LESSONS LEARNED FROM CLEAN SWEEP CDW

Using Enterprise Architecture to Attain Full Benefits from Corporate Big Data while Refurbishing Legacy Work Systems

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IT Express Europe

DHL Express

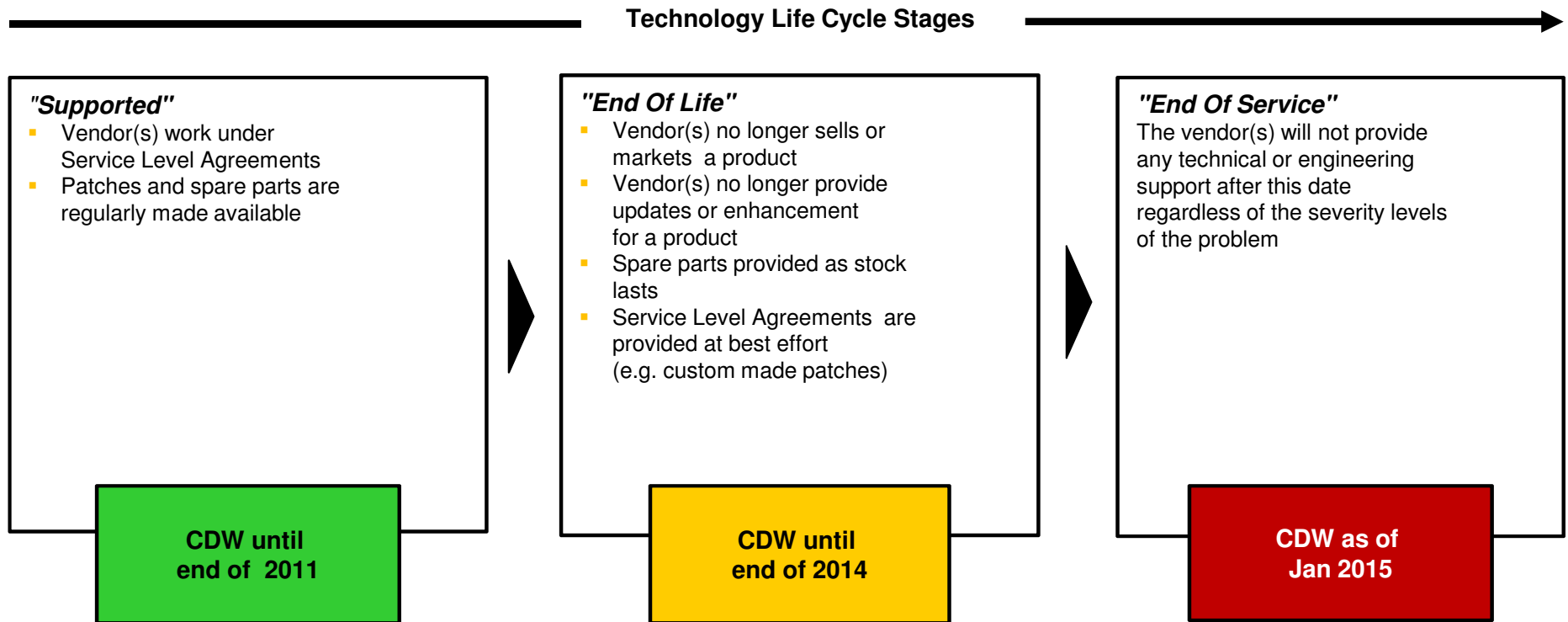# Welcome to Logistics & DHL

DHL's logistics goals:

- Get the right stuff in the right amount to the right place at the promised time

- Transparency on where shipments are

- Transparency on where shipments are going

DHL Express

220 Countries & Territories served

3 Global Hubs &
19 Regional Hubs

2.5 Million Customers

1,500 Facilities

30,600 Vehicles

250 Dedicated Aircraft

2 Global IT Centers

50,000 Service Points

4
Global QCCs &
26 Country QCCs

90,000 Employees

195 Million Time Definite Shipments Annually

Software Assets in the Country Data Warehouse (CDW) were approaching end-of-life….. A major threat

Technology Life Cycle Stages →

"Supported"
- Vendor(s) work under Service Level Agreements
- Patches and spare parts are regularly made available

CDW until end of 2011

"End Of Life"
- Vendor(s) no longer sells or markets a product
- Vendor(s) no longer provide updates or enhancement for a product
- Spare parts provided as stock lasts
- Service Level Agreements are provided at best effort (e.g. custom made patches)

CDW until end of 2014

"End Of Service"
The vendor(s) will not provide any technical or engineering support after this date regardless of the severity levels of the problem

CDW as of Jan 2015

➔ It was time to trigger a Clean Sweep!

The Clean Sweep CDW Project

Task:

Review all capabilities in use in the Country Data Warehouses (CDW) in Europe and those hosted on CDW shared HW in detail and spring clean them

What we then did:

Leg	Partition	Timeline	Key Task	Main Output
Project 1	Legacy assessment "What we have in use"	Q4 2012 – Q1 2013	Review of the 220 legacy components in use	Baseline and desired end-state
Project 2	Strategy design "How to handle it"	Q1 2013 – Q3 2013	Design, align and agree on a legacy strategy for each capability and component found	Agreed joint course of action and decision points to get to the agreed portfolio of capabilities in the predefined desired end-state
Project 3	New system development "Making it happen"	Q4 2013 – Q4 2014	Build the to-be system landscape	The agreed end-state
Project 4	"Clean up"	Q3 2014 – Q1 2015	Final and conclusive decommissioning of CDW	Code removal, hardware decommissioning, Solution Support contract termination, hosting contract termination and license cancellation

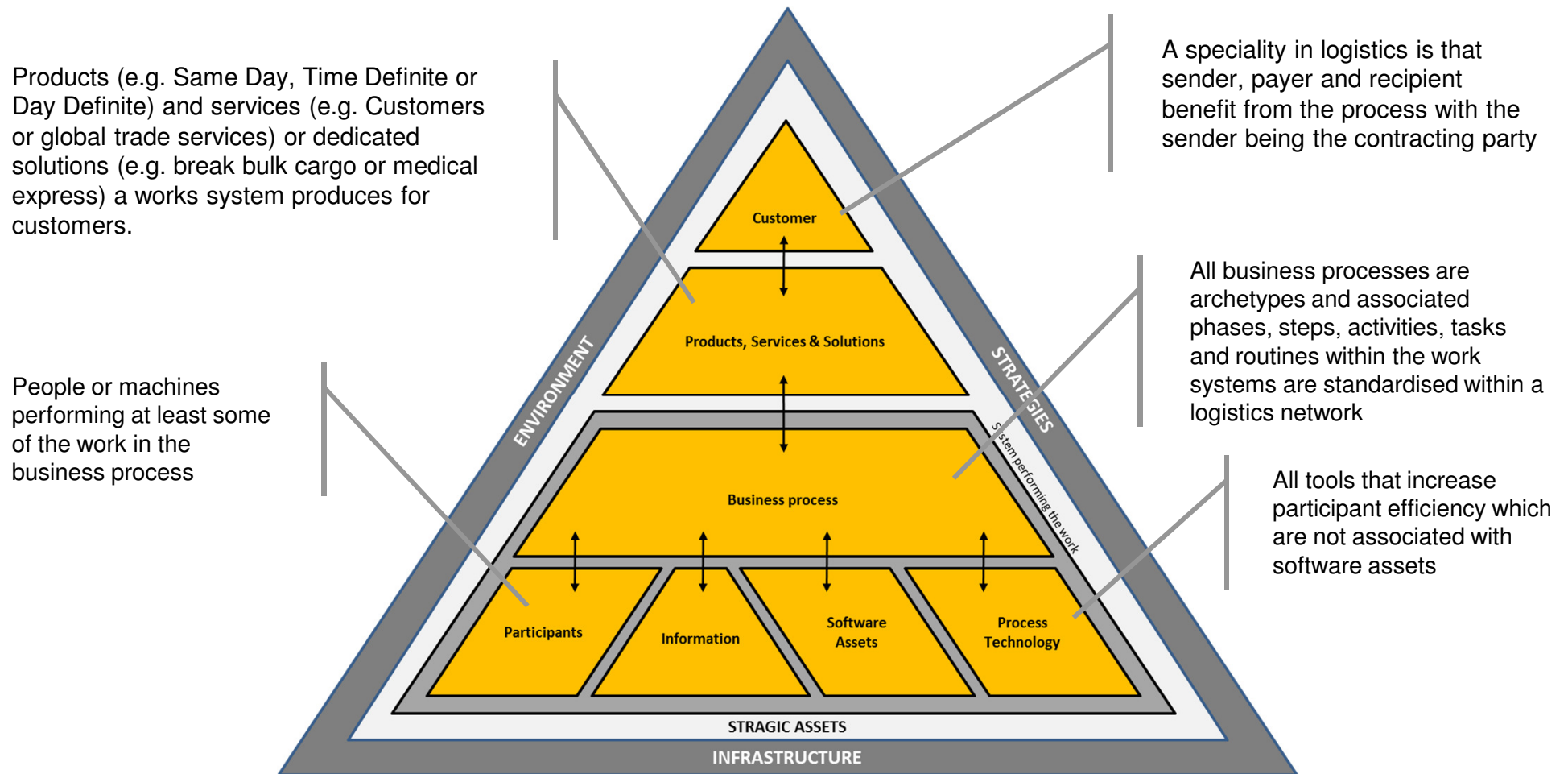# We scrutinized each capability that we found
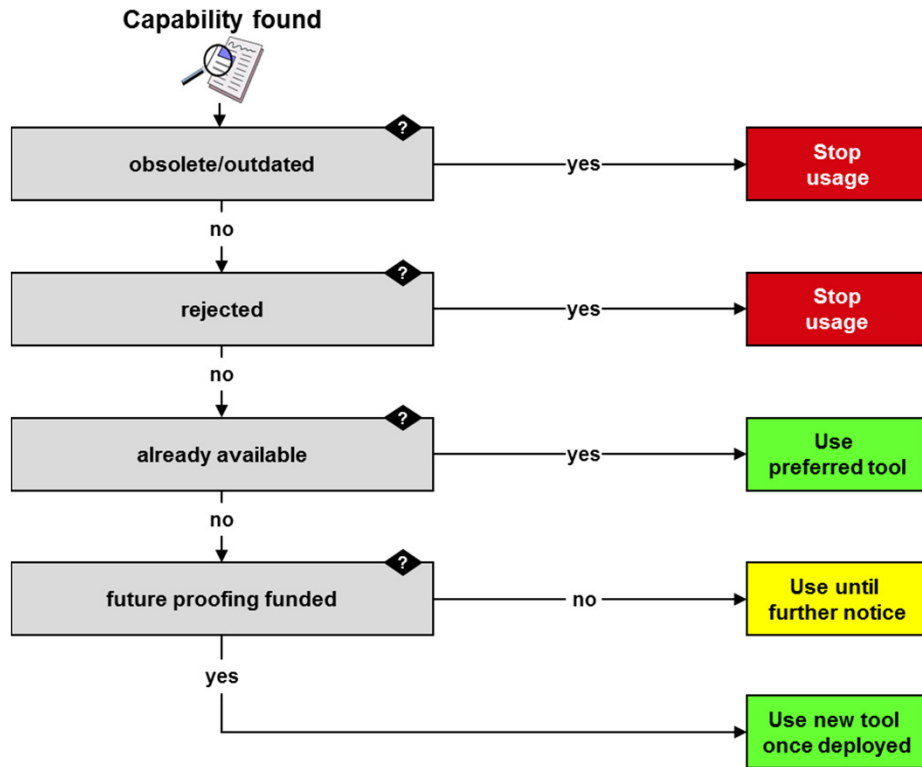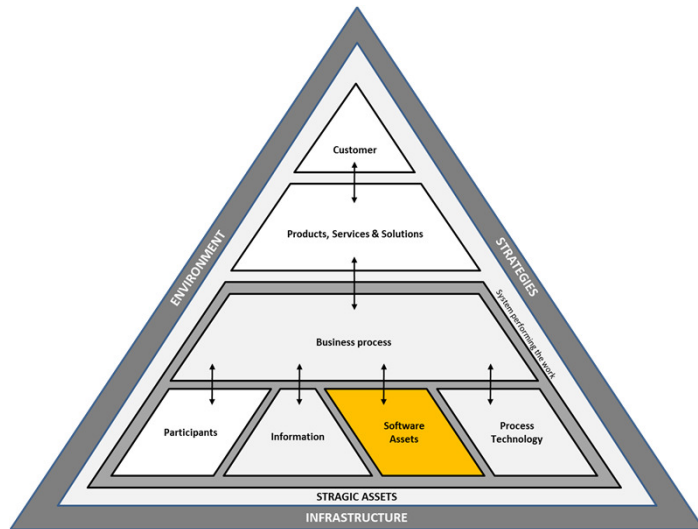

Outcome:

1. Sunset 187 legacy components

2. Overhaul of 33 legacy components

3. Technology refresh 2 servers

4. Stop 261 obsolete capabilities in use

5. Make 47 local workarounds a global standard as demonstrated best practices

6. Sunset 25 servers

7. Downsize 2 servers

8. Re-allocate 8 servers wrongly assigned to the CDW contract

9. Fix the four previously unknown issues in global target systems as part of the User Acceptance Test

10. Contribute confirmed > 1 Million EUR EBIT p.a. in savings

# Support DHL Customers through Work System Capabilities ------- (not just software)

Logistics Work Systems (adapted and updated from Alter (2006, 2013))

Products (e.g. Same Day, Time Definite or Day Definite) and services (e.g. Customers or global trade services) or dedicated solutions (e.g. break bulk cargo or medical express) a works system produces for customers.

A speciality in logistics is that sender, payer and recipient benefit from the process with the sender being the contracting party

People or machines performing at least some of the work in the business process

All business processes are archetypes and associated phases, steps, activities, tasks and routines within the work systems are standardised within a logistics network

All tools that increase participant efficiency which are not associated with software assets

Pyramid diagram with levels from top to bottom: Customer; Products, Services & Solutions; Business process; Participants, Information, Software Assets, Process Technology. Outer bands labeled ENVIRONMENT, STRATEGIES, System performing the work, STRAGIC ASSETS, INFRASTRUCTURE.

Clean Sweep as an Enterprise Architecture approach

**Current state of science and
technology thinking and focus**
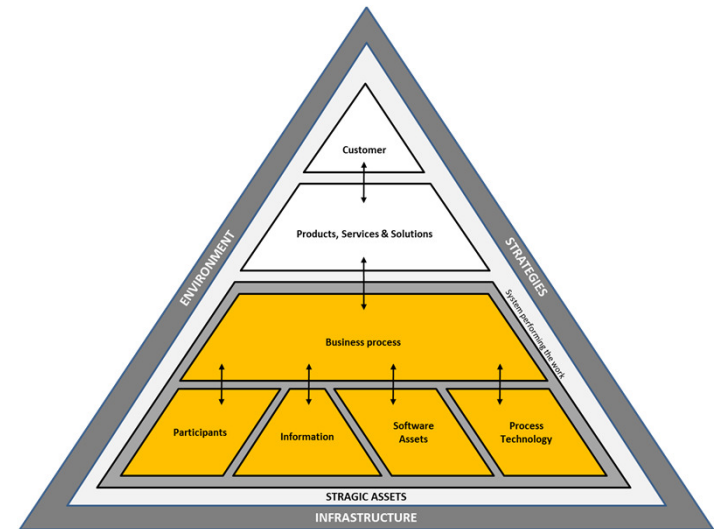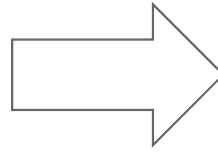
Clean Sweep

Clean Sweep resolves the following legacy issues:

1. *Strategic*   (i.e. related to deliberately abandoned business processes),

2. *Financial*   (i.e. costs that are excessive in relation to profit contribution),

3. *Operational*   (i.e. extraneous factors that no longer need to be considered for planned evolution related to changes in a work system's environment or infrastructure) and

4. Technical   (i.e. no further need to support systems that have reached End of Life or End of Service).

➔ A singular focus on Software Assets will regularly fail to resolve these issues and is therefore insufficiently customer-centric!

Singular focus on Software Assets is insufficiently customer-centric
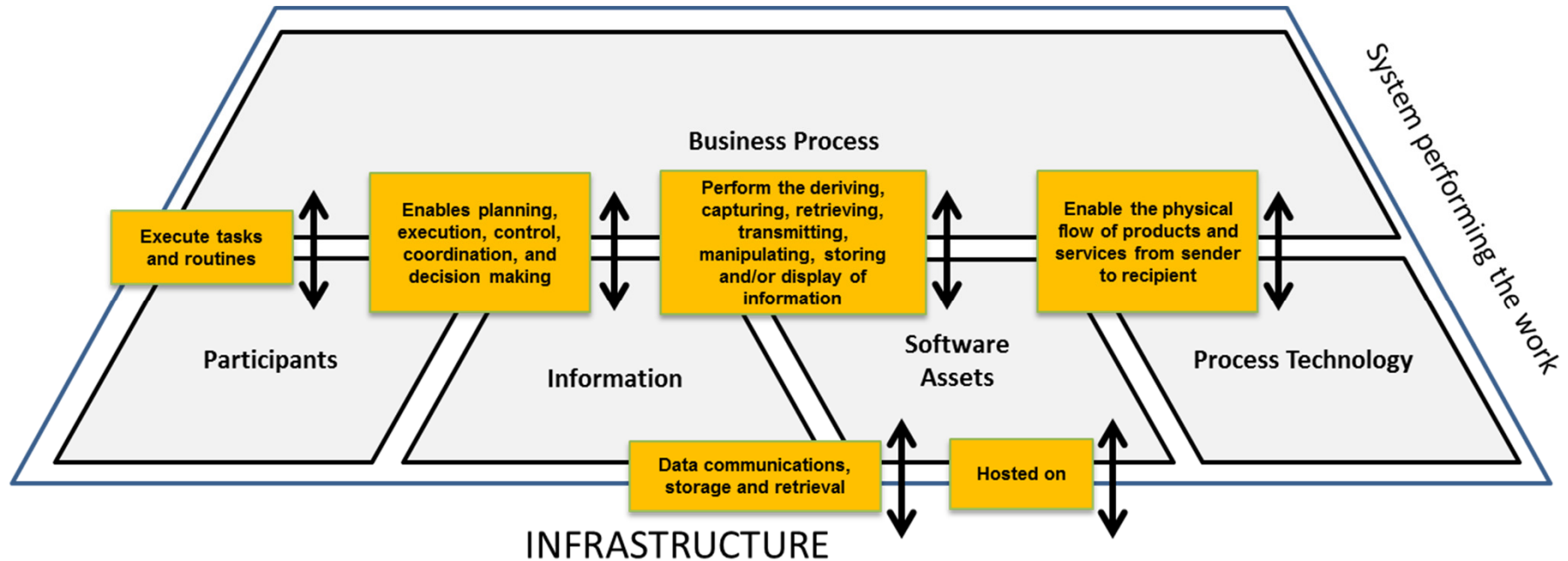
Because customer pay for a business capability which is the output of a system performing the work!

Therefore the system performing the work is "A" or even "THE" key differentiator!

Please note our working definition for a "business capability":
A "business capability" in logistics is a logistics service provider's ability to execute a defined and repeatable portfolio of standardized business processes to produce a desired outcome (e.g. a Time Definite International service) by deploying specific participants, information, software assets and process technology in a logistics system performing the work.

Lessons Learned I

1. **End of Service scenarios can trigger planned innovation cycles**

2. **The Clean Sweep approach is an effective way to tackle End of Life issues for infrastructure technologies**

    Clean Sweep projects are Enterprise Architecture-driven programs designed to enable:

    *   baselining of a status quo,

    *   defining and aligning a desired end-state of an evolution cycle for technology in use,

    *   addressing strategic opportunities or threats and

    *   transitioning (i.e. future proofing) toward an architecture that serves business needs more efficiently and effectively.

3. **Vendors dictate the necessity and timing of Clean Sweep activities**

Lessons Learned II

4. ***Senior Users and executives need to collaborate fully in evaluating existing capabilities and deciding how to exploit them to innovate to better capabilities***

5. ***Oversized systems are a costly burden***

6. ***Software assets enabling opinion forming and decision making should be customized to specific business needs***

    Software assets like CDW operate at two levels: operational or strategic

    - At an operational level they support opinion forming and decision making about work system execution (e.g., operation of business processes and activities to fix errors that occur).

    - Software assets addressing strategic issues support gathering and processing distributed and non-homogeneous operational data and combining it with business, market and competitor data. This provides decision makers with mission critical knowledge about status, opportunities and threats.

Contacts

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Backup

What we mean by DHL Express

Brand	DHL	DHL		
Division	**PeP** (Post - eCommerce – Parcel)	**Express**	**Global Forwarding/ Freight**	**Supply Chain**
Revenue[1]	16,131 m€	13,661 m€	14,890 m€	15,791 m€
EBIT[1]	1,103 m€	1,391 m€	-181 m€	449 m€
Business Model	• The postal service for Germany • Targeted and cross-channel advertising • Sending mail and merchandise internationally • Worldwide portfolio of parcel and e-commerce services	• Standardized, scheduled network • Self-operated infrastructure • Door-to-door delivery capability globally	• Specialist in air, ocean and road freight as well as industrial projects and end-to-end transport management solutions • Tailored sector solutions • Asset-light business model, based on brokerage of transport services	• Customer- and sector-specific solutions across the entire value chain • Planning, sourcing, production, storage, delivery and return logistics services. Outsourcing and marketing supply chain solutions and implementation of global communications and brand services • Deep expertise in key customer sectors including Automotive, Consumer, Engineering & Manufacturing, Retail, Life Sciences & Healthcare, Technology, Financial Services
Employees[2]	Approx. 207,000	Approx. 90,000	Approx. 45,000	Approx. 147,000