

UNLOCKING THE FULL POWER OF THE E-COMMERCE BOOM

DIGI X E-COMMERCE
#DIGIFRIDAYS



#DIGIFRIDAYS



DIGI x ESG

June 2nd

@15.00 CEST



DIGI x E-commerce

June 16th

@15.00 CEST



DIGI x Automation

June 9th

@15.00 CEST



DIGI x CX

June 23rd

@15.00 CEST





**DIGI x
E-COMMERCE
#DIGIFRIDAYS**

**Digi x E-commerce
Unlocking the full power of
the e-commerce boom**

Konstantin Peris
SVP Digital Customer Interactions
DHL Customer Solutions & Innovations

**Digital Experience at
DHL eCommerce Solutions**

Ralf Pankotsch
VP IT Systems
DHL eCommerce Solutions

**Seizing the re-commerce
opportunities through
digitalization**

Nabil Malouli
SVP Global E-commerce and Returns
DHL Supply Chain

**Cutting through customs with
Artificial Intelligence**

Thorsten Kranz
Head of Data Science Implementation
DPDHL Group



UNLOCKING THE FULL POWER OF THE E-COMMERCE BOOM DIGI X E-COMMERCE

KONSTANTIN PERIS

SVP DIGITAL CUSTOMER INTERACTIONS

DHL CUSTOMER SOLUTIONS & INNOVATIONS



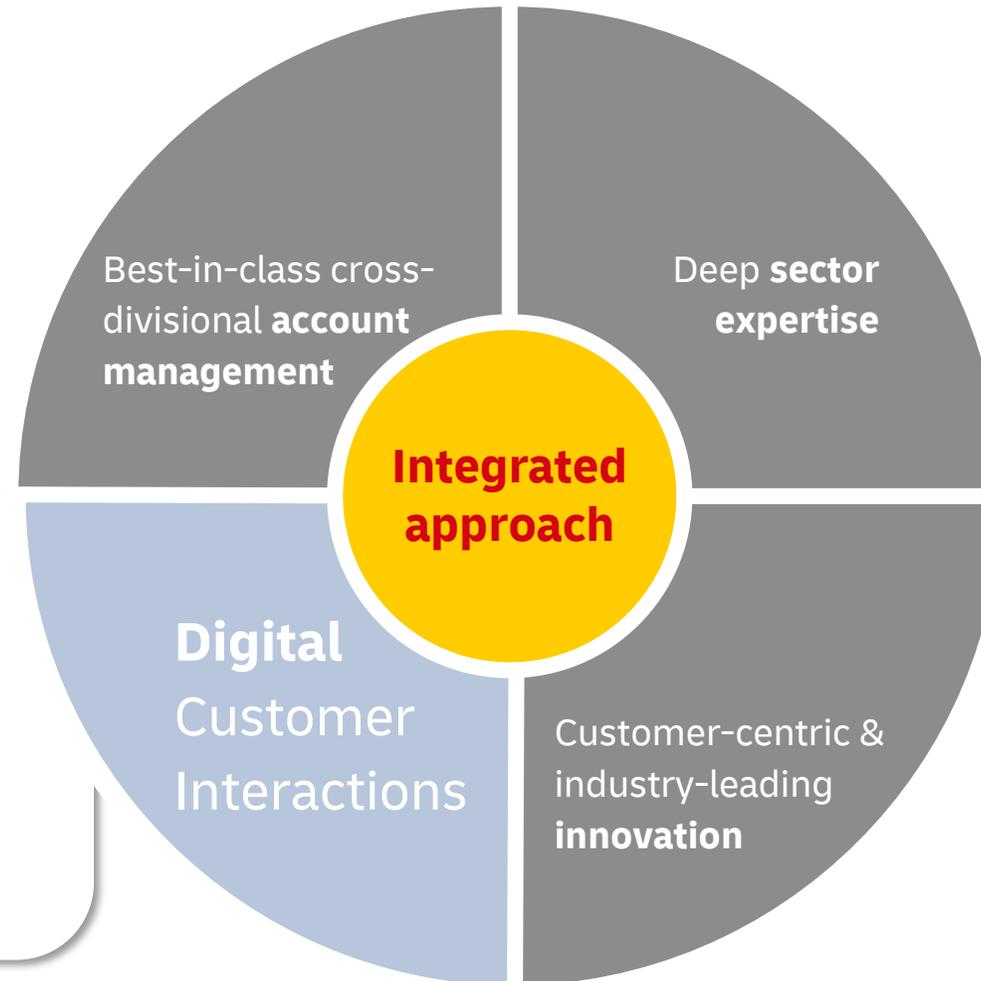
DHL Customer Solutions and Innovation (CSI) manages the Top-100 customers of the group and digital customer interactions at group-level



Konstantin Peris

SVP Digital Customer Interactions

- Happy Customers
- Profitable Growth
- Digital Shine



Four important trends that will shape the industry going forward



GLOBALIZATION



E-COMMERCE



DIGITALIZATION



SUSTAINABILITY

E-commerce is here to stay and a positive logistics experience is key

+48%

DHL Express B2C Shipments/Day
Q1 2023 vs. Q1 2019

+74%

**DHL eCommerce Solutions B2C
Volumes Europe**
Q1 2023 vs. Q1 2019

+21%

DHL Parcel Germany Volumes
Q1 2023 vs. Q1 2019



**78% of consumers
unlikely to buy again
from a brand after
negative delivery
experience.**

Source: Auctane

What does our offering along e-commerce logistics value chain look like?



Inbound

Fulfillment

Delivery

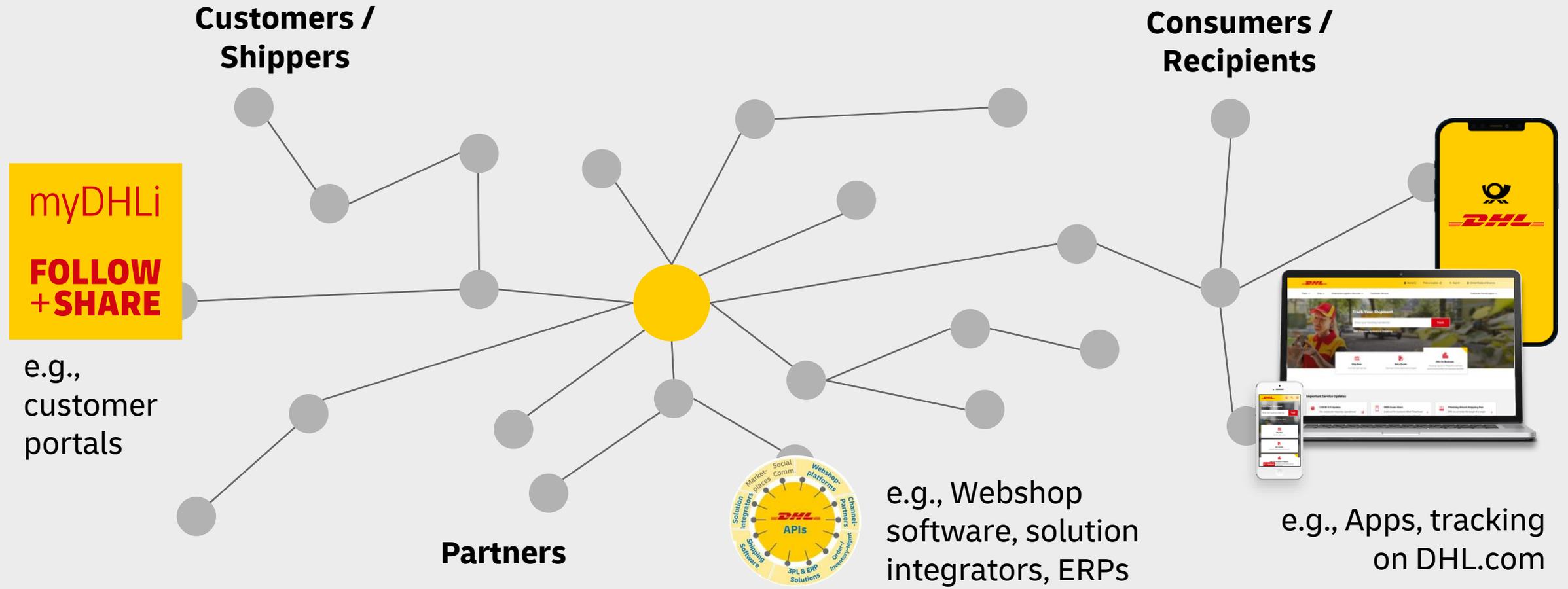
Return

ENABLING E-COMMERCE THROUGHOUT THE ENTIRE LOGISTICS VALUE CHAIN

Where digitalization improves our e-commerce offering



In the e-commerce ecosystem, APIs are “hidden heroes” (invisible connectors between all parties)



The concrete e-commerce set up of each customer is unique



DHL APIs allow quick, secure and seamless data transfer

Our efforts in digitalization improve our customers' success in e-commerce



**Digital Experience at
DHL eCommerce Solutions**
Ralf Pankotsch



**Seizing the re-commerce
opportunities through
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Nabil Malouli



**Cutting through customs with
Artificial Intelligence**
Thorsten Kranz

DIGITAL EXPERIENCE AT DHL ECOMMERCE SOLUTIONS

ACHIEVING LIMITLESS GROWTH IN A
WORLD POWERED BY E-COMMERCE

RALF PANKOTSCH
VP IT SYSTEMS
DHL ECOMMERCE SOLUTIONS



eCommerce Solutions provides World-Class Parcel Logistics

Services mainly for e-tailers in B2B and B2C space around the globe



Core business

Domestic Last Mile

- In **selected countries outside of Germany**
- This includes **Europe, US** and selected emerging markets in **Asia Pacific**, incl. India



We focus
on Domestic and non-TDI* Parcel delivery

Non-TDI Cross-border

- Commercial capabilities – primarily **to/from and intra-Europe**
- Parcel Connect in Europe a **strong and growing platform** as basis for future growth

*non-Time Definite International Parcel delivery

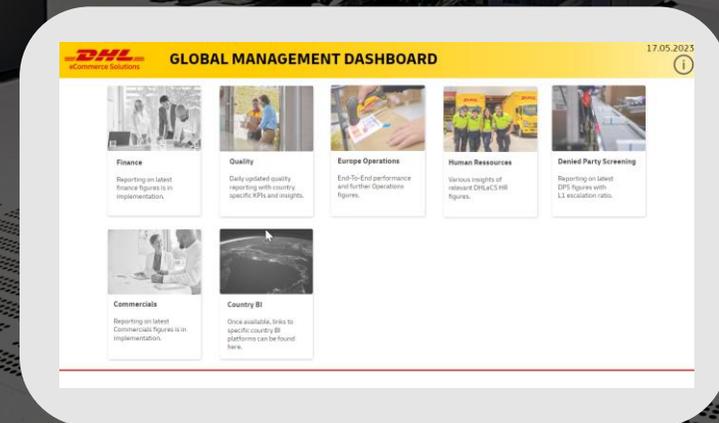
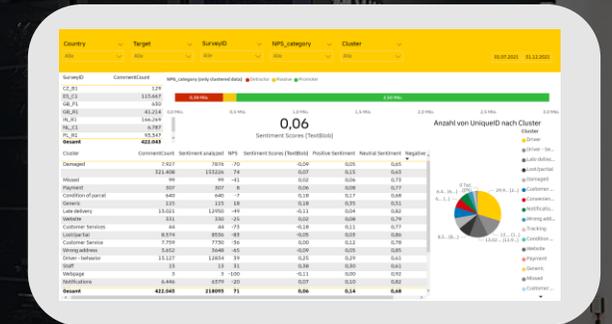
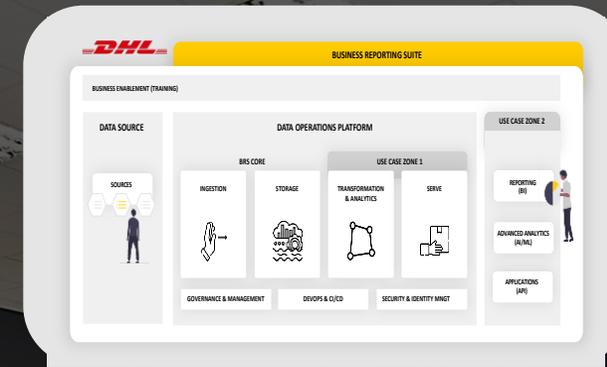
Data as a product

Global DeCS Data-Lake technology

- Microsoft Azure & Databricks
- PowerBI Reporting Suite
- Datarobot advanced analytics
- Near future: Generative AI (ChatGPT, MS-Fabric) exposed via DPDHL AI Hub

Dashboards & Reports

- Customer Carbon Reporting
- Global Quality Reporting
- Volume Reporting & Forecasting



Advanced Pricing Tool

Technology

- e-cloud based SaaS Platform “Open Pricer”
- Integration in Salesforce.com & SAP
- API based rating engine

Core Features (examples)

- Fair Price Benchmarking using modern machine learning
- Profitability Analysis
- Customer Segment Analysis supported by AI
- Sales KPI Monitoring

Origin Countries (Parcel Return not - Easy Returns)	Flat Rate	Shipment	GM %	Revenue
AT-Austria	All	7.0	20.5%	44.80
BE-Belgium	All	10.0	20.5%	66.50
BG-Bulgaria	All	5.0	20.3%	59.50
CY-Cyprus	All	5.0	20.4%	50.78
CZ-Czech Republic	All	5.0	20.4%	31.00
DE-Germany	All	30.0	20.3%	96.00
DK-Denmark	All	8.0	20.4%	63.20
EE-Estonia	All	5.0	20.4%	37.00
ES-Spain	All	15.0	20.5%	108.75
FI-Finland	All	10.0	20.3%	79.00
FR-France	All	20.0	20.2%	184.00



NET REVENUE	DIRECT COSTS	GROSS MARGIN	NET MARGIN
7,640.20 EUR	5,334.41 EUR	30.2%	30.2%
	TOTAL COSTS 5,334.41 EUR	2,306.79 EUR	2,306.79 EUR

Gross Margin: 2,306 EUR (30.2%)			
Element	Revenue EUR	Cost EUR	Per Shipments EUR
Gross price	7,640.20		7.34
Contract discounts & surcharges	-0.00		-0.00
► Pickup		1,056.04	1.01
► Terminal Handling		488.29	0.45
► Linehaul			
► Delivery			
► Customs Clearance			
► Other Direct			
► Indirect			



Digital Products in operations and last-mile delivery

Technology

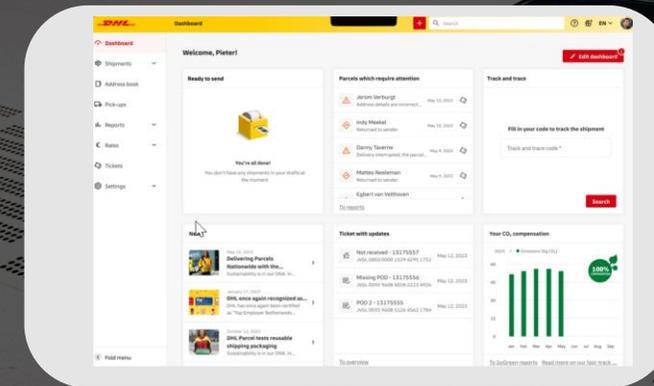
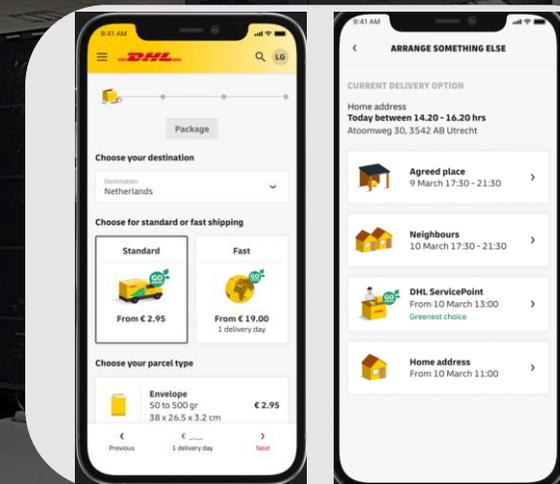
- React frontend
- Java / Scala backend
- Kafka event processing

Core Features (examples)

- What3Words integration
- Delivery time prediction
- Pick-up ordering
- Shipment tracking



The Last Drop Off | DHL x what3words



Design of new products & services

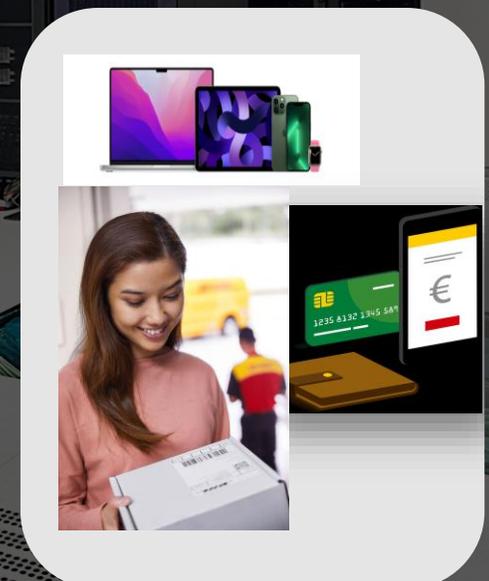
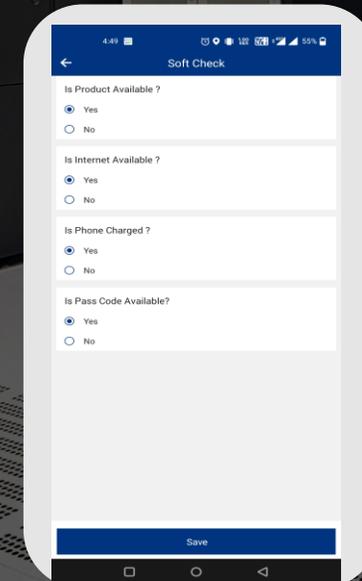
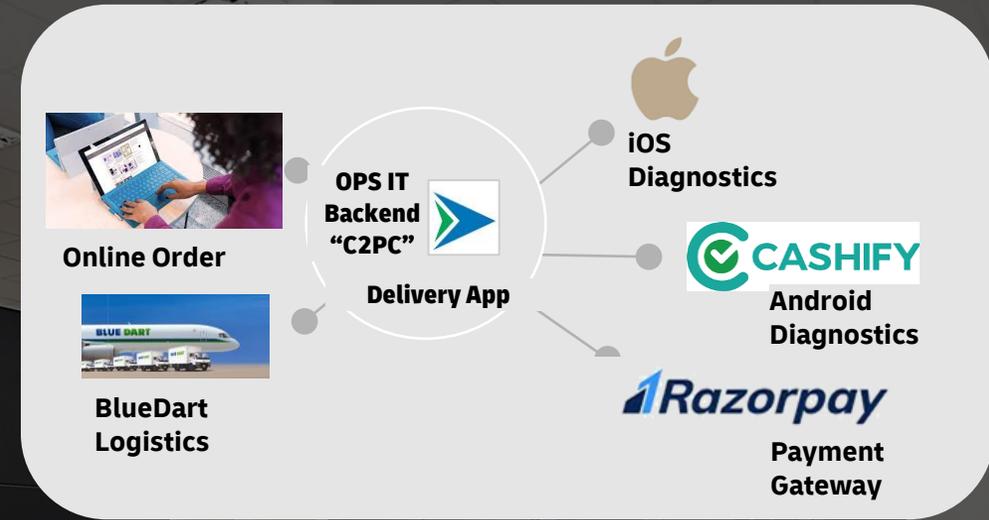
BlueDart Hi-Tech device exchange

Technology

- FarEye delivery app
- iOS & Android diagnostic integrated
- Razorpay gateway integrated

Core Features (examples)

- Delivery & exchange of Mobile Devices
- Multiple big brands integrated
- Technical checks at doorstep
- Payment & returns handling



BlueDart Express provides delivery and exchange service for high-end mobile devices at the doorstep

Step 1

- ❖ Consumer buys new device online incl. trade in option

Step 2

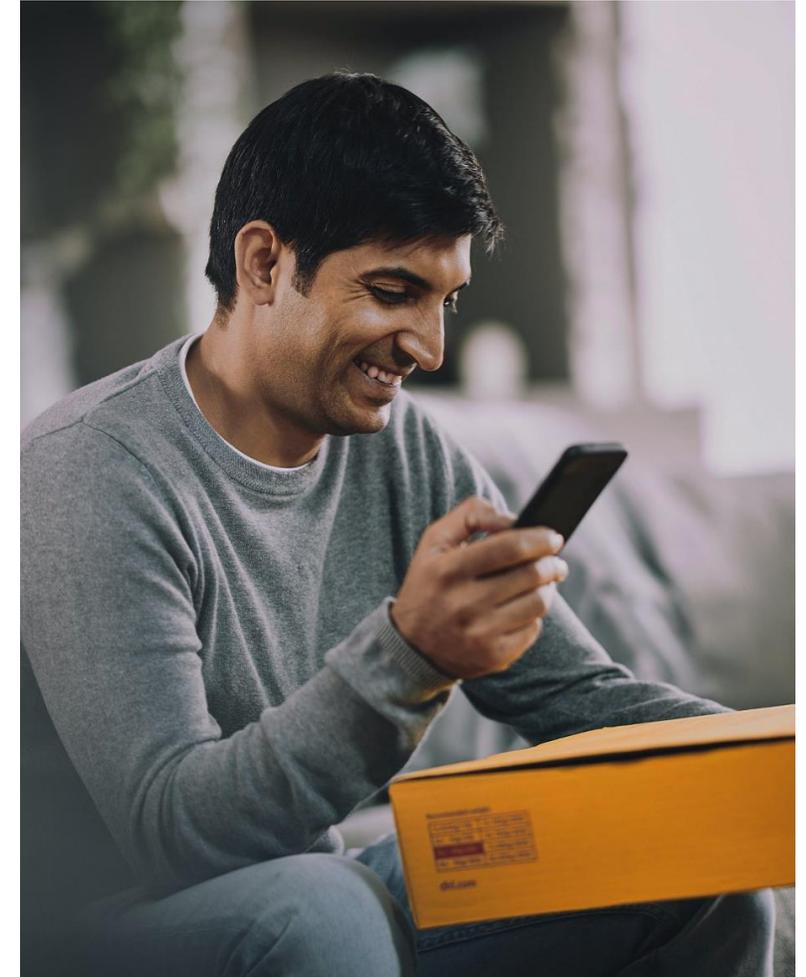
- ❖ BlueDart Customer Service arranges delivery date

Step 3

- ❖ Technical & functional checks
- ❖ Commercial offer

Step 4

- ❖ Handout new device
- ❖ Handle payment
- ❖ Return old device



SEIZING THE RE-COMMERCE OPPORTUNITIES THROUGH DIGITALIZATION

**GREAT FOR THE PLANET.
GREAT FOR THE WALLET.**

NABIL MALOULI

SVP GLOBAL E-COMMERCE & RETURNS
DHL SUPPLY CHAIN



Re-commerce market is booming! Projected to reach \$350bn by 2027! So are the supply chain activities!!

Reverse logistics market for re-commerce is expected to reach **\$24bn by 2027**, presenting a very attractive opportunity*

Walmart launches product refurbishment program

Published Aug. 1, 2022

Nike launches shoe refurbishment program with focus on saving the environment

The company plans to reduce its waste footprint with the campaign

SUSTAINABILITY / ENVIRONMENT

Global Secondhand Market to Reach \$350 Billion by 2027, ThredUp Says

Resale is hot, but is it set to sustain momentum against fast-fashion heavyweights?

Carhartt Launches Resale Program for Recycling Worn Jackets, Coveralls, and More

lululemon Expands Like New Resale Program to All U.S. Stores Beginning This Earth Day

Apr 12, 2022

*Sources: DHL Consulting Research, Statista, Straits Research

Why re-commerce presents a great opportunity for companies

Sustainability, consumer satisfaction, margin erosion are all key elements!



Sustainability & Circularity

88 companies launched resale programs last 12 months



Consumer Satisfaction

Returns process is linked to consumer refund



Margin Erosion

Destroy less, resell better, resell more



Unsolved Problem

Double touch and long recovery times



Regulations

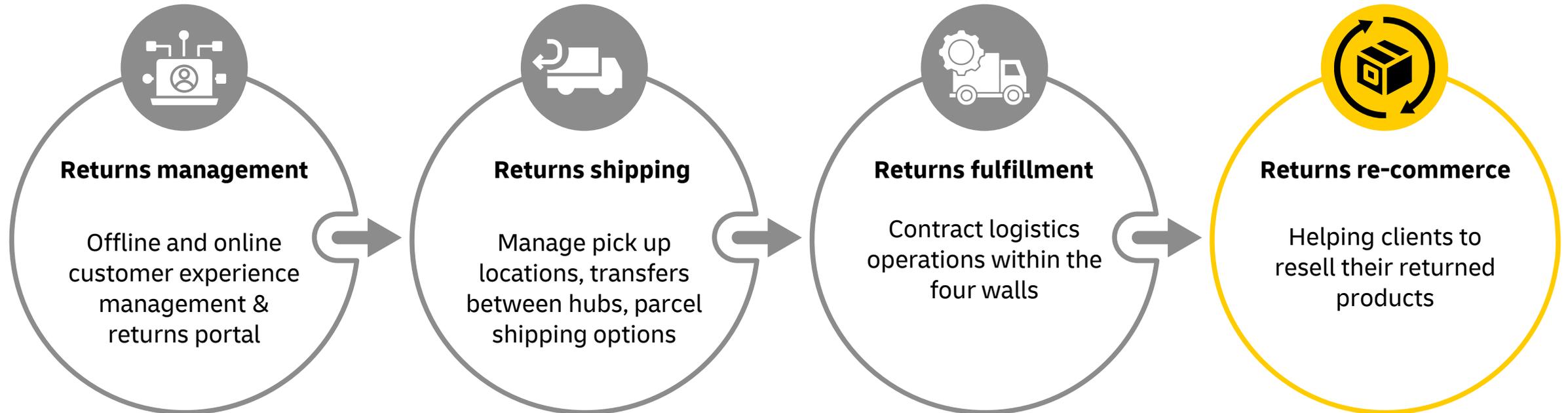
Rise of regulations such as Waste Framework Directive



High Cost

Additional logistics costs to return a product

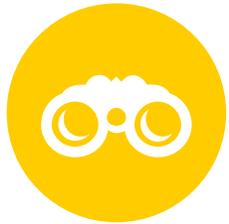
The reverse logistics journey is complex



To make re-commerce viable, financially and operationally, a sophisticated and effective end-to-end reverse logistics supply chain is required

How is DHL helping customers?

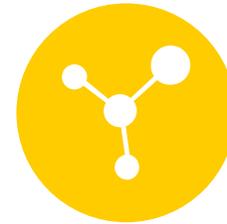
End-to-end Reverse Logistics solution at scale through best-in-class technology



Traceability & visibility
through **one software solution**



State of the art **return functionalities & features**



Ecosystem of integration
with re-commerce sales channels

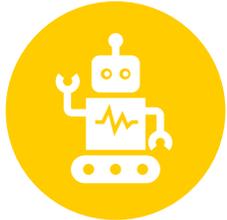
PROVEN BENEFITS

- Management of **large-scale return volume** (i.e.: +25M/Year per site)
- **+30% gains in productivity** in return processing
- **Reduction of destroyed products** by 20%



How is DHL helping customers?

Automation enables faster processing and enhancements of productivity



Deployment of
**automation tools e.g.
assisted picking robots**
(Locus robotics)



Automation **increases speed
of processing** to reduce
inventory carrying cost



PROVEN BENEFITS

- Faster **“available to sell”** status through **re-fulfillment and shipping**
- **25% cost reductions** through automation
- Synergies through **activities under one single operation** with one inventory pool

We leverage technologies to help brands & retailers unlock their re-commerce

Customer testimony

“More sales from positive returns experience in a Market Strategic and Cost-effective Location, leveraging Efficient and Innovative approach”

SVP Global Logistics & Distribution
Global Leading Sportswear Brand



Speed & Efficiency

+97% dock to stock within
24 hours



Operational execution at scale

Managing dedicated regional
return centers processing more
than 125M units per year globally



Omnichannel reverse logistics

Ability to process B2C & B2B into
the same operation



End-to-end supply chain solution

Enabling the management of return
portal, return shipping & return
fulfillment and resale

CUTTING THROUGH CUSTOMS WITH AI

PRODUCT CLASSIFICATION TOOL

THORSTEN KRANZ

HEAD OF DATA SCIENCE IMPLEMENTATION
DPDHL GROUP



DIGI x
ECOMMERCE
#DIGIFRIDAYS

Connecting People, Improving Lives ACROSS BORDERS

A connected world with barriers

Global trade is essential.
Existing and growing **customs requirements** are complex.

Customs processes are expensive

The **complexity and scale of customs processes** are a challenge for our network and imply significant costs. Efficient mitigation is a critical success factor.

Best-in-class internal solution

Providing leading edge solutions for **customs process automation**. Accurate, reliable and compliant.

AI-based Product Classification Tool (PCT) predicts customs codes for cross-border shipments and helps automating customs clearance processes.

With the rise of x-border e-commerce, PCT is a great support for our customs clearance processes



Acceleration of processes

Product Classification API accelerated customs clearance by **automatically providing customs codes**



Supporting Customs Audit

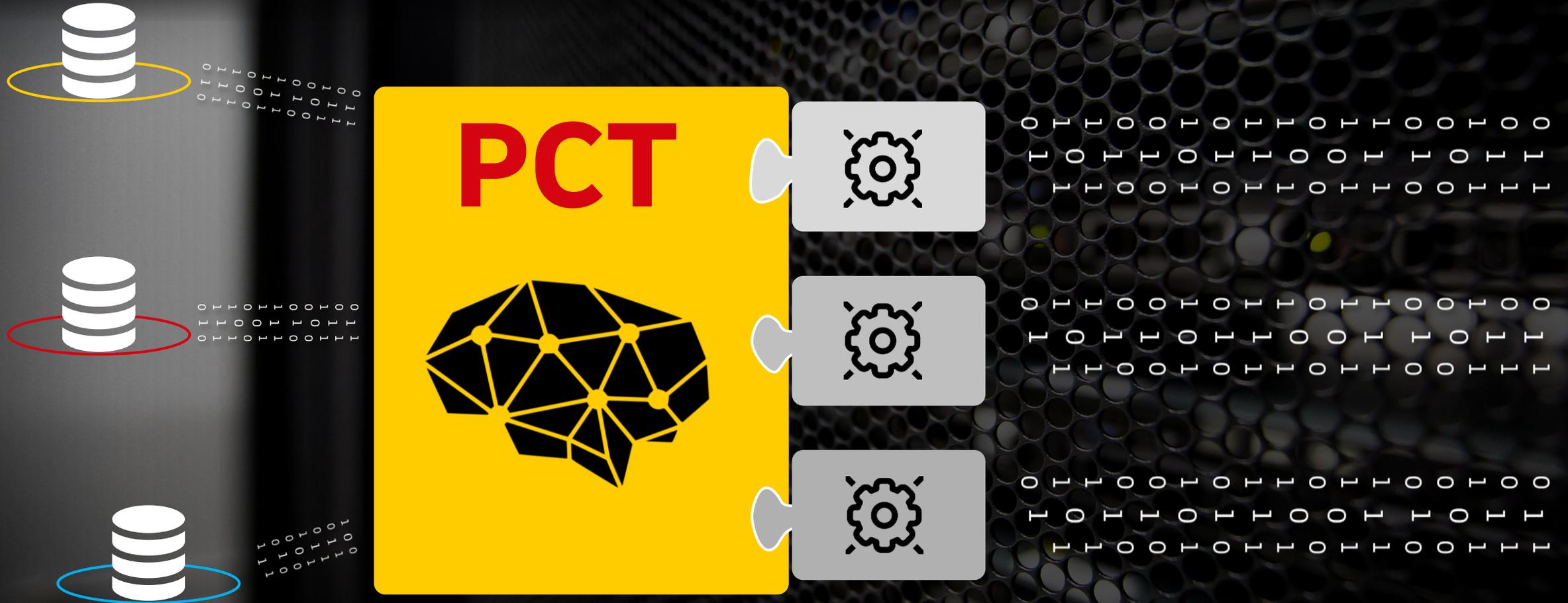
Product Classification models **trained on holistic DPDHL customs data assets** also used during **customs audit**



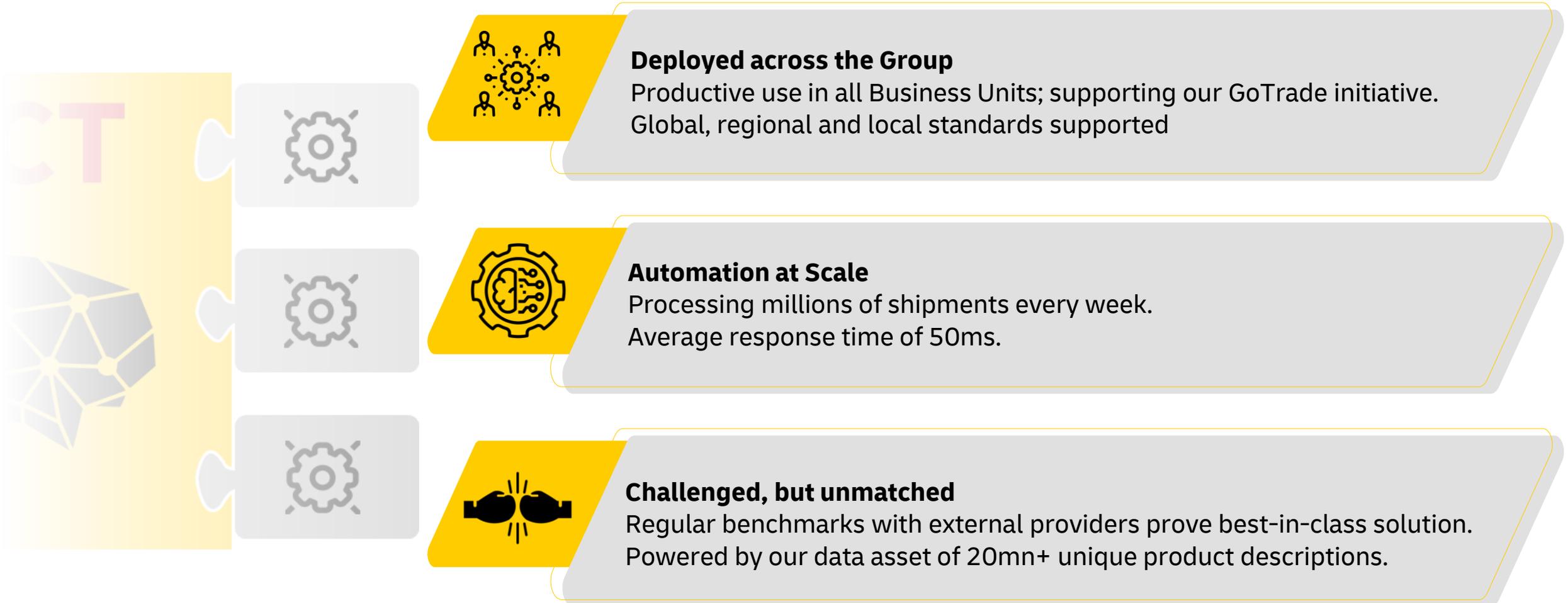
Improve Master Data Quality

Product Classification Tool **recommends potential customs codes to customers** improving data for x-border shipments

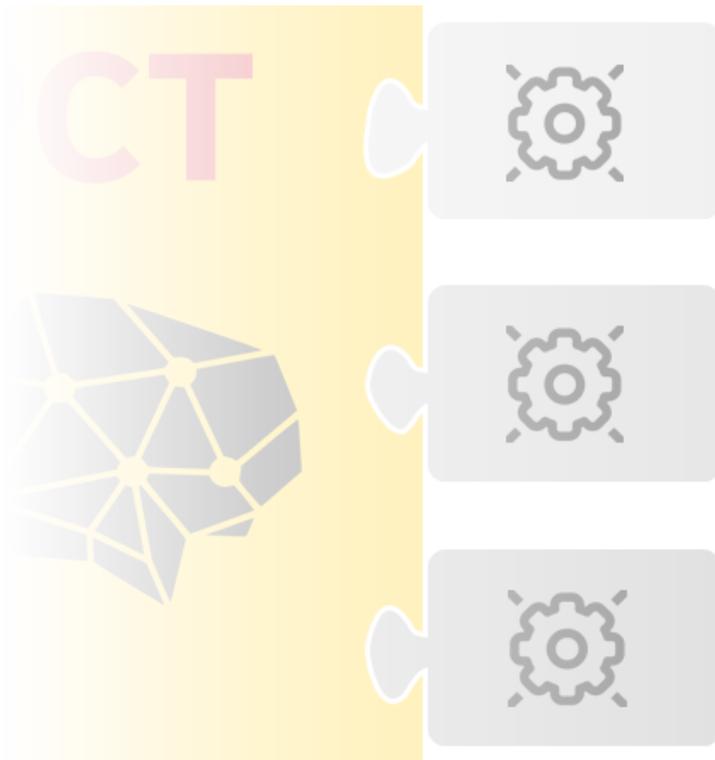
We are leveraging internal data sources to provide tailored, highly accurate solutions that can be plugged into existing IT landscapes



PCT is a cross-divisional solution used by EXP, DeCS, P&P and DGF



Cross-divisional solution: Automation at scale



DHL Express

Automated classification of import shipments either with global or local standard

DHL eCommerce Solutions

Automated classification of EU import shipment

Post & Parcel Germany

Automated classification of German import letter (“Post International”)

DHL Global Forwarding

Monthly customs audit through rule-based validations with machine learning based predictions

We are supporting SMEs in emerging economies through GoTrade

Trade Facilitation

- Connecting People. Improving Lives. In a sustainable way.



Help Growing Together

- When trade grows, we grow. Through proactively steering trade environments, we support market growth.



Win-Win

- Countries benefit from DPDHL's knowledge & expertise while future customers are exposed to our service capabilities.



Providing PCT as an interactive tool for GoTrade

Product Classification Tool

Which product do you want to classify?
rum samples in boxes

Chapter	Confidence	Description
22	Very likely	Beverages, spirits and vinegar
08	Very likely	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol; spirits, liqueurs and other spirituous beverages

Select Subheading

Subheading	Confidence	Description
40	Very likely	Rum and other spirits obtained by distilling fermented sugar-cane products
30	Unlikely	Whiskies
70	Unlikely	Liqueurs and cordials
60	Unlikely	Vodka

AI-based recommendations: 610910 (Very likely), 610920 (Likely), 610930 (Not likely)

Interactive selection of final customs code: 610910 ✓

PCT benefits and outcomes



Reduce cost

With a fully automated process for AI-based assigning customs codes the cost for manual labour can be reduced.



Customer satisfaction

Fully landed cost can be displayed before checkout. Shipments are received faster.



Lower CO2e footprint

Correct customs codes reduce unnecessary shipping and vehicle usage caused by returns.



Easy to implement

The API service can be easily integrated into existing systems.



Reliable service

Automated cloud-based solution makes sure that data and services are available and accessible 24x7. Autoscaling enables usage for millions of requests.



Faster delivery time

Goods will clear customs faster and can be delivered to the recipient in time.

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