ACHIEVING OPERATIONAL EXCELLENCE IN THE OIL & GAS INDUSTRY THROUGH STRATEGIC ENGINEERING OUTSOURCING

Introduction

The slump in the Oil & Gas prices during current industry downturn has been very dramatic. From a level of US$100+ per barrel in May 2014, oil prices have slumped to about US$30 per barrel and below in early 2016. This has set alarm bells ringing in the industry and companies involved in exploration and production are forced to question how they can stay profitable and economically viable. The immediate need for oil companies in the wake of the price slump has been to control and reduce their operating costs in every possible way to maintain their cash flow and profitability.

While the situation is unprecedented in recent times, the accompanying challenges have been intense enough to warrant new approaches that would ensure reduction in costs, besides rationalization of capital and operational expenses. The current situation has provided the drive and motivation for companies to seriously embrace operational excellence. Engineering outsourcing has specifically emerged as a sustainable means to achieve operational excellence, providing major benefits in reducing costs and maintaining profitability. Outsourcing of non-core activities could result in 25% cost saving for on-/near-site operations and 50-75% for offshore operations compared to cost of doing same activities in-house.
Need for Operational Excellence

Oil & Gas industry projects are marked by long lead-times and the recent oil price decline has created a situation where projects are not as profitable as originally planned. The sizeable amount of capital investments required specifically in the exploration and production stages heightens the need for cost control. In addition, there is a substantial reduction in investment globally in new exploration and production projects since the upfront investment is not financially feasible. This has resulted in reduced order books for equipment manufacturers and oil field service providers.

The operational strategies within Oil & Gas companies have been modified to enable them to survive in this environment and be in a position to grow when the market returns. Initiatives have been kicked off as companies look for innovative ways of lowering costs and gaining operational excellence to maintain a sustained, long-term competitive advantage.

Operational Excellence

Operational Excellence is something many organizations strive for and requires long-term planning and transformed mindset. It brings together many diverse aspects of an organization to ensure strategy, budget, and resources are in sync. Operational excellence can improve equipment/facility uptime, improve resource efficiency, increase capacity, and lower maintenance and production costs. According to a McKinsey estimate, an operationally excellent team spends 50% of their time on value-added activities compared to an industry average of 25%.

Implementing Operational Excellence is a complex undertaking that involves identifying processes to map out and enhance them using various tools and techniques. There are many routes to achieve operational excellence, one of which is to increase engineering outsourcing.
Engineering Outsourcing & Operational Excellence

Many large players in the industry have had to resort to layoffs and cut their focus on research and new product development to focus almost solely on their current business. These are not sustainable decisions in the long run.

A more sustainable option is in strategic outsourcing of non-core activities. Outsourcing brings positive outcomes, strengthens the business, and is scalable for growth during the eventual industry upturn.

Outsourcing engineering services helps with cost control, allowing companies to focus on their core business functions. Outsourcing ensures that the non-core work streams of Oil & Gas companies are optimized and can be done at significantly reduced costs and more efficiently. Internal resources can focus on core activities that add value to the organization and their customers like research and new product development. Whilst engineering outsourcing is still a new concept in the Oil & Gas industry, it can be seen as a paradigm shift in the direction of cost reduction and operational excellence and driving towards a competitive advantage.

Engineering Services Outsourcing (ESO) partners have validated processes, systems, tools, and training methodologies from their prior experience in other industries. These are updated and improved constantly and considered best practices. In addition to the relevant and qualified skilled engineers, ESO partners like QuEST have the domain knowledge, functional expertise, and capability to integrate and sync seamlessly with the systems and processes of the client, acting as an extended arm of their customer’s team. Outsourcing companies can provide the benefits of a collaborative partnership and function like an undifferentiated extension of the company. The flexibility of an ESO partner also allows for customers to seamlessly cope with workload fluctuations despite unpredictable industry dynamics. Outsourcing can be a beneficial, sustainable, and long-term partnership in terms of benefits, profitability, and viability for Oil & Gas companies.

Conventional Strategies

- Unstable Organization Structure:
  - Delivery Quality & Capacity impacted
  - Rebuilding needed during rebound

- Majority of Outsourcing Teams Laid Off

- Experienced people doing low-level work

High Performance Strategies

- Keep the focus:
  - Operational Excellence via Outsourcing of non-core
  - Cost Savings of 50-75% on non-core capacity

- Additional Non-Core Outsourced to Save Cost

- Non – Performers Laid Off

Cost-cutting Strategies
How & What to Outsource

Outsourcing helps companies have the best of both worlds with respect to the local and global business environment, expertise, and costs. Companies can leverage the global knowledge, expertise, and best practices along with the definite cost advantage that a global workforce brings in. They can get closer to the customer and understand them and align better with respect to the local geography, industry, and customer base. The exact operating model to be used will be decided as a function of the engineering activity, processes, and requirements from a customer.

What can be outsourced differs greatly for each company and depends on their specific organization priorities and their challenges. A QuEST proprietary tool and process called the Workstream Assessment is used to help identify the ‘outsourceable’ areas. This process involves QuEST Technical Experts and Engagement Leaders working hands-on with engineering managers and technical leaders to understand in detail, the tasks and activities involved. With the results of this assessment, a joint engagement roadmap can be defined. This ensures that the engagement progresses and delivers maximum value to the customer.

QuEST Operating Models Technical Services Consulting (left) & Managed Services (right)
Success Story 1

An Oil & Gas industry customer of QuEST was able to improve productivity on their manufacturing shop floor by 2.5x. This involved outsourcing their CNC programming to QuEST center in India, where they were able to significantly reduce the time taken per program and allow machine operators to run the shop floor efficiently, aside from the cost advantages.

QuEST is now developing an approach with the customer to help standardize manufacturing processes across their plants. This will provide a significant benefit in reducing part-manufacturing costs and improving part quality.

Success Story 2

A customer in the Oil & Gas industry had a significant and ever-increasing backlog of field requests which needed to be handled by the engineering team. QuEST provided a managed service to handle the investigation and implementation of the field requests, and could do it at a much faster rate than the customer could internally. Within a few months, a significant part of the backlog was cleared up and internal engineers were re-focused to high-priority product development and R&D projects. QuEST now handles a significant portion of field requests across diverse product lines and is a preferred, strategic outsourcing partner of the company.

While the examples above indicate some of the outsourced functions and activities, the different non-core areas that Oil & Gas companies can look at outsourcing activities include:

For Oil & Gas Companies, outsourcing can be a strategic partnership that requires little mentoring, handholding or supervision. It is a solution that helps companies achieve high quality and cost effectiveness in their commitment to their customers and clients and most importantly helps control costs.
Conclusion

With current conditions in the Oil & Gas industry, it is imperative for companies to control their costs immediately. A sustainable strategy would be to adopt an Operational Excellence approach across the organization. Strategic outsourcing can enable the journey to Operational Excellence and help continue serving customers at a lower overall cost without compromising quality and excellence. By taking a strategic approach to outsourcing, organizations can save 25-75% of costs through resource optimization. Further benefits will be realized when market demand returns and positions the organization to scale and grow for the future, making this the perfect time to develop a strategic outsourcing partner.

There are demonstrable advantages and benefits to outsourcing and of partnering with an experienced outsourcing provider such as QuEST. QuEST offers services across engineering and production areas, has Oil & Gas expertise, and critical capacity. As an established outsourcing provider, QuEST can utilize their learnings and best practices to help ensure a smooth setup and transition to engineering outsourcing.

About the Author

Inder Chawla leads the Oil & Gas Business at QuEST Global Services, based in Houston. Inder has over 25 years of energy industry experience with E&P Operators, OFS, EPC, and ESO companies at several international locations. In his previous roles, he held several operational and technical leadership roles with Schlumberger including corporate operational excellence initiative for a multi-billion-dollar business segment. His team also won “Perform by Schlumberger” President’s annual award for service/support business transformation.