure. Margins have been eroded and many OFS companies are still in financial distress. The outlook was grim.

Now there appears to be light at the end of the tunnel. With supply and demand seeking a gradual equilibrium, the oil price has recovered a little. Among some companies there is a growing confidence that perhaps we have reached the trough.

The Schlumberger CEO, Paal Kibsgaard, displayed this optimism when discussing third quarter earnings saying, "After seven quarters of unprecedented activity decline, the business environment stabilized as expected in the third quarter, confirming that we have indeed reached the bottom of the cycle."[1] That said, if we are poised for a potential recovery, it is likely to be uneven.

So, as some OFS companies dare to gaze at the stars, what do they need to do to prepare for a potential upturn? As they emerge from the turmoil, in many ways the operating landscape has radically transformed since the oil price decline in the summer of 2014. What will they need to focus on to succeed in this new world?

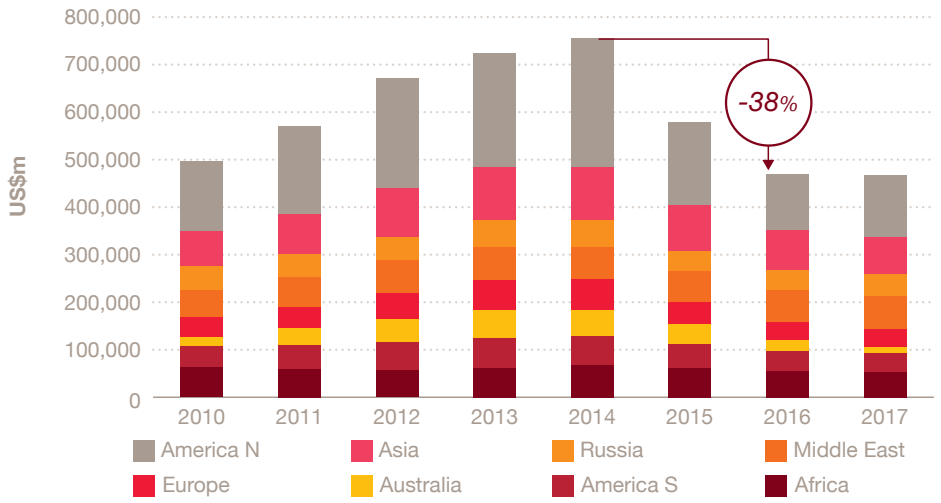
[1] Schlumberger Q3 2016 results press release

A brave new world beckons

Much has been written on the level of financial distress in the sector. But it is worth mentioning a few facts to put this distress into context. A major driver has been the dramatic decline in global upstream capital expenditure with some commentators suggesting a 40% decline in spend in 2016 versus the high in 2014 (as illustrated in Exhibit 1).

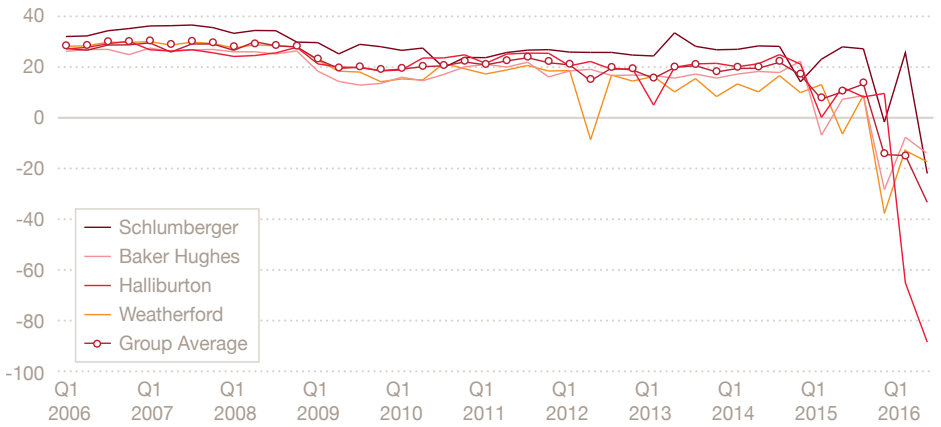
This capex reduction, combined with a broader decrease in drilling activity and opex minimisation strategies, is having a significantly adverse impact on the OFS sector. This is evident in the drilling segment. For example, since the summer of 2014 we have seen day rates for drill ships decline by some 30% and monthly utilisation rates for drill ships plummet from 90% to just over 30% in recent months. More broadly, strong negotiating tactics by operators (anecdotal evidence suggests discounts of between 30%-40%) have adversely impacted OFS rates, with some service providers suggesting this level of price reduction is not sustainable longer term. In terms of financial performance this degree of distress across the sector translates into major margin erosion if we look at the earnings results of the large OFS companies (see Exhibit 2).

Exhibit 1: Global Upstream Capex 2010 – 2017 in US$m



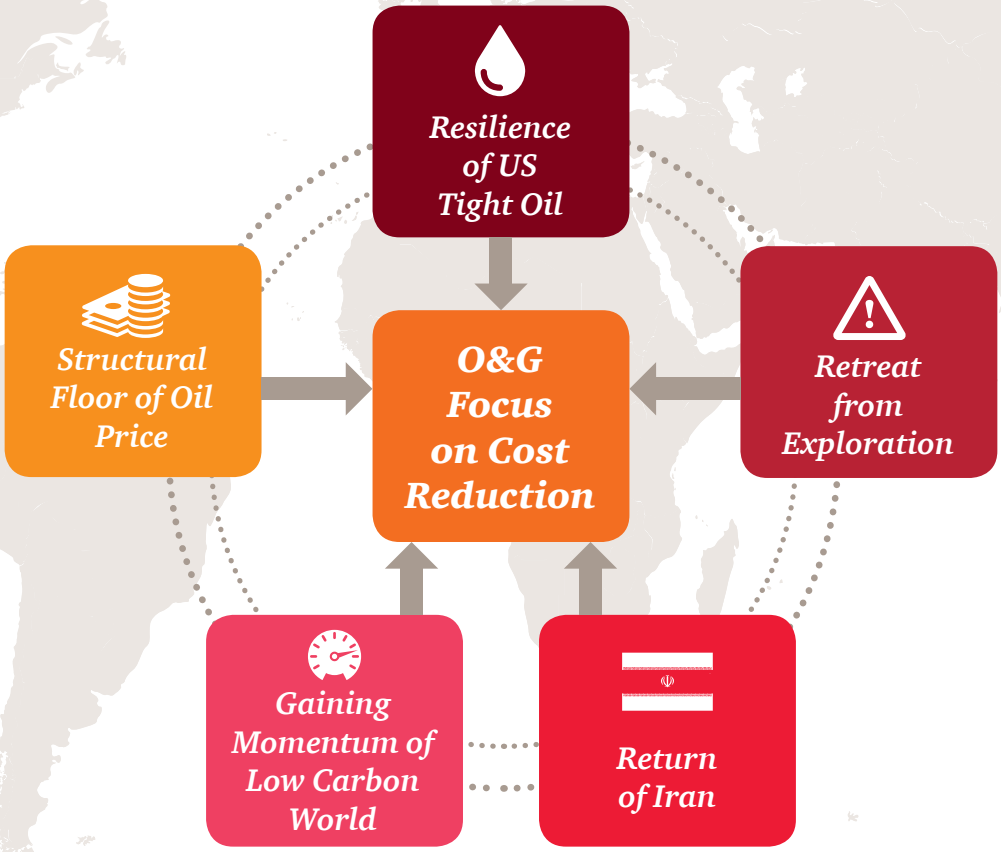
Source: Rystad Energy; Strategy& research

Exhibit 2: Earnings Margins of Leading OFS Companies Q1 2006 – Q2 2016



Source: Bloomberg; Strategy& research

Exhibit 3: Evolution of Global Oil Market – Selected Drivers



Source: Strategy& research

Clearly there will be great sense of relief among market participants if we have really touched the bottom. But to be fair if we have touched the trough of the cycle, the recovery is likely to be uneven with some companies emerging from the turmoil sooner than others. One may argue that the big global integrated players will be the first to benefit from the green shoots of recovery, given their financial and operational scale. Then again some of the smaller specialist niche players may be the early beneficiaries of an upturn. That said many of the other players are likely to experience the downturn for another year or so. However, should that be the case, as companies emerge from this period of distress, the world they operate in has changed dramatically.

In our paper written in 2014, *"Surviving the worst: It's time for oil services to address shortcomings and find strategic solutions"*, we highlighted the challenges facing the sector as it entered the downturn. But in many ways the landscape has evolved so much since June 2014 as illustrated in Exhibit 3.

Oil prices no longer have a mythical 'structural floor' of US$100/bbl with Brent hitting a low of US$28/bbl in January 2016; operators are less "bullish" and we see some retreating from those challenging technical frontier plays and large scale capital projects (such as Shell shelving its Arctic aspirations and Chevron publicly stating it wants to move away from major projects), as well as reduced exploration activity; Saudi Arabia's role as the traditional swing producer is being challenged by US tight oil, a segment that has proved to be extraordinarily resilient; the lifting of sanctions in January 2016 paved the way for the return of Iran, as it grew production, seeking to become a major OPEC producer; there is the renewed momentum for a lower carbon world and a greater sense of urgency post COP21 for the need to decarbonise our energy system; and finally, we see a relentless focus on cost reduction across the whole oil and gas sector.

Prepare yourself for a recovery

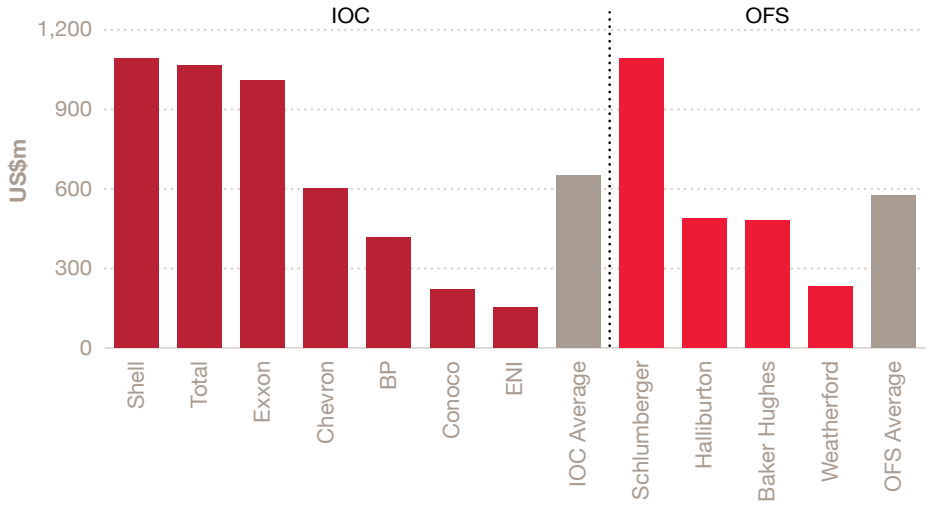
So while OFS companies may still feel their feet are firmly planted in the 'gutter' what should they do to prepare for the 'stars'? Here are just a few thoughts to consider:

1. Double down on innovation

Innovation and R&D are at the core of the OFS business. It is worth reminding ourselves that oil operators outsourced this capability in the 1980s and since then it has become a differentiating factor between operators and services when bidding for work.

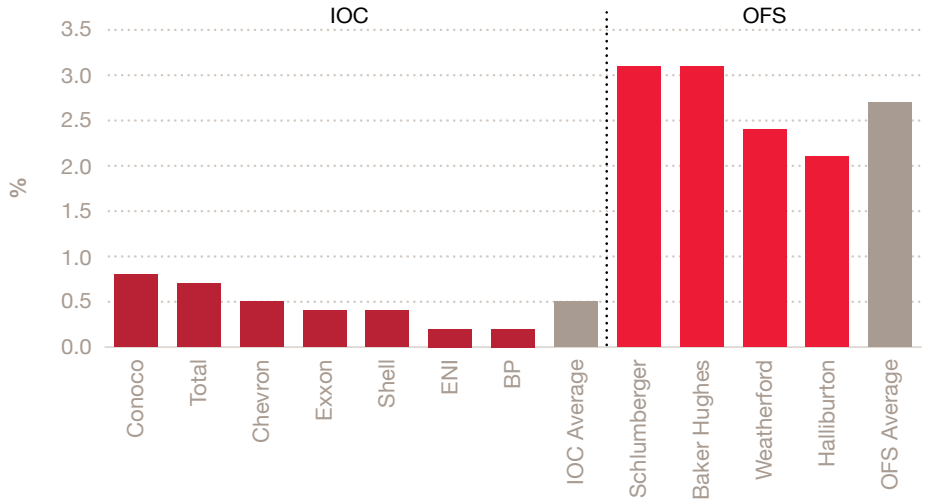
That said the pain of the downturn has forced some OFS companies to cut back on R&D spend. This is significant. The larger OFS companies spend as much as the majors in absolute terms but noticeably more in terms of spend as a percentage of sales (see Exhibit 4).

Exhibit 4: R&D Absolute Spend – IOCs vs. OFS 2015



Source: Bloomberg; Annual Reports; Strategy& research

Exhibit 4: R&D Spend as % of Sales – IOCs vs. OFS 2015



Source: Bloomberg; Annual Reports; Strategy& research

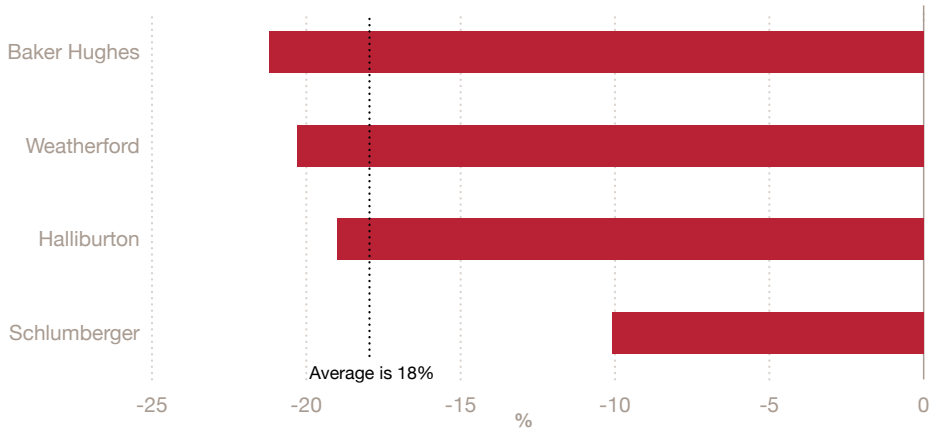
18%

Average decline in R&D spend

Due to financial distress triggered by the oil price decline some of the major OFS companies are scaling back R&D spend. Compared to 2014 all the big four OFS companies saw R&D spend shrink, as illustrated in Exhibit 5.

Given the importance of innovation, it is essential OFS companies protect investment levels in this core area. Moreover, the technology demands of players in this environment will also influence the type of technology being sought. It is unlikely advances in seismic technology will have the scale of impact in the market given the drop in exploration spend and reduced activity compared to growing demand for improving production technology.

Exhibit 5: Decline in R&D Spend for Selected Players 2015 vs. 2014



Source: Bloomberg; Strategy& research

More broadly innovation in technology will be key to reviving the competitiveness of some basins. The UK North Sea is a good example. This mature and high cost region has seen its production economics challenged by low oil prices with the threat of some fields being prematurely decommissioned. The application of new technologies will be critical not only in lowering the cost to operate but may also underpin innovation exports to other basins (such as decommissioning skills). As oil prices hit a low of US$28/bbl in early 2016 the UK government announced a number of initiatives to support the North Sea oil and gas sector, including the creation of the UK Oil and Gas Technology Centre (OGTC). The aim of OGTC is to pioneer technologies of specific benefit to this mature basin to extend longevity of production, as well as prepare for decommissioning.

2. Explore partnerships to aggressively push 'big data' analytics

The innovation theme is broader than R&D spend. The sector has an opportunity to really push on data analytics and the Internet of Things, in order to dramatically improve the efficiency of operations. If we look at the digital oil field for example, there are some pioneers in the industry but digital oilfields have yet to take off.

This is partly because the sector has been slow to adopt and deploy these new technologies at scale. One industry player described the sector's conservative approach to technology as 'glacial'. This is in stark contrast to other extractive industries such as mining, where driverless trucks are well utilised, and driverless trains are being piloted to promote productivity enhancements in remote regions. More recently, the Kazakh government formed a partnership with Google and McKinsey to analyse big data from sensors placed in mining operations across the country to monitor productivity levels.

To be fair to the oil and gas sector, the risk of catastrophic failure is also a major reason why companies are wary of rapid adoption. Nevertheless, with the industry's relentless focus on cost reduction and the impact of headcount attrition and loss of capability, technology has the opportunity to succeed. It can help drive efficiencies and go some way to bridging that capability loss.

There are now new entrants in the sector not traditionally seen as oilfield services companies, such as Siemens and GE Oil and Gas, who are competing with the likes of Halliburton and Schlumberger. These technology companies use their experience in other industries and versatility to leverage digital technologies to address remote operations and collaboration, analytics, optimization and the Internet of Things. Some OFS companies may do well to consider strategic partnerships with these new entrants to deliver a whole new set of capabilities to operators.

3. How will OFS bridge the capability gap?

The human cost of this downturn cannot be over-estimated. According to some industry estimates between 230,000 and 350,000 jobs have been lost in the oil and gas sector globally since mid-2014. The OFS segment has been particularly aggressive in this area, shedding significant numbers of employees over the past two years.

The scale of this attrition will exacerbate the capability issues already plaguing the sector. Moreover, the ability to retain and recruit new talent to the sector will be rendered much more difficult. How can you "sell" a sector to new joiners that is notorious for harsh headcount reduction during each cyclical downturn? More importantly perhaps, when the upturn comes what will be the consequences of this capability loss? In our conversations with the sector, some respondents noted their biggest concern was the lack of people and capabilities available to OFS once the upturn materialises. Moreover, when this upturn comes it is likely to be quick and due to the lack of people, the industry will be building the next cost escalation cycle.

Facing this significant capability gap what should OFS do? Clearly there is no single silver bullet but companies will need to consider a range of strategies ranging from the application of technology, to pursuing partnerships with selected providers to outsourcing services and operations. Again the mining sector may serve as a helpful reference point regarding workforce diversity. BHP Billiton recently announced an aspirational target of ensuring 50% of its workforce is made up of women by 2025, citing not only it was the right thing to do but it would also improve performance.

4. Reduce complexity of operations

Companies should review their business structure and operations to reduce complexity and eliminate inefficiencies that have become ingrained over time. The value of digitisation has long been heralded but little real progress has been made in this area. Baker Hughes is one exception where they are exploring the application of artificial intelligence to manage back office invoicing. As the pressure on cost reduction remains, companies will need to explore new avenues to achieve this and digitisation might be one option. Given the aversion of the sector to catastrophic risk, piloting digitisation in several non-core business units is a good way to deploy this technology with lower levels of risk impact.

Reducing complexity does not mean diluting integration. Operators will continue to seek service providers that provide them with scale, technology and solutions that are a one stop shop rather than seeking a solution from multiple vendors. So as the momentum for integration mounts, key OFS companies will need to develop integrated capabilities without adding to the complexity of their operations.

Moreover, OFS companies might consider business models where they more effectively share pools of resources. In the same way Premier floated the concept of pooling back office functions across some operators in the UK North Sea, OFS might be able to replicate a similar approach. Equally, there are other existing business models that may gain more traction in this current environment. Schlumberger and Halliburton already pioneer services and solutions that manage assets on behalf of operators (respectively called Production Management and Integrated Asset Management). Through these services OFS companies share the risk and reward with operators. This enables service companies to optimise operations and innovate, while creating flexibility for the operator to release its own talent and capital to redeploy to newer and more prolific basins. These kind of models are increasingly appealing in a world where operators are looking at different ways to lower costs and allocate resources efficiently.

5. Be mindful of M&A deals and know your future client portfolio

Despite predictions from some industry commentators that a wave of M&A in the sector is imminent, this has yet to materialise. In fact according to our analysis the value of global M&A deals in OFS is down by some 70% from 2014 levels and the number of deals equally down by some 60% (as of mid 2016). That said there has been some noticeable activity in this area. Technip and FMC announced their US$4.7bn merger, Schlumberger acquired Cameron for US$14.8bn while Halliburton's US$37.5bn bid for Baker Hughes failed on antitrust grounds.

To be successful in this area, M&A transactions need to address specific objectives, ranging from transformational plays to building particular capabilities. The risk of any major M&A transaction is they distract management focus and are costly to execute and may add complexity to the business. However, the upside from well thought through and planned M&A can be significant. For larger players a major M&A transaction can be the means by which they can differentiate themselves and an ideal opportunity to re-shape the business quickly. Alternatively companies can explore limited 'bolt on' acquisitions that deliver value added services and capabilities in a region or technology. But given the complexity of executing an M&A deal successfully, there are other options. Pursuing partnerships and alliances with other companies that complement and enhance capabilities is a cost effective way to deliver added services and perhaps may serve as precursor to a targeted M&A deal.

This is what happened when Technip and FMC established a joint venture called Forsys Subsea, which subsequently resulted in their recent merger. It is worth noting at the time of writing this paper, GE was in talks with Baker Hughes about a potential partnership.

This focus on portfolio optimisation should not only be viewed through the M&A lens. OFS companies will also need to decide their optimal portfolio through the lens of their client base. As oil and gas activity picks up, OFS companies will need to have a view on the plays they will focus their efforts on going forward. This may have a number of dimensions ranging from geography, offshore versus onshore, asset type from gas to oil, and conventional versus unconventional, to potentially the type of corporate client from NOCs to Independents.

The service providers will need to identify where they see growth opportunities across the oil and gas landscape, and given the uneven picture, different players will experience a very different recovery (as illustrated in Exhibit 6).

For example, if the medium term view is one of lower oil prices, OFS may shy away from more expensive production technologies such as oil sands and heavy oil. In the North Sea some service providers may take the view a lower oil price for longer will accelerate decommissioning and that is the play to focus on. Similarly, the opening of Iran with its needs for foreign investment to boost oil production beyond 4m bbls/d presents a completely different type of opportunity.

Exhibit 6: Potential Factors Influencing OFS Recovery by Category

Product life-cycle

- Services related to ongoing production have been more protected
- Field life extension where economic can offer immediate returns
- Projects close to production are expected to recover first
- Decommissioning may be mandated

Region and resource type

- Geography of prospect is key
- Exposure to high cost fields has been disproportionately affected in volume terms and in value even more so
- Greater focus on onshore and production activity can provide greater protection from the cuts

Customers

- IOCs that invested in frontier regions have cut most
- NOCs may face government pressure to maintain activity
- Companies that responded slowly to the downturn, may have further cuts to make

Service offering

- Mission critical services are more protected than discretionary services
- Equipment (rental/purchase) is more at risk as replacement cycles increase
- Higher cost/risk complex services are more at risk

Source: PwC

6. Working smarter

As we head towards a future, particularly in mature basins, dominated more by late life and decommissioning rather than exploration and development, it's clear that innovative solutions will play a greater role as upstream companies seek to minimise their decommissioning spend.

Consortia of service companies providing packaged solutions through aggregation of skillsets could be the way forward – providing the upstream companies with almost a one stop shop to meet their decommissioning needs. And those solutions need only be "good enough" to ensure that a) the job gets done and b) the inherent risk transfer from operator to service company is minimised through intelligent "demolition" which protects both the asset and the people involved. By fulfilling those needs, the consortia can ensure that the solutions are cost effective and repeatable on future projects.

A further consideration in relation to risk transfer is getting the terms and conditions right at the onset of the project. The risk profile related to late life and decommissioning is different to business as usual production, where an operator is "happy" to take the operational risk. The risk involved in dismantling something is more likely to rest with dismantler rather than the operator. Innovation in building those Ts and Cs will be vital in ensuring all parties are comfortable with the risk transfer profile, as well as giving the service company, or consortia of service providers, the competitive advantage in a market place that is only likely to heat up.

Conclusion

There is a sense that a balancing of industry fundamentals is approaching which should support a limited oil price recovery. And while we are unlikely to see US$100/bbl prices returning in the near to medium term at least, a more robust price in the US$60-70/bbl should be realised in the next few years. This will trigger an increase in upstream capex spending and broader activity levels which in turn will improve the fortunes of the OFS sector. But this recovery will be uneven. Moreover, we are unlikely to witness a return to the boom period as prices recover. Operators are in cost reduction mode, and are embedding a culture that ensures the business model is more resilient at lower prices. This will mean the OFS sector has to adapt its own business to this new reality. It is essential therefore that OFS companies maintain their focus on cost reduction, but with one eye on the future. Those players that can operate efficiently and profitably in the current environment, while investing in core business areas for future growth, will be the fittest to emerge from the turmoil and most likely to reach for the stars.

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