The oil and gas industry has reached a mature stage of its development. Florent Maisonneuve, Managing Director in the Enterprise Improvement practice at AlixPartners*, believes it is time for companies to reinvent themselves in order to remain competitive.

Even prior to the sharp decline in oil prices, oil and gas companies have been experiencing growing pressures: capital expenditure (capex) costs have increased, oil prices are stagnant, most major players can’t deliver production increase, and mega projects have been delayed. Now the time for action has come. Oil and gas companies need to capitalise on the very challenging environment ahead to boost their internal capex performance.

There are four immediate actions companies need to undertake to radically overhaul their business models and transform the oil and gas industry as a whole:

- Change their capex management strategies in order to boost returns.
- Prove to investors that they can optimise investments while continuing to boost oil delivery.
- Accept the need to adapt their strategies to a reduced demand growth environment and a more competitive world.
- Transform capital spending processes to reach a new level of excellence.

Management strategies
Return on capital employed (ROCE) has eroded in all segments of the oil and gas sector for listed companies between 2009 and 2013. Capex has grown by 17% for the last four years, with a strong increase in upstream activities, whereas the ROCE average has decreased from 15% to 7% over the last five years (see Figure 1).

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*(AlixPartners)*

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**Figure 1** ROCE trends for public oil and gas companies, 2008–2013
Note: After tax rate of 37.5%, EBIT as % of capital employed

Source: Capital IQ, AlixPartners analysis

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The reasons for this declining capital productivity are multiple and complex. They include:

- Increased competition for shares in attractive assets.
- Competition from more attractive capital structures such as Master Limited Partnerships (MLPs), which allow higher returns with the same operating performance and return cash flows to investors on a yearly basis, carrying less risk. The market is now wide open to any smaller new entrant.
- Rapid growth putting pressure on resource quality and efficiency.
- Stress on supply, leading to inflation in costs. This increase is due both to rising labour costs and significant backlog orders for equipment suppliers and deepwater E&P.

The erosion of capital has been widely reported but most industry players appear to be in denial of the urgency for change. AlixPartners conducted a survey with Oxford Economics in September 2014, just as the early signs of price erosion began to make themselves felt. To the question ‘What are the levers you apply to optimise your ROCE?’, most companies indicated that they would primarily focus on throughput and portfolio management, neglecting internal efficiency challenges (see Figure 2).

Strangely, a large proportion of industry players acknowledged that they could do a better job internally, (see Figure 3).

Investment value
Falling profitability raises major issues for investors who start to question business models and the overall attractiveness of the sector. Strong pressure on companies to restore capital productivity, adapt to a changing global market and the need to be more conservative with capex has been accentuated. As a result of recent price falls and erosion of returns, 2015 is expected to see the first industry-wide contraction in the last five years (see Figure 4).

In addition, emerging regions such as Asia and, more recently, Africa, are reinforcing their determination at a state level to take a greater share in the energy value chain. African states are building up national companies, sometimes backed by national sovereign wealth funds. National companies may find themselves fighting to attract private investment, therefore, increasing competition for access to natural resources and availability of capital for privately held companies.

Strategy, structure and best practices of the oil and gas industry are not perceived by investors as aligned with the changing economic reality of today’s world. For the past century, oil and gas companies have been focusing on volume production and meeting demand. It appears now they should concentrate on showing how they will deliver value to investors.

The increasing technical complexity of oil and gas projects may lead investors to trust companies that are able to put technology control at the core of their strategies while optimising costs and seizing potential opportunities with state-owned companies in Asia, Africa and South America.
Doubts are also arising about the future profitability of offshore production and unconventional resources such as heavy oil, gas-to-liquids (GTL), oil sands, etc., leading to tremendous technical challenges for which costs have been steadily increasing.

In 2020, it is forecast that unconventional resources will represent 21% of industry capital and annual growth rate (CAGR) compared to 6% in 2010, while offshore production will represent 47% of CAGR, compared to 30% in 2010 (source: Rystad energy database). Oil and gas companies have to seriously reconsider their culture and investment strategies.

For a while, the upstream business model has been based on accepting a permanent flow of capital expenditure to renew and extend portfolios with the next attractive assets, leading to gross undervaluation of real project costs and diminishing returns. Optimising costs and capital productivity do not appear to have been the priority for most oil and gas companies, until now.

**Need to adapt**
Other capital and technologically intensive industries (such as aerospace, automotive, banking, high tech) went through a similar transition when reaching a mature stage. For example, in the automotive sector we saw a sweep of new players sponsored by governments, while in the finance sector hedge funds have gained prominence.

Taking a look at other industries might provide insights into the best way the oil and gas sector can cope with increased competition and lower capital returns.

In order to restore ROCE performance, these industries had to go through a deep transformation of their capital spending processes in order to reach a new level of operational excellence. Some transformation measures included restructuring the value chain to refocus on true competitive advantage, leveraging scale and innovation while limiting outsourcing to competitive markets. Systematically breaking ‘black boxes’ in pieces allowed companies to regain control on the true cost drivers and technologies.

By not neglecting innovation and technology while implementing strict processes that limit tolerance for estimation errors and standardised cost elements has allowed control of capital spending. For example, one of the key levers for car companies to reduce production costs has been to standardise key cost elements. Toyota has reduced its number of radiator types from 100 to 21, and has recently announced its intention to reduce the number of airbag types from 50 to 10 and the number of cylinder sizes in its engines from 18 to six. All these efforts are aimed at cutting both the time and cost (up to 30%) to create new models.

Other transformation measures have included creating productivity and cost culture as a dogma at all levels of the organisation. The strongest organisations create a continuous improvement mindset. Toyota generated close to 1 million ideas per year, with around 90% of these ideas implemented, involving everybody from the shop floor to top management. Meanwhile, building entry barriers with regulators has restricted new entrants’ ability to compete and helped to protect technology.

Such measures have allowed leading capital and technologically intensive industry players to restore superior returns and market attractiveness despite averages continuing to decline in the face of competition. This approach could pave the way for the oil and gas sector to transform.

**New level of excellence**
Oil and gas companies need to transform capital spending processes to reach a new level of excellence. Some possible steps may include challenging the engineering, procurement and construction (EPC) culture to regain competitive advantage. For example, Toyota does not outsource engineering of its cars nor plants. As a result, the company appears able to build car plants and to develop new models with a capex per car less than its competitors. Oil and gas could potentially do the same by buying ready-made market solutions. There is also a need to regain control of technology – as in other sectors, the oil and gas industry could acquire technologies, patents and industrial solutions, to improve its returns. Rebuilding core technological advantage will be the key to a better return on investment.

Standards for costing and investment structure need to be developed. The search for return niches has created a huge portfolio complexity for oil and gas players. As a result, lack of standards for projects, estimations and project structures appears to be leading to gross undervaluation of the real project costs diminishing returns. Refocusing the portfolio and industry using key projects may create more attractive returns (ie examining how many companies have developed a line of similar units: standard crackers, standard FPSO).

A strengthened lobbying structure and investment in ‘clean technology’ seems to offer the best opportunity to restrict new entrants. The wave of shale gas investment and MLP vehicles are opening the door to many new players not always as careful with the future consequences of their acts. Industry leaders should intensify their push for more environmental and certification constraints in order to limit those entering the market who are not environmentally compliant, which will assist in boosting returns.

There is also a requirement to implement a culture of ‘doing more with less’, through rigour, cost optimisation and permanence. While safety, technology and availability are challenges for all industries, cost issues have often been neglected in the oil and gas sector. Changing the players’ mindset should safeguard the future and help create significant untapped value. Creating a true continuous improvement mindset will be key to sustain the cost saving levers identified.

Lastly, the oil and gas sector should learn from the shale gas success, ‘industrialising’ processes and looking for productivity. The shale gas boom had not been anticipated by many players. Indeed, very few players had anticipated the productivity reservoir of the industry – consequently, productivity has doubled in the last six years. (It should be noted, however, that current oil prices are challenging the economic model for shale gas.)

**Now the time for action has come. Oil and gas companies need to capitalise on the very challenging environment ahead to boost their internal capex performance**

In a changing and low growth world, there is no easy option for any organisation in any sector. The oil and gas sector is no exception to this rule. Companies urgently need to act and significantly adjust their ways of doing business. The recent oil price decline is a unique chance for players in the oil and gas arena to work on basics and build competitive edge over new competitors. Companies that have been caught napping will have a rude awakening.

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