

**7 WAYS TO BOOST
OPERATIONAL EXCELLENCE
IN THE CURRENT
OIL PRICE
ENVIRONMENT**

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The recent slump in oil prices has affected the oil and gas industry from the South China Sea to Gulf of Mexico, **squeezing operating budgets and assets** alike.

A key instrument for weathering the storm whipped up by the oil price downturn is the implementation of **operational excellence (OE) principles**. In the following industry analysis, we look at seven ways in which oil companies are attempting to brave the oil price crisis and win in the current oil price environment .



We spoke with **Lee Laviolette, Global Oil and Gas Leader at Navigant and Co-Chair of the upcoming Operational Excellence in Oil and Gas Summit in Houston in November, 2015**, to gain his insights on the following seven top ways to boost operational excellence in the current oil price environment, also drawing from his experience with organizations in the industry.

1. REDEPLOY, NOT UNEMPLOY



Given the nature of the oil and gas industry, low oil prices will inevitably mean job losses. Touching on the subject of top talent, Lee Laviolette says: “Companies in hard times can forget how difficult it was to attract top talent that they really wanted in the more competitive times to begin with quite quickly.” Another observation is clearly understanding core and non-core roles. The latter can be redeployed and contracted out, which will then bring around the issue of managing contractors. Companies need to be clear how exactly each role is contributing to the bottom-line, then increase the contribution or look at other ways of covering roles.

As opposed to simply axing staff headcount in areas of the business that have become strained in times of financial difficulty, **companies should be looking at reassigning personnel to areas of the business where there is still extant or potential growth**. Lee Laviolette adds: “It’s pretty hard to do a full cost-of-employment analysis, but to unemploy someone and then to go back and re-attract an equivalent capability set later on is a pretty expensive proposition. So, the economics are not necessarily all that attractive to begin with even from a pure economic standpoint.”

In such a way, **instead of losing years-worth of in-company and industry knowledge** with the swing of a hatchet, there is a **redistribution of expertise** across the organization. Another important factor to remember is loyalty. “Loyalty is not dead and people will remember at some later point in time when they’re trying to be attracted away, the loyalty that was shown by companies,” says Lee. “There’s no direct way to measure that other than retention, but people will make decisions to stay and that will ultimately pay back lots of rewards to companies that stick with them in later times as well.”

*“All industries (especially this one) go through booms and busts;
without fail, we will get through this one and arrive in better shape than before.
So have confidence!”*

Lee Laviolette, Global Oil and Gas Leader, Navigant

What Can Companies Do?

Take up the mantle on bringing new capabilities with people while the immediate workload is down. [ISO 55000](#) is coming, so building skillsets around what's going to be needed and really be ahead of the curve will be a good investment. Building Lean Six Sigma and project management skills among your employees will also be beneficial.

Some Innovative Practices:

- **Loaning employees** to non-competing industries for a period of time to learn new skillsets from some complementary industries.
- **Collaboration tools**
- **Remote operations and technology centers** with technology specialization (i.e. FCCU, Alky, Crude, Coker, etc.)
- **Installing job sharing** where employees are given a chance to voluntarily cut back to half-time and two or more people take on a single workload. This not only helps to distribute a role across two to three people, scaling back hours and salaries, but everybody keeps their employment until a company can afford to bring them back on a full-time basis.

2. GET TO THE ROOT OF THE PROBLEM

Operational Excellence consists of stripping out anything that is unnecessary and purely habitual from the running of a business. As such, **root cause analysis (RCA)**, is the defining method for identifying the fulcra of a procedural problem. In RCA, the key underlying cause of an unwanted event (accident, incident) is identified. The process of arriving at the root cause is structured and assesses several optional candidates for the root cause while driving towards the final solution. Multiple tools or methodologies exist for this identification. At times these tools may have specialized applications and it is important to know the particular strengths of each one.



“Leading players are finally learning how to address systemic legacy problems,” says Navigant’s Laviolette, who details one technique being carried out with clients: “To a very large extent, we’re using a combination of the **Lean toolkit and Kaizen** in an innovative way to do rapid improvement interventions where the problems are really well understood.” Lee explains that the work is carried out in “a very prescriptive way to address the known root causes and solve them for good”. However, when the root causes are less well-known “we have created something that we call a **Discovery Kaizen Process** where we can go in and – again using value stream mapping and other kaizen approaches – very quickly identify the root causes and then the rapid intervention approaches can be used on these.”

When successfully achieved, RCA is the ultimate expression of a lean philosophy: getting to the crux of a problem that persists in causing a range of symptoms, rather than just carrying out intermittent and superficial firefighting actions.

3. MAP THAT VALUE STREAM



Part of the lean philosophy, **value stream mapping (VSM)** can be applied to virtually any **product value chain**. Oil and gas companies are increasingly looking to the analysis and redesign of the web of events that take a product or service from its origins all the way through to the customer.

VSM is a straightforward itemization of the moving parts that drive a process - stripping out of the extraneous parts of the flow allows for the remodeling and reorganization of a value chain. Even in a pen and paper flowchart format, companies will be able to make sure that there is no doubling up between departments and that silos are broken down to maximize knowledge sharing without compromising on KPIs and safety critical elements.

Lee highlights one example with a steel manufacturer, which was having a power outage, where VSM has had huge benefits: “They were losing more than an hour per day of productivity from their workforce - between 2,000 and 3,000 workers - because of inefficiencies in physically getting all of these workers through the security gate.” The solution: “In partnership with a cross-functional team of their employees and contractors we facilitated them through this process which was less than a week in duration and literally overnight we were able to help them recover almost an hour per day of productivity across this huge worker base.”

4. MANAGE CHANGE



As a result of the triage that is entrained by any operational excellence-focused restructuring, **companies will need to be on top of all aspects of change management.** One way in which this can be tackled is by involving those on the proverbial shop floor and building a flexible system through consultation. By **gathering input from those at the coalface**, restructuring can begin from the bottom up in a way that will be optimally productive for those that need to carry out the tasks in hand. The role of the change manager in an OE context is that of a communicator, whose function is to liaise between teams and integrate frontline personnel’s knowledge of particular systems into an adapted and best-practice model.

Change often has a technology component. Make sure new technology **really is supporting** the business objectives.

In any kind of sustainable approach to performance improvement, **the levers of people, processes, and technology all have to be addressed** and they all have to be addressed in an integrated way.

Historically, one of the most challenging things centers around people. Lee states: “We can never get away from the fact that **results are always driven from the bottom up and that always starts with people**. One of the earliest white papers that I ever wrote was called **Leadership of Change** and it’s all about people and it’s probably the most timeless piece that I’ve ever been involved with because it is always about people.”

Navigant’s Laviolette says that he has “**war story after story**” on managing change but one particular case, during a three-year major operational transformation with a gas liquids separation division of one of the world’s largest national oil companies, sticks out: “The transformation created more than \$100 million per year of sustainable profitability improvement and the operational levers in play were throughput, liquids recovery, and energy efficiency; everything was built around driving improved performance in all three of those in a sustained way. However, when I was touring all of their operating facilities with the CEO, he said to me: “*When I look around, the assets are the same, the technology is the same, even the people are the same, but what is different is how we are working and how we are working together*”. That for me was an ultimate testimony to the fact that you can never get away from the people dimension.”

5. STANDARDS ARE GOLD

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A lot of the wastage and inefficiency that flows through processes comes from starting from scratch at the inception of any project. The nature of the oil and gas business means that no one asset is identical to another - however, that does not mean that there cannot be a prototypical template for the way that a project is structured. Although it will be impossible to fully standardize a project based on the bespoke needs of every situation, oil and gas companies should be moving towards at least partial standardization of their processes to cut out unnecessary legwork and time.

Having and following (effective) standards is gold... and now is the time to challenge some of the gold plating standards. Be clear not just ‘what’ but ‘why’ they are there and (offline) review whether they are still a real requirement. Efficiency is key. Ultimately though, standards need to be simple and easy to understand.

Talking on the topic, Lee believes the **mind-set is now moving beyond corporate standards** from local standards, which are very much experience-based, to international standards. “How those standards get constructed into processes and get pieced together from standards to practices and then practices up to processes; there’s always going to be some customization and it’s going to have to take into account local situations and local constraints, he says. “But at the core there is a best way to do things and recognizing the way that I do it today – whoever I am, wherever I am – is not likely to be the best possible way. This is the start of understanding that **continuous improvement** from whatever my level of performance is today to something better in the future is possible.”

6. DON'T SEPARATE HSE FROM OE

The mantra of any commodity-based industry is to do as much as you can, as efficiently as you can with as little cost as you can. At the heart of this, should be the commitment to “as safely as you can”. When an overhaul is in full swing to streamline the way business is done, the customary trimming of staff numbers could inadvertently result in safety lapses. One way for the oil and gas industry to shed workforce but remain safe is by involving top brass from the safety fold to invigilate the restructuring process. Across the sector, many of those responsible for operational excellence are actually the directors of HSE, showing a commitment to the fact that OE and HSE are complementary and not opposing.


According to Lee, health, safety, and environmental performance (HSE) go hand-in-hand with housekeeping and housekeeping is exactly a leading indicator for the potential for bigger safety issues and risk. However, Lee adds: “I actually see efficiency, productivity, variability in operating performance along any number of operating metrics as being the same thing. People who, and organizations which, recognize that there is a best way and that standardization of practice is a good thing are the ones who are going to achieve and sustain leading health, safety, and environmental performance.”

“When you look at the design of processes, when you look at the metrics by which processes and operations are measured, they have to include all perspectives including health and safety perspectives as well as customer service and financial performance and all of those dimensions together at the same time,” Lee adds.



7. INSTIL A CULTURE OF COST OPTIMIZATION WHILE IMPROVING HSE & RELIABILITY

Operational excellence is really about efficiency, which, in turn, goes hand-in-hand with cost reduction. For the first time, many companies are having to explore possibilities for cost reduction where their remit has formerly only consisted of getting as much oil out of the ground as possible.



As well as establishing a philosophy of cost savings, there must be a clear message to all concerned that this is not being taken up as a short-termist quick fix to balance the books in hard times, but as a genuine *modus operandi* for a long-term sustainable future.

There is also an important onus on the Supply Chain by “not just demanding price cuts but talking with the supply chain about genuine cost reductions and listening to them,” adds Lee.

“It’s all about driving better, faster, more informed decision-making closer to where the operation happens,” Lee says. He adds: “While standardization and best practice-based process design is something that every organization works to achieve, situations do arise in the course of day-to-day operations where decisions have to be taken. You want those decisions to be made in the best possible way by the people who are running the operations. That’s where real, long-term, sustainable, continuous improvement is going to come from.”

Looking holistically across the industry, “we’re seeing broad efforts across the industry to build business skills, to create toolkits and information systems that give the people who are at the control boards and in the field turning the valves, operating the levers – the engineering teams who are collocated with the operators – everything they need to make the right decisions and continuously improve operating performance,” Lee adds.

Organizations are striving to understand what the decisions that need to be made are and what actions or tools will help people to make better, faster, more informed decisions. One example highlighted by our Co-Chair of the Operational Excellence in Oil and Gas Summit in Houston included: “An operator in Houston for example, which is very successful in the conventional space, is getting into unconventional and they are taking very diligent efforts to look across who the best-in-class existing North American unconventional players are. They’re trying to learn from these players about how to structure their new organization, how to build their operating model, and how to empower their teams so that they have a very abbreviated learning curve from what it might otherwise be.”

WHY SHOULD PROFESSIONALS ATTEND THE OPEX IN OIL & GAS SUMMIT?

“What’s so exciting about the event to me is that it’s both timeless and universal. Upstream, midstream, downstream; upswings or downturns in market cycles... Operational Excellence can either help preserve profitability or it can maximize profitability. It can help the best get better. It can help the weaker players close performance gaps with the leaders. It’s something that everyone has to pay attention to. The smallest players can get bigger. The biggest players can establish absolute market leadership or conversely prevent them from dropping the ball. It’s something that every company, every organization has to pay significant attention to. It’s probably the most universal concept in my mind in any industry. In an industry as capital, labor, and technology-intensive as ours, it’s absolutely imperative to focus on for every company and so from my standpoint I personally could not be more excited and it’s why I’ve been passionate about operational excellence my whole 35-year career.”



Lee Laviolette

**Global Oil and Gas Leader at Navigant
Co-Chair of the Operational Excellence in Oil and Gas Summit (Houston)**

**OPERATIONAL
EXCELLENCE
IN OIL AND GAS**



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