

Mitigating Bias, Blindness, and Illusions in E&P Decision Making

Course Description

Decisions in E&P ventures are affected by Bias, Blindness, and Illusions (BBI) which permeate our analyses, interpretations and decisions. This two-day course examines the influence of these cognitive pitfalls and presents techniques that can be used to mitigate their impact. *Bias* refers to errors in thinking whereby interpretations and judgments are drawn in an illogical fashion. *Blindness* is the condition where we fail to see an unexpected event in plain sight. *Illusions* refer to misleading beliefs based on a false impression of reality. All three can lead to poor decisions regarding which work to undertake, what issues to focus on, and whether to forge ahead or walk away from a project.

This course (1/2 to 3 days) begins by examining the types of BBI that affect us. Awareness exercises, videos, examples, and mitigation exercises help illustrate how these manifest themselves and how we can lessen their impact. We then present oil and gas case studies that show their impact on decision-making and ask participants to identify the types of cognitive errors contributing to project outcomes. The course concludes with a mitigation 'toolkit' that can be applied to project work.

Course Outline

1. Introduction
2. Bias
 - a. Anchoring, Availability, Confirmation, Framing, Information, and Overconfidence
 - b. Motivational Bias
3. Blindness and Illusion
 - a. Perceptual Blindness
 - b. Illusions of Knowledge, Potential, and Objectivity
4. Case Studies (a relevant subset of these will be presented)
 - a. Exploration
 - i. Plio-Pleistocene Sandstone
 - ii. Pliocene Sandstone
 - iii. Jurassic Sandstone
 - b. Appraisal/Development
 - i. Cretaceous Shale
 - ii. Cambrian Sandstone
 - iii. Naturally-fractured carbonate
5. Mitigation 'Toolkit'

Who Should Attend

The course is intended for anyone interested in understanding and lessening the impact of these cognitive errors including field personnel, technical and non-technical staff, and executives.

Recipients of Training

Internal courses have been conducted for Anadarko, Apache, Chesapeake, Conoco-Phillips, ENI, Exxon-Mobil, Oxy, Pioneer, Repsol, Sasol, Shell, Southwestern Energy, and Total. Open-enrollment courses in Abu Dhabi, Dallas, Denver, and Houston have included participants from 30+ companies.