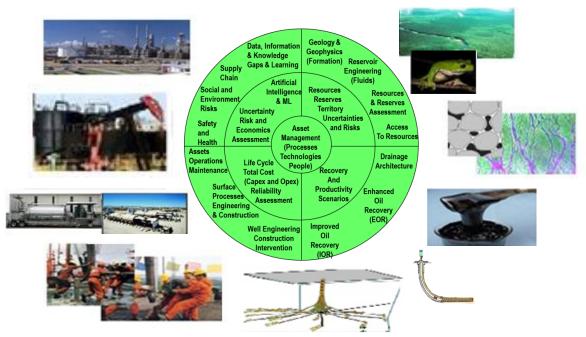


<u>PETROLEUM ASSET MANAGEMENT</u> <u>INTELLIGENT, INNOVATIVE & INTEGRATED (PAMI³)</u> Practical Workshop

OPTIMAWELL IS PROUD TO OFFER THIS PRACTICAL LEARNING WHILE DOING WORKSHOP TO THE PETROLEUM & ENERGY INDUSTRY



Do you know the health, life cycle, viability and reliability of your petroleum assets (natural and physical), how does your asset system perform vs. best-in-class analogues using benchmarking? Room for Improvement?

Are you aware of all value creation opportunities, uncertainties and risks?

Are you considering all potential technology options and scenarios in your business plan for enhanced oil recovery and productivity optimization?

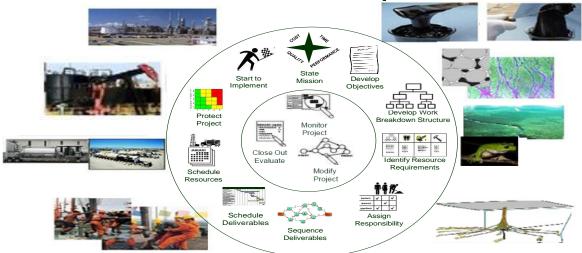
Do you have a strategy and plan for application of artificial intelligence and machine learning? How reliable is your asset data and information?

Are you satisfied with your project and process cycle times, costs and reliability LEARN HOW YOU CAN OPTIMIZE VALUE, ASSET LIFE CYCLE COSTS AND CYCLE TIME BY APPLYING STATE OF THE ART INTELLIGENT ASSET MANAGEMENT TOOLS TO YOUR PETROLEUM ASSETs

ENGLISH OR SPANISH



Practical Workshop



PETROLEUM ASSETS: A CHALLENGING BUSINESS

Petroleum assets are a challenging business, characterized by produced fluids with a wide range of viscosities some needing dilution and heating before production and transportation. Some fluids with water, clay and minerals require treatment and upgrading before considered a suitable feedstock for refining. When are found in shallow deposits and complex depositional environments, significant efforts are needed to appraise size of resources, exact subsurface location and commercial producibility. Fluids are likely to impact environment by disposal of by-products, water-usage, footprint and carbon emissions caused by burning carbon-intensive fuels to get energy for operations. Special strategies to mitigate risks are a must for sensitive environmental and social areas.

CHANGING THE GAME

Petroleum assets require changing the game by planning and executing IOR-EOR projects as early as during appraisal phase to reduce uncertainty about resources characterization and its producibility, instead of planning IOR-EOR pilot projects for latest phases of asset life cycle.

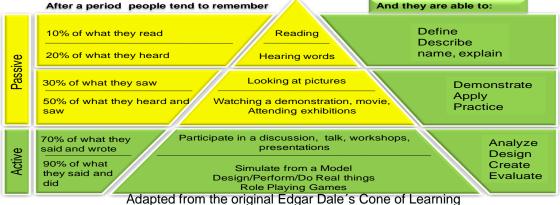
PETROLEUM ASSET MANAGEMENT

We offer an intelligent innovative and integrated methodology that looks for high recovery factor and productivity from the very beginning of asset life cycle. Our petroleum management best practices can help achieving:

- 1) Capital expenditures optimization for production, transportation and upgrading as well as planning, execution and evaluation of pilot projects for IOR-EOR and supporting technologies.
- 2) Plan workforce for activities during peak associated with appraisal and development phases
- 3) Optimization of operational expenditures (OPEX) during whole life cycle including cost of reducing impact on environment from using carbon intensive fuels, water usage, footprint, land reclamation, reforestation and disposal of byproducts
- 4) Risk analysis of supply and value chain activities in sensitive environmental and social areas.



Practical Workshop



LEARNING PETROLEUM ASSET MANAGEMENT USING ROLE PLAYING

OptimaWell uses an active learning strategy (see adapted Dale's Cone of Learning model) based on project management role playing simulation using actual cases of heavy oil assets (analogues) as a context to encourage the integration of concepts, methodology and the participants knowledge. A project management role playing simulation is an active practical session where the facilitators set up a scenario where the participants are assigned different roles similar as those they will undertake in the field. One important result is that participants get an opportunity to see the field situation from perspectives other than those they might be taking. That opportunity results in a greater sensitivity to the experiences of other participants in the field situation. This learning approach has high positive impact in heavy oil projects and can also be applied to any project dealing with high levels of uncertainties and risks.

LEARNING OBJECTIVES

On completion of this workshop, the participants are expected to achieve an introductory competency level to:

- 1) Identify, classify and prioritize all data, perform exploratory data analysis (data analytics).
- 2) Identify opportunities, uncertainties and risks for all fluids and bearing formations.
- 3) Assess technology needs and implementation of pilots to reduce uncertainties and risks.
- 4) Map the life cycle of petroleum assets and projects (asset reference plan and projects)
- 5) Asset reference project definition (Front End Loading) using complexity and definition indices.
- 6) Break down each project into manageable work packages from initial phase to final handover
- 7) Apply effective tools for project control, monitoring execution progress and evaluation
- 8) Work effectively as asset project team members or asset project manager

At the end participants will have a tool-box to prepare the asset reference plan.

WHO SHOULD ATTEND

All employees who work in petroleum industry and regulatory bodies including but not limited to asset and project managers. This workshop is designed for those who seek to expand their competencies in asset and project management applied to petroleum assets from resources to reserves development.



Practical Workshop LEARNING PLAN - CONTENT

Before Workshop - To Be Scheduled With Each Participant

- Online Interview To Map Competencies vs. Learning Objectives
- Workshop Road Map and Dynamics, Check list of Asset Data and Information, Learning Material, Reading Assignment and Evaluation (Quizzes).

Day 1 (Divergent Thinking)

- Introduction to Petroleum Asset System Components, Levels of Aggregation, Functions, Life Cycle Cost, Reliability, Sustainability, Economic Value at Risk Methods and Tools. Asset Model Integration, Options, Decisions and Scenarios. Asset Documentation. Project Management Methodology - Front End Loading -Definition of FEL Index and Application Tool.
- Data Analysis Petroleum Reservoir Fluids and Bearing Formations, Classification and Properties, Depositional Environments, Rock Properties — Selection of key parameters and preliminary identification of Uncertainties & Risks.
- Data Needed for Selection of Improved Oil Recovery Technologies.
- Practical Application Using Analogues Part 1 (Exploratory Data Analysis, Data Assessment with application of Artificial Intelligence, PRE-FEL Index)
- Resources Classification and Maturation to Reserves for Production Uncertainties and Risks Factors Controlling Maturation Estimation Methods Resource Governance Index and benchmarking. Review of life cycle and standards.
- Practical Application Using Analogues Part 2 (Challenges)

Day 2 (Relationships - Systemic Thinking)

- Life Cycle of Petroleum Assets Impact of Activities On Ultimate Recovery
- Near and Far Market Technologies Implementation Strategies Using Pilots
- Practical Application Using Analogues Part 3 (Categories, Decisions, Options)
- Improved Oil Recovery Technologies (Primary, Secondary & Tertiary Recovery)
- Practical Application Using Analogues Part 4 (Scenario Matrix)

Day 3 (Relationships - Systemic Thinking)

- Practical Application Using Analogues Part 5 (Scenarios)
- Risk and Uncertainty Assessment Economic Assessment Methods
- Practical Application Using Analogues Part 6 (Scenario Evaluation and Ranking)



Practical Workshop CONTENT

Day 4 (Convergent Thinking)

- Asset Reference Plan (ARP) Methodology for Asset Whole Life Cycle
- Technology Plan Components and Preparation Methodology
- Field Development Plan (FPD) Components and Preparation Methodology
- Appraisal Pilot Projects Plan and Preparation Methodology.
- Practical Applications Using Analogues Part 7 (ARP Peer Review)

Day 5 (Convergent Thinking)

- Integrated Practical Exercise Using Role Playing Based Learning, to Prepare a Project Charter Business Proposal Entitled: "Business Plan For Petroleum Asset Using Data and Information from Successful Analogues"
 - ✓ Project Mission Statement ,Objectives, Work Breakdown Structure and Resource Matrix
 - ✓ Definition Phase (Visualization of Options and Scenarios, Selection of Best Options, Basic and Detailed Engineering) Check List FEL (Definition Index) Matrix Preparation and Evaluation
 - ✓ Uncertainty and Risk Analysis Economic Assessment
 - ✓ Data Acquisition and Surveillance, Modeling and Decisions During Project Life Cycle
 - ✓ Project Execution Plan (PEP) Responsibility Assignment Matrix, Sequencing and Scheduling Deliverables, Project Protection Plan, Monitoring and Evaluation.
 - ✓ Project Life Cycle Documentation System From Project Charter to Asset Reference Plan
 - ✓ Appraisal and Field Development Plan Document Structure
- Workshop Evaluation, Adjournment and Hand Out of Completion Certificates

After Workshop - To Be Scheduled With Each Participant

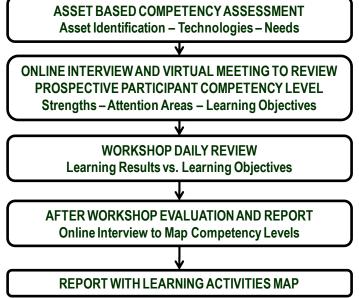
- Online Interview To Evaluate Learning Objectives and Workshop
- Report With Summary of Workshop and Recommendations



Practical Workshop

COMPETENCY RADAR AND MENTORING PROCESS





One day before workshop, participants will attend an online interview and fill out a questionnaire designed to assess competency level in heavy oil project management. They also receive reading material to get prepared for the workshop dynamics during practical sessions.

Every day participants will be asked to give feedback on the results from daily learning activities vs. learning objectives.

After workshop, the participants will attend another online interview to assess competency level of petroleum asset management vs. learning objectives and discuss workshop report with summary and recommendations.



Practical Workshop INSTRUCTOR-FACILITATOR

José Luis Ortiz Volcán - Consultant & CEO OptimaWell

42 years of experience in reservoir and production engineering technical, operational and managerial positions. Technology manager for LAGOVEN (former Creole-Exxon) where Lake Maracaibo mature fields, Orinoco heavy oil assets and high pressure, high temperature deep reservoirs North of Monagas, were part of his experience. He held production technical manager and production center of excellence manager positions for PDVSA Exploration and Production Venezuela. He worked in reservoir development and improved-enhanced oil recovery, Well Design and Diagnosis, Thermal Recovery steam injection CSS, PETC, Continuous, Intermittent and Slug Gas Lift, Optimization, automation based optimization projects (SOLAG, SEDILAG, NetLAG), BADEP Project Manager (integrated exploration and production data base for the Venezuelan national oil industry), "ARAR" oriented to improving technical competences in key knowledge areas for the oil and gas business plan, integrated productivity teams, MIP (Integrated Productivity Methodology) and PAM (Petroleum Asset Management) oriented to optimizing reservoir production total cost and well productivity by developing key technical competences, transferring technology and best practices from North Sea operations (UK and Norway). At Halliburton, he was a senior consultant and project manager with consulting services business development responsibilities. In 2010 he started his own independent consulting company OptimaWell. He has performed consulting activities in Venezuela, Trinidad Tobago, Suriname, Colombia, Mexico and Kuwait.

During 8 ½ years (2012-21) was consultant for the biggest heavy oil development project in Kuwait. In Kuwait Oil Company supported Implementation Project Gate System/Front End Loading, Enterprise Risk Management (ERM) and Risk Adjusted Return on Capital RAROC, mandatory for capital investment decisions. Consultant for ETSA contract between KOC and Shell and Co-Leader of Center of Excellence for Heavy Oil.

He holds a B.S. in Chemical Engineering, a M.Sc. Degree in Petroleum Engineering, a Master Degree in Business Management with graduate studies in Financial Management and Post Graduate Program in Artificial Intelligence and Machine Learning. He attended business programs in Columbia and Harvard universities.

He has 45 papers and presentations and has taught in-house courses, seminars and workshops in oil industry during his entire career. He is a lifetime member of Society of Petroleum Engineering (SPE).

www.linkedin.com/in/jose-luis-ortiz-volcan-802927210



<u>PETROLEUM ASSET MANAGEMENT</u> <u>INTELLIGENT, INNOVATIVE & INTEGRATED (PAMI³)</u> Practical Workshop

SPECIAL OFFER ON-LINE AND IN-HOUSE

One-Line Workshop with Certificate

500 USD plus value added taxes (VAT) if applicable for 5-day workshop with up to 20 participants per workshop.

In-House Workshops

20000 USD plus value added taxes (VAT) if applicable for a 5-day workshops with up to 20 participants at 1000 USD/participant.

1st Payment 50% as a deposit when reserving and sending the participant's registration form and 2nd Payment 50% 5 days after completion of workshops.

Prices for venue and food during the workshop are quoted separately and agreed with the client company.

Payments are made by electronic wire transfer to the bank account indicated in the proposal accompanying this brochure.

Contact

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