

E&P industry performance improvements require process and technology changes

SID WILLIAMS

Asia Pacific, Landmark Graphics (Malaysia) Sdn. Bhd.
11th Floor, Menara Tan & Tan
207 Jalan Tun Razak
50400 Kuala Lumpur

The E&P industry faces a number of performance challenges that it must address in order to compete in the global market place. Investment has been historically drawn to this industry despite the high levels of risk by the promise of long-lived profitable returns that oil and gas assets can provide. Typically, returns on investments are generally less than 7% although to sanction most projects, the expectation is a return much higher and in the order of 18%. Various analysts suggest this discrepancy is attributed to an underestimation of project risk coupled with an overestimation of predicted production. This leads us to ponder whether this is a technology problem or a people problem? What is required are means to improve overall performance of the industry. Certainly improvements in both process and technology will have a significant contribution to achieving better results.

A number of papers recently published suggest the need for better decision analysis processes coupled with well defined cross- discipline assessment of technical uncertainties. These processes are complex and technology is just now coming forth that will allow teams to reduce the pain of uncertainty analysis and facilitate exploring multiple scenarios and associated risk in order to better predict the project performance. Additional technologies are coming forth designed to reduce process pain points. These process pain points have been identified by Landmark through collaboration with over 20 companies to map common processes in the upstream E&P sector with the intent to create solid next generation technology for asset teams.

Technology improvements to date have primarily focused on improving intra- discipline workflows especially around reducing repetitive task, integration and visualisation. Today, organisations are looking for ways to reduce decision making time while improving their understanding of uncertainties that impact project economics. Continued development and deployment of vital technologies will help correct the underperformance of our industry.