## Fundamentals of decision making in E&P

## Fundamental challenge

- Extreme levels of uncertainty
- Examples
  - Exploration wells
  - Development
- Challenge = Decision Making Under Uncertainty

## **Industry Practice**

- Build "decision quality" via "decision analysis"
- Formal processes
  - Creating alternatives
  - Probabilistic: occurrence & outcome
  - Multiple decision metrics
  - Analytical models
- Both technical and "nontechnical" uncertainties
- Focused on design