

Exploring End-to-End Collaboration and the Critical Role of Digitalisation in Healthcare Logistics



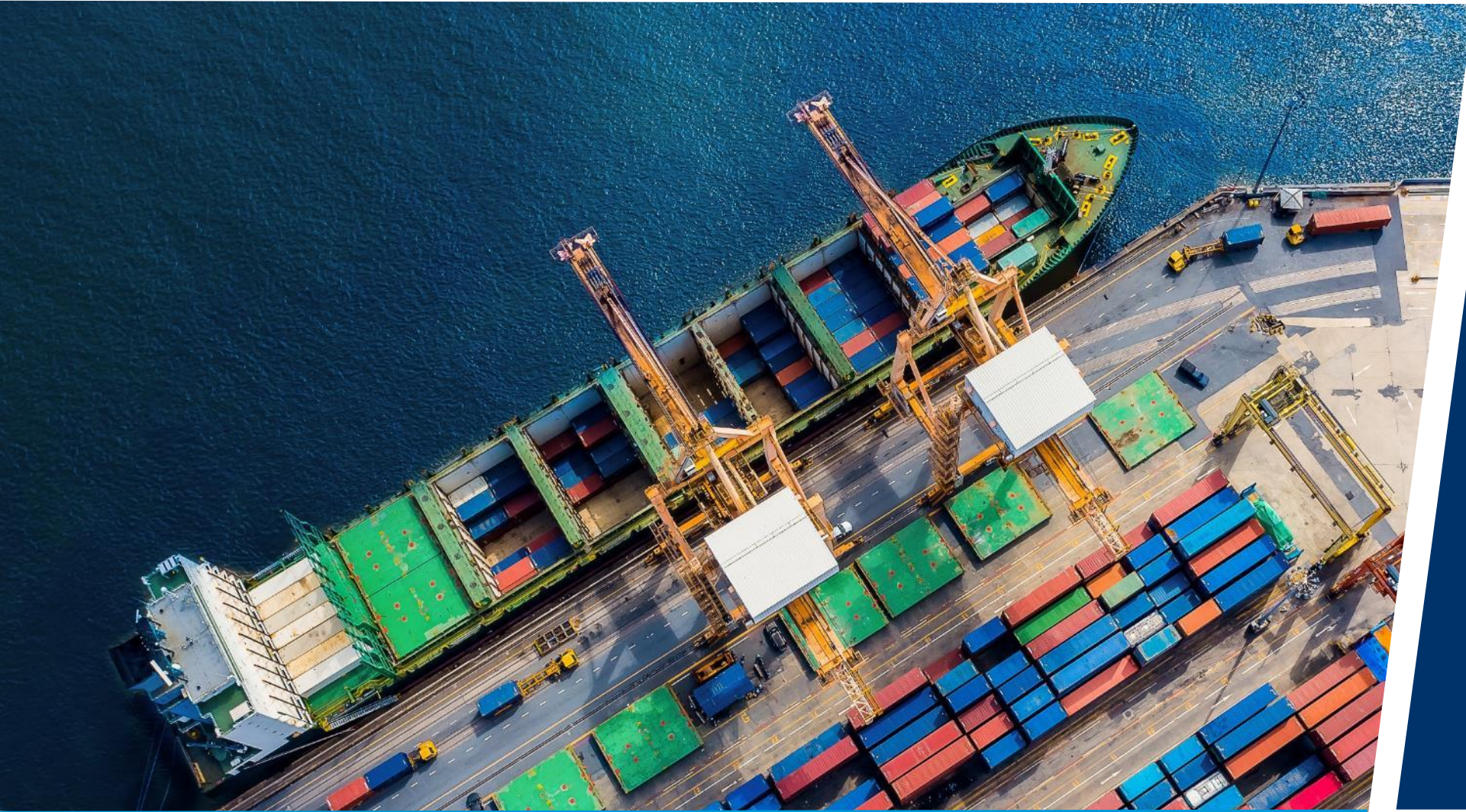
Jon Chapman

Vice President Healthcare
K&N



Henry Ames

*General Manager,
Distribution and Logistics*
TraceLink



Transportation & Logistics : End-to-End Collaboration and the Critical Role of Digitalization

Jon Chapman
VP Healthcare Services, Kuehne+Nagel
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**FORTUNE
GLOBAL
500**

Swiss Stock
Exchange

SIX

KNIN.SW
Part of the SMI –
Swiss Market Index

A true **global** player with
HQ in the Swiss hills

A **strong** business partner



Sea Logistics



Air Logistics



Contract Logistics



Road Logistics
in Europe

Kuehne+Nagel in **one** day

16,500

Standard container (TEUs)
shipped

77

Fully-loaded Boeing 747
jumbo jets

87,000

Trucking orders
accepted

815,000

E-commerce shipments
dispatched



Completeness of Vision

Old and new trends are impacting logistics

Consumer needs

Demographic shifts
Rise of e-commerce



Supply chain challenges

Geopolitical events,
trade barriers
Agility and resilience
Multi-sourcing



Competitive landscape

Customers / suppliers
become competitors
New entrants and
“Digital” forwarders



Data & automation

Unique insights from data
New and better services
More efficient operations



Sustainability

Increasing regulation
Demand from customers
Generational shift



Transport capacity

Volatility
Low data quality

**We are guided by our
Vision 2030 and
Roadmap 2026.**

The four cornerstones of the Roadmap 2026 Digital Ecosystem

Our Goal: Improve the digital customer experience with value-added services by making the best use of all available data, increasing automation and efficiency, and evolving our technology in the cloud.

Key to Vision 2030: We gain trust by handling logistic needs reliably and efficiently, by proactively identifying and solving problems, by providing unique insights, and by making it easier to work with us.



Play the Video here

We are the **trailblazers** in
AI in logistics

We are a **bridge** between
customers and **forwarders**

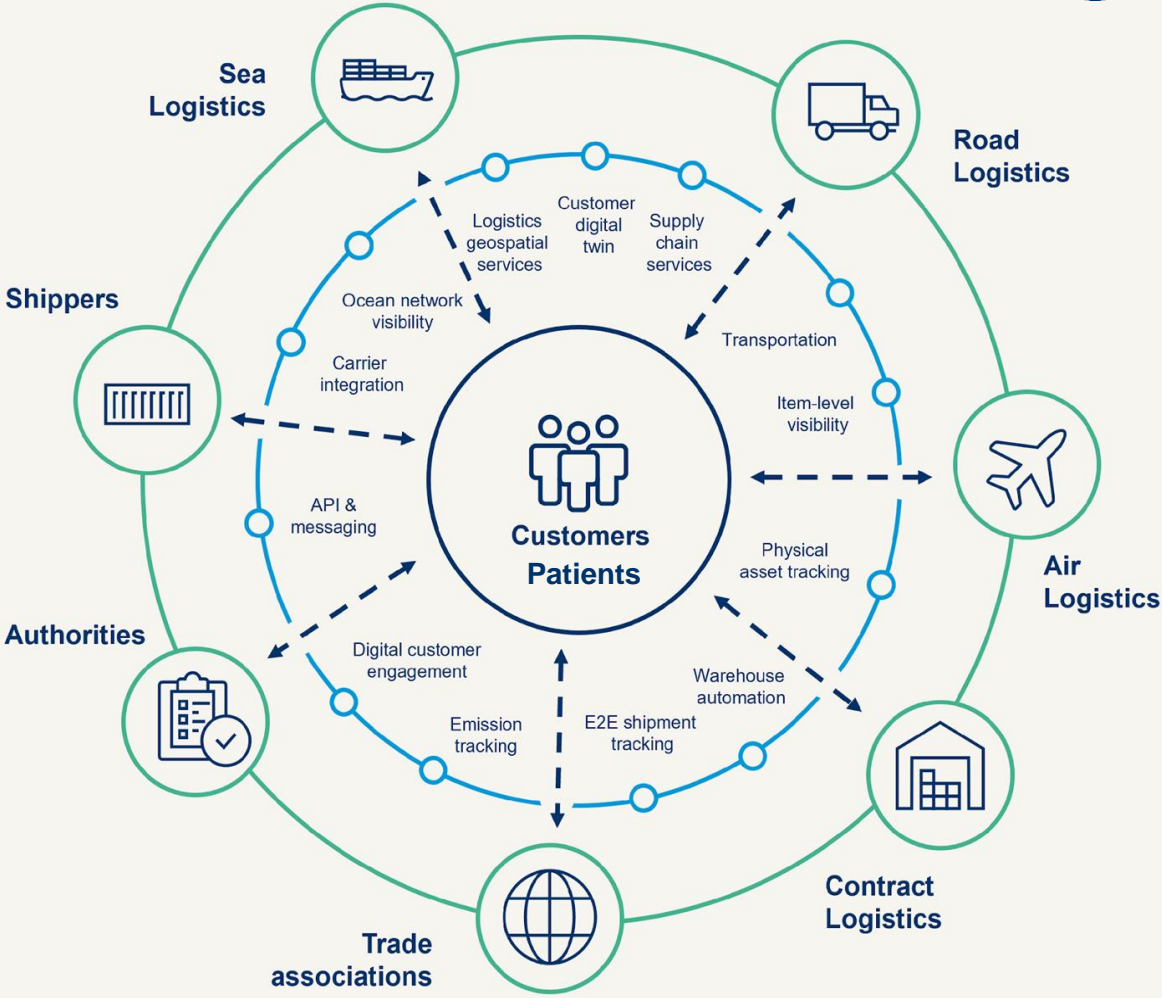
Kuehne+Nagel Digital Ecosystem

Cloud transformation

Data & Connectivity Platform

AI Platform

Digital Ecosystem Services



Focus strategic areas

Our digital ecosystem


Customers & Patients



Living ESG

Supporting a sustainable future



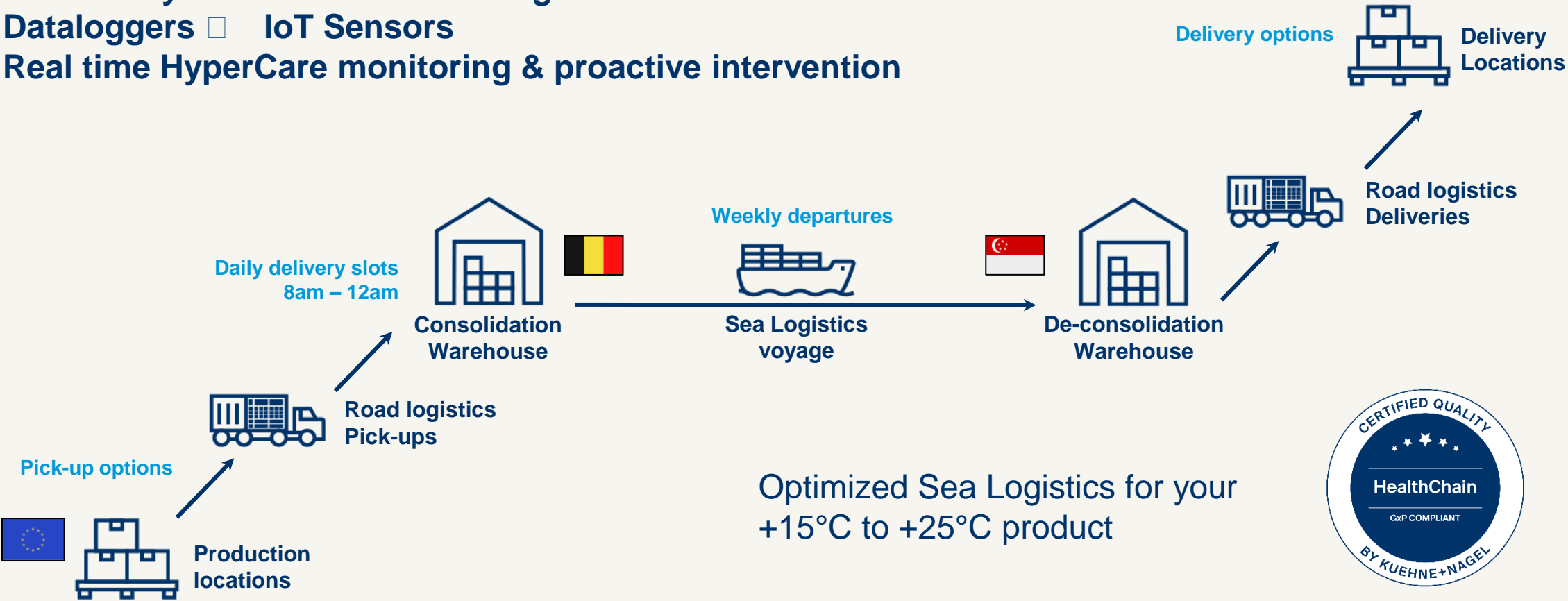
KUEHNE+NAGEL 

Integrated Risk Management

Building supply chain resilience

Living ESG : Sea Logistics Less Than Container Load

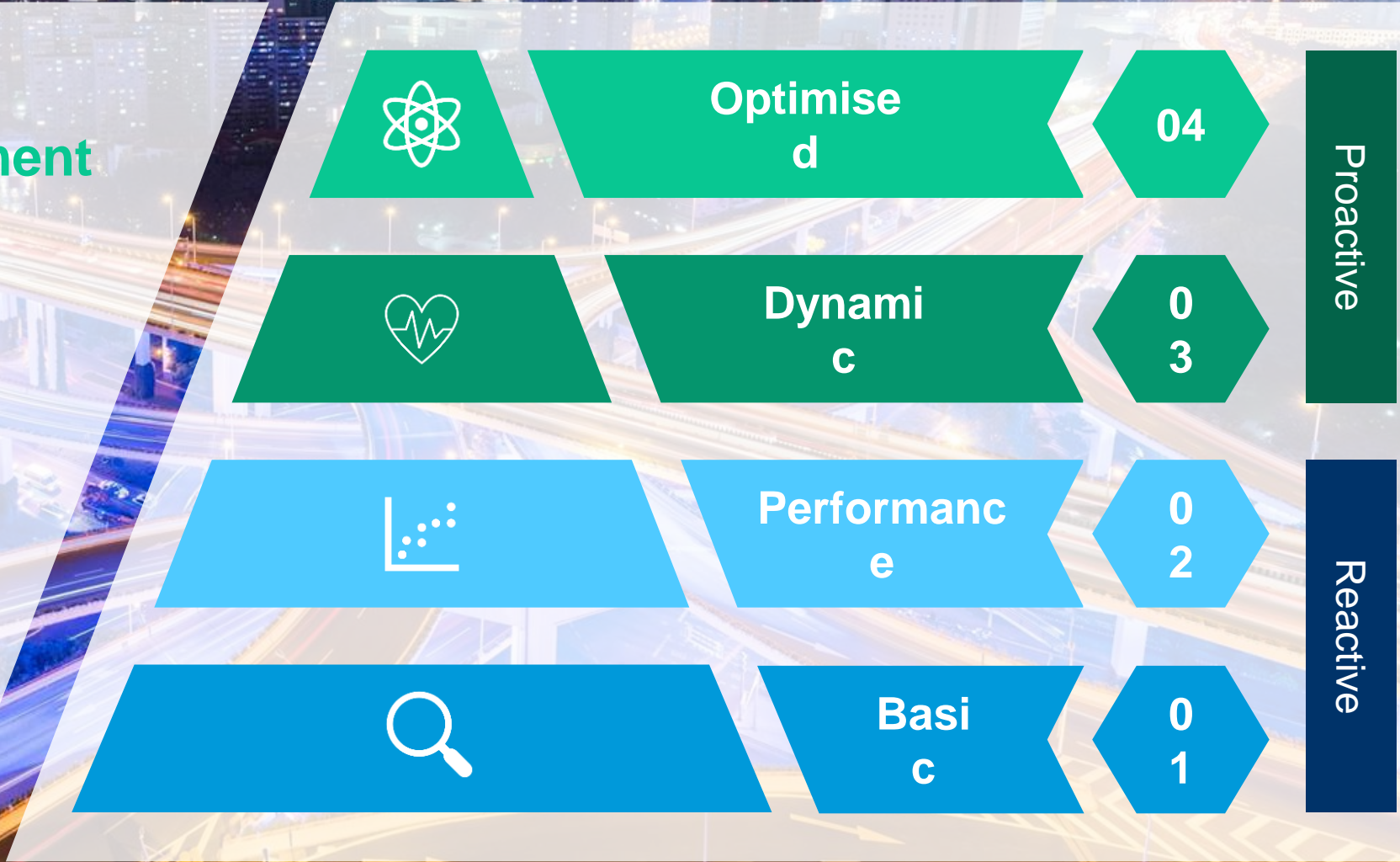
Enabled by tech. evolution and digitization
Dataloggers IoT Sensors
Real time HyperCare monitoring & proactive intervention



Optimized Sea Logistics for your
+15°C to +25°C product



Kuehne+Nagel Integrated Risk Management and Decision support



Customer Quality Advisory Board Feedback (March & Sept 2024)

Reduce temperature deviations by 50%

On-time delivery reliability (OTIF) above 95%

League table with best and worst performing lanes

Benchmark at lane level my performance with industry norm.

Eliminate situations with the same failure 3 times or more

Have at least 2 routing options for any currently failing lane

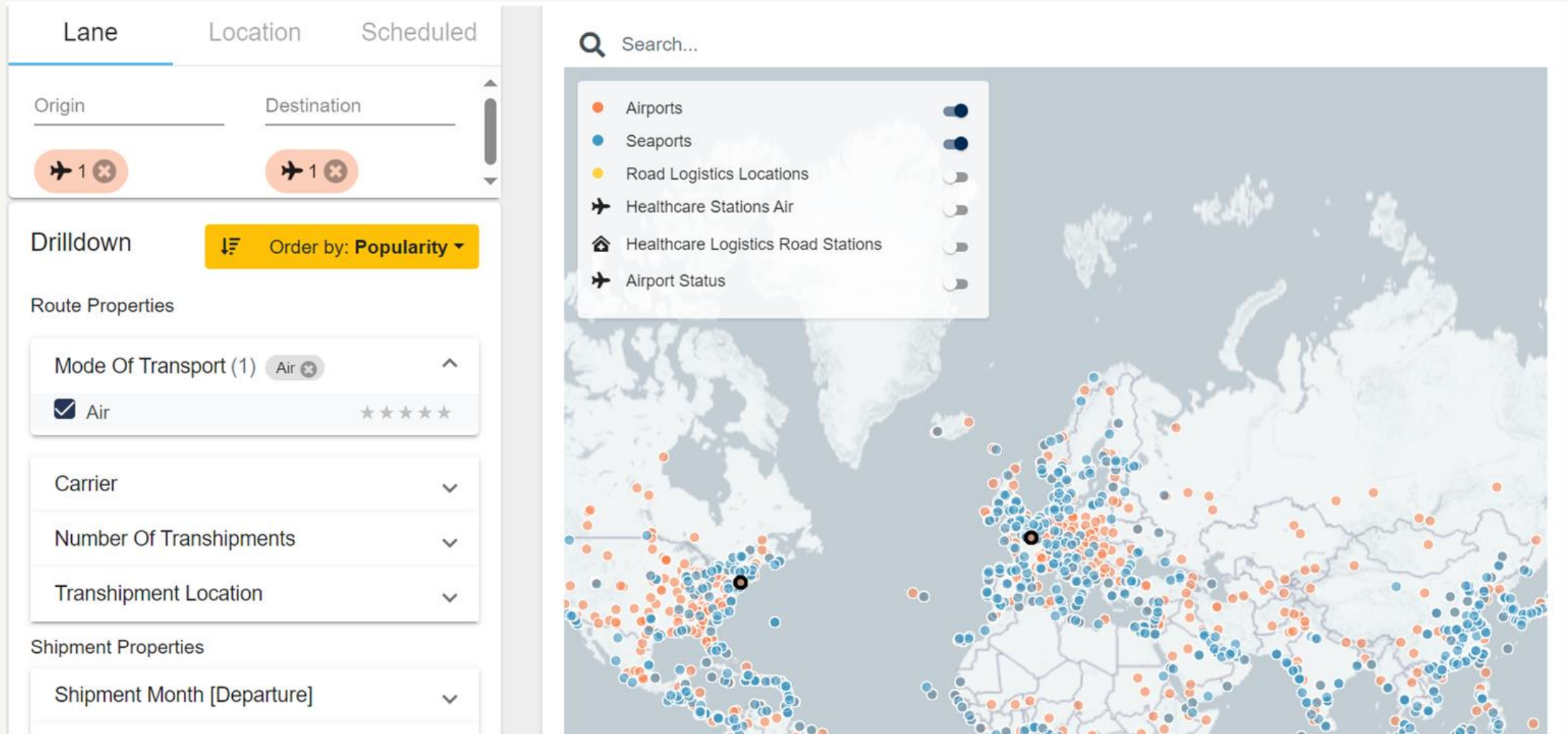
Eliminate mis-routings for my shipments completely

Reduce split shipments to less than 1 in 500 shipments



Network Analysis

Collect, organise, filter and generate actionable insights



The dashboard is divided into two main sections: a left-hand filter sidebar and a right-hand map view.

Filter Sidebar:

- Lane:** Origin, Destination
- Scheduled:** (Empty)
- Drilldown:** Order by: Popularity
- Route Properties:**
 - Mode Of Transport (1): Air
 - Carrier: (Dropdown)
 - Number Of Transhipments: (Dropdown)
 - Transhipment Location: (Dropdown)
- Shipment Properties:**
 - Shipment Month [Departure]: (Dropdown)

Map View:

- Search:** Search...
- Legend:**
 - Airports (Orange dot):
 - Seaports (Blue dot):
 - Road Logistics Locations (Yellow dot):
 - Healthcare Stations Air (Airplane icon):
 - Healthcare Logistics Road Stations (House icon):
 - Airport Status (Airplane icon):
- Map:** A map of Europe and surrounding regions with numerous colored dots representing the selected location types. Two black dots are highlighted on the map.

Network Analysis

Collect, organise, filter and generate actionable insights

Order by: **Alarm duration**

- Popularity All
- Transit time All
- Route map accuracy Air
- Release time Air, Sea
- Delivery on time Overland
- Delivery not late Overland
- Pickup on time Overland
- Alarm risk All
- Alarm duration All
- Alarms amplitude All




Routes (0) Order by: **Alarm duration**

CDG	→	JFK
Carrier		
Popularity	★★★★★	

CDG	→	JFK
Carrier		
Popularity	★★★★★	
Transit time	★★★★★	
Release time	★★★★★	
Route map accuracy	★★★★★	

CDG	→	JFK
Carrier		
Popularity	★★★★★	
Transit time	★★★★★	
Route map accuracy	★★★★★	

Routes (1) Order by: **Alarm risk**

LHR	→	JFK
Carrier		
Popularity	★★★★★	1552 shipments
Transit time	★★★★★	1 days (based on 61 shipments)
Release time	★★★★★	1 days (based on 958 shipments)
Route map accuracy	★★★☆☆	2 hours (based on 1546 shipments)
Alarm risk		12.5 % (based on 8 shipments)

Our key principles for responsible AI

At Kuehne+Nagel, we are committed to leveraging the potential of AI for our business. That is why we have been working on establishing some ground rules and guidelines that will help us as a company and all our employees in developing and deploying AI effectively – and responsibly.

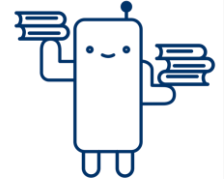
Put humans first, always



Design inclusively



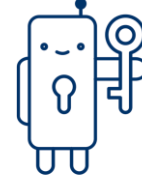
Promote fairness



Think green



Safeguard our IP



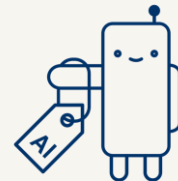
Protect our privacy



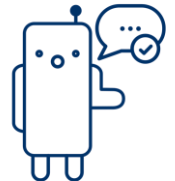
Keep it secure



Label it right



Speak up





**AI savvy leaders
are the way forwards**

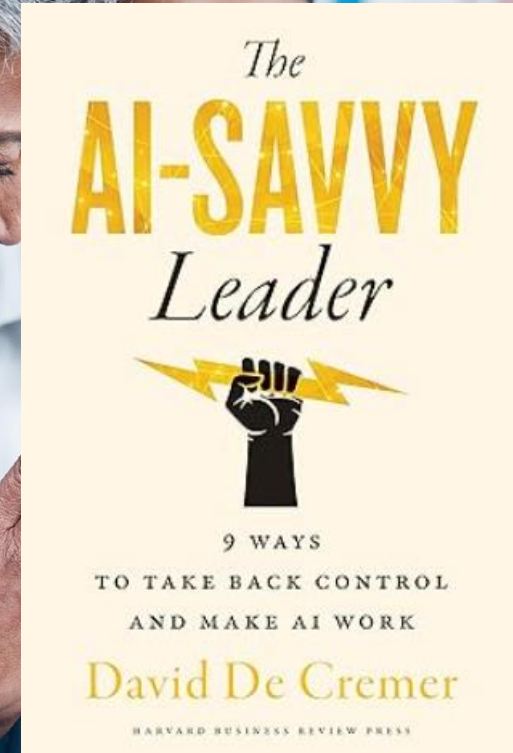
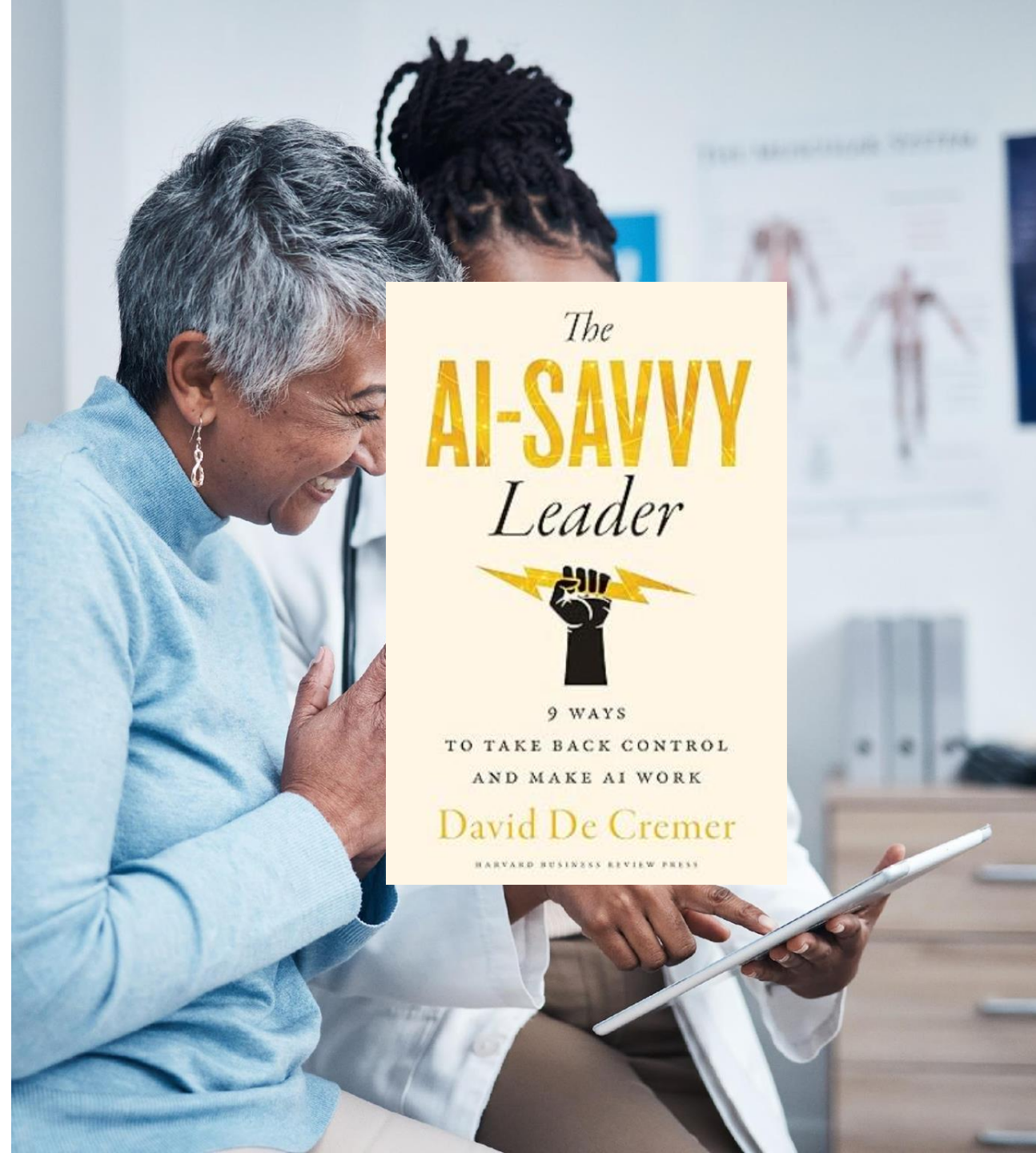
Data Gaps & Digitisation opportunities

- **Data Quality**
Complete and accurate in real-time
- **Consistent**
LSP : BOL, AWB, CMR
Shipper : SKU, inventory
- **Piece Level**
Technology and cost constraints
- **Upstream and downstream**
Priority on contracted activities, not overall supply chain visibility or patient benefit



Key takeaways

- **Digital**
Leverage digital and AI to innovate across the industry.
- **Sustainability & ESG**
Leverage low-carbon solutions and promote circularity along the entire value chain
- **Resilience**
Strengthen supply chains via proactive and multifaceted risk management.
- **Ecosystem**
Teamwork and data sharing. Patient outcomes improved through collaboration
- **AI wish to know more**
Read the AI-Savvy Leader by David De Cremer



Inspire. Empower. Deliver.

