



Stan Bond, Hess

OE ThoughtStream

The need for lean

During the past decade, our industry has applied new technologies and adapted old ones that enabled us to meet the world's energy needs more efficiently, productively and safely.

As an engineer, I find these innovations thrilling, but I believe our industry has only begun to embrace the most significant innovation to transform our business. We are just now beginning to leverage lean methodologies that have benefitted other industries for decades.

Lean is about transforming leadership, planning, learning and thinking. Ultimately, it's about creating value and eliminating waste. That may not sound as exciting as a technological breakthrough, but it can result in faster development, reduced downtime, safer operations, lower costs and more profitable projects.

With a systematic approach to continuous improvement in place and, as we like to say at Hess, an *Army of Problem Solvers* who apply lean every day in their work, we have a much better chance as offshore operators to not just survive, but thrive during difficult market conditions.

It may seem that the unconventional business — with its factory approach to drilling, completions and pad facilities — is the only obvious place to apply lean. But these same principles can be used offshore and in deepwater developments. We have seen those benefits firsthand at Hess and are actively applying them across our business. Not just onshore, but offshore in drilling, completions and developments, as well as supply chain, information technology and other functions.

People have argued that lean principles cannot be applied in larger, more complex, longer cycle-time deepwater developments due to the tailored field-development

requirements. Yet, at our Tubular Bells development in deepwater Gulf of Mexico, we used lean principles to successfully fast-track the project from sanction to first oil in just three years. Extensive planning was critical to our success. In fact, we spent more time planning our wells than executing the work. We designed multiple scenarios for the field development before drilling a well. And when drilling began, we held regular meetings on lessons learned and applied them immediately to the next phase of the operation. Even in an under-appraised, challenging, high-pressure, high-temperature field, the drilling and well placement was exceptional,

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resulting in higher well performance.

We are just beginning to understand and apply lean, but we believe we are formulating a deepwater execution model we will use as the basis for our other important assets and developments in the Gulf, Ghana, Australia and worldwide.

In our offshore operations we introduced the lean business planning process to focus on meeting annual safety, production and cost targets. That outlined the entire business plan on a sheet of paper, making it simple to see and understand.

As we trained our people in lean, we applied it across our business. In Equatorial Guinea, we reduced the duration of a planned turnaround by almost 50%, and applied the lessons learned in the Gulf to eliminate a high-impact turnaround. Across our offshore Americas and West Africa operations, we used lean thinking to avoid approximately 700 lifting and hoisting events, reducing operating costs and safety risks.

We have proven to ourselves and our partners that we can plan and execute a major project safely and efficiently by applying key lean principles being used onshore and in manufacturing.

Don't get me wrong. I understand the application is different offshore, especially in developments, but the rhetoric around "this won't work here" is being removed. We need to become more efficient. Lean thinking is a lot like the drive to improve safety — you never really get there, but you're always striving to be better, safer, more efficient every day.

Lean thinking has proven to be a value driver for Hess, and a lesson I believe will benefit our industry as it confronts the challenges of the global price of crude and world energy needs, now and in years to come. **OE**

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