



How to Develop Technical Leaders in Oil & Gas

Bridging the Technical Expertise Gap

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The oil and gas industry is facing a major technical talent shortfall in the exploration and production (E&P) sector that could be just as crippling – if not more so – as the declining availability of accessible oil and gas reserves. Over the last decade, industry volatility forced energy companies to cut their workforce down to bare bones and slash training programs. Now, as the market slowly rebounds, companies are ready to hire again– but the talent isn't there.

Frustrated by the constant boom/bust cycles, skilled workers have left oil and gas for more stable industries. The vast majority of remaining technical talent is gainfully employed, and very few of these individuals are willing to switch companies– even for a higher salary. Oil and gas companies are now facing a serious problem: they have no one in their internal pipeline groomed for senior leadership positions. Baby Boomers are retiring and there's little experienced talent in the current marketplace available for hire.

Developing top technical talent is not impossible, but it does require a shift in recruitment strategy. Oil and gas companies must recognize that their traditional approach to technical talent development is no longer effective. Companies that pivot course and take decisive action to groom tomorrow's leaders will gain a critical competitive advantage– while those that don't change course risk being left behind.

Why Are Technical Leaders Difficult to Find in Houston?

This past decade has been a rollercoaster ride for Houston's oil and gas industry. In July 2008, oil peaked at \$147.27 per barrel, only to plummet to [less than \\$40 per barrel](#) six months later. From 2011 to 2014, [prices fluctuated between \\$90 and \\$120](#), but by mid-2014, a significant increase in American oil production, combined with declining demand from emerging countries, triggered a sharp downward spiral. By February 2016, oil collapsed to [less than \\$30 a barrel](#)– nearly a 75 percent decline from 2014 numbers.

These major fluctuations in oil prices have profoundly impacted Houston's job market. With each dip, companies are forced to let go of technical talent. Now, as the energy market slowly recovers, E&P, service and manufacturing companies are facing a new problem. Companies are ready to hire back technical talent, but hiring managers are discovering this talent is in short supply.

A perfect storm of factors led to Houston's current technical expertise gap:

1. Extreme boom/bust cycles drove talent to other industries.

Frustrated by the extreme boom/bust cycle of the last decade, some top talent has permanently left the oil and gas industry. Five years ago, these individuals would have jumped at lucrative oil and gas job offers. But after their



latest ride on the boom/bust rollercoaster – weathering multiple layoff rounds and financial uncertainty – this talent has found stability in industries like electrical, mechanical and process manufacturing. Now, hiring managers are finding that no amount of money or benefits will lure these individuals back to oil and gas.

2. Remaining technical talent is employed– and reluctant to leave their current companies.

As the Houston economy emerges from its latest downturn, E&P, service and manufacturing talent who remained employed is especially reluctant to jump ship. Their current companies offer stability and a proven track record of working to keep employees on payroll even during a downturn. Thanks to this demonstrated record of longevity (rather than speedy downsizing), employees are loyal to their current companies. Should they leave, there's no guarantee that when the next downturn comes their new company will work as hard as their current company did to keep employees on payroll. Even a higher salary or benefits package simply is not worth the perceived loss in job security.

3. Baby Boomer retirement is contributing to industry “brain drain”.

The exodus of Baby Boomers departing the job force – known as the “[Big Crew Change](#)” – is in full swing. Nationwide, the number of Americans aged 65 or older without a disability who are not in the labor force grew by [800,000 in the fourth quarter of 2016](#) with an estimated [10,000 Baby Boomers retiring each day](#). Oil and gas retirement figures may be even higher. The Society of Petroleum Engineers estimates that half of the current skilled workforce could retire within the next five to seven years. Compounding the impact of Baby Boomer retirement? There is no internal talent ready to step up and fill their vacated roles.

4. Current oil and gas job seekers don't have the technical skills companies need.

The recent downturns necessitated multiple rounds of layoffs and tight budgets, leaving companies with little money to invest in technical skill development these last five years. Rather than grooming younger employees for top technical positions, companies were forced to slash training programs and cut payroll. Now, companies are finding that they have few – if any – mid-level employees who are adequately trained to take over more senior positions.

The current job pool isn't helping matters: many of these individuals were let go (through no fault of their own) from other energy companies due to the downturn. Consequently, they've never received the advanced training and critical on-the-job experience necessary to develop their technical leadership skills. While companies can certainly choose to hire and train these individuals, these job seekers won't be ready to hit the ground running from day one.

5. Rising technical complexity is exacerbating the talent gap.

Long gone are the days when technical leaders only needed to know how to drill a well in West Texas, pump oil from the ground, and then send it downstream for processing. From tar sands and shale deposits to ultra-deepwater drilling, companies are expanding their oil and gas explorations into more difficult-to-access reserves. These explorations, by their very nature, necessitate individuals with a highly specialized technical skill set. Even in the most robust job market, finding technical leaders with the right skills and experience for these emerging conditions would be challenging. Given today's lean candidate market, however, finding these leaders can feel like mission impossible.



Bridging the Expertise Gap with Strategic Recruitment

A one-size-fits-all approach to talent recruitment fails to take into account the realities of today's changing job market as well as your company's evolving needs. Rather than reacting to talent shortages, your company must take a proactive, strategic approach to talent recruitment. This includes a comprehensive assessment of your current talent gap, identifying existing opportunities for advancement, and a renewed focus on global leadership skills in addition to technical expertise.

1. Understand the current talent gap.

While most companies understand that they're struggling to recruit technical talent, many companies fail to realize just how profound their talent gap truly is. The first step to solving the problem is to understand it.

Assess your current talent gap by asking these questions:

- What will our energy business look like in five years? How many new wells and active rigs do we anticipate having? How technically complex will our portfolio be?
- How many mission critical employees do we currently have and where are we falling short? (e.g., senior geologists, rig superintendents, senior drilling engineers, etc.) At a minimum, how many new hires do we need in each discipline or geography to bridge this gap?
- How much experience will our new hires have? How quickly can we help them gain additional on-the-job experience and develop their leadership skills?

Use the answer to these questions to identify your most acute talent needs and major skills gaps. Target new hires in strategic specialties most needed for the future. For example, if you will need 10 mid-level geologists in five years, who do you need to be hiring today to ensure this need is met?

2. Maximize available talent.

Do your top performers occupy the most critical positions at your company? The answer may surprise you. Research from [Bain & Company](#) found many oil and gas companies are plagued by an alarming mismatch: average and poor performers fill most of a company's strategic roles while top performers are placed in non-strategic positions.

Why? Rather than assessing the pool of potential leaders and modeling their likely advancement paths globally through the organization, these companies thought locally about talent. They failed to track and coordinate local talent development at a global level. As a result, a concentration of technical talent would develop in one office while other offices lacked technical leaders.

Redistributing talent throughout your organization won't be a cure-all for your technical expertise gap. Like the previous talent gap exercise, however, it will help your recruitment team better understand what gaps currently exist (or will exist in 5 or 10 years) and then develop a strategic model for long-term recruitment and internal promotion efforts.

3. Recruit talent with global leadership potential.

It's tempting for industry leaders to focus solely on the lack of technical expertise in today's job market. However, it's not enough for future oil and gas leaders to simply master complex technical skills. In an industry where globalization and geopolitical risks are just as important as operational excellence and profitability, tomorrow's technical leaders must be global leaders, too.



Today's diverse teams may include a Brazilian drilling engineer, an Italian completions engineer, and a geologist from British Columbia. Team leaders must be able to collaborate effectively in a global, knowledge-based environment. Effective communication skills, including the ability to clearly and concisely translate complex technical details, are paramount.

Tomorrow's leaders must be adept at organizing people and processes and then communicating not only what needs to be done, but also why it needs to be done. The ability to explain your decision-making process and be open to adjusting this process based on team feedback is the hallmark of tomorrow's global leader.

4. Look outside the industry for confident decision makers and quick learners.

Facing extreme staffing shortages, companies can no longer afford to disqualify candidates for a lack of technical skills. This is not to suggest companies settle for "second best". Instead, companies need to think outside the oil and gas talent box. You won't find the next generation of leaders at Del Frisco's steakhouse in Houston or the Capital Club in Bahrain— you'll find them at seminars, continuing education events, industry conferences, professional certification programs, and leadership programs.

These are the individuals who take it upon themselves to further their knowledge and leadership skills. They're open to continued learning, rather than assuming their settled perspective is the right way. They're proactive, passionate and driven: exactly the people your company needs in this era of dynamic industry change.

While job-specific tasks are trainable, you cannot teach intellectual curiosity or decision-making confidence. These are soft skills that will profoundly impact a new hire's ability to be successful. As oil and gas continues to evolve at a rapid pace, the ability to quickly master new information and apply this knowledge on-the-go is critical, as is the ability to make decisions with confidence.

How to Train and Mentor Tomorrow's Technical Leaders

The new hires you recruit may have already demonstrated leadership potential and technical proficiency. It is still up to your organization, however, to shape these new hires into tomorrow's global, technical leaders:

1. Provide mentorship opportunities.

Given the thin leadership bench, many companies are turning to intensive training programs to replace what years of on-the-job experience previously provided. The right talent – fast learners who are confident decision makers with global leadership potential – will thrive under solid coaching.

The [Society of Petroleum Engineers \(SPE\) eMentoring program](#), for example, gives SPE members a way to contribute to the E&P industry by sharing industry insights and practical career advice with young professionals. The developing specialists also have the unique opportunity to serve as mentors to university students, providing academic and career guidance. The eMentoring program makes it easy to communicate via email, Skype, LinkedIn or other social media, keeping mentors and mentees engaged throughout the process regardless of location or time zone.

If your talent cannot be taught – or teach others in return – promoting this talent into leadership positions will do little to benefit your company in the long run. When recruiting top candidates, look for individuals with a strong desire to learn and teach others in return.



2. Codify your existing knowledge base.

The Big Crew Change means a major “brain drain” of institutional knowledge and best practices. If your business has not done so already, now is the time to codify this deep knowledge base before it walks out the door into retirement.

One effective approach for institutional knowledge codification is web-based knowledge management (KM) communities that allow simultaneous instruction and discussion around industry issues. Generally led by industry experts, the KM communities foster collaborative learning and global dialog around critical topics. Participants can join discussions in real-time or review the threaded discussions. Chevron’s four-day Executive Training program is one example of an intensive version of the KM approach, offering a simulated series of challenges in a real-world format.

Next Steps: Recruiting the Next Generation of Leaders

The oil and gas industry is undergoing a state of dynamic evolution thanks to increased globalization and rapid technology advancements. As oil and gas companies in Houston continue to rebound from the downturn, they’re investing in digital technologies that integrate, collaborate and automate processes. In addition to engineers and geologists, they’re recruiting technology-savvy, metrics-driven professionals who excel at complex logistics management, operational performance, and cybersecurity— and there are more open job positions than available talent.

The current technical leadership gap is both a challenge and an opportunity. Energy companies that continue to follow a one-size-fits-all approach to talent recruitment will also continue to struggle with talent recruitment. Companies that adopt a strategic approach and are willing to consider non-traditional talent sources will tap into new markets for technical leaders.

Today’s energy companies must understand that the scarcest global commodity is not oil and gas reserves, but human talent. Companies that approach their talent supply strategically and recruit for global leadership potential – in addition to technical skill sets – will be best positioned for success in an increasingly talent-constrained world.

I'm interested in your experiences and perspectives on this topic. Please send your ideas and comments to me at darmendariz@lucasgroup.com.