



2024 CATALOG

Our Mission is Helping You Achieve Sustainable Value Creation Through Asset Optimization

Updated February 2024



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<u>Welcome</u>

Asset Optimization System

<u>Summary</u>





Welcome to OptimaWell



Dear Customer:

For OptimaWell, it is a pleasure to provide this Consulting, Training and Products Guide to help you achieve sustainable value through asset optimization, by delivering easy to apply socio technical solutions that create value, optimize productivity, and mitigate risks from challenging natural and physical complex assets.

We are constantly striving to reach a profound understanding of our customer's needs and requirements by analyzing and diagnosing health of assets, vital business functions and viability and then we focus on feasible action-oriented solutions with nonbiased selection of technologies, competencies, and processes.

We speed up the analysis, diagnosis of assets with knowledge base which stores best practices and lessons learned in real assets during more than 40 years and with our value in 1,2 and 3 (+V123) approach, three stages for approaching an asset (short term rapid response for low hanging fruits, midterm integrated productivity solutions design and long-term enhanced value scenarios), applying project and process management best practices from best-in-class assets that our customers can easily carry out.

We support individuals, organizations, and companies with strategic planning and competitive technology intelligence to identify opportunities and risks for assets, options with the right combination of state-of-the-art technologies (near and far market), processes, and competencies to generate life cycle scenarios for value creation opportunities, facilitate the definition of a strategy and asset reference plan (business plan), to produce more output with less input sustainably, effectively, and efficiently in a safely, socially, and environmentally responsible manner.

All our services and products are assisted with artificial intelligence and include analysis of data and information, generating insights to support decision making, performing benchmarking with successful projects and processes, executed in all type of assets during more than 40 years. We promote cross learning among projects by providing a base line of quality content and learning tools.

We leverage learning and teamwork with our toolbox that combines engineering with artificial intelligence, systemic thinking, and transfer knowledge using role-playing games.

We monitor the state of the art of our internal toolbox of technologies and best practices, to make sure that our work produces reliable and trustworthy results.

Our prices are highly competitive since we charge knowledge-based work that generates value. We have negligible or zero overheads issues compared to medium and big size consulting companies and training marketing intermediaries.

We invite you to request our fit for purpose competitive proposals or information and we look forward to hearing from you soon!

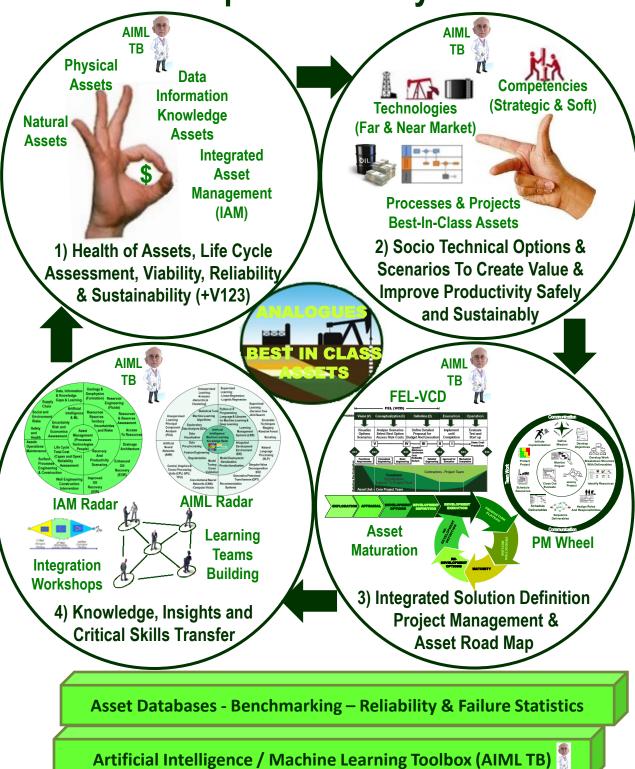
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Founder, CEO & Consultant Email: jlov@optimawell.us





Asset Optimization System





In this guide you will find consulting value added services that can be applied to assets undergoing any phase of the life cycle from initial to mature phases until abandonment providing practical results to our costumers:

- Artificial Intelligence Opportunity Assessment, Strategy and Plan for Implementation
- Assessment Of Data And Information Requirements For Your Business Or Asset Plan And Preparation Of Measurement, Control, Automation and Optimization Asset Master Plan
- Opportunity Identification and Definition Of Projects (O-FEL) For All Phases Of Asset Life Cycle (Opportunity to Abandonment)
- Analysis, Diagnosis of Production And Life Cycle Cost Assessment Of Physical And Technology Assets
- Production Control and Optimization Rapid Response Team (Single Asset Or Portfolio Of Assets)
- Resources And Reserves Management Process Assessment
- Improved Oil Recovery and Productivity Opportunity Assessment, Candidate Selection and Solution Design
- Well Construction And Intervention Project Life Cycle Management Using FEL-VCD
- Independent Evaluation Of Technologies (Technology Intelligence and Pilot Projects)
- Integrated Health, Safety And Environmental Risk Assessment And System Implementation
- Activity-based Competency Assessment For An Asset And Preparation Of Learning Master Plan

We also present a training offer with learning solutions ranging from individual learning blocks, integrated learning programs and advanced programs covering a wide range of knowledge areas that usually are difficult to find in the training market. Some training blocks and programs are offered to the public and others are delivered on demand or as part of the consulting services:

- Introduction to Asset Management Practical Workshop
- Production Asset Management Practical Workshop
- Mature Fields Reservoir Management Practical Workshop
- Economic & Life Cycle Cost (LCC) Assessment Of Oil And Gas Assets Practical Workshop
- Technology Life Cycle Planning For Petroleum Assets
- Integrated Reservoir Management Process Improvement
- Decision Analysis Tool-box For Upstream Oil And Gas Asset Valuations
- Intelligent Performance Measurement And Statistical Quality Control In Oil And Gas Processes
- Introduction To HSE Integrated Risk Management Tools And Techniques
- Entry Program For Rookies Or Non-Petroleum Staff
- Introductory Gas Lift For Engineering and Operations
- Practical Introduction to Artificial Intelligence / Machine Learning Using Python Programming Language
- A Journey into the World of Artificial Intelligence and Practical Guide for Its Application in Business
- Petroleum Asset Management: Integrated Innovative and Intelligent (PAMI3) Value Creation System During Life Cycle of Upstream Assets
- Well Construction and Maintenance Project Management FEL-VCD Methodology (Visualization, Conceptualization And Definition)
- Methodology for Integrated Production Subsurface Surface Optimization (MIP-2SO): Reservoir Analysis, Well Performance Diagnosis, Integrated Solution Design & Implementation Planning
- Dr. Well: Analysis, Diagnosis, Solution Definition Assisted with Artificial Intelligence and Machine Learning
- Heavy Oil Asset Management Practical Preparation of Improved Oil Recovery (IOR) Business Plan
- Mature Fields Asset Management Practical Preparation of Improved Oil Recovery Business Plan
- Resources To Reserves Maturation Process Management Application of Stage Gate Project System
- Toolbox for Outperformers: Strategic and Soft Skills For Asset Teams

Finally, we also present a portfolio of products which are designed to be used in some of the consulting services and training programs. These products will be also offered separately.

Welcome - Approach - Summary







- 1. <u>Artificial Intelligence Opportunity Assessment, Strategy and Plan</u> <u>for Implementation</u>
- 2. <u>Assessment Of Data And Information Requirements For Your Business Or Asset Plan And Preparation Of Measurement,</u>
 Control, Automation and Optimization Asset Master Plan
- 3. Opportunity Identification and Definition Of Projects (O-FEL) For All Phases Of Asset Life Cycle (Opportunity to Abandonment)
- 4. Analysis, Diagnosis of Production And Life Cycle Cost
 Assessment Of Physical And Technology Assets
- Production Control and Optimization Rapid Response Team (Single Asset Or Portfolio Of Assets)
- 6. Resources And Reserves Management Process Assessment
- 7. <u>Improved Oil Recovery and Productivity Opportunity Assessment,</u> <u>Candidate Selection and Solution Design</u>
- 8. <u>Well Construction And Intervention Project Life Cycle Management Using FEL-VCD</u>
- 9. <u>Independent Evaluation Of Technologies (Technology Intelligence and Pilot Projects)</u>
- 10. <u>Integrated Health, Safety And Environmental Risk Assessment</u>
 <u>And System Implementation</u>
- 11. <u>Activity-based Competency Assessment For An Asset And Preparation Of Learning Master Plan</u>



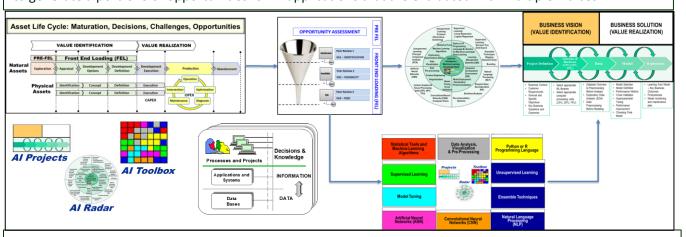


Artificial Intelligence Opportunity Assessment, Strategy and Plan for Implementation

ID: C-AI-SPFA-11

Description

This service is executed by interacting with business staff data owners using interviews, surveys and assessment tools which are the result of successful experiences in the industry. We offer proven methodologies to review existing data and information flow for processes & projects, computerized tools and AI applications currently in use. We compare the maturity of AI-based systems vs. best-in-class similar assets, to generate a portfolio of opportunities for AI applications that are evaluated with multiple indices.



Outcomes

- Assessment of AI maturity vs. challenges (risks, uncertainties, opportunities and barriers).
- Review life cycle activities, Al guidelines and experiences from existing systems that are being used.
- Feasibility analysis for application of AI using standard commercial software or tailor-made solutions.
- Strategy for closing AI gaps including identification of learning while doing learning activities.
- Data and information availability and quality required to train AI models for core processes and projects.
- Al Competency maps coupled to workflows within projects and processes for easy implementation.
- Options and scenarios for Al-based solutions for improvement by addressing risks, and barriers
- Strategy and business plan with options and scenarios for decision making and implementation.

Delivery Of Tailor-Made, Fit-For-Purpose, Just-In-Time On-The-Job Onsite or Remote Training And Mentoring Artificial Intelligence Implementation Plan Aligned To Your Business Goals And People's Talents





Assessment Of Data And Information Requirements For Your Business Or Asset Plan And Preparation Of Measurement, Control, Automation and Optimization Asset Master Plan

ID: C-ADIICAMP-8

Description

This assessment addresses all production operations processes that occur from the sand face at the bottom of each producing or injection well up to the surface in the custody transfer point of the surface production system. All activities within processes are analyzed in terms of measurement and basic control, supervision and advanced control, optimization and finally business integration. Benefits and costs are evaluated and opportunities for value creation are ranked. This model has been used successfully in the oil and gas industry with actual examples that also can be used as analogs.

Field (F)			0-F	A-F	
Reservoir (RE)		ASC-RE	O-RE		(\$
Surface Installation (SI)	BSC-SI	ASC-SI	O-SI		$\overline{}$
Well Head (WH)		ASC-WH	O-WH		NEFITS
Drainage Area (DA)		ASC-DA	O-DA		BEN
	Basic	Advanced			"
	Supervision	Supervision	Optimized	Asset	
	Control	Control			
	INVESTMENTS (\$)				

DATA INFORMATION KNOWLEDGE PYRAMID INSTRUMENTATION, CONTROL AND AUTOMATION



Outcomes

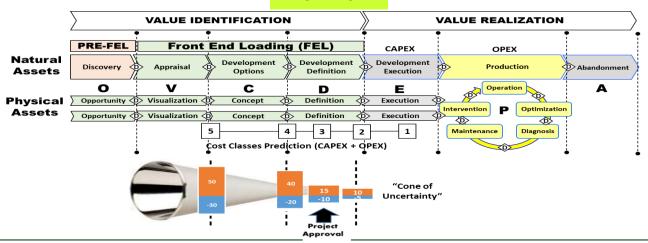
- Identification of data coming from each activity and process within the production system as well as the existing instrumentation, control and automation levels are mapped and analyzed to determine what decisions are made, which data bases and applications are using these data.
- Data reliability diagnosis and failure mode and effect analysis (FMEA) and risks assessment is performed for each data elements.
- Four levels of instrumentation, control and automation levels are assessed in terms of cost benefits for each failure mode and risks.
- Benefits are classified by their effect on reduction of production losses, operating costs, HSE related risks mitigation.
- Potential combination of options are visualized, and proposals are prepared.





Opportunity Identification and Definition Of Projects (O-FEL) For All Phases Of Asset Life Cycle (Opportunity to Abandonment)

ID: C-FELVCD-1



Description

Review your existing asset business reference plan using O-FEL (VCD) and you will be surprised of the many opportunities you could be missing compared to traditional approaches. Combine O-FEL (VCD) with your existing subsurface integrated studies to get another level of oil and gas business performance.

This consulting services provides support for implementation of Opportunity-Front-End Loading (OFEL) which stands for Opportunity Identification (O), Visualization (V), Concept (C) and Definition (D). This best practice for asset maturation is used in successful asset projects and can be applied in natural and physical assets undergoing different phases of asset life cycle (discovery, development, production until abandonment). Implementation of O-FEL will bring a new portfolio of opportunities for optimizing total cost (capital and operational expenditures) and project time cycle while mitigating risks, achieving economic return and productivity goals.

Outcomes

- •Business asset modeling, life of asset assessment, evaluation of existing projects and asset plan to identify value added after application of O-FEL and preparation of proposal to improve your existing business plan.
- •Implementation of O-FEL methodology, tools and complexity and definition indices using a rapid implementation method that focuses on results project by project.
- •Design of O-FEL indices to optimize your project management process by measuring complexity, level of definition (maturity), project performance and reliability of operations.
- Appraisal of competencies vs. required levels for application of O-FEL and preparation of a learning plan.





Analysis, Diagnosis of Production And Life Cycle Cost Assessment Of Physical And Technology Assets

ID: C-ADE-LCAA-4

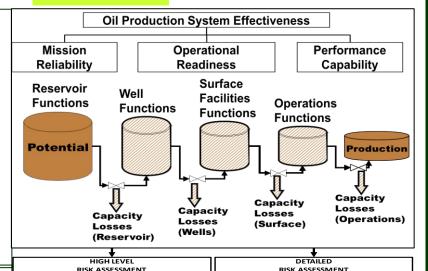
Description

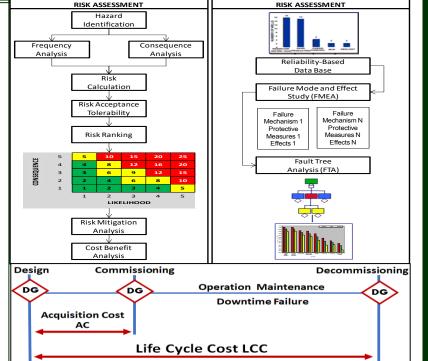
Check if your assets are performing the required functions to sustain resources recovery and reserves production.

Identify capacity losses impacting your production system. Review if your current flow of data, information and decisions is supporting identification of failures, production losses and life cycle cost losses. This services will provide operators about health and performance of existing assets and identification of production losses which prevents achieving target volumes and costs.

Outcomes

- •High level risk assessment with hazard identification and risk ranking including a review of the criteria for risks under the ALARP classification.
- •Detailed assessment for assets showing high risk levels using failure mode and effect analysis, fault trees and action plan to achieve acceptable levels of volumes and life cycle cost performance.
- Production allocation and reporting process assessment and production losses associated causes and action plan life cycle status and recommendations.
- •Data and information flow and decisions process supporting production losses and life cycle cost management.
- •Appraisal of competencies vs. required levels for application and preparation of a learning plan.









Production Control and Optimization Rapid Response Team (Single Asset Or Portfolio Of Assets)

ID: C-PCORRT-5

Description

We provide combined expertise to review a producing field from reservoir to export with the objective of identifying opportunities to boost production, drive down operating costs and to agree on a work plan to realized the benefits and execute further in-depth analysis in particular components of the system.

This service consists of immediate identification of the capacities and limitations of the current production system base line by a team that review all processes that support the flow of field data and information and analyze available daily production potential distribution from reservoirs and wells, producing the first map of production volumes.



TO THE PARTY

Production Method Analysis

- Production losses identification, root cause analysis and design of correction actions plan
- · Nodal analysis and method optimization
- Artificial lift method change analysis

Surface Network and Facility Analyses

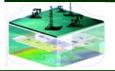
- Measurement and accounting with volumes allocation to wells and reservoirs
- Instrumentation and control diagnosis
 De-bottlenecking, separation, treatment

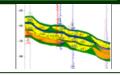
Drainage Area Candidate Recognition

- Production potential vs. daily production
- · Formation damage assessment
- · Reservoir-well connectivity analysis
- Non wanted water & gas diagnosis

General Reservoir Revision

- · Resources and reserves review
- Partially drained areas
- Abnormal fluid distribution
- · Rock quality and fluid pressures distribution





Outcomes

- •Review and analysis of field production data process (data capture, validation, uploading and management) and identification and classification of problems associated to field production data flow
- Production volume losses identification, root cause analysis and correction action plan
- •Identification of underperforming wells, production problems, failure modes, root cause analysis
- •Classification of problem causes and recommendations for handling them at operational level.
- Activity-based cost and time cycle analysis and preparation of a project execution plan with benefits and costs
- Knowledge transfer through mentoring during project execution (optionally: field work, field visits)
- •Appraisal of competencies vs. required levels for application and preparation of a learning plan.





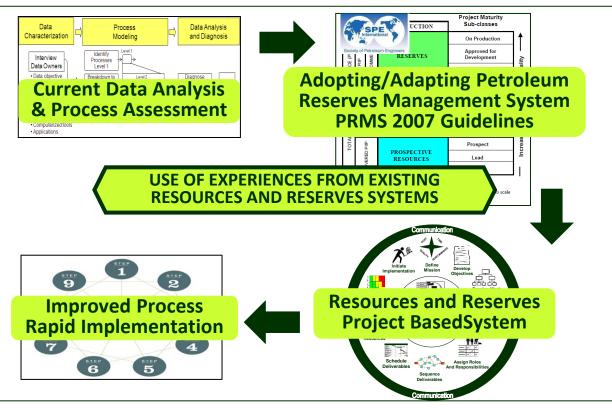
Resources And Reserves Management Process Assessment

ID: C-RRMPA-6

Description

This service provides a review of the hydrocarbon life cycle from undiscovered to discovered resources, reserves and production in order to improve your performance in resources and reserves management.

This service range from short assessments to full implementation of a resources and reserves management process with all options, so the customer decides which one is best for their business needs.



Outcomes

- Assessment of current data and process including identification of uncertainties and barriers.
- Identification of opportunities for process improvement by addressing uncertainties and barriers
- •Short workshops typically 1 to 3 days to review hydrocarbon volumes life cycle activities, PRMS 2007 guidelines and experiences from existing resources and reserves systems that are being used in several countries.
- •Feasibility analysis for application of software solutions depending on the size of the resource base or implementation of simple applications using standard commercial software.
- Appraisal of competencies vs. required levels for application and preparation of a learning plan.





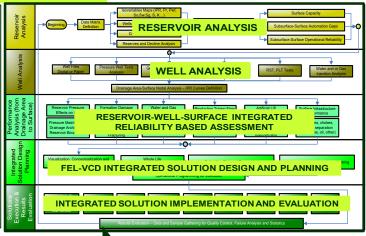
Improved Oil Recovery and Productivity Opportunity Assessment, Candidate Selection and Solution Design

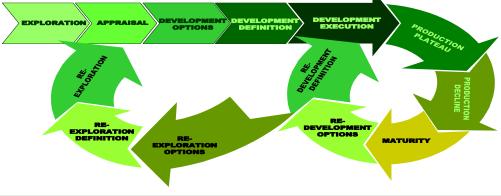
ID: C-IOR-ASD-3

Description

Optimize oil and gas recovery and productivity from your existing wells – Make sure your wells are producing at their potential – Get another view of your current reservoir exploitation plan and operations

This best practice has been applied in thousand of wells in different kind of reservoirs and types of hydrocarbons. The aim is to provide recovery and productivity integrated solutions and independent, unbiased advice to select the best combination of technologies for your reservoir exploitation plan.





Outcomes

- •Evaluation of individual wells performance with identification of opportunities to improve recovery and productivity and visualization of scenarios for integrated solutions with cost estimates, risk assessment and economic evaluation.
- Identification of opportunities for re-development or re-exploration of existing areas of the asset.
- •Definition of improved recovery and productivity integrated solutions using front end loading FEL-VCD and preparation of execution plan including coordinating the participation of service companies that are providing new products and services for each solution.
- •Implementation of plan by coaching and mentoring a project team assigned by operating company.
- Appraisal of competencies vs. required levels for application and preparation of a learning plan.



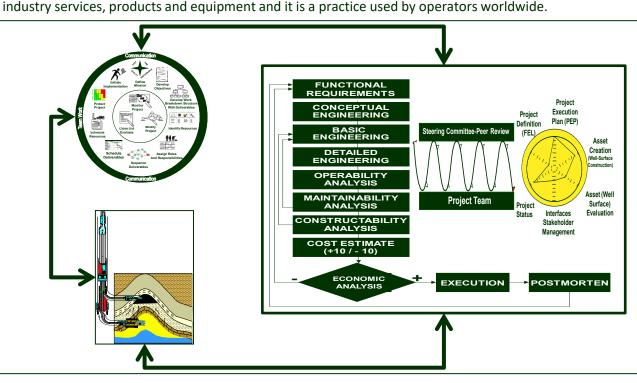


Well Construction And Intervention Project Management Using FEL-VCD

ID: C-WCP-VCDFEL-2

Description

Review and improve your well construction and intervention project portfolio by applying FEL-VCD. Implementation of project management and front-end loading (FEL-VCD) to your well construction and intervention project portfolio. This tool will allow any operator to have an independent, impartial assessment of



Outcomes

- •Evaluation of well construction or intervention projects to identify value added after application of FEL (VCD).
- •Visualization of scenarios and well cost estimates for all phases of the hydrocarbon life cycle.
- •Coaching and facilitation of conceptual and detailed well completion design including participation of service companies that are providing new technologies .
- Design of indices to optimize your project management process by measuring complexity, level of definition, project performance and reliability of operations.
- Appraisal of competencies vs. required levels for application of FEL (VCD) and preparation of a learning plan.
- •Implementation of FEL (VCD) methodology, tools and indices in your company using a rapid method.



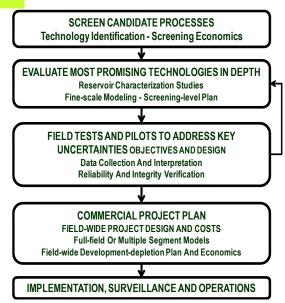


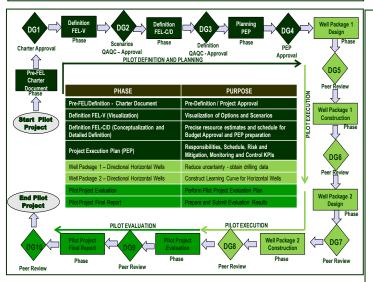
Independent Evaluation Of Technologies (Technology Intelligence and Pilot Projects)

ID: C-IETPP-7

Description

We offer assistance for technology intelligence and pilot projects during all phases of the life cycle from project initiation with the screening and feasibility analysis, preparation of the project execution plan, field assistance during evaluation and evaluation of results to support decision on proceeding to commercial project plan. We have the experience of running integrated field laboratories which is a particular application of this service to integrated multidisciplinary evaluation of selected areas that can be scaled up to the totality of the reservoir. This service includes appraisal of competencies and preparation of a learning plan to support the change management process to ensure a successful massive application of the technology being tested.





Outcomes

- Project initiation document (charter)
- Technology identification and economics
- Design of heavy oil field pilot tests including data acquisition, analysis and interpretation process adapted to the requirements of technologies under evaluation.
- Project execution plan (PEP) with resources sequence and schedule, roles and responsibilities matrix for each resource and pilot project activity
- Results evaluation and preparation of technology implementation plan at massive scale.
- Competency assessment and development plan for asset team members.



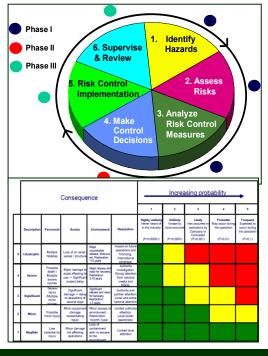


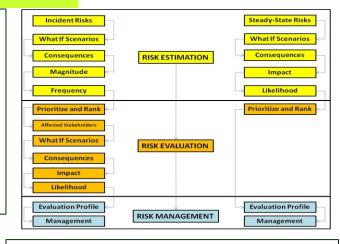
Integrated Health, Safety And Environmental Risk Assessment And System Implementation

ID: C-ISHERA-9

Description

We carry out technical reviews for new and existing assets. The objective is to assess all safety, operability and environmental aspects of your assets. We use an integrated health, safety and environmental risk assessment methodology where risks are analyzed, evaluated and mitigation strategies are organized into a system that is implemented in phases that triggers a learning curve and a culture that can be measured and monitored by the members of the asset team.





Outcomes

- Major risks and priorities (risk ranking)
- Program for risk control
- Strategy for risk reduction
- Identification of needs for in-depth studies
- Continuous risk evaluation process, tools and competences to support risk control program and risk reduction strategy
- Establish where the organization is in terms of risk management (who, what and how)
- Develop or update criteria for intolerable, tolerable and broadly accepted risks
- HSE competency development plan for all members of the asset team.

"The first duty of business is to survive, and a guiding principle of business is the avoidance of loss - not only the maximisation of profit"



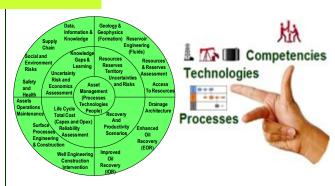


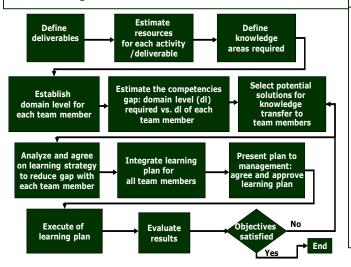
Activity-based Competency Assessment For An Asset And Preparation Of Learning Master Plan

ID: C-ABCA-LMP-10

Description

We provide an activity-based competency assessment to satisfy the specific learning needs of your projects and processes. We design a result oriented, learning while doing mentoring, facilitation and coaching program to be executed as part of the business plan. This service is executed by interacting with your staff using interviews, surveys and competency assessment tools which are the result of successful experiences in the oil and gas industry. We offer proven methodologies.





Outcomes

- Strategy for closing competencies gaps using learning while doing activities.
- Competency maps coupled to workflows within projects and processes for easy implementation of knowledge.
- Learning plans for exploration and production assets and projects
- Teaching and mentoring programs adapted to customer's particular reservoir needs.
- Permanent follow up, evaluation and adjustments as part of execution of the learning plan.

Delivery Of Taylor Made, Fit For Purpose, Just In Time On The Job Onsite/Remote Training And Mentoring Plan Aligned To Your Business Goals And People's Talents



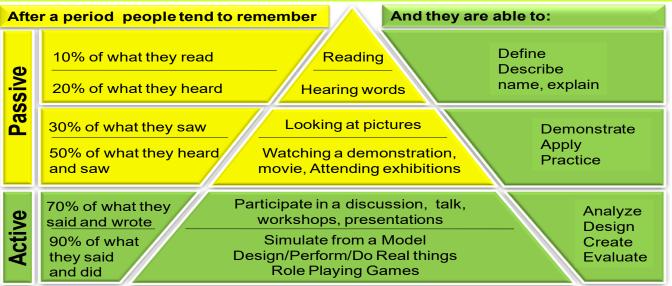




Training



Active Learning Strategy



Adapted from the original Edgar Dale's Cone of Learning

OptimaWell uses an active learning strategy which accounts for 70% or more of the learning process as shown in the adapted Dale's Cone of Learning model).

Our methodologies are based on our experience in the oil and gas industry with knowledge management tools designed to close the loop with results and can be translated into business value. In each learning while doing activity we facilitate teamwork, mentoring, communities of best practices, learning before during and after projects.

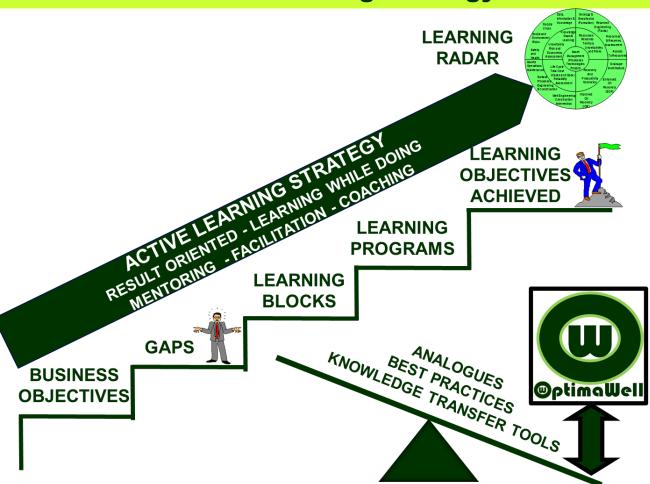
All our services, training and products are designed to **leverage** your learning needs which are identified by direct interaction with our customers using interviews, surveys and competency assessment tools which are the result of successful experiences in the oil and gas industry. We offer proven methodologies!

An example of learning while doing is our role-playing simulation method in which we use actual cases from analog assets to create a context that encourages the integration of concepts, methodology and the participant's knowledge. 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. This learning approach has high positive impact in any project dealing with high levels of uncertainties and risks





Active Learning Strategy



- 1. Learning Plans For Assets And Projects
- 2. Tripod Learning Model: % Videos, % Online-interactive and % Work Project For Immediate and Advanced Applications.
- 3. Interactive Customer Centered Learning Model For Individuals And Groups.
- 4. Teaching And Mentoring Programs Adapted To Customer's Particular Assets Needs.
- 5. Competency Maps Coupled To Workflows For Easy Implementation Of Knowledge.
- 6. Practical Examples (Analogues) From Successful Worldwide Assets And Projects.



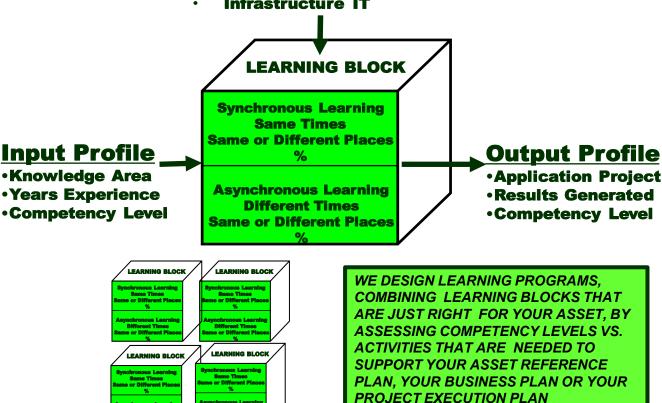


Learning Resource Center Model

Learning Block And Program Model

Resources (Cost-Time)

- **Consultants (15 To 30+ Years Experience**)
- **Software And Applications**
- Infrastructure IT



Program = Σ Blocks(i)

Request A Proposal For Learning While Doing Opportunities To Support Your Business!





Learning Resource Center Model

Learning Blocks - Foundation

Basic entry level - Learning loop closed with concepts and fundamentals relevant to company assets and fields and a total duration less or equal than 24 hours.

Learning Programs at Tactical Level

Intermediate level - Learning loop closed with results in particular projects and processes supporting assets and fields and a total duration less than 1 week.

Learning Programs at Strategic Level

Advanced level for managers and leaders of business projects and processes - Learning loop closed with business plan objectives and goals and a total duration of more than 1 week.





Learning Resource Center Model

Learning Resource Center Blocks and Programs

Learning Blocks By
Knowledge Area
(Rookies & Beginners)

Learning Programs
By Processes And
Projects
(Intermediate)

Learning Programs
By Assets
(Advanced)

- Geology And Geosciences
- Reservoir Engineering
- Production Engineering
- Drilling And Completion Engineering
- Surface Processes Engineering
- Reliability Engineering
- Health, Safety And Environment
- Risk And Economics
- Introduction to Artificial Intelligence
- Soft Skills

- Resources To Reserves
- Well Construction
- Facilities Construction
- Well/Field Optimization
- Asset Management
- Technology Planning
- Socio-Technical Methods
- Artificial Intelligence Business Applications

- Heavy Oil
- Gas
- Exploration/Appraisal
- Development
- Mature Fields
- IOR-EOR Pilot Projects
- Artificial Intelligence Projects
- Environmentally And Socially Sensitive Areas

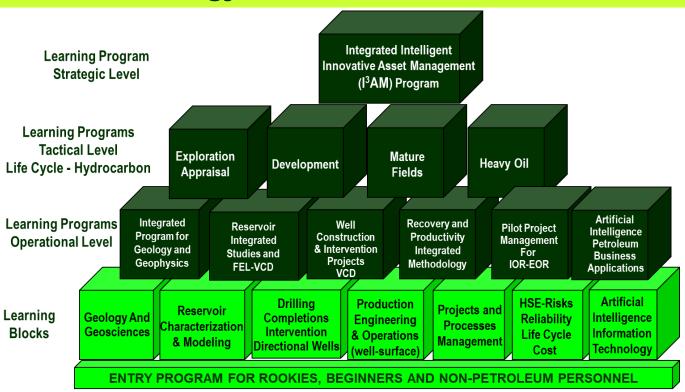
WE OFFER A DIFFERENTIATED APPROACH TO TRAINING AND MENTORING BY PROVIDING HIGHLY EXPERIENCED PROFESSIONALS THAT ARE AVAILABLE WHENEVER THEY ARE NEEDED WITHOUT PAYING EXORBITANT RATES AND HELPING YOU TO OPTIMIZE YOUR OVERHEADS RELATED TO CONSULTING AND TRAINING SERVICES DURING PEAK SEASONS. IN SUMMARY VALUE-ADDED HIGH-QUALITY TRAINING!





Learning Resource Center Model

Energy and Petroleum Assets



- Learning Blocks and Learning Programs Adapted For Your Particular Asset So You Save Money And Precious Time In Applicable Courses Aligned To Your Needs
- Our Entry Program For Rookies, Beginners and Non-Petroleum Personnel Is Based On Successful Experiences From Oil and Gas Industry
- 3. We Shorten Your Learning Curve By Providing Online Assistance At Competitive Prices

Request A Proposal For Learning While Doing Opportunities To Support Your Business!







Learning Blocks



Training

Learning Blocks

- Introduction to Asset Management Practical Workshop
- Production Asset Management Practical Workshop
- Mature Fields Reservoir Management Practical Workshop
- <u>Economic & Life Cycle Cost (LCC) Assessment Of Oil And Gas</u>
 Assets Practical Workshop
- Technology Life Cycle Planning For Petroleum Assets
- Integrated Reservoir Management Process Improvement
- <u>Decision Analysis Tool-box For Upstream Oil And Gas Asset</u>
 <u>Valuations</u>
- <u>Intelligent Performance Measurement And Statistical Quality</u>
 Control In Oil And Gas Processes
- <u>Introduction To HSE Integrated Risk Management Tools And</u>
 Techniques
- <u>Entry Program For Rookies Or Non-Petroleum Staff</u>
- Introductory Gas Lift For Engineering and Operations
- Practical Introduction to Artificial Intelligence / Machine Learning
 Using Python Programming Language



Introduction to Asset Management

Title: Introduction to Asset Management

Level: Introductory Program ID: T-B-AM-5

Duration: 24h

Consultant(s): José Luis Ortiz Volcán (Instructor-Coordinator)

Invited Speakers

Who Should Attend:

Asset managers, project leaders and internal service providers of any discipline related to geology-geophysics, reservoir engineering, production, finance, human resources, procurement.

Designed For Assets:

All assets and hydrocarbons

Objectives: Help participants understand the principles underlying asset management and how these can best be implemented in practice. Define an asset in its context within a production system. Determine the essential variables to measure the whole life cost of an asset. Introduce analytical management tools to enhance asset value.. Understand relevant aspects of terotechnology (The study of the cost of an asset over its absolute physical life). In general terms, plan and critically review the management of an asset to reduce the different costs incurred at the various stages of the asset's life and to develop methods that will help extend the asset's life span.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives—Asset management principles and processes – Key performance indicators and criticality - Asset organization design – Accountability, responsibility and authority – Shared asset ownership – Interface management – Interpersonal skills and team performance – Service agreements and service provider relationships – Business planning —Costing and hence how to look at, and value for investment, a complete system from a whole life viewpoint while managing uncertainty – Whole life costing and inter-relationship between revenue, capital and operating costs – Methods and data for all phases of asset development - Supply chain management - Case histories from different companies (NOC and IOC) particularly from North Sea - Benchmarking

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Production Asset Management From Resources To Reserves Development Practical Workshop

Title: Production Asset Management From Resources to Reserves Development							
	uration:	24h					
Consultant(s): José Luis Ortiz Volcán (Instructor-Coordinator) Invited Speakers							
Who Should Attend: This workshop is designed for all employees who work in oil and gas fields and expand their competencies in asset management from resources to reserves of	•	•					
Designed For Assets: Oil and Gas Assets Undergoing Exploration, Appraisal, Development, IOR-EOR	R Projects						

Objectives:

On completion of workshop participants are expected to achieve an introductory competency level to: 1) Classify data, identify uncertainties and risks for heavy oil fluids and bearing formations, 2) Assess technology needs and implementation of pilots, 3) Map life cycle of a heavy oil asset and project , 4) Construct the key elements of project definition (Front End Loading), 5) Break down project into manageable work packages, 6) Apply effective tools for project control, monitoring and evaluation, 7) Work effectively as project team

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives - oil taxonomy and classification, fluid properties - oil bearing formations - Depositional environments, rock properties - oil production technologies – Implementation strategies using pilots - Resources classification – Prospective, contingent, reserves and production (SPE PRMS 2007) - Uncertainties and risks factors controlling reserves - Reserves estimation methods - Life cycle of oil assets – Impact of activities on ultimate recovery - Project management process methodology based on PMI-PMBOK® - Front End Loading – Visualization-Conceptualization-Definition - Definition index (FEL Index) - Preparation and application - Practical application using analogs – Risk and uncertainty assessment – Methods economic assessment

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Mature Fields Reservoir Management – Practical Workshop

Title: Mature Fields Reservoir Management – Practical Workshop				
Level: Introductory ID: T-I-MFRM-5 Duration:				
Consultant(s): José Luis Ortiz Volcán (Instructor-Coordinator)	Invited Speakers			
Who Should This workshop is designed for petroleum engineers, fie have completed most of the foundation learning blocks	· ·			
Designed Mature Fields For Assets:				
Objectives: To provide an integrated petroleum engineering worksl approach to the development and exploitation of matur				

of best practices in petroleum engineering methods and techniques for monitoring, modeling and management of reservoirs in a brownfield setting, with the aim of maximizing recovery and return on investment.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Reservoir management principles- Study planning guidelines – Integrated reservoir performance analysis – Use of seismic techniques in producing reservoirs – Petrophysical techniques for mature fields - Cased-hole logging and reservoir monitoring - Probabilistic modeling of development and production optimization - Productivity improvement - Selection of wells candidates for productivity improvement – Redevelopment and incremental projects – enhanced oil recovery options for mature fields – Forecasting and scenario planning for incremental projects – Projects screening and evaluation

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Economic & Life Cycle Cost (LCC) Assessment Of Oil And Gas Assets – Practical Workshop

Γitl	e:	Economic & Life C	cycle Cost (LCC) Assessment Of Oil And	Gas Assets – Practical Workshop
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Level: Introductory

ID: T-I-LCCA-5

Duration:

24h

Consultant(s): José Luis Ortiz Volcán

Who Should Attend:

This workshop is designed for employees who participate in the preparation of the business plan for assets undergoing any phase of the life cycle from exploration to abandonment.

Designed For Assets:

All assets and all hydrocarbons

Objectives:

1) Perform life cycle cost assessment of one asset or a group of assets, 2) Apply Petroleum Resources Management System (PRMS 2007) to classify resources, reserves and production, 3) Identify activities related to capital expenditures and operational expenditures, 4) Identify asset effectiveness variables and assess data and information to determine the existing effectiveness base line, 5) Apply causal loops to model the asset, activities and costs to identify opportunities for cost optimization and 6) Prepare a life cycle costing report with value creation opportunities as input in the business planning cycle.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Asset life cycle phases and activities from exploration to abandonment – Classification of petroleum resources using SPE PRMS 2007 - Capital expenditures (CAPEX) concept and modeling – Operational expenditures (OPEX) activity based costing concept and modeling – Effectiveness concept - Uncertainties and risks during life cycle – Cause and effect modeling of an asset during life cycle – Scenario planning using combinations of options and decisions to identify asset optimization opportunities – Simulation of scenarios using Monte Carlo – Simulation of scenarios using systems dynamics – Selection of best scenario

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Technology Life Cycle Planning For Petroleum Assets

Title: Technology Life Cycle Planning For Petroleum Assets				
Level: Introductory ID: T-A-TPHA-5	Duration : 24h			
Consultant(s): José Luis Ortiz Volcán	Invited Speakers (Optional)			
Who Should This workshop is designed for professionals with knowledge of hydrocarbon assets who participate in technology planning for operating or service companies				
Designed All assets and all hydrocarbons For Assets:				

Objectives:

1) Understand life cycle of hydrocarbon assets from discovery to abandonment, impact of activities in recovery and productivity and modeling capital and operational expenditures, 2) Understand and apply technology life cycle and scenario planning, 3) Understand uncertainties and risk modeling for hydrocarbons in South American basins, 4) Learn how to prepare a demand model from an asset reference plan in any phase of the lifecycle, 5) Learn how to prepare a supply model of goods and services for an operating company based on the asset reference plan

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – 1) Hydrocarbon life cycle from discovery to abandonment – impact of activities in recovery and productivity -Capital and operational expenditures modeling, 2) Oil and gas technologies life cycle and risk assessment, 3) Characteristics of reservoirs and hydrocarbons existing in Venezuelan basins, 4) Challenges for discovery, recovery and productivity associated to hydrocarbons in South American basins, 5) Asset reference plan for an operating unit and demand model for goods and services, 6) Supply chain analysis and preparation of supply model for different scenarios of demand – uncertainty and risk assessment , 7) Technology intelligence process for preparation of technology business plan

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Integrated Reservoir Management Process Improvement

Title: Integrate	d Reservoir Management Process Improven	ent	
Level: Introd	uctory ID: T-I-IRMPI-5	Duration: 2	24h
Consultant(s	Invited Speakers (Optional)		
Who Should Attend:	Reservoir , drilling and completions, producteam members. Basic level of statistical qu	ction operations and surface processes leaders o ality control is recommended.	r
Designed For Assets:	All assets and hydrocarbons		
Objectives: To identify, analyze and improve existing integrated reservoir management processes with asset unit or exploitation unit in order to meet new goals and objectives. Learn how to apply business process improvement methodologies to identify opportunities get more hydrocarbons from existing field development plans. Learn how to work in multidisciplinary teams and to identify critical skills required for specineds of a reservoir. Prepare a reservoir operations plan supporting the exploitation plan.			

Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Concepts of activities, processes and projects - Reservoir assets life cycle, activities, decisions and skills - How and when to manage activities through processes vs. projects - Data life cycle and Content reliability analysis techniques - Statistical quality control application to reservoir processes and activities – Concept of process variation – Business process improvement projects - Process simulation modeling techniques to reduce risks and increase performance – Process simulation software options and how to select it – Using analogs to accelerate process modeling - Simulation exercise using a practical case – Tools for multidisciplinary teamwork - Preparation of an integrated reservoir management process improvement proposal for your organization or your company.

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Decision Analysis Tool-box For Upstream Oil And Gas Asset Valuations

Title: Decision Analysis Tool-box For Upstream Oil And Gas Asset Valuations									
Level: Introductory ID: T-B-DATB-3					Duration : 2	4h			
Consultant(s): José Luis Ortiz Volcán									
Who Should Attend:	Anyone working in development mana	. •	c planning, asse	et managers, project n	nanagers, busines	s			
Designed For Assets:	· · · · · · · · · · · · · · · · · · ·								
Objectives: Get an overview of most used decision analysis tools in oil and gas asset valuations – Learn the applicability and limits of each tool with practical examples – Understand the methodology and common uses by applying tools to actual cases.									
Ве	fore and after worksh	op: On line interv	riew to map com	petencies vs. learning	obiectives –				

Content Themes

Decision trees – Monte Carlo simulation – Real options valuation – Binomial option pricing models – Influence diagrams – Front end loading (FEL) – Stochastic price models – Critical Path Method (CPM) – Program evaluation and review technique (PERT) – Critical chain project management – Bayes theorem – Correlation charts – Bootstrapping – Utility theory – Value of information – Payoff matrices – Breakeven and indifference analysis – Tornado and spider diagrams – Balanced scored cards – Scenario planning – Stage-gate systems – Game theory – Simple multi attribute rating technique – Analytical hierarchical process – Managerial strategic grids – Portfolio optimization

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Intelligent Performance Measurement And Statistical Quality Control In Oil And Gas Processes

Title: Intelligent	Performance Me	asurement	t And Statistical Qua	lity Control	In Oil And Gas	Processes	
Level: Introductory		ID:	Γ-I-PMSQC-3			Duration :	24h
Consultant(s):José Luis Ortiz	Volcán	Invited Speakers				
Who Should Attend:	Asset managers	, project te	eam leaders and ser	vice provide	ers of any discip	oline.	3
Designed <i>F</i> For Assets:	All assets and hyd	rocarbons					-
Objectives:	Awareness of data Learn About Mac	of statistica from Dr. Sh ta use and hine Learr		y Data Ana cal Analysi	llysis s	ons	

Content Themes

Before and after workshop: Online interview to map competencies vs. learning objectives – Choosing performance measures - Data analysis techniques - Statistical trending - What to do with performance data - Management decision making - How to build a better process - Three exercises: red beads - win all you can win - red pen/blue pen – Machine Learning Tools for Statistical Analysis: Excel and Python Libraries

Request A Proposal For Learning While Doing Opportunities To Support Your Business!



Introduction To HSE Integrated Risk Management Tools And Techniques

ISE Integrated Risk Management					
Duration : 24h					
akers					
Who Should Exploration and Production staff that are going to have responsibility for HSE or who are going to be involved in the development of HSE plans.					
1					

Objectives:

1) Be aware of all available HSE tools and techniques which can be applied in the various EP business phases, including their benefits and limitations. 2) Achieve a general knowledge of the simpler and more commonly used HSE tools and techniques, 3) Acquire the skills necessary to understand all HSE documentation and reports, 4) Describe the structure of the HSE integrated management system 5) Planning and control the implementation of HSE integrated management system.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Methods for identifying hazards – Tools and techniques for assessing these hazards – HSE integrated management system - Operational processes analysis methodologies - SCHIRP (Structured, Comprehensive Hazard Identification and Risk Profiling) - HAZOP (Hazard and Operability Studies) – What If Analysis - Cause and Effect Analysis - Fault Tree analysis – Tools and techniques for control of hazards, including feedback mechanisms – Safe work practice, Mechanical integrity – Prestart review - Emergency and contingency plans – Change management – Contractor HSE management - Auditing – Incidents investigation.



Entry Program For Rookies or Non-Petroleum Staff

Title: Entry Program For Rookies & Beginners or Non-Petroleum Staff

Duration: 24h Level: Introductory ID: T-B-EPFRB-40

Consultant(s): José Luis Ortiz Volcán (Instructor-Coordinator) –

Participation of 4 Experienced Consultants From Different Disciplines

Who Should Exploration and Production graduate recruits who are starting their careers in the oil and gas Attend: industry coming from different engineering and geology disciplines.

Designed All assets and hydrocarbons For Assets:

Objectives:1) To introduce a wide range of well engineering techniques and issues to prepare participants for further well and surface engineering and operations training, 2) Understand key elements of drilling, workover and production operations, 3) Develop an introductory competency level of geology and geosciences, 4) Explain the roles of reservoir engineering and apply basic level of reservoir engineering concepts, 5) Get a basic level of knowledge of exploration and appraisal activities, 6) Understand the processes for resources and reserves management, risk and economic evaluation of EP projects, 7) Learn about HSE tools and techniques relevant to oil and gas.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Module 1: Introduction to oil and gas operations and equipment - Module 2: Geology and geosciences – Module 3: Reservoir engineering – Module 4: Drilling, completions and well interventions – Module 5: Well and surface production operations – Module 6: Resources and reserves, risk and economic evaluation - Module 7: HSE - Module 8: Practice assignment with field cases and preparation of report and presentation.



Introductory Gas Lift For Engineering and Operations

Title: Introductory Gas Lift For Engineering and Operations						
Level: Introdu	uctory	ID: T-B-IGLFEO-5		Duration : 24h		
Consultant(s) :José Luis Ortiz \	Volcán (Instructor-Coordin	ator) Invited Speaker	rs		
Who Should Attend:	Production engine introduction to ga		ammers and operations staff n	eeding a detailed		
Designed For Assets:	All assets and hydr	rocarbons				
Objectives: 1) Get an introductory overview of the different gas lift methods and its applicability including principles of continuous, intermittent, slug gas lift and variations for open, semi closed and closed systems. 2) To provide awareness and knowledge regarding equipment selection and design for gas lift systems, 3) Get exposure to gas lift valve design and gas lift mandrel spacing, 4) Learn the basis of gas lift optimization and gas lift operations, 5) Learn the principles involved in gas lift wells surveillance and monitoring.						

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Gas lift concepts and description of methods – Inflow performance and gas lift – Gas lift equipment and valve mechanics – Valve calibration – Unloading – Designing valves – Temperature and choke sizing – Mandrel spacing – Continuous gas lift principles and operations - Intermittent gas lift principles and operations – Lift gas rates, instability and distribution – Gas lift surveillance – Gas measurement – Gas lift surface charts – Principles of gas lift well analysis and diagnosis.



Practical Introduction to Artificial Intelligence / Machine Learning Using Python Programming Language

Title: Practical Introduction to Artificial Intelligence / Machine Learning Using Python Programming Language					
Level: Introduc	evel: Introductory ID: T-I-PIAIMLUPPL-5 Duration: 2				
Consultant(s): José Luis Ortiz Volcán (Instructor-Coordinator)	Invited Speakers			
Who Should This workshop is designed for all employees seeking to expand their competencies in practical applications of artificial intelligence and machine learning using Python language					
Designed For Assets:	All types of Assets				
Objectives:	On completion of workshop participants are expected to achieve an introductory competency level to 1) Develop a good understanding of what artificial intelligence and machine learning is and its impact in business, 2) Understand life cycle of data, acquisition, quality, processing and analysis to generate information and knowledge, 3) Develop an introductory foundation for programming with Python and the most important libraries, 4) Get familiarity with analytic tools for generation of information for intelligent decision making.				

Content Themes

Before and after workshop: Online interview to map competencies vs. learning objectives – Python tutorial overview – How to read, explore and visualize data - Data preprocessing and exploratory data analysis using Python – Learn Python IDE Jupyter Notebook to Write and Run Python Programs – Data visualization and selection of the right tool – Introduction and practical aspects of supervised, unsupervised learning and deep learning.





Learning Programs



Training

Learning Programs

- A Journey into the World of Artificial Intelligence and Practical Guide for Its Application in Business
- <u>Petroleum Asset Management: Integrated Innovative and Intelligent</u>
 <u>(PAMI3) Value Creation System During Life Cycle of Upstream Assets</u>
- Well Construction and Maintenance Project Management FEL-VCD Methodology (Visualization, Conceptualization And Definition)
- Methodology for Integrated Production Subsurface Surface
 Optimization (MIP-2SO): Reservoir Analysis, Well Performance
 Diagnosis, Integrated Solution Design & Implementation Planning
- <u>Dr. Well: Analysis, Diagnosis, Solution Definition Assisted with</u> Artificial Intelligence and Machine Learning
- <u>Heavy Oil Asset Management Practical Preparation of Improved Oil</u> <u>Recovery (IOR) Business Plan</u>
- <u>Mature Fields Asset Management Practical Preparation of Improved</u>
 Oil Recovery Business Plan
- <u>Resources To Reserves Maturation Process Management Application</u> of Stage Gate Project System
- Toolbox for Outperformers: Strategic and Soft Skills For Asset Teams

Request Our Competitive Fit For Purpose Proposals!



A Journey into the World of Artificial Intelligence and Practical Guide for Its Application in Business

Level: Introductory Program | ID: T-B-AIFME-5 | Duration: 5d

Consultant(s): José Luis Ortiz Volcán Invited Speakers

Title: Artificial Intelligence for Managers and Executives

Who Should Managers, executives who work in petroleum, energy, and other sectors seeking to expand their knowledge about artificial intelligence and its practical applications in business.

Designed Petroleum, Energy and other Economic Sectors and Industries.

For Assets:

Objectives:

On completion of workshop participants are expected to achieve an introductory competency level to 1) Develop a good understanding of what artificial intelligence and machine learning is and its impact in business, 2) Understand the process from data to insights, data life cycle, quality, acquisition, processing and analysis to generate information, knowledge and insights 3) Develop an introductory foundation for programming with Python and the most important libraries, 4) Get familiarity with a road map and tools for generation of information for intelligent decision making, 5) Understand the potential and limits of artificial intelligence, including ethical aspects.

Content Themes

Before and after workshop: Online interview to map competencies vs. learning objectives – Python tutorial overview – How to read, explore and visualize data - Data preprocessing and exploratory data analysis using Python – Learn Python IDE Jupyter Notebook to Write and Run Python Programs – Data visualization and selection of the right tool – Introduction and practical aspects of supervised, unsupervised learning and deep learning.



Petroleum Asset Management: Integrated Innovative and Intelligent (PAMI3) - Value Creation System During Life Cycle of Upstream Assets

Petroleum Asset Management: Integrated Innovative and Intelligent (PAMI3)					
Level Introductory Program	ID TO BALLIO 5	Duration: 5d			
PAGE INTRODUCTORY PROGRAM	ΙΙΙΙ ΙΙΙΙ Ι-Β-ΡΔΙΛΙΊΧ-5	Hillration: 5d			

Consultant(s): José Luis Ortiz Volcán Invited Speakers (Optional)

Who Should Asset managers, project leaders and internal service providers of any discipline related to Attend: geology-geophysics, reservoir engineering, production, finance, human resources, procurement.

Designed All assets and hydrocarbons For Assets:

On completion of this workshop, the participants are expected to achieve an introductory Objectives: competency level to: Identify, classify and prioritize all data, perform exploratory data analysis -Identify uncertainties and risks for fluids and bearing formations - Assess technology needs and implementation of pilots to reduce uncertainties and risks - Map life cycle of a petroleum asset and projects (asset reference plan and projects) - Construct the key elements of project definition (Front End Loading) - Break down projects into manageable work packages from initial phase to final handover - Apply effective tools for project control, monitoring execution progress and evaluation - Work effectively as asset project team members or asset project manager

Content Themes

Before and after workshop: Online interview to map competencies vs. learning objectives-Life Cycle of Petroleum Assets – Impact of Activities On Ultimate Recovery - Improved Oil Recovery Technologies (Primary, Secondary & Tertiary Recovery) - Petroleum Production System Components, Functions and Life Cycle Analysis - Asset management evolution in petroleum industry Asset management toolbox and documentation system to support all decisions during asset life cycle – The importance of reliability engineering – Evaluation and diagnosis of natural and physical assets – Reliability tools – Forensic Engineering key to closing the loop in the asset management cycle - Project Management Process Methodology - Front End Loading - FEL Index - Tool-box to prepare asset reference plan. - Economic Assessment - Methods



Well Construction and Maintenance Project Management FEL-VCD Methodology (Visualization, Conceptualization And Definition)

Title: Well Construction and Maintenance Project Management FEL-VCD Methodology

Level:Intermediate Program

T-I-WPMVCD-5 ID.

Duration: 5d

Consultant(s): José Luis Ortiz Volcán

Invited Speakers

Who Should Attend:

This workshop is designed for employees of all disciplines responsible for well construction and intervention projects.

Designed For Assets:

Well assets.

On completion of workshop participants are expected to achieve a competency level to: 1) Define Objectives: and plan a well project construction or maintenance with all departments aligned to the asset reservoir business plan, 2) Achieve a systemic business vision including the impact of all disciplines involved in the different decisions during well project life cycle, 3) Learn how to draw potential scenarios by well and field by combining technology options and decisions, 4) Understand life cycle costing and apply it to optimize time and cost in planning and execution, 5) Manage uncertainty and risks for more reliable decision making process and 6) Learn how to plan your well project using benchmarking to reach your asset potential limits.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives - Project management methodology (definition, planning and execution) with examples from actual well projects - How to perform data classification, analysis, validation, uncertainty and risks identification to support well projects - VCD for well projects (front end loading) FEL index with examples from actual well projects - Basic concepts of drilling (including directional) and completions - Visualize options and scenarios integrating geology, reservoir, drilling and completions, production and operations - Design solutions using analogs - Apply project management to prepare a rig or rig less intervention program.



Methodology for Integrated Production Subsurface Surface **Optimization (MIP-2SO)**

Title: Methodology for Integrated Production Subsurface Surface Optimization (MIP-2SO)

Level:Intermediate Program

ID:

T-I-MIP2SO-20

Duration: 20d

Consultant(s): José Luis Ortiz Volcán

Invited Speakers

Who Should Attend:

This workshop is designed for anyone responsible for selecting candidates for production

improvement and preparing rig or rig less intervention programs

Designed For Assets: Mature Fields - Heavy Oil Assets - Oil and Gas Assets Undergoing Production Phase -

Underperforming Wells In General

Objectives: Generate a portfolio of optimization projects, and the implementation of a best practice at asset and corporate levels, to secure that each production well will have the identification of opportunity for production improvement and cost reduction, to support the business -Establish actual reservoir potential and actions to achieve the required levels of producibility. -Meet worldwide standards for data reliability and productivity enhancement well candidate - selection process (rig or rig less) - -Realistic evaluation of recovery efficiency vs. worldwide class scenarios for IOR/EOR. - Oil and gas accounting reflected into wells and reservoirs. --Reduction of cycle time for operations and projects. - how to identify opportunities and design integrated solutions.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives - Data gathering and reliability analysis to identify completeness, uncertainties and risks – Review and diagnosis methods for determining causes of deliverability problems - Application of reliability based tools to analyze failure modes and causes related to reservoir, well drainage area, well mechanical completions, artificial lift and surface production system – Selection of corrective and preventive actions - Cost, cycle time and resources modeling - Visualization, conceptualization and definition of solution (VCD) - Workflow for integrated assessment reservoir-well drainage areaartificial lift-production system – Application of project management to prepare a rig or rig less intervention program - Examples

OPTIONAL: SPECIALIZED PROGRAM FOR HEAVY OIL ASSETS





Dr. Well: Analysis, Diagnosis, Solution Definition Assisted with Artificial Intelligence and Machine Learning

Title: Dr. Well: Analysis, Diagnosis, Solution Design & Implementation Using Reliability & VCD

Level:Intermediate Program

T-I-WADSD-5 ID:

Duration: 5d

Consultant(s): José Luis Ortiz Volcán

Invited Speakers

Attend:

Who Should Personnel responsible for checking the health of well assets, analyzing and diagnosing root causes of underperformance or failure and define a solution using AI and ML

Designed For Assets:

Underperforming Wells or Failing to Perform Its Functions as Designed

Objectives:

On completion of workshop participants are expected to achieve a competency level to: 1) Perform data classification, analysis, validation, uncertainty and risks identification, 2) Diagnose and analyze (individually and team approach) wells in an integrated manner considering reservoir, drainage area, completion, artificial lift and surface, 3) Identify candidates for production improvement, 4) Visualize options and scenarios for solution design and select best scenario, 5) Design integral solution using analogs and 6) Apply project management to prepare a rig or rig less intervention program.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives - Data gathering and reliability analysis to identify completeness, uncertainties and risks – Review and diagnosis methods for determining causes of deliverability problems – Application of reliability based tools to analyze failure modes and causes related to reservoir, well drainage area, well mechanical completions, artificial lift and surface production system – Selection of corrective and preventive actions - Cost, cycle time and resources modeling - Visualization, conceptualization and definition of solution (VCD) – Workflow for integrated assessment reservoir-well drainage areaartificial lift-production system – Application of project management to prepare a rig or rig less intervention program - Examples

OPTIONAL: SPECIALIZED PROGRAM FOR HEAVY OIL ASSETS





Heavy Oil Asset Management

Title: Heavy Oil Asset Management - Practical Preparation of Improved Oil Recovery (IOR) Business Plan

Level Advanced Program

ID: T-A-HOPAMP-5

Duration: 5d

Consultant(s):

José Luis Ortiz Volcán (Principal Instructor and Coordinator) – Participation of Experienced Consultants From Different Disciplines

Attend:

Who Should Asset managers, project leaders and internal service providers of any discipline related to geology-geophysics, reservoir engineering, production, finance, human resources, procurement.

Designed For Assets: Heavy oil hydrocarbons. It is recommended to select a field with an Appraisal or Field

Development Plan (FDP) already approved as study case for this program.

Objectives:

Given the length of the program there will be continuous assessment of the candidates during the program to ensure that each of them is progressing as best as possible. This will also ensure that the objectives are being met, and that the candidates are gaining real value that can be taken back to their organization. - Training on "Asset Management" theory and practice. Enhancement of asset management "Knowledge and Skills". Training on asset management "Best Practices". Awareness of world class proven asset management "Technology". Methodology and approach to standardize the use of best practices and technology to optimize exploitation of their own assets.

Content Themes

Before and after workshop: Online interview to map competencies vs. learning objectives – Week 1: Introduction to asset management – Week 2: Reliability and risk analysis – Week 3: Asset life cycle investment and costing – Week 4: Strategic management – Week 5: Financial asset management workshop – Week 6: Asset operational integrity workshop – Week 7: Asset management implementation workshop – Week 8: Practical Preparation of Improved Oil Recovery (IOR) Business Plan



Mature Fields Asset Management

Title: Mature Fields Asset Management - Practical Preparation of Improved Oil Recovery Business Plan

Level: Advanced Program

ID: T-A-MFRMP-5 **Duration:** 5d

Consultant(s):

José Luis Ortiz Volcán (Principal Instructor and Coordinator) – Participation of Consultants

From Different Disciplines

Who Should All disciplines working in mature assets or in redevelopment projects who have completed

foundation learning blocks and experienced field engineers and operations staff

Designed

Attend:

Mature, Idle or Near Abandonment Fields

For Assets:

Objectives:

To provide an integrated petroleum engineering program emphasizing a multi-disciplinary approach to the development and exploitation of mature oil and gas fields. To promote the use of best practices in petroleum engineering methods and techniques for monitoring, modeling and management of reservoirs in a brownfield setting, with the aim of maximizing recovery and return on investment – Field cases are studied by syndicate groups who will have access to relevant EP reports, documentation and computer support – Preparation of a business case for a mature field redevelopment.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – Reservoir Aspects of Mature Fields – Resources and reserves assessment (how much is left) -Characterization of reservoir rock for formation damage - Restricted flow into the wellbore -Reservoir study planning guidelines - Integrated reservoir performance analysis - Use of seismic techniques in producing reservoirs – Petrophysical techniques for mature fields – Cased-hole logging and reservoir monitoring - Probabilistic modeling of development and production optimization – Productivity improvement – Selection of wells candidates for productivity improvement - Redevelopment and incremental projects - Enhanced oil recovery options for mature fields -Forecasting and scenario planning for incremental projects – Projects screening and evaluation



Resources To Reserves Maturation Process Management

Title: Resources To Reserves Maturation Process Management - Application of Stage Gate Project System

Level-Intermediate Program

ID: T-I-RRM-5

Duration: 5d

Consultant(s): José Luis Ortiz Volcán Invited Speakers

Who Should
Attend:

This workshop is designed for professionals who participate in resources and reserves management processes in an operating company

Designed For Assets:

All assets and all hydrocarbons

Objectives:

1) Learn about different resources classification methods worldwide, 2) Apply Petroleum Resources Management System (PRMS 2007) to classify resources, reserves and production, 3) Use analogs to perform a resource assessment in assets undergoing early phases of a life cycle (exploration and appraisal), 4) Learn the workflow of activities that support the resources and reserves management system (PRMS 2007) and particularly existing systems in national and international oil companies.

Content

Before and after workshop: On line interview to map competencies vs. learning objectives – Basic Principles On Petroleum Resources Classification – Project based resources evaluation – resources classification – Unconventional resources – Evaluation and reporting guidelines – estimating recoverable quantities – Uncertainties and risks concepts and modeling - Monte Carlo simulation application - Examples of resources and reserves management systems in national companies and international companies.



Toolbox for Outperformers: Strategic and Soft Skills For Asset Teams

Title: Toolbox for Outperformers: Strategic and Soft Skills For Asset Teams

Level:Introductory Program

ID: T-B-SSPAT-5

Duration: 5d

Consultant(s): José Luis Ortiz Volcán

Invited Speakers

Who Should Attend:

Exploration and Production staff who are going to have roles and responsibilities in project or asset teams. Anyone seeking to expand their knowledge about soft skills.

Designed

All assets and hydrocarbons

For Assets:

Objectives:

This is introductory overview intended to complement technical skills in the area of expertise with soft skills that are needed to maximize employee effectiveness within the organization, especially leadership roles. Soft skills play a vital role for professional success when working in project and asset teams. At the end of this seminar participants will have introductory knowledge about the soft skills most used by successful project and asset teams and will have the opportunity to assess which ones are useful for their organizations or company needs.

Content Themes

Before and after workshop: On line interview to map competencies vs. learning objectives – **Role as Architect and Coordinators**: Time management - Meetings' facilitation - writing and presenting a paper - Understanding body language - The art of listening and communicating properly - Dealing with cultural diversity - Stakeholder management - Coaching and mentoring - Public speaking – **Role as Strategist and Builder**: Systems thinking - Systems Dynamics - Creativity and innovation - Change management - Knowledge management - Problem solving techniques - Teamwork and collaboration - Project management - Process management - Uncertainty and risk - Data, information technologies – **Role as Leader and Champion**: Management styles - Emotional intelligence - Storytelling - Role playing - Strategic thinking - Conflict management





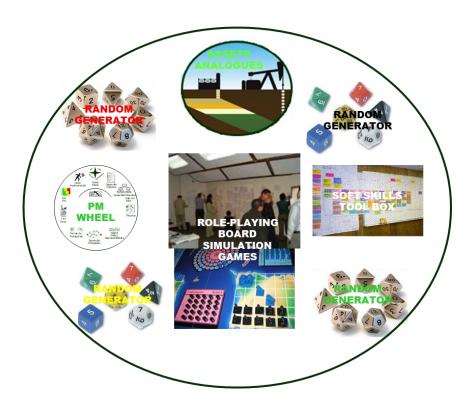


- <u>Learning Games</u>
- <u>Software Workflows</u>
- <u>eBooks & Print</u>
- <u>Databases</u>
- <u>Technology & Market Intelligence Reports</u>



Learning Games

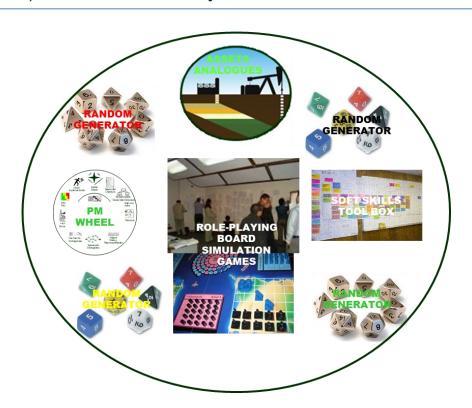
- Artificial Intelligence Fun Game Building Insights from Data
- Role Playing Board Simulation Game And Book For Managing Natural Assets and Associated Physical Assets
- Integrated Asset Management (Processes And Projects) Games Cards and Templates





Software - Workflows

- Process Based Workflow Software For Analysis And Diagnosis Of Oil And Gas Wells
- Analogue Based Software For IOR-EOR Screening
- Software for Risk Adjusted Life Cycle Costing and Economic Evaluation
- Strategic and Soft Skills Toolbox For Project And Asset Teams (Cards, Quick Study Guide, and Book)
- Petroleum Asset Management: Integrated Innovative and Intelligent (PAMI3) Book, Asset and Project Databases and Software





eBooks & Prints

English

- Toolboxes for Outperformers (ID: OWP-TBFO-230706)
- The Intelligent Project Management Wheel (ID: OWP-IPMW-230706)
- Introductory Guide to Risk Management Systems For Asset Optimization (ID: OWP-IGRM-230922)
- OptimaWell Artificial Intelligence & Machine Learning PTR (ID: OWP-AIMLPTR-230711)
- OptimaWell Asset Optimization System (ID: OWP-AOS-230923)

Spanish

- 100 Common Sense Rules for an Asset Project Manager (Spanish version) (ID: OWP-100CSRFAPM-230706)
- Asset Based Process Modeling and Simulation Guide (Spanish version) (ID: OWP-ABPMASG-230706)
- Guide for Introduction To Risk Management (Spanish version) (ID: OWP-GIGR-230707)



Databases

- World Oil Field Size Distribution Database
- World Oil and Gas Operating Companies Database
- World Oil and Gas Service Companies Database
- World Oil and Gas Assets Analogues Benchmarking Database
- Venezuelan Oil and Gas Assets Analogues Benchmarking Database
- Petroleum Industry Accidents, Disasters & Fatalities Database
- Well Blowouts Database
- Well Cost Database
- Petroleum Industry Outliers (Records) Database





Technology & Market Intelligence Reports

- Enhanced Oil Recovery EOR Technology Intelligence Report
- Far Market Technologies Applicable to Oil and Gas Industry Report
- Heavy Oil Economics Benchmarking Report
- Health, Safety and Environment Technologies Intelligence Report
- Enhanced Oil Recovery EOR Suppliers Market Report
- Artificial Lift Market Report
- Venezuela Petroleum Industry Market Report
- Latin-American Petroleum Industry Market Report





Types Of Contracts



Types Of Contracts

Lump Sum, Time Based, Success Fee and Indefinite Delivery

Lump Sum (LS)

Used mainly for projects or assignments in which the customer has precisely specified the content and length of the services. Therefore, it is possible to agree on a viable scope of work and required resources.

Time Based (TB)

We provide services based on actual execution time and quality specifications. The customer will agree on consultant staff unit price and a time sheet report for reporting and recognizing actual time spent in executing the assignment. The customer will also pay for agreed reimbursable expenses costs.

Success Fee (SF)

We recommend these contracts when supporting sale or acquisition of assets. We first agree on a Quality and Cost-Based Selection (QCBS) method, and we ask consultants to quote a success fee that is approved by the customer and that is fixed in advance. The customer pays the success fee as a lump sum. The success fee should use a clear scope of work and duration of the assignment; otherwise, we recommend a time-based remuneration.

Indefinite Delivery (ID)

These are contracts in which the customer requires an individual, the whole consulting firm or a consortium for a specified period (usually half a year to three years) to undertake tasks as and when the need arises. The specific workload is unknown at the outset. The customer has already identified the need to receive support in a particular knowledge area.





Types Of Contracts

Correlation Between Scope Of Work And Type Of Contracts

Scope of Work	Services	Type Of Contract
Simple Planning Or Feasibility Studies (Clearly Defined Scope)	Consulting	Lump Sum
Preparation of Bidding Documents (Clearly Defined Scope)	Consulting	Lump Sum
Simple training (Open to Public and In House)	Training	Lump Sum
Field Asset Studies (All Phases of Life Cycle)	Consulting	Time Based
Technical Assistance And In-House Mentoring	Consulting-Training	Time Based Or Indefinite Delivery
Studies In New Technologies, Pilot Projects	Consulting	Time Based
Technical Assistance For Asset Valuation	Consulting	Success Fee





Associates



Associates

Partial List of Associates

Jose Luis Ortiz Volcan - Consultant

42 years of experience in production engineering, technical, operational and managerial roles. 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 was corporate production optimization technical manager and production center of excellence manager, both positions in PDVSA Exploration and Production Venezuela (>3 MMBOD, >30000 Wells, all type of reservoirs and hydrocarbons, organizations from 25 to 1000 professionals). He worked in reservoir development and improved-enhanced oil recovery, Well Design and Diagnosis, Thermal Recovery steam injection CSS, Orinoco PETC (continuous steam stimulation), Steamflood, Intermittent and Slug Gas Lift, Well Production Optimization, artificial intelligence based optimization projects (SOLAG, SEDILAG, NetLAG), BADEP Project Manager (exploration and production data base for national oil industry), "ARAR" oriented to improving technical competences in key knowledge areas of oil and gas, 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 consultant and project manager with consulting services business development responsibilities in Venezuela, Trinidad Tobago and Suriname. In 2009 he founded his own independent consulting company OptimaWell. During 2011 and 2012 worked in heavy oil and well productivity projects in Colombia and Mexico. During 8-1/2 years worked in Kuwait as consultant for the biggest thermal EOR heavy oil development project in North of Kuwait and was consultant for 2 enhanced technical service agreements between Shell and Kuwait Oil Company to transfer best practices and technologies for enhanced oil recovery and production operations in heavy oil and conventional oil assets.

Chemical Engineer with M.Sc. in Petroleum Engineering, Masters in Business/Financial Management and postgraduate studies in Artificial Intelligence and Machine Learning. 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 all his career. Lifetime member of Society of Petroleum Engineering (SPE). Chair of SPE Caracas Petroleum Section from 2002 to 2007, in 2008 was awarded the SPE South American and Caribbean Regional Service Award.

Eduardo Muñoz – Mechanical Engineer, Heat Exchanger Systems Expert, PMP

He has more than 38 years of experience in the metal-mechanic, automobile and heat exchanger industries (initially with Delfa – Joint Venture between GM and Faaca). He got his B.Sc. in mechanical engineering from Simon Bolivar University with a research thesis on Non Conventional Resistance Thermometers. He has undergone intensive training on thermal systems from 1990 to 1999 at Delphi Harrison Thermal Systems a former Division of General Motors. He paid several visits to Delphi and GM Plants in USA, Canada and Mexico as part of quality assurance process coordination to support GM plants in Venezuela. He also has got intensive training and practical experience in Quality Control Management in U.S. prestigious training centers for the automobile industry, with practical knowledge of process statistical control, internal auditing for QS-9000, QSA Quality system assessment, control of measurement and test equipment and has participated in the development and update of quality control manuals for automobile products. During 1986 to 1989 he was technical liaison engineer for aluminum die casted compressor cylinders exported to Dayton, Ohio, Evaporator assemblies exported to Brazil and he was responsible for quality control of all raw materials and products entering the plant as well as finished products coming out of the fabrication process. From 1989 to 2000 he held position of Quality Control Director responsible for quality control and engineering activities keeping regular communication and coordination with Delphi components plants, attending board of directors meetings and assisting to field service seminars organized by Delphi Components Company. From 2001 to 2011 he held several positions in FAACA automobile parts related industry in Venezuela responsible for heat exchanger systems and related auto parts.





Associates

Partial List of Associates

Roberth Cardenas - Technology Consultant

Roberth is an accomplished professional with an impressive track record of over 20 years in information technology project management across diverse sectors within leading corporations spanning multiple countries, including Argentina, Bolivia, Colombia, Ecuador, Mexico, and Venezuela. Throughout his career, Roberth has successfully led significant projects, notably overseeing the implementation of standard applications for production, drilling, and geosciences in the oil fields of Repsol (Argentina, Bolivia, Mexico, and Venezuela), ConocoPhillips and Total (Venezuela), Petro Amazonas (Ecuador), Petrobras (Ecuador and Colombia), and Chevron (Colombia and Venezuela). Within the context of these projects, he has not only directed implementation teams but has also assumed pivotal responsibilities, such as database installation, configuration, and programming. Furthermore, he has automated workflows between applications and harnessed Business Intelligence to generate comprehensive reports, dashboards, and key performance indicators, significantly enhancing decision-making processes across relevant domains. Currently, his dedication is focused on contributing to OptimaWell's progress by driving the development and execution of projects. He leverages diverse platforms, including the Microsoft Power Platform, to establish streamlined workflows and applies Business Intelligence as a cornerstone for robust data analysis. This strategic approach ensures the consistent delivery of superior outcomes to our valued clients.







2022-23 Consulting, Training and Products Guide

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