

13-14 SEPTEMBER 2023**JW MARIOTT HOTEL**

RIO DE JANEIRO, BRAZIL

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Our events and functions are accessible to all attendees with wheelchairs. If you require special arrangements, please contact our staff at the registration desk.

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SPE recognizes the legitimate serving of alcoholic beverages in the process of conducting business and social activities. We also recognize that the use and consumption of alcohol carries with it the requirement for all attendees to consume those beverages responsibly.

COMMERCIALISM

In remaining consistent with workshop objectives and SPE guidelines, commercialism in presentations will not be permitted. Company logos should be used only to indicate the affiliation of the presenter(s).

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Attendees will receive 1.6 CEUs. One CEU equals 8 contact hours of participation. CEUs will be awarded through SPE Professional Development for participation and completion of an SPE workshop. A permanent record of a participant's involvement and awarding of CEUs will be maintained by SPE.

DOCUMENTATION

Following the workshop, a URL containing released copies of the workshop presentations will be available to all attendees.

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As a courtesy to the speakers and your fellow registrants, please turn off all electronic devices during presentations.

NAME BADGES

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WORKSHOP FORMAT

Workshops maximize the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practices.

Many of the presentations are in the form of case studies, highlighting engineering achievements and lessons learned. In order to stimulate frank discussion, no proceedings are published and members of the press are not invited to attend.

SPE IS THE LARGEST INDIVIDUAL MEMBER ORGANIZATION SERVING MANAGERS, ENGINEERS, SCIENTISTS AND OTHER PROFESSIONALS WORLDWIDE IN THE UPSTREAM SEGMENT OF THE OIL AND GAS INDUSTRY.



Please take a moment and let us know your thoughts on this event!

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Society of Petroleum Engineers

13-14 SEPTEMBER 2023

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Digital Transformation

Digital technology promises to deliver operational efficiencies across multiple disciplines in the upstream value chain directly influencing break-even, operating costs, recovery factors, faster leaner field developments and infrastructure. In Brazil, changes in regulation, ownership and incentives are encouraging the appetite for risk from the new prolific ultra-deepwater pre-salt to the established mature fields. Digital technologies can deliver innovations and efficiencies across all these assets.

Digital transformation is as much about simple developments centered on transforming work functions and architecture (e.g Business Intelligence, Logistics, Project Management, Data Analytics) to the more complex (e.g. Risk Management, Safety & Human Factors, Asset Integrity & Lifecycle management). From deepwater offshore to mature assets onshore Brazilian E&P has all of these requirements with major players to smaller opportunistic disruptive enterprises developing technologies and addressing needs.

Obstacles in the Digital Transformation journey are many hindering technology uptake: change management, data governance, conflicting standards and protocols, IT infrastructure, skills & talent management, how to test, fail-and-learn fast, upscale and commercialize. Answers are not always easy to find as many digital applications are customized for specific use cases.

The workshop aims to explore a number of digital transformation opportunities and technologies that can impact Brazil's E&P operations – technology adoption, development, uptake, success and failures.



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Society of Petroleum Engineers

Technical Agenda

WEDNESDAY, 13 SEPTEMBER



MORNING EVENTS

0700–0800

Registration Check-In Continental Breakfast

0800–0805

Chairperson's Welcome
and Introduction

0805–0830

Keynote: What have we learned in
the First 20 Years of Digital
Transformation in Oil and Gas

Dr Tony Edwards

Chairs:

*Giovanna Carneiro,
SLB
Roberta Mendes,
Petrobras
Braulia Borges,
SLB*

0830–1000

Session 1: Exploration and
Production Development (Using
Data to Improve Decision Making)

Semantic Integration for Data
Analytics on Digital Twin

*Regis Kruei,
UFRGS*

Leveraging Artificial Intelligence
to Fast-Track the FDP Process and
Improve the Return on Investment

Henio Alberto, SLB

Contributions of Geoinformatics
and Visual Computing in
Transforming the Petroleum
Geology

*Luiz Gonzaga,
Professor, Unisinos*

1000–1030

Coffee Break

1030–1200

Session 2: Digital Oil Field
Applications in Production
Performance and Remote
Operations

Chairs:

*Tony Edwards,
Stepchange Global
Consultancy Ltd*

Scalable Tailoring - Approach to
Assist Digitalizing Industry

*Danielle Monteiro,
Data Scientist,
Solution Seeker*

Reducing POB Through Remote
and Autonomous Operations

*Roger Burnison,
Sensia/Rockwell*

Incorporating Digital and Immersive
Technologies to Improve Offshore
Production and Maintenance
Operations

*Robinson Luiz
Souza Garcia,
Petrobras*

Digital Transformation in Flow
Assurance and Data Management
to Improve Production and
Productivity

*Rafaela Passos,
Flow Assurance
Leader, Total*

1200–1330

Lunch



AFTERNOON EVENTS

1330–1500

Session 3: Asset (Equipment)
Performance Management in
Context of Operations

Chairs:

*Matt Mohajer, SLB
Leonardo Machado,
Shape Digital*

APM in FPSO Operations

Henrik Sture, SLB

The Critical Importance of Intelligent
Asset Management and Maintenance
Reliability

*Bruno Bertinatto
Vidal, Petrobras*

Large Scale Online Condition
Monitoring on FPSOs – Challenges
and Lessons Learned After 3 Years of
Implementation

*Leonardo Carvalho,
Value Assurance Man-
ager, Shape Digital/
MODEC*

1500–1530

Coffee Break

1530–1700

Session 4: From Proof of Concepts
(POCs) to Full Scale Deployment of
Digital Solutions

Chairs:

*Carolina Barros,
Kongsberg Digital
Braulia Borges, SLB*

The Application of Machine Learning
(ML) to Redefining Geological Fault
Interpretation

*Tiago Filgueiras
Pereira, Petrobras*

From Vision to Reality: Achieving
Full-Scale Deployment in Well
Monitoring

*Vinay Srinivas -
Platform Director,
Kongsberg Digital*

Scale AI Initiatives with Data
Contextualization and Escape Pilot
Purgatory

*Prabu Parthasarathy
and Alberto Pastor,
Cognite - Partnership
with SLB*

1700–1800

Networking Reception



SPE provides **shared expertise, resources, and life-long learning opportunities** to fuel the success of our members and the future of the industry.

LEARN AND CONNECT

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THURSDAY, 15 SEPTEMBER

MORNING EVENTS

0800-
9000

Continental Breakfast

0900-
1000

Session 5: Mature Fields

Chairs:

Carlos Calad,
Tachyus
Matt Mohajer, SLB

Technical and Economic
Considerations Required to Unlock
Data Insights - Real Case Application
To Water Injection Stability

Francesco
Giorgetti, Sierracol

Overcoming Challenges in Mature
Offshore Fields with Digital
Transformation

Gabriel Alcantara
Bomfim,
Operational
Planning and
Critical Resources
Manager, Petrobras

1000-
1030

Coffee Break

1030-
1200

Session 6: Energy Transition: CCUS, Geothermal and Others

Chairs:

Carlos Calad,
Tachyus
Diogo Pinto,
Equinor

Repurposing Asset Portfolios
towards Decarbonization - A Digital
Twin Technology Approach

Rodrigo Ferraz,
Head of Market
Development
LATAM, FutureOn

Dealing With Emissions Reduction
Without Impacting Production and
CAPEX Investments: How Digital
Tools Can Help to Optimize the
Operation of Existing Assets

Julio Ribeiro,
Head of Products,
Shape Digital

Driving the Path to Net Zero:
Empowering CCUS Projects with
Digital Solutions - Lessons from
Success Cases in Brazil

Guilherme Veloso,
SLB

1200-
1330

Lunch

AFTERNOON EVENTS

1330-
1500

Session 7: Key New Emerging Technologies

Chairs:

Luiz Fernando
Guedes dos
Santos, Shell
Augusto Borella,
Intelle

AI Evolution and the Creation of
Technology Convenience

Mohamed
Sidahmed, Shell

AI and Earth Observation for a
Low-Carbon and Sustainable Energy

Anthony Credoz,
Earth Observation
and Artificial
Intelligence Expert,
TotalEnergies

Digital Twins for Inventory and
Emissions Monitoring During Cargo
Operations in FPSOs

Jose Maria
Nogueues,
InProcess

1500-
1530

Coffee Break

1530-
1700

Session 8: Digitally Enabled Organizational Transformation - The Role of People, Process and Organizational Change in delivering Digital Transformation

Chairs:

Roberta Mendes,
Leonardo
Machado,
Shape Digital

The Real Digital Transformation:
Evolution and Sustainability Through
Human Transformation

Danilo Garbaza
Vieira, Petrobras

Game On: How Gamification is
Driving Employee Engagement and
Adoption of Digital Solutions for the
Reservoirs Community

Marcelo Rezende,
Petrobras

Digital Transformation is About
Human Transformation

Augusto Borella,
Intelle

