



THE PRICE OF AGILITY IN OIL & GAS

**Zeroing-in on cost
optimization**

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For oil and gas companies, “business as usual” is no longer a winning strategy. Amid the supply and demand disruptions that are rocking the industry, competitive agility becomes a critical asset.

Some leading players are already becoming leaner and more adaptive with new operating models, processes and digital technologies. They are also embracing an entirely new approach to spending—one that optimizes costs with zero-based budgeting and aligns spending to a strategy for growth and profitability. Others would be wise to follow their lead.

**There's no longer
any time, or money,
to waste.**

A NEW ENVIRONMENT CALLS FOR A NEW APPROACH TO COST OPTIMIZATION

Economic downturns are a way of life for oil and gas companies. When oil prices fall, so do industry expenditures. In the past, spending cuts have been largely indiscriminate and reactive. They've also been temporary.

For example, in 2007–08, the growth rate for operational expenses/barrel (Opex/bbl) in the industry was 13 percent. During the 2008–09 oil crisis, operators virtually halted their spending growth, bringing Opex/bbl growth down to just 2 percent. But one year later, Opex spending returned to near pre-crisis levels.¹

The tendency to bounce back to prior spending levels is not unique to the oil and gas industry. According to Accenture Strategy research, just half (51 percent) of all companies that reduced their spending were able to sustain cost savings for one to two years.² But the voracity with which oil and gas operators upped their spending is noteworthy. When oil prices rose above US\$100 a barrel, operators had a clear incentive to invest in technical solutions that would allow them to produce more of it. They spent extravagantly to do just that. Between 2006 and 2013, the industry average Opex/bbl nearly doubled, from US\$4 to US\$7.60. During that same period, cumulative dollar inflation hovered just around 20 percent.³

The resurgence in spending after a downturn is understandable. Industry downturns in the last 20 years have typically been short lived, which meant oil and gas companies only needed to tighten their belts until oil prices rose again. Also, since oil prices have historically been high, oil and gas companies have had no real need to establish a culture of cost optimization. That's not the case today.

WHERE ARE THE COST OPTIMIZATION LEADERS?

Adopting a long-term mindset to cost optimization will be challenging. It's been more than 20 years since oil and gas companies had to navigate a prolonged downturn. Fewer than 10 percent of current industry leaders were in industry leadership positions at that time. And among workers, only four out of 10 have any memory of what it was like to manage costs over an extended period of time.⁴



Global investments in efficient, renewable energy sources have tempered the world's reliance on oil and gas. At the same time, fracking made it possible for operators to extract light tight oil more quickly, cheaply and in greater volumes than ever imagined.

Because of this increased supply and decelerating demand, oil prices are expected to remain between US\$50 and US\$80 per barrel for the foreseeable future.⁵ Even modest pricing fluctuations can wreak havoc if they occur at greater frequency. Our analysis revealed that daily oil price volatility reached 19 percent between 2014 and 2016. That's nearly four times higher than 2010–14 levels.⁶

In an environment characterized by low prices and a constant state of market volatility, oil and gas companies will find that their current cost levels can no longer sustain the margins to which they have grown accustomed. They will also find that their traditional approaches to managing their operations and costs will hold them back from achieving the agility they now need. It's time for them to pivot their focus from cost management to cost optimization, from process improvement to process transformation, and from digital enablement to digital disruption.



PIVOT TO THE NEW, NOW

New, comprehensive cost optimization strategies can help oil and gas companies not only weather the downturn, but thrive when the market rebounds. These strategies will combine three distinct and equally critical components:

A ZERO-BASED MINDSET.

Most oil and gas companies determine a given year's costs based on what they spent in previous years. But amid the industry's increasing volatility, as well as falling technology prices, a backwards view of spending will not propel them forward. Fortunately, they can now re-imagine their budgets and spending based on what things "should cost," not what they have cost in the past. Similarly, they can re-imagine their organizations, supply chains and processes from a zero-base. Starting with a clean slate in multiple areas can help oil and gas operators achieve better visibility into the organization, prioritize spending, and free up capital that can be reinvested in activities that drive growth and profitability.

Companies in other industries have applied zero-based approaches to generate savings of 20 to 30 percent.⁷ Oil and gas companies can achieve similar benefits. A small independent, a large independent and a national oil company all infused their cost optimization strategies with a zero-based mindset to reduce annual supply chain spending by 15 to 20 percent.⁸ A downstream B2B player zero-based the organization to achieve savings of 5 to 10 percent across its sales, marketing and supply chain areas.⁹



Zero in on Savings

To jump start a long-term approach to cost management, oil and gas companies should:

- **Assess all opportunities to apply zero-based budgeting approaches. Benefits, professional services, well services, and rig/driller contracting hold particular potential.**
- **Commit to gaining forensic visibility into costs and eliminating waste from their organizations.**
- **Set aggressive targets that break the habit of incremental cost cutting.**

INNOVATION.

Nearly half of oil and gas spending (48 percent) is for highly technical and industry-specific processes such as drilling and oil production. While “should cost” approaches can play an important role in getting these costs down, they can only do so much. In complex areas such as well services, subsea equipment construction and maintenance, and rig and drilling contractor management, oil and gas companies need to think more innovatively about how to achieve the efficiencies and competitive agility they need. Process transformation, digital disruption and operating model reconfiguration are all on the table.

When it comes to rethinking how they do things, oil and gas companies can get inspiration from other industries. Amazon has revolutionized the concept of supply chain management and logistics with innovations such as robotic warehousing and drone or one-hour delivery in certain markets.¹⁰ Volkswagen and other carmakers have done the same to manufacturing with modular vehicular architectures that enables them to build various brands of cars in one facility that share a set of standardized components.¹¹ There’s clearly an opportunity for oil and gas companies—which lack product-traceability capabilities and tend to treat every project as unique—to apply innovative thinking from other industries to their own.

Digital technologies can also help enable the innovative responses that are now needed. Seventy-two percent of industry professionals believe cost reduction is an important—or even the most important—challenge digital technologies can help address.¹² This is more than digital lip service. Eighty percent of respondents indicated they are planning to invest at least as much in digital over the next five years as they have in the past. Half will invest more.¹³ This is encouraging news. While oil and gas companies are on the technical edge in certain core engineering areas, they generally do not have a strong culture of digital innovation (see Figure 1). Now, they have a chance to catch up and, in the process, seize opportunities to optimize operations.

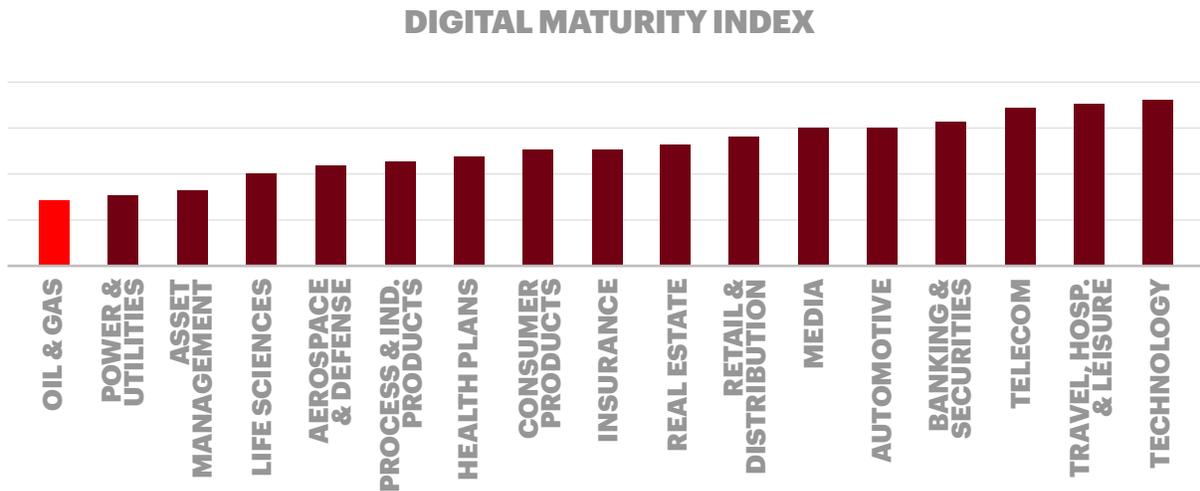


Target Practice

To build out a comprehensive cost optimization capability, oil and gas companies must address spending in capital-intensive, industry-specific areas by:

- **Developing new ways of working by customizing concepts and solutions from other industries. Purchase tracking and inventory control are two examples.**
- **Investing in digital capabilities—especially data analytics—to achieve a new level of efficiency and technical innovation.**
- **Identifying opportunities to transform how work is performed—internally and across the supplier network.**

Figure 1: Oil and gas companies have been slow to embrace the digital revolution



Source: Accenture Strategy analysis, 2017.

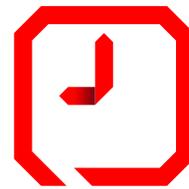
Accenture Strategy worked with one oil company to build an intelligent layer, based on robotics, into its drilling process. Today, robots are enhancing drilling performance by staking parameters more quickly and precisely than drilling engineers could.¹⁴ With industry investments today focused on mobility and the Internet of Things (IoT), we're seeing remote operations and drilling, 3D printing of spare parts, and wearable technologies that improve worker performance and safety becoming more commonplace. Over the next three to five years, the focus will shift to analytics and more targeted IoT applications.¹⁵ Some experts believe digital solutions will ultimately allow oil and gas operators to reduce Capex by 10 to 20 percent and Opex by 20 to 30 percent.¹⁶

Companies can reduce costs even further by rethinking how they operate. For example, suppliers typically engage with industry players on a fixed-rate or daily-rate basis. With these arrangements, there is little incentive for the suppliers to improve their efficiencies. New commercial models that reward suppliers for bringing costs down could fundamentally change how service is provided in the industry. Capex-as-a-service models would revolutionize the concept of asset ownership.

SUSTAINABLE CHANGE.

Cost optimization is an essential enabler of competitive agility, both when the market plunges and when it soars. Oil and gas operators must put mechanisms in place to ensure that their new cost strategies evolve over time, in lockstep with the needs of the business. A disciplined, dynamic, closed-loop process can be invaluable. With such a process, companies follow a continuous three-step cycle. First, they assess and, if needed, redefine the future-state vision they have of their organization. Next, they assess their resource and cost allocations, and make any necessary changes to achieve that vision. In the final step, they deploy their spending, starting from a zero-base. Repeating this closed-loop process prevents ineffective spending from creeping back in over time

Additionally, oil and gas operators should nurture a culture of digital innovation and a team approach to cost optimization. As described in the Accenture Strategy report **“Getting Ahead By Cutting Back,”** such an approach involves everyone in the organization. Senior executives should lead by example, and all employees should treat the company’s spending as if it were their own. Multi-channel communications, training programs, incentives and consumption policies can all be used to foster the enduring cost optimization mindset that will set winners apart.



Agility for the Long Haul

Cost management cannot be a one-time remedy for overspending. It must become a way of life. To make cost management principles a part of their corporate DNA, oil and gas companies should:

- **Identify areas where freed-up cash can be reinvested into growth and innovation.**
- **Continually assess the organization’s objectives and portfolios, and pivot priorities and resources, as needed.**
- **Create a sustainable cost management culture through change management.**

PAY IT FORWARD

Oil and gas companies are now operating in an environment unlike any they have encountered before. Today, success is dictated not by production capacity or drilling know-how, but by an organization's ability to successfully maneuver through periods of high volatility.

Digital innovation, new operating models and, above all, new cost optimization strategies will bring that differentiated capability to life.



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Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations and function strategy to help our clients envision and execute industry-specific strategies that support enterprise-wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent and leadership helps drive both efficiencies and growth. For more information, follow @AccentureStrat or visit www.accenture.com/strategy.

Notes

- 1 Accenture Strategy analysis, 2017.
- 2 Accenture Strategy, Strategic Cost Reduction research, 2015.
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- 4 Ibid.
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