

PUBLIC

INNOVATION
CENTER



LOGISTICS OF THE FUTURE

INNOVATION BEYOND POTENTIAL

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DR. KLAUS DOHRMANN

Vice President

Innovation Europe & Trend Research

DHL Customer Solutions & Innovation

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THE NEW NORMAL: SUPPLY CHAIN TRANSPARENCY IS KEY

- Supply chains will re-shape themselves with a focus on **resilience, flexibility, robustness,... and sustainability**
- Supply chains will have to be re-assessed, including **transportation flows and warehouse networks**
- **Supply chain innovation** will be essential
- **Collaboration** along the value chain is the enabler

“In the new normal, if your supply chain is the same as the one that you had pre-coronavirus, you’re probably doing something wrong.”

*Richard Wilding
Professor of Supply Chain Strategy,
Cranfield School of Management*



SUSTAINABILITY: THE CHALLENGE AHEAD



Targets

23% of Fortune 500 companies committed to be carbon neutral by 2030 (4xvs.2015)

Targets are **harder to reach than expected.**



Transport

14% of greenhouse gas emissions worldwide

Additional delivery vehicles needed by 2030, equaling 32% additional carbon emissions.



E-Commerce

60% return rates in some product categories

Significant **emissions** growth



Packaging

One truckload of plastic enters the ocean **each min**

This is set to **Quadruple by 2050**

THE DHL LOGISTICS TREND RADAR™



High Impact:
revolutionary applications that are potentially disruptive

Low Impact:
evolutionary changes with incremental improvements

Relevancy:
when a trend will become ubiquitous or commonplace in the logistics industry as a whole

TECHNOLOGY CASE STUDY

Inventory optimization & digital twin for a leading Asian airline



Challenges

- **Rising costs** and **lower margins**
- Huge **amounts of available data** but no feasible means of meaningful analysis
- Lack of **end-to-end visibility** in SKU movement



Solution

- **Automated data crawling** and extraction through custom-built RPA
 - New source of data made accessible for internal analysis
- Creation of a network **digital twin**
- Identified **cost saving** opportunities with statistical analysis



BUSINESS IMPACT

**Significant reduction of
annual Cost Spend for a
limited part of the network**

**Inventory Transport
& Storage
optimization**

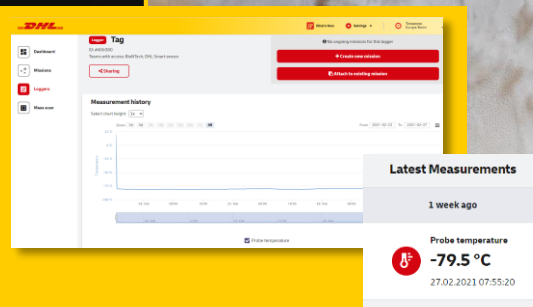
**Identified Fuel
Saving
opportunities**

TECHNOLOGY CASE STUDY

Shipment Condition & Energy Monitoring



Vaccine Distribution

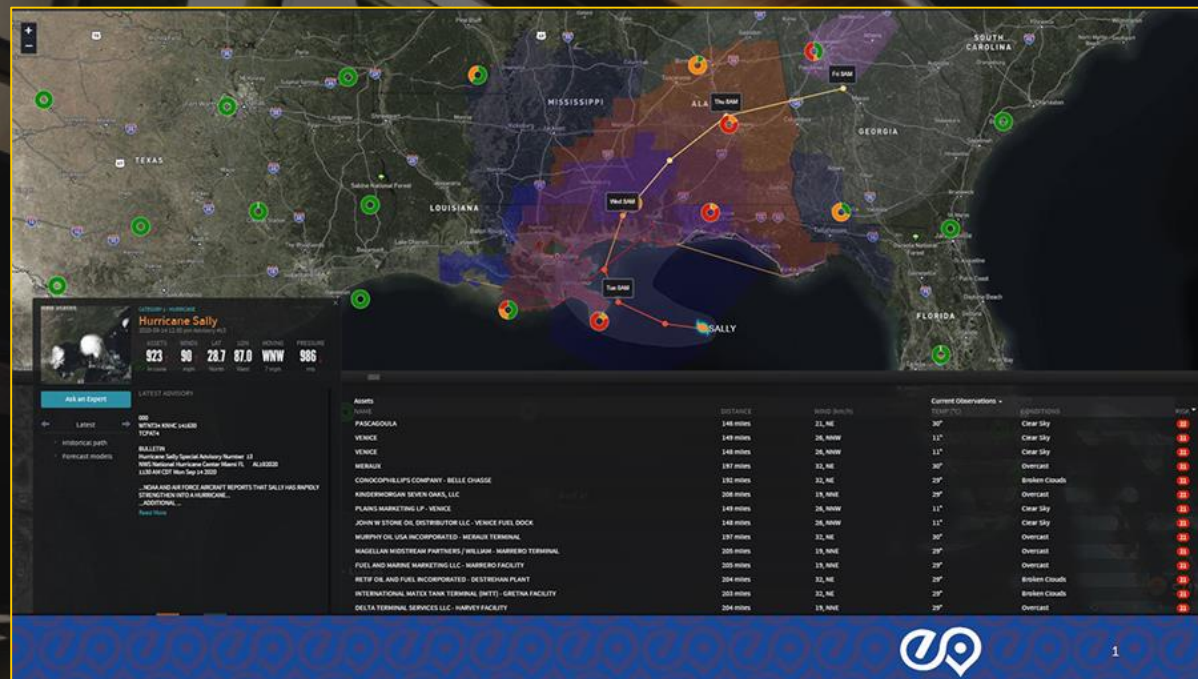


Warehouse Operations



TECHNOLOGY CASE STUDY

Predictive and real-time Risk Insights



Risk Management platform

- Mapping supply chains & locations
- Building risk profiles
- Identifying critical hotspots
- Mitigate supplier risks
- Real-time visibility of shipment status, risk and adjusted ETA



Clean operations for climate protection



DPDHL will invest **€7 billion until 2030 in Clean Operations** to reduce our emissions to under 29 million tonnes by 2030 and thereby commit to Science Based Targets initiative (SBTi)



Target **>30% Sustainable Aviation Fuels blending** by 2030 in our airfreight business



Electrify 60% of last-mile delivery vehicles & grow **sustainable fuel share in line-haul** on average **to >30%** by 2030



Carbon neutral design to be used for all new buildings



Increase the usage of **Sustainable Marine Fuel** for our FCL & LCL shipments



Offer **green alternatives for all of our core products/solutions** by using, for example sustainable fuels and low carbon technologies

THE ERA OF **LOGISTICS**

**THE DHL LOGISTICS &
SUPPLY CHAIN SUMMIT**

16 – 17 June 2021



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LOGISTICS IS DELIVERING CUSTOMER PROMISE & EXPERIENCE

Supply chain transformation from a cost driver to a value driver

THANK YOU!



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