

# Why energy companies need to monitor their Corporate IQs

Organizational learning can boost the intelligence of energy companies but slow learners may lag behind and experience a decline in their IQs. That follows from a new conceptual framework and test that allow companies to routinely monitor their Corporate IQ. Ruud Weijermars<sup>1</sup> explains.

Why do some companies succeed and others fail? And what can be done if a company has moved into the danger zone of failing? Energy companies need to optimize organizational learning in order to maintain a high Corporate IQ. Smarter companies recognize potential problems early and thus avoid costly failures. Such failures are not restricted to the energy business. But energy companies are increasingly challenged to take on bigger risks, for example, in ever more complex offshore fields. A company's ability to innovate and adapt to new business opportunities must grow in step with the speed of change.

Major failures have rippled through the energy business from time to time. Companies in pursuit of competitive profits under technological and financial pressure have sometimes overstepped the boundaries of compliance with rules and regulations. Examples are Enron (utility trading violations), Amaranth (energy option trading violations), Shell (SEC reserve scandal), BP (maintenance failures), and many unnamed others.

### Avoiding strategic drift

The strategic drift model shows that companies may become gradually misaligned with their business environment if they cannot keep up with the speed of change (Figure 1). They begin to drift and swagger, long before they incur costly mistakes and ultimately fail (or recover; paths 4A and 4B in Figure 1). The common denominator of those who do recover is adeptness in organizational learning. Companies that do not see the metaphorical 'burning platforms' (Con-

ner, 1992) and 'melting icebergs' (Kotter and Rathgeber, 2006) coming at them will be badly hit. Smarter organizations see such dangers long before these can incur costly damage; they take measures in time because they are smarter than their competitors. They also seize new business opportunities well ahead of the competition.

Smart companies are particularly good at applying lessons learned and avoiding past mistakes; they quickly recognize undue risks that could cripple the company. Their portfolios seek a proper balance between risks and opportunities. These so-called learning organizations are good at scanning the business

environment for change and translate this change rapidly into opportunities to grow the corporate brand name and raise product sales.

In contrast, companies with lagging performance stagnate because their organizational learning capacity is poorly developed. Such organizations with lower Corporate IQs miss the tell-tale signals from external and internal business indicators that should have urged them to accommodate change. Because their internal organizational capacities are inflexible and slow in recognizing and adapting to change, such companies consistently underperform and often struggle to stay profitable.

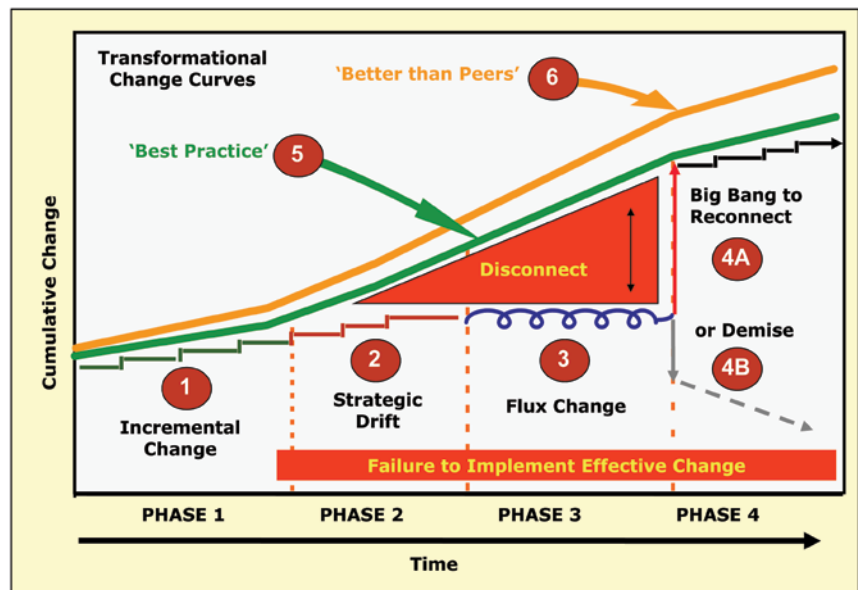


Figure 1 Individual companies that cannot keep up with the speed of transformational change in the industry will disconnect and run the risk of failing. Four phases (1 to 4B) of increasing disconnect with the transformational change are indicated. Only a major change (i.e. 'Big Bang', 4A) can save from demise a company that has erred for too long in strategic flux. Industry leaders set the pace for change in the business environment with Best Practice (5) or Better than Peers (6).

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### Assessing Corporate IQ

Smart organizations know that running a performance-oriented organization means gathering business intelligence and requires active organizational learning to stay ahead. But how do you know whether your company's future performance will be excelling in 'best practice' or even perform 'better than peers' (Figure 1)? The monitoring of operational and financial performance metrics is by nature based on historic performance. These metrics do not tell you how well your organization will respond to the challenges ahead. Table 1 provides examples of some of the current and future challenges faced by energy companies.

A company's Corporate IQ Index provides the required indicator of that company's ability to anticipate change, seize opportunities, and prevent costly crises. The generic concept of individual IQ – Intelligent Quotient – dates back almost a century. About a decade ago, this work has been transposed to corporations, for example, in 'Survival of the Smartest' by Mendelson and Ziegler (1999), who introduced an assessment tool for an organization's future health, which they call organizational IQ. Matheson and Matheson (2001) used an 'Organizational IQ Indicator Scoresheet' which extended their 'Smart Organization' concept of 1998. Underwood (2004) presents the results of a study of 15 global competitors and determined that

- Easy oil and gas projects are gone, which drives companies to deeper and more complex offshore prospects in remote Arctic waters in need of innovative field developments solutions. These offer potentially attractive project opportunities but at great operational, financial and political risks.
- US natural gas prices below the marginal cost of shale gas projects put cash flow of onshore projects under pressure.
- Volatility in oil and gas markets requires swing producers like Saudi Arabia to buffer price swings in oil markets, while gas prices cannot be stabilized as production swings cannot be enforced on US private companies.
- Global warming is strongly correlated with the use of fossil fuels and leads to uncertainties over greenhouse gas emission rights and taxes.
- Environmental litigation exposes oil and gas companies to greater and greater (and practically unlimited) remediation and abandonment costs.

**Table 1** Examples of change and challenges in the external business environment that puts energy companies' IQ to the test.

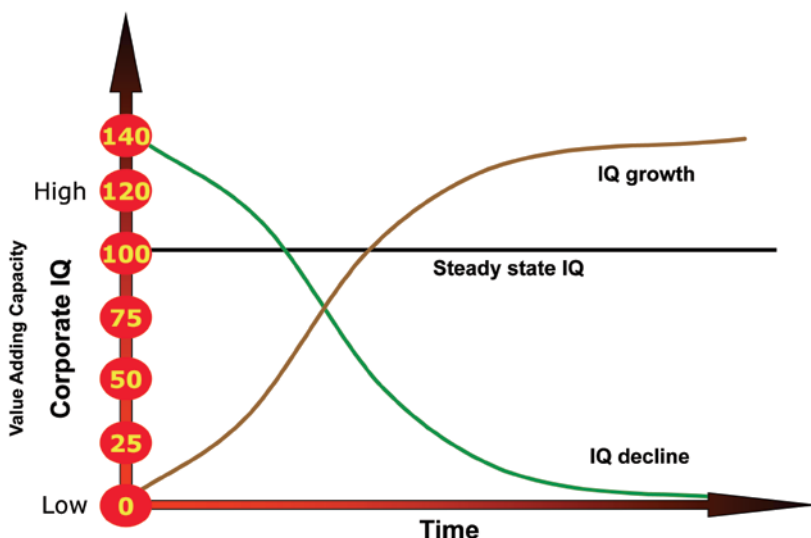
high Corporate IQ companies consistently ranked among the top performers in their industries. Underwood describes Corporate IQ as the interrelationship between a firm's strategy, organization, character, and competitors.

The Corporate IQ concept has recently been expanded to assess the specific cognitive abilities of energy organizations (Weijermars, 2011a,b). The basic premise of the Corporate IQ concept is that a single number expresses a company's ability to outperform its peers; and the company's IQ can change over time (Figure 2). The Corporate IQ measures whether company professionals work knowledgeable and effectively and use their resources to attune the company with its changing business environment when needed. If the dynamics for organizational learning are in

place and working well, the Corporate IQ will be relatively high. Deterioration of the Corporate IQ can quickly occur if new and current knowledge remains overlooked or ignored. Application of the IQ analysis reveals a frequency distribution plot that commonly follows a bell curve, and sometimes a skewed bell curve (Figure 3). Such frequency plots also imply that the 5% of smartest companies on a global scale are the ones that have IQs higher than 130.

### Developing organizational intelligence

The Corporate IQ framework is based on knowledge acquisition and organizational learning that is translated into business performance (Weijermars, 2011a,b). State-owned monopolists like national oil companies (NOCs) operat-



**Figure 2** Periodic assessment of your Corporate IQ allows the tracking of its temporal changes (growth, decline, or steady-state). Such periodic monitoring provides early warning for negative Corporate IQ impacts, commonly due to weak links and deficiencies in your organizational learning programme. The deficiencies can then be remediated.

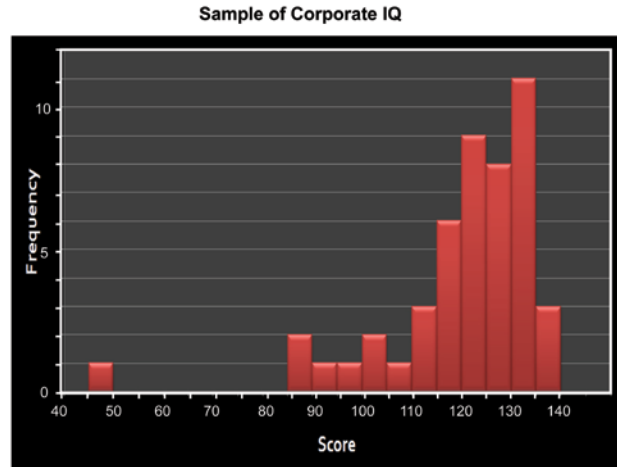


Figure 3 Frequency plot of Corporate IQ spread. Such graphs could be made available for different response groups within your company.

ing with unique access to domestic oil and gas resources tend to have less need for a competitive advantage. They are under-challenged and their protected markets can be managed without competitive IQs; their Corporate IQs are commonly lower than those of international oil companies (IOCs), see Figure 4.

IOCs have long known that they need to excel at organizational learning to develop leading technology in order to stay attractive partners for the NOC resource holders. In-depth knowledge in the oil and gas business provides IOCs a licence to develop and operate

new oil and gas fields together with NOCs. IOCs have the expertise to open up new oil and gas plays as well as the cash, while the NOCs hold the national rights to vast reserves. Unique knowledge has thus become a competitive instrument for IOCs as hallmarked by their trademarked concepts, like Smart fields (Shell), I-fields (Chevron), and Field of the Future (BP) – all of which are built around competitive knowledge of workflow processes and new technology tools.

The early IQ test results (Figure 4) confirm the general notion: the building

of enhanced Corporate IQ by organizational learning has now been taken up successfully by several former NOCs that have moved toward internationalization (e.g., Statoil, Lukoil, Tatneft etc.). Such public-private-partnership (PPP) Oils were traditionally divided from IOCs (Private Oils), but privatization of over a dozen NOCs in the past decade has created these oil companies as an emergent, third major group of E&P players – PPP Oils. This group has rapidly learned to take on more risk, and developed entrepreneurial strategies that in the past kept the business

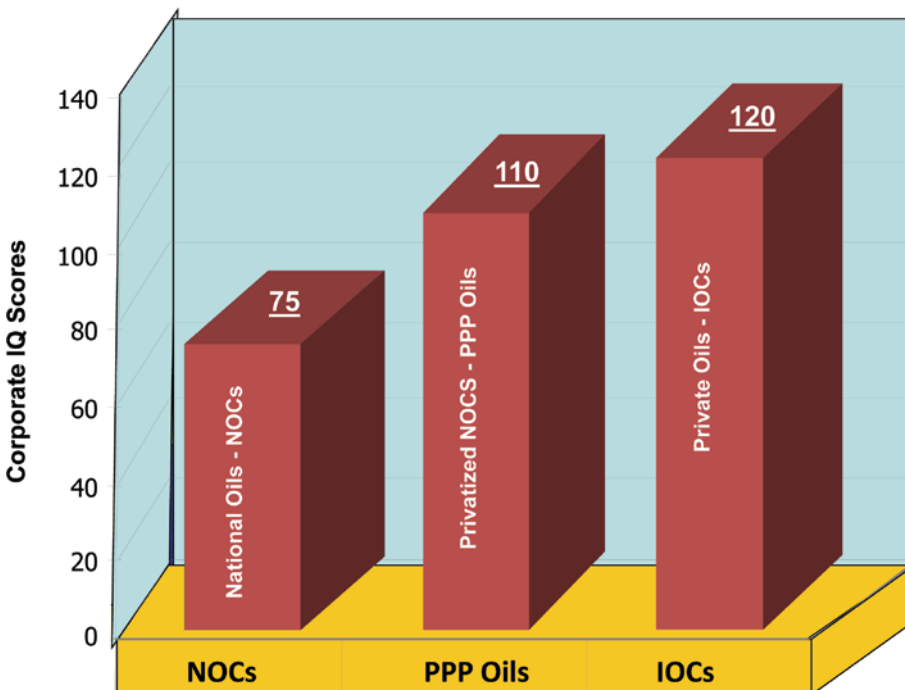


Figure 4 Corporate IQ scores for peer group panel. Number of respondents are: NOCs (30), PPP Oils (57), and IOCs (4).

tactics of Private Oils and State Oils distinctly apart. Moving from NOC to IOC status means such companies enter into a much more competitive business climate. Privatization of NOCs into PPP Oils commonly means more risk exposure and more organizational intelligence is needed in order to survive under faster competition. PPP Oils and IOCs therefore are smart in responding to changes in the business environment.

### Merits of Corporate IQ improvement

A recent Canadian study (2011) emphasized that improving the Corporate IQ by unlocking tacit knowledge lies at the basis of making companies smarter. A company's innovation rate is seen positively correlated to its Corporate IQ (Jackson, 2009). Bill Gates (1999) briefly joined the early IQ debate by stating that 'knowledge is power' and emphasized that corporate power comes from knowledge shared effectively; there should be no place for keeping knowledge for personal advantage. The corporate culture and reward systems should encourage the sharing of knowledge to support the organizational learning process. Corporate IQ requires the sharing of mature explicit knowledge augmented with recently externalized tacit knowledge at the greatest speed.

Professionals in high IQ organizations work efficiently and know how to share experience and knowledge to complete projects faster, better and cheaper.

Only a few companies have benchmarked their IQs, but the energy business has now started to realize the merits of routinely rating their Corporate IQ. Everything being equal, i.e., access to technology, people talent, and process engineering, true competitive edge requires optimization of the organizational learning process to maintain and improve the Corporate IQ. Because it is such a powerful indicator of future performance, the Corporate IQ metric should be monitored frequently. The higher the score the better the company's managerial capacity to take the right decisions at the right time, and act accordingly. A practical guide to understanding Corporate IQ for energy sector companies can be found in the author's new publication (Weijermars, 2011b), and based on the framework and IQ questionnaire outlined, a professional testing procedure can be implemented.

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