

MODELO DE INNOVACION EN LA INDUSTRIA LOGISTICA EL CASO DE DHL

Panama Logistics Summit 2016

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Camara Maritima de Panama
Panama City, Marzo 2016

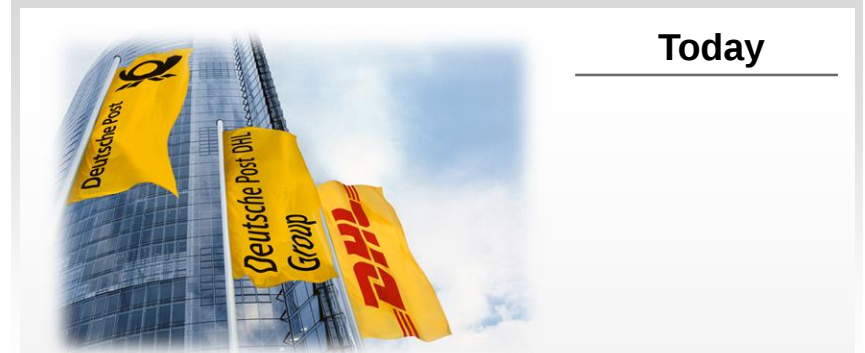
Deutsche Post DHL
Group

From the very beginning, innovation was part of our company DNA



A history of innovation

- 1490: First postal network with regular service across Germany
- 1815: Danzas invents forwarding business
- 1969: DHL invents international express



Today

- ~ 480,000 team members
- > 220 countries and territories
- Shaping the logistics industry

Passion, entrepreneurship and hard work

DHL Innovation Center: A platform to inspire, connect and engage



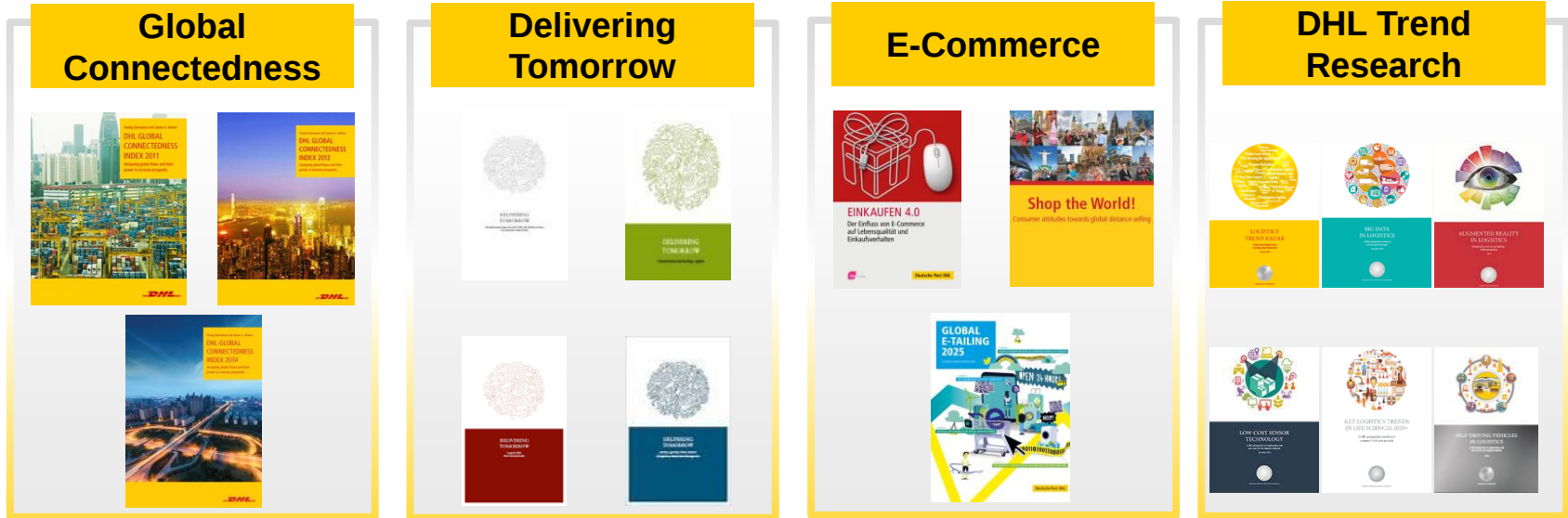
Customer-centric innovation

- » Transforming trends and market insights into new business concepts and prototypes
- » Long-term partnerships with customers and academic elites
- » Network of over 50 DHL experts and partners in innovation center

How do we see the future?

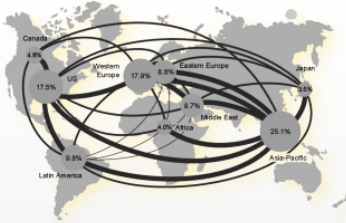
A hand in a blue suit jacket points towards a globe. The globe is surrounded by various yellow icons: a shopping cart, a laptop, a target, a magnifying glass, a padlock, and several airplanes. Yellow lines connect these icons, suggesting a global network or supply chain.

Deutsche Post DHL: On the Pulse of New Global Paradigms and Trends



The New Global Context: Globalization, volatility and stakeholder engagement

Global Connectedness



- Global connectedness is a **key engine for peace and prosperity**.
- **Advanced economies** have not kept up with the big shift of activity to emerging markets.
- Biggest threat to globalization: Policy fumbles and **protectionism**

Delivering Tomorrow



- Complex landscape with **increasing volatility**
- Key challenges for future logistics services:
 - **Creating value** via stakeholder engagement
 - Business innovation and green demand driving **carbon-efficient logistics**
 - **Automation and big data** transforming the industry

Booming E-Commerce: The “New Normal” in Shopping



E-Commerce changes the way we live on a global scale

- **EUR 616 bn** in global distance selling in 2013;
expected **annual growth of 10.7%** (2013–2018)
- Largest growth expected in **China** (24.5%), **Mexico** (16.5%)
and **Australia** (16.4%)
- Key aspects of potential future e-commerce scenarios:
 - Everywhere commerce (online & offline)
 - “Always on” lifestyle (3D fab labs)
 - Predictive purchasing
 - New recycling, leasing and sharing models



DHL Trend Research: Insight today, value tomorrow



1 Augmented reality in logistics

Changing the way we see logistics



Warehouse operations

- Staff equipped with smart glasses (barcode scan, step-by-step instructions, increased productivity, less errors)



Freight transportation

- Dynamic traffic support (e.g. cargo temperature, vehicle status, surrounding threats)



Last mile

- Optimized parcel loading; last-meter navigation in delivery

2

Self-driving vehicles in logistics



Huge potential of autonomous technologies



Warehouse operations

- Autonomous loading and transport of small goods alone or connected in flexible conveyor systems



Outdoor logistics operations

- e.g. in yards, harbors, airport environment



Linehaul transportation

- e.g. assisted highway trucking

Logistics on a transformational path



**More operational efficiency, better customer experience,
new business models**

- » Optimal shift planning in retail stores
- » Avoid out-of-stock conditions for customers
- » Operational capacity planning

4

Internet of Things in logistics



Connecting the Unconnected

- » **Estimate: 50 bn devices connected to the internet by 2020**
(compared to 15 bn today)
- » **The Internet of Things as a catalyst for growth and enabler of global transformation** (USD 8 trillion worldwide in Value at Stake over the next decade)
 - USD 1.9 trillion impact in supply chain and logistics over the next decade ¹⁾
 - More last-mile delivery options
 - More efficient operations and transportation

1) Economic analysis of Cisco, co-author of Internet of Things Trend Report



How do we innovate to meet new trends and demands?





Data-Driven Responses to the New Global Context:

Increasing transparency as a basis for improvement

DHL **GOGREEN** CARBON DASHBOARD



DHL Carbon Dashboard 2.0

Greater carbon emissions transparency

- Web platform, measuring the customer's carbon efficiency and comparing it with industry benchmarks
- IT application on emission resources on country, regional and trade lane level
- Helps to identify pain points and cost improvement potential

B

Technology-Driven Responses to the New Global Context:

Use cases of carbon-free delivery and delivery drones

StreetScooter

*Bonn: Model city
for carbon-free
delivery since 2013*



- Electric delivery van, specifically developed for Deutsche Post
- Range: up to 120 km; Length: 4.6 m; max. speed of 85 km/h; lithium-ion battery and asynchronous drive motor delivering 30/45 kW of output

DHL Parcelcopter



- Unique pilot project on the North Sea island of Juist
- For the 1st time worldwide, medications and other urgently needed goods delivered to the island at certain times by delivery drone

C People-Driven Responses to the New Global Context: Group-wide engagement & cultural change initiative to drive service quality

More than 80%
of all employees to be certified
globally by 2020

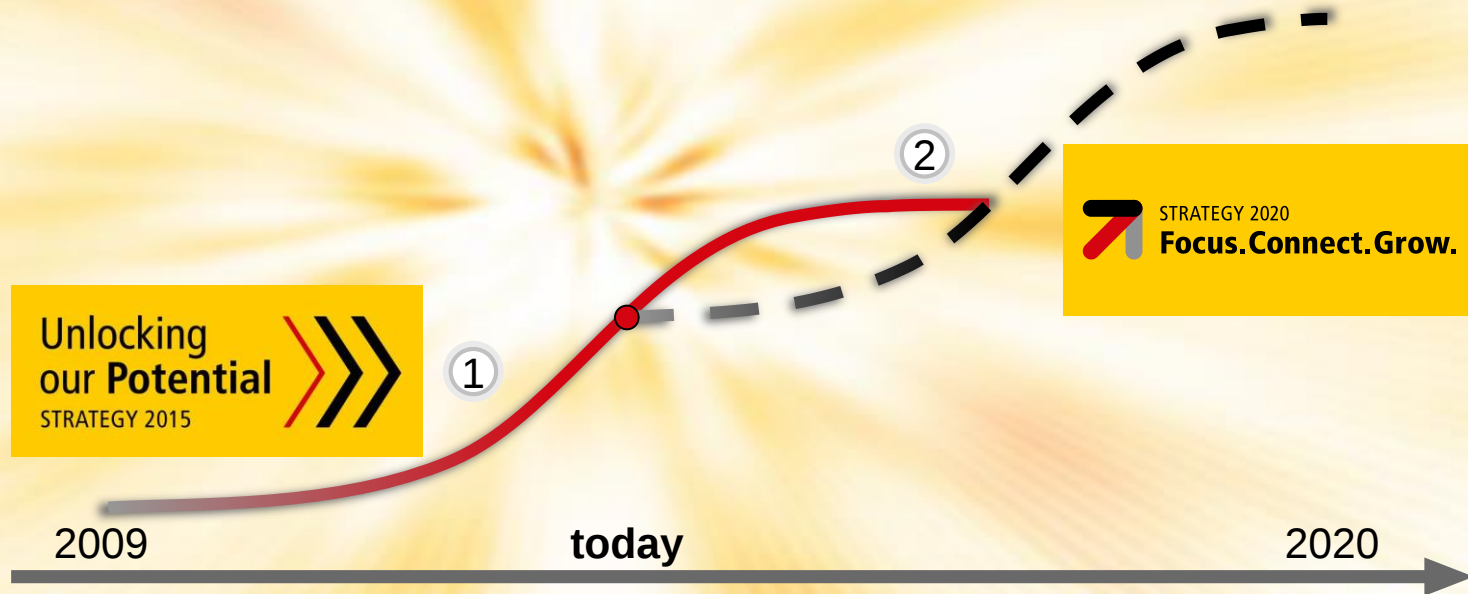


Certified Specialists in everything we do

- Ensuring all employees have the skills and knowledge needed to **delight the customer**
- **Engage, excite and empower** employees through inspirational leadership
- Foundation to **enhance all stages of the employee lifecycle**

How do we define our strategic framework for the future?

Ready for the next development step



Our Plan Through 2020



STRATEGY 2020

Focus.Connect.Grow.

Focus.



Industry-leading performance

- Logistics remains our core
- A family of divisions

Connect.



Quality and service excellence

- Certified specialists for everything we do
- Connecting across the organization

Grow.



Find and capture new opportunities

- eCommerce logistics leadership
- Emerging Markets growth

Our Aspiration for 2020: We define logistics.



When people think of logistics,
we want them to think Deutsche Post DHL

WE are the
most global

WE are the
quality leader

WE are most
customer-centric

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