

Day 1

Monday, May 13, 2025

● Sponsored Sessions ● Booked Sessions ● Available Sessions

08:30

Registration & Refreshment Networking



09:00

Advanced Data Analytics for Business Growth – to Oil and Gas (O&G) Industry Harnessing IoT and Digital Twins for Predictive Maintenance and Sustainable Operations.



Sree Muktevi
Regional Vice President **Yash Technologies**



Gopal Krishnaswamy
Asst. Vice President (Analytics Thought Leader), **Yash Technologies**



09:30

Using Digital-twins to Optimize Heat Exchanger Networks and Monitor Operations

- We first show how digital twin software fits into existing data workflows, and how it can be used to optimize exchanger cleaning schedules.
- Then we delve into a case study where a digital twin was used to select an optimal turnaround cleaning schedule based on total costs, including CO2 impact.
- Finally, we explore other applications for a digital twin, and pending features currently in development.



Greg Magness
Regional Sales Manager, **HTRI Heat Transfer Research, Inc.**



10:00

Patenting Internet of Things (IoT) and AI inventions in the Oil & Gas industry

- Patent filings statistics in the oil and gas industry dealing with Internet of Things (IoT) and AI inventions
- Patenting strategies for protecting Internet of Things (IoT) and AI inventions in the oil and gas industry



Ryan phelan
Registered Patent Attorney and Partner **Marshall, Gerstein & Borun**



10:30

Powering the Future of Energy Markets with Innovation

- Comprehensive Product Portfolio – Covering Spot Gas, Future Gas, Day-Ahead Market, Intra-Day Market, Power Futures, Renewable Energy Guarantees, and more.
- Tailor-Made Solutions – Offering SaaS & on-premise deployments, customized to local regulations and market needs.
- Cutting-Edge Technology – Backed by 200+ experts, utilizing Latest Best Practices-Technologies, Blockchain and Proven Quality with CMMI 3 for robust solutions.
- Scalable & Reliable Architecture – Implementing Microservices & Cloud-Native Applications for high-performance energy market solutions



Mehmet Uçansoy
Director, Information Technology, **EXIST**



11:00

Data-driven Virtual Flow Meter

- Introduction physical meters vs virtual flow meter (VFM) for production flow estimation
- Machine learning/deep learning modeling for VFM
- Automated workflow pipeline



Yongfeng Li
Manager Eng Analytics, **Oxy**



11:30

Enhancing Asset Integrity and Performance in Oil & Gas Operations Using Performance Digital Twins

- Performance Digital Twins for Offshore Assets – Digital replicas integrating real-time sensor data with design criteria, industry standards, and operational KPIs to enhance asset integrity management and decision-making.
- Real-Time Data Integration & Insights – Combines environmental (wind, wave, current) and structural response sensors (strain, motion, GPS) to provide actionable engineering insights for safety, reliability, and performance optimization.
- Use Cases & Applications – Supports real-time condition reporting during hurricanes, post-event integrity assessments, operational decision-making, and continuous asset monitoring to enhance offshore asset resilience and efficiency.
- Advanced Technologies & Scalability – Leverages automated data processing, machine learning, and visualization tools to analyze vast sensor data streams, extending asset life and reducing operational risks in offshore environments



Phani Shakkari
Principal Data Analyst, **bmtglobal**



LUNCH AND NETWORKING BREAK

12:00 (1 Hour)

13:00

AI-Driven Mobile Suite: Revolutionizing Oilfield Service Operations

- Objective: Implement a mobile solution to enhance field efficiency and streamline equipment management.
- Methods: Integrate AI-powered communication, real-time management, and digital authorization.
- Results: Achieved 30% efficiency increase and reduced document approval times from 2.5 days to 4 hours.



Michael Maltsev
CEO, **riger@ - Oilfield Services ERP**



13:30

Smart Manufacturing 4.0 (Focus on Data, Digital twin, Sustainability, NetZero) driven by Digital Innovations

- Leveraging Applied AI based Digital Solutions for achieving Sustainability/Net Zero targets in Oil and Gas
- Centralized datahubs, Real time seamless data access, High Fidelity Digital twins
- Machine Learning algorithms for Predictive Maintenance and Run-length/Cycle-time optimizations
- Gen AI Powered Chatbot tailored to Oil and Gas: "INGIE"



Chandra Pulleti
Director Value Enhancement Program, Americas, **Ingenero**



14:00

Digital Transformation, from the edge to the Cloud

- Digital Transformation, what do you mean?
- Edge data storage solutions
- Introduction to the Data Storage Appliance
- Much more than storage
- Imagery service offerings



Thomas Peters
Founder, **Imagery Business Systems, LLC**



Michael Hotrum
CEO, **Imagery Business Systems, LLC**



NETWORKING BREAK

14:30 (30 Min)

15:00

Optimizing Natural Gas Compression: Utilizing a Digital Twin to Revolutionize Compressor Control

- Operators managing compressor fleets face challenges with dynamic field conditions, limited asset visibility, strict environmental regulations, & costly downtime. Traditional solutions often rely on fragmented systems & manual processes, leading to inefficiencies & suboptimal performance.
- This session explores how Dynamic Package Control, achieved with Digital Twin technology running on edge devices, addresses these challenges. Attendees will gain insight into the evolution of compressor management, from reactive maintenance to predictive insights & autonomous operation.
- We will discuss the current challenges, the limitations of existing approaches, and the vision of an ideal state where edge-enabled Digital Twin models enhance control and optimize performance.
- Learn how this approach extends operating ranges, prevents failures, reduces emissions, and supports sustainability, ultimately transforming compressor management into a streamlined, efficient process.



Zachary Bennett
SME, **DETECTION**



15:30

Real Time Well Engineering with Generative Artificial Engineering Intelligence (GenAel): At Speed, At Scale, At Edge, in Real Time

- It is not just drilling ahead with digital transformation but with data, ML, AI, automation, and people converging to autonomics making the well construction in self-configuring, self-diagnosis, self-healing, self-optimizing and self-managing state.
- Digital well program consists of engineering formalism through engineering microservices, plus interpretation of data and thus providing the reaction link between the mathematical formulation and elements of the physical world.
- The talk will provide the context and the requirements of engineering microservices coupled with GenAel models for the new paradigm of well construction at scale, at speed and at edge.



Robello Samuel
Chief Technical Advisor & Senior Fellow, **Halliburton**



16:00

The Digital Twin. It's not just for breakfast anymore.

- If a plant's lifecycle were a day, breakfast would be construction. A poor breakfast leads to bad choices at lunch and dinner.
- Transformations are painful and expensive, but don't require luxury; they can start with existing tools in any company's kitchen.
- Getting the digital twin right from the start can prevent costly transformations and accelerate performance to first-quartile levels.



James Haw
Vice President of Automation and Digital Strategy, **Operations Technology Specialists, LLC**



END OF DAY 1

Day 2

Tuesday, May 14, 2025

● Sponsored Sessions ● Booked Sessions ● Available Sessions

08:30

Registration & Refreshment Networking



09:00

Advanced Data Analytics for Business Growth – to Oil and Gas (O&G) Industry Harnessing IoT and Digital Twins for Predictive Maintenance and Sustainable Operations.



Sree Muktevi
Regional Vice President, **Yash Technologies**



Krenal Chauhan
Sr. Technical IoT Architect, **Yash Technologies**



09:30

From Data to Decisions: HTRI Digital Twin Solutions for Heat Exchanger Performance Monitoring, Optimization, and Troubleshooting

- HTRI is a trusted research and software provider in the oil and gas processing industry for computer simulation of heat transfer equipment.
- HTRIconnect™ integrates near real-time plant data with heat exchanger simulations to realize digital twins of air coolers, economizers, and furnaces, as well as plate-fin, spiral plate, and shell-and-tube heat exchangers.
- Explore applications of digital twins in realistic scenarios to estimate fouling that affects heat transfer performance and tube metal temperatures that cause creep failure in operation.



Fred Hendrix
Group Lead, Software Development, **HTRI Heat Transfer Research, Inc.**



10:00

Digitalization Drives Turnaround and Plant-Based Project Excellence

- Review industry turnaround and plant-based project performance trends
- Demonstrate how digital technologies contributes to better performance:
- Discuss how organizations can effectively implement digital tools



Brett Schroeder
Co-Founder and CEO, **AP Networks**



10:30

Clean Energy for Data Centers - Small Modular Nuclear Reactors (SMR)

- Benefits of SMR's for Data Centers and AI servers – Our next tier of life Artificial General Intelligence (AIG)
- Achieving Cost Reduction at Scale: Lessons from France's Model for Building These Reactors
- Safety Challenges associated with projected increased density of nuclear reactors within civic locations



Saeed Mehmood
Program Manager - Commissioning and Quality, **Tesla**



11:00

Rapid Technical Analysis Digital Twin Technology

- Using Digital Twin technology to rapidly analyze operational risk and reliability
- prepare industry/regulatory certified 3rd party reports on demand



Garry Davis
President and CEO, **BOP Risk Mitigation Services, LLC**



11:30

Designing Digital Twins: Avoiding no-ROI Twins by Working Backwards from the Real World

- Digital twins create change in the real world, but are often designed as software only bundles of capabilities.
- Multiple digital twin projects are "flaming out" 2-3 years after inception, due to lack of measurable improvements and low adoption.
- In order to avoid the no-ROI situation, digital twins require strong product thinking to create, measure and improve change in the real world.
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Rob Foster
CEO, **Geminum**



LUNCH AND NETWORKING BREAK

12:00 (1 Hour)

13:00

Digital Transformation for Equipment Health in a Refinery Setting using a Digital Infrastructure and Analytics to Inform Decisions

- The Digital Transformation ERA
- Understanding Equipment Health and Performance
- Digital Transformation Technology Components (People, Process, and Technology)
- A Refinery of the Future Pilot case study



Preston Johson
Business Development Leader, **Cutsforth**



13:30

Improving Safety, Efficiency, and Sustainability with Digital Twins in Oil & Gas

- Understand the key benefits of implementing digital twin technology in oil and gas operations
- Learn how digital twins can address specific safety, efficiency, and sustainability challenges
- Discover real-world examples of successful digital twin implementations in the oil and gas industry
- Gain insights into the future of digital twin technology and its potential impact on the oil and gas sector



Keshav Sundaresh
Senior Director of Digital Transformation, **Altair**



14:00

Title will be published soon

- Point 1
- Point 2
- Point 3
- Point 4



Andrea Craig
Principal, Client Solutions, **BairesDev LLC**



NETWORKING BREAK

14:30 (30 Min)

15:00

Harnessing Data for Smarter Operational Excellence: Driving Safety, Reliability, and Profitability.

- Leveraging Advanced Data for Operational Optimization
- Enhancing Safety, Security, and Reliability Through Data
- The Digital Workforce: Empowering the Next Generation of Terminal Operators
- Breaking Down Data Silos: From Fragmented Information to Operational Insights



Salman Khan
Managing Director, **Digineox Consulting**



15:30

How digital twins help companies scenario plan in times of uncertainty

Title will be published soon

- Point 1
- Point 1
- Point 1



Jason Hehman
Vertical Lead for Industry 4.0, **United States**



16:00

Implementing Digital Twins in the Oil and Gas Industry: Challenges and Opportunities

- Introduction to the concept of Digital Twin: Explanation of what Digital Twins are and how they can be applied in the Oil and Gas industry
- Use cases and benefits: Practical examples of implementing Digital Twins in Oil and Gas operations, highlighting the benefits in terms of efficiency, safety, and cost reduction.
- Challenges and solutions: Discussion of the main challenges faced in implementing Digital Twins and the solutions adopted to overcome them.



Edson Bouer
Managing Director, **Accenture**



END OF DAY 2