Creativity and Innovation Skills for E&P (G029)



Tutor(s)

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Overview

This course addresses how value is created from creativity and innovation. It provides participants with practical tools and methodologies to become more creative, and to make innovation actionable. Creativity and innovation are learnable skills, with step-wise approaches possible. Participants will leave with tools that allow them to formulate an action plan that can be used when they get back to work.

The course is interactive and practical. It uses group discussions and exercises to develop creative thinking techniques, models and frameworks that can be applied to real life oil and gas industry situations. It stresses breaking away from the "business as usual" environment.

Duration and Logistics

Classroom version: 2 days; a mix of lectures, case studies and discussion groups. The manual will be provided in digital format and participants will be required to bring a laptop or tablet computer to follow the lectures and exercises.

Virtual version: Four 4-hour interactive online sessions presented over 4 days. A digital manual and hard-copy exercise materials will be distributed to participants before the course.

Level and Audience

Fundamental. Intended for oil and gas industry staff responsible for solving problems, visualizing opportunities or developing new business streams. Suitable for managers and team members in technical, financial or support positions.

Objectives

You will learn to:

- 1. Apply the fundamentals of creativity and innovation to create value.
- 2. Prepare for creative thinking and to improve your creative skills.
- 3. Implement the concepts of creative thinking critical to innovation, such as associative thinking and disruptive thinking.
- 4. Develop questioning skills, effectively employing both descriptive and disruptive questions.
- 5. Apply the five critical aspects of creative thinking and determine your current state in each one.
- 6. Challenge your own thinking and your "status quo" mindset.
- 7. Understand the various types of innovation and how they can be applied your challenges.
- 8. Assess your own level in each of the five behaviors of innovative business leaders, where you can improve on each and how to leverage other people with complementary skills.

Course Content

Course Details

Agenda

- 1. Introduction
 - What is innovation?
 - What is creativity?
 - Preview of foundational concepts
- 2. Creativity
 - 1. Cognitive process of creativity
 - 2. The behavioral process of creativity
- 3. Innovation
 - Innovation concepts
 - Innovation within the business organization
 - Summary and class wrap-up

Supporting Material

- Innovation case study #1: Petroleum Helicopters Inc.
- Innovation case study #2: The Birth of Nautilus
- Innovation simulation: Parrish Bay 3-D seismic
- Innovation case study #3: The emergence of Seismic Micro-Technologies (SMT)
- R&D MonopOily
- Marshmallow Challenge
- Personal innovation case study, innovation interview prompt worksheet and personal innovation challenge
- Innovation quotes
- Glossary: Definitions of innovation and creativity terms used in class
- Reference list