

Talent Management in Oil & Gas

The Skills Gap Re-Visited 2017

In our annual Oil & Gas industry surveys we ask respondents for their views on the future of the industry and the skills needed to succeed in it. Last year's results reflected the pessimism of the moment and highlighted a potential skills gap in leadership, a finding supported by other studies. In 2017, the mood has changed, quite dramatically. Two thirds of respondents expressed optimism for business in 2017, but leadership remains a problem, exemplified by a lack of innovation and willingness to think differently.

In addition, respondents flagged long-term planning and cross-functional collaboration as skills lacking in the industry. This last point – collaboration – is seen as increasingly important and problematic in an industry that needs to adjust its way of working. In this paper we examine our respondents' views alongside various industry studies, and what this means for talent management.

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Executive Summary:

- Dramatic improvement in short term optimism
- More realistic about long term industry prospects
- Strong demand for change amidst generational tensions
- Leadership, strategic thinking, innovation and collaboration identified as skills gaps
- Long-term skills shortage still a problem, with negative views of the industry putting off younger entrants
- Companies need to commit more to career development plans
- Europe lagging behind US, Asia and Africa in number of days training

"Change is the only constant in life and 2017 is no different if anything it will accelerate. Industry and the people running it need to similarly adapt."

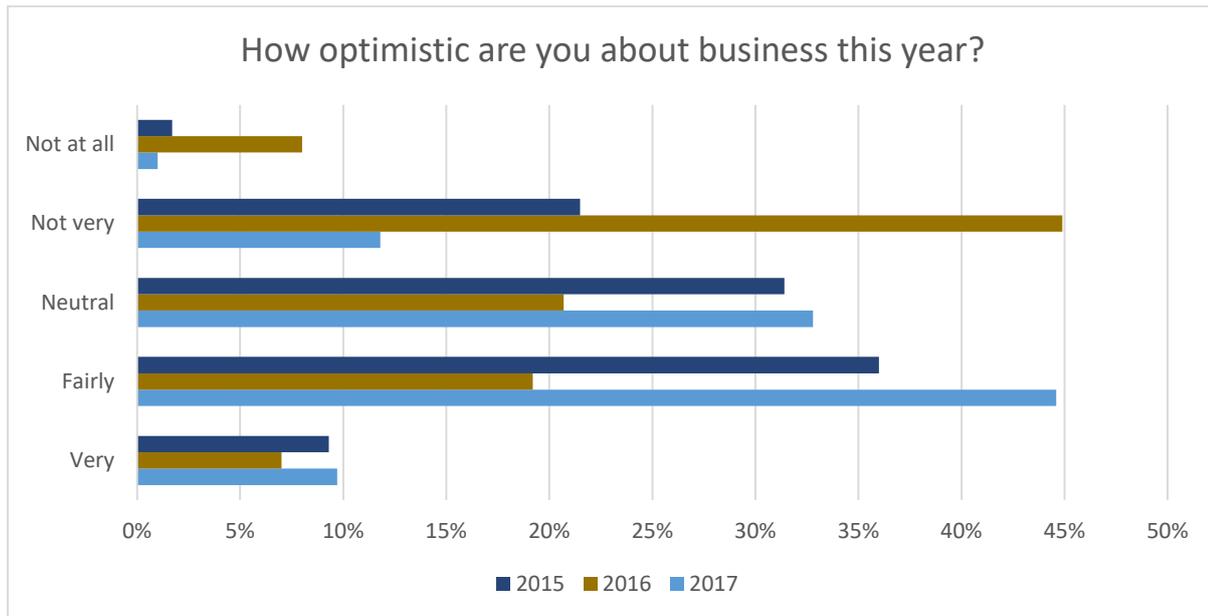
"[we] struggle to bring new talent in due to negative impressions of our industry"

"There is no vision in the people at the top and I have very little faith that they will ever change".

The Mood of the Industry

Optimism up, but talent retention and attraction still a challenge

There's been a significant shift in optimism for the short term, but tempered with some caution. The same number who were "not very optimistic" last year are now "fairly optimistic", and the worst of the pessimism has disappeared, with only 13% "not very or not at all optimistic" vs 53% last year and 23% in 2015. In general, Europeans were less optimistic than their counterparts in the US, Asia the Middle East or Africa.



Source: WBC Industry Survey 2017

These findings are broadly consistent with other industry surveys. The very comprehensive Hays Oil & Gas Salary Guide 2016 study, conducted in November 2016, showed 53% of respondents positive about a strengthening outlook, with 20% seeing it weakening.

In terms of careers, this increased optimism isn't necessarily reflected in increased confidence. For some, a bruising redundancy cycle has put them off returning to the sector. The Hays study identified that 72% of those made redundant in the recent downturn are looking for jobs outside the industry, and an astonishing 75% of those still employed are looking for a new job. Perceptions of the industry, and of individual companies, clearly play a major role in attracting talent.

So although the employers who responded to Hays cited economic instability as the #1 concern in the short term, they expect skills shortages to become a more prominent issue in 2017; retaining and attracting talent remains a major challenge.

"the brain drain that is now occurring as we all go look for jobs in other sectors"

"The longer I'm out the less inclined I am to go back"

"a lot of talented individuals will move elsewhere and be lost to the industry forever"

"Then it will plummet and be gone, with only backwards facing countries like the USA, retaining an interest as the rest of the world moves to renewables."

"I'm taking my 22 years experience and re training as a teacher"

The Future Shape of the Industry – 20 Year Outlook

Still a major industry, but less profitable; success dependent on willingness to innovate and change

Once again, the need for change and innovation featured heavily in respondents’ comments, repeating last year’s point that change is essential if the industry is to survive and thrive. There are plenty of sophisticated studies on the future of the oil industry from the likes of BP, Shell, Wood Mackenzie, and others and we do not claim to be predicting at this sort of level. Rather, we are identifying the mood of industry professionals: as such, there are some trends that should worry those responsible for attracting talent to the industry in the future.

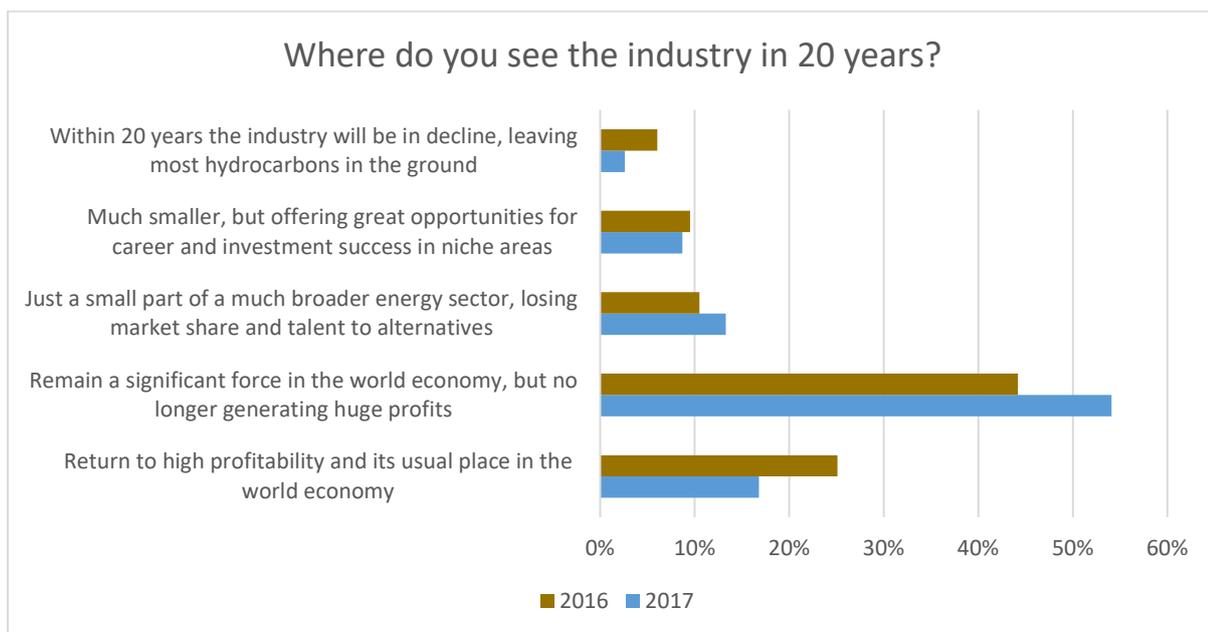
The overall sense is one of realism – there’s a drop in the extreme views (either a return to the glory days of huge profits, or an industry in terminal decline), and an increase in those seeing a significant industry but without the huge profits of the past. Several commented on a change in structure – the growth of niche firms (either by region or by competence), and gas in particular, at the expense of the Majors, and stressed the need to embrace renewables.

“Niche companies will flourish at the detriment of the old firm ones”

“be ready to embrace changes in the energy mix towards renewables and position with the intention to become players within that domain too”

“For the near term focus will remain on developing assets and developing niche competencies rather than playing a broad range of assets”

“The world will operate as a gas economy where fortunes will be made”.



Source: WBC Industry Survey 2017

Talent outlook

Other sectors more attractive to new generations – negative image of industry and perception of outdated management styles

There's a small drop among those saying the industry will offer great career opportunities, and an increase in those saying the industry will lose talent to alternative energy producers.

A 2016 study by McKinsey (Oil & Gas Organization of the Future) showed that 14% of Millennials would not work in the industry because of its negative image: this is the highest percentage of any industry, and was supported by verbatim comments in our study. Of course, it can be argued that this still leaves 86% of Millennials willing to join oil and gas firms, and our own results are not necessarily statistically significant. In contrast, a UK report by Opito, an Oil & Gas skills

"the industry is more and more depicted as criminal in public opinion being ignorant of this impression can cause huge issues with stakeholder management"

consultancy, demonstrated a healthy interest in the industry among the younger generation: but commenting on it, John Macdonald, Opito CEO also warned that "if we do not take action we are in danger of having a reasonable proportion of next generation talent discouraged from pursuing a career in this

industry."

Taken together with the perception that many oil companies are not structured in a way that appeals to Millennials (strict hierarchies, silo mentality, lack of innovation or willingness to adapt), perhaps these are some warning signs that oil firms would do well to watch.

Some are already making efforts to adapt; but others see less of a problem. Does the combination of new technology and a reduced workforce will mean there will be less competition for people with leadership skills? Ray Lance, CEO of ConocoPhillips was quoted at a recent CERAWEEK conference saying "Our industry is pretty fortunate in that it's high-paying here in North America and around the world as well. I think we will naturally attract people who we need to run the business, but [the number of employees it takes to manage a rig] is coming down. We're running our fields with less people so that's a reality as well"

"Graduate recruitment must restart asap to avoid a major skills gap and to limit damage to recruitment potential from universities. Enthusiasm must be retained".

References & Acknowledgements

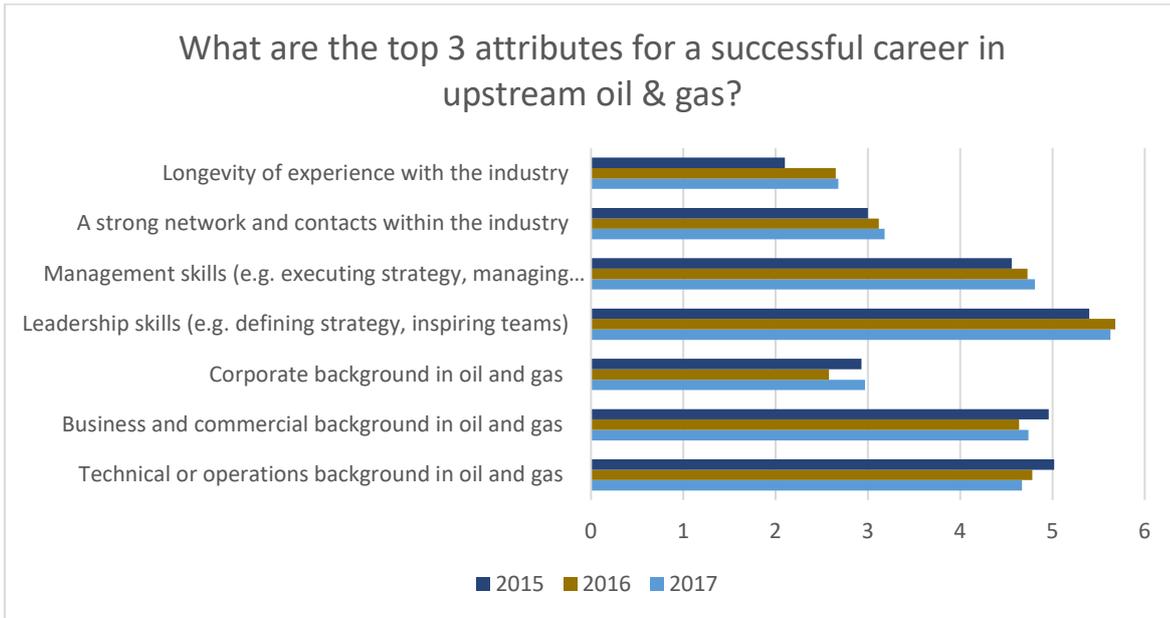
Our thanks go to all those who took time to complete our short survey and to leave additional comments. We have also drawn on various industry reports from industry experts, including McKinsey & Co, Mercer, Hays, EY and others, whose knowledge and resources are far greater than ours. Our comments and interpretations of their analysis, together with any errors or omissions, are our own. Full details of the reports quoted can be found via the links below:

McKinsey & Co:	McKinsey Oil & Gas Organization of the Future
Mercer:	Mercer Oil & Gas Talent Outlook
Hays:	Hays Oil & Gas Salary Survey
EY:	EY - Employee Development & Coaching
Opito:	Opito Youth Perception of Oil & Gas Careers Report
WBC 2016:	Managing the Skills Gap in Oil & Gas 2016
WBC 2016:	Decline & Fail or Innovate & Thrive - The Future of Oil & Gas

Managing for the Future – Addressing the Skills Gap

Ability to innovate, collaborate and think strategically identified as major gaps – adding up to a lack of leadership skills for an industry that needs to change

Views on what attributes are required for a successful career in Oil & Gas remain largely, and unsurprisingly, consistent with previous years, with Leadership skills, defined as setting strategy and inspiring teams, rated as the most important attribute.



Source: WBC Industry Survey 2017

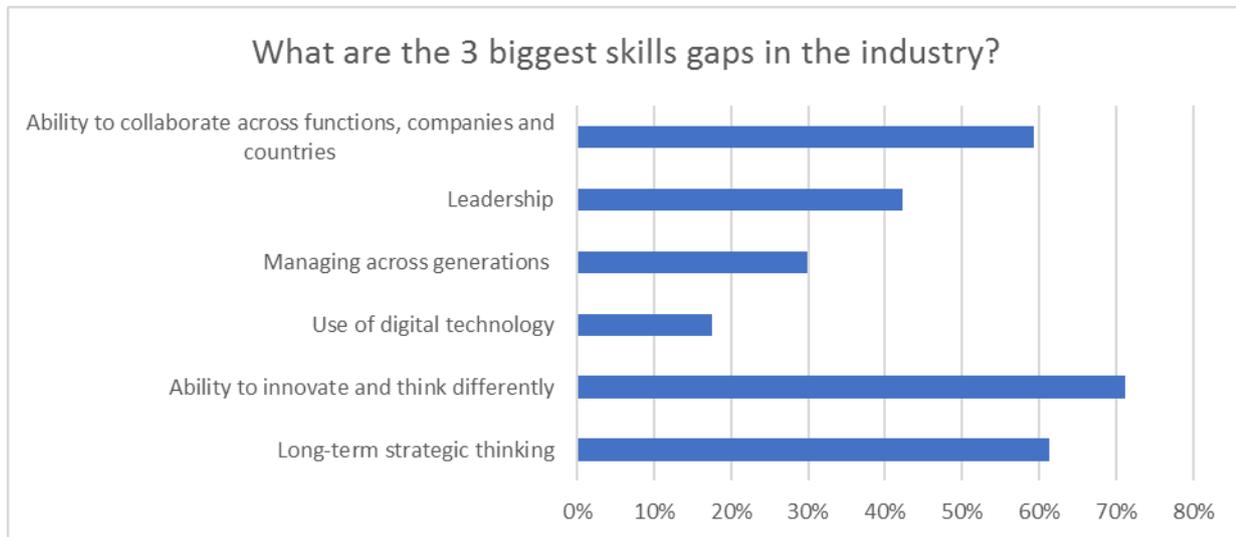
Following a large number of comments in last year’s survey about the skills gap, we introduced a new question this year to identify where respondents thought skills were lacking. The results confirm what was said anecdotally last year, as well as data from other reports such as Bloomberg’s 2016 Job Skills Report. Innovation and collaboration feature strongly in comments:

“the industry will regain some level of profitability, this will need to be achieved with collaboration between companies as well as with governments.”

“the downturn will continue to drive innovation and collaboration, driving the cost base down and culminating in delivery of significant profits.”

“The oil industry like all others must innovate to the challenge of change”

In terms of the gaps, three attributes or behaviours stand out in the data: the ability to innovate and think differently; long term strategic thinking; the ability to collaborate across functions and regions. Leadership ranked fourth, but we would argue that the first three are all essential elements of leadership.



Source: WBC Industry Survey 2017

The Innovation Challenge

Repeated calls for the industry to be more willing embrace change and encourage innovation

Supporting the data, the need for innovation and change came out strongly in the verbatim comments, too. This has been a constant anecdotal theme in the three years we have run this survey as well as in other studies: with one or two exceptions (eg Shale) there seems to be a clear perception that the industry does not embrace change or willingly innovate. Some respondents highlighted the need to bring in innovation skills from outside the industry, claiming that only a totally fresh approach would work, while others warned that innovative individuals were likely to feel frustrated and move to more welcoming sectors.

"the industry will have to reinvent itself to ensure operational efficiency and business performance."

"As hiring picks up again, new entrants will bring innovative approach, agile approach to technology. Not all bad"

"Innovation and effectiveness will be key for the successful companies, but a challenge will be leakage of competence and resources to other industries, in particular renewable energy"

Last year several respondents commented on the industry's reluctance to understand how the world is changing – one referred to the industry's "Kodak moment". This came up again in 2017, and some

"..understanding the world outside oil and gas (not dismissing signals of disruption)"

question whether existing structures and organisations are able to cope with change. To encourage innovation and take advantage of a changing world the McKinsey report recommends the development of organisational agility, loose hierarchies, fluid teams,

supported by a strong (but limited) core. Such decentralisation is not new – these things go in cycles – but it emphasises the need for much broader experience and knowledge in the front line if there’s less corporate input from the centre.

Like some of our respondents, McKinsey’s paper also recommended re-defining what’s really core and looking at partnerships and outsourcing: so the collaboration issue isn’t just about breaking down silos within one organisation but across different companies. Again, it will be important for all players to have a thorough understanding of each other’s business if such collaboration is to succeed – and as shown by our survey results above, this isn’t always present.

“the industry will shift from doing in-house intellectual work (model building reservoir description etc.) to out-sourcing to consultancies (many based in India and China)”

The Millennial Challenge

Intergenerational frustration

No report on talent is complete without reference to Millennials. Many commentators continue to emphasise the impact of Millennials on management issues within the industry – McKinsey cite this demographic as one of three key drivers of change and EY did a piece on their view of the Annual Appraisal– but our survey suggests that it poses less of a management challenge than others (and indeed, some academics challenge the idea of Millennials as discrete group). Nonetheless, a preference for collaborative teamwork, innovation and flexibility is said to be a characteristic attribute of Millennials, so maybe this factor is behind the other issues too.

Inter-generational and functional frustration certainly came across in some of the verbatim comments:

“Also the babyboomers need to stop being greedy, move aside and let the younger generation move to the forefront”

“but the industry needs to remove all the dead wood and embrace change of the status quo

“The industry needs to change as a whole and be less driven by the typical / stereotypical Texan WASP mid-aged guy. The industry needs to look to the future, value and reward young talent and change its conservative mindset to thrive again in challenging times”.

“Old (baby boomer) Idiots in charge, who think they know what they are doing, but don't / don't communicate and micro-manage.. This is not an isolated thing.. A lot of baby boomers are very closed minded”.

“reduce the number of accountants and give engineering leaders real power to get things done correctly, cost efficiently and safely”

Personal Career Development

Training requirements reflect skills gaps; companies need to invest more for a competitive advantage

When it comes to personal career development, responses were consistent with previous years and reflected earlier observations on what’s important and what’s missing – an ability to think strategically, a willingness and ability to collaborate, and negotiation and deal-making.

What are your top 3 priorities for leadership skill development?

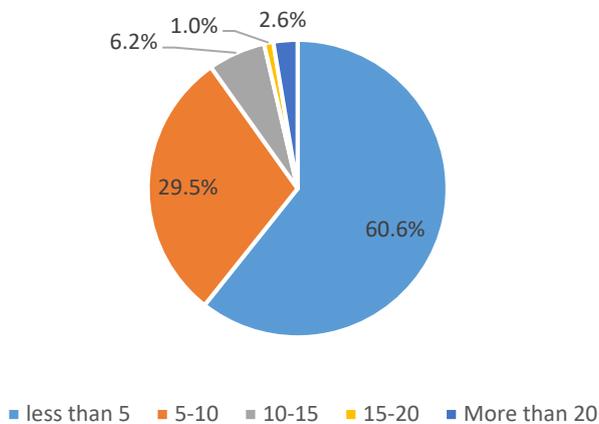


Source: WBC Industry Survey 2017

In their report “Oil & Gas Talent Outlook 2016-2025” Mercer emphasises the benefit of offering clear career development plans alongside salary and job security as part of a talent programme. Using “Time to Proficiency” as a key metric demonstrates the value of targeted high impact training – “Protecting career development and training investments that deliver faster proficiency times will often produce cost savings” says Mercer.

The Hays salary survey asked how firms were addressing the skills and talent issues. There was a range of answers (eg bringing back retired staff, introducing apprenticeships and changing compensation and rewards systems), but Training & Development was the #1 area employers are aiming to improve: even so, fewer than half, 43%, were focusing on this as a way to develop skills, and just over a third were using it to attract new staff – despite evidence that a clear sense of career development is hugely important. Our own survey suggests an equally limited commitment to training.

Expected number of days class-room based training



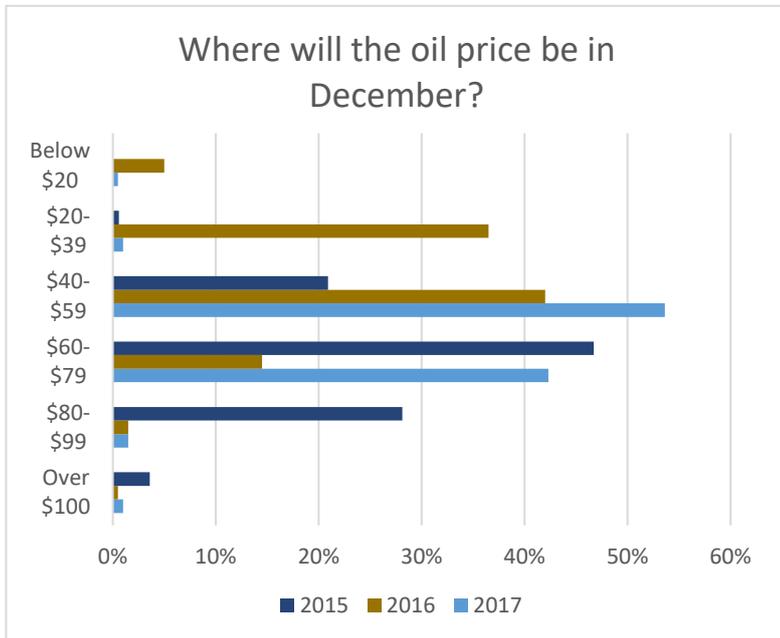
“Trainings of manpower should be encouraged by all the major stakeholders in the industry”

“the best investment during such prolonged downtime is in education”

With so many firms holding back, any company willing to invest more in training will clearly gain a competitive advantage.

The Oil Price at the end of 2017

In January 2016 respondents were cautious, with most forecasting just above the \$40 mark, in keeping with most other predictions, and below where it actually finished, at \$54, with a few outliers at the more



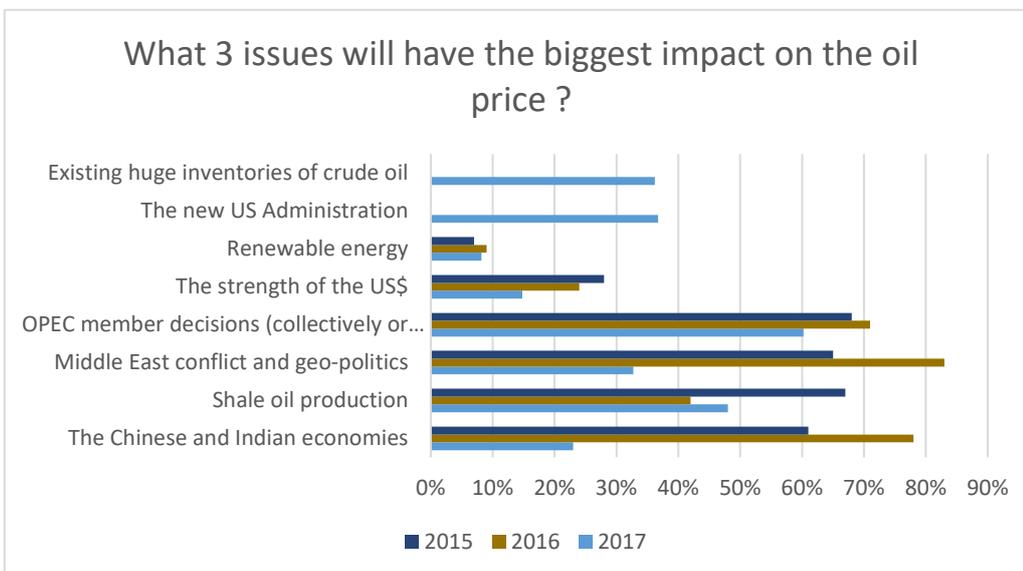
extreme optimistic or pessimistic ends.

This year responses were slightly more concentrated, with 97% predicting somewhere between \$40 and \$80 but the overwhelming consensus is between \$40 and \$60 – ie more or less where it is now, and in keeping with almost every other prediction, around the \$57 mark.

Source: WBC Industry Survey 2017

Factors Affecting the Oil Price

OPEC member decisions topped the table this time, closely followed by Shale. New options for 2017, the overhang of supply/huge inventories and the impact of the Trump administration were in joint third place, though there were some regional differences (see below). It's interesting to note diminished perception of importance of Chinese and Indian economies, but this chart comes with a caveat – as new options were added, a year-on-year comparison is not so meaningful.



Source: WBC Industry Survey 2017

Regional Variations

Although responses were broadly consistent around the world, a few regional variations stand out:

- Europe investing less in training, and focusing more on personal development; more concerned about threat from renewables
- Asia, Africa, Middle East investing more in training, more confident about the long term future, but more concerned about lack of leadership and strategic skills

Europe – representing 58% of responses – was notably less optimistic on both the oil price and on business in 2017. They highlighted the overhang of supply as a major factor affecting the market more than the US administration, and saw a greater long term risk to the industry from renewables. They tended to be more concerned about lack of collaboration skills than leadership, with verbatims complaining about “lack of practical hands-on experience”; they also expected to do less training than the rest of the world. But in terms of what training they wanted, their emphasis was more on personal development and becoming an inspiring leader, rather than technical or strategic issues.

In the US (13%) there was of course greater expectation that the Trump administration would have a major effect on the oil price; and in Asia, Africa and the Middle East (25%), respondents were significantly more optimistic (75% vs average 53%) and also viewed the Trump administration as having more effect than the oversupply.

In these regions – many of course being oil-based economies – there was also greater confidence in the long-term strength of the industry. However, respondents in these markets were more critical of the lack of leadership and strategic thinking in the industry than those in Europe or the US. And it was in these regions that the desire to innovate, collaborate and develop strategic planning skills was most prevalent. These markets are also investing much more heavily in training, with over half the respondents expecting to do more than 5 days’ classroom training - twice as many as in Europe (26%).

About Warren Business Consulting

We deliver Oil & Gas courses all over the world, helping NOCs, IOCs and service companies develop local talent. We believe success in the international oil markets depends on a thorough understanding of the industry’s complexities. Technical expertise is not enough – it is essential to understand the geopolitics, the technology, the finance and the many different functions and stakeholders, as well as knowing how to get the best out of a team.

As well as public courses, we also run in-house programmes, customised to meet clients’ needs.

“Hands down, the “3 Day MBA in Oil & Gas” is the quickest, most effective way to understand the E&P business model. I wish I had taken this course at the beginning of my career.”

Some of Our Upcoming Courses

- April 3-5: 3 Day MBA in Oil & Gas, London
- April 17-19: 3 Day International Oil & Gas Contracts, Jakarta
- May 8-10: 3 Day MBA in Oil & Gas, Houston
- May 8-9: 2 Day Risk Management, Jakarta
- Oct 16-18: 3 Day MBA in Oil & Gas, Lagos
- Nov 9-10: 2 Day Project Governance, London

For a full list of our courses, or to discuss in-house programmes, please contact us at training@warrenbusinessconsulting.com or visit our website at www.warrenbusinessconsulting.com