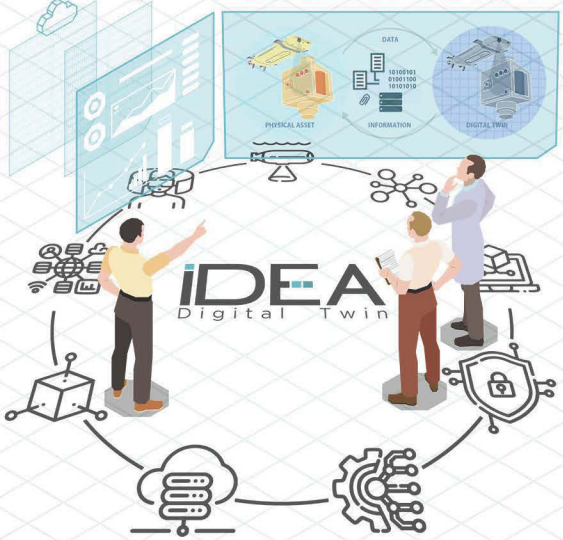
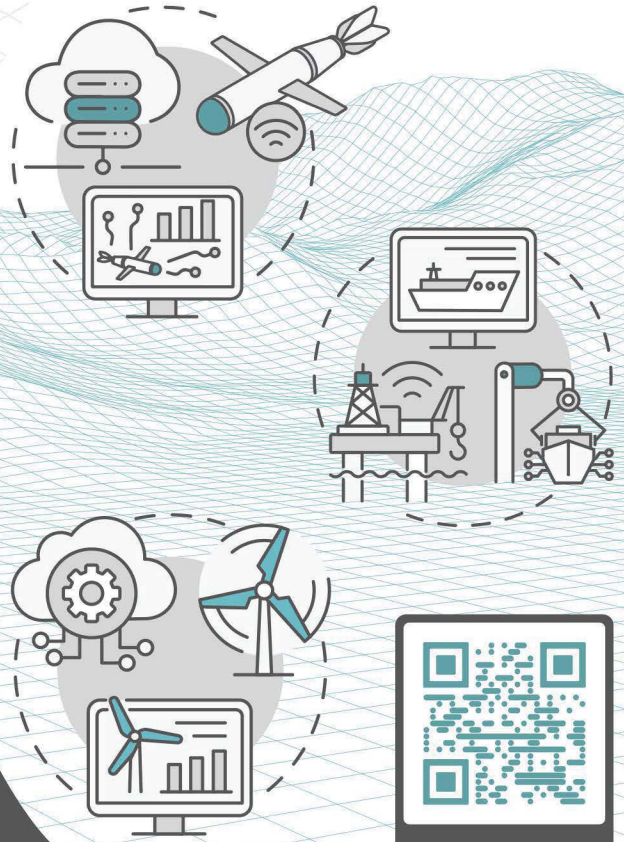
The best way to predict the future **is to create it**



IDTA (Industrial Digital Twin Association) sees itself as a powerful alliance actively shaping the future of Digital Twin in an innovative way. Its active members include many top industrial firms internationally recognized as technology leaders. As members of the Industrial Digital Twin Association (IDTA), (IDTA), GRi is working to integrate the Asset Administration Shell (AAS) data model into iDEA-DT. AAS is the realization of the digital twin for Industry 4.0. AAS establishes cross-company interoperability and is available for non-intelligent and intelligent products. It covers the complete life cycle of products, devices, machines, and facilities. AAS enables integrated value chains and is the digital basis for autonomous systems and augmented intelligence (AI).

proud members of
IDTA
industrialdigitaltwin.org



iDEA
Digital Twin

NET ZERO
tools.solutions.future

Enabling the Journey Towards NetZero

Achieving net-zero emissions means our economy either emits no greenhouse gas emissions or offsets its emissions. Emerging new technologies like the Internet of Things (IoT), machine learning, and artificial intelligence (AI) are promising methods of optimizing current operational strategies to achieve maximum energy efficiency. GRi enables industry leaders to offset negative emission balances by using digital simulation and visualization technologies to reduce redundant and unnecessary pitfalls in the production, planning, and optimization of offshore energy projects, assets, and the remote intervention technologies that service them.

www.grisim.com

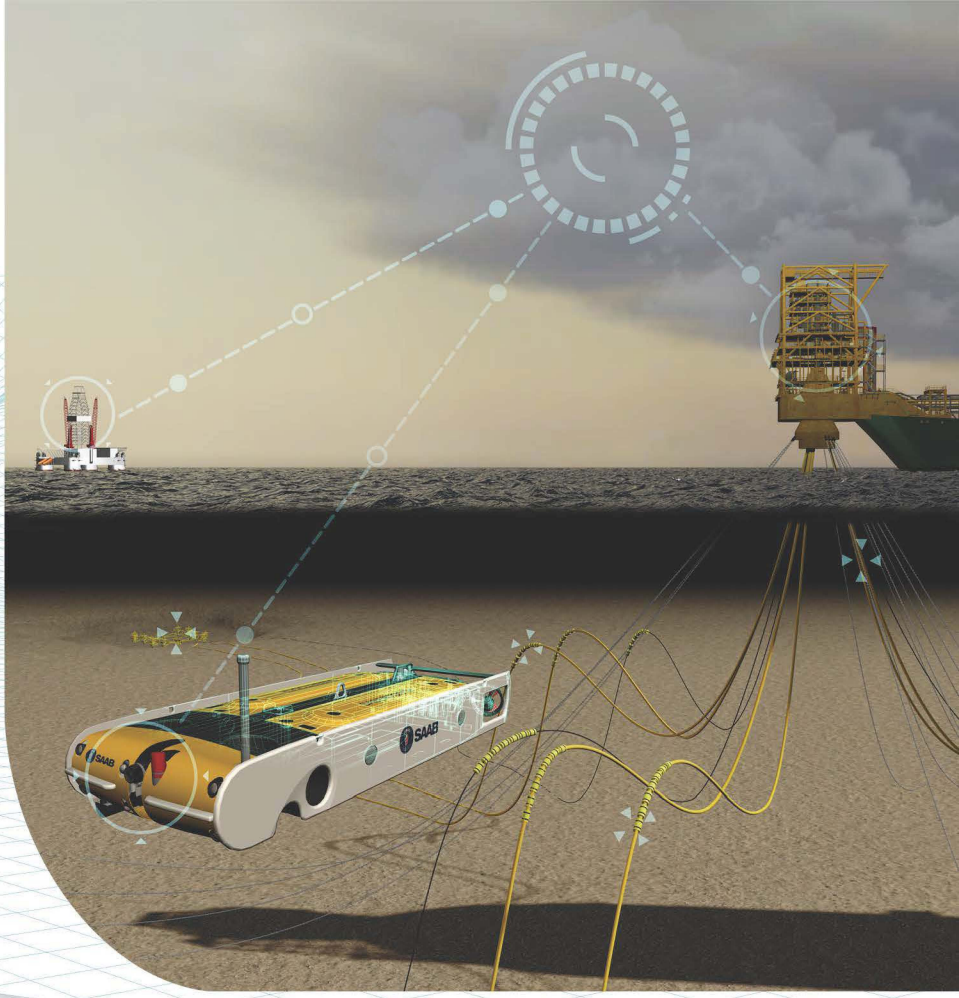
DIGITAL OCEANS CANADA

GRi SIMULATIONS

iDEA Digital Twin

GRi's iDEA (Interactive Design, Engineering & Analysis) line of software products consists of 3D, interactive data visualization and simulation software tools for offshore assets, projects, and their associated operations, providing users with a digital "sandbox" for rapid, informed investigation and decision making. iDEA-FDK (FDK = Field Development Kit) is optimized for subsea oil & gas field architecture design. In contrast, iDEA-DT (DT = Digital Twin) is optimized for integrating and visualizing historical and real-time data from multiple sources in a common, interactive 3D interface.

Both iDEA-FDK and iDEA-DT include GRi's dynamic simulation engine, allowing users to investigate advanced simulation use cases for planning, rehearsal, and real-time visualization of challenging offshore operations in various marine environments and conditions.



Enabling Digitalization for

INDUSTRY 4.0

3D
Visualize offshore assets in 3D, using digital operating environments generated from GIS mapping data and CAD equipment models to provide accurate virtual representations of real-world facilities.

Simulation
Incorporate our VROV software for a real-time interactive sim to apply a wide range of simulation models, from engineering, testing, training, prediction, and more. Or integrate with another software through an API.

Big Data
Data sets that are too large or complex to be dealt with by traditional data-processing applications can now be extracted for untapped analytical value through iDEA Digital Twin.

System Integration
Integrate your existing legacy systems vital to your operations to enable real-time data distribution models, consolidated databases, reduced manual user data entry, and more.

Internet of Things (IOT)
Incorporate real-time sensor data from production facilities, environmental buoys, and robotics systems to enhance your digital twin with accurate, up-to-date information.

Cyber Security
The high availability of cloud services means that cloud computing can keep business-critical systems running securely despite single-component failures. Backed by constant monitoring, geo-redundancy, and failover protocols.

Robotics
Leverage the data from autonomous robotic tools to ascertain various analytics, visualize remote operations in real-time and unify with other Digital Twins.

Cloud Computing
Increase accessibility and usability by harnessing the power of cloud computing to enable faster innovation, flexible resources, and scalability.

VR / AR
Interact with 3D assets and their associated data in a simulated virtual environment or blend it seamlessly with the real-world using augmented reality. Immersive virtual training is less expensive and enables better bias training and teachable soft skills.

GRi SIMULATIONS