Learning to Do More With Less in Oil & Gas

FOSTERING CREATIVITY AND DEVELOPING TALENT AND RESOURCES IN A VOLATILE ENVIRONMENT

A group of Oil & Gas industry professionals discuss their recommendations on how companies can literally do more with less.
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Doing more with less. It is increasingly becoming the unofficial motto of the oil and gas industry, which has to tackle greater obstacles with fewer resources these days. More than ever, showing creativity – in exploration and technological innovation, as well as through strategic partnering – and demonstrating a commitment to investing in human resources is critical to survival.

“This industry is not in a particularly good spot in the moment,” admits Andrew Latham, Vice President of Exploration Service at Wood Mackenzie. “It’s under a lot of stress.” Not that the whole picture is bleak. Latham points out that much is going right with O&G, too, with conventional gas still being fairly abundant and some 40% of exploration wells making discoveries. But even with the good, problems persist that have a serious effect on the overall health of the industry.

A NEED TO LOOK AT THE LONG TERM

“You can look at the valuations of oil and gas companies and compare them to other sectors and they are miserable,” Latham says. “Investors are not exactly in love with oil and gas right now.”

“Whenever you’re trying to do anything different, when you’re trying to be creative, whether you’re a geologist, an entrepreneur or whoever you might be, there are all sorts of factors that get in the way. Things designed to stop you. Not just to trip you up, but literally to stop you progressing,” insists Phil Andrews, Chairman of Getenergy Events Ltd. “One of them is the investment communities, or the public owners of some of these major firms, who have relatively short-term aspirations for the share price and the return on investment that the company makes, in order to produce dividends.”

Jonathan Turner, a structural geologist in the Geological Studies Group at BG Group, shares the concern about the narrow focus of some investors.

“We need to communicate with our investors a lot better than we do at the moment,” he insists. Improved communication would help investors to better understand the particular challenges that oil and gas companies are facing at any given time and allow both parties to align on their objectives.
“A few years ago we were getting the average well down in 50 days. Now it takes near 80.”

— Andrew Latham, Vice President of Exploration Service at Wood Mackenzie

LOW PRICES, HIGH COSTS

While the investors’ love affair with O&G may come and go, there is no denying that the industry has other long-term concerns. “It’s costing more to find oil and gas,” asserts Latham. “It’s costing more to develop oil and gas.”

Considering that the average well needs to go deeper than before, plus the demand for a more cautious approach to drilling, the process is simply taking longer. “A few years ago we were getting the average well down in 50 days. Now it takes near 80,” explains Latham.

“The majority of the new supply that this industry is bringing to market is complex,” he continues. “Either because it’s in deep water or because it’s gas that needs infrastructure to sell. Or it’s in tight reservoirs or nasty fluids or whatever. And actually quite a large amount of this ‘easy’ conventional is nothing of the sort. It’s remote onshore oil and things like that. So, irrespective of the price change we’re facing right now, we’ve got this enormous challenge of complexity in all its various forms, which is driving costs.”

BUT IT’S ABOUT MORE THAN THE PRICE OF OIL

“If the oil price was above $100, we could still have a debate about doing more with less,” says Turner, who feels there are three main reasons for this. “One of them is less money, one of them is less man and woman power. And the third is less public buy-in, particularly with fracking and the whole debate around unconventional. So I do feel that, because of the fact that over the next 4 to 5 years something like 50% of subsurface professionals will retire, we still need to face the idea of doing more with less.”

“The question is, how can an industry that doesn’t have loads more engineers or geologists, certainly doesn’t have lots more cash, how can it address these pretty challenging trends and get back to making good returns, which is what the companies and investors want?” asks Latham.

A high percentage of the O&G workforce is nearing retirement age.

HIRING, RETAINING, AND DEVELOPING TALENT IS CRITICAL

More than half of the current workforce will retire within 5-10 years

Currently, the average age of an O&G worker is 50 years old


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DEVELOPING PARTNERSHIPS

There seems to be agreement from virtually everyone in the industry that reaching out to others will be critical to doing more with less. “Partnerships are going to be important – partnerships perhaps between companies and their contractors, partnerships between companies and resource holders,” says Latham. “But even partnerships between companies themselves, from a point of view of risk sharing and idea generation.”

Friso Veenstra, Senior Director of Business Development for Oil and Gas Exploration at TNO Energy, believes “it’s all about joint industry projects. It’s all about being aware of the fact that you face the same challenges.”

But the willingness to share is not always there. As Ian Bryant, Chief Operating Officer at Packers Plus Energy Services Inc., points out, “I think there's always a reluctance to share in the good times, because people feel they have competitive advantage and they're not willing to share with a peer group.” He is still hopeful, though, that some partnerships can emerge as they become necessary. “When things get tough, that’s when there’s an opportunity for better partnering between the service sector and the operators to try and jointly come to a way of making things work. So I'm kind of optimistic that might be one of the good things that comes out of the present climate.”
“In terms of possible solutions, the one I’m most in is nurturing the next generation of really top-notch creative geoscientists.”

– Jonathan Turner,
Structural Geologist at BG Group

THE PRICE OF OIL HAS DROPPED SIGNIFICANTLY SINCE LATE 2014. This is one of the biggest reasons that Oil and Gas companies need to “do more with less.”


NURTURING CREATIVITY IN EXPLORATION

When fewer resources are at a company’s disposal, that is when it is time to start looking at your human capital. “In terms of possible solutions,” opines Turner, “the one I’m most interested in is nurturing the next generation of really top-notch creative geoscientists.”

Bryant agrees. “There’s a very well-known saying that you won’t find oil by taking the same old ideas and looking in the same place. There’s been so much exploration over the last century that you’re always going to be looking where someone has been before. So the ideas, the creativity of the individual geoscientist is absolutely critical.”

“The real key to finding completely new plays and opening up new basins,” continues Bryant, “is people having new geological ideas. So I think that creativity, a different generation coming in, not vested in the past, not living with accepted wisdom from previous people, that’s really critical.”

TECHNOLOGY, INNOVATION AND INFO MANAGEMENT

Technology and innovation play a significant role in helping oil and gas companies accomplish more with less money and fewer resources. This can cost a lot on the front end, but, in the long-term, successful technologies can save money by saving time – and by saving companies from investing their efforts in the wrong places.

“In the past,” contends Bryant, “you wouldn’t have been able to get images beneath thick salt cover, now you can. So there’s a way of seeing things that other people couldn’t, using technology.”
And valuable technologies do not always come in the form of pricey equipment. Informatics solutions, for instance, can offer search and processing technologies that make it possible to swiftly and easily find needed answers for critical decision-making.

Simply knowing where to look for valuable data is often a major difficulty, though. “One of the big challenges with some of the companies that we’re working with is just integrating legacy seismic data,” says Veenstra. “It’s a struggle sometimes to bring it all together, to just know what you have in-house, to just know what’s available in terms of data, and use that as a starting point for your new exploration efforts.”

“I’ve lost count of the number of times, in visiting various countries,” adds Andrews, “you go to the university geology department and find piles and piles of data on the professor’s desk. Which I would imagine some of the IOCs would absolutely love to get their hands on, but they don’t visit universities. It’s not part of the plan. So, actually, in lots of these countries, data is all over the place. And the best place to start is in the brains of the people who’ve run the industry 40 years before you even turned up.”

INVESTING IN RELATIONSHIPS

Andrews emphasizes the importance of examining the relationship between the companies and the people who own the resources being used. “It seems to me that that might be an area where there could be enormous improvements if we recognized the impact of what we’re discussing here on an economy that relies on the production of oil and gas for its ability to reinvest in itself.”

“It may be possible, in this kind of doing more with less mentality, to better deploy the resources you get as a result of the investment,” reasons Andrews, citing how the president of Brazil recently announced her intention to “turn oil into education” in order to deal with the nation’s social problems.

This is not only advantageous for the countries, but can be for the oil companies as well. As they direct millions of dollars into research in a particular country, they can benefit from the fruits of that research, which is not only about data and innovation, but also about nurturing new generations of geoscientists.

Speaking about maintaining a healthy relationship with resource owners and with governments, Andrews notes that “you wouldn’t immediately pick that up from the idea of doing more with less. But, actually, it’s quite an entrepreneurial approach to building your business. Build a local business.

It’s much more efficient and more effective. But, yes, it does mean investing. And it means investing in things that the IOCs, who regard all this stuff as corporate social responsibility, would regard as a luxury. But there’s actually an argument that this is core business, and this is how you build a sustainable economic model to run your business in a particular country.”

“I think the industry as a whole is realizing that they’re going to have to be more efficient.”
— Ian Bryant, Chief Operating Officer at Packers Plus Energy Services Inc.
BREAKING THE CYCLE: SAVING TALENT MEANS SAVING MONEY

The cyclical nature of the oil and gas industry, with its fluctuating prices and short-term-focused investors, means that it is often losing many of its greatest assets.

Bryant says that when the oil price is down, a great deal of value in the business is done away with as equipment is discarded and people are let go. “People who we spent a lot of money to train,” he notes. “So when the price comes back and the industry wants to get going again, we have to then make another big investment in training people and building new equipment. That is an anchor on the whole industry, the fact that these cycles are so destructive in terms of the value that we try to jointly create.”

But it goes beyond a hit to morale and putting talented people out of work. The fact is that it is time-consuming and costly in the long run. As Andrews points out, “There have been studies before, looking particularly at Aberdeen but also elsewhere, when there’s been a downturn in a cycle, the amount of time it takes you where you were before, in terms of attracting people to the industry is far, far longer than it would be if you [gave] people a sabbatical, more training, those kind of things. An innovative approach to the problem, rather than cutting people on your human resources.”

TOWARDS GREATER EFFICIENCY

“I think the industry as a whole is realizing that they’re going to have to be more efficient,” asserts Bryant.

From current oil prices and the increasing complexity of exploration work to the forthcoming shortage of experienced geoscientists, the O&G landscape simply requires that companies learn to overcome bigger hurdles with fewer resources. Fortunately, as we have learned from some of the industry’s experts, there are many strategies for rising to this challenge, from fostering creativity in all aspects of exploration to ensuring that the best talent is being nurtured and retained.

No matter how great the challenges, though, O&G has proven it can take them on. “This is a pioneering industry, isn’t it? This is an industry of pioneers,” Andrews reminds us. And because pioneers are, by nature, people who push beyond the limits of what seems possible, doing more with less just comes with the territory.