2019

SERVICE & SUPPLY SURVEY OUTLOOK REPORT

More hard times ahead, say industry leaders

Daily Oil Bulletin

INTRODUCTION

More hard times ahead, says survey respondents

Last year was a disappointing one for the Canadian oilfield service industry as a whole, and 2019 will be even worse based on results of the 2019 Daily Oil Bulletin Service & Supply Outlook Survey. The 120 companies that responded to the survey expected the good times to continue to roll in 2018, after a solid rebound in 2017, but weaker than expected oil and gas prices resulted in less capital spending and field activity than forecast.

Although a slight majority of companies reported increased revenues in 2018, two-thirds of respondents from last year's survey were expecting higher revenues for the year. The situation was even worse for profit margins, with roughly a third of respondents reporting an increase last year, after almost two-thirds had expected a rise for the year.

Looking forward, service companies as a whole are relatively pessimistic about revenue growth in 2019, compared to last year's performance, but more optimistic about profit margins. This dichotomy is somewhat surprising given the weakened state of the western Canadian oilpatch and oilfield service companies having already cut their costs to the bone during the extended downturn.

The oilfield service industry is relatively optimistic about prices for their products and/or services in 2019, especially compared to their expectations for day rates, but the number of companies expecting a price increase is equal to those predicting a decline, at 27 per cent.

On the other hand, oilfield service companies appear to be running out of places to cut costs. Total costs increased for the majority of companies in 2018, despite business activity being fairly weak and companies adding less permanent and contract employees on a net basis than in 2017. When asked to select their top method to control costs in 2019, the rationalization of their services and/or products was the most common response at 43 per cent.

Ominously, responses to a number of additional questions suggest the oilfield services industry and/or the western Canadian oilpatch are coming under increasing financial stress. Cash flow may continue to be king for the service industry as a whole, but almost a third of companies said equity, debt or a combination of the two would be their primary source of capital this year.

Cost reductions dropped substantially as a means of managing cash flow in 2018 compared to the year before, while the biggest gainer was aggressively pursuing overdue account receivables. Survey respondents said the three most common ways customers attempted to squeeze them last year were by delaying invoice payments, requesting price concessions under 30 per cent, and cancelling or delaying existing orders.

Despite three-quarters of Canadian oilfield services companies believing rapid technological innovation will fundamentally disrupt the way they do business over the next five years, the proportion of companies with no plans for new innovation projects more than doubled to 17 per cent between this survey and the last.

I. Service companies expect tough financial conditions to continue in 2019

After a turnaround in 2017, many survey respondents reported downturns in revenues in 2018. A significant minority of respondents expects this trend to continue in 2019. Access to capital is expected to remain tight, with most operators relying on cash flow to fund operations.

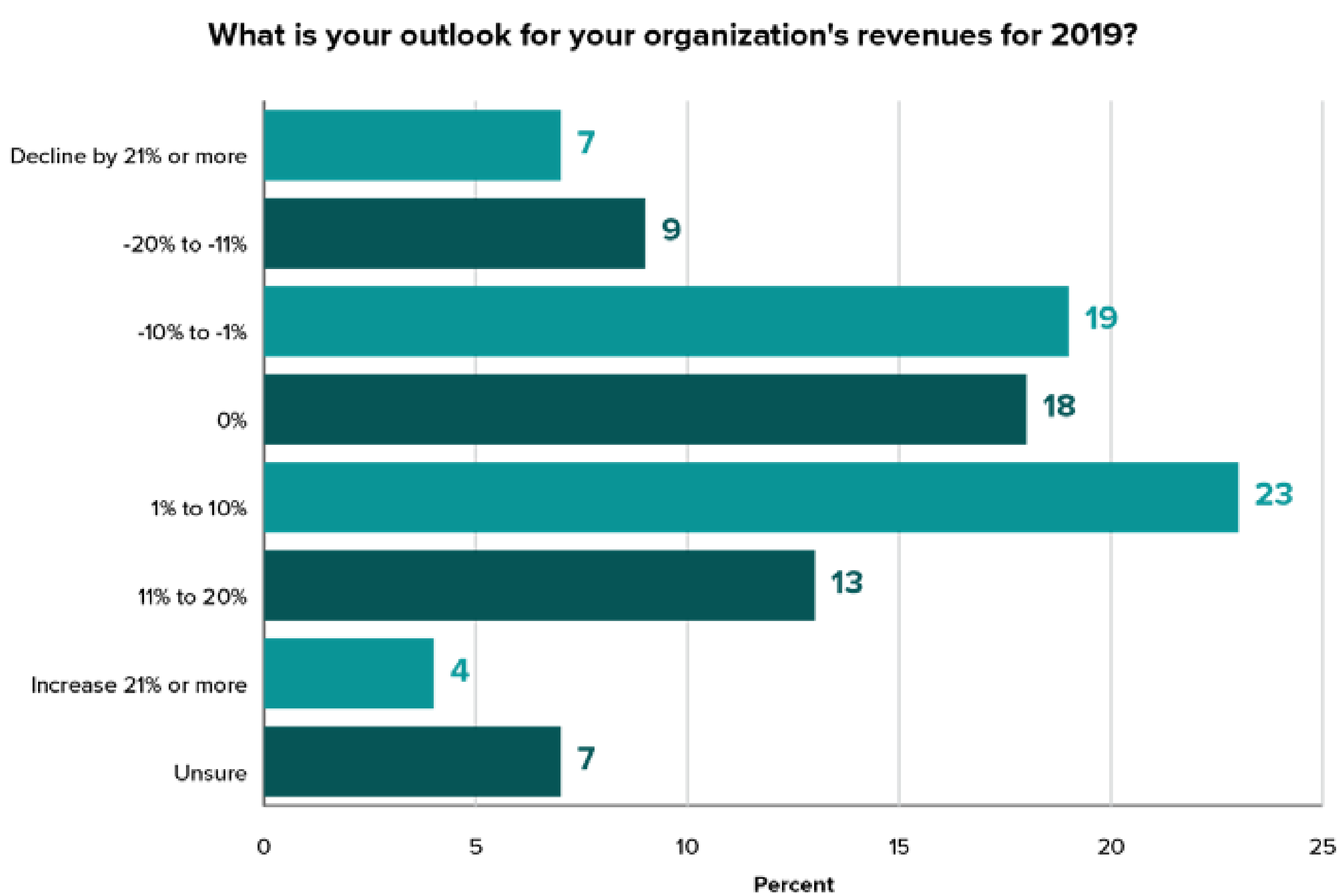
Decline in revenues predicted by over one-third of survey respondents

Oilfield service companies reported a rebound in revenues in 2017 after a disastrous 2016, as increases in oil prices and capital investment resulted in a significant bump in field activity. Sixty-one per cent of survey respondents reported a rise in revenue in 2017, with two-thirds of those seeing increases of greater than 10 per cent. Roughly a quarter reported declines in revenue.

The relatively good times were expected to continue to roll in 2018, with two-thirds of respondents to last year's survey expecting higher revenues, but then the wheels fell off Western Canada's crude wagon. Large price differentials for regional crude, especially in the second half of the year, along with continuing large price discounts for the region's natural gas, increasingly weighed on industry activity.

As a result, only 53 per cent of survey respondents saw an increase in revenue in 2018, with more than half of that gain limited to 10 per cent or less, and 37 per cent suffered revenue declines.

Looking forward, service companies are relatively pessimistic about revenues in 2019, which should not be a great surprise given curtailment of Alberta crude and low, volatile regional gas prices. Only 40 per cent of survey respondents are expecting revenues to increase in 2019, while 35 per cent anticipate declines.

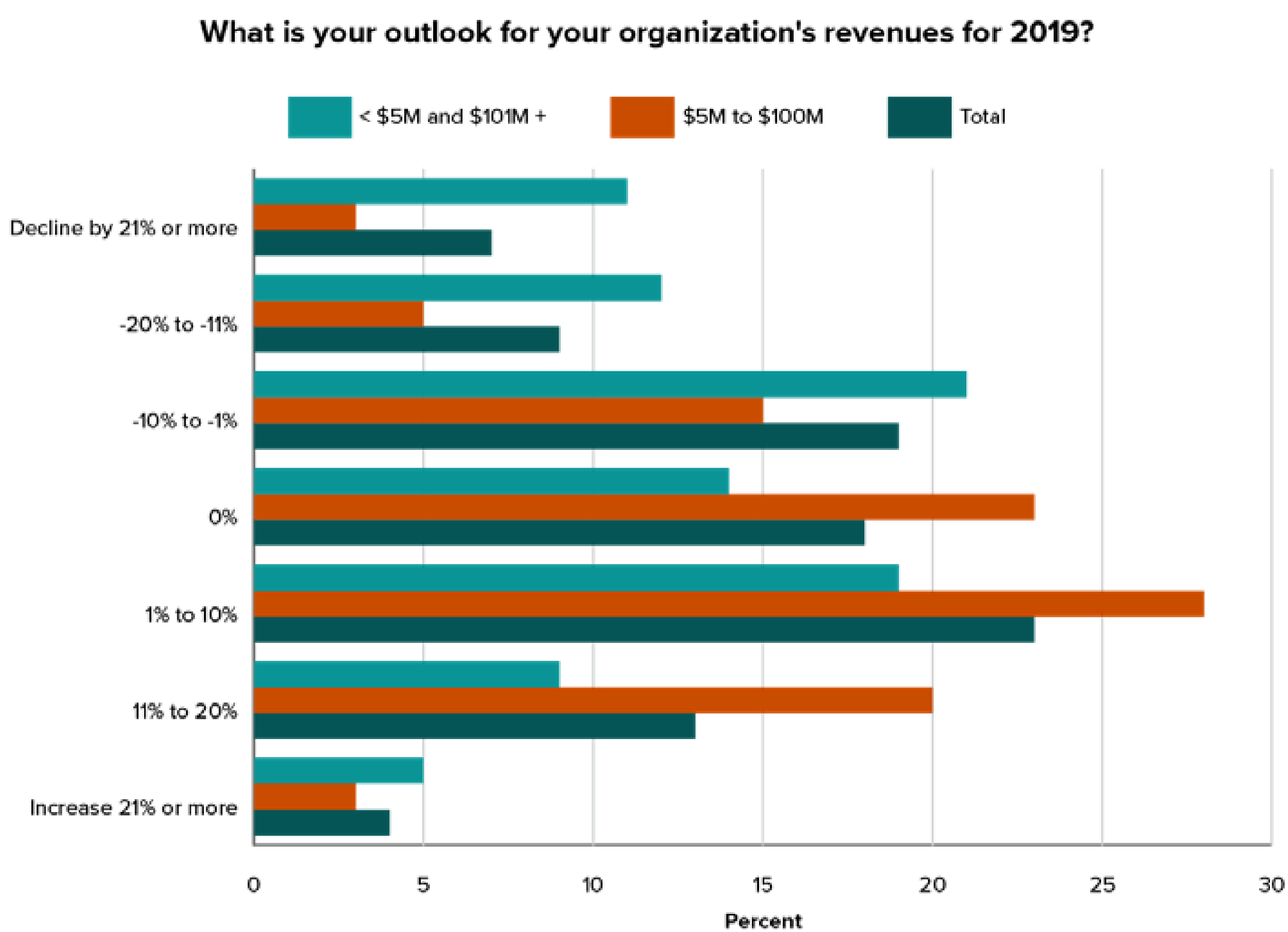


Big service providers, Mom & Pop shops, hardest hit by revenue decline

2018 was a fairly disappointing year for many Canadian oilfield service companies – after a rebound year in 2017 – especially for small ones based on revenue (less than $5 million) and large ones (greater than $100 million). Only 44 per cent of them saw an increase in revenue in 2018, the same number that reported declines. In contrast, almost two-thirds of respondents from mid-revenue companies reported a revenue rise, and only 28 per cent saw declines.

At the same time, small and large companies were much more likely to suffer a relatively large revenue drop last year, with a third of them reporting declines greater than 10 per cent, compared to only 5 per cent of mid-revenue companies. Small and large companies were the only ones to see declines greater than 20 per cent.

Looking forward, service companies as a whole are relatively pessimistic about revenues in 2019. But this pessimism is driven by small and large companies, with 44 per cent of them expecting declining revenue, 11-percentage points more than anticipate a rise. In contrast, 50 per cent of mid-revenue companies are predicting revenue growth in 2019, over twice as many that expect a decline.



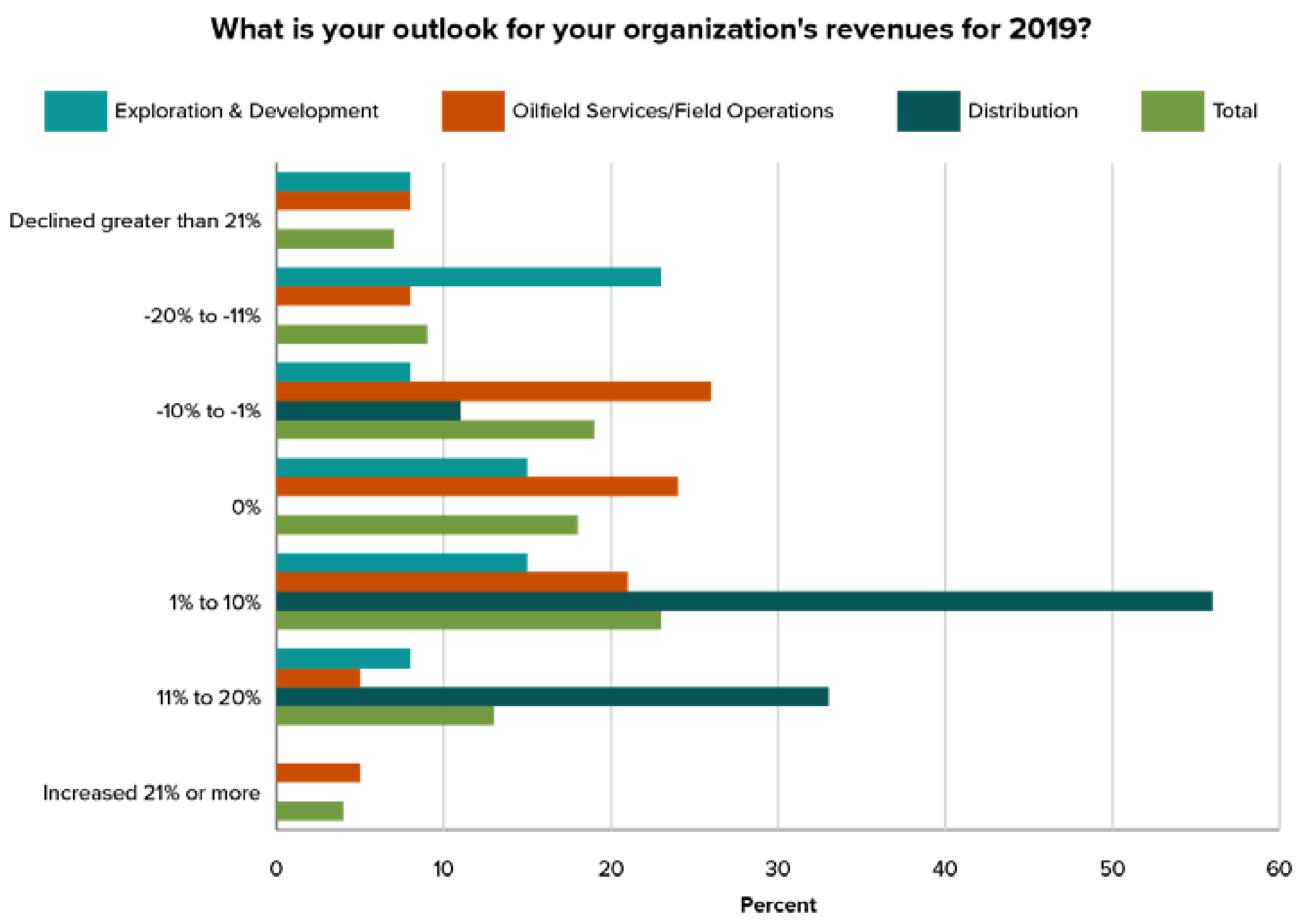
Exploration and development sector most pessimistic about 2019

The Canadian oilfield service industry may have had a fairly disappointing year in 2018 on the revenue front, but some sub-sectors performed significantly better than others.

The worst performing sub-sector last year was exploration and development with only 38 per cent of companies reporting a rise in revenues, compared to 77 per cent of companies focused on transportation, the best of all sub-sectors. Results for the oilfield services/field operations were indicative of the industry as a whole, with 47 per cent reporting increases in revenue and 39 per cent declines.

Looking forward, companies focused primarily on exploration and development and oilfield services/ field operations are among the more pessimistic about revenue in 2019, whereas those specializing on distribution are the most optimistic.

Twenty-three per cent of survey respondents from the exploration and development sub-sector are expecting an increase in revenue this year along with 32 per cent of those specializing in oilfield services/ field operations. In contrast, 89 per cent of companies in the distribution sub-sector expect a revenue rise, but none greater than 20 per cent.

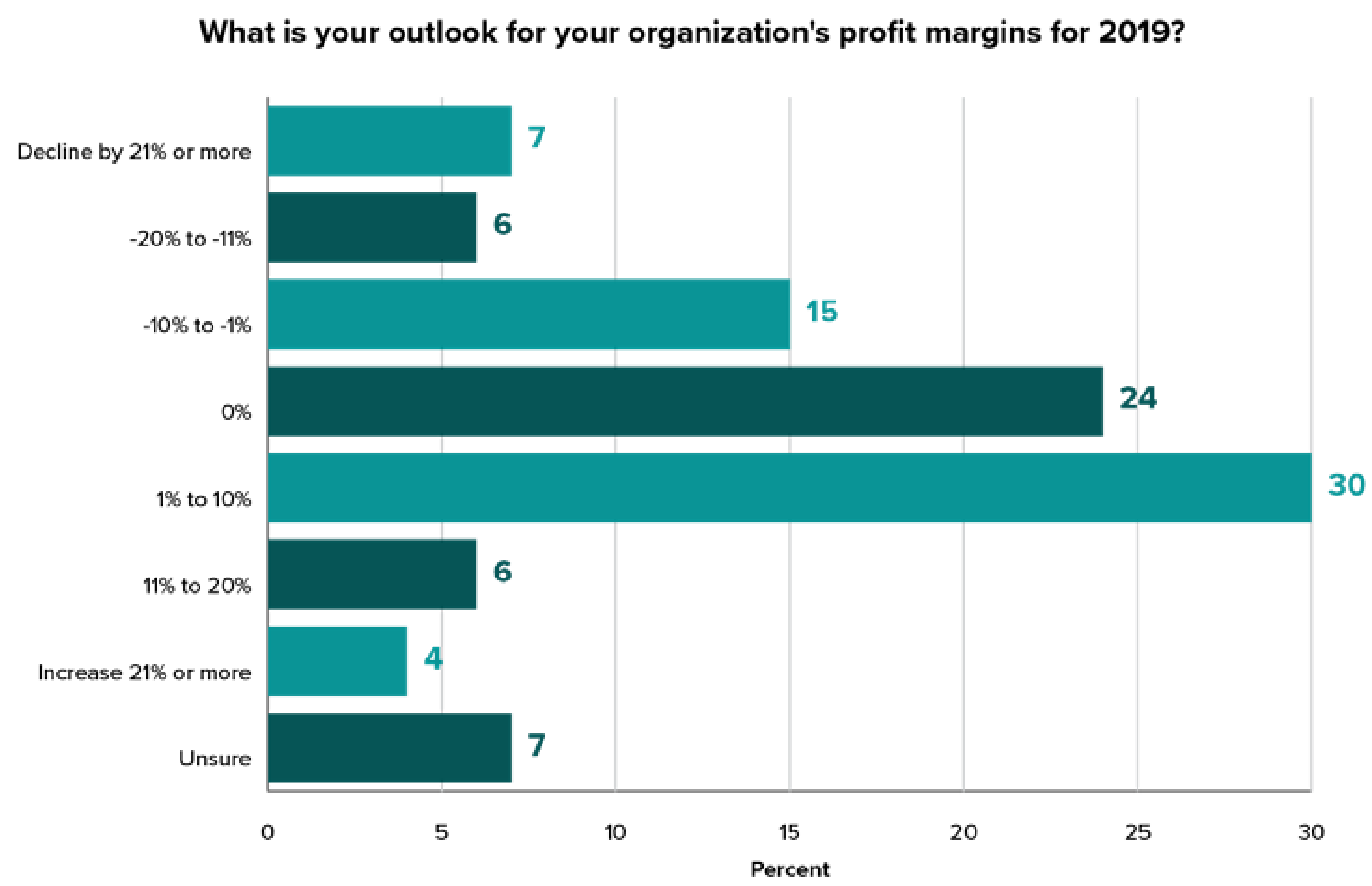


Profit margins fall back to earth in 2018, but optimism for improvement in 2019

Oilfield service company profit margins were not able to withstand relative weakness in revenue growth in 2018, especially as service companies had already squeezed their costs hard over the previous three years. After a nice blip higher in 2017, profit margins unexpectedly fell back to earth last year.

In 2017, 43 per cent of survey respondents reported an increase in profit margins, compared to 28 per cent reporting a decline, with almost two-thirds of the risers in the up to 10 per cent range.

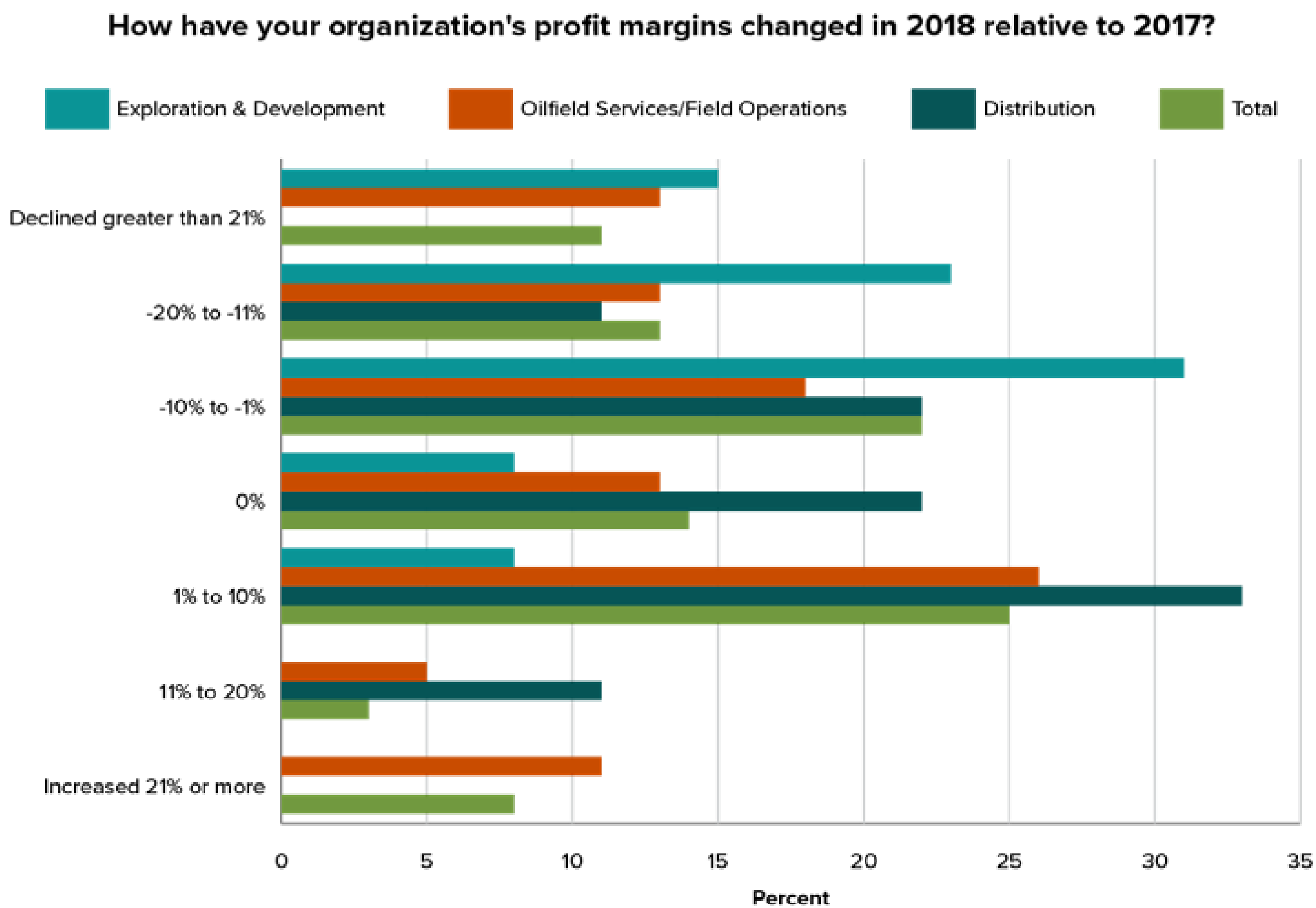
Sixty-three per cent of companies had expected profit margins to rise in 2018, and a mere 10 per cent



a decline. In fact, in the most recent survey, only 36 per cent of respondents reported an increase in profit margin last year, and 46 per cent a drop.

On the whole, service companies are more optimistic about profit margins in 2019 than their performance last year, but few see potential for a large increase.

Forty per cent expect profit margins to rise this year, and 28 per cent foresee a decline.

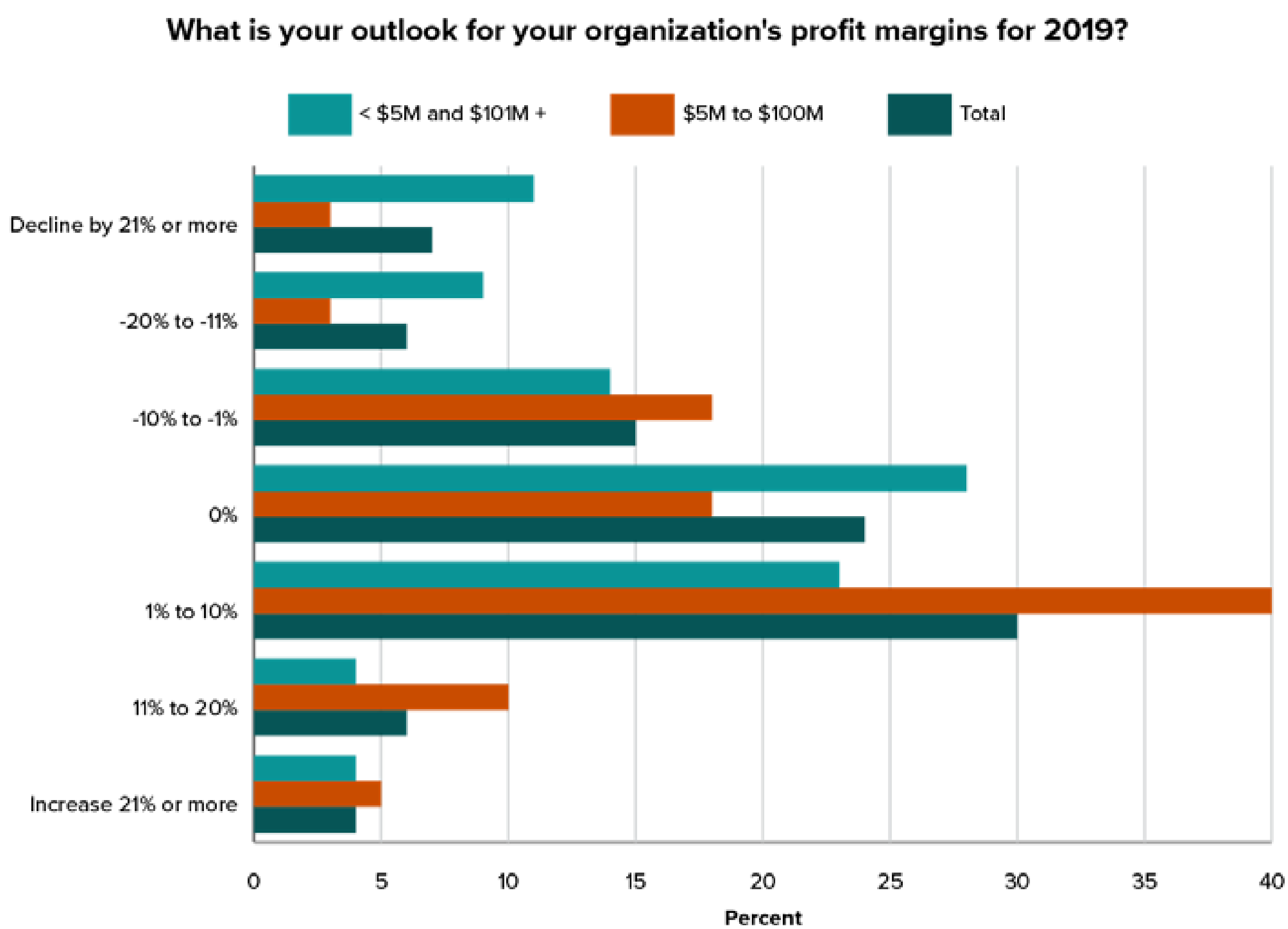


Large service providers take biggest hit

Profit margins fell back to earth in 2018, along with revenue, with larger service companies (greater than $20 million revenue) leading the decline. Larger companies were twice as likely to report a decline in profit margins last year than a rise, 29 per cent versus 58 per cent, respectively.

Service companies as a whole are more optimistic about profit margins in 2019 than their performance last year, but this is driven by mid-revenue companies ($5 million to $100 million). Fifty-five per cent of respondents from these companies expect profit margins to rise, compared to 23 per cent foreseeing a decline.

In contrast, only 30 per cent of respondents from small and large companies expect a rise in profit margins this year, while a third expect a decline. And these companies are much more likely to expect larger declines in profits, with almost a fifth expecting a drop greater than 10 per cent, compared to 5 per cent for mid-size companies.

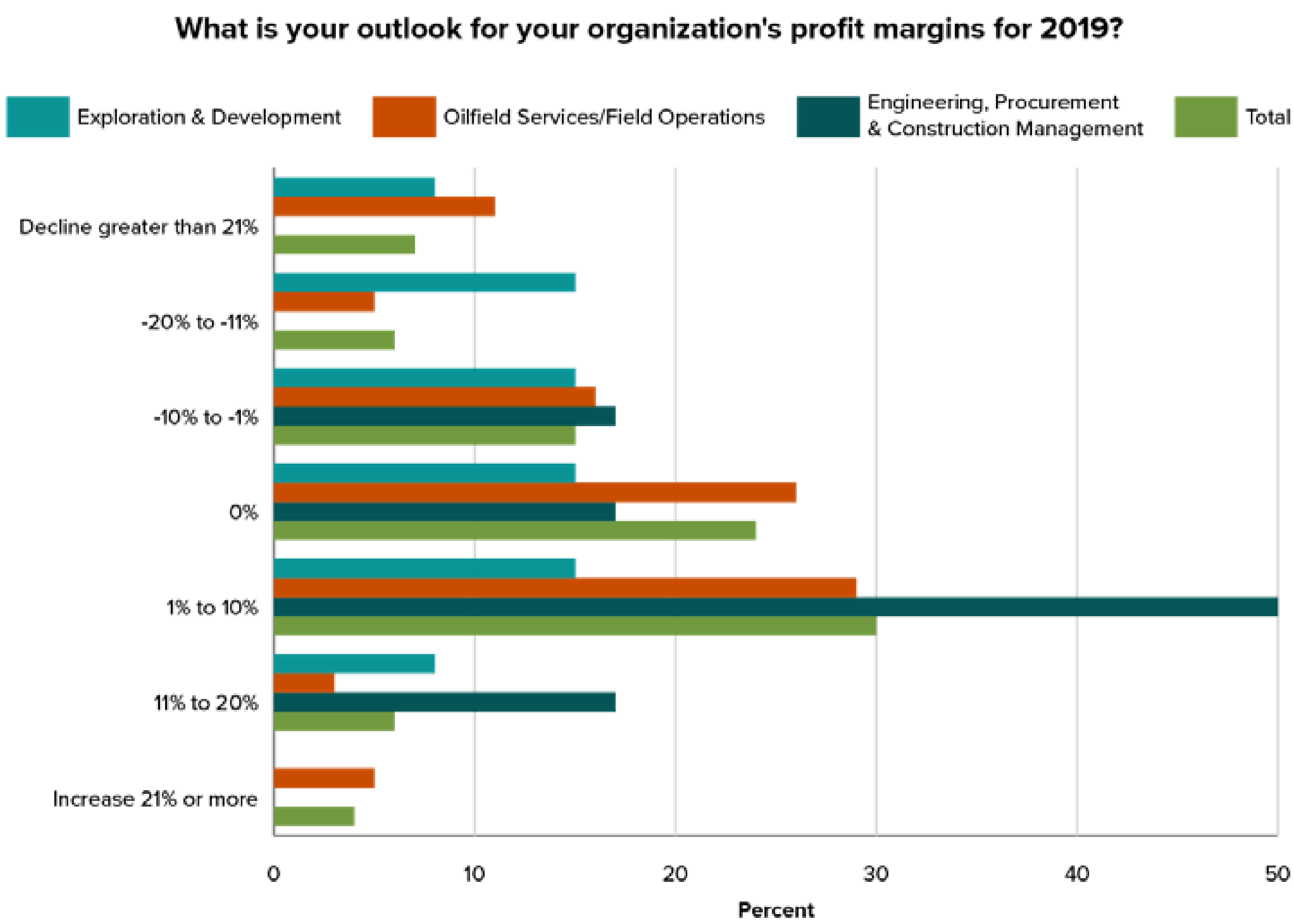


Profit margins decline most in E&D focused service providers

The performance of profit margins and revenue tended to be closely aligned in 2018 for the service industry as a whole and for individual sub-sectors. The exploration and development sub-sector was the hardest hit in terms of profit margins, companies specializing on distribution the top performer, while the oilfield services/field operations sub-sector again came in near the industry norm.

A mere 8 per cent of companies focusing on exploration and development reported an increase in profit margins in 2018, compared to 44 per cent for the distribution sub-sector, and 42 per cent for oilfield services/field operation. Declines in profit margins differentiated the distribution and oilfield services/field operation sub-sectors, at 33 per cent and 45 per cent, respectively.

The service industry and individual sub-sectors are relatively optimistic about profit margins in 2019 compared to their performance last year, with engineering, procurement and construction management the most optimistic with 67 per cent expecting a rise. In contrast, only 23 per cent of companies in the exploration and development sub-sector expect an increase in profit margins this year, and 37 per cent focusing on oilfield services/field operations expect an increase.



Cash flow is king when it comes to covering costs

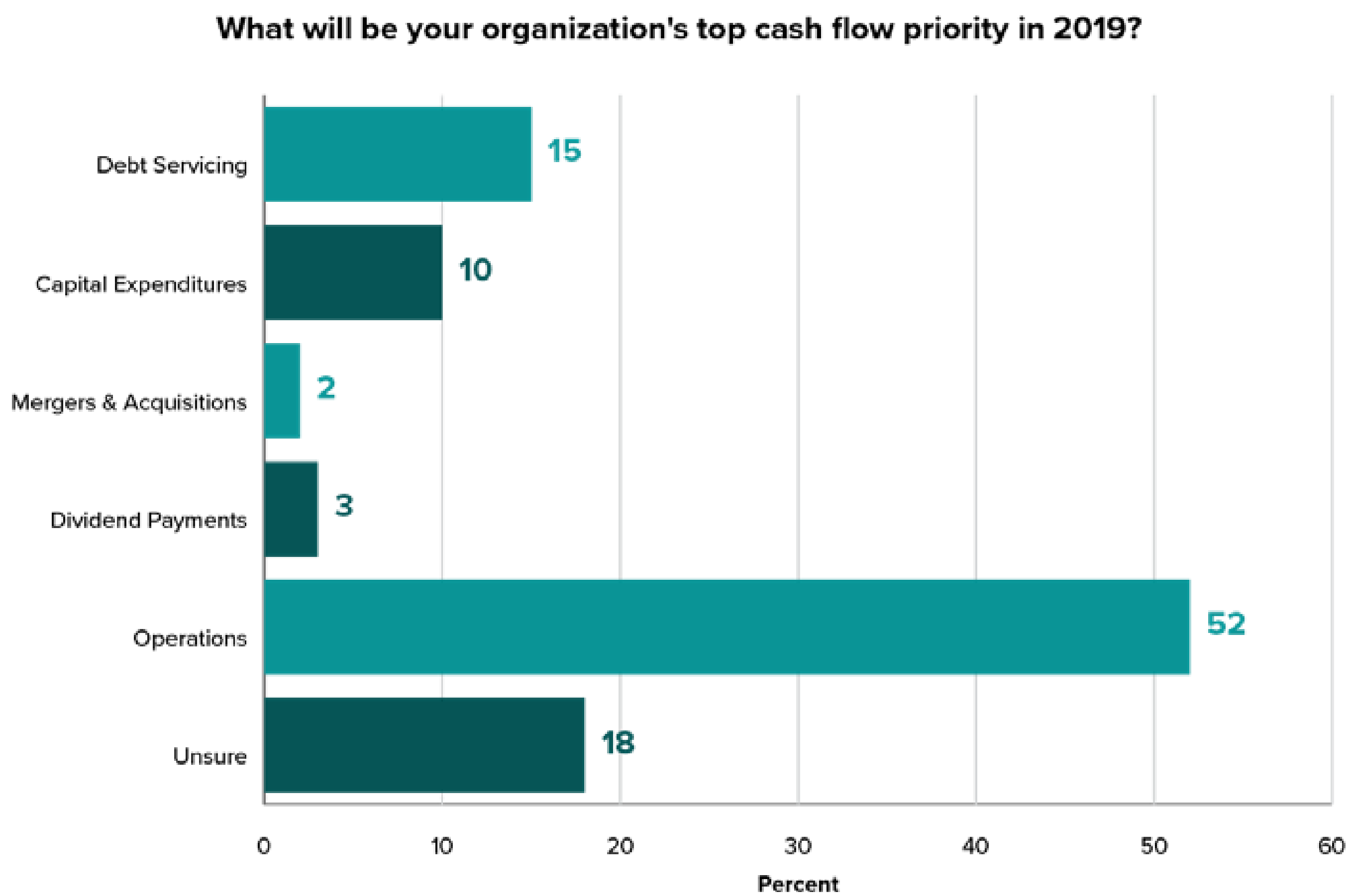
In an extremely difficult operating environment cash flow will continue to be king for oilfield service companies in 2019, as 59 per cent of survey respondents indicated it would be their primary source of capital.

In total, 32 per cent of companies said they were planning to rely on equity, debt or a combination of the two as their primary source of capital this year. Equity and debt came in at 8 per cent each, while 15 per cent expect the combination of the two to dominate.

On the whole, equity is an unattractive option due to generally poor stock prices, while companies are trying to avoid taking on additional debt to avoid becoming takeover targets or becoming insolvent.

The increasing risk aversion of service companies can also be seen where they plan to obtain their capital in 2019 compared to last year. Twenty-three per cent are to seek funding from private capital and 15 per cent are planning to borrow from major financial institutions, for declines of 3 percentage points each from last year's survey. Only 7 per cent of respondents are planning to use capital markets as a funding source, half as many as 2018.

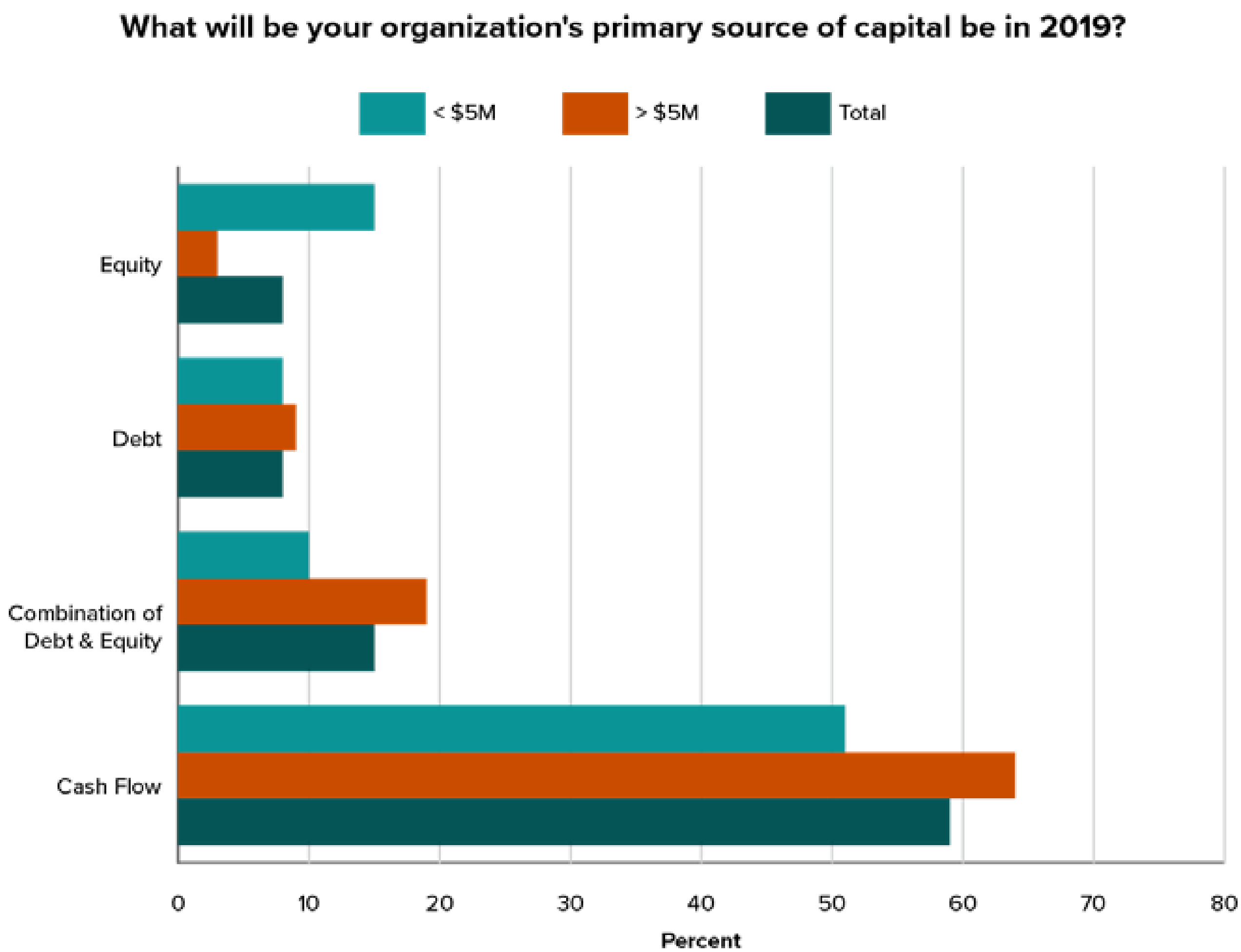
At the same time, 7 per cent of companies are planning to rely on economic development organizations for funding in 2019, an increase of 3 percentage points from last year, and 54 per cent are to lean on free cash flow – a 7 point rise.



Small companies challenged to survive on cash flow

Cash flow may continue to be the main source of capital for oilfield service companies in 2019, but this is much less the case for small companies (less than $5 million revenue) than larger ones – a half versus almost two-thirds, respectively.

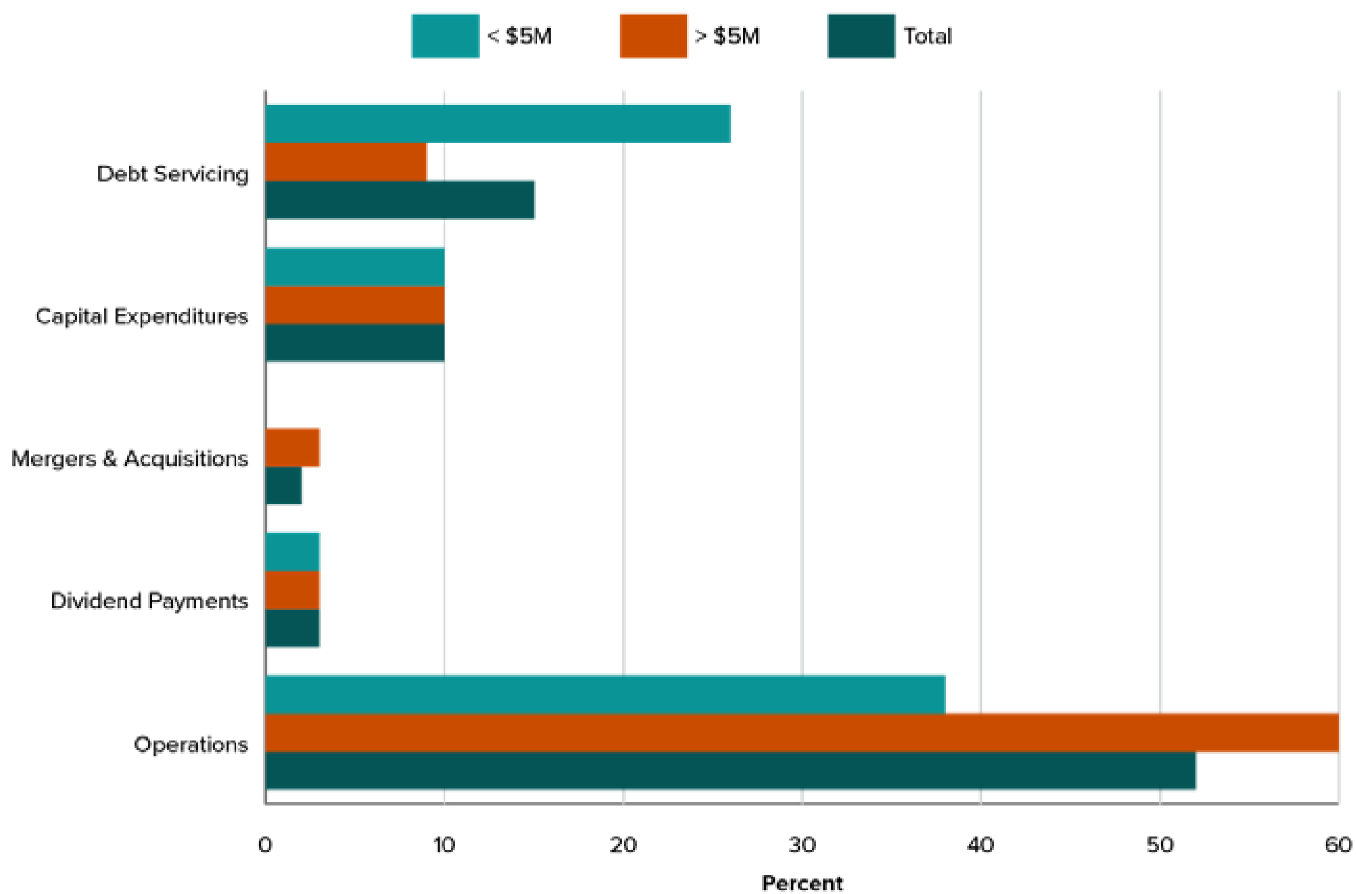
A potential sign of financial distress among small companies is the fact 15 per cent said the issuance of equity would be their primary source of capital this year, five times more than larger companies, despite generally poor stock prices at the present time.



The divergence in cash flow priorities for 2019 between small service companies (less than $5 million revenue) and larger ones also appears to reflect their relative financial strength. Sixty per cent of respondents from larger companies ranked operations as their top cash flow priority, whereas only 38 per cent of respondents from small companies did the same.

On the flip side, 26 per cent of small companies said debt servicing would be their number one cash flow priority this year, almost three times more than larger companies.

What will be your organization's top cash flow priority in 2019?



Companies report there is little left to cut to manage cash flow

Cost reductions dropped substantially as a means of managing cash flow for service companies in 2018, with companies already running lean after cuts in previous years. Non-employee related cost reductions may have been cited by the most survey respondents as one of their top approaches for managing cash flow, but at 45 per cent this represented a 14-percentage point decline compared to 2017. Employee related cost reductions saw even a bigger drop, 19 points to 25 per cent, falling from top ranking to fourth place in the process.

The biggest gainer for managing cash flow last year was aggressively pursuing overdue account receivables, an indirect sign of rising financial distress in the Western Canadian oil industry. Pursuit of overdue account receivables gained 20 points to 29 per cent to become the second most common approach, compared to a sixth place finish the year before.

The other two top five methods for managing cash flow – reducing inventory or selling assets and the delay or deferral of investment – were mentioned by 28 per cent and 21 per cent of respondents, respectively, 3 points less for each than 2017.

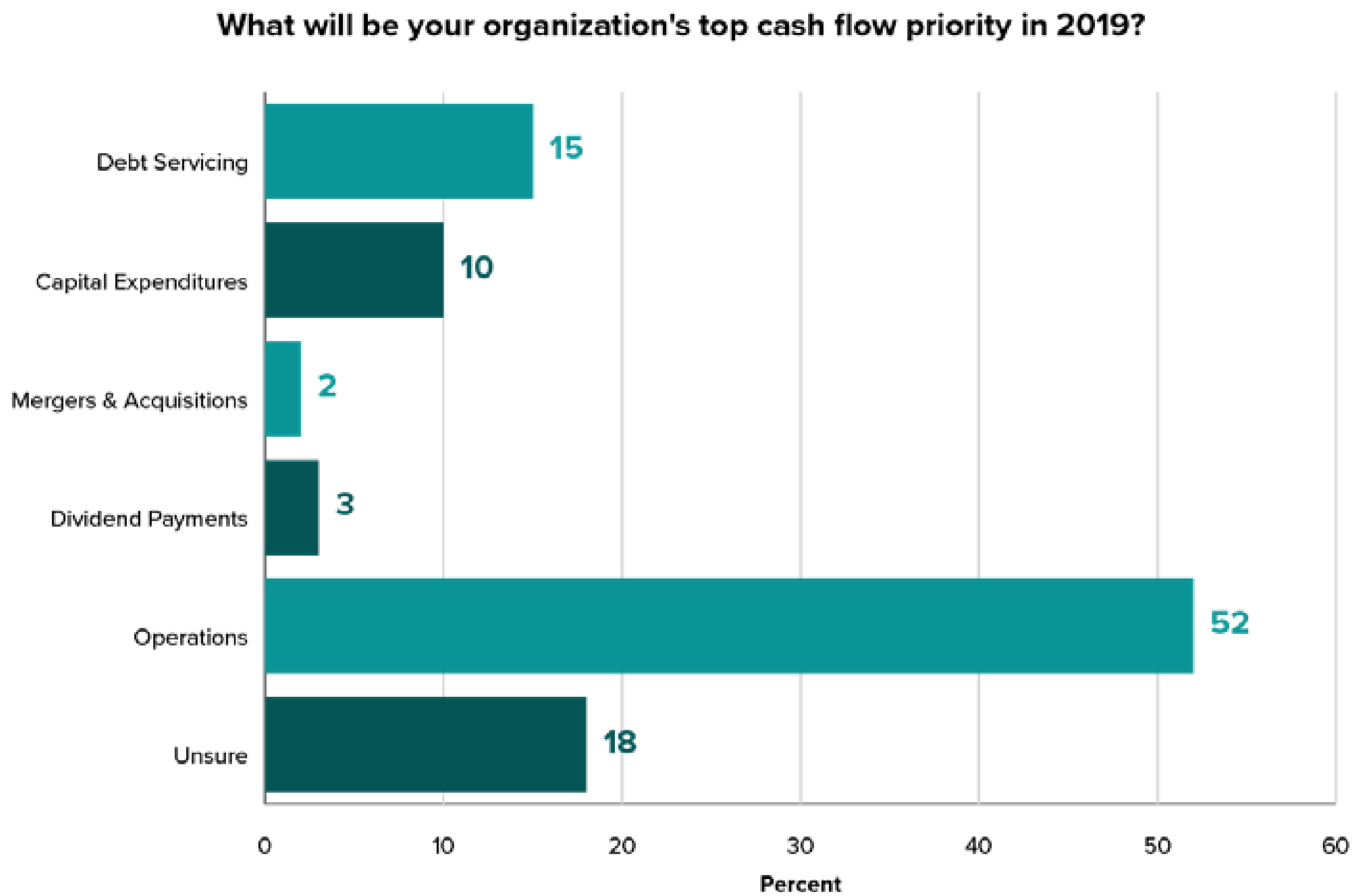
Cash Flow Priorities for 2019

How do oilfield service companies plan to spend their cash flow in 2019?

Fifty-two per cent ranked spending on operations as their top priority, an increase of 6-percentage points from 2018.

Fifteen per cent of respondents said debt servicing would be their top priority in 2019, compared to 12 per cent the year before.

A mere 2 per cent ranked spending on mergers or acquisitions as their top priority, a drop of 11 points from 2018.



Subsectors have different capital plans

Cash flow may continue to be the main source of capital in the oilfield service sector in 2019, but there is a great deal of divergence between different sub-sectors, possibly due to debt loads and relative financial health.

Forty-six per cent of companies specializing on exploration and development, the most battered of the sub-sectors, said cash flow would be their main source of capital in 2019, with equity coming at 23 per cent.

Cash flow is expected to be the least important source of capital for the transportation sub-sector, with 38 per cent of respondents saying it would be their primary source this year, compared to 15 per cent for equity.

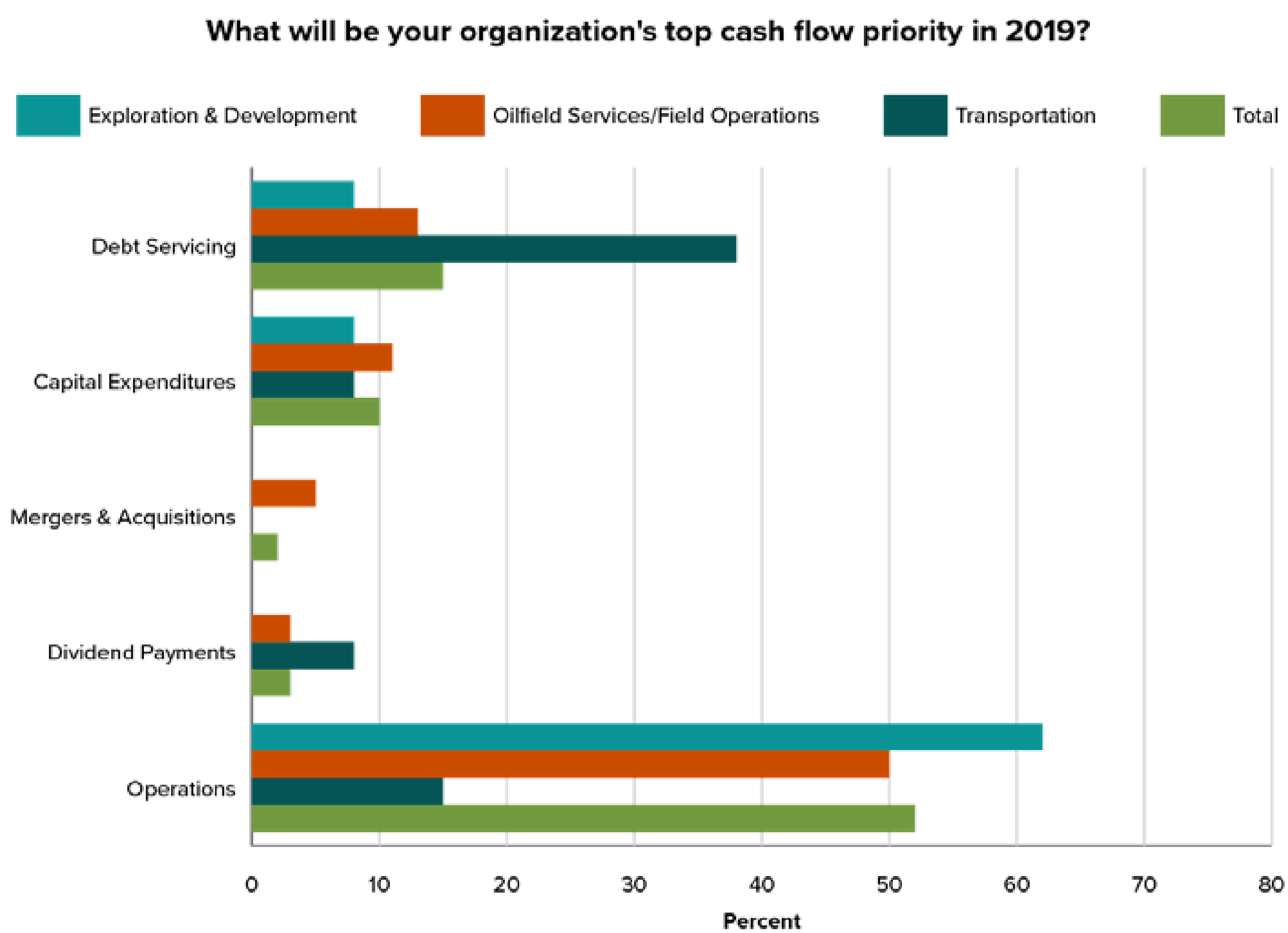
Companies specializing in oilfield services/field operations continue to be indicative of the industry as a whole, with 66 per cent of respondents saying cash flow would be their primary source of capital this year and a mere 3 per cent equity.

Differences in cash flow priorities for 2019 between companies from different sub-sectors may also reflect their relative debt loads and financial health.

Sixty-two per cent of respondents from the exploration and development sub-sector said operations would be their top cash flow priority this year, and only 8 per cent said debt servicing.

A modest 15 per cent of service companies focusing on transportation said operations would be their number one cash flow priority in 2019, compared to 38 per cent citing debt servicing.

Fifty per cent of respondents from the oilfield services/field operations sub-sector said operations would be their top priority this year, with only 13 per cent saying debt servicing, which again track the industry norm.

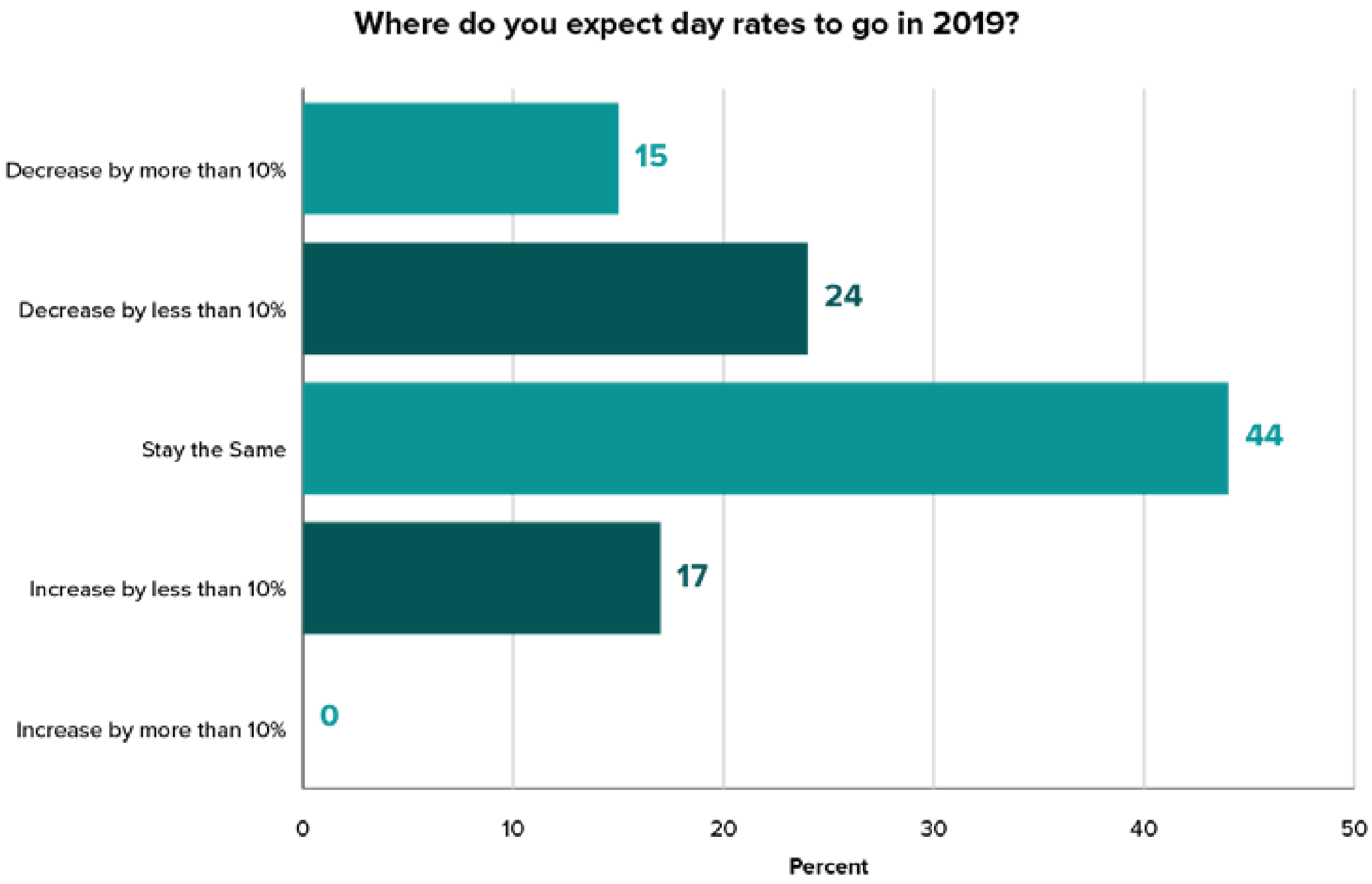


II. Market Conditions less favourable in 2019, say survey respondents

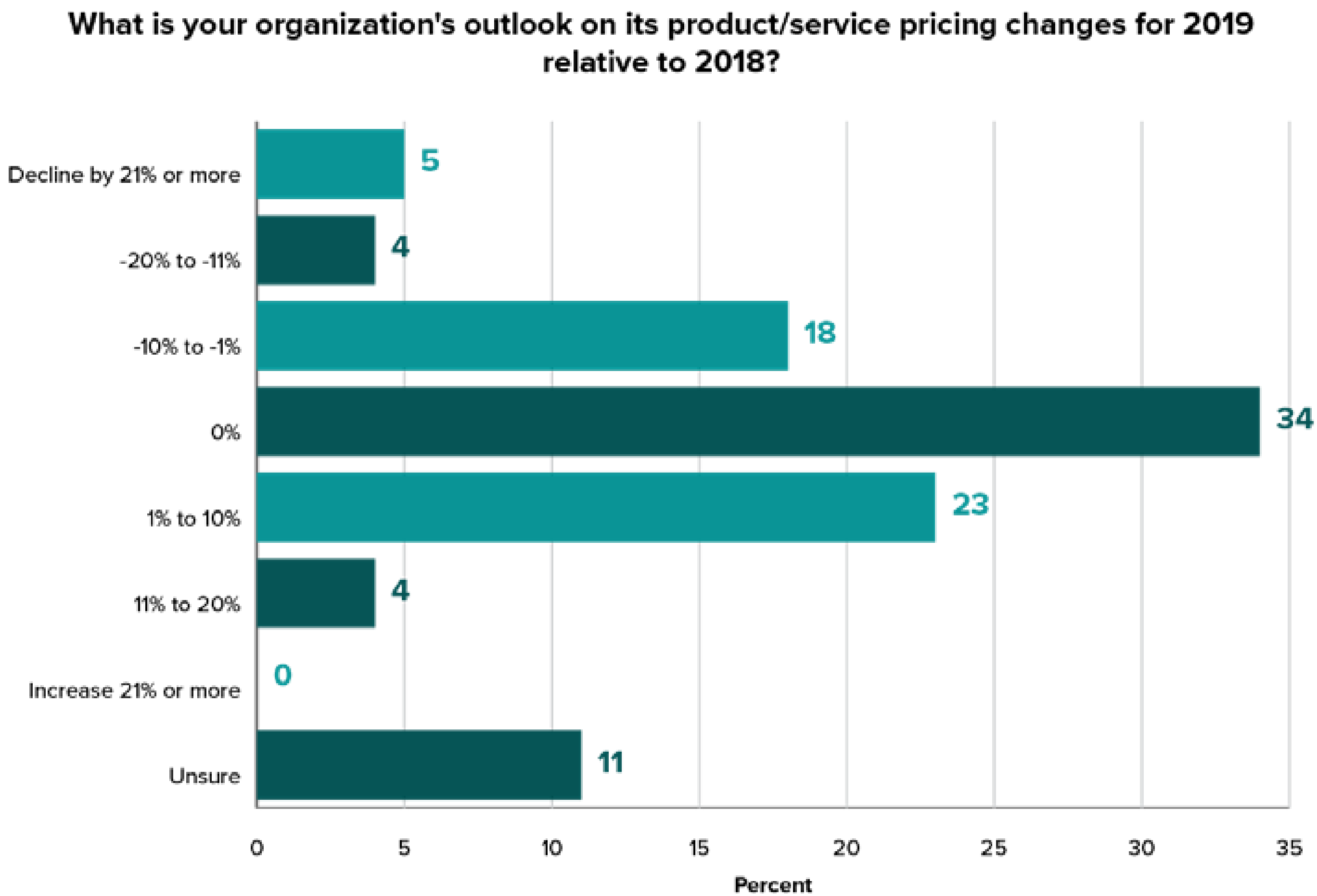
Oilfield service companies are predicting challenging market conditions in 2019, with a large minority expecting day rates to decline compared to 2018. The sector also expects to struggle to manage their costs, and to recover costs from customers due to increased pricing from suppliers or increased demands on equipment in the field. They also expect pricing pressure from customers to continue.

Improving day rates and increasing product pricing remain a challenge

The Canadian oilfield service industry is quite pessimistic about day rates for 2019, especially compared to last year. Thirty-nine per cent of survey respondents expect day rates to decline this year, compared to 17 per cent that foresee an increase, and none of these expect a rise greater than 10 per cent. In last year's survey, 42 per cent of service companies expected day rates to increase in 2018, with only 12 per cent forecasting a decline.



Despite this pessimism about day rates, the service industry's most important benchmark price, service companies are relatively optimistic about prices for their own services in 2019. Twenty-seven per cent of respondents expect prices for their products and/or services to increase, the same number that foresee a decline, but none expect a price rise of greater than 20 per cent. For the sake of comparison, 51 per cent of last year's survey respondents expected an increase in pricing in 2018, and only 15 per cent predicted a decline.

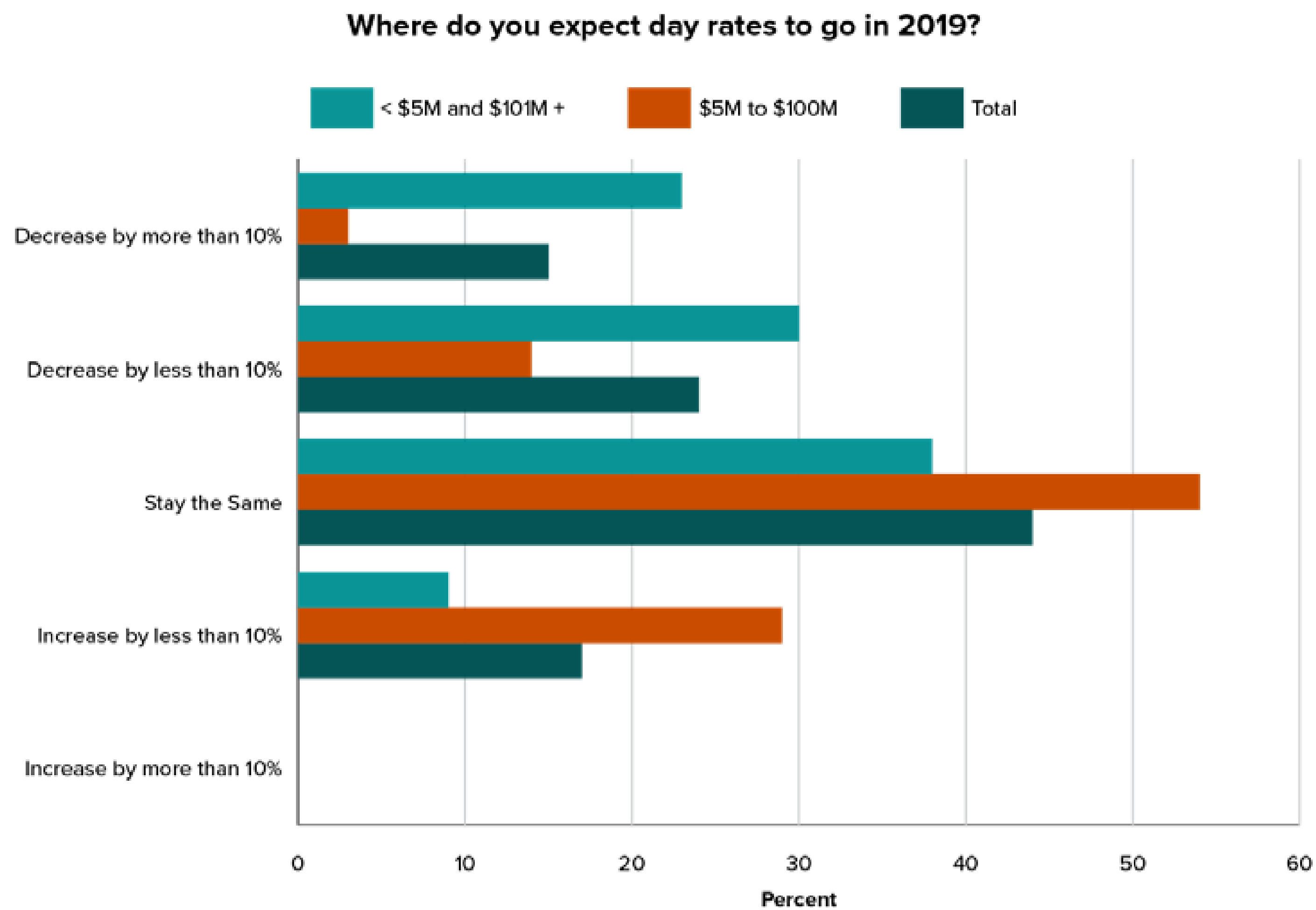


Midsized operators most optimistic about improved pricing

The Canadian oilfield service industry as a whole may be quite pessimistic about day rates for 2019, but this tends to be driven by small (less than $5 million in annual revenue) and large (greater than $100 million) companies. Only 9 per cent of survey respondents from small and large service companies expect day rates to increase this year, roughly a sixth the number forecasting a decline.

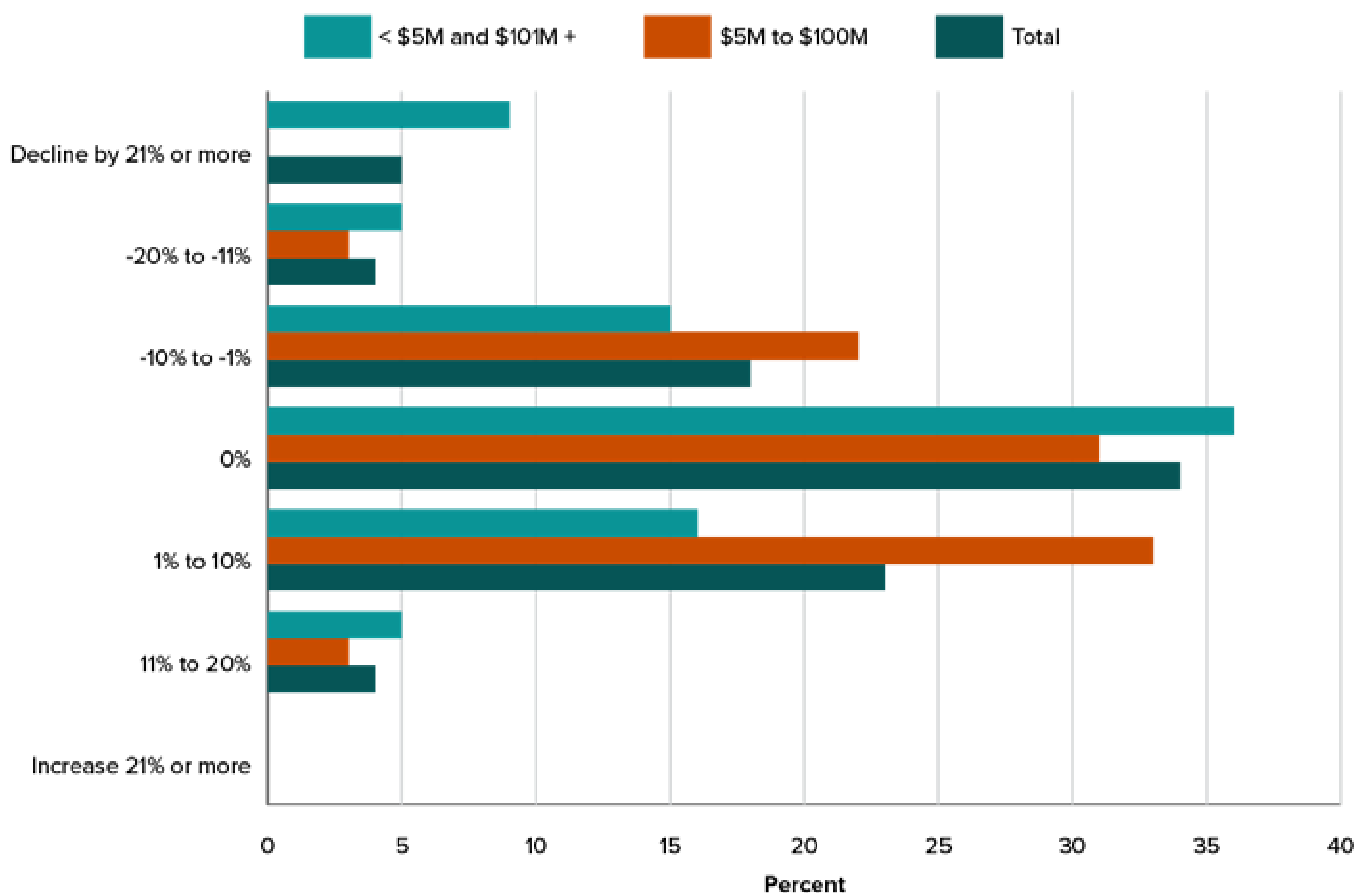
In contrast, 29 per cent of mid-revenue service companies are expecting an increase in day rates this year, 11 percentage points more than are predicting a decline. The relative pessimism is especially evident on the extreme downside, with almost a quarter of small and large companies expecting day rates to decline more than 10 per cent, compared to only 3 per cent of mid-revenue companies.

Although the service industry as a whole is relatively optimistic about prices for their products and/or services in 2019 compared to day rates, the dichotomy between small and large service companies on the one hand and mid-revenue companies on the other continues.



Twenty-two per cent of small and mid-size companies expect prices for their products and/or services to increase this year, 7-percentage points less than those predicting a decline. In contrast, 36 per cent of mid-revenue companies are expecting an increase in prices, 11 points more than those forecasting a decline. Nine per cent of small and large companies are expecting a decline of 20 per cent or more for their products and/or services, whereas no mid-revenue companies expect the same.

What is your organization's outlook on its product/service pricing changes for 2019 relative to 2018?

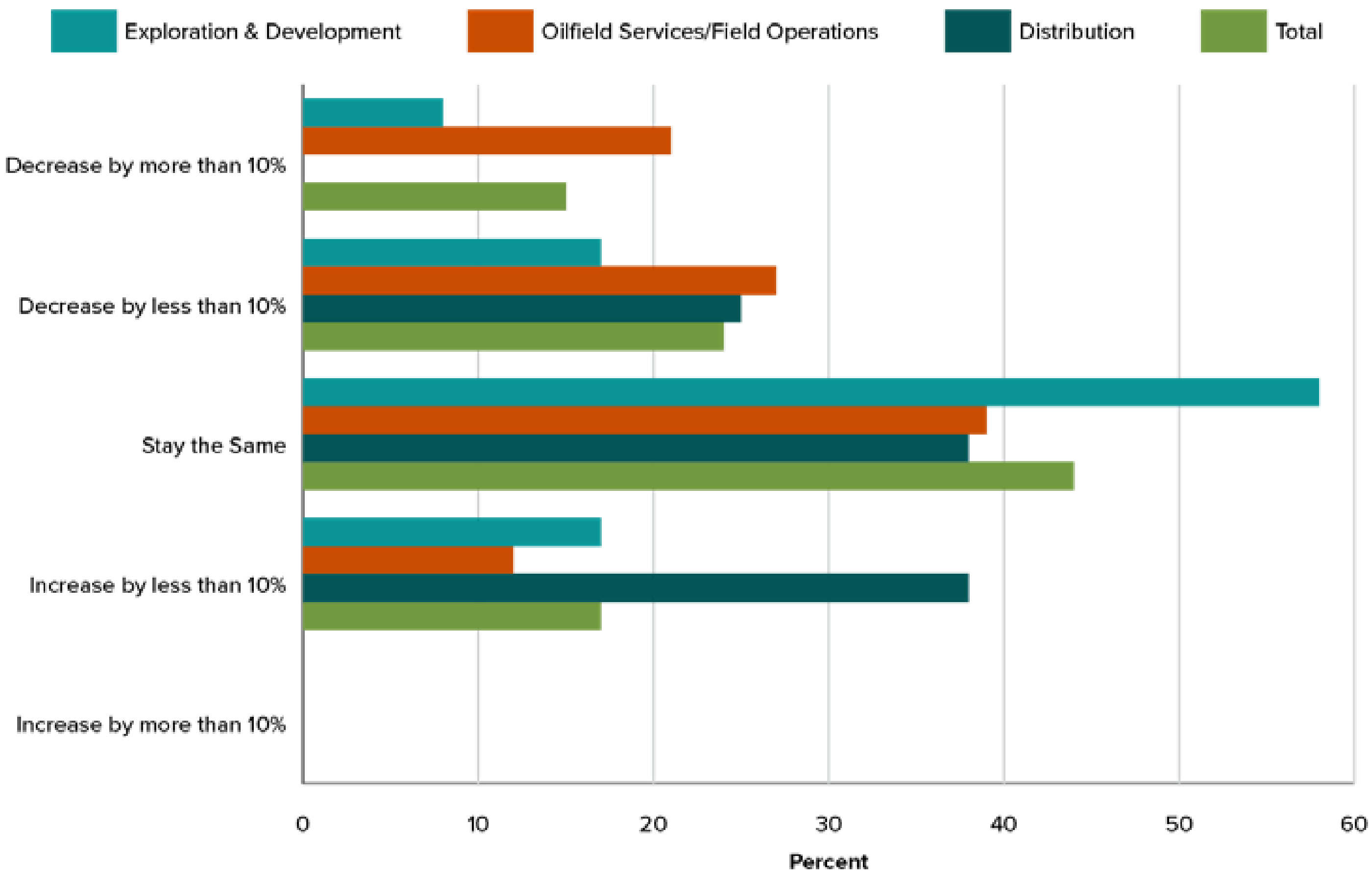


The Canadian oilfield services industry as a whole is quite pessimistic about day rates for 2019, but some sub-sectors are more pessimistic than others.

The most pessimistic sub-sector about day rates is oilfield services/field operations, with almost one half of survey respondents expecting a decline this year, and only 12 per cent predicting an increase. In contrast, distribution is the most optimistic service sub-sector, with 38 per cent of companies expecting an increase in rates, 13 percentage points more than are forecasting a decline. No company focusing on distribution is expecting a decline in day rates greater than 10 per cent.

Exploration and development is the second most optimistic sub-sector, but companies expecting day rates to decline this year still exceed those predicting an increase by 25 per cent to 17 per cent.

Where do you expect day rates to go in 2019?



The service industry as a whole is relatively optimistic about prices for their products and/or services in 2019 compared to day rates, but again there is a wide range of divergence among the sub-sectors.

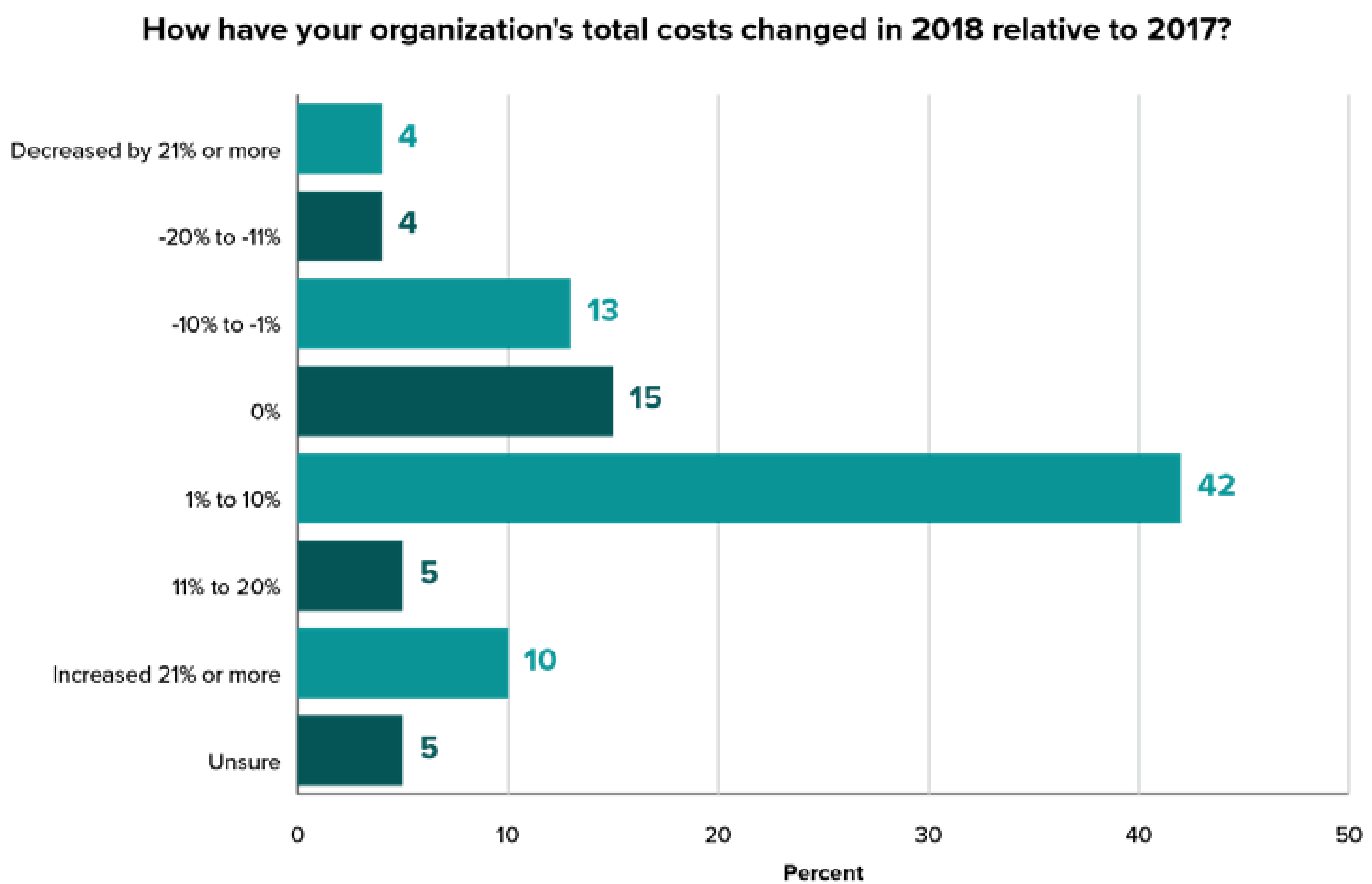
The most optimistic sub-sector is again distribution (see next page), with half of respondents expecting an increase in prices for their services and only 13 per cent forecasting a decline. No company specializing in distribution is expecting a decline greater than 10 per cent.

On the other hand, both the exploration and development and oilfield services/field operations sub-sectors are relatively pessimistic about pricing for their products and/or services. Only 23 per cent of companies focusing on exploration and development are expecting prices to increase, 15-percentage points less than those predicting a decline. Twenty-nine per cent of companies specializing in oilfield services/field operations are expecting a price rise, 6 points less than decliners.

What is your organization's outlook on its product/service pricing changes for 2019 relative to 2018?

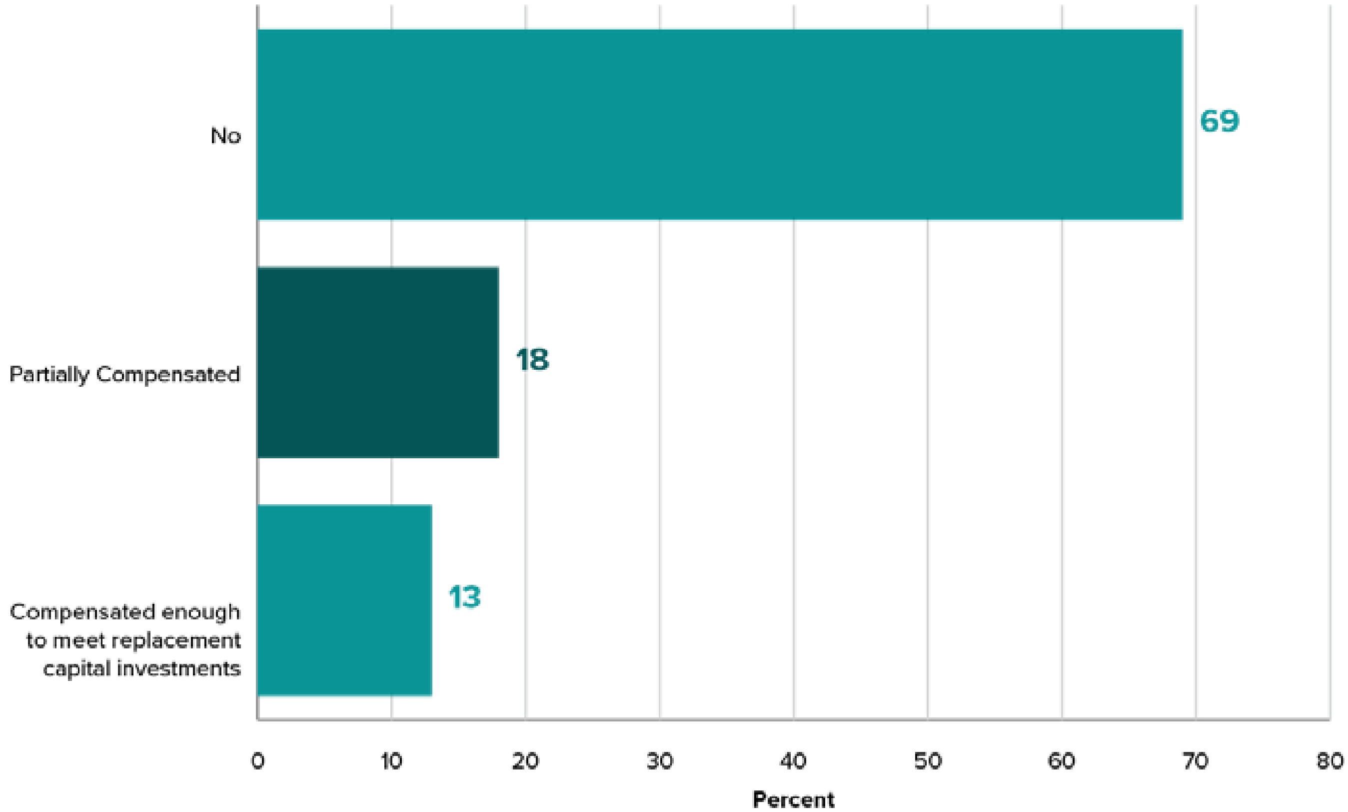
Costs creep up in 2018

Total costs increased for the majority of oilfield service companies in 2018, despite business activity being relatively weak. Fifty-seven per cent of survey respondents reported an increase in total costs, while 22 per cent said they declined. In contrast, responding to last year's survey, only 46 per cent of companies said total costs increased in 2017, with 34 per cent indicating a decline.



In 2018, service companies continued to be compensated less than required to meet greater demands on equipment in the field. Sixty-nine per cent of respondents said they were not being compensated at all for wear and tear on equipment, an increase of 11 percentage points from the year before. Eighteen per cent indicated they are being partially compensated, while only 13 per cent said they were paid enough to meet replacement capital investments.

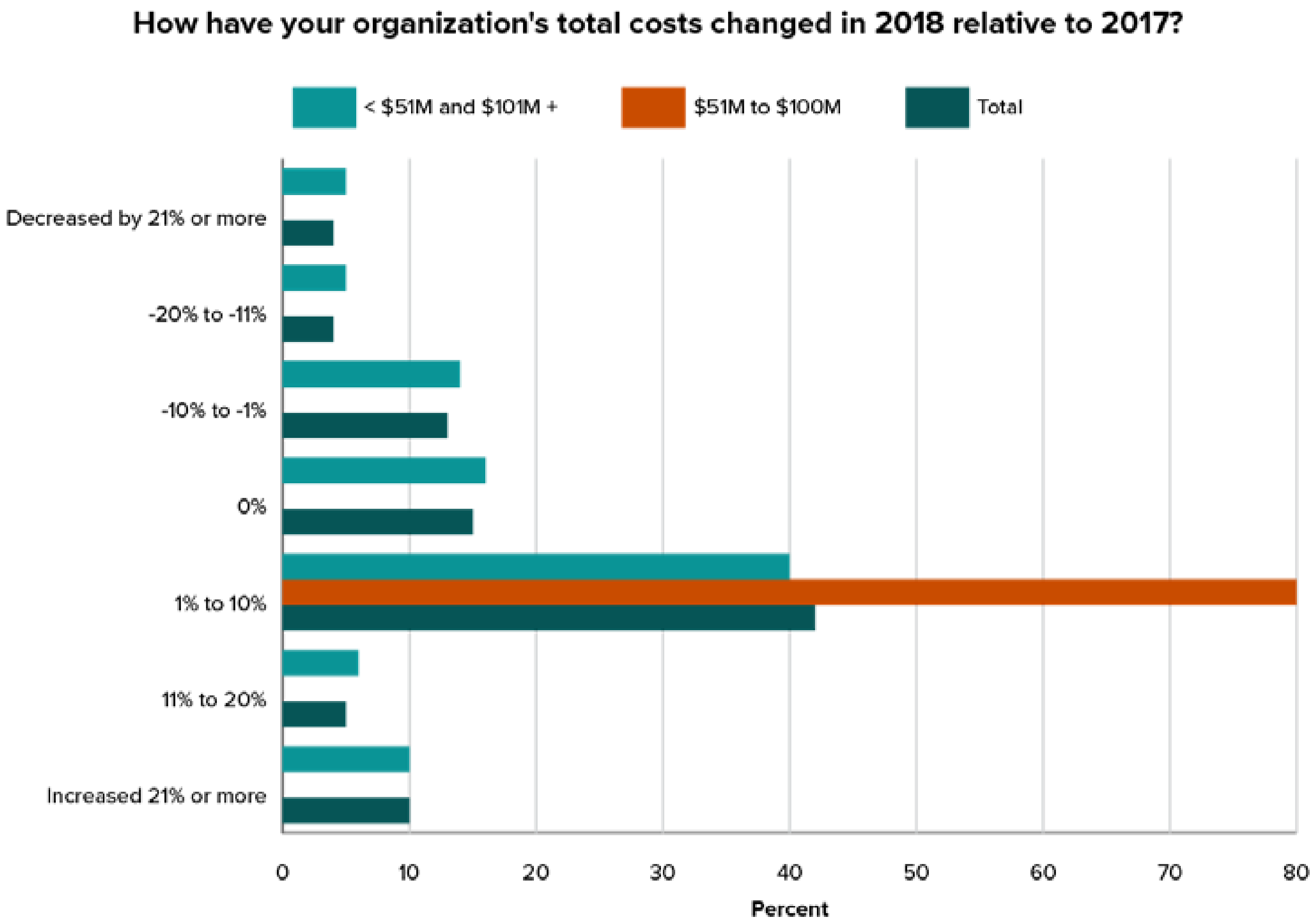
Are you being compensated for greater demands on equipment in the field?



Midsized companies most challenged in managing costs

Increases in total costs may have outweighed declines for all strata of oilfield service companies in 2018 based on size of company revenue, but those in the $51-$100 million range were much more likely to suffer cost increases. Eighty per cent of respondents from these companies saw cost increases last year, but none greater than 10 per cent, with no companies reporting declines.

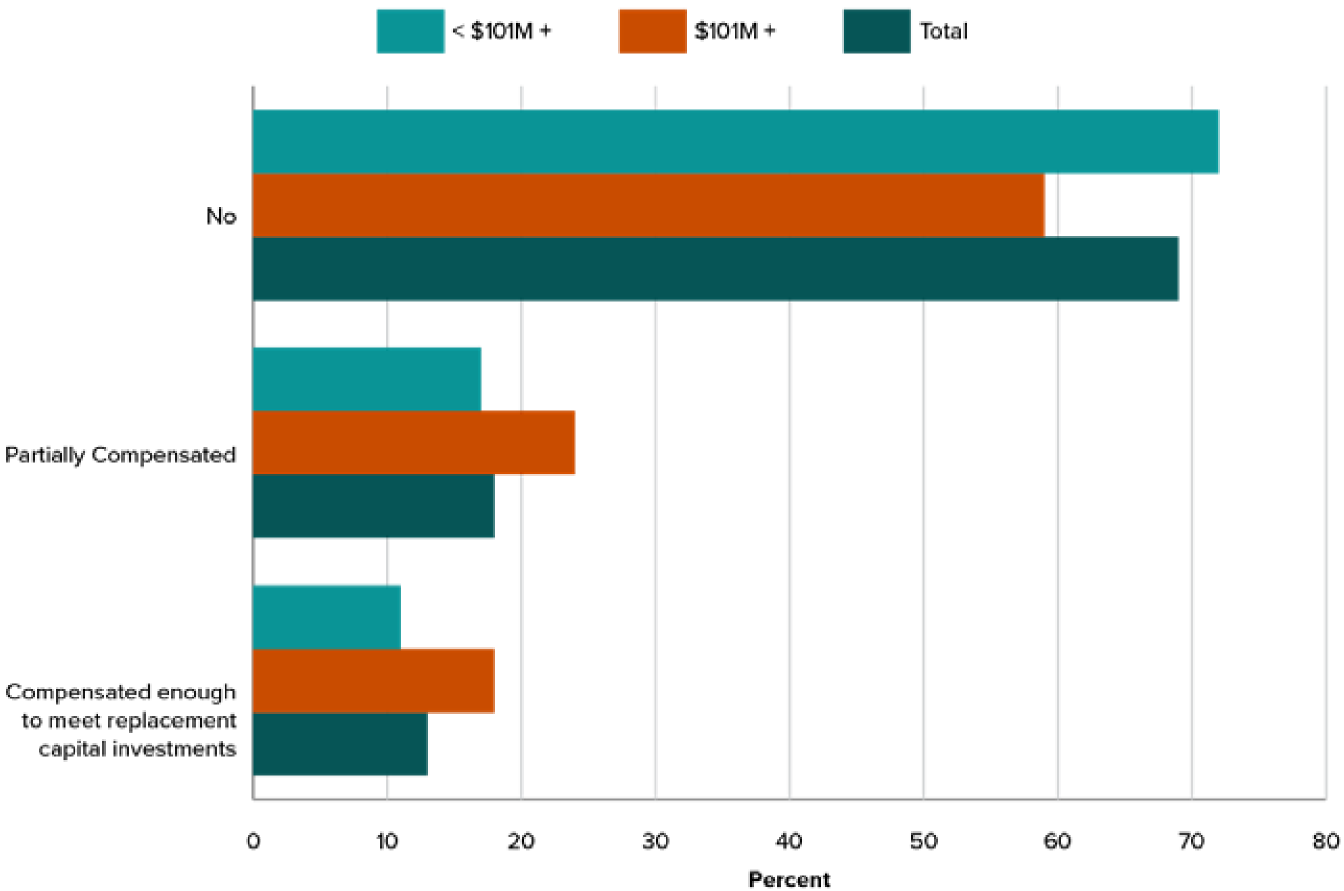
In contrast, only 56 per cent of service companies outside the $51-$100 million revenue range saw total costs increase last year, with 23 per cent experiencing a decline.



Service companies tended to be compensated less than needed to meet replacement investment costs again in 2018 (see next page), but this was much less the case for large companies (revenues greater than $100 million) than smaller ones. Eighteen per cent of survey respondents from large companies said they were being compensated enough to meet wear and tear on capital, almost a quarter reported they were partially compensated, while 59 per cent said they were not being compensated at all for greater demands on equipment in the field.

In contrast, only 11 per cent of smaller companies reported being sufficiently compensated, 17 per cent partially compensated, and almost three-quarters said they were not being compensated at all for greater wear and tear on their equipment.

Are you being compensated for greater demands on equipment in the field?



All industry subsectors report cost management challenges

More companies reported increases in total costs than declines in all sub-sectors of the Canadian oilfield services industry in 2018 with the exception of exploration and development. Thirty-one per cent of survey respondents focusing on exploration and development said they experienced an increase in total costs last year, while 38 per cent saw declines.

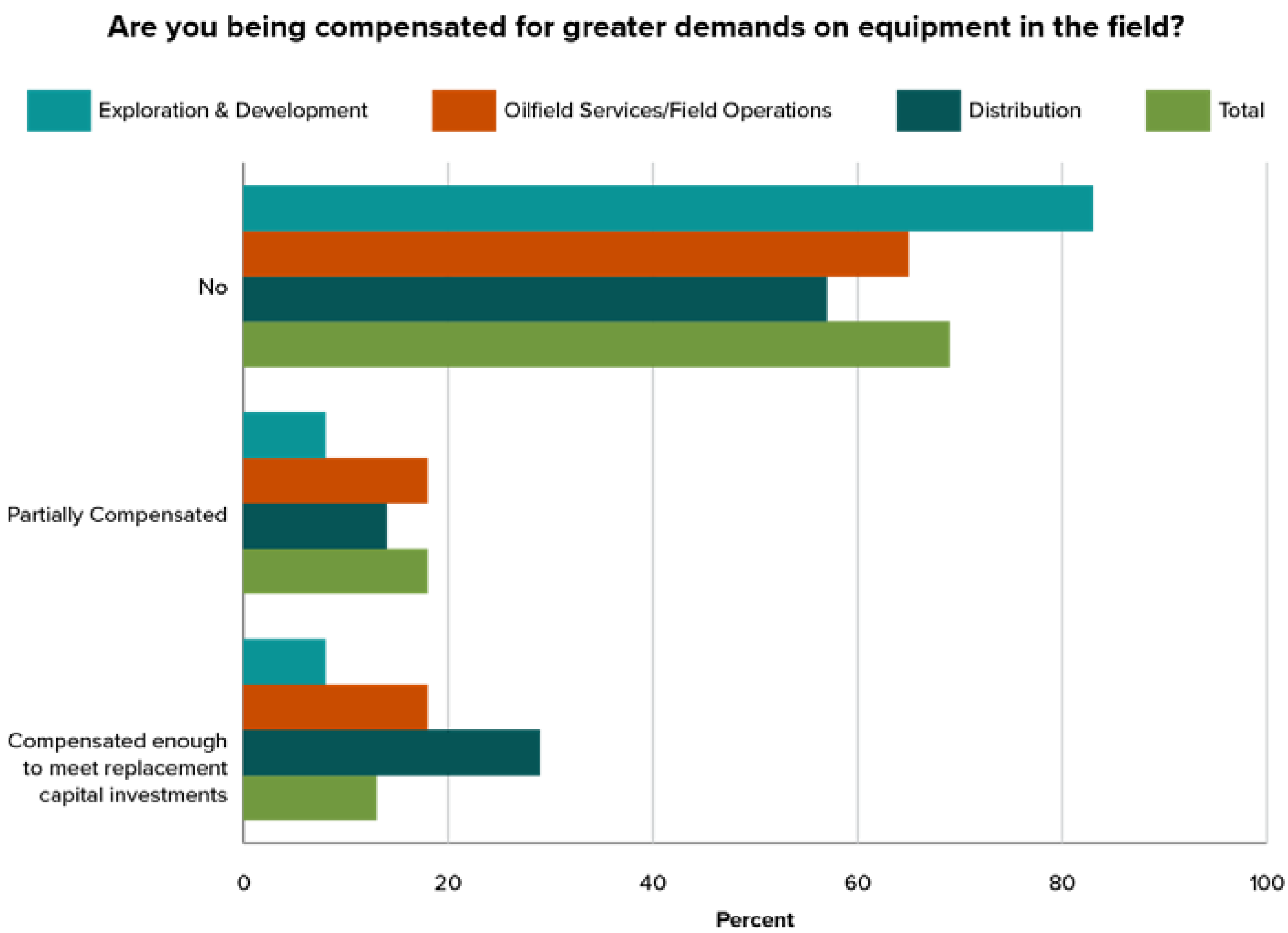
On the other hand, companies specializing on maintenance were the most likely to see cost increases last year. One hundred per cent of respondents from this sub-sector said total costs increased, with a third reporting cost increases of greater than 20 per cent.

Companies in the oilfield services/field operations subsector were more middle of the road, with almost a half reporting an increase in total costs, and 31 per cent experiencing a decline.

Not a single sub-sector in the oilfield services industry had a majority of companies report compensation that at least partially covered replacement investment costs in 2018 (see below). The hardest hit sub-sector was exploration and development, with a mere 8 per cent of respondents saying they were being compensated enough to meet greater wear and tear on equipment, another 8 per cent reporting partial compensation, and a massive 83 per cent said they were not compensated at all.

In contrast, the distribution sub-sector was the best compensated last year, with 29 per cent of companies reporting being fully compensated for greater wear and tear on capital, 14 per cent partially compensated, but still 57 per cent saying they were not being compensated at all.

The oilfield services/field operations subsector was again more middle of the pack, with over a third being at least partially compensated to cover replacement investment costs, and almost two-thirds not at all.



Customers continue to squeeze suppliers

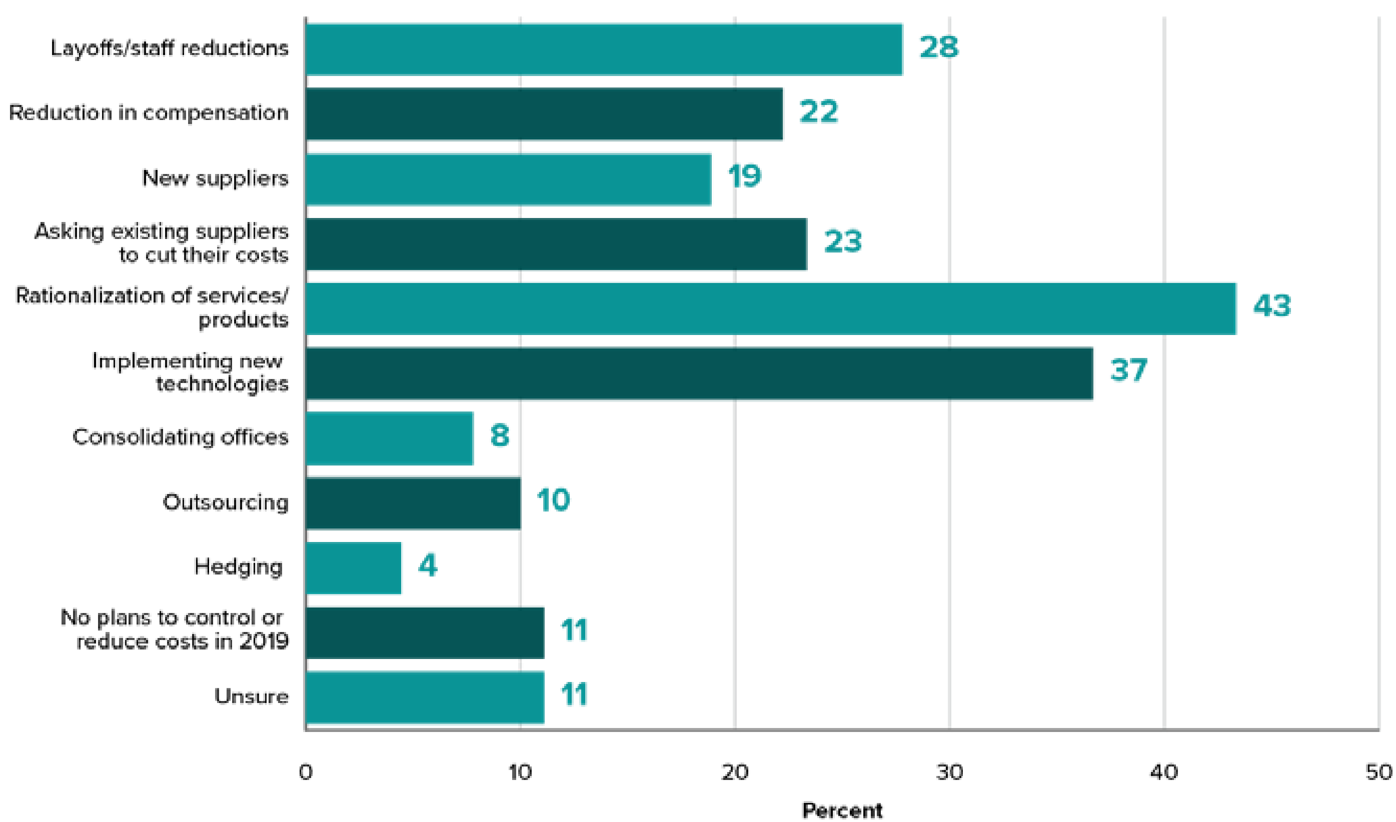
An oversupply of most equipment and services in Western Canada allowed the oil companies to continue to squeeze oilfield service companies in 2018 in an attempt to slash supply costs and return to profitability. Survey respondents reported 42 per cent of customers delaying invoice payments, 41 per cent requesting pricing concessions under 30 per cent, and 39 per cent cancelling or delaying existing orders, when asked for the three most common.

The two biggest changes from the previous year's survey were an 11-percentage point rise in customers seeking collaborative cost reduction solutions to 34 per cent, and only 8 per cent of them requesting pricing concessions over 30 per cent, roughly half as many as the year before.

Methods to Control Costs

There are a number of ways that oilfield service companies are planning to control costs in 2019 in an attempt to improve their own profitability. When asked to select their top three, 43 per cent of survey respondents cited rationalization of their services and/or products, 37 per cent said by implementing new technologies and 28 per cent indicated through layoffs and other staff reductions. Layoffs increased the most from the previous year, jumping 17-percentage points, while implementing new technologies dropped 7 points.

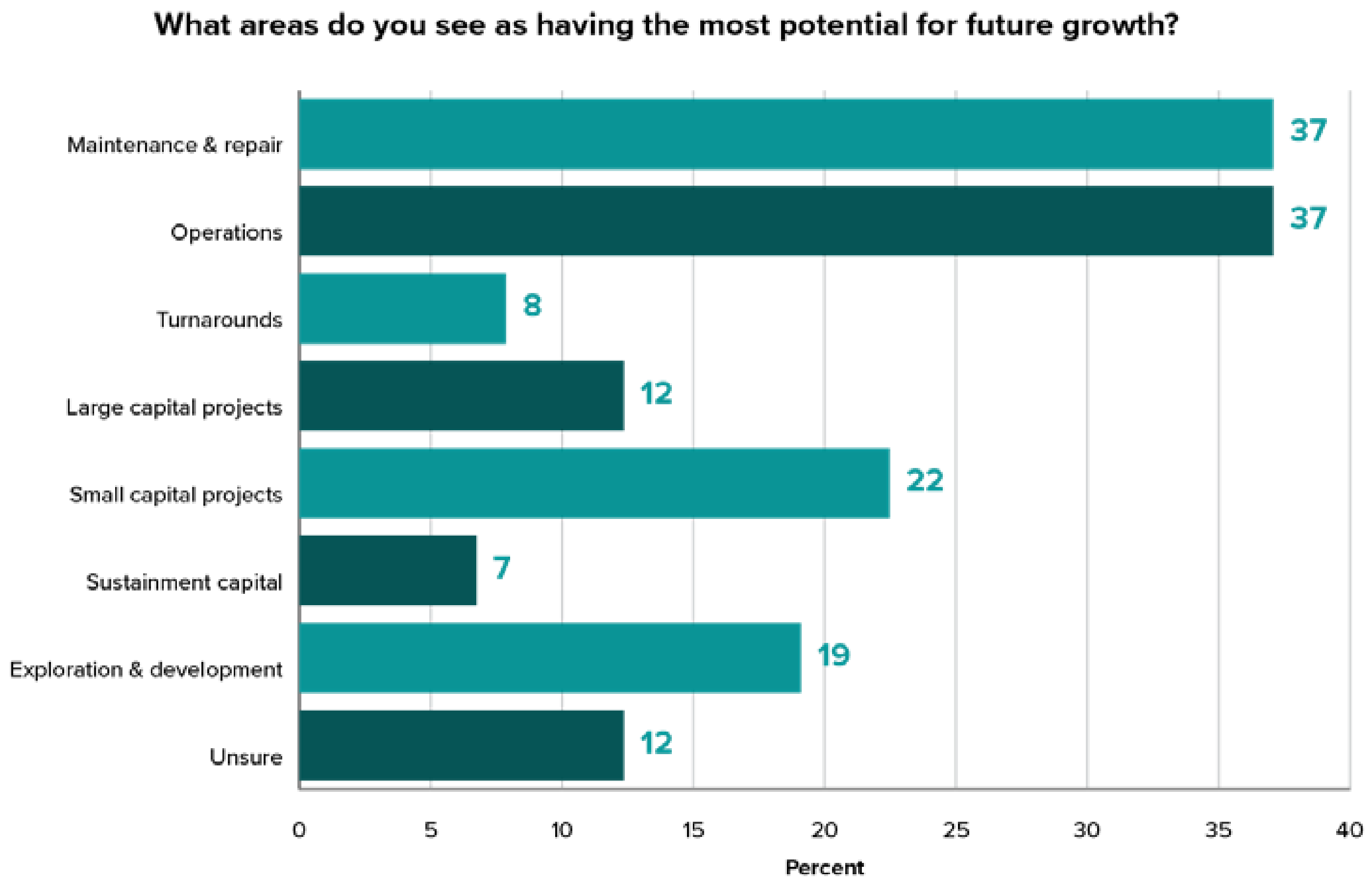
How will your organization try to control/reduce costs in 2019?



Focus on operations and maintenance market continues

Since the majority of the Canadian service industry are planning to continue to focus efforts on the battered domestic market, it should not be surprising that survey respondents saw operations and maintenance and repair as the two business areas with the most potential for growth. Thirty-seven per cent of companies selected each of these areas when asked to name their top two, a jump of 9-percentage points for maintenance and repair from the previous year, and a decline of 3 points for operations.

Small capital projects again came in third place, at 22 per cent, representing a decline of 4-percentage points, while large capital projects suffered a more precipitous slide, dropping 10 points to 12 per cent.

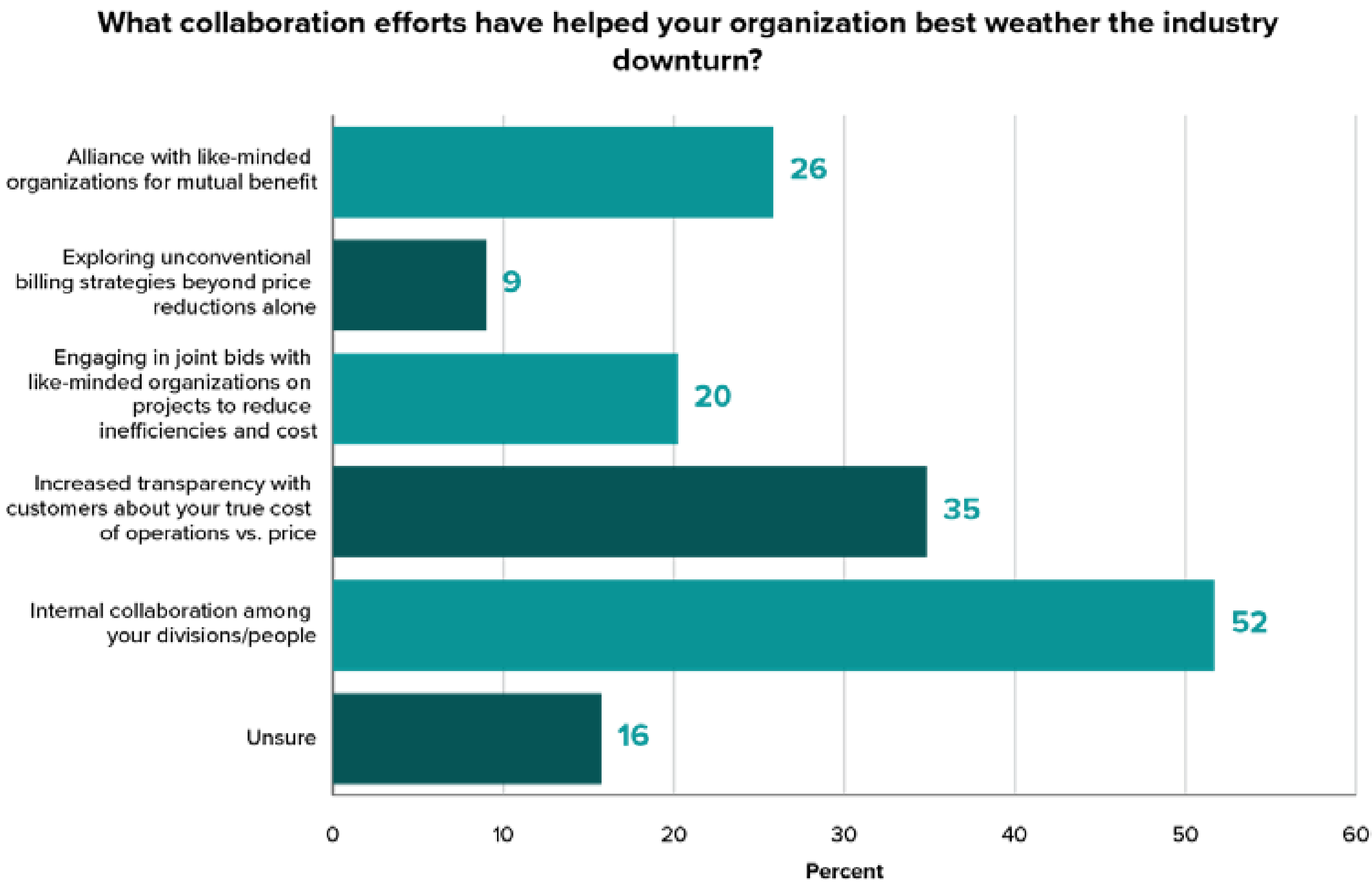


Focus on Collaboration

Canadian oilfield service companies have relied on a wide range of collaboration efforts to best weather the prolonged downturn facing the industry. Internal collaboration among their division easily topped the list, with 52 per cent of respondents selecting it when asked for their top two. This represented a 6-percentage point increase from last year's survey.

The second most popular collaborative approach, at 35 per cent, was increased transparency about costs and prices with their customers, a slight decrease from the year before.

Alliances with like-minded organization for mutual benefit were the third most popular collaborative approach, with 26 per cent of respondents going this route. This was a 6-point decline from last year's survey, and the largest drop off.

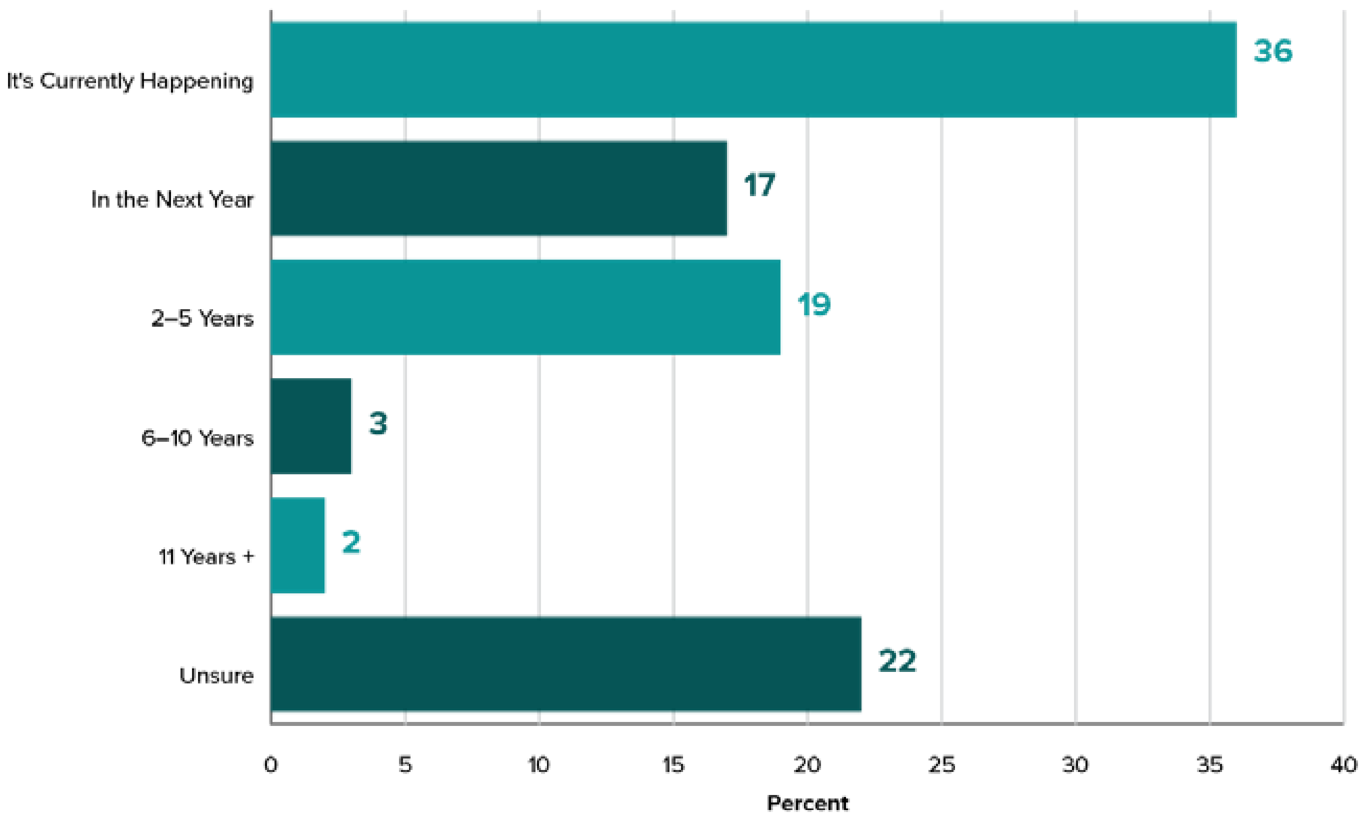


III. Technological disruption driving service industry change, but financial issues slowing advances

Most Canadian oilfield service companies continue to foresee rapid technological innovation fundamentally disrupting the way they do business over the next several years. Over half of survey respondents said they expect this to be the case within the next year, and almost three-quarters expect substantial technological disruption within the next five years.

But this is a significant drop off from last year's survey, when 84 per cent of service companies expected rapid technological innovation to fundamentally disrupt their industry within five years. The major driver for this shift is the number of companies saying they are unsure about the impact and/or timing of technological innovation, increasing 14-percentage points to 23 per cent between the two surveys.

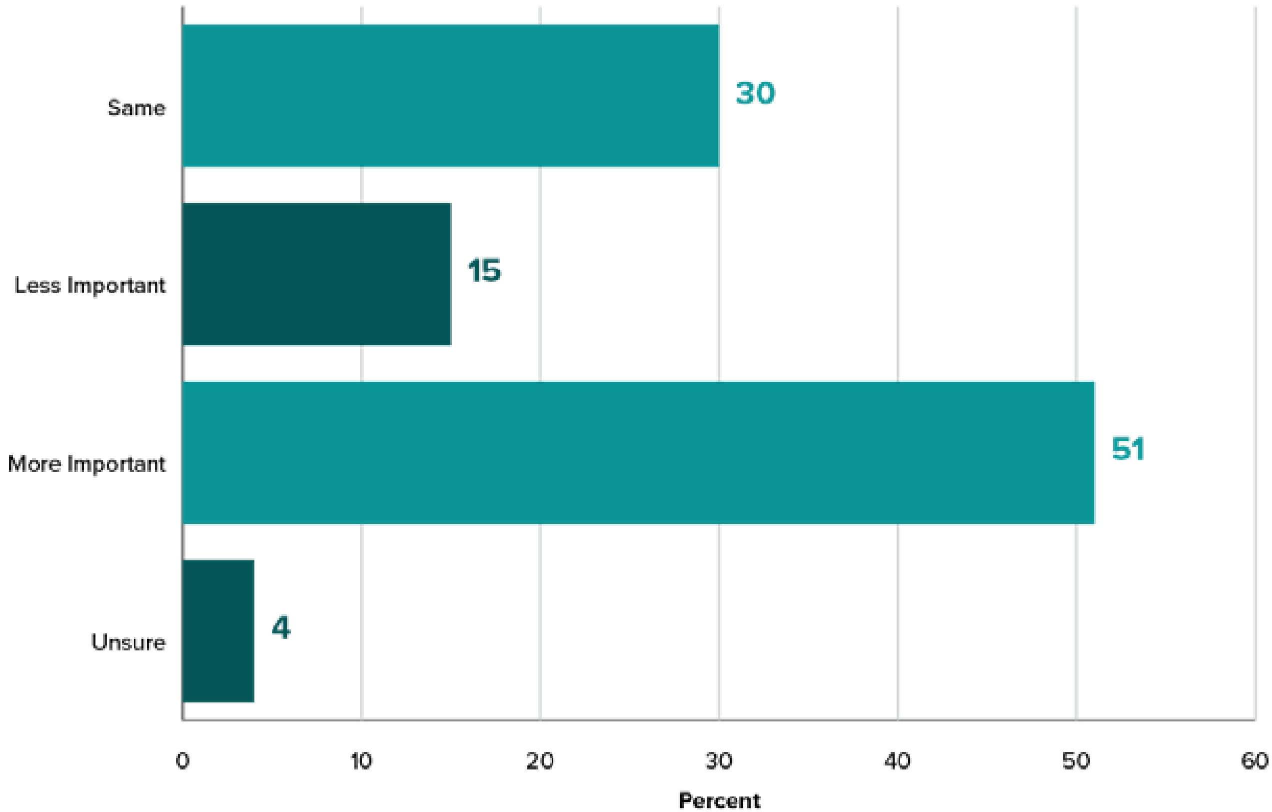
How soon do you expect to face technology disruption that will fundamentally change the way service and supply organizations operate?



The perception of slower technological advancement, or at least greater uncertainly about its timing, combined with a fair amount of financial distress in the service industry appear to be negatively impacting the importance companies are placing on investing in new technologies and funding for such investments.

For example, 51 per cent of service companies said investing in new technology is more important today compared to the oil price heyday mid-decade (see next page), but this is a 12-percentage point drop from last year's survey. Fifteen per cent of respondents said new technologies are less important, compared to 10 per cent last year, while 30 per cent said it is the same – for a 7-point rise.

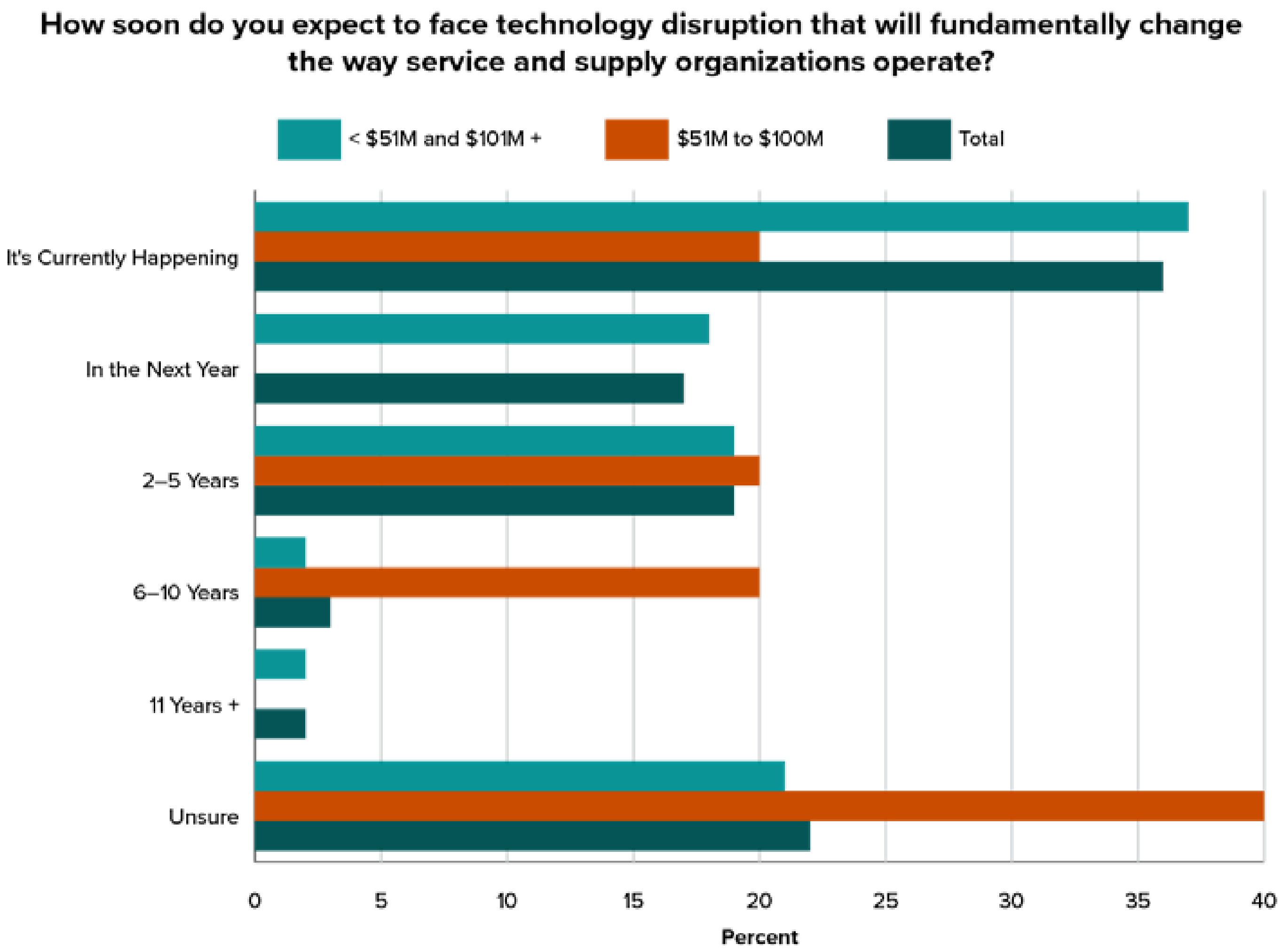
How important is investing in new technologies for your organization today compared to the peak oil price market?



Midsized companies less focused on technology changes

Most Canadian service companies may foresee rapid technological advancement fundamentally disrupting their industry over the next several years, but this is much less the case for companies with revenue in the $51-$100 million range. Only 40 per cent of these companies expect substantial technological disruption within the next five years, roughly half as many as other service companies.

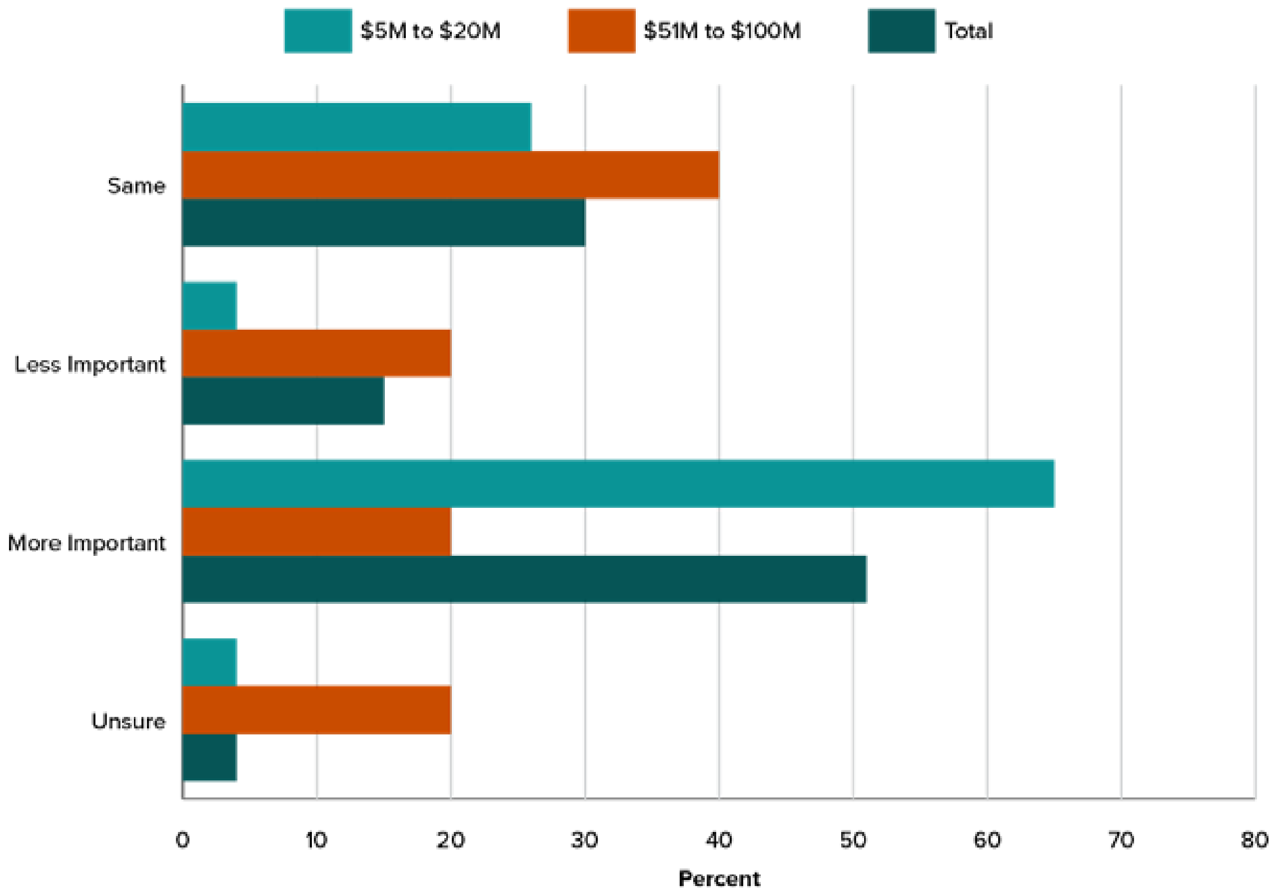
The discrepancy between service companies in the $51-$100 million revenue range and the other companies is especially great for those believing rapid technological innovation will change the way they do business in the next year, zero per cent of respondents compared to 18 per cent, respectively.



This relative skepticism about the impact of technology by service companies in the $51-$100 million revenue range also showed up when asked how important is investing in new technologies today compared to the mid-decade oil market peak. Only 20 per cent of respondents with revenue in the $51-$100 million range said it was more important, less than a third of those in the $5-$20 million range, the other extreme (see next page).

At the same time, 20 per cent of companies in the $51-$100 million range said investing in new technologies is less important than during the peak, five times more than the those in the $5-$20 million revenue range.

How important is investing in new technologies for your organization today compared to the peak oil price market?



Subsectors differ on impact of technology on their business

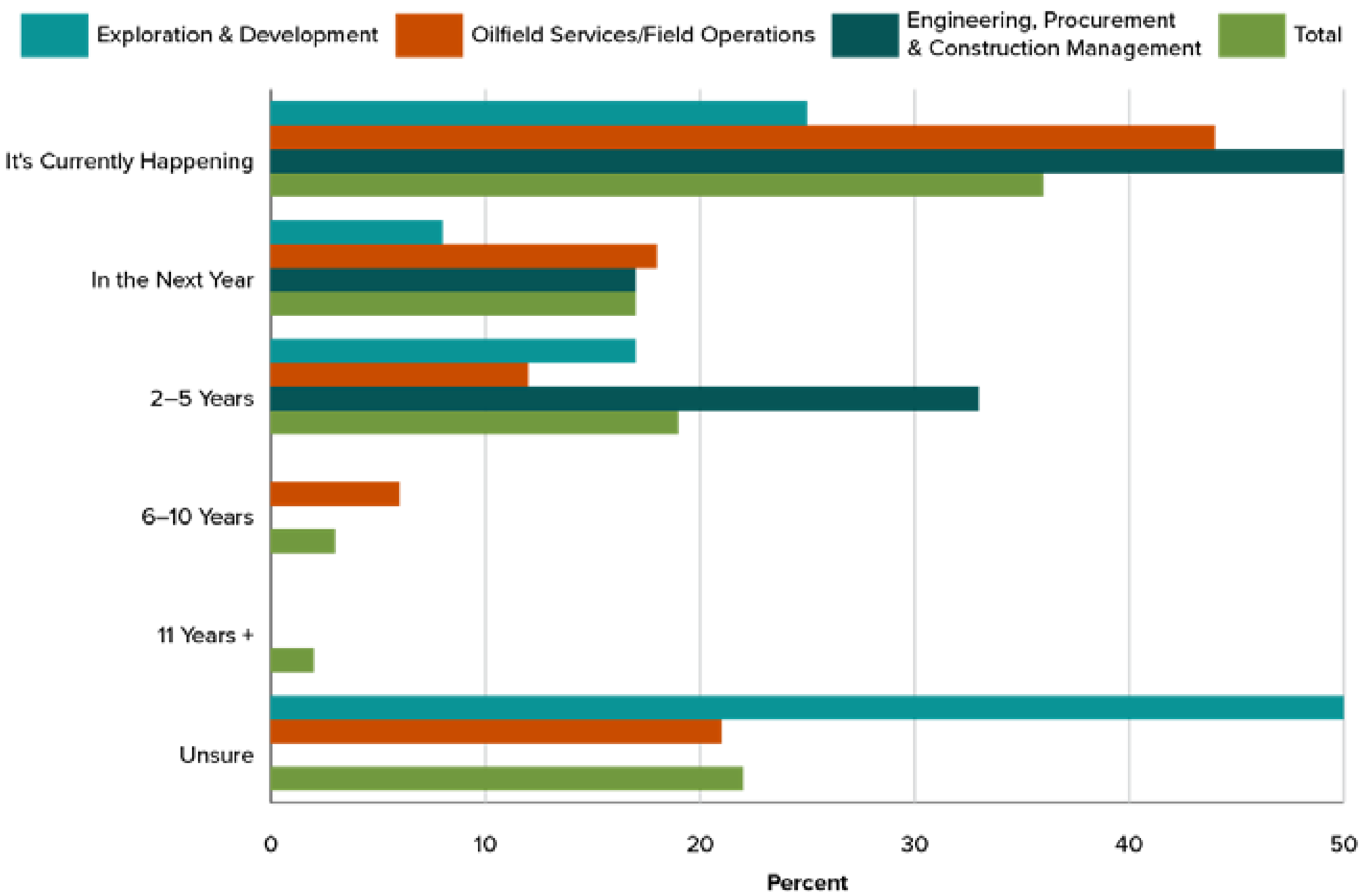
The majority of companies in every sub-sector of the Canadian oilfield service industry may expect rapid technological advancement will disrupt how they do business over the next five years, but there is still significant variance between the sub-sectors.

The engineering, procurement and construction management sub-sector is the most concerned about the impact of technology on their business, with every respondent saying it would cause fundamental change over the next five years. Half said it is already happening, 17 per cent expect it in the next year, and a third of companies in the two-to-five year timeframe.

In contrast, only half of companies focused on exploration and development said technological disruption would fundamentally change the way they do business in the next five years. The other half of companies was unsure of timing and/or impact.

The oilfield services/field operations sub-sector tracked the industry as a whole, with almost three-quarters expecting technological advancement to cause fundamental change within the next five years, 21 per cent unsure of the impact, and the remaining 6 per cent saying technological disruption would take more than five years.

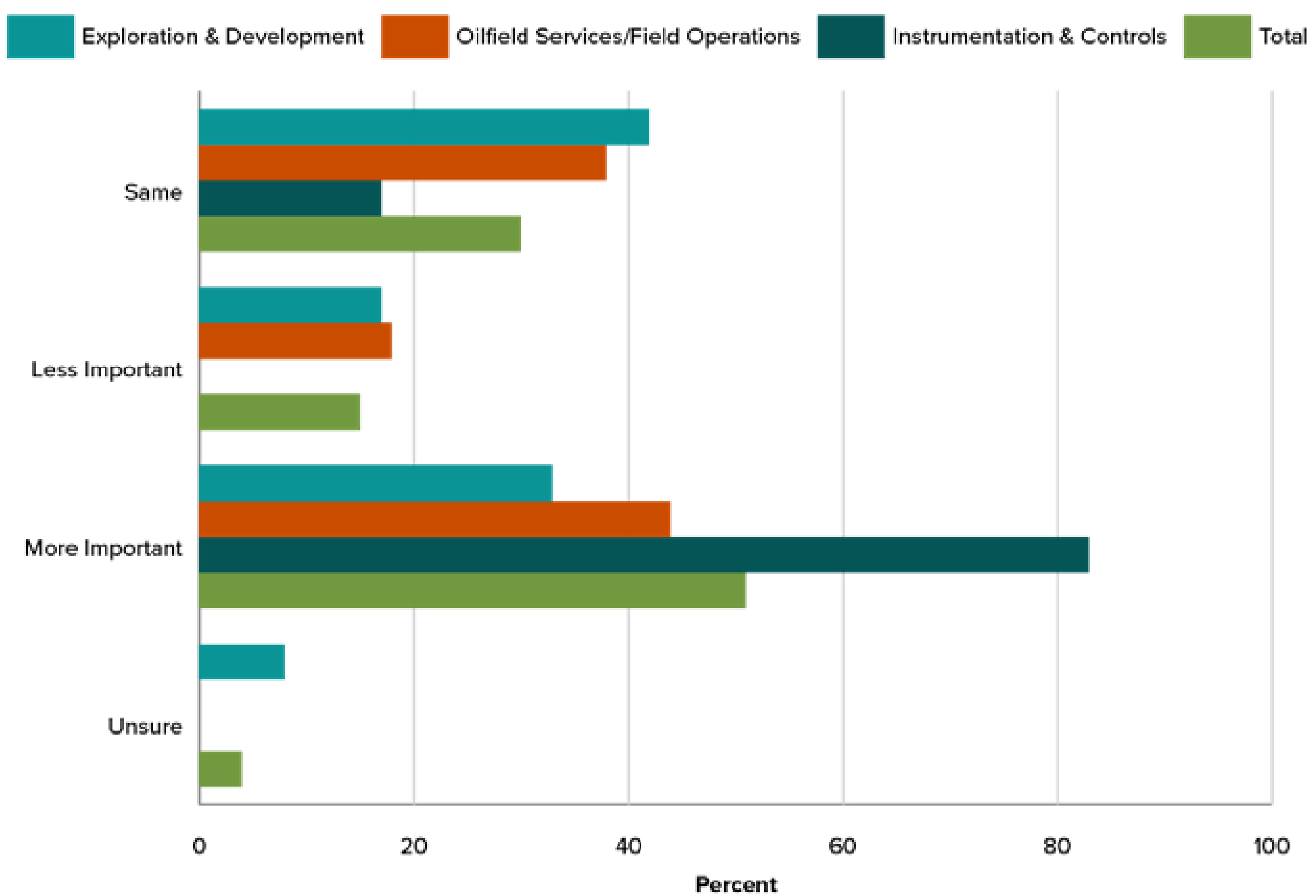
How soon do you expect to face technology disruption that will fundamentally change the way service and supply organizations operate?



For the related question, the importance of investing in new technologies today compared to the mid-decade oil price peak, the exploration and development sub-sector again placed the least importance on technology, companies specializing on instrumentation and controls the most importance, with the oilfield services/field operations sub-sector more middle of the pack.

Only a third of respondents focusing on exploration and development said investing on new technology is more important today than during the peak, compared to 83 per cent in the instrumentation and controls sub-sector and 44 per cent of companies specializing in oilfield services/field operations.

How important is investing in new technologies for your organization today compared to the peak oil price market?



Who pays for innovation?

A large proportion of oilfield service companies are again planning to use their own financial resources to fund new innovation projects, but an increasing number of companies plan to rely on outside sources of finance, while significantly more are simply opting out of such projects altogether.

Two-thirds of survey respondents said they plan to use their own financial resources, when asked to select their top two methods of funding new innovation projects. Nineteen per cent reported plans to rely on R&D tax credits, 18 per cent plan to apply for government grants, and 9 per cent said they plan to rely on loans. Tax credits and loans each represented a 4-percentage point increase from last year's survey.

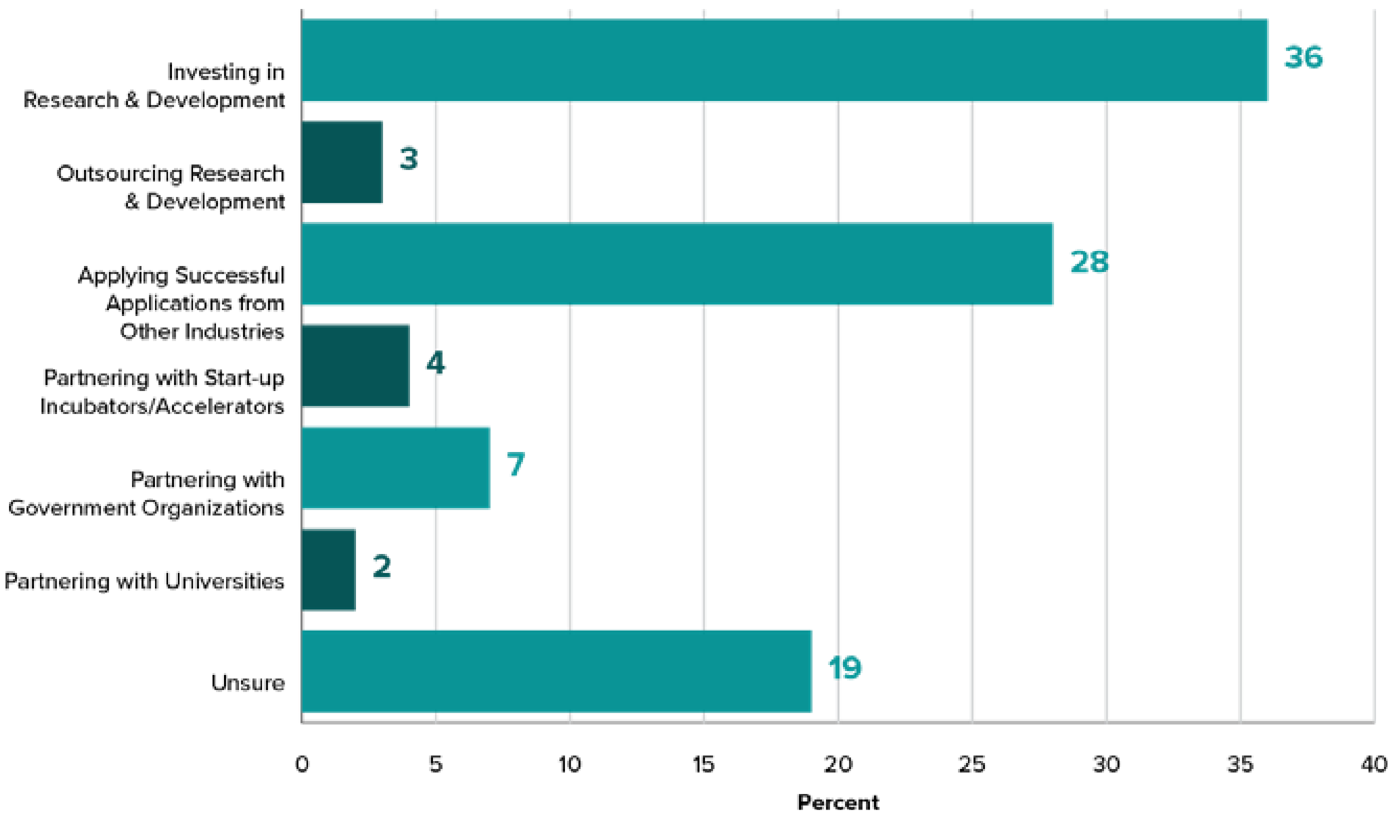
Nine per cent of respondents reported partnering with other companies to fund projects, compared to 22 per cent the year before, while companies with no plans for new innovation projects more than doubled to 17 per cent.

Approaches for Innovation

The shift in perception of the impact and/or timing of technological innovation on the service industry had no apparent impact on approaches companies focus on to develop new technologies, as survey respondents provided similar answers this year and last.

Thirty-six per cent of companies said they will focus on their own R&D efforts to develop new technologies, 28 per cent will apply successful applications from other industries, and 13 per cent reported they would partner with government organizations, start-up incubators/accelerators, or universities.

When looking to develop new technologies, which approach does your organization focus on?



In terms of methods employed by the service industry to develop new technologies, there is a significance difference between small (less than $5 million in revenue) and larger companies, with the former more reliant on partnering and the latter on their own resources.

Forty-two per cent of larger companies reported they would focus on their own R&D efforts to develop new technologies, compared to 27 per cent of small companies. In addition, 35 per cent of larger companies said they would apply successful applications from other industries to develop new technologies, almost two times more than small companies.

On the flip side, almost a quarter of small companies reported they would partner with either government organizations, start-up incubators/accelerators or universities to develop new technologies, four times more than larger companies.

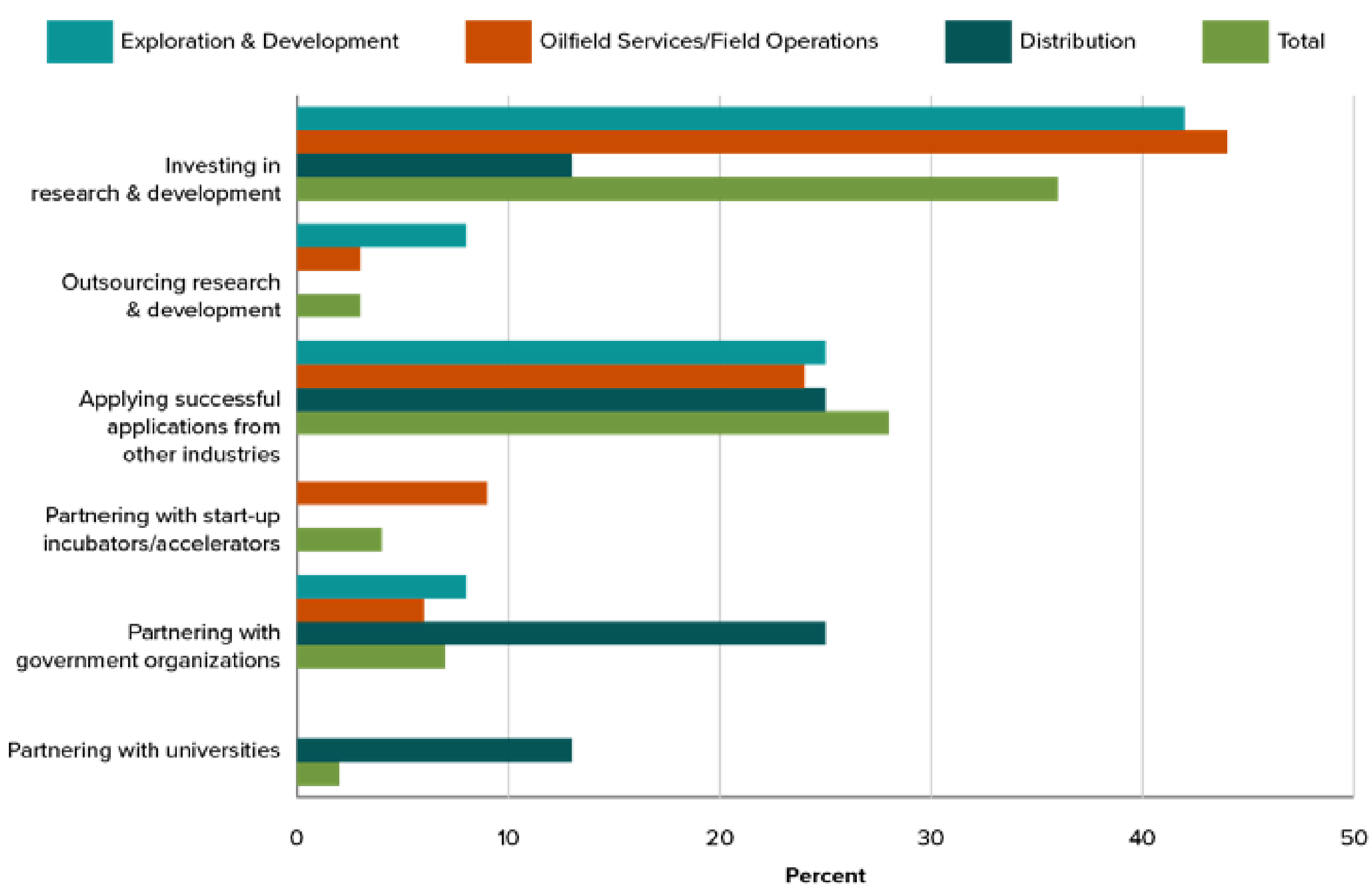
There is a great deal of divergence between sub-sectors in the oilfield service industry in term of methods employed to develop new technologies, especially regarding reliance on their own resources versus partnering with other organizations.

The exploration and development sub-sector and companies focusing on oilfield services/field operations are relatively middle of the road. Forty-two per cent of the former and 44 per cent of the latter reported focusing on their own R&D efforts to develop new technologies.

At the same time, 8 per cent of respondents specializing on exploration and development said they would partner with government organizations, start-up incubators/accelerators or universities to develop new technologies, and 15 per cent of companies from the oilfield services/field operations sub-sector.

In contrast, only 13 per cent of companies focusing on distribution said they will focus on their own R&D efforts to develop new technologies, and 38 per cent reported plans to partner with outside organizations.

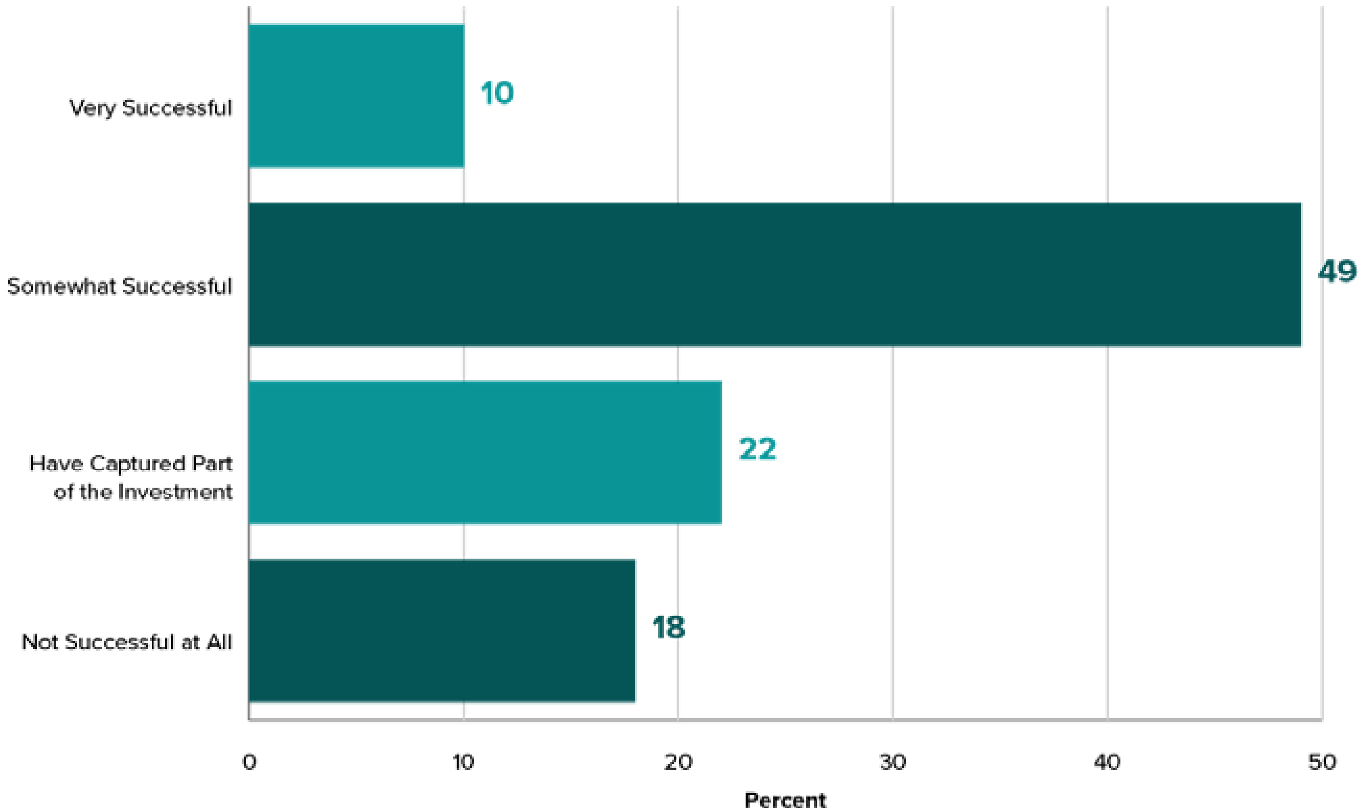
When looking to develop new technologies, which approach does your organization focus on?



Capturing the value of technology and innovations

Another factor that may be causing the downdraft in funding for technological innovation by service companies is the failure of the industry to capture the full value of productivity improvements through technology or process changes from their customers. Only 10 per cent of survey respondents said they are very successful at doing so, roughly half of those who reported they have been not successful at all. Almost half of the companies said they were somewhat successful, and 22 per cent have captured part of their investment.

How successful have you been in capturing value of productivity improvements through technology or process changes from your customers?



In terms of revenue strata, oilfield service companies tend to clump in terms of being very successful at capturing the full value of productivity improvement through technology or process changes from their customers, around 10 per cent, and having captured part of their investment – 22 per cent (see next page).

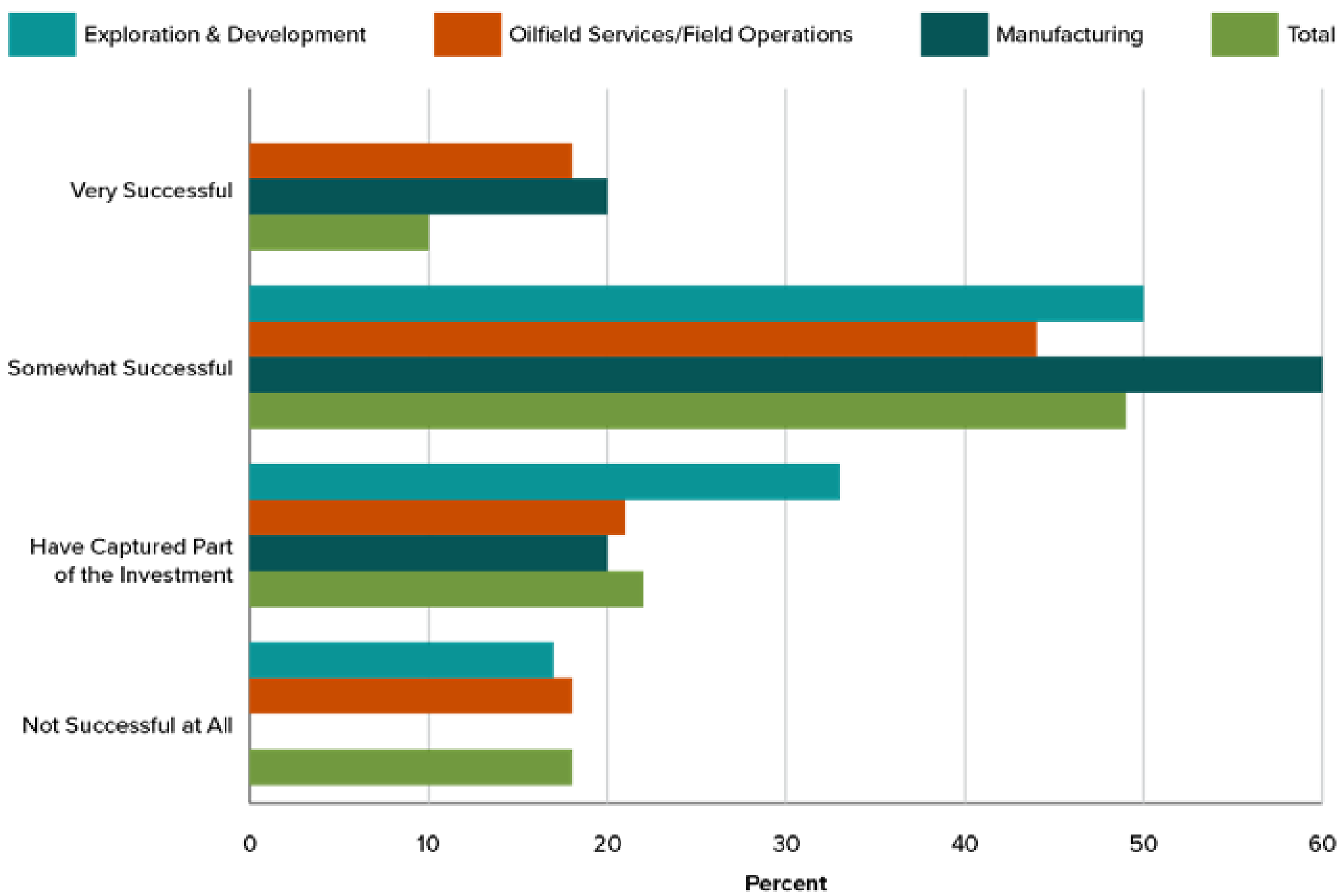
In contrast, 60 per cent of mid-revenue companies ($5-$100 million) reported they have been somewhat successful in capturing full value of their technology investment from customers, compared to 43 per cent of small and large companies. At the same time, only 6 per cent of mid-size companies said they were not at all successful, whereas over a quarter of small and large companies reported the same.

The manufacturing sub-sector has been the most successful in the services industry to capture full value of productivity improvements through technology or process change from their customers. Twenty per cent reported being very successful, 60 per cent somewhat successful, and the final 20 per cent having captured part of their investments.

In contrast, companies specializing on exploration and development have been one of the least successful sub-sectors at capturing full value. None of them reported being very successful, and 17 per cent said they had been not at all successful.

The oilfield services/field operations sub-sector was more middle of the pack, with 18 per cent reporting being very successful at capturing value from technological investments, 44 per cent somewhat successful, and 21 per cent capturing part.

How successful have you been in capturing value of productivity improvements through technology or process changes from your customers?



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SERVICE & SUPPLY SURVEY OUTLOOK REPORT

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