KOGNITWIN®

Transforming Operations with Kognitwin®, the Industrial Work Surface September 26, 2024





Our Company Mission

Enable Smarter, Safer and Greener operations by solving real customer pain points KONGSBERG

SMARTER

Increase operational efficiency by revealing critical insights, making personnel able to make smarter decisions. Remove personnel by digitalising and automating and allowing for remote operations.



Increase safety, security and reliability in our customers operations by transparency, reducing human errors, moving personnel onshore, training and education

GREENER

Improve climate and environmental impact / performance by supporting fuel and voyage optimisation, support smarter decisions. Enable the green shift as digital partner



Tangible proof points – aligning profits with sustainability





as removing dull, dirty, and dangerous jobs by enabling remote operations

An operator can save up to 2 hours per day with KDI's solutions



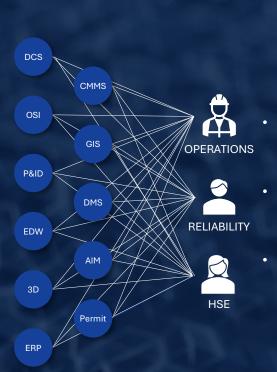
Digitally transforming work processes significantly reduce human errors and incidents as well as taking down the silos

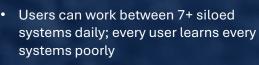


KDI's solutions enable more than 15% reduction in greenhouse gas emissions From...

Kognitwin[®] defragments the end user experience to accelerate value

KONGSBERG Visualization, Data Contextualization and AI are at the core of our solution





 Insights are trapped in individual systems or not visualized with enough context to drive efficiency

Change saturation impacts
 productivity as individual functions
 deploy micro-solutions to close gaps



• One environment for all assets

- Highly integrated/tailored user experience
- Contextualized industrial data that can be rapidly accessed

OPERATIONS

 \sim

RELIABILITY

HSE

- Powerful real-time, simulation
 and AI/ML models
- Orchestration of workflows driving intelligence to action
- Enriched Data Lake with tools to help make misalignment between systems visible

*This is not a complete list of systems or personas; illustrative example only

Kognitwin[®] offers a single work surface for assets

KONGSBERG Asset data is visualized and contextualized in a SaaS environment

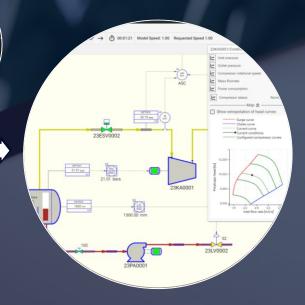


One Environment

An integrated space for one or multiple assets to drive insights, plan activities, monitor performance, optimize facilities and ensure safe operations Fully contextualized IT & OT data Interoperable platform that ingests and contextualizes available data sources

- → 3D Models, Laser Scans, 360 images
- └→ Engineering Data & Documents
- └→ Real-time & Historic Data
- └→ Maintenance & Inspection Data
- → Permitting

Rich, data driven visualization Move seamlessly between 2D/3D models which link together data from multiple sources to enable new capabilities



Powered by advanced analytics & simulations

- \mapsto Real-time Simulation
- ➡ "What-if" Scenario Analysis
- └→ Virtual Metering
- └→ Machine Learning
- → Hybrid Analytics

Kognitwin® offers a single work surface for assets

KONGSBERG Asset data is visualized and contextualized in a SaaS environment

INTUITIVE 2D AND 3D VISUALIZATION

Kongsberg Digital's **data-driven visualization engine** consumes and visualizes a wide variety of data sources and formats including PDMS, CAD, point clouds, photogrammetry, imaging, scan, GIS, etc.

INDUSTRIAL DATA CONTEXTUALIZATION

Static, structured and unstructured data from varied sources are **contextualized via ML algorithms and manual methods,** rapidly reducing the time required to contextualize and enabling very large volumes of data to be integrated quickly. Visualization



Orchestration & Workflow



Models

REAL-TIME, SIMULATION AND ANALYTICS

KOGNITWIN® taps into **real time data sources** and **simulators** to provide comparative results in Real-time and provides scenario management for 'what if' modeling and greater optimization.

Data



Kognitwin scales across the enterprise, asset types and functional areas

>50

Kognitwin is used across global assets At-scale delivery of digital twin to address production, maintenance and engineering teams

~25,000

25,000 industrial users and growing Executing daily planning, operations and maintenance tasks

3

Avg. time-to-value: 3 Months

Initial deployment time of 3 months enables early value-generation in the business case

A single interface to industrial workflows, One

analytics - planning through execution Kognitwin applies across the energy and industrial value chains

