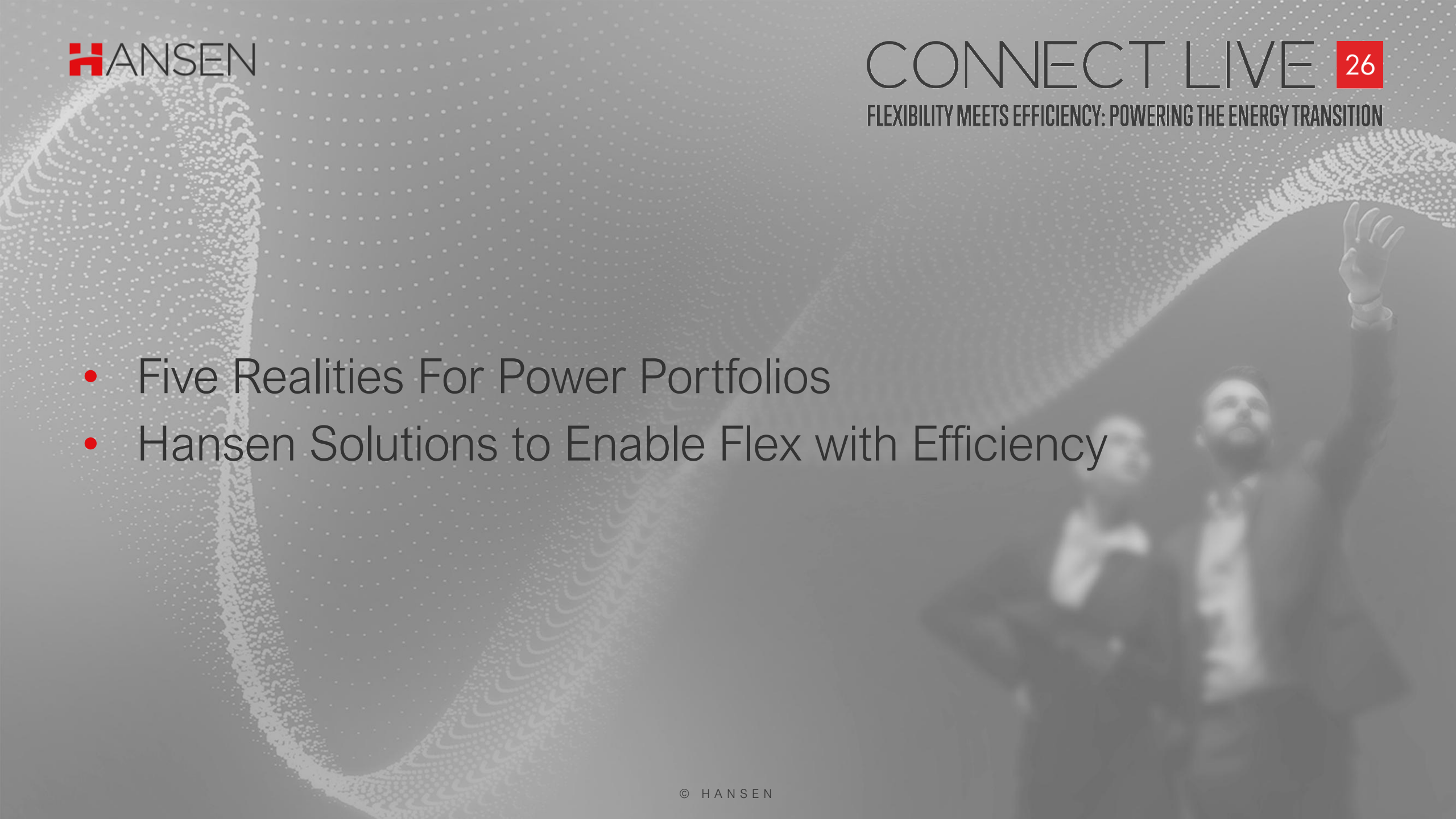
HANSEN KEYNOTE: FLEX MEETS EFFICIENCY

Mika Rissa, VP Energy Strategy & Colleagues

© HANSEN

- Five Realities For Power Portfolios
- Hansen Solutions to Enable Flex with Efficiency



© HANSEN

FIVE REALITIES FOR POWER PORTFOLIOS

WHY PRICE VOLATILITY AND FLEX BEHAVIOUR NOW DRIVE OPERATIONAL OUTCOMES AND RISK

1. Weather-dependent renewables drive price volatility

- Wind and solar drive spot prices
- Dunkelflaute and congestion create price spikes
- Direct impact on portfolio risk and flexible generation revenues
- High-resolution renewable forecasts are critical

2. Flexibility becomes price-sensitive and synchronised

- EVs, heat pumps and commercial loads shift with prices
- Consumption, generation and storage respond to the same price signals
- Large portfolios respond synchronously
- Load forecasts need to include flex behavioural

3. Day-ahead prices change the reality they were based on

- Day-ahead forecasts optimise against expected flexible demand
- **Once prices are published,** customers and assets respond
- Weather effects amplify portfolio risk
- Portfolio risks materialise after price publication

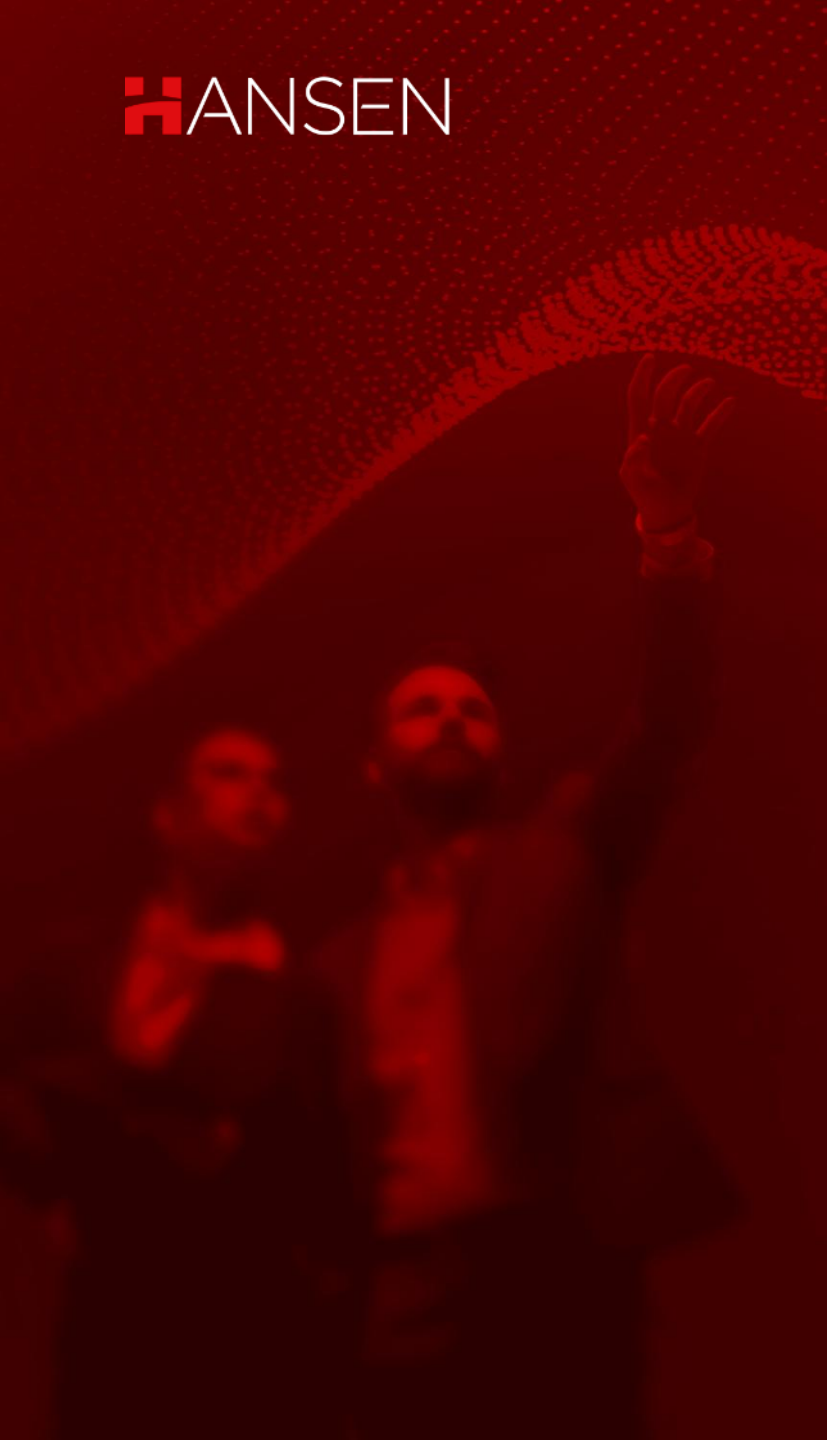
4. Intraday becomes the key mode of operation

- Imbalance costs concentrate in extreme price periods
- Portfolio positions must be adjusted closer to delivery
- Intraday trading is essential for risk control and value capture

5. Imbalance risk increases, even with full asset control

- Customer behaviour and automated assets react dynamically to prices
- System-wide synchronisation amplifies forecast and timing risk
- BRP imbalance responsibility remains unchanged

One portfolio reality. One imbalance responsibility. Flexibility expressed in different ways.



HANSEN

CONNECT LIVE 26

FLEXIBILITY MEETS EFFICIENCY: POWERING THE ENERGY TRANSITION

LINA TRANEVALL

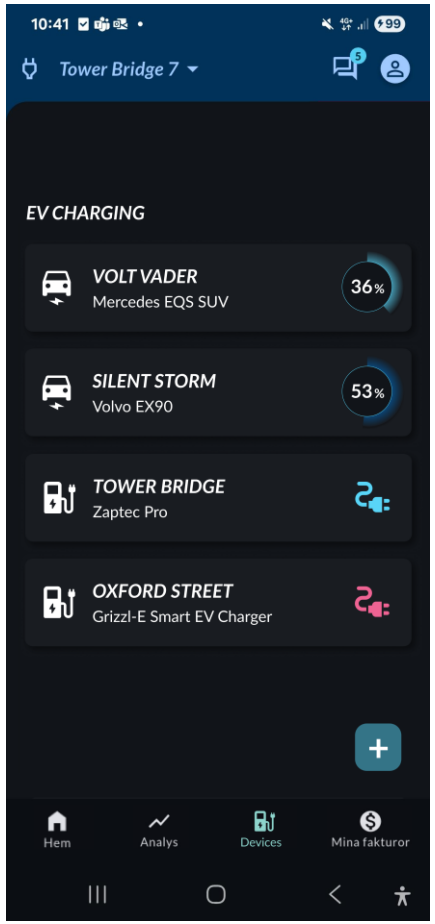
Product Director, Hansen

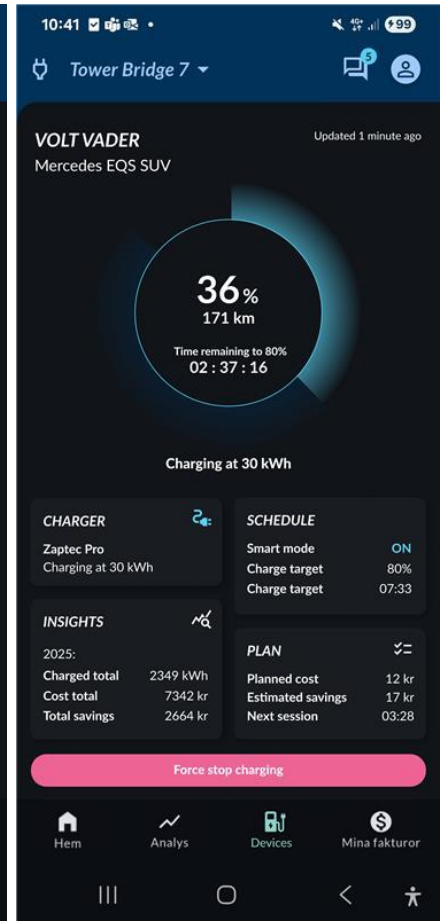
© HANSEN

HANSEN'S FLEX APP SUPPORTS HEM

- Capability for your end-users to steer their charging costs.
- Visualization of the data on Hansen's Self-Service platform
- Enable new smart products that leverage the markets flexibility initiatives.
  - Electric vehicle charging
  - Home chargers
  - Solar inverters
  - Home batteries
  - HVACs (heating and cooling)
- Hansen can handle the whole chain

DER Connectivity Middleware





© HANSEN

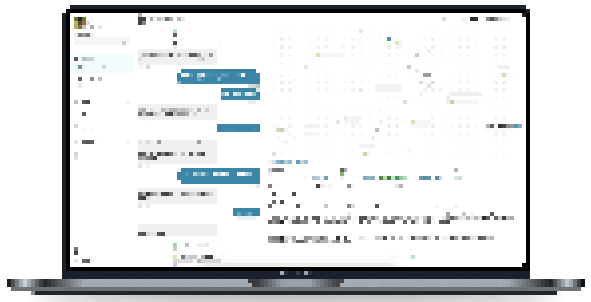
DIAL AI & HANSEN
HARNESSING AI TO TRANSFORM THE ENERGY SECTOR

Strategic Investment

- Hansen's strategic investment in **Dial AI**, a Vancouver-based AI innovator, is accelerating AI-driven transformation in energy.

Energy Vertical Focus

- Hansen's AI Agent with Dial AI is a **conversational AI platform** purpose-built to **streamline operations** and **enhance customer service** in the energy sector. It is a Gen AI agent solution for customer service process automation.



Targeted to **utility service providers** seeking a **domain-specialised**, quickly deployable & integrated solution

HANSEN

© HANSEN

CUSTOMER ENGAGEMENT - WHO HANDLES WHAT?

You remain in control, human in the loop, guiding principle.

AI Handles the Routine

- Overflow call volume
- 24/7 availability
- High value but repetitive queries
- Support for agents (CSR Co-Pilot)
- Call summary and case creation beyond single call resolution(s)

What Humans Handle

- Complex conversations
- Complaints and conflict resolution
- Compliance and regulation
- Emotional nuance
- Relationship-building and loyalty

HANSEN

© HANSEN

SUPPORTING THE CUSTOMER JOURNEY

In our experience customers will most often reach out to you, their energy provider, with these questions and problems for you to solve.

Billing and Payments:
balances, due dates, invoice information breakdown, moving the due date of the invoice, shifting invoice interval, selecting payment options, setting up a payment plan.

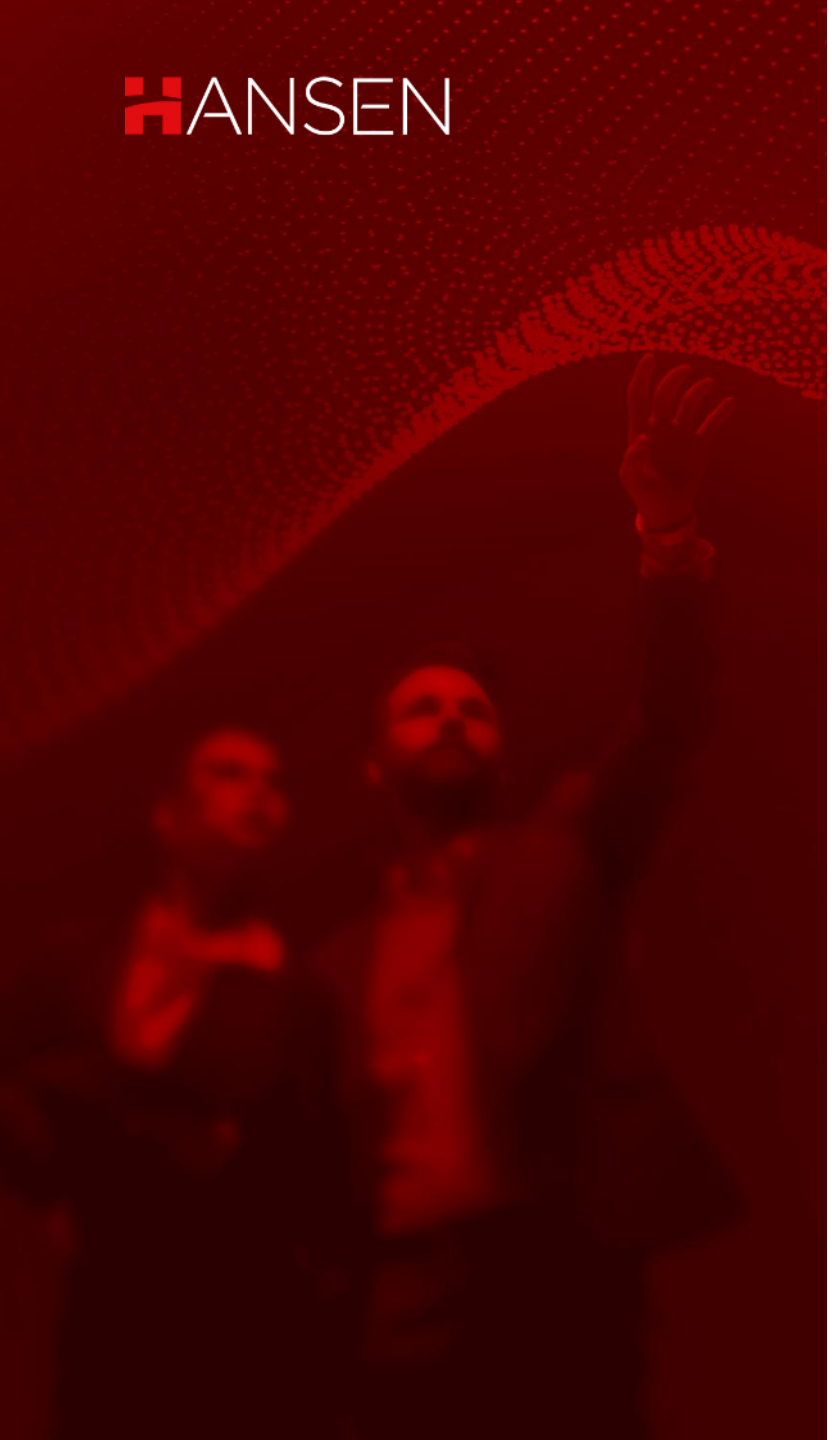
Usage and Consumption:
understanding how much they have used and when, get efficiency advice on how to spend less energy

Customer Management:
updating contact details, future addresses and communication preferences

Service Requests:
starting service; move-in, ad a new customer and or contract, stopping, or transferring service; move out.

Questions:
such as, energy market information, information about your prices and products.

© HANSEN



HANSEN

CONNECT LIVE 26

FLEXIBILITY MEETS EFFICIENCY: POWERING THE ENERGY TRANSITION

RIIKKA KUMLIN

Product Director, Hansen

© HANSEN

HANSEN MDM

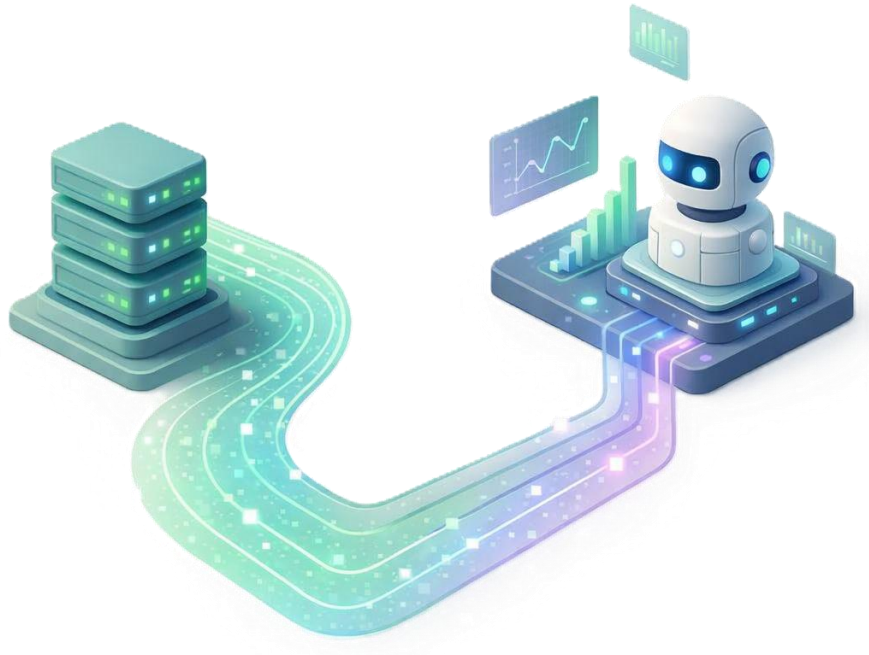
Current focus

- Near real-time MDM (in Cloud)
- Seamless integration

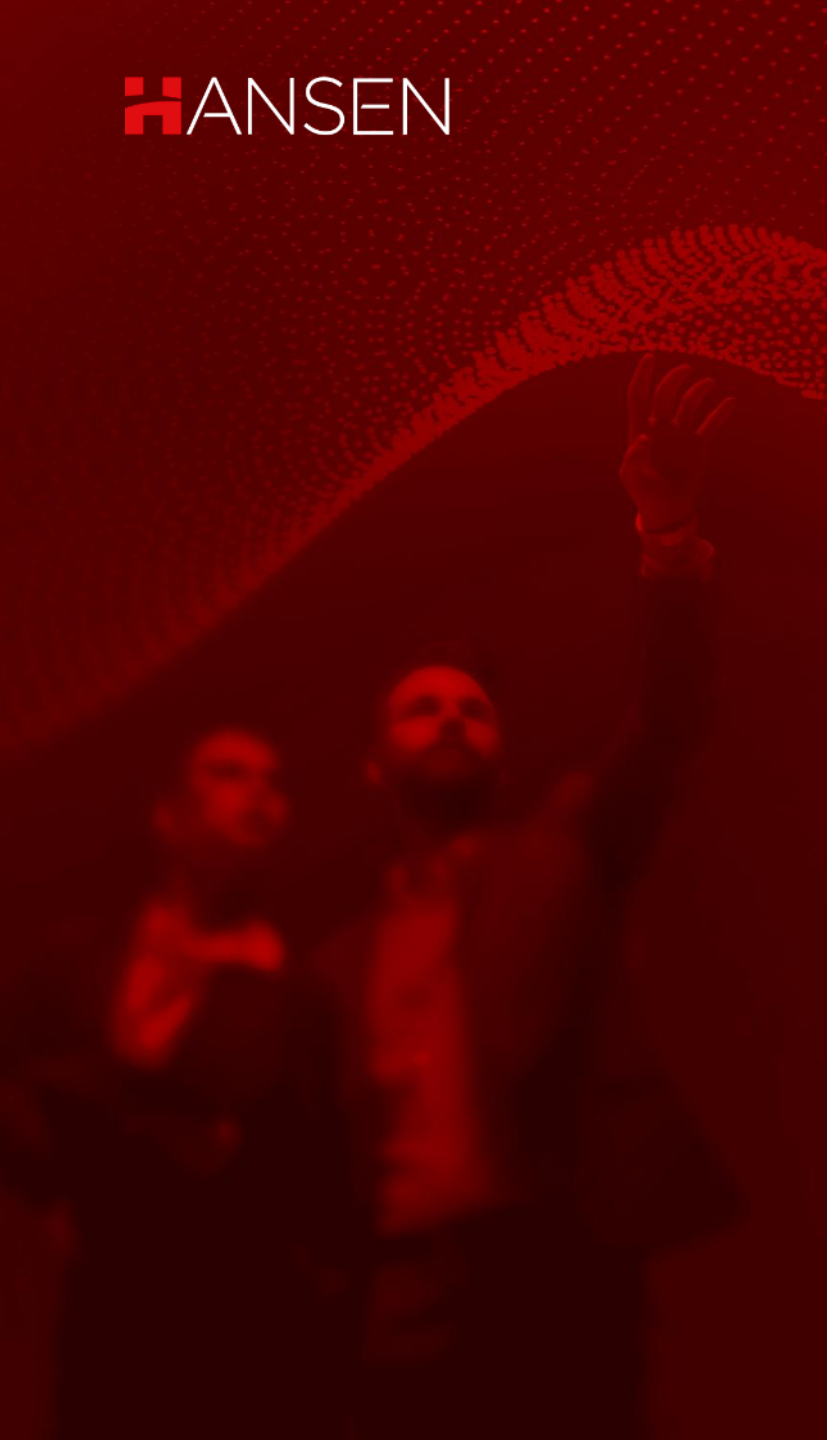
Next focus

- Product expansion towards advanced analytics
  - Through data lake when possible
  - ML/AI/Analytics

- **Enabling informed decision making**



© HANSEN



HANSEN

CONNECT LIVE 26

FLEXIBILITY MEETS EFFICIENCY: POWERING THE ENERGY TRANSITION

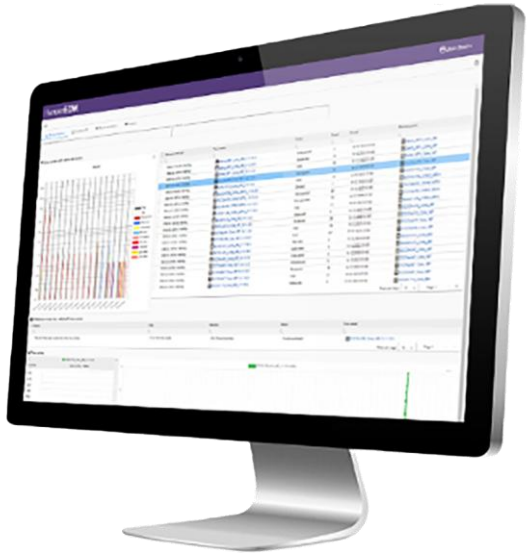
SAKARI SEPPÄLÄ

Senior Product Manager, Hansen

© HANSEN

HANSEN EDM BRP

- Hansen EDM **integrates** to multiple markets and external systems to gather **time series data**.
- Calculations are **created automatically** from asset data for trading, settlement and invoicing processes.
- Hansen EDM works as **energy data warehouse** storing data even for decates to be used in reporting and portfolio analysis.

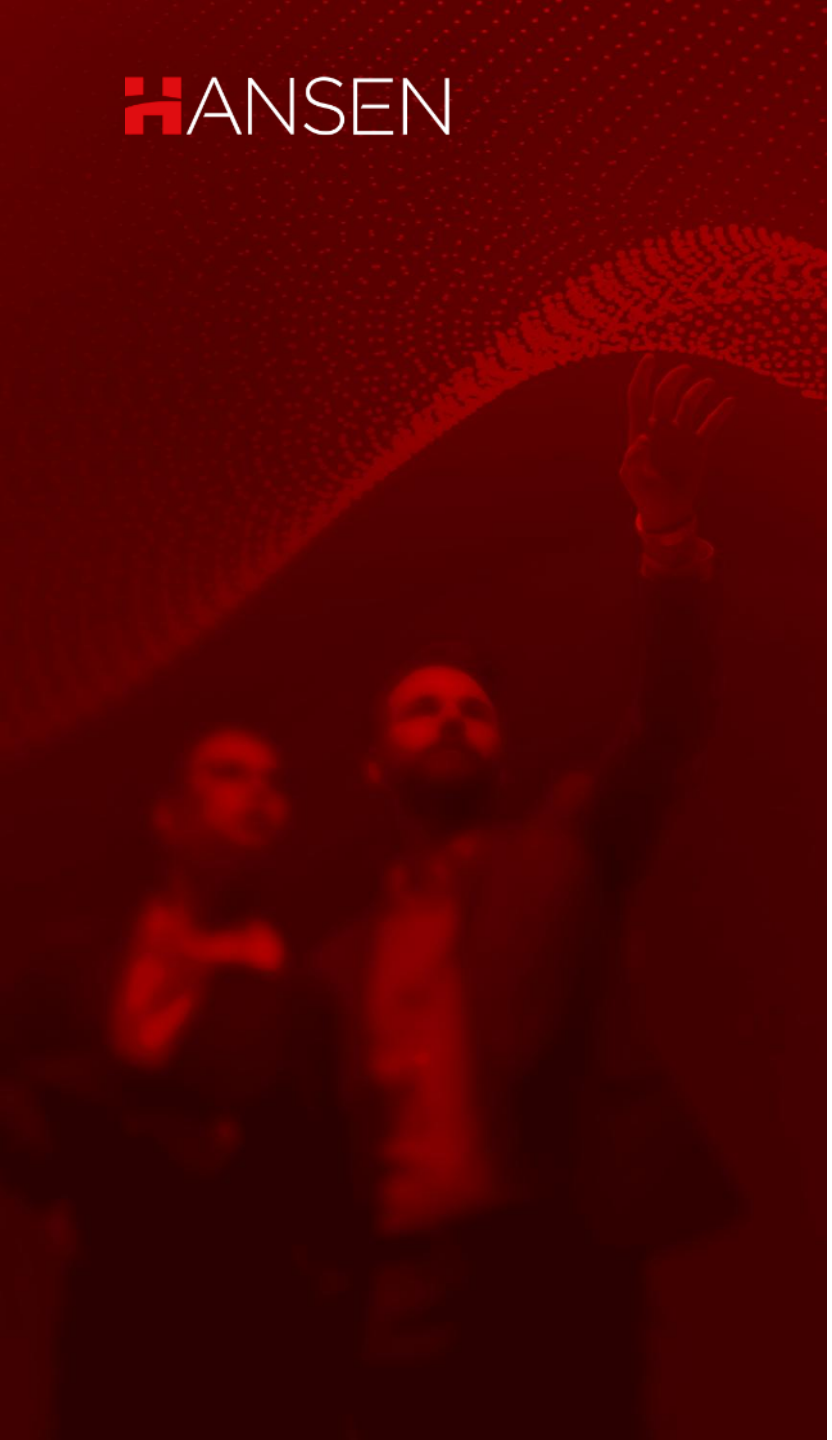


HansenEDM

Automated Energy Data Management

HANSEN

© HANSEN



HANSEN

CONNECT LIVE 26

FLEXIBILITY MEETS EFFICIENCY: POWERING THE ENERGY TRANSITION

JYRI JOUTSI

Product manager, Hansen Trade

© HANSEN

ASSETS & ENERGY DATA

EDM

VPP

SCADA

INPUT

TRADE RESULTS

HansenTrade

Modular Trading Solution For Automated Physical Power Trading

IMBALANCE TRADING

ASSET TRADING

MULTI-MARKET OPTIMISATION

MARKET ACCESS

MARKETS

NORD POOL

Power Exchanges

Statnett

Ancillary Markets

NODES

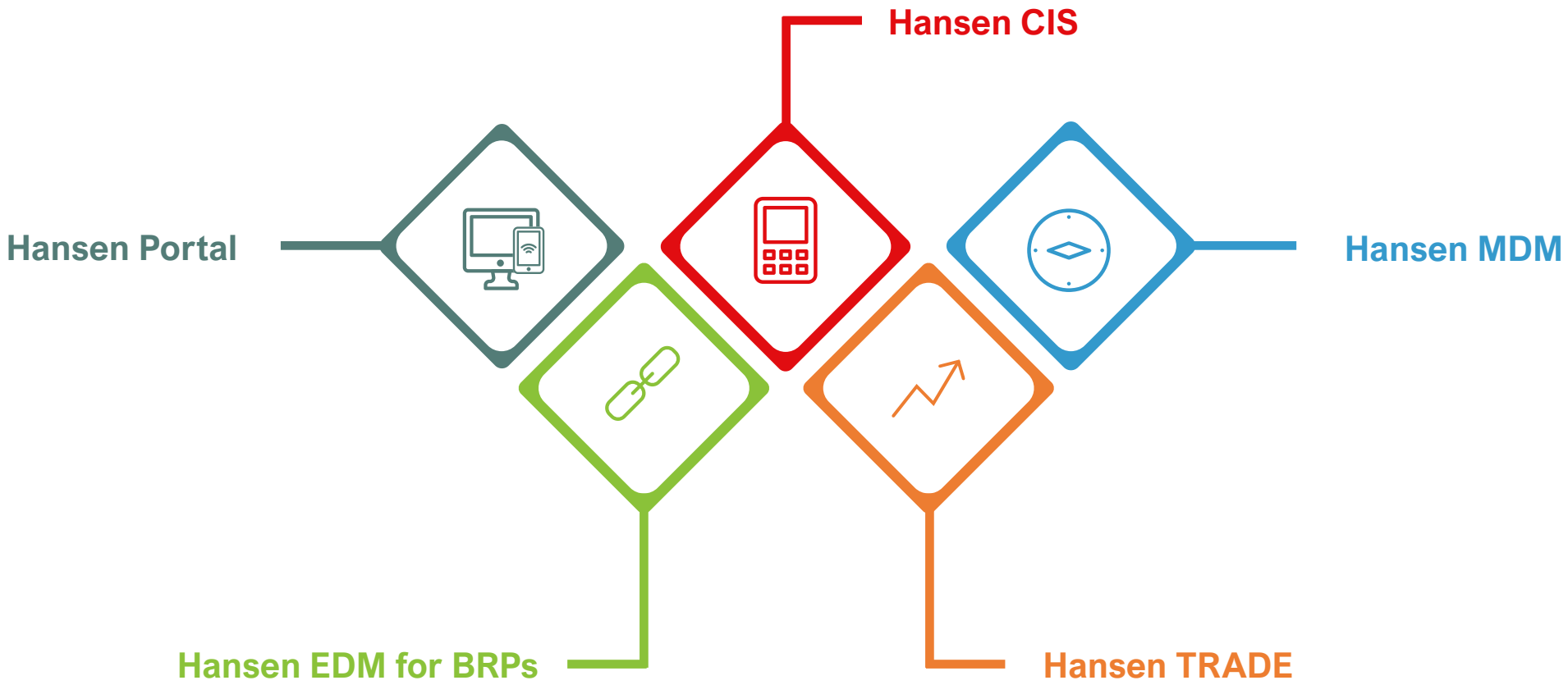
Other Flexibility Markets

- HansenTrade Intraday Trading
- HansenTrade Day-ahead Trading
- HansenTrade Intraday Auctions
- HansenTrade aFRR
- HansenTrade FCR
- HansenTrade Regulating Power (mFRR)
- HansenTrade Multi-market Optimization
- HansenTrade Customer Portal
- HansenTrade Potition Monitoring
- HansenTrade Power Market Analytics
- HansenTrade Power Plant Failure Alarms

HANSEN

© HANSEN

HANSEN FLEX SOLUTIONS

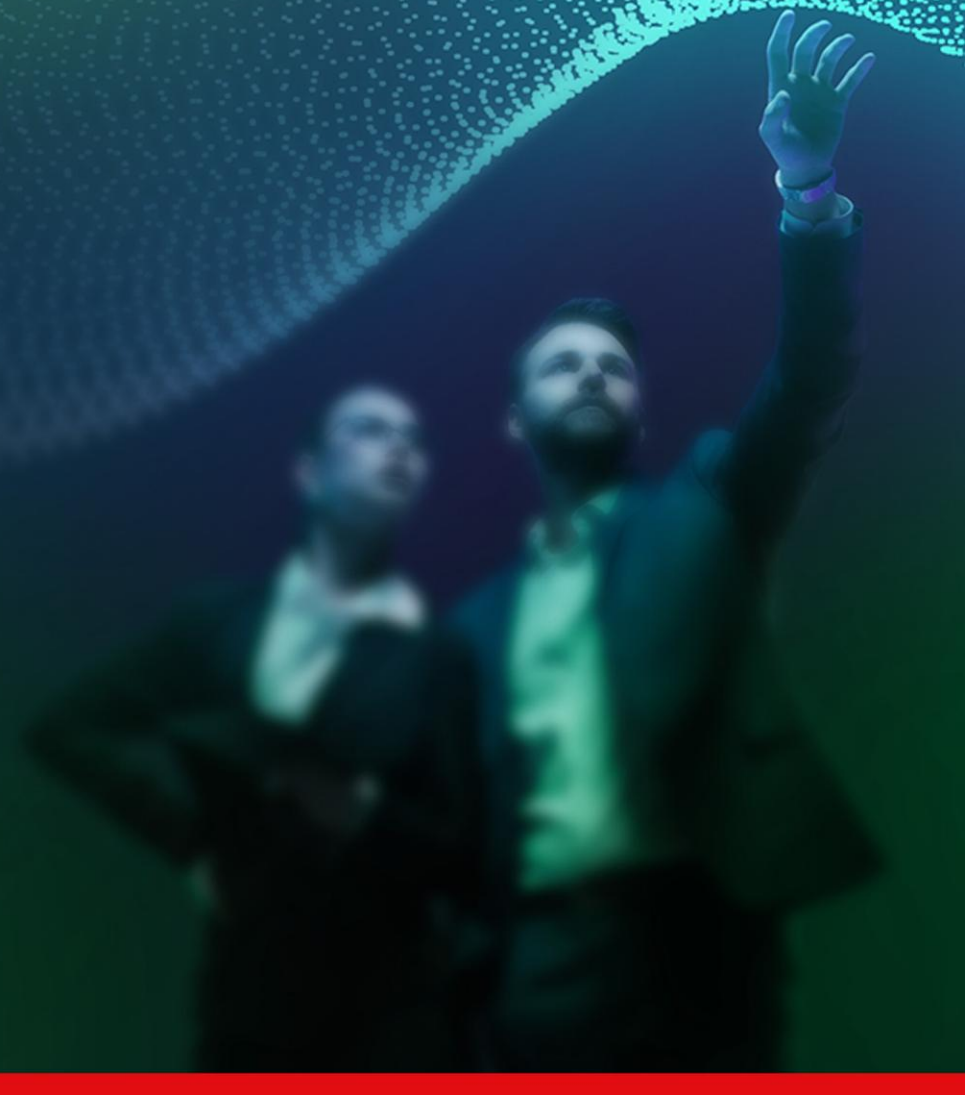


© HANSEN

FOR THE DEMO PLEASE CONTACT JYRI.JOUTSI@HANSENCX.COM

© HANSEN

THANK YOU!



© HANSEN