In our recent study, we surveyed senior executives from across the oil and gas industry to determine the trends, issues and challenges for 2018 and beyond. These industry leaders weighed in on such topics as digital technology trends, talent-related challenges, oil & gas price expectations, company headcount trends, capital spending, M&A activity and more. We investigated their expectations for company performance, industry segment performance and the macro-economic environment.

Contents:

Reinsvold & Associates

Overview

Short-Term

The short-term outlook has continued to improve from last year's cautious optimism. Expectations for short-term industry segment performance, company performance, hiring, capital spending and oil & gas prices are all positive.

Here are the short-term highlights:

- 77 percent of the executives believe that their industry segment will perform better in 2018
- 79 percent believe their own companies will perform better in the next 12 months
- 41 percent expect their companies to increase their headcount
- 42 percent feel that their companies will increase their capital spending
- 55 percent believe oil prices will average greater than $55 for 2018
- 49 percent expect natural gas prices to average greater than $3.00 for 2018

All of the above short-term metrics have improved from their respective values in last-year's study.

Long-Term

The five-year outlook is more optimistic than the short term. About 85 percent of the executives believe that both their industry segments and their companies will perform better over the next five years.

Other longer-term trends:

- The top four drivers of opportunity over the next five years are: increasing oil & gas prices, global economic recovery, increasing use of natural gas, and new technology developments
- Lower costs will be driven more by improving operating efficiencies and applying new technologies, rather than lower prices for purchased products and services
- New digital technologies will play a greater role over the next five years than other new technology opportunities
- The most impactful digital technology areas are expected to be: 1) big data / analytics, 2) real-time monitoring and decision-making, and 3) artificial intelligence / machine learning
- Talent-related issues remains as one the top longer-term challenges over the next five years
- Negative public opinion is becoming a greater long-term threat

The Short-Term Outlook Continues to Improve

The oil & gas executives participating in our latest survey have a very positive outlook for the next twelve months. On multiple dimensions such as industry segment performance, company performance, employee headcount, and capital spending – the majority believe 2018 will be a better year than 2017. Last year we saw the first positive shift in the short-term outlook in three years. This year the expectations are even better.

We used several questions to gage the short-term sentiments of the surveyed oil & gas executives. Figure 1 shows how the executives feel their respective industry segments will perform. A vast majority (77 percent) believe that their industry segment will perform moderately or significantly better in 2018 when compared to 2017. This is up from last year's report in which 60 percent expected 2017 to be a better year for their segment when compared to 2016. For comparison, Figure 2 shows the evolving sentiment of the last four years. At the end of 2014, the 2015 outlook was clearly pessimistic. Since then, we have seen a growing optimism and a general feeling that the worst may be over for this downturn. Of course, only time will tell.

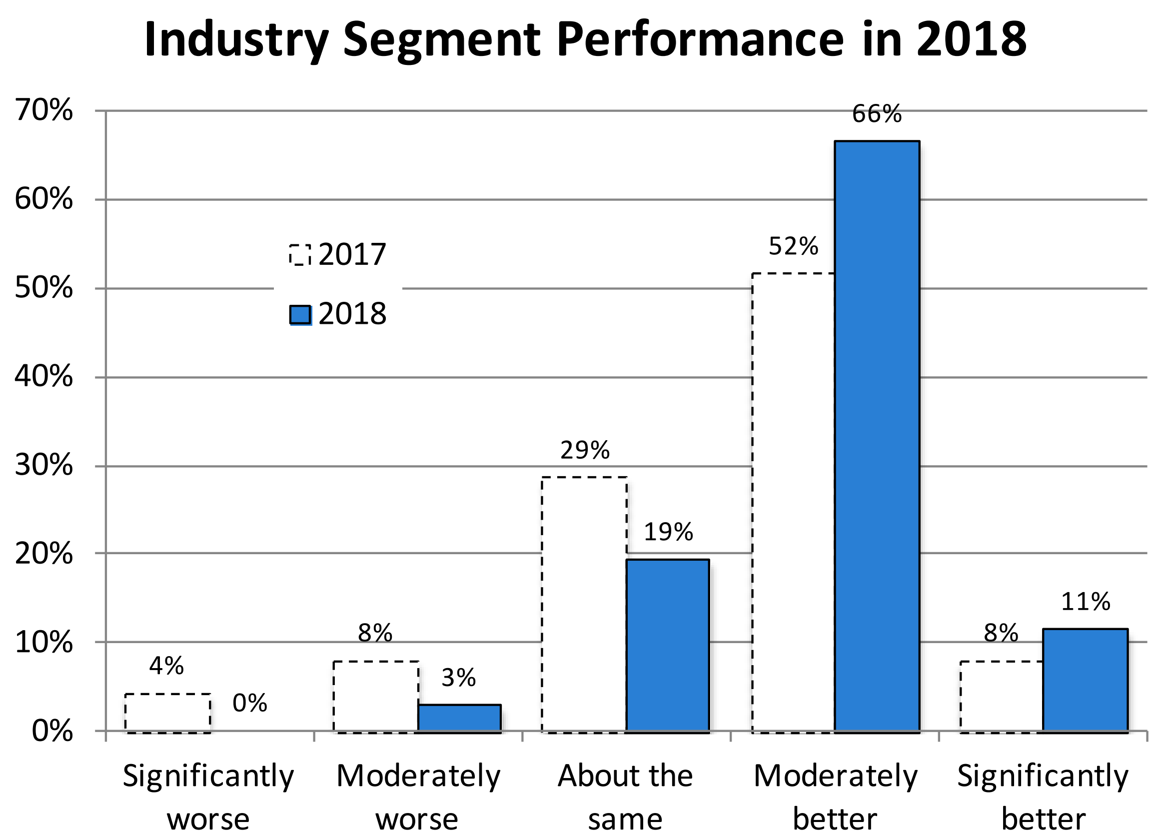
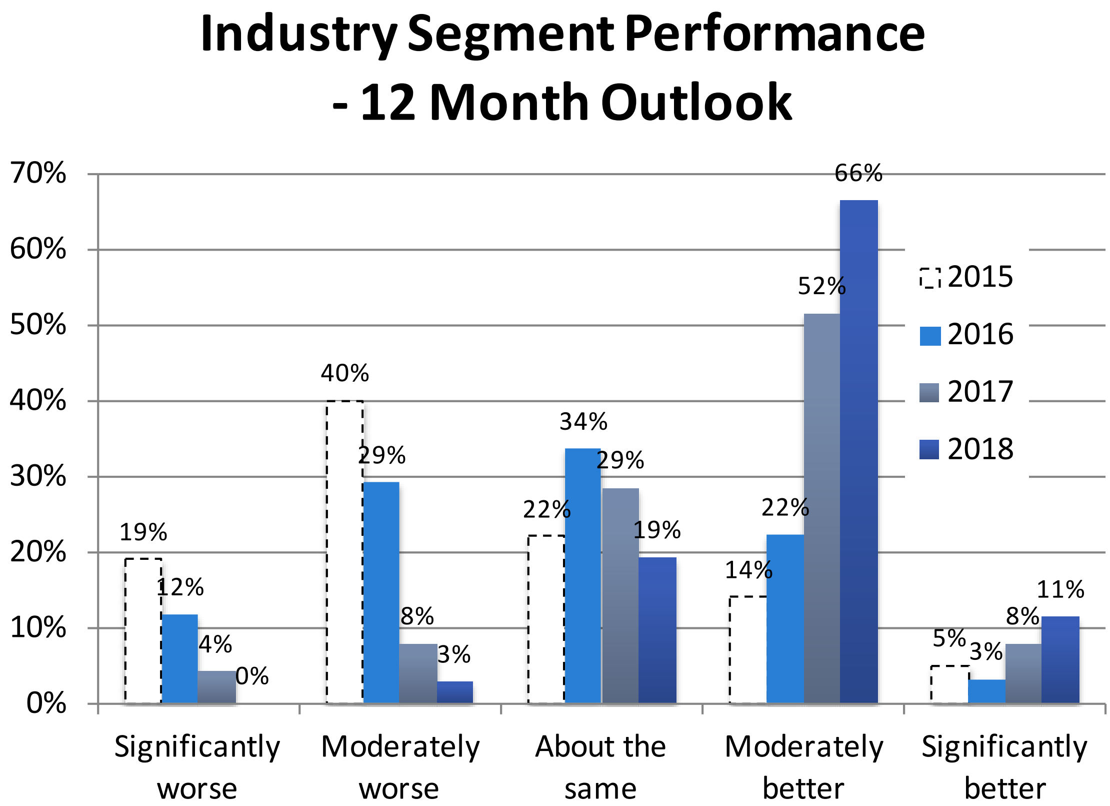


Figure 1



Industry Segment Performance
- 12 Month Outlook
70%
60%
50%
40%
30%
20%
10%
0%
19%
12%
4%
0%
40%
29%
8%
3%
22%
34%
29%
19%
14%
22%
52%
66%
5%
3%
8%
11%
2015
2016
2017
2018
Significantly worse
Moderately worse
About the same
Moderately better
Significantly better

Figure 2

We also asked the executives to predict how their companies would perform in 2018 (Figure 3), rather than their industry segment. As is the case every year, the company outlook is a little more positively skewed than the industry segment performance expectations. Of course, we would expect senior executives to have a positive bias regarding their own company's performance (since they play a major role in making that happen). About 79 percent of the executives expect their companies to have a better year in 2018 and only 3 percent expect it to be worse. In the 2017 Outlook, these values were 66 percent for a better year and 10 percent for a worse year.

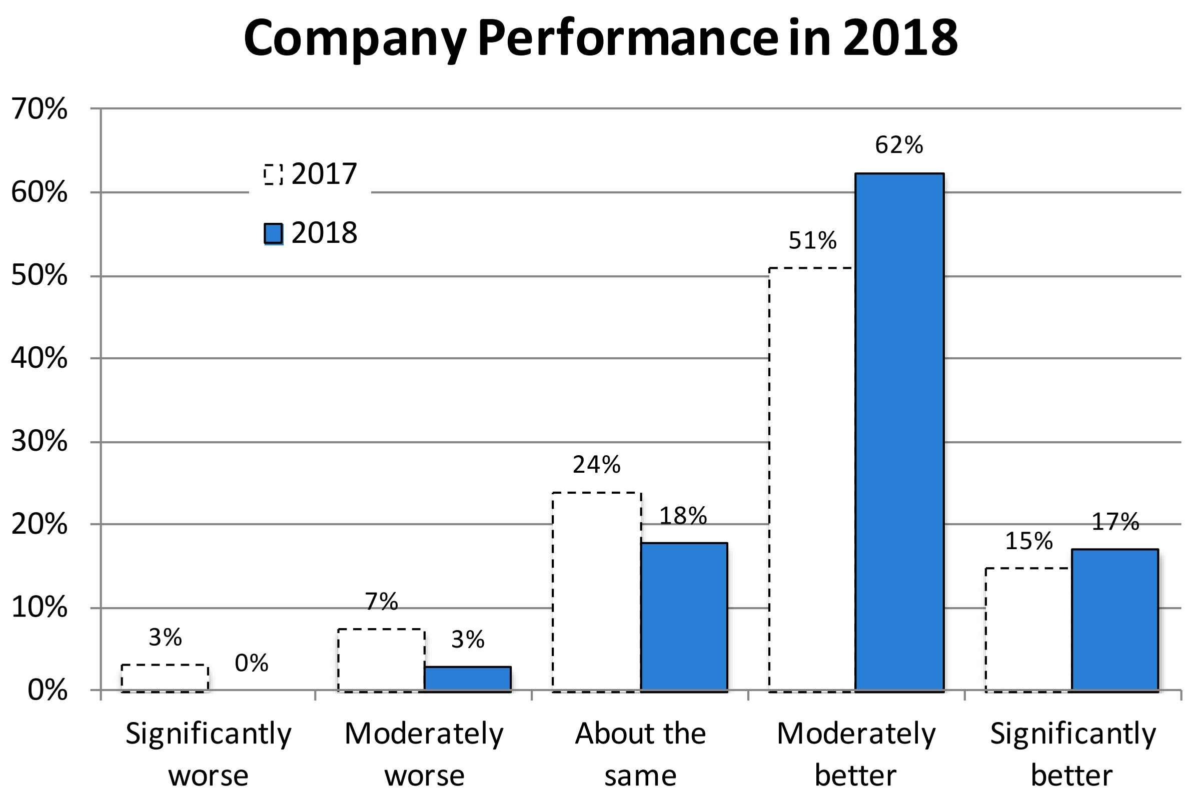


Figure 3

In Figures 1, 2 and 3 the segment and company performance was not rigidly defined. This was done on purpose. There are many ways to measure performance and we allowed the executives to comment on relative performance from their own viewpoint. For different executives in different segments this might mean revenue growth, or reserves growth, or earnings growth, or greater net positive cash flow. Being non-specific allowed us to capture the overall sentiment or business confidence without debating which is the "correct" measure of performance. However, we did find it useful to ask two specific questions that might indicate company growth or contraction - executive expectations around their company's plans for: 1) employee headcount and 2) capital spending.

The twelve month expectation for company headcount is presented in Figure 4. Forty-one percent of the company executives expect their companies to increase their employee headcount in 2018. Last year, only 34 percent of the executives expected to see an increase at their respective companies. Also, 2017 was the first year that the percentage expecting higher headcounts was greater than the percentage expecting lower headcounts. And now, the 2018 Outlook the net expectation is decidedly even more positive.

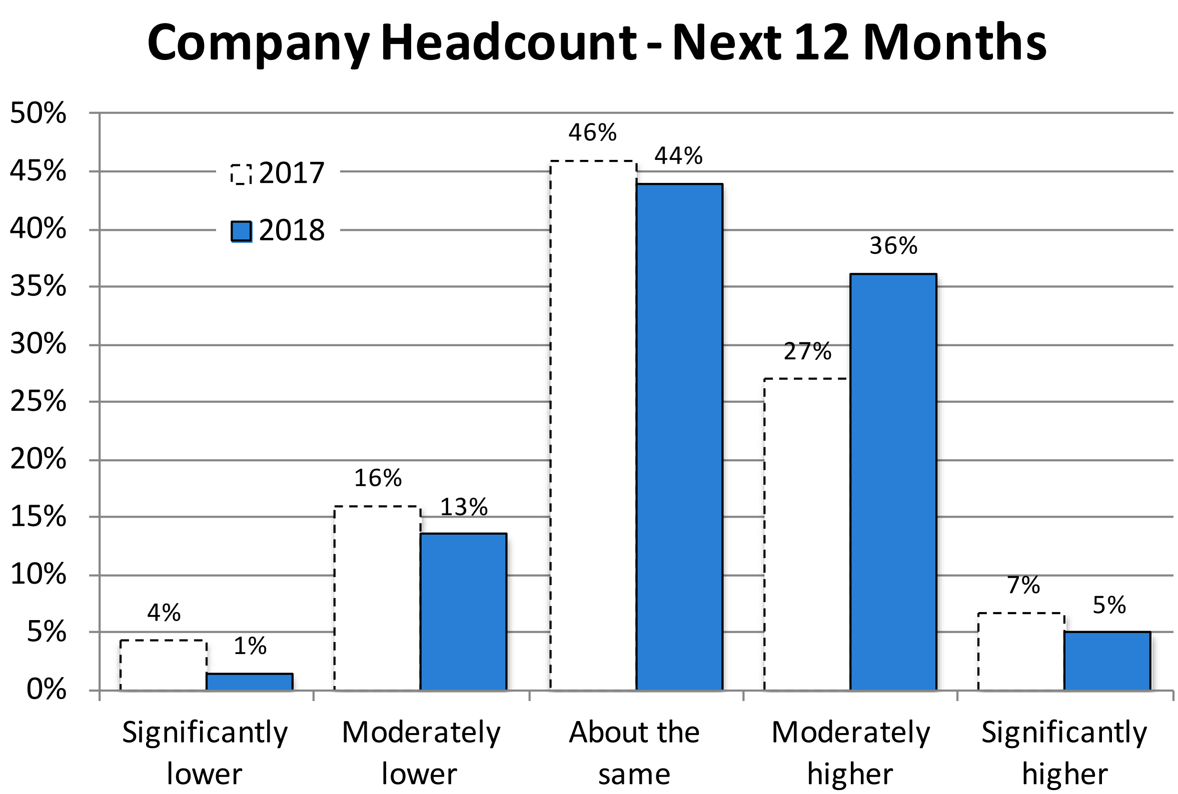


Figure 4

Like the employee headcount, the short-term capital spending outlook has continued a positive trend into 2018 (Figure 5). The number of executives expecting their companies to increase spending has increased to 42 percent. The 2017, 2016 and 2015 expectations for capital spending increases were 40 percent, 22 percent and 17 percent, respectively.

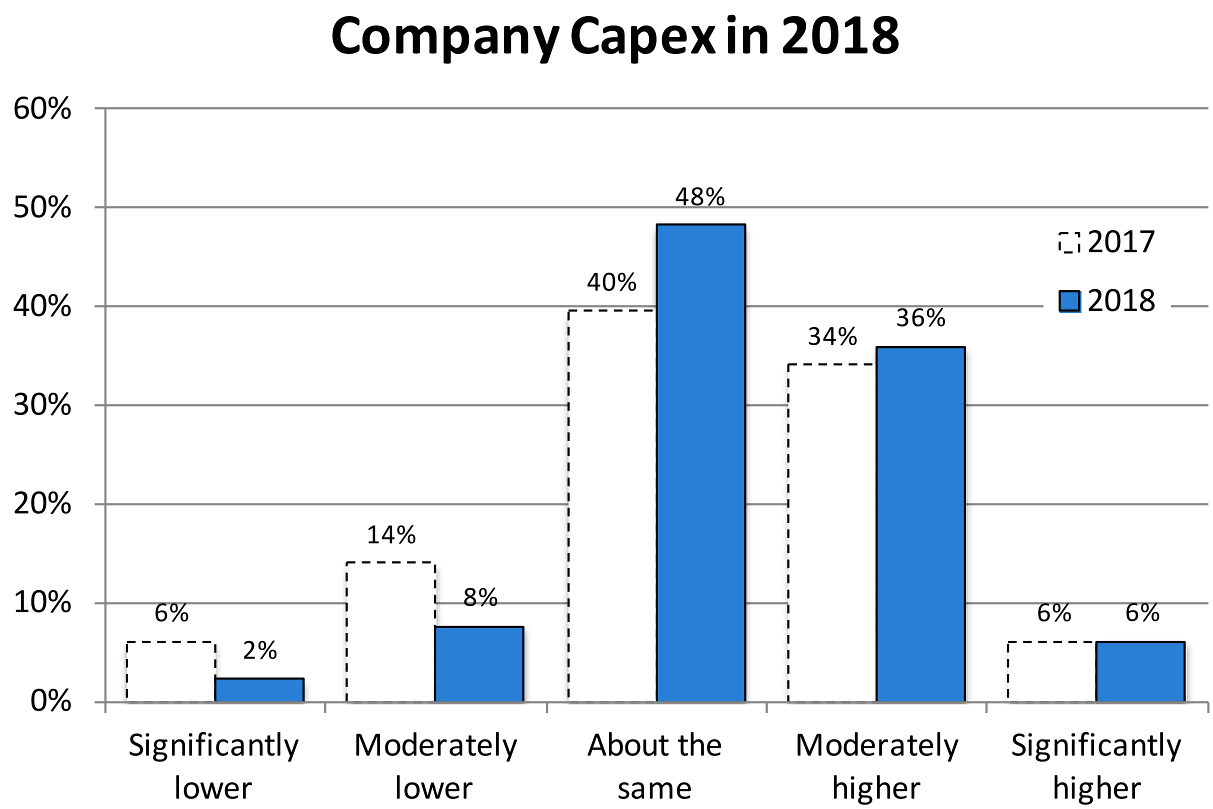


Figure 5

In each of the last four years, M&A activity was expected to be very strong over the next twelve months. For 2018, 61 percent of the executives surveyed next year to be one of moderately or significantly more M&A activity in their industry segment, while only 8 percent expect less. Last year at this time, 71 percent expected more M&A activity in their industry segment and 5 percent expected less.

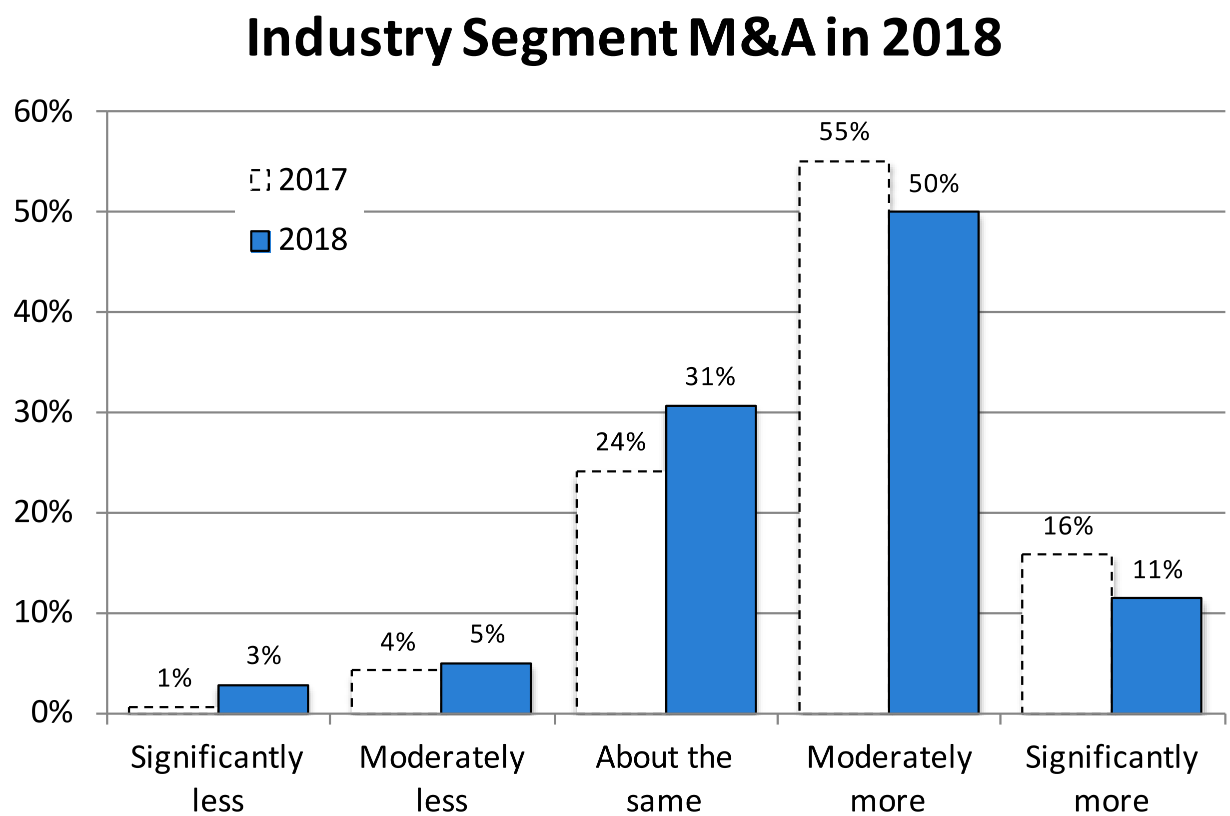


Figure 6

In addition to asking the executives how their industry segments and companies will perform in 2018, we asked them to identify which segments they believe will outperform all the other industry segments in 2018 (Figure 7). The survey participants were allowed to choose up to three segments. The results show that the major integrated companies and the independent E&P companies are expected to be the best performing segments in 2018.

Offshore drilling contractors and EPC companies are at the bottom of the list of expected best performers for 2018. This was also the case for the 2017 outlook. Both of these segments are linked to larger capital projects with longer lead times. Many of these projects have been delayed, reduced, or cancelled, so it is not surprising to see these segments low on the attached chart.

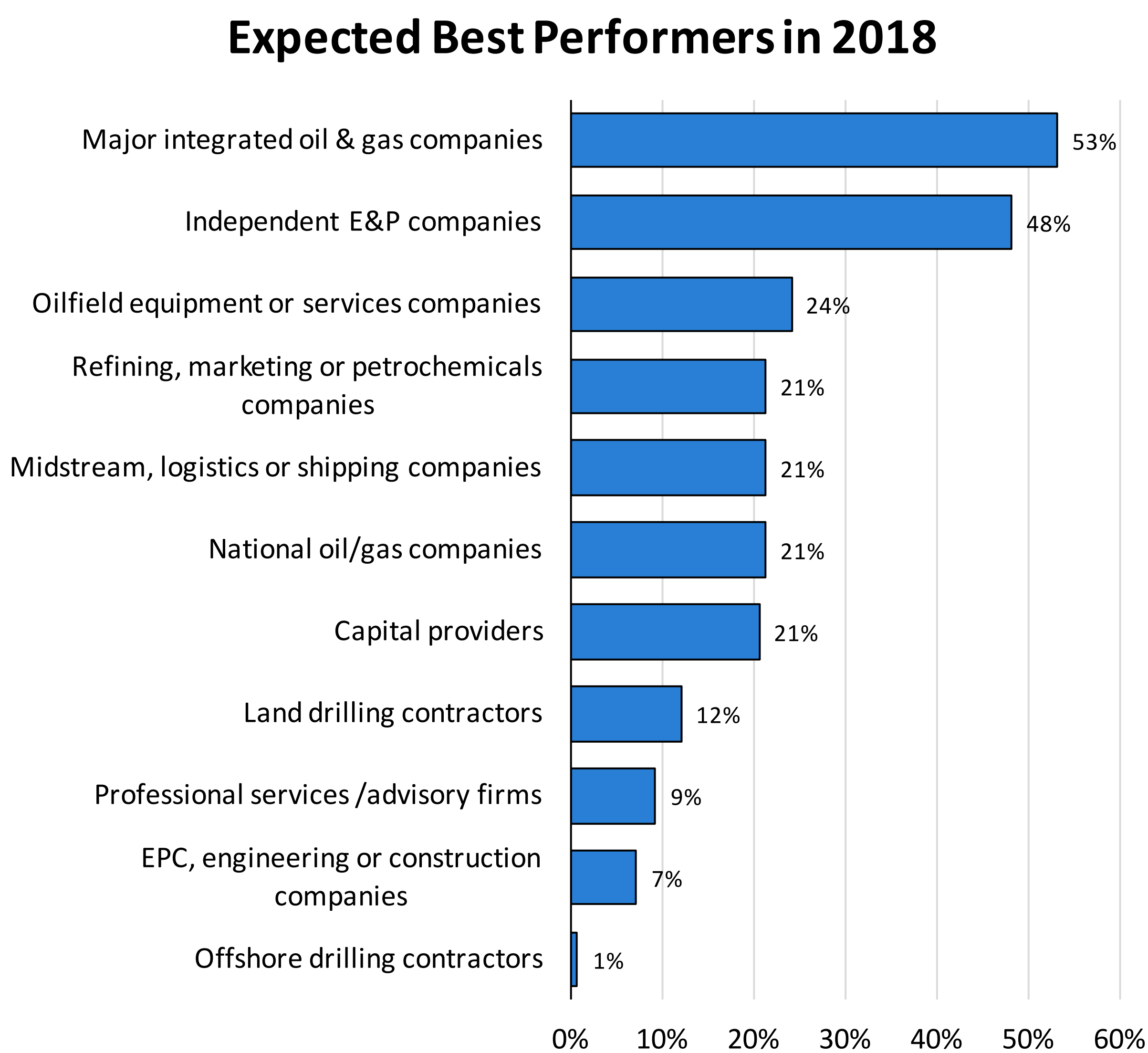


Figure 7

2018 Oil & Gas Price Outlook Remains Range-Bound

The expectations for oil prices appear to be range-bound and generally more concentrated than the expectations of twelve months ago. About 88 percent of the survey participants expect the average price of WTI oil to be in the range of $50 to $65 per barrel in 2018 (see Figure 8). Last year 66 percent of the executives expected the average price to be in this same range for 2017. Only 8 percent of the executives believe the average price for 2018 will be below $50. Last year 32 percent of the executives expected the price to average below $50 for 2017.

As a matter of reference, according to the EIA the 2017 average price for WTI was $50.18 per barrel for the first 11 months of the year (up to the time of the survey). In 2016, the average price was $43.29 for the entire year. Also, during the 10 days in November 2017 that this survey was conducted, the price of oil averaged $56.43 per barrel. This survey was conducted before the November 2017 OPEC meetings at which OPEC and Russia agreed to maintain their production cuts through 2018. However, during the survey period, there was certainly speculation that OPEC might reach such a deal.

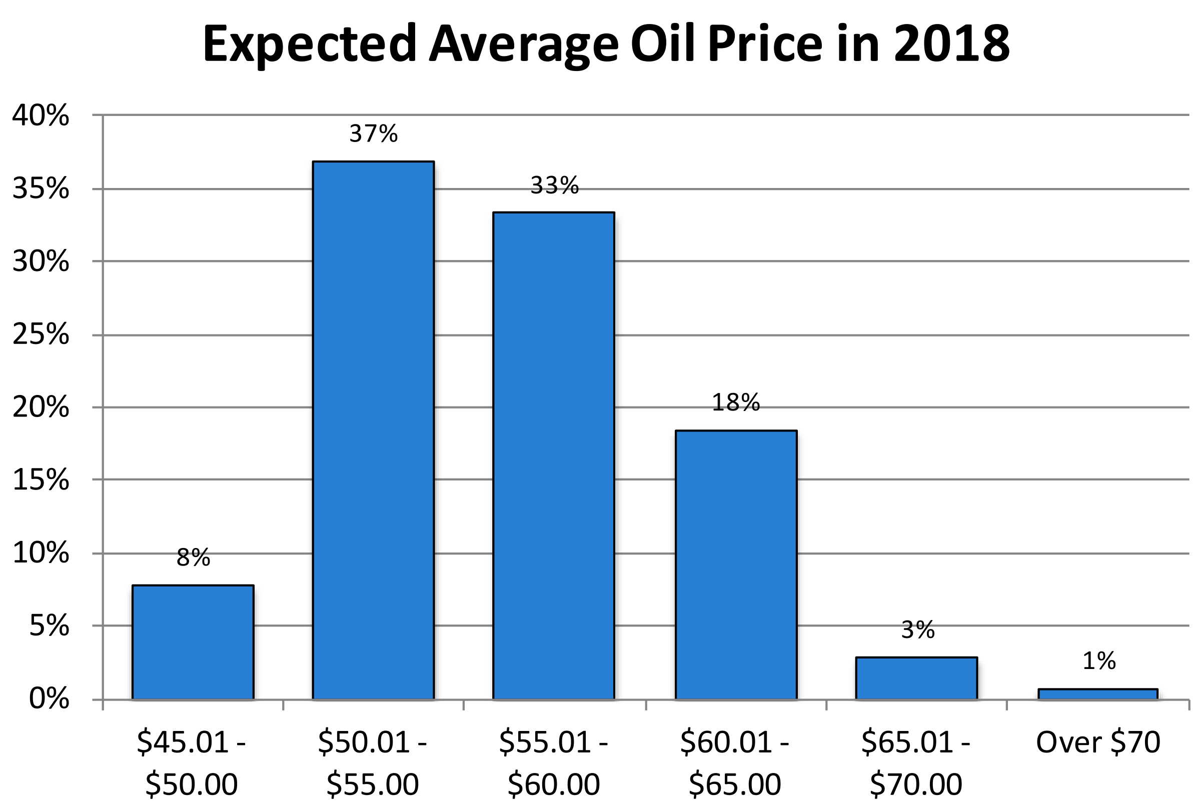


Figure 8

Regarding natural gas prices, expectations have shifted higher for 2018 (Figure 9). About 82 percent of the survey participants expect the average 2018 spot price of Henry Hub natural gas to be in the range of $2.51 to $3.50 per thousand cubic feet. Very few of the survey participants expect gas prices to be above $3.50 (8 percent) or below $2.50 (10 percent).

As a matter of reference, according to the EIA, the 2017 average Henry Hub spot price for natural gas was $3.00 per thousand cubic feet for the first 11 months of the year. In 2016, the average price was $2.52. Also, during the ten days in November 2017 that the survey was conducted, the natural gas spot price averaged $3.11 per thousand cubic feet.

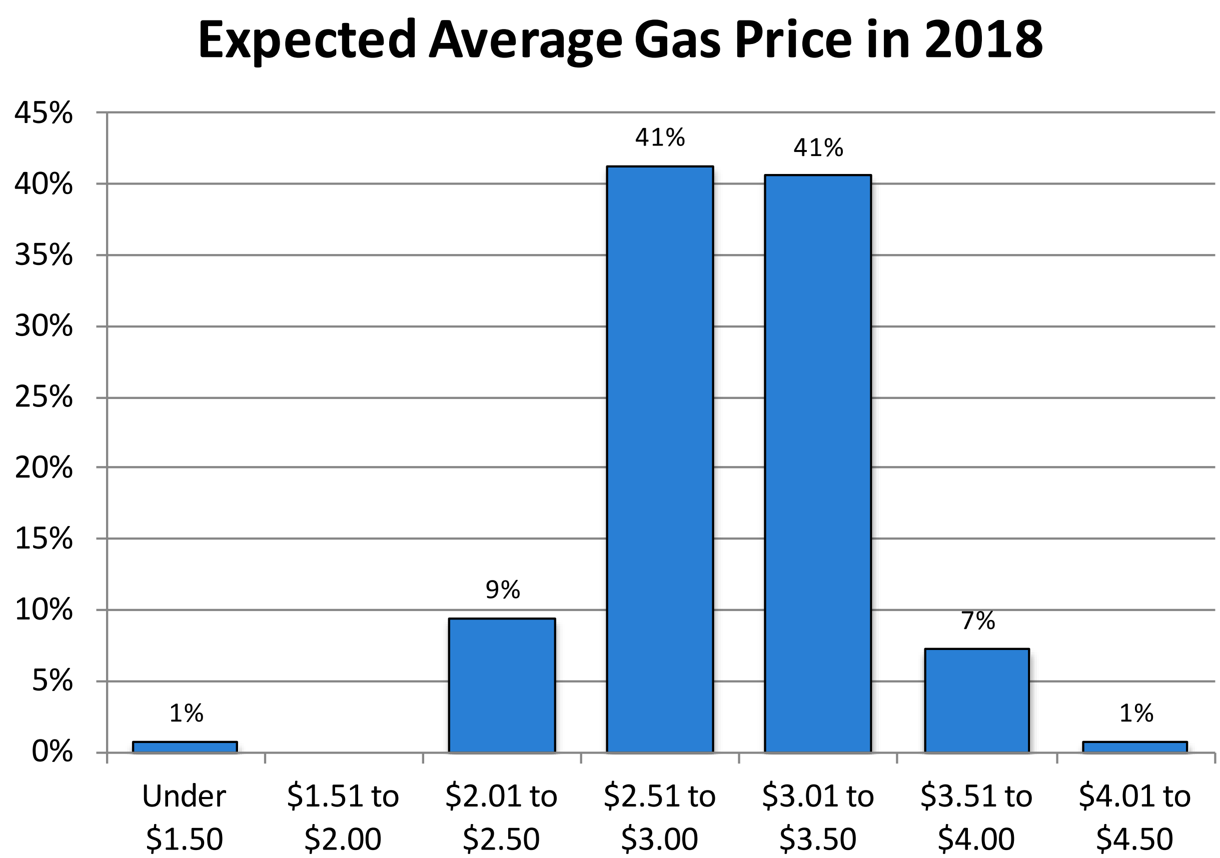


Figure 9

The Long-Term Outlook is Strong

Switching to a longer-term view, we asked the survey participants to rate their industry segment performance over the next five years (Figure 10). A large majority of the executives (85 percent) believe that their respective industry segment will perform moderately or significantly better. This is down slightly from last year when 90 percent thought that their industry segment will perform moderately or significantly better over the next five years.

We believe it is important to consider both the short term and long term horizons when accessing the outlook for the oil & gas industry. This helps us to separate year-on-year changes from the longer-term business cycles. However, we also believe there will always be a positive bias built into any longer-term forecast (oil & gas executives tend to be optimists). For this reason, we pay more attention to relative shifts in the long-term outlook rather than the absolute percentages. Is there any significance to the reduction of 5 percent in the positive longer-term outlook? It might be significant, perhaps reflecting concerns about longer term challenges such as negative public opinion related to climate change, threats from other energy sources, the end of inexpensive capital, or oil & gas prices that might be "lower for longer". Or, the 5 percent change could just be within the error of the survey sample.

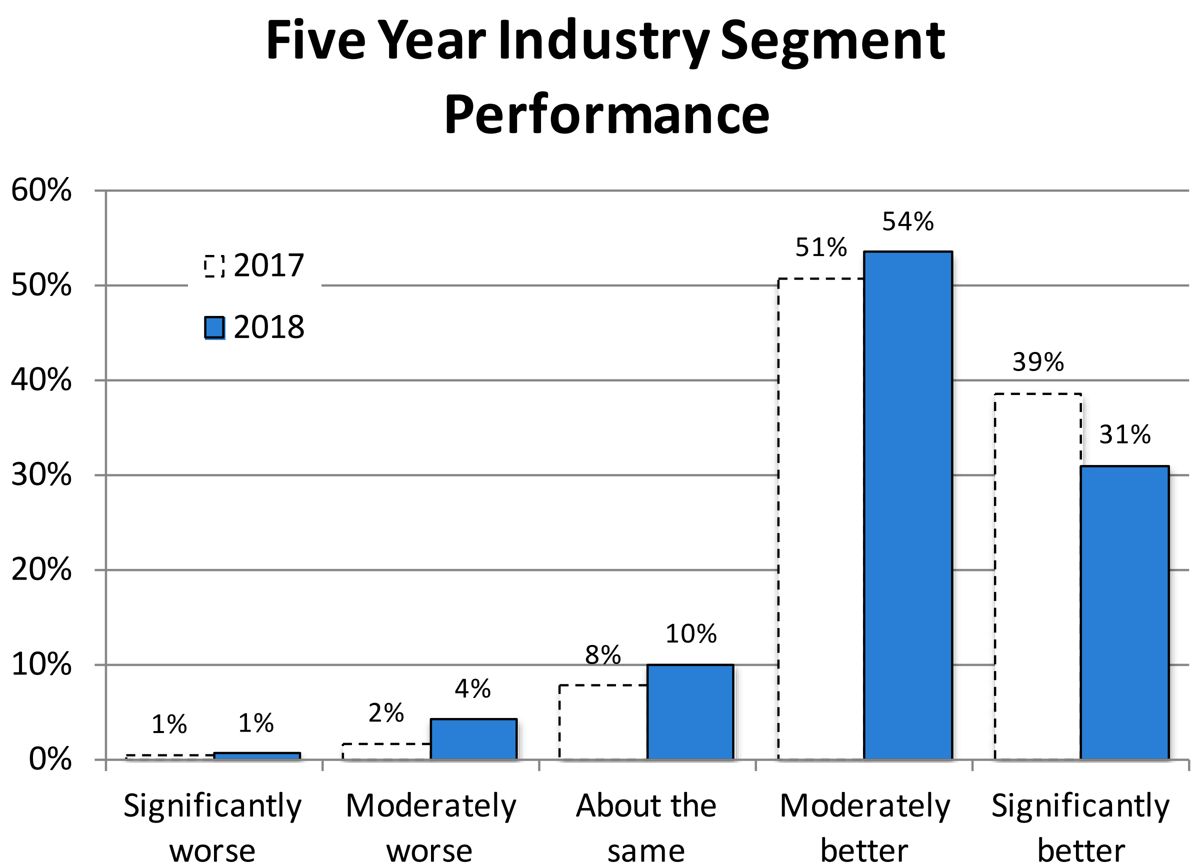


Figure 10

In addition to industry segment performance, we asked the executives to comment on the longer-term performance of their own companies. Again, a large majority of the executives (85 percent) believe that their companies will perform better over the next five years (Figure 11) – down from 90 percent in last year's survey. Included in that number is 33 percent that believe their companies will perform significantly better. This is down from 48 percent that last year said their five year performance was expected to be significantly better. Only 2 percent believe their companies will perform worse over the next five years. Overall, the executives still believe that their companies will perform well over the next five years. However, there has been an important shift from the "significantly better" to the less optimistic "moderately better" category.

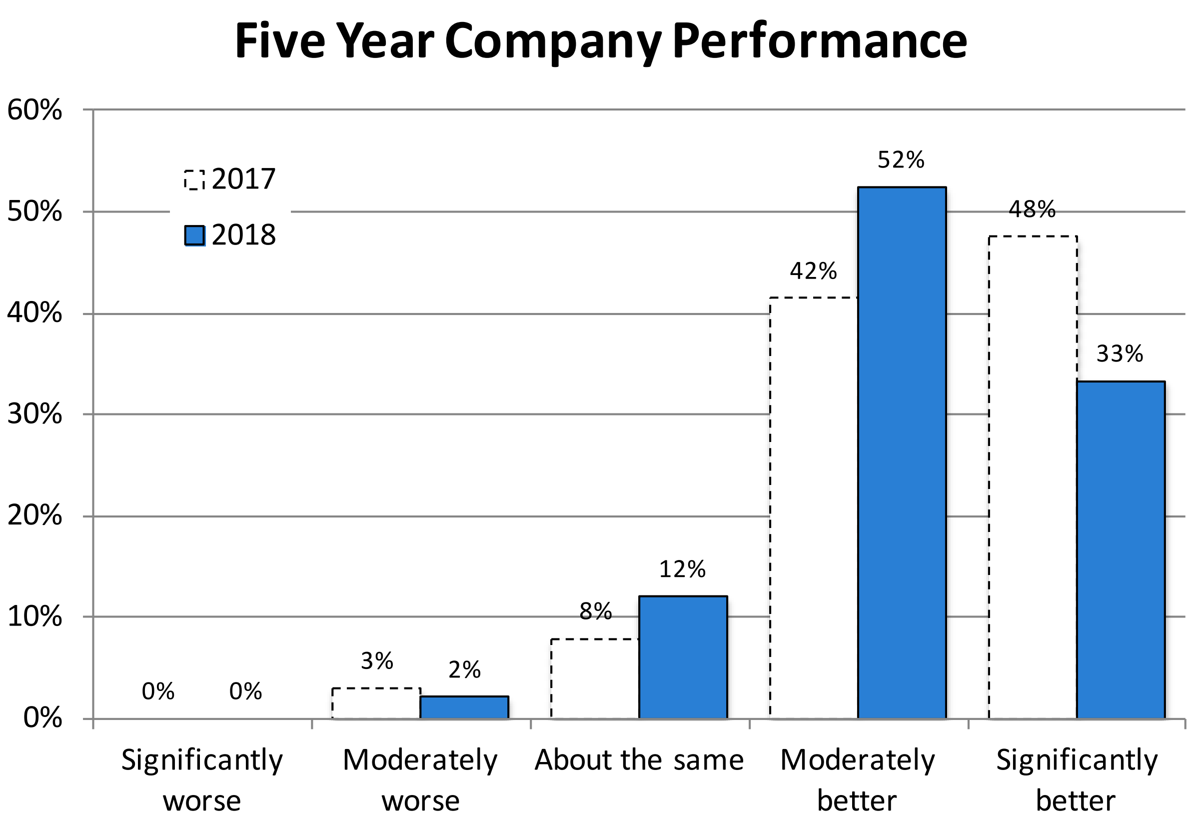


Figure 11

Figure 12 shows the expected best performing industry segments over the next five years (survey participants were able to choose their top three). Comparing this to the short-term industry performance chart in Figure 7, we see that the top three short-term performers are also expected to be the best long-term performers: major integrated oil & gas companies, independent E&P companies, and oilfield equipment or services companies.

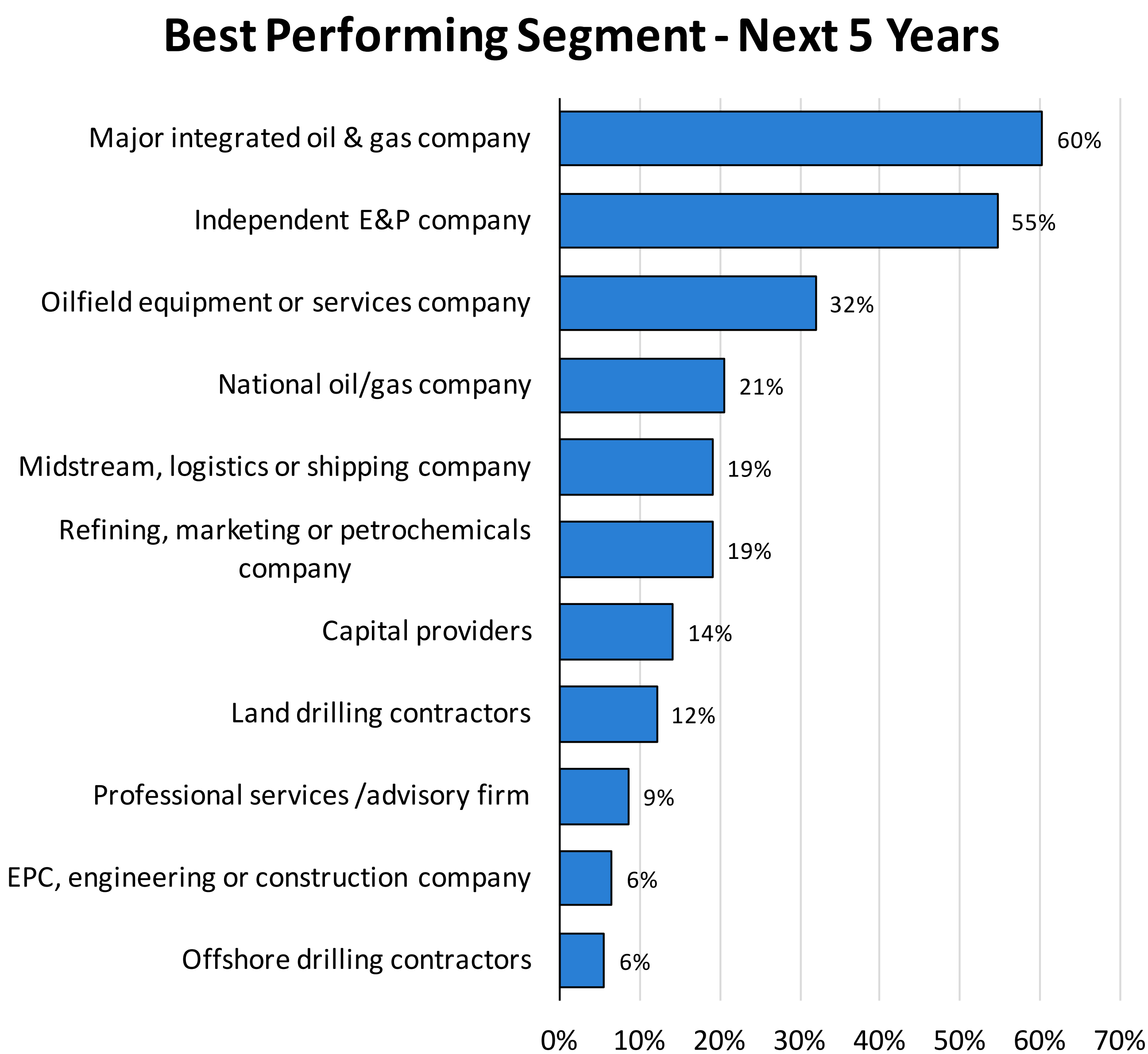


Figure 12

Industry Tailwinds Over The Next Five Years

Moving beyond just company and segment performance, we asked the executives to weigh in on the tailwinds or important drivers of opportunity (Figure 13) as well as the headwinds or challenges (Figure 19) for their segments over the next five years. For this question the participants were able to select their top three choices. The survey results show that, like last year's survey, the top driver of opportunity is improving oil/gas prices. The next four drivers after that are very close in rank. They are, in order: global economic recovery, increased use of natural gas, new technology developments and lower costs.

For many of these tailwinds, survey participants were given follow-on questions to learn more about their thoughts on these particular drivers. For example, the follow-on details for the increased natural gas use driver can be found in Figure 14.

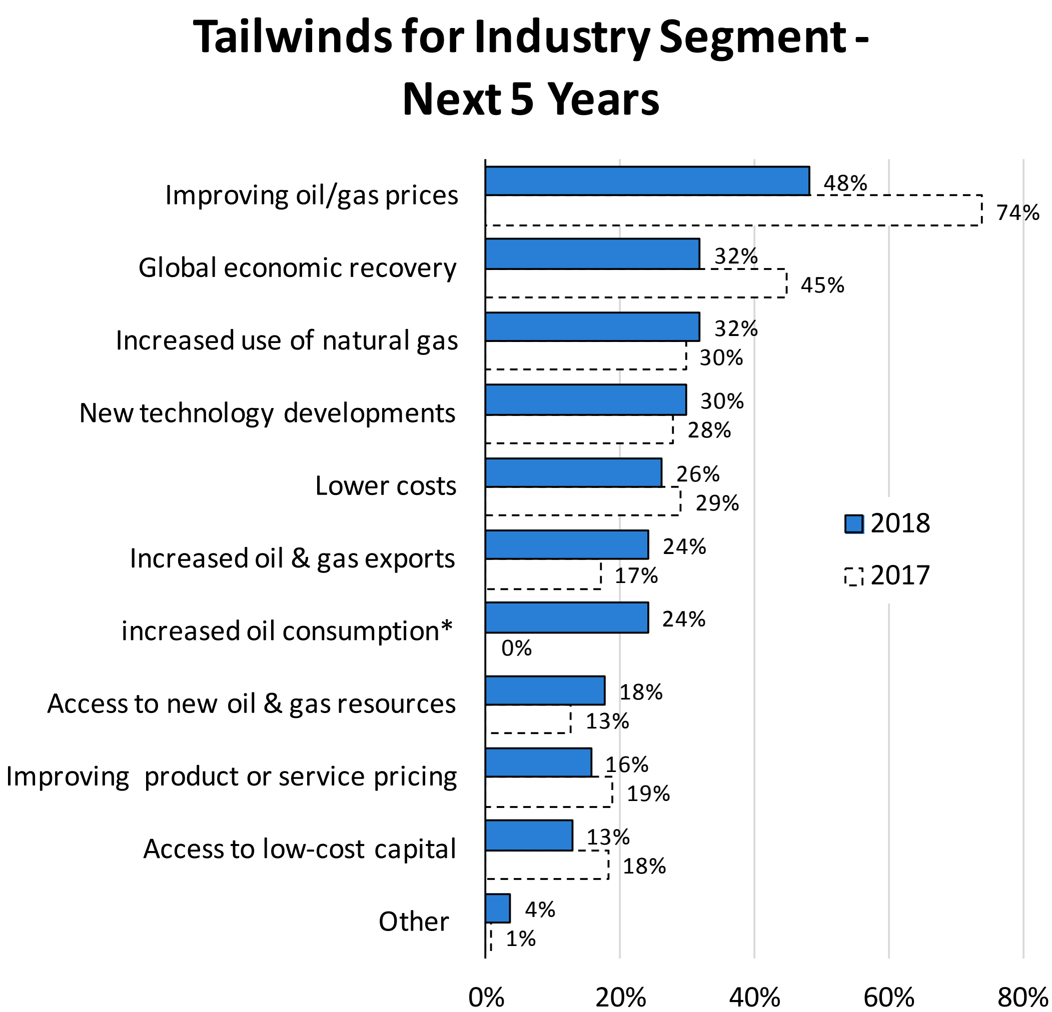


Figure 13

*The category of *increased oil consumption* was not specifically called out in the 2017 survey

One of the factors cited in the opportunity drivers (Figure 13) was the increased use of natural gas. The chart below (Figure 14) shows how the survey participants answered the follow-on question as to what is the biggest factor driving a long-term increase in the use of natural gas. Certainly, the economics of inexpensive natural gas has led to a significant increase in its use for power generation at the expense of coal. Also, the second greatest factor for longer-term increased gas use: LNG exports from the U.S., represents a somewhat U.S.-centric view. However, an increasingly global market for gas, enabled by LNG shipments from the U.S. and other countries, would increase the overall use of natural gas.

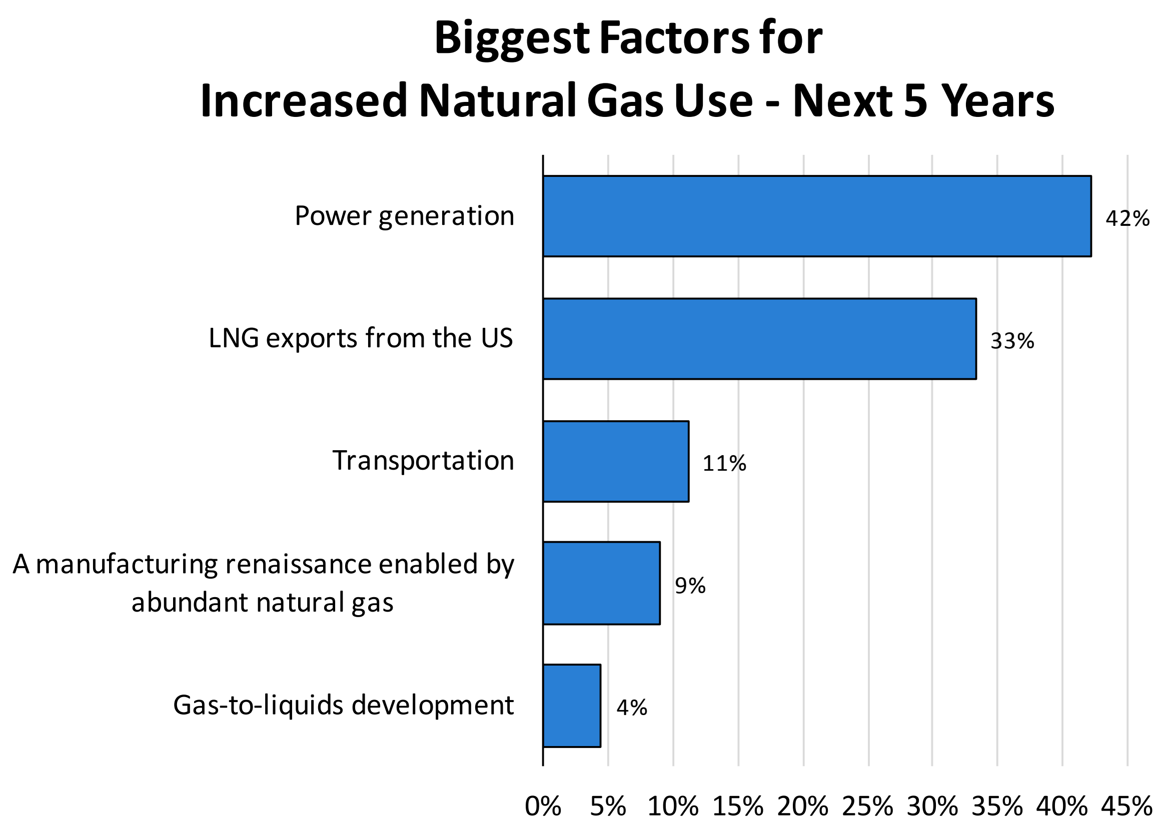


Figure 14

The fifth-ranked long-term opportunity driver cited in Figure 13 is lower costs. Figure 15 gives additional detail on the factors that the survey participants believe will lead to lower costs over the next five years. Last year the top contributor to lower long-term costs was cited as reduced costs for purchased equipment and/or services. Price discounting by suppliers was quite common during the last few years. However, this is expected to be less common in the longer-term. Consequently, the top two long-term cost reducing factors cited this year are 1) improved operating efficiency and 2) improved technology.

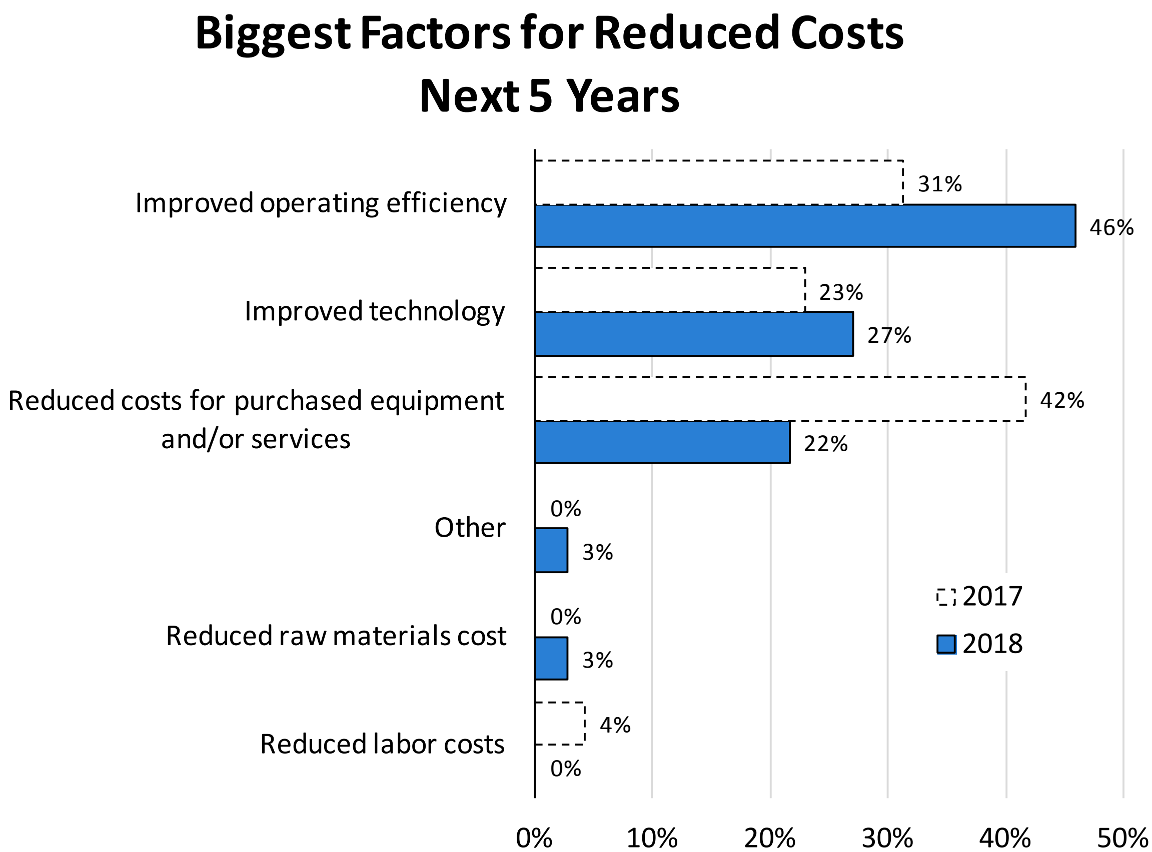


Figure 15

Another factor cited as a long-term opportunity driver in Figure 13 was increased oil & gas exports. The chart below (Figure 16) shows how the survey participants answered the follow-on question as to what is the biggest factor driving the increase in oil & gas exports. LNG exports was cited as the top factor with U.S. crude oil exports by ship as second.

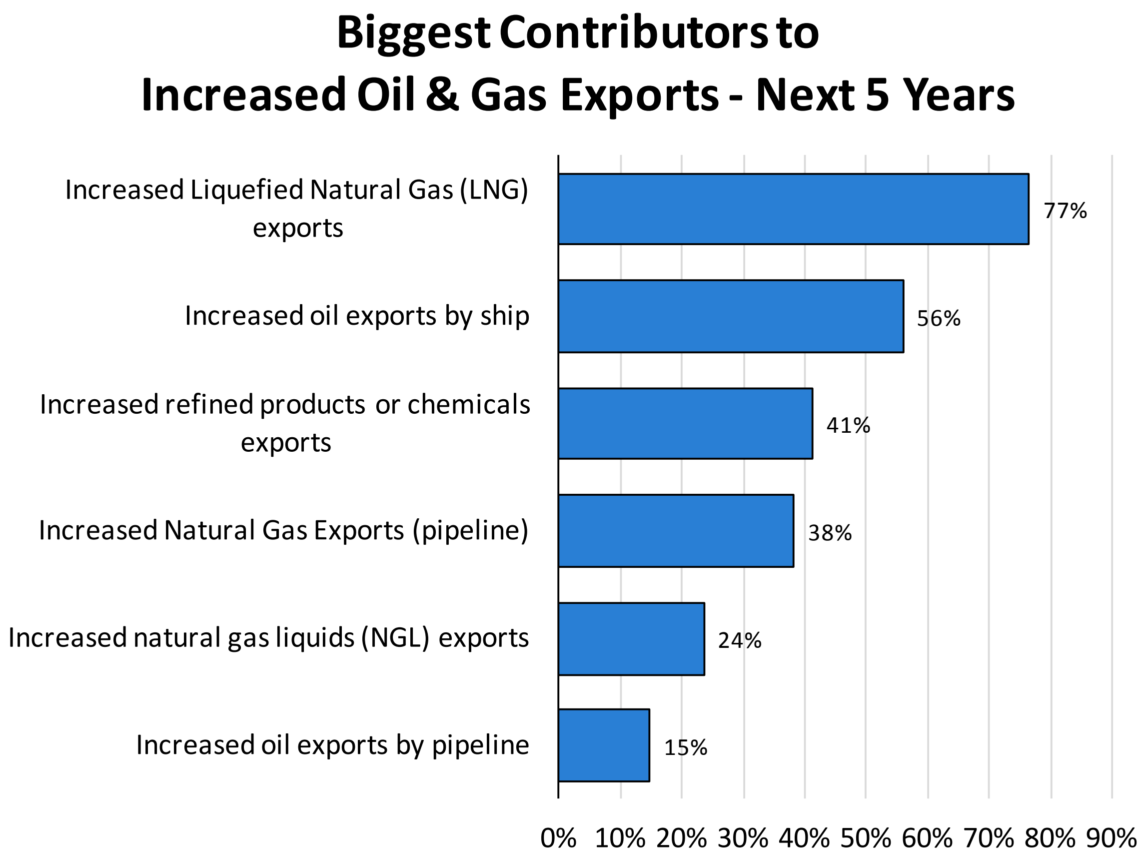


Figure 16

The Increasing Role of Technology

Technology improvement was listed as the fourth highest overall long-term opportunity driver (in Figure 13). Those survey participants that cited this driver were given a follow-on question to better understand which technology drivers they thought would have the biggest impact (choosing their top three).

Figure 17 shows the top technology developments. The top two are: 1) increasing use of new digital technologies, and 2) improvements in hydraulic fracturing and completions. These are the same top two from last year. An additional question (Figure 18) was asked to gain insight into which digital technologies the executives believe will be the most impactful over the next five years.

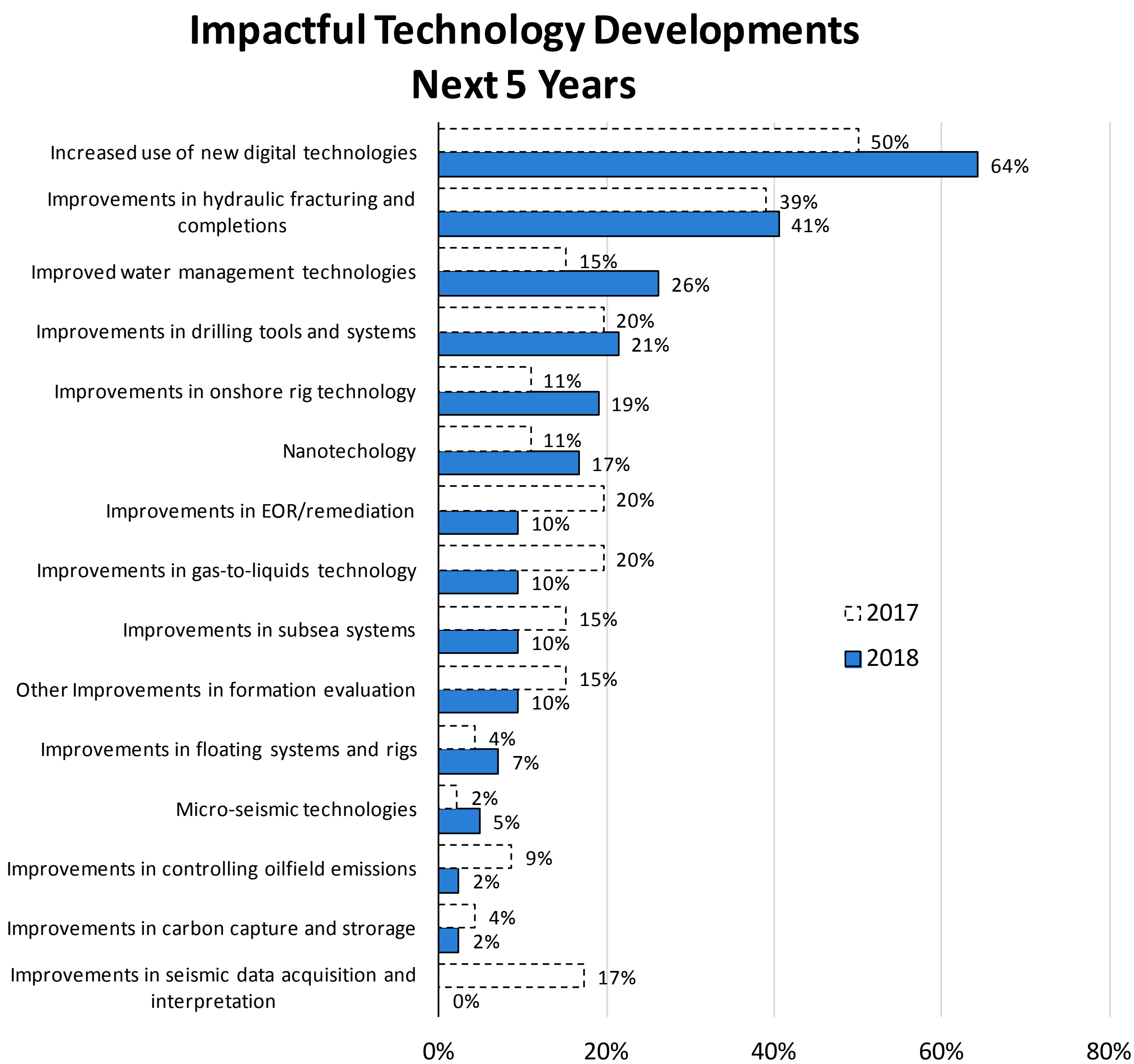


Figure 17

New technology developments was listed as one of the top tailwinds creating opportunity over the next five years (Figure 13). Also, under the overall umbrella of new technology developments, new digital technologies was cited as the top factor (Figure 17). Figure 18 examines this even further. Listed below are the rankings for the digital technologies expected to be the most impactful over the next five years. The top three factors, in order, are: 1) big data / analytics, 2) real-time monitoring and decision-making, and 3) artificial intelligence / machine learning.

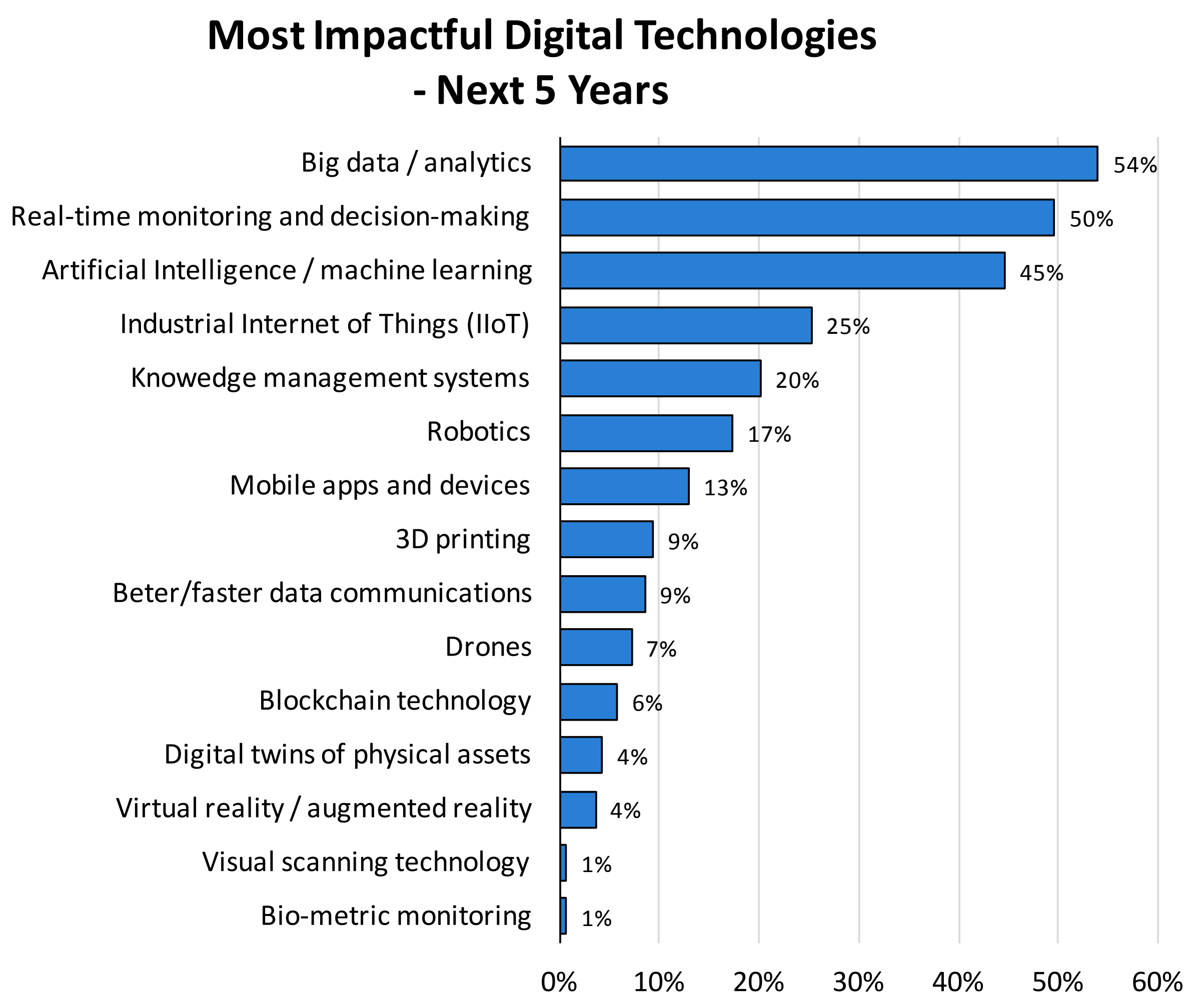


Figure 18

Industry Headwinds

In addition to asking about the most important drivers of opportunity (Figure 13) over the next five years, we asked the survey participants their view on the industry headwinds or challenges (Figure 19) their segments would face. In the chart below, the participants were able to select their top three choices. Like the Tailwinds question, survey participants were asked follow-on questions to gain additional detail into specific Headwinds choices. For the past three years, talent shortages has been the top or second greatest challenge long-term. This year it returns to the top spot (more on this on page 25).

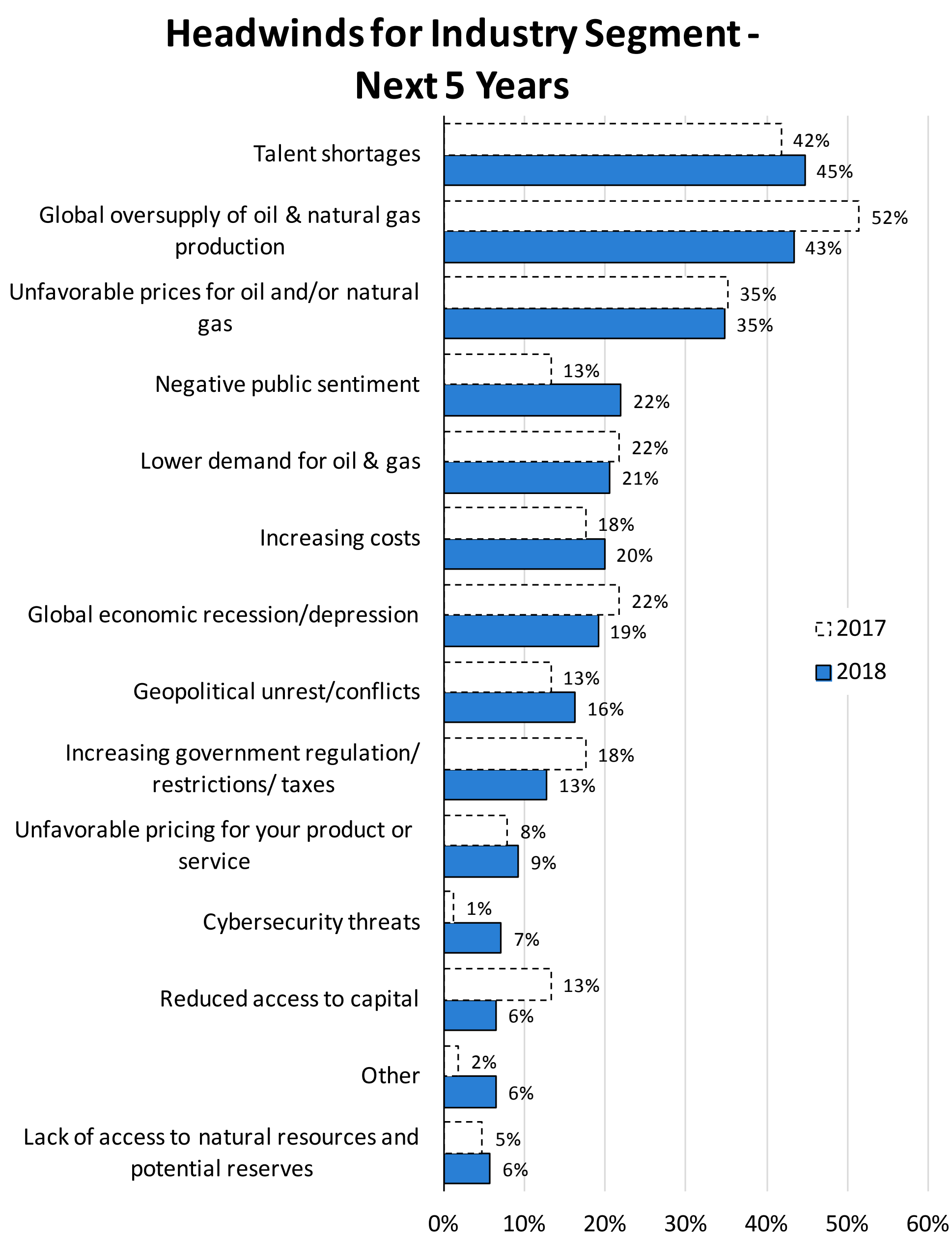


Figure 19

The fourth most often cited headwind was listed as increasing negative public sentiment, rising from the 8th position in last year's survey. Figure 20 gives additional detail into this issue. Survey participants were allowed to select their top three factors. General concerns over climate change is expected to be the biggest factor in increasing negative public sentiment.

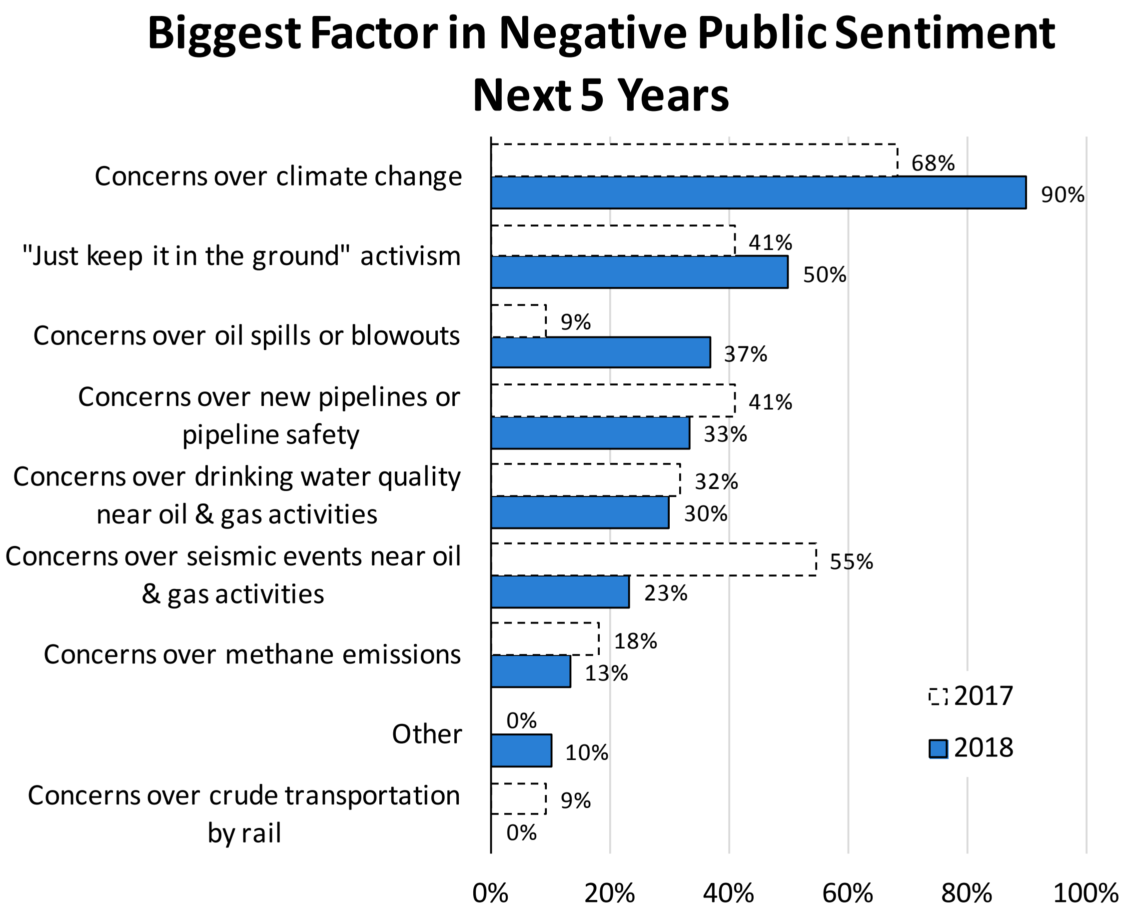


Figure 20

When asked for more detail on what would lead to lower demand for oil & gas (#5 in Figure 19), the following was cited (Figure 21). In a change from last year's survey, the greatest factor in longer-term lower oil & gas demand will come from competition from alternative energy. Electric vehicles are not seen as having a significant impact on oil & gas demand over the next five years.

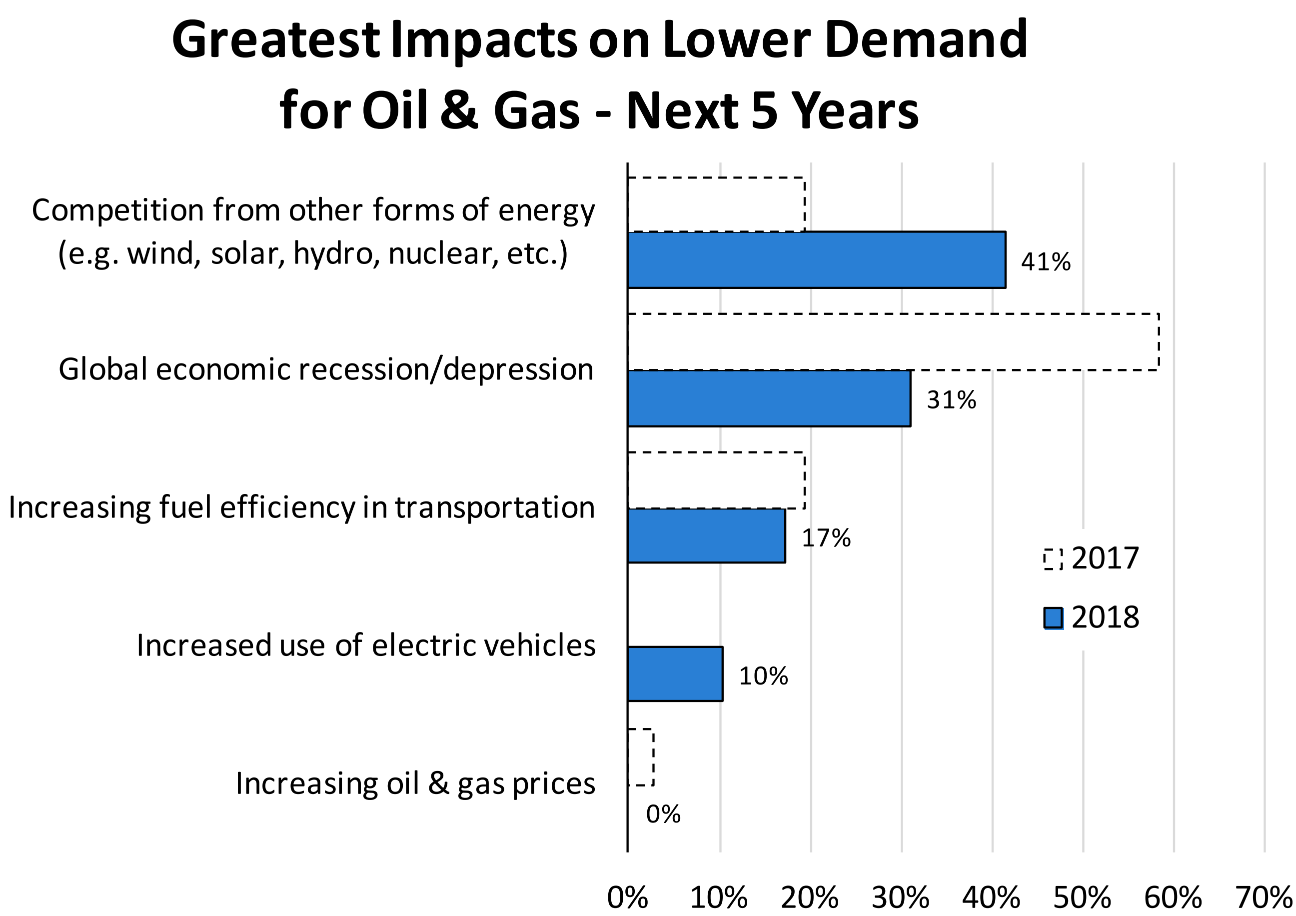


Figure 21

The sixth most cited headwind was increasing costs over the next five years. Figure 22 gives additional detail on this issue. The top two factors driving increases in costs are: increased costs for purchased equipment and/or services, and increased labor costs.

If we look at the responses in Figure 15 together with Figure 22, it appears that the deep price discounting by suppliers of equipment and services over the last few years will be less common going forward. Also, the factor of increased labor costs (below) is consistent with talent shortages being cited as a top challenge in Figure 19.

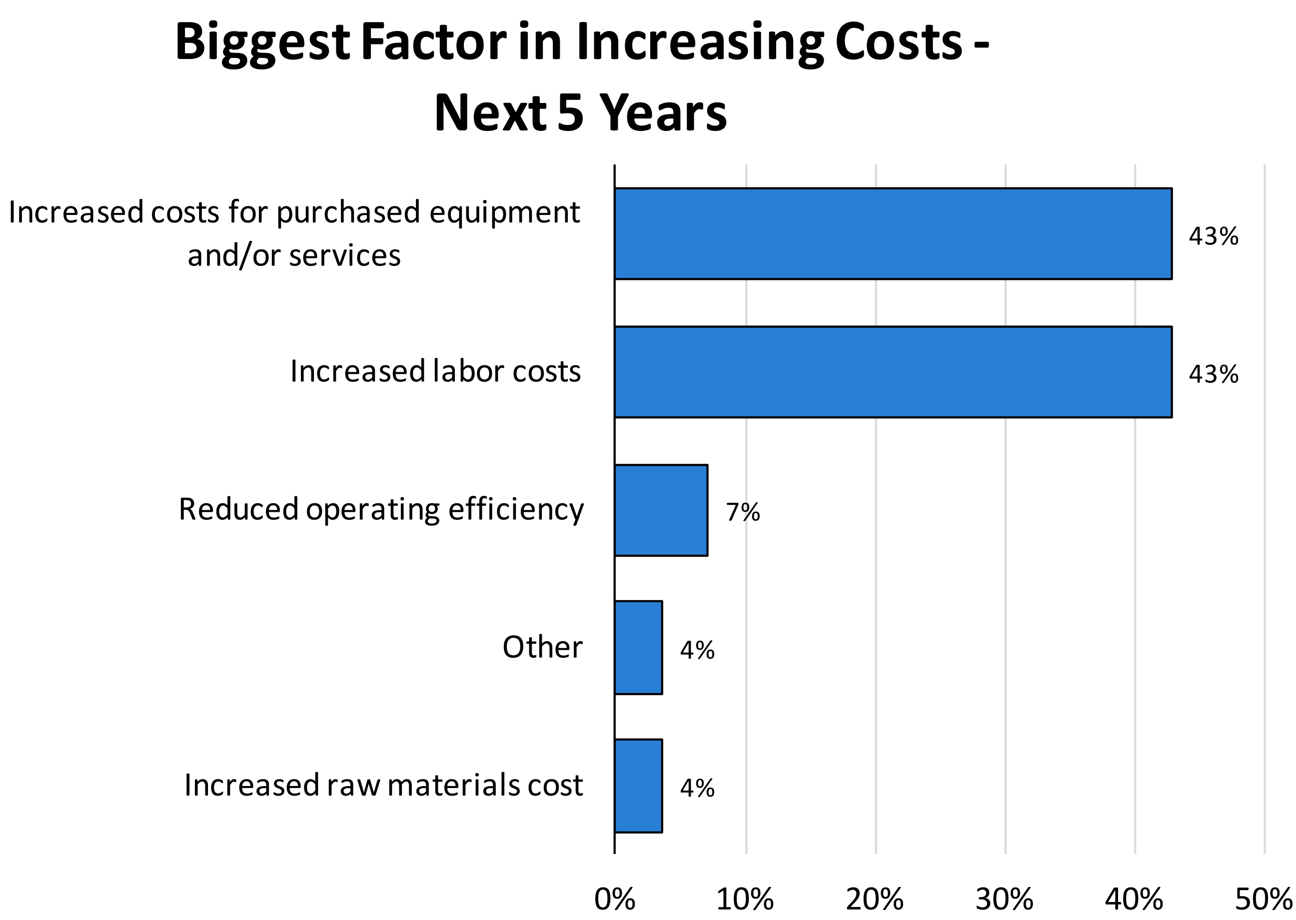


Figure 22

Talent-Related Issues

The survey participants were asked to identify the top talent-related challenges that they expect their industry segment to experience over the next five years (Figure 24). For the fourth year in a row, the most significant talent issue cited is the "Great Crew Change" – the retirement of key personnel that has already happened or will happen in the near future. The second greatest talent-related challenge is the industry's attractiveness to new entrants. The third greatest talent-related issue is expected to be employee retention.

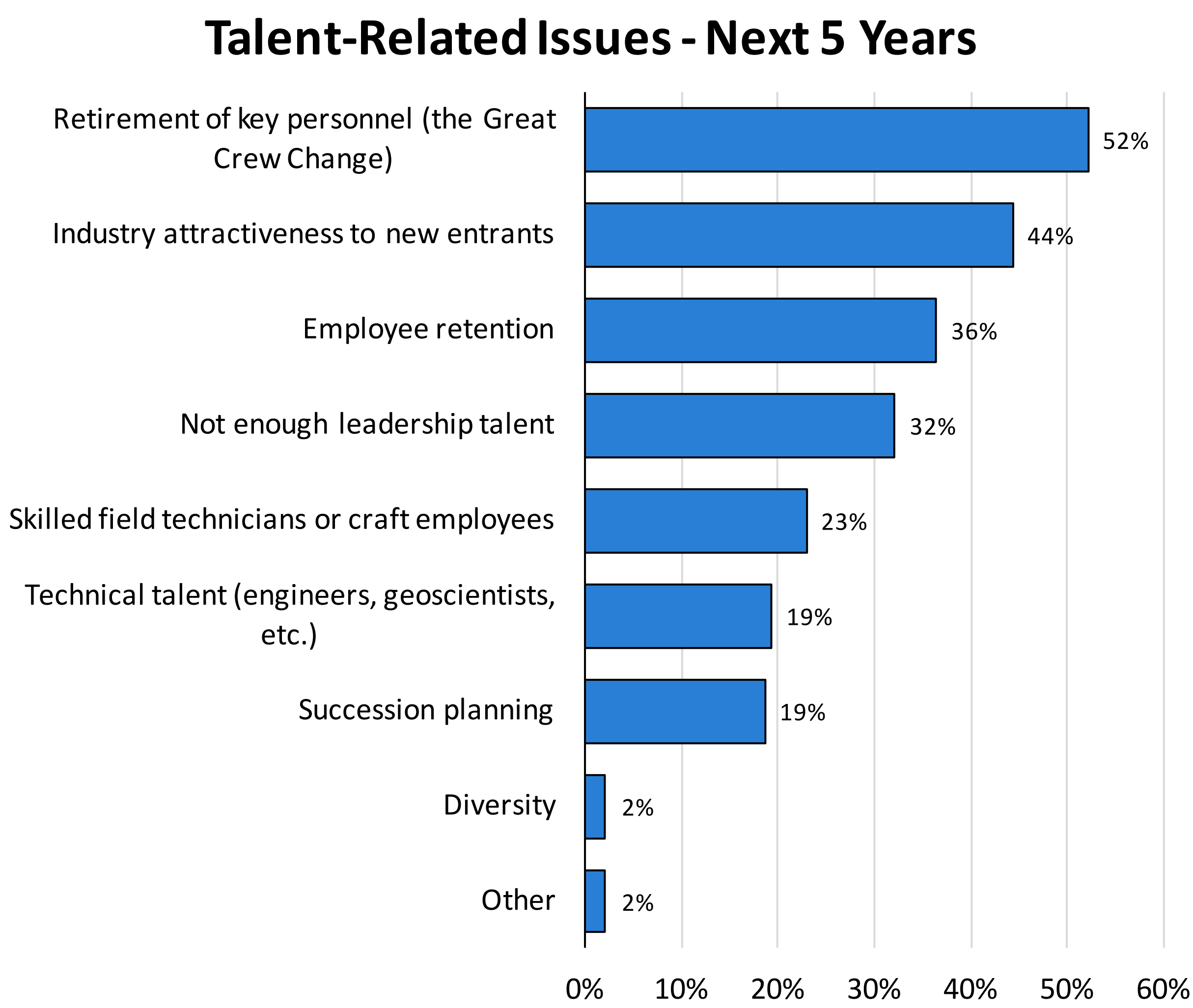


Figure 24

About The Survey

This survey was conducted from November 6 to 17, 2017. Of the participants, 67 percent are at the Board, C-level (CEO, CFO, etc.) or VP level (Figure 25). Most of the participants represent the upstream side of the industry with the rest distributed amongst the many other segments. About 66 percent of the executives' companies are headquartered in the U.S. (Figure 26) and 76 percent of the survey participants reside in the U.S. (Figure 27).

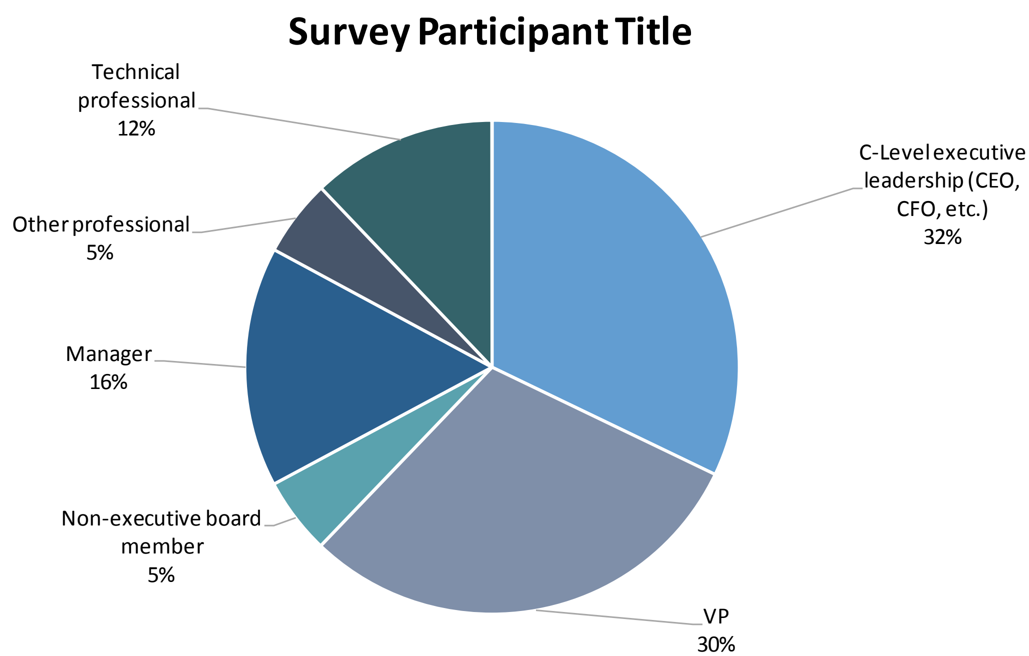


Figure 25

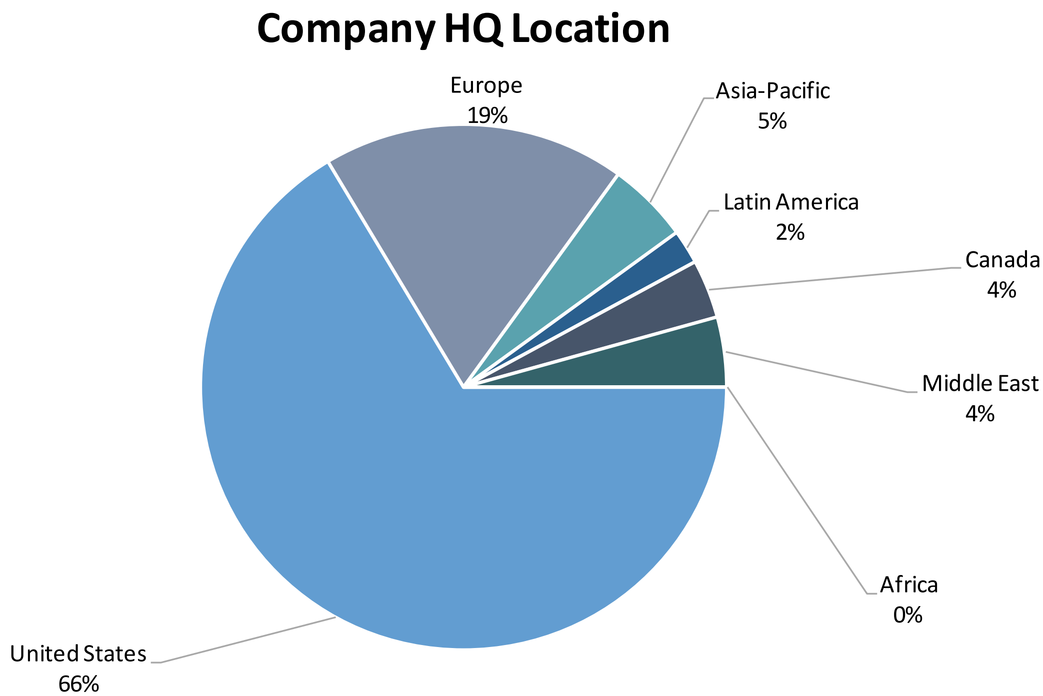


Figure 26

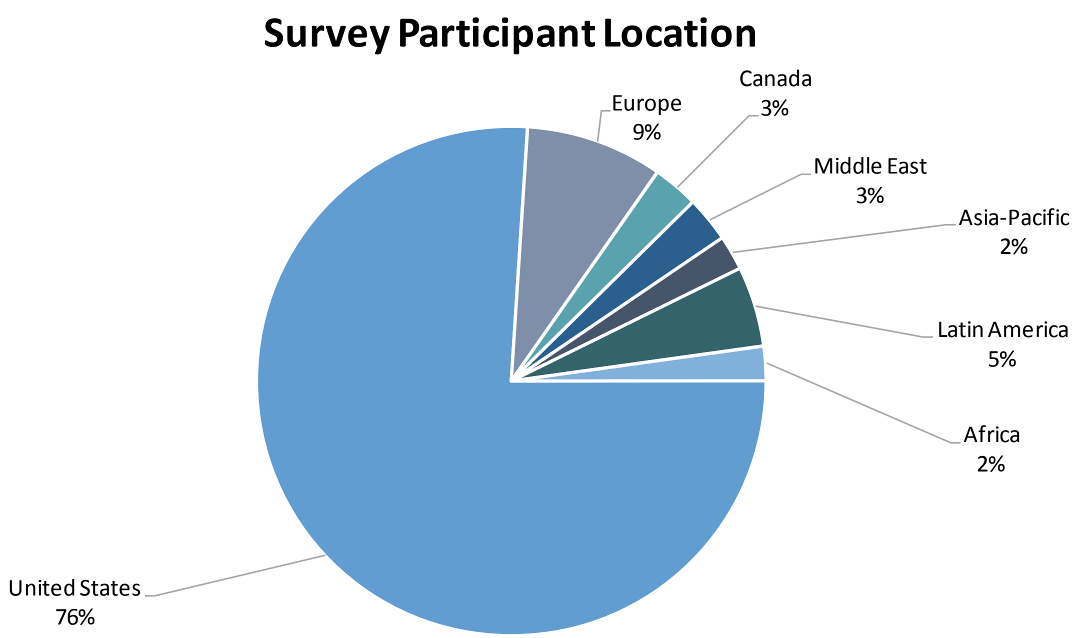


Figure 27

About Reinsvold & Associates

Reinsvold & Associates, LLC is a privately-owned executive search and strategic consulting firm. Our consultants deliver custom solutions, focusing on the critical issues and executive searches that matter most to our clients. We are trusted advisers to boards, CEOs and senior leaders of companies small and large, public and private, family owned, domestic and international. We view every strategic consulting engagement and executive search project as an opportunity to add significant value to the organizations and individuals we serve. Reinsvold & Associates is headquartered in the Houston, TX area, but we deliver projects for clients around the globe.

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