

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



LEAD AUTHOR

Hardeep Dhaliwal
Team Lead - Predictive Maintenance, Wood

CO-AUTHORS

Peter Carydias
Integrity Operations Manager Wood

ENSURE VALUE REALIZATION FROM MAINTENANCE DIGITAL TRANSFORMATIONS IN LNG INDUSTRY

With fluctuating resource prices, a disrupted supply chain, a push for more sustainable, efficient operation and a dramatic up-tick in digital adoption; operators are being challenged to dramatically reduce operating costs (~40%), site staffing (~60-80%), emissions (zero), and safety (zero) while improving production throughput and availability (~10%).

AI-supported solutions that fully utilize an operator's data can combine human intelligence + machine learning + advanced analysis to achieve today's challenging objectives by deploying smart, 'low-touch' maintenance strategies, IoT sensors and predictive/prescriptive equipment models. However, value realization from these advanced solutions is a major challenge.

We discuss six steps that strongly influence and ensure value realization from digital transformations in maintenance:

1. Clearly articulate the plant business case
2. Set up a dynamic philosophy, system and organization to enable continuous optimization
3. Get on the front foot when it comes to OT infrastructure and data strategy
4. Develop low-touch strategies that optimize for availability, reliability, staffing and inventory
5. Optimize the end-to-end sensor-to-action workflows and the necessary KPIs
6. Partner with a supply chain that focuses on results and are accountable

We present case studies, results and lessons learned and demonstrate how these can enable modern asset operations to achieve bold transformation goals.

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>