Current Status of E&P Portfolio Management as a Corporate "Best Practice" — Obstacles, Solutions, and Consequences

By 2002, most Major oil companies and many Independents had accepted that systematic probabilistic project evaluations, linked with sophisticated portfolio management processes and tools, produced more efficient E&P results. Recent publications on E&P business performance confirm this.

Portfolio management allows the E&P business to reduce its traditional ‘boom or bust’ volatility, and to balance corporate needs for reserve growth and timely cash flow, by employing (1) unbiased probabilistic geotechnical project assessments and DCF analyses; (2) known statistical principles regarding project interactions and variable dependencies; (3) variable working interests of constituent projects; and (4) advanced mathematical procedures carried out with sophisticated software tools. It enables management to plan, by modifying trial portfolios so as to optimize the chances of realizing important corporate goals.

Barriers to speedy and universal implementation of portfolio methods are primarily human and organizational, not technical or conceptual. Among the most common are: (a) resistance to change; (b) the centralization vs. decentralization conflict; (c) misaligned corporate incentive systems; (d) avoidance of accountability; (e) application of probabilistics to conventional reserves categories; and (f) ingrained Industry traditions of project salesmanship and ‘the Prospector Myth.’

An innovative organizational structure can resolve the centralization/decentralization conflict. Other characteristic barriers can be overcome when both Management and Staff recognize that elegant software tools cannot fix problems whose nature is behavioral, cultural or professional. E&P firms that implement routine portfolio analysis change their corporate cultures. This requires education, training, performance tracking, professional discipline, and above all, sustained and purposeful ‘top-down’ leadership.