Shale’s pressure test in 2015: forcing maturity of operating models
Success in shale plays is facing a test to ‘sweat’ the marginal and high cost barrels of oil out of the market, driven by OPEC decisions. Players who survive will combine the flexibility of an entrepreneur with the discipline and support structure of a market leader. How can your company blend the best of both worlds to survive and build competitive advantage?
US unconventional operators are facing the toughest test they have encountered to date. They are being confronted with the harsh realities of market volatility and have to face a key question.

Is anyone out there doing shale right?

Without a doubt, the rapid growth in domestic shale production is impressive, and even in a low-price commodity environment, there are companies who are making money in shale. But how much money is left on the table?

There have been winners to date, and there have also been losers – including some companies that have basically given up on shale. More importantly, even the winners can’t be certain that they are maximizing their efficiency and minimizing their costs in today’s shale rush. What would profits be if companies were utilizing a time-tested, proven unconventional operating model – one that reconfigured traditional exploration and production (E&P) “silos” and restructured the delivery of services to support the type of flexible decision-making and rapid deployment that shale requires?

The reality today is that no individual company – or division of a larger player – can claim maturity in unconventional execution, especially when compared with other global businesses. The shale business today is more akin to the wildcatters of old than it is to the 21st-century modern corporation. These wildcatters are now facing extreme pressure as oil supply globally drives prices to their lowest levels in years, and the actions of foreign producers are impacting the market to give “a good sweating” similar to the price drop of 1986.
Shale is different - here's why

The uniqueness of shale plays requires a highly differentiated approach that is, in many ways, fundamentally opposed to traditional industry business practices. Shale production has often been likened to the manufacturing process, in that a series of wells is drilled in rapid succession and adjustments and enhancements are made on the fly. This flexibility and rapid responsiveness gives the industry a unique ability to respond to oil prices and maintain profitability until pricing recovers.

Well counts are higher, and decline curves are faster. A single well site can have drilling, completions and production operations under way at the same time. Designs and plans change constantly to keep pace with the unique geologic challenges that shale presents. Spacing, infill wells and fracture geometry will keep changing.

All this results in back-office issues, due mostly to the industry's endemic addiction to touching a piece of paper and getting a physical signature. The number of transactions and the number of partners per well are typically much higher on shale plays. The volume of suppliers and materials is also significantly increased.

Success in unconventional exploration and production is the result of continuous collaboration and cooperation between various business functions, from planning groups such as engineering and land through production-focused functions such as operations, services, health/ safety/environmental and the back office. There is so much deep expertise within functions; however, incentives often don't drive collaborative behaviors between these knowledgeable individuals. This is as much of a managed behavioral innovation as it is an "organizational practice."

And unlike conventional E&P efforts, where field development moves from step to step in a linear fashion among the company's various functions until production is under way, shale plays work best with a non-linear linkage among functions - and often, a redefinition of the traditional E&P silos. This allows companies to speed decision-making, rapidly deploy and redeploy rigs and allow for experimentation or out-of-the-box approaches to drilling. In the short term, this will result in the ramp down of capital programs and cost cutting; but the speed of recovery can match the rebound and intensity of pricing changes.
How fast can US producers find the best of both worlds?

In the early days of shale production, small, nimble independents were the first to understand the nuances of the unconventional world, and their flat organizational structure enabled many of them to succeed out of the gate. Their flexibility to change plans as needed to get the best production returns out of every well drilled gave them a distinct advantage.

Energy majors, on the other hand, struggled with the need for speed and flexibility that shale required, and their large size and structured processes were a hindrance in moving quickly to adapt to shale's unique geological and operational challenges. Compared to the independents, it felt like a sprinter racing someone using a walker.

Since then, however, many independents have come to realize that their focus on local control and the resulting lack of corporate-wide processes - while an advantage in the field - create other issues, especially related to cost controls and the sharing of best practices. For example, independents typically have self-contained teams assigned to each play; engineers focused on a challenge at one site might not realize that their colleagues down the hall developed a viable solution on another play that could be beneficial, because there are no processes in place to share such information.

At the same time, the majors now recognize that when they allow their unconventional business units the freedom to maneuver outside of the strict confines of their traditional E&P operating model, they can be successful in shale, too. For example, allowing their shale units to fund drilling costs from cash flow as independents do - versus going through a time-consuming annual capital allocation approval process - can enable even the biggest company to speed development and strike quickly in promising plays. By "ring fencing" their unconventional units, they essentially maintain two distinct cultures within one organization. It is unclear whether this model is sustainable, since large organizations typically fight off innovative subcultures.

The majors also benefit from economies of scale with oilfield service providers, and integrated, efficient back-office systems with the resources and capabilities to handle shale's increased number of transactions.

In short, both sets of unconventional players - independents and majors - have unique strengths that are needed to succeed in unconventionals. The companies that manage to combine the two - flexible, local decision-making supported by standardized processes, shared best practices and a reliance on timely data - will finally have a business model that can deliver the best possible results from shale plays. The producer that achieves these results in the face of the oil market pressure will emerge from 2015 stronger and leaner than ever.
The right approach

Responsible customization is key

The key to marrying these two approaches could best be called “responsible customization” – giving accountability to those in the field but supporting their efforts with processes, guidelines and services that enable them to benefit from the company’s broader capabilities.

Given the relative newness of shale development, the level of communication and trust that is required between E&P functions – and just as important, with service vendors – is far greater than that of traditional drilling. The most successful companies involved in shale today are not afraid of sharing information around new techniques and new opportunities; they recognize that collaboration feeds creativity and enhances productivity.

In fact, the complexity and service intensity of unconventional well pads and fields requires a tightly integrated approach to execution. Operators need to clearly communicate to enable maximum production and reduced time to first oil/gas. Working in tandem – more as partners than as vendors and customer – can be a game-changer.

In general, implementing a thorough, mature approach to shale development – one that combines the best of both operating models via responsible customization – requires a focus on six unique organizational areas.

- **Process/governance structures** - Repeatable, standardized processes must be put into place, but they should be flexible enough to allow for local control based on learnings. Continuous improvement must be a priority and efforts to drive burdensome bureaucracy out of the system encouraged.

- **Policy, controls and decision accountability** - Formalized control decisions must be based on data availability and realistic understanding of limits for information. Local managers must be able to adapt to conditions and needs and change all aspects of execution.

- **Technology** - The integrated and cross-functional viewpoint of the organization must always overrule the needs of functional silos. Appropriate tools must fit the maturity of the organization and the process, and the technology support organization must have a build, test, and deployment cycle that is measured in months as opposed to years.

- **People and talent** - Chaotic change is now the norm, and transparency through organizational flatness can enhance competitiveness. Companies seeking to compete effectively in unconventionals must move quickly to hire talent and provide a culture and environment that supports employee retention.

- **Data** - Local and leadership teams need live, near-time visibility to a broad range of important information, including revenues, costs and internal statuses. Cross-functional standards must drive data quality and consistency. High-integrity data must be gathered and kept close to source on a single platform throughout its life cycle.

- **Performance management and metrics** - Metrics and key performance indicators must drive continuous learning and innovation in execution, as well as drive changes to paradigms. There is a correct balance to risk-based controls that support execution, without overwrought internal audit functions that constantly challenge operations with excessive compliance. Management must do whatever it takes to keep pace with operational learning.
In the face of Shale’s 2015 pressure test, these six critical areas of focus will enable players to:

- **Move with intensity** - Decisions are made quickly with no second-guessing; there is a bias toward action rather than further study.

- **Empower local leaders** - The company or business unit operates with a guided entrepreneurial spirit; that is, under the direction of processes and standards. There is strong organization protection for risk-takers and those who experience missteps.

- **Respond with agility** - Feedback and data are delivered quickly - in real time, if possible - and drilling, efficiency or cost adjustments and improvements are allowed at the lowest possible level of competence.

From an organizational standpoint, companies must find and maintain the correct level of autonomy that allows a local response to basin dynamics and competitive issues. Balancing centralized and decentralized services by function can create an optimized approach that maintains decision accountability at a level low enough that responsiveness is not limited. And designing a structure that supports linkages, information flows and feedback mechanisms between the various E&P functions and service vendors is critical.

Of course, business unit incentives and profit and loss structures - if not properly aligned - can drive behaviors that are counterproductive to success. Taking a holistic approach to designing and implementing an operating model can ensure that all necessary elements are in place and working together to extract the most possible value from shale reserves.

EY has extensive experience helping companies find the balance between control and empowerment - facilitated by interconnected collaboration - for maximum benefit. Our knowledge of the unconventional business and in-depth expertise in operating models can speed competitiveness and maturation of your company’s approach to shale development.
How EY can help

Unconventional players are continuously more exposed to risks and increasing velocity, requiring innovation and optimization. Our professionals have experience addressing critical issues across the entire unconventional value chain in the highest-impact areas, including:

- Rapid Cost Takeout Analysis and Execution
- Operating models and organizational designs for unconventional assets
- Finance and accounting for unconventionals including joint venture and production revenue
- Enterprise portfolio management and capital budgeting
- Business intelligence and field cost visibility
- Cost visibility, cross-entity processes, and technology support
- Business support functional process and control design (Supply Chain, Finance, People, Technology, Data)
- Risk and HSE policy and implementation
- Internal audit management and control design

Tax services:
- Business incentives and credits
- Federal tax
- Property tax
- Sales and use tax
- State income tax
- Tax accounting

Transaction advisory services:
- Divestiture advisory services
- Infrastructure advisory
- Restructuring advisory services
- Transaction support
- Valuation and business modeling
- Working capital

Financial accounting advisory services

Contacts

Linda Castaneda  
+1 713 750 1402  
linda.castaneda@ey.com

Jim Franks  
+1 214 969 8550  
jim.franks@ey.com

Jim Perrine  
+1 704 338 0537  
jim.perrine@ey.com

Alex Fleming  
+1 720 931 4305  
alex.fleming@ey.com

Bill Hale  
+1 713 750 8383  
bill.hale@ey.com

Fay Shong  
+1 630 488 2803  
fay.shong@ey.com

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member organizations of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

How EY’s Global Oil & Gas Center can help your business

The oil and gas sector is constantly changing. Increasingly uncertain energy policies, geopolitical complexities, cost management and climate change all present significant challenges. EY’s Global Oil & Gas Center supports a global network of more than 10,000 oil and gas professionals with extensive experience in providing assurance, tax, transaction and advisory services across the upstream, midstream, downstream and oilfield service subsectors. The Center works to anticipate market trends, execute the mobility of our global resources and articulate points of view on relevant key sector issues. With our deep sector focus, we can help your organization drive down costs and compete more effectively.

© 2015 EYGM Limited. All Rights Reserved.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

ey.com/oilandgas/capitalprojects

Connect with us

Visit us on LinkedIn
Follow us on Twitter @EY_OilGas
See us on YouTube