

KOGNITWIN®



THE WORK SURFACE OF THE FUTURE

Kognitwin Grid is the digital twin solution for the distribution grid, enabling better decisions, automated processes and more efficient grid investments.

- Cloud-based, SaaS solution
- Automated load and production forecasting
- Issue identification
- Data-driven and scenario-based planning
- Advanced analytics for grid optimization
- Developed in close cooperation with DSOs

KOGNITWIN®

Accelerate the energy transition with the digital twin for distribution grids

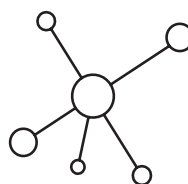
RAPID CHANGES IN THE POWER SYSTEM DRIVES A NEED FOR CHANGE

As the energy system is facing an influx of intermittent, distributed and renewable energy and a sharp increase in electrification the complexity of planning and operating the energy system increases.

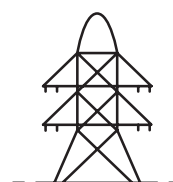
These changes are causing challenges related to power quality and grid stability, more demanding customers with low-cost expectations, and new competitors with innovative solutions.



Renewables ramp-up



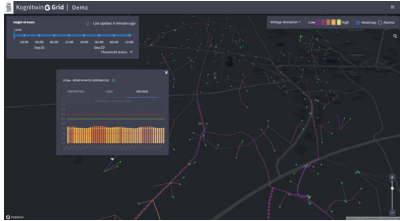
Low degree of digitalization



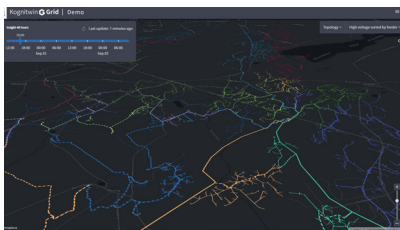
Aging assets and cost pressure



Digital grid model connecting asset data to load flow simulations



Always-on grid status identifying bottlenecks and power quality issues

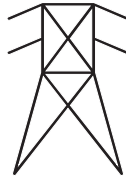


Grid topology optimization for improved grid utilization

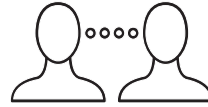
- INCREASED GRID UTILIZATION
- IMPROVED RELIABILITY
- OPTIMIZED INVESTMENTS
- DEMOCRATIZED DATA

Developed to handle the challenges of tomorrow

A digital twin solution will support the increasing complexity and enable new business models. Kognitwin Grid supports network operations, analysis, and long-term planning. This enables better informed investment decisions, automated processes, and more efficient grid operations.



Past, present and future
grid condition
ML-based load/production
forecasting



Flexible and scalable
Remove data silos
3rd party integration



Cloud-based, SaaS
Data-driven
Automation

Applications that support your grid operations



INSIGHT

Data visualization and engine main output. Grid state monitoring through bottleneck detection and power quality analysis.



PLANNER

Scenario-based and data-driven planning, automation of capacity requests and simulation of future requirements



OPTIMIZER

Optimizing grid operations through ML techniques and new tools



NEW APPLICATIONS

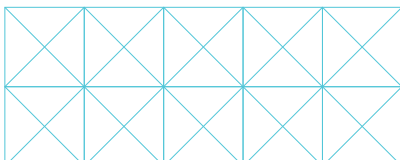
Integration of 3rd party applications, DSO applications and future KDI developed solutions

DIGITAL TWIN ENGINE

Digital twin engine that collects, adapts and contextualizes data from different sources, systems and 3rd parties to make them available for new applications and use cases. Forecasting of grid condition and continuous load flow analysis

KONGSBERG DIGITAL COMBINES INDUSTRY KNOWLEDGE WITH TECHNOLOGY EXPERTISE

With years of experience and domain knowledge, Kongsberg Digital is a global and solid technology provider. Together with our team of experts, we serve leading energy companies with innovative solutions to unlock maximum value.



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