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Introduction

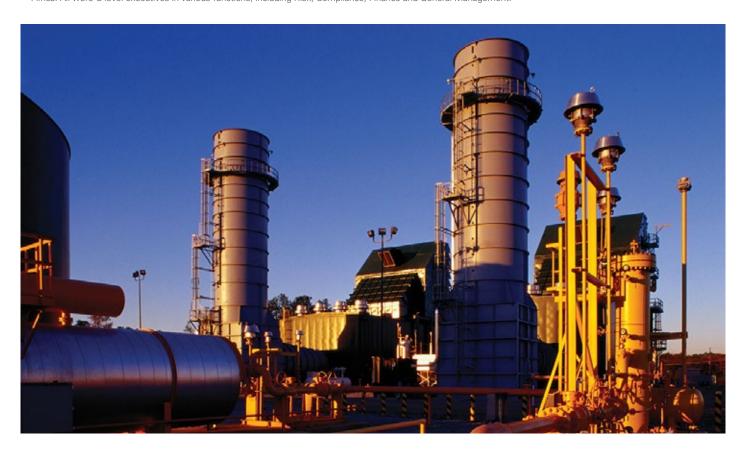
The energy and natural resources (ENR) industry has fared well in the past few years thanks to strong prices and expanding production, but the past is no guide to a future challenged by threats and opportunities at every turn. Companies in the industry are entering more and more remote regions of the world to search for natural resources, often in fragile countries where the state is weak and the environment is under threat. Technology is creating immense opportunities to develop oil and gas fields in, until now, unconquerable areas. But labor relations are fraught with tension in some parts of the world. And public opinion is often hostile to ENR companies, even in places that rely on natural resources for their livelihood.

In short, ENR companies face an ever-growing array of risks. But in a worldwide survey of senior executives

in the industry,¹ we found that the management of these risks was not advancing as fast as the threats facing these companies. Today's complex business environment requires an even stronger ability than before to master risk management, but companies are falling short in important areas.

"ENR companies face an inflection point in their risk management efforts," says Michael Wilson, Partner, KPMG in the UK. Large oil and gas companies in particular were early adopters of enterprise risk management, but in the past few years progress has stalled, as many have been using nearly the same process they first implemented. Companies need to return to basics and reconsider what the expectations are of their programs if they are to take risk management to the next level.

¹ The survey of executives was conducted by the Economist Intelligence Unit in December 2012, as part of a research program covering a wide range of sectors. A total of 1,092 C-level executives responded to the questionnaire, of which 156 were employed in the ENR industry. Thirty-nine percent of ENR executives were in North America, 23 percent in Asia-Pacific and 16 percent in Europe. The remaining 22 percent were in Latin America, Middle East and Africa. All were C-level executives in various functions, including Risk, Compliance, Finance and General Management.

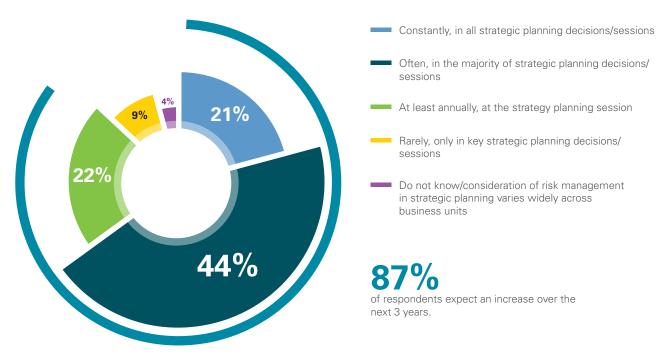


Integration and comprehensiveness

There are two main reasons why companies are being outfoxed, says Steven Briers, Partner, KPMG in South Africa. First, "companies have only addressed two or three key processes of enterprise risk management and are not linking it to the company's financial framework." They may conduct an enterprise-wide assessment once a year, but the way in which risk is measured doesn't correspond to the company's financial imperatives. "The heart of the problem is that even huge companies address and measure risk very simplistically. It's not connected to the real-world finances and operational targets of the group," he adds.

Briers suggests the second reason as: "Risk management is incorrectly positioned as a compliance function or a governance obligation. Management will go along with a one-day workshop on risk, but the whole exercise is seen as a paper chase." He states that risk management is regarded as a mechanism for describing risks and communicating them to the Board, but it is not seen as a strategic function, and is not part of the business planning cycle. According to Briers: "It is not considered an essential piece of strategy formulation. It exists in a parallel universe."

How often are risk management considerations factored into your organization's strategic planning decisions?



Risk management, therefore, needs to be brought down to earth. Paolo Mantovano, Partner, KPMG in Italy, believes that: "Given the fast-changing environment, it is essential that the risk function is embedded in the business and is always kept updated about organizational, strategic, business changes or decisions, as well as about external changes that could expose the company to emerging unknown risks."

There is no doubt that executives are aware of the need to manage risk; it is clearly seen as a high priority among ENR companies surveyed, however, only 65 percent of respondents build it into strategic planning decisions often or constantly. "Things are done intuitively, but not systematically," says Wilson. "The process should be about presenting options and monitoring the hurdles faced in reaching strategic objectives."

Briers states that: "Companies mistakenly think they can gradually implement a program of enterprise risk management and do so in a piecemeal fashion." But instead, he thinks they should try to get all the pieces of the risk management puzzle in place in 12 months or less. "Companies assume that the more difficult things, like measuring risk in dollar terms, can wait until some other time, but there has to be a complete system of enterprise risk management put in place right away," he adds.

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Operating with risks in mind

Enterprise risk management needs to be positioned as an operational management system and embedded in management processes. In a good company, there will be a carefully thought-out sequencing of risk management interventions in the strategic planning cycle. Thinking about risk should be incorporated from the first step of the planning process to the very end, including such things as adverse commodity price movements, labor relations, the lifecycle of the mine or oilfield, and so on. All of this is then translated into the corporate budget, in which the Chief Financial Officer incorporates risk assessments in the budget. All executives need to understand how the different risks affect key performance indicators. "The planning and control functions can play an important role supporting the Chief Risk Officer in linking risk management to business planning," says Mantovano.

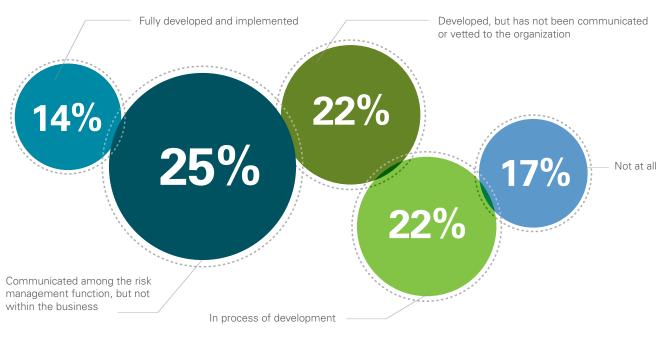
Many companies skip at least one of these steps. Only 14 percent of survey respondents have developed a formal risk appetite statement, even though it is hard to calibrate the risks of pursuing a given strategy without one. Risks are often not measured in dollars, yet companies cannot understand their risk appetite without this. For example, if there is a three-week strike, what is the dollar impact on operating income? Armed with this kind of data, stakeholders can challenge the Board on whether the company is taking enough risk, as well as too much. Is a same-sized competitor valued more highly in the stock market because it is less risk-averse? The difference may be due to its careful, deliberate approach to investing in the midst of uncertainty.

"Risk appetite sounds so bureaucratic to some people; we're not going to use the data anyway, so what's the point?" says Wilson. But in fact, "understanding how much risk the organization is willing to take and then having it cascade to decision makers is important." Companies are often reluctant to hire a risk professional who has primary responsibility for managing risk. The company is not required to call the person the Chief Risk Officer with a bureaucracy set up around the position, but to assign a risk professional with the task of pulling together the disparate strands of risk management and aligning it with the company's strategic goals.

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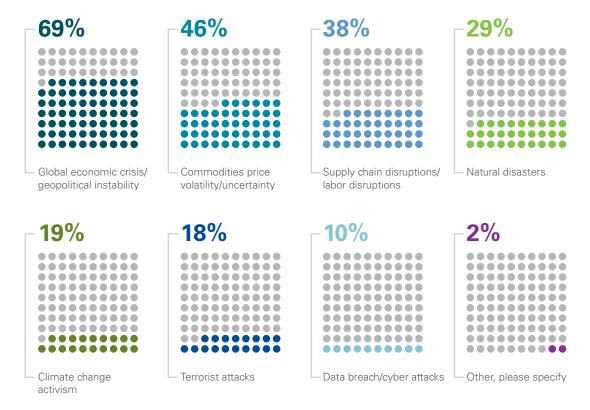
To what extent has your organization developed a formal risk appetite statement?



The view across the enterprise

This kind of coordination is important, but many ENR companies do not have a consistent way of assessing risk across the enterprise. Forty-nine percent say the risk management function does not perform a bottom-up risk assessment annually or more frequently than this. Eighteen percent admit there is no process in place to aggregate risks and 36 percent rely on a self-assessment by the business units. "Oil and gas companies have always invested in risk management activities to address those risks that are function-specific, such as exploration risks, production

Which of the following risk scenarios pose the greatest threat to the energy and natural resources industry?



Note: Percentages may not add up to 100 percent as respondents were instructed to select the top three. Source: Expectations of Risk Management Outpacing Capabilities, KPMG International, 2013.

risks and financial risks," says Mantovano. "The challenge is how to get all these risk management initiatives integrated in a common framework to make sure that the Board and top management are kept informed about top risks and mitigating plans in order to strengthen decision making."

Most organizations start correctly by taking a top-down approach to risk assessment, identifying all the major risks and understanding their potential impact on corporate profit. Indeed, leading companies in this field undertake an enterprise-wide risk assessment at a high level, while delegating the management of operational issues such as compliance to a lower level. Similarly, commodity-price risk should be dealt with by the marketing and trading division. It is up to senior management to pull these strands together.

Enterprise-wide risks, particularly emerging threats, are those that are on the Board agenda to understand and manage, but a bottom-up assessment is important, too. Cyber security is a key risk, but it is often not analyzed deeply enough by undertaking scenario analysis. This analysis drives an understanding of the practical risk implications, the greatest vulnerabilities, quantification of the exposure, and a detailed evaluation of how we are monitoring and addressing the possibility of cyber attack, beyond simply ranking it as a top risk, says Wilson. Geopolitical risk is not just the possibility of asset nationalization, but also predatory fines by a government in dire need of money.

The risk scenario perceived as the greatest threat to the ENR industry is geopolitical instability (69 percent of respondents). However, in terms of issues, respondents said regulatory pressure was the biggest threat (53 percent). Regulatory pressure may have been interpreted broadly to include things such as predatory fines and risks associated with the environment and health and safety, which are perennial concerns in ENR. Companies face very large risks when venturing into countries they haven't operated in before, says Wilson, particularly in terms of regulatory uncertainty. "Companies may try to do the right thing and can get tripped up by a government's broad interpretation of the rules, or an absence of regulations, or a rule that's unclear," he argues.

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The role of the Board

ENR respondents report less confidence than other sectors in two areas of risk management by the Board. Only 37 percent of ENR respondents attributed their company's success in effectively communicating risks to the Board of Directors to a strong understanding of risk issues on the part of the Board. And only 42 percent said that an appreciation by the Board of the importance of risk issues was an important factor. The average for all sectors in the global survey was 43 percent and 46 percent respectively.

There is often a gap

between the Board

risks themselves.

providing broad oversight

around the enterprise risk

process and the individual

Briers considers this is an age-old problem of the Board wanting one thing and management providing another. "Management wants to stay out of trouble, but the Board wants the truth," he says. So the Board must dive deeper at its meetings or as part of its planning process and start to understand the root causes of market dynamics, to question the risk culture and management's propensity for risk taking. "I don't think that better reporting and dashboards will necessarily address the problem of the confidence of the Board in getting at the truth; it goes to culture," he says.

Wilson argues that there is often a gap between the Board providing broad oversight around the enterprise risk process and the individual risks themselves. Key risks should be assigned to individual committees (the compensation committee, for example, should monitor risks like succession planning) and the Board needs to step back and evaluate how it allocates responsibility for overseeing key risks and developing the risk agenda.

To what do you attribute your organization's success in effectively communicating risk issues to the Board level?



Note: Percentages may not add up to 100 percent as respondents were instructed to select all that apply Source: Expectations of Risk Management Outpacing Capabilities, KPMG International, 2013.

Skills needed

An important concern for the Board is whether control functions and risk management are properly aligned. Forty-two percent say that a lack of skills is the main obstacle to the convergence or integration of risk and control functions in ENR companies. Forty-seven percent of executives in the industry also say that skills need to be upgraded in order to improve adherence to regulations.

According to Briers, one reason why companies' risk management systems are incomplete is a lack of knowledge or experience of how to bring about this form of integration. Compliance, corporate governance, assurance, risk financing and so on need to converge, but the managers in these siloes are not confident enough to oversee the entire portfolio. A single executive is needed who understands the broader issues of governance, risk management and compliance. "We helped a utility company to combine six risk-related departments into one division," enabling the company to standardize risk-related functions and achieve good synergies, he says. A general risk management standard that he recommends is ISO 31000* to make sure risk is continually under the microscope.

"It comes down to a question of what skills and resources have been dedicated to the enterprise risk management program," says Wilson. "I'm not sure ENR companies have done a good job of understanding the expectations of internal and external stakeholders with regard to risk management and building the process and skills to meet those expectations."

*ISO 31000: 2009, *Risk management – Principles and guidelines*, provides principles, framework and a process for managing risk. It can be used by any organization regardless of its size, activity or sector. Using ISO 31000 can help organizations increase the likelihood of achieving objectives,

improve the identification of opportunities and threats and effectively

allocate and use resources for risk treatment.

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Tying risk to compensation

These steps would help to create a risk-aware culture, but more needs to be done. Survey respondents admit they have to motivate business managers to make risk-aware decisions by linking their performance in this area to compensation. Fifty-two percent of those in ENR said there was a weak link between risk management and compensation.

Briers says that companies with advanced risk management processes sometimes tie performance in this area to compensation: "when it's in place, it's very effective." For ENR companies, the record is mixed in this regard. The management of health, safety and environmental issues are usually tied in some way to compensation, but risk management more generally is hard to define, he believes. There are other ways to achieve similar results, such as auditing. A company will document risk control standards for risks identified at an operational level and then audit managers to see whether they are complying with these standards. If a team or department achieves a high score in its risk-control audit, it might lower the unit's insurance contribution and raise its share of the bonus pool. "Now you have a score you can build into a formula for performance management," argues Briers.

The management of health, safety and environmental issues are usually tied in some way to compensation, but risk management more generally is hard to define. There are other ways to achieve similar results, such as auditing.

To what degree is the compensation incentive structure of business line employees (e.g. marketing, sales, etc.) at your organization linked to effective risk management?



Measuring ROI

Many companies understand some, or all, of these problems with their risk management programs and are investing in ways to upgrade their approaches. Yet 23 percent of ENR respondents have no means of measuring the return on the investment and 33 percent are simply reviewing past events to assess the effectiveness of their risk controls.

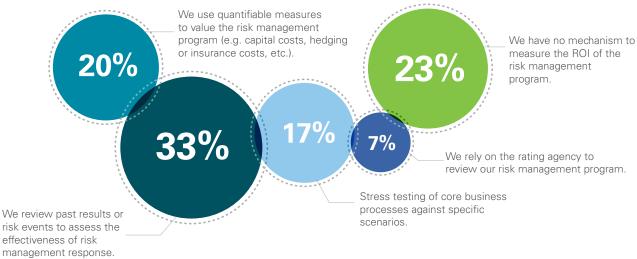
Briers believes that part of the answer is to measure the monetary value of risk management and to integrate the program with the company's strategic and operational objectives. Return on investment in this field is hard to measure, but still necessary. For example, would an increase in risk and control costs be outweighed by a reduction in risk financing costs? He cites the example of a very large oil and gas company in Europe that has used its enterprise risk management program to improve the identification of business opportunities, holding managers accountable for upside potential, as well as downside risk.

Wilson agrees that monetary measurement of risk is important, but says that many companies need to do a lot of work before they get to specific metrics. "They need to have clear goals around the risk management program and link those to what internal and external stakeholders expect," he says. "It is difficult to understand whether risk management delivers value unless there is a consensus among the Board and executives about the goals."

The Chief Executive Officer should play a crucial role in this regard by formulating the goals for risk management and driving the process to reach a consensus. At one very large ENR company, according to Briers, the CEO personally drafts the description of the top 20 risks and presents them to the Board every quarter. He makes sure that risks are dealt with at planning meetings and is regularly on the agenda of the executive committee. He refuses to delegate this role to a less senior officer.

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How do you measure the return on investment (ROI) in your risk management program?



Conclusion

The key lesson from the survey for ENR companies is integration. If risk management is regarded by leaders of the business as a pro forma exercise solely for the consumption of Board members, it will remain forever divorced from operational reality. The CEO must take the lead in helping the Board make risk-aware decisions at an enterprise level, while ensuring that managers lower down the hierarchy understand how their choices affect the risk profile of the company. ENR companies often do a good job managing risks to health and safety and the environment, but these challenges tend to overshadow other risks that may be equally dangerous to the health of the company. Only by integrating the process of risk management into everyday business thinking can executives build a risk-aware culture.

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