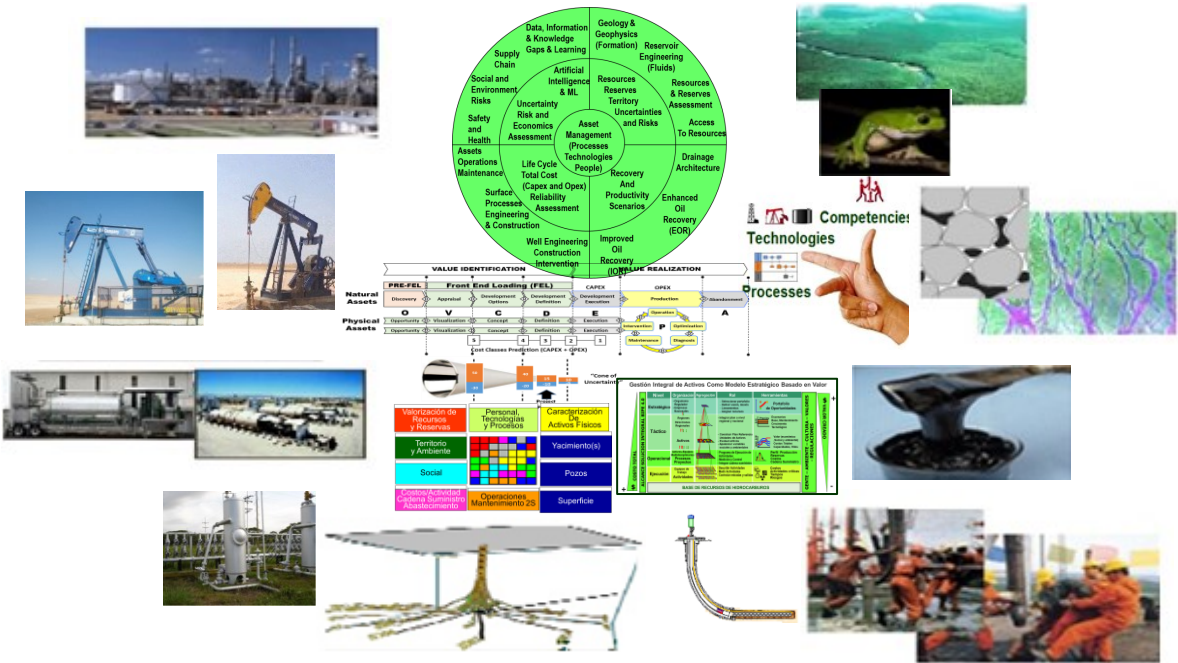


# Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM) Practical Workshop

OptimaWell is proud to offer this practical learning while doing workshop to the petroleum & energy sectors



**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?**

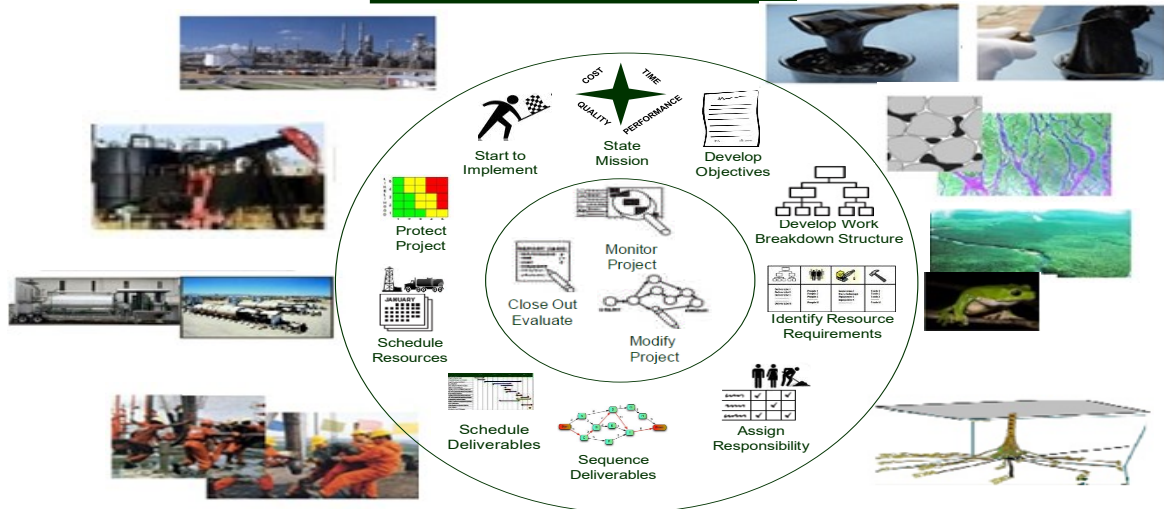
**Are you considering all potential technology options and scenarios in your business plan for enhanced oil recovery and productivity optimization?**

**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**

# ***Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM) 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 BY CHANGING PARADIGMS**

*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.*

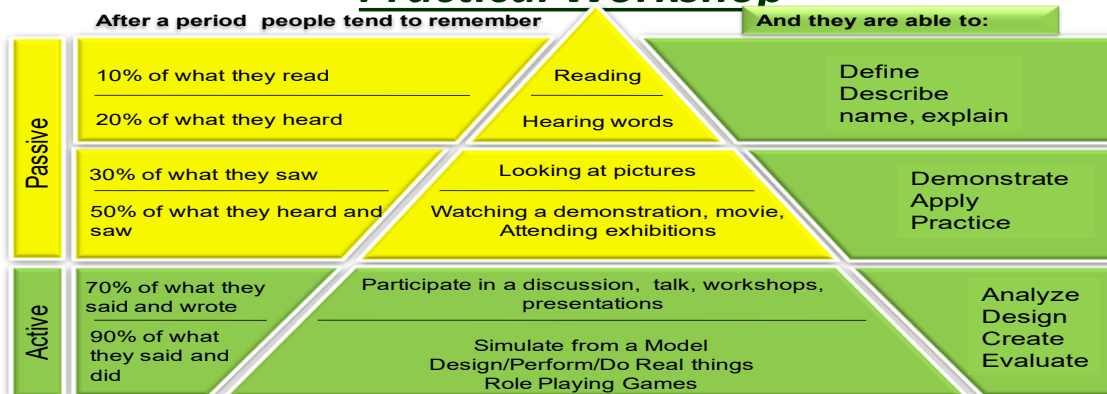
## **INTELLIGENT, INNOVATIVE PETROLEUM ASSET MANAGEMENT**

*We offer an intelligent and innovative petroleum asset management system that looks for high recovery and productivity from early phases of the asset life cycle with best practices of project and process Management assisted with AI, that can help you achieving:*

- 1) *Data reliability for decision making by performing exploratory data analysis (data analytics).*
- 2) *Identification of opportunities, risks and uncertainties for fluids and formations.*
- 3) *Capital expenditures optimization for production, transportation and upgrading, as well as planning and execution of pilots for IOR-EOR and supporting technologies.*
- 4) *Identificacion of technologies to address opportunities, reduce uncertainties and mitigate risks.*
- 5) *Developing a map of the assets as input for preparation of asset reference plan (ARP).*
- 6) *Planning workforce for activities during different phases of asset life cycle.*
- 7) *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.*
- 8) *Risk analysis of supply and value chain activities in sensitive environmental and social areas.*

# Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM)

## Practical Workshop



Adapted from the original Edgar Dale's Cone of Learning

### ACCELERATING LEARNING USING ANALOGUES AND ROLE-PLAYING SIMULATION

OptimaWell uses an active learning strategy (see adapted Dale's Cone of Learning model) based on asset management role playing simulation, using actual cases of complex assets (analogues) as a context to encourage the integration of concepts, methodology and the participant's knowledge. An asset management role playing simulation is an active practical session where the facilitators set up a scenario where the participants are assigned different roles, like those they will undertake in the asset. One important result is that participants get an opportunity to understand the actual situation from perspectives other than those they might be facing. That results in a greater sensitivity to the experiences of other participants in the asset situation. This learning approach has high positive impact in complex petroleum assets and can also be applied to any asset, project or process 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) Classify data and identify opportunities, uncertainties and risks for all fluids and bearing formations in complex assets.
- 2) Identify technology needs and plan pilots to reduce uncertainties and mitigate risks.
- 3) Develop life cycle map of petroleum assets, asset reference plan and portfolio of opportunities.
- 4) Build key elements of definition of asset projects using complexity and front-end loading indices.
- 5) Break down asset reference plan into manageable work packages during asset life cycle.
- 6) Apply effective tools for project control, monitoring and evaluation of asset projects.
- 7) Work effectively as asset project team members or asset project leader.

At the end participants will have a tool-box to prepare the asset reference plan for complex assets and a plan for risks and uncertainties identification and monitoring during asset life cycle.

### WHO SHOULD ATTEND

Anyone looking to expand their competencies in management of complex assets, and in general anyone working in petroleum assets, enhanced oil recovery and productivity enhancement (IOR-EOR), or supplying goods and services to the petroleum industry, including but not limited to project and process leaders.

***Integrated Intelligent and Innovative  
Petroleum Asset Management (I<sup>3</sup>PAM)  
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 (Systemic Thinking)***

- *Life Cycle of complex 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 (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)*

# ***Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM) 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)***

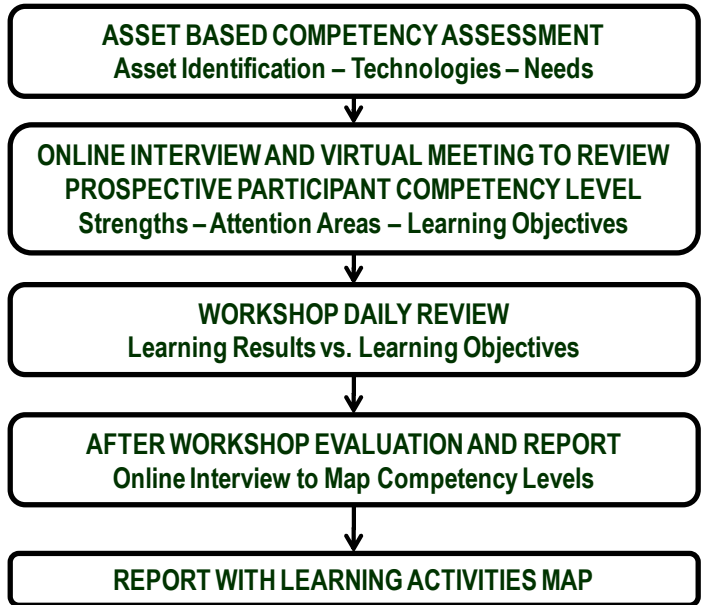
- *Integrated Practical Exercise Using Role Playing Based Learning, to Prepare a Project Charter Business Proposal Entitled: “Business Plan For Petroleum Asset Using Data and Information from Successful Analogues”*
  - ✓ *Project Mission Statement ,Objectives, Work Breakdown Structure and Resource Matrix*
  - ✓ *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*

# *Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM) 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.***



# ***Integrated Intelligent and Innovative Petroleum Asset Management (I<sup>3</sup>PAM) 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](http://www.linkedin.com/in/jose-luis-ortiz-volcan-802927210)



***Integrated Intelligent and Innovative  
Petroleum Asset Management (I<sup>3</sup>PAM)  
Practical Workshop***

***SPECIAL OFFER ON-LINE AND IN-HOUSE***

***One-Line Workshop with Certificate***

*1000 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.*

*1<sup>st</sup> Payment 50% as a deposit when reserving and sending the participant's registration form and 2<sup>nd</sup> Payment 50% 5 days before commencement of workshop.*

*If applicable prices for travel expenses, 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***

*José Luis Ortiz Volcán. Email: [jlov@optimawell.us](mailto:jlov@optimawell.us)*





***Integrated Intelligent and Innovative  
Petroleum Asset Management (I<sup>3</sup>PAM)  
Practical Workshop***

**WORKSHOP REGISTRATION FORM**

- Name: \_\_\_\_\_
- Date of Birth (Month-Day-Year): \_\_\_\_\_
- Company : \_\_\_\_\_
- Job Title: \_\_\_\_\_
- Email: \_\_\_\_\_
- Office Phone: \_\_\_\_\_
- Other Phone: \_\_\_\_\_
- Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***Academic Background and Experience***

- University: \_\_\_\_\_
- Grade/Year: \_\_\_\_\_

***Brief Summary of Work Experience Relevant to This Workshop***

---

---

---

---

---