



Software for sustainable growth



Increasing asset flexibility through digitalization of optimisation and trading

Trond Straume, CEO Powel



Powel ownership - AFK Group in brief

10 main investments

81 companies

27 countries

+2200 employees

MNOK **4 906** revenues

MNOK **501** EBITDA

NSSLGlobal
ON LAND • ONBOARD • ONLINE

scanmatic

Cogen

MARKEDSKRAFT

powel

Bryggebyen

EFD
INDUCTION

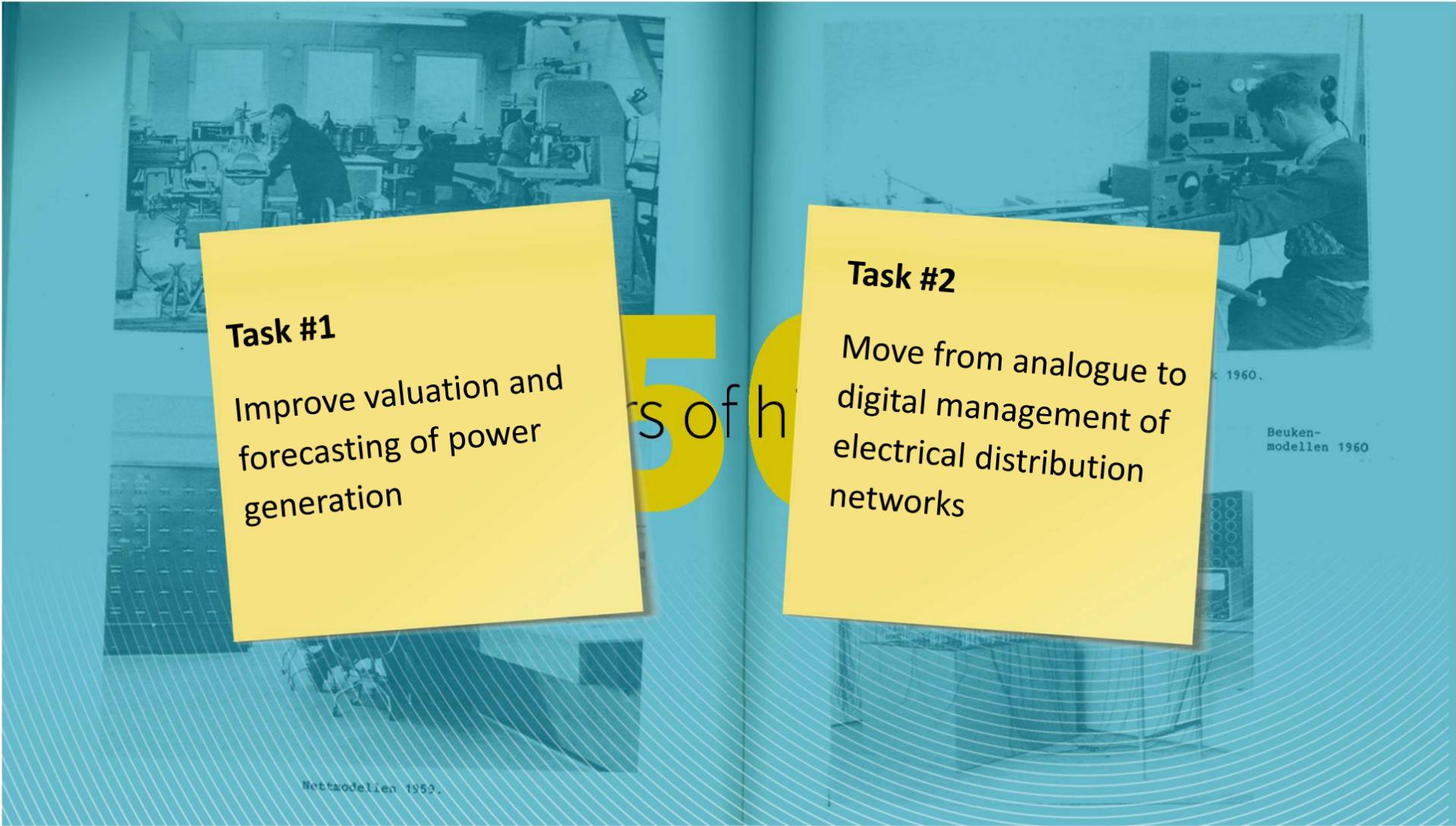
WATTSIGHT

TEKNA

AFK



DEVELOPING BETTER COMPANIES



Task #1

Improve valuation and forecasting of power generation

Task #2

Move from analogue to digital management of electrical distribution networks



20 years,
with **50** years of history



More than **20**
offices in **7** countries



55
MEUR revenue



400
employees



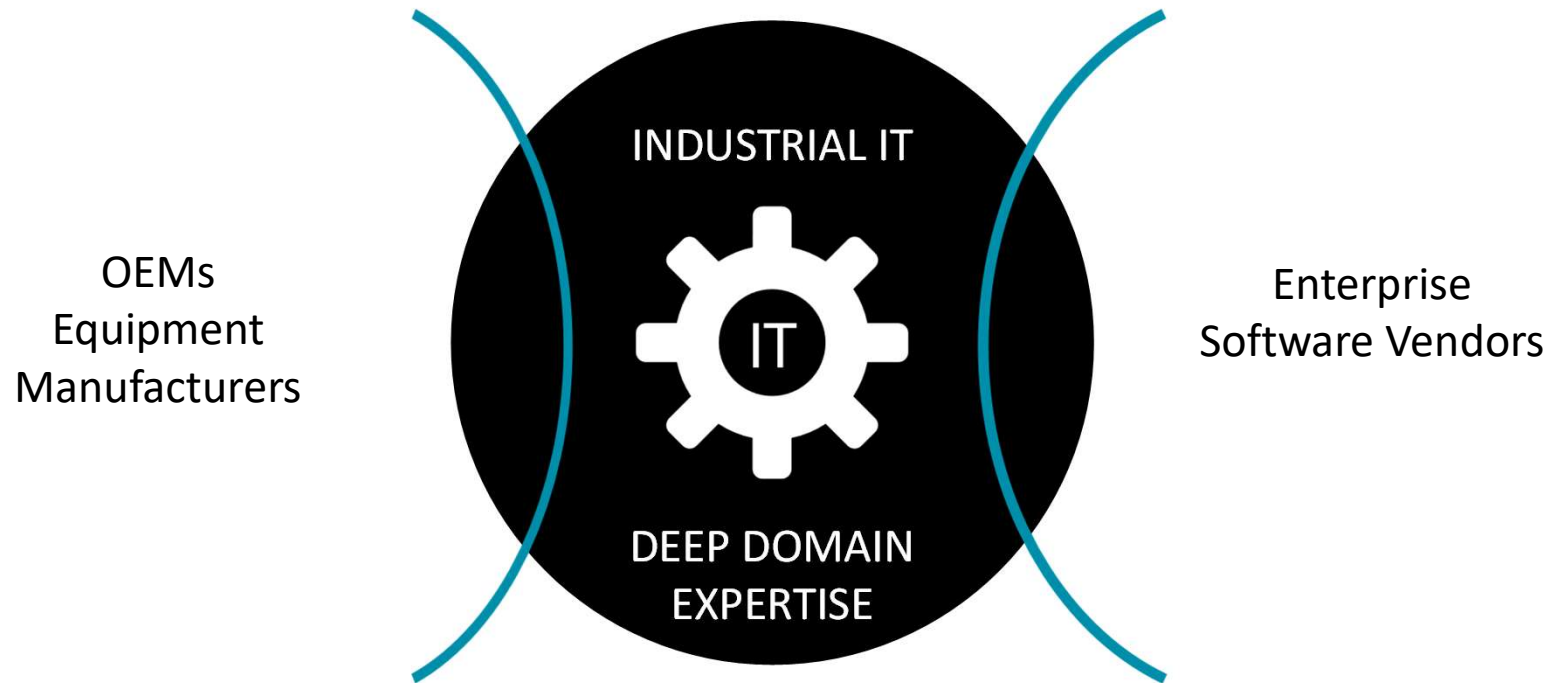
5th
largest software
company in Norway



No 1
in industrial IT
in Norway

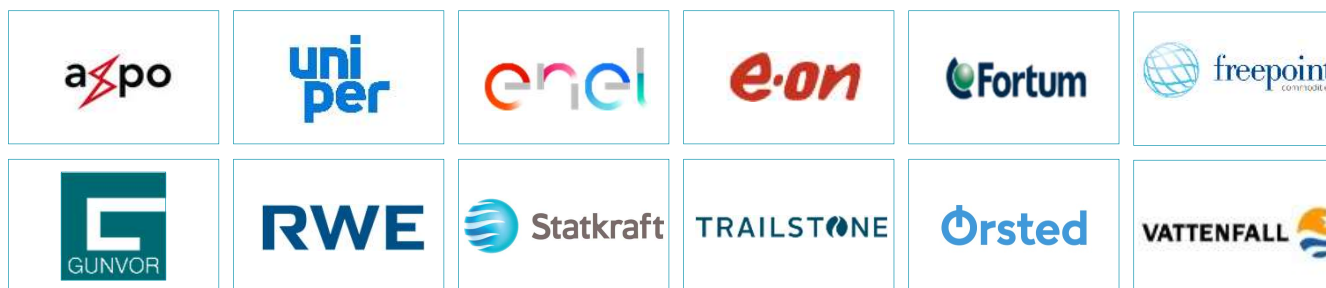


Why we are different





Our customers












Multi-national
players

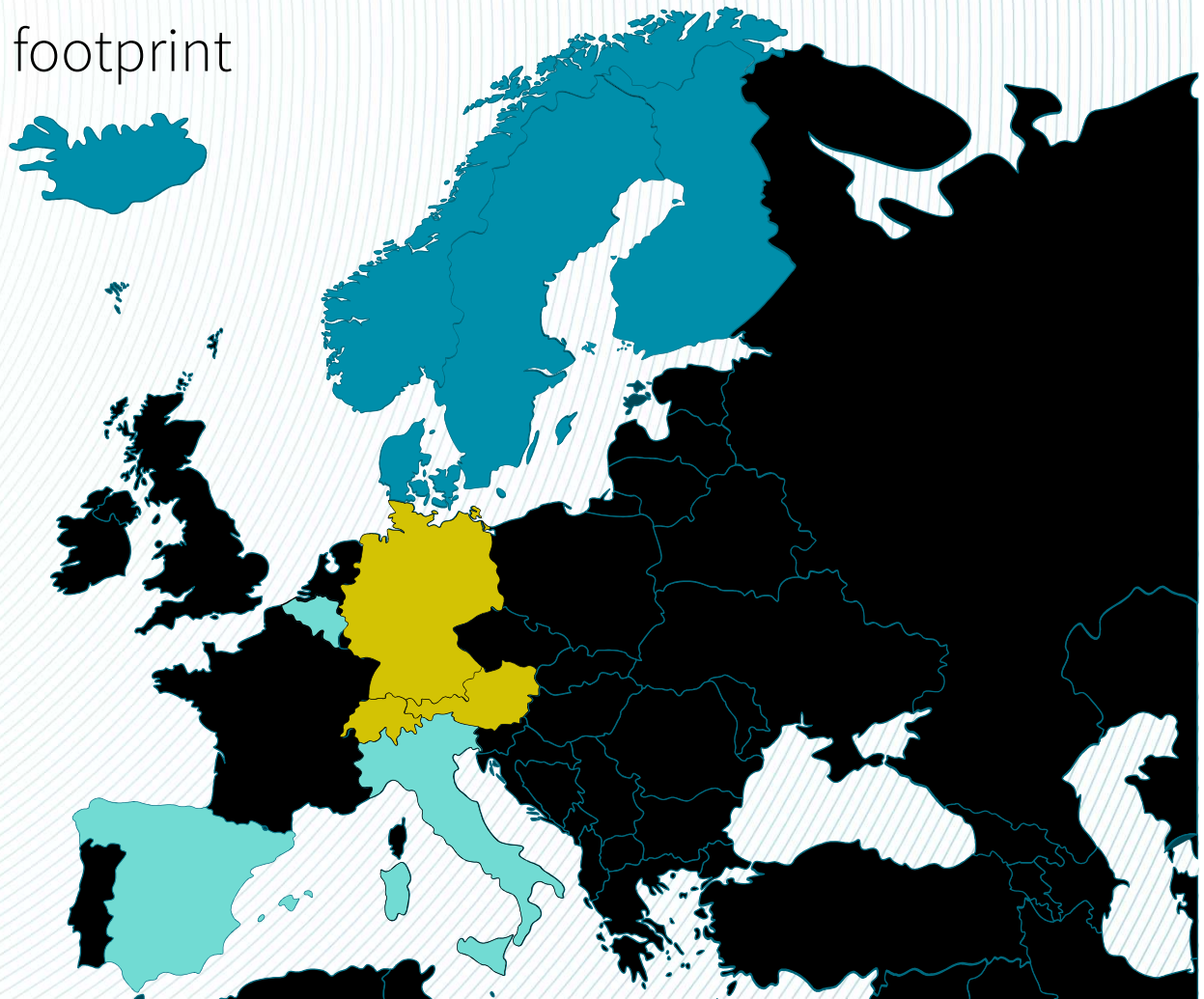


National
players



Our international footprint

Maturing	
Growing	
Starting	
	
	
	
	
	





Sustainability

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Source: Brundtland Commission of the United Nations, 1987

A hand in a dark jacket reaches down towards a river flowing through a mountain valley. The scene is overlaid with a blue-green tint and a subtle grid pattern.

To prosper over time, every company
must not only deliver **financial
performance**, but also show how it
makes a **positive contribution to society**

Source: Larry Fink, CEO BlackRock



Within the next 5 years **ALL** investors will
measure company's impact on **SOCIETY**,
GOVERNMENT and the **ENVIRONMENT** to
determine their worth

Source: Larry Fink, CEO BlackRock



Paris
Climate
Agreement

Climate
awareness

Digitisation

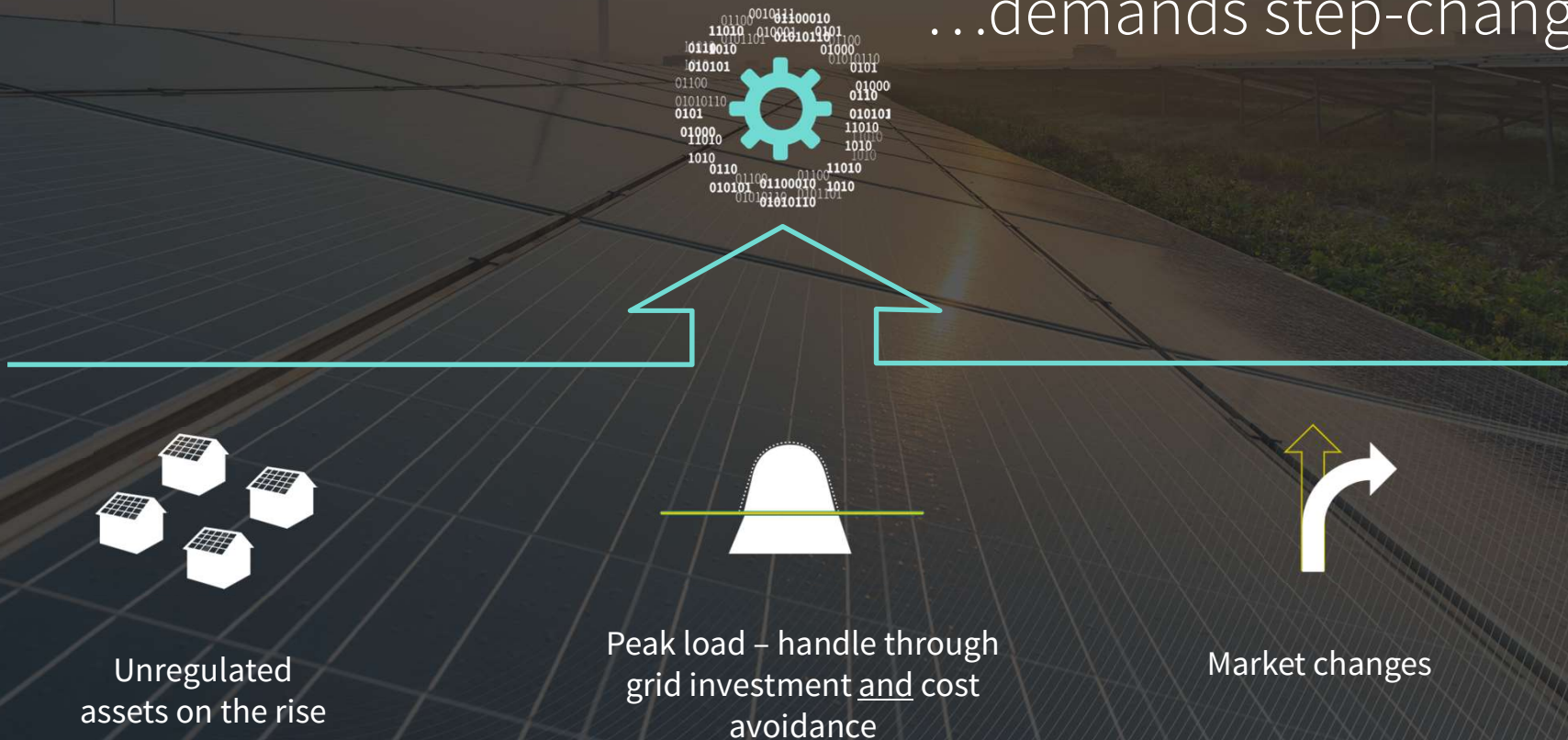
EU's
Energy
Packages

Motivation
to change

Electrification

Changes to the world around us...

...demands step-change





Powel DNA

1

Optimisation of resources, assets and processes

2

Make advanced decision support available for operational use

3

Big data management for deeper insight

«A strategy of not making a premature decision but instead delaying commitment and keeping important and irreversible decisions open until the cost of not making a decision becomes greater than the cost of making a decision»

Mary Poppendieck

A yellow sticky note is placed on a dark, blurred background. The note contains the text 'Task #1' followed by 'Improve valuation and forecasting of power generation'.

Task #1

Improve valuation
and forecasting of
power generation

“Making decisions at the last responsible
moment”

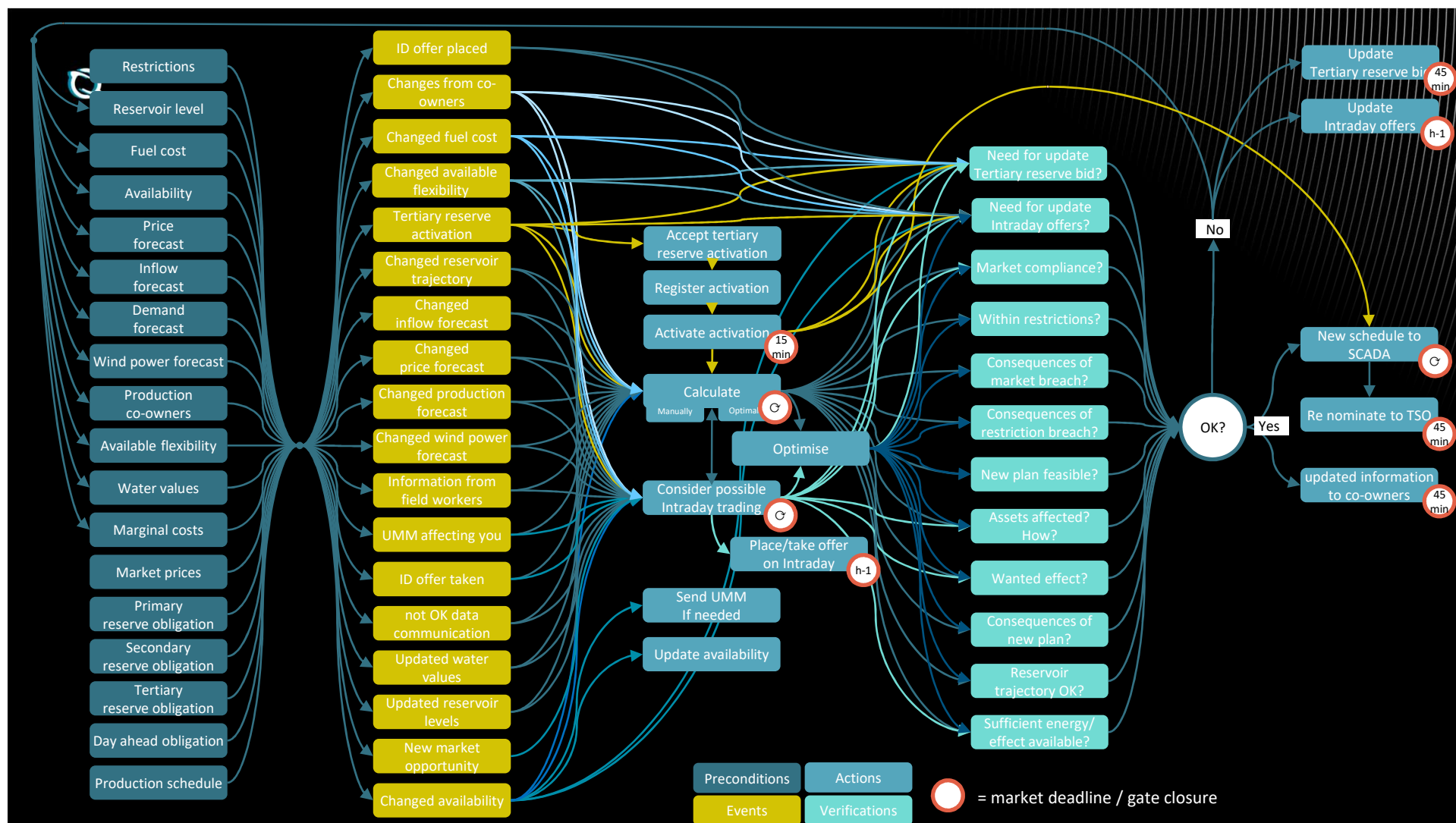
Mary Pennendieck

Modular platform for handling multi-assets and multi-markets



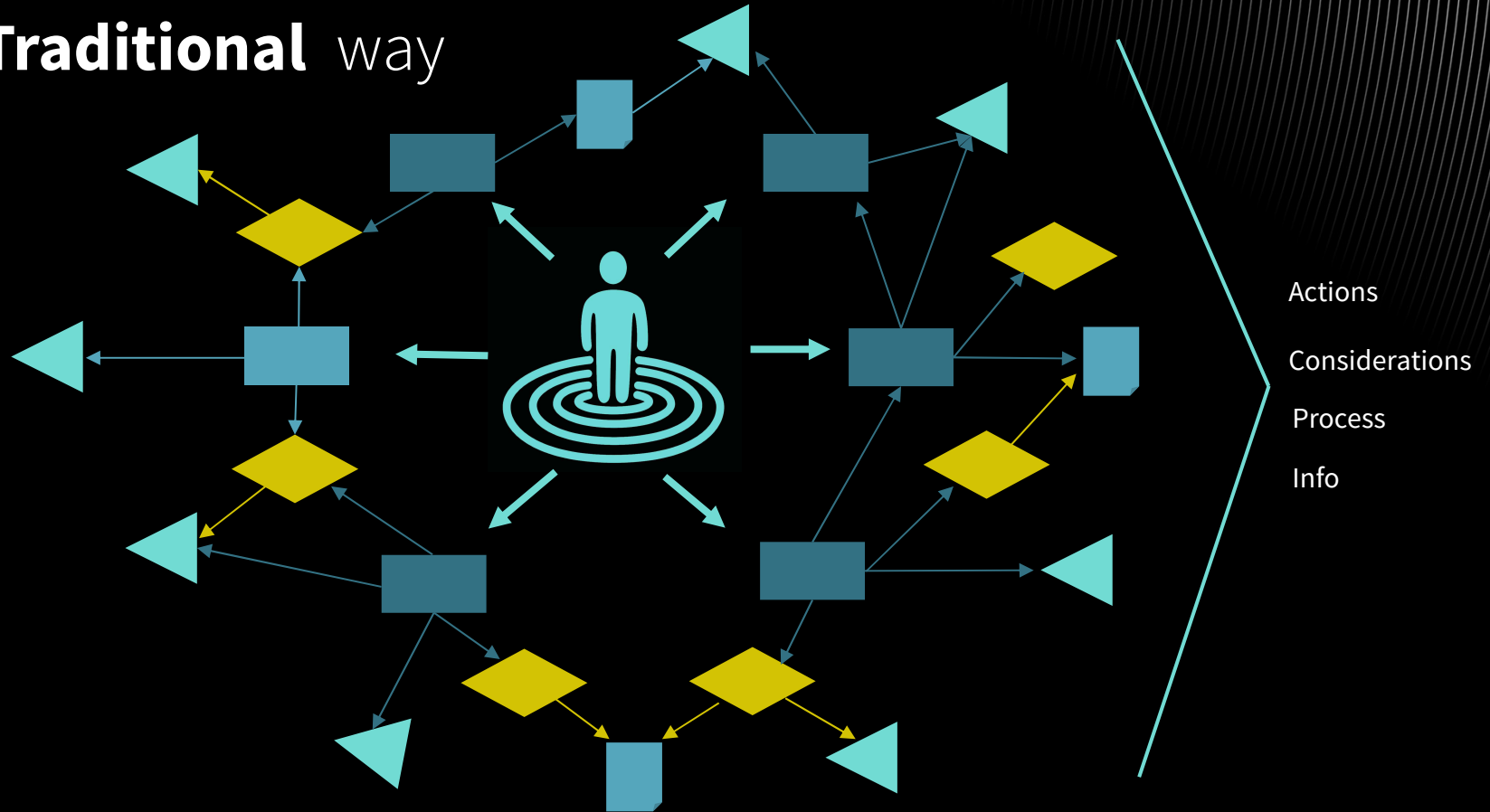
🔄 Maximize business value in power generation and trading





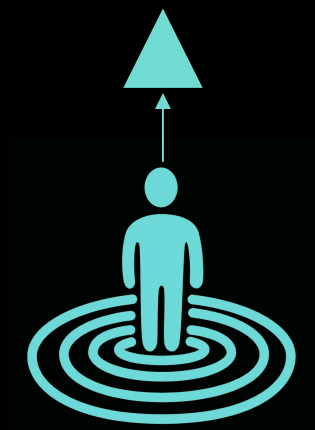


Traditional way

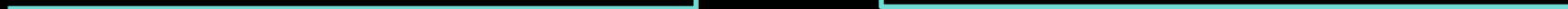
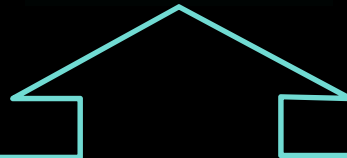




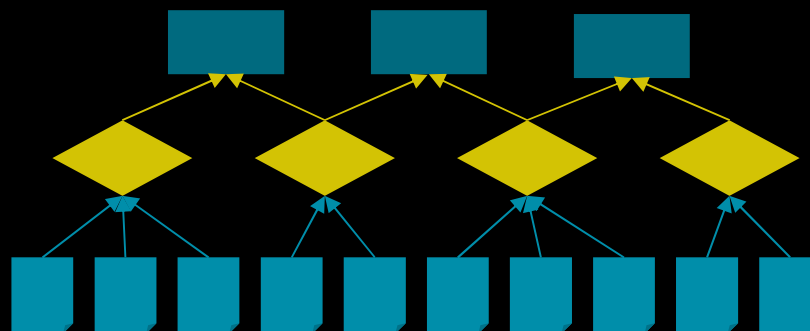
New way



Human decisions



Machine Decisions



Flexibility + exploit = fleXploit

1

50 years of optimisation and physical models to improve earnings

2

5 years with AI for further improvements and earnings

3

Combining optimisation and AI creates unprecedented results

30%

Intraday precision increased by

Task #2

Move from analogue to
digital management of
electrical distribution
networks

“Making decisions at the last responsible
moment“

Mary Donnendiek

50 years of history – Digital management of electrical networks

**Long term
planning**

**Projects and
documentation**

**Risk based
Maintenance**

**Operation
(ADMS)**

Asset database

🔄 Minimizing costs for the electric grid industry

Average annual
low voltage grid
OPEX **today**

83

€/customer

Average annual
low voltage grid
OPEX **tomorrow**

58

€/customer

20 M€

Expected
annual reduced cost

50%

of manual work hours is related to documentation

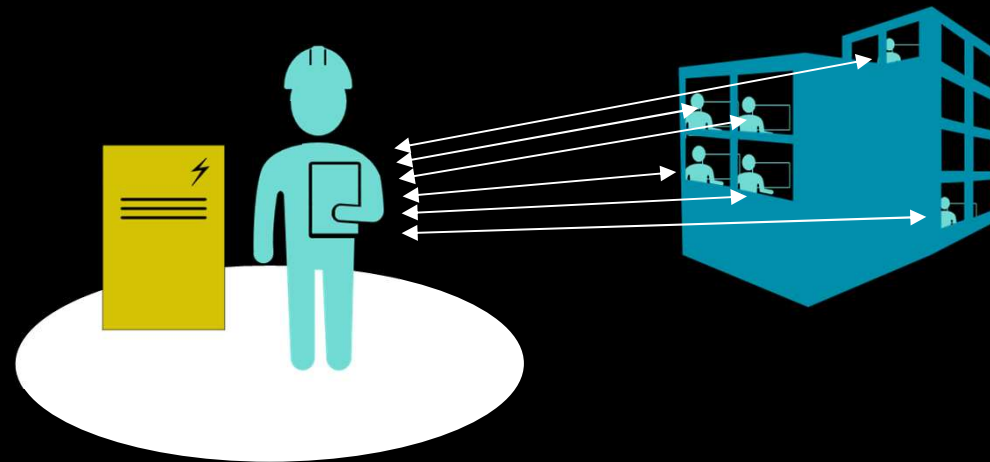


From desk
to the field

Enabled by automation,
analytics and self-service



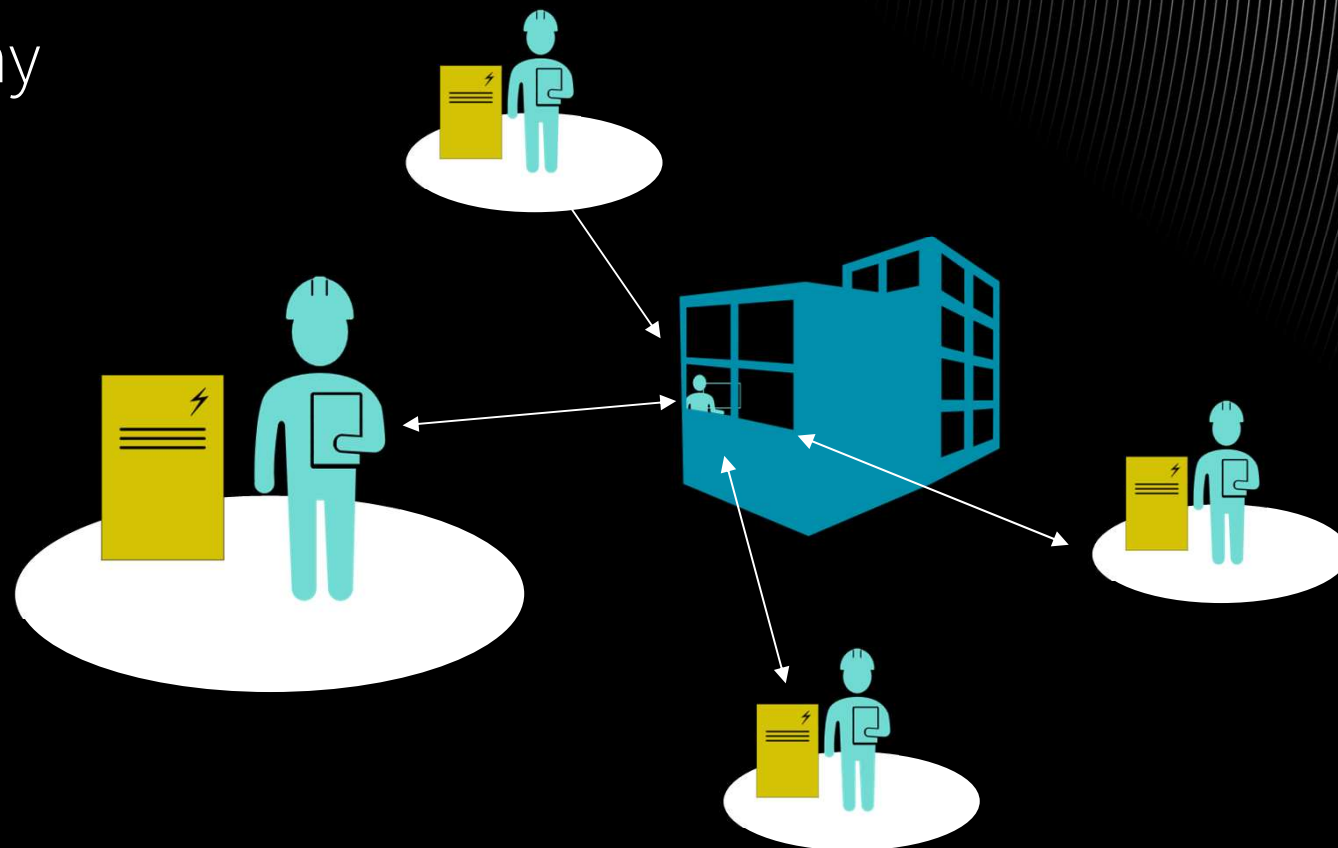
Traditional way



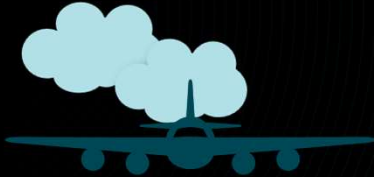
Actions
Considerations
Process
Info



New way



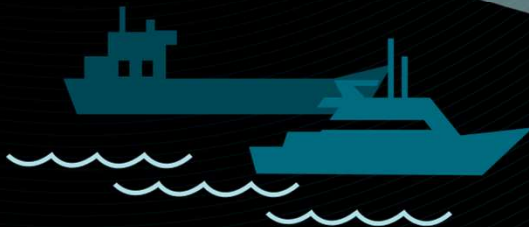
THE FUTURE IS ELECTRIC



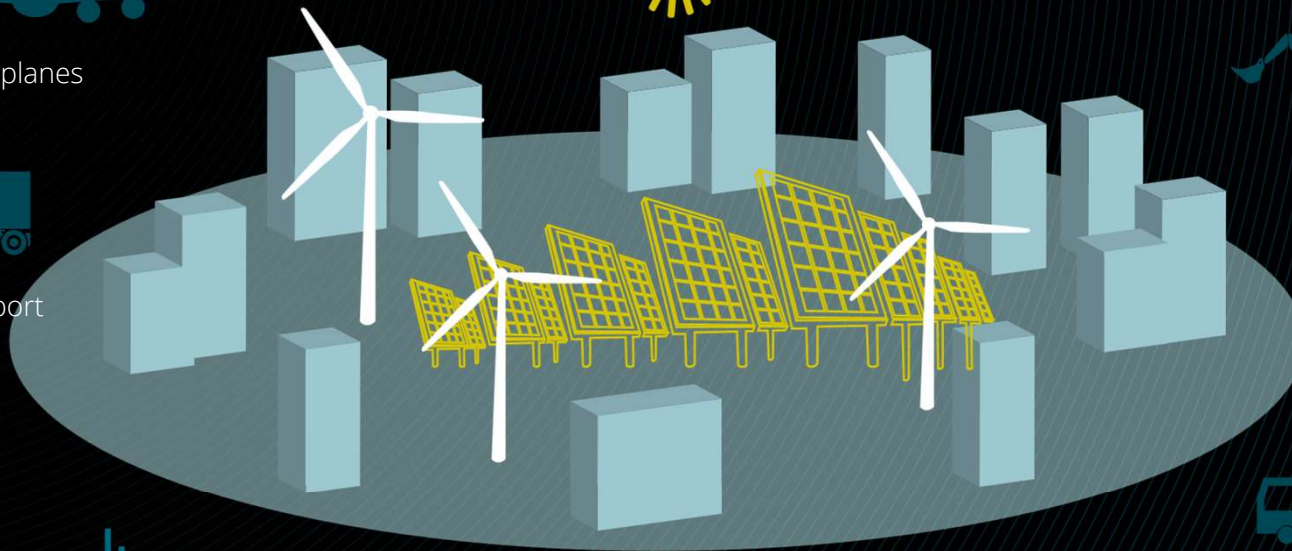
Airplanes



Long-distance transport



Ship with electrical power from shore



Building sites



Public transport



Electric Vehicle



Powel – dedicated to industrial IT

1. Software as a Service (SaaS) strategy, with
2. Dedicated Cloud Operations organisation
 - Continuous testing and deployment
 - SLAs with 99.9x uptime requirements
 - 24/7 support
3. Delivered through Scalable Software Factory
 - ISO9001: 2015 – Quality Management
 - ISO 27001 – Information Security Management
4. R&D Centres in Norway, Sweden, Poland & Switzerland

“THE CUSTOMER AT THE HEART OF EVERYTHING WE DO”



Thanks!

Powel AS

powel.com