DHL Supply Chain Benelux

From EDC to *e*DC

Eindhoven, 17th of April 2012

Alfredo Molin- Head of Innovation & Product Development
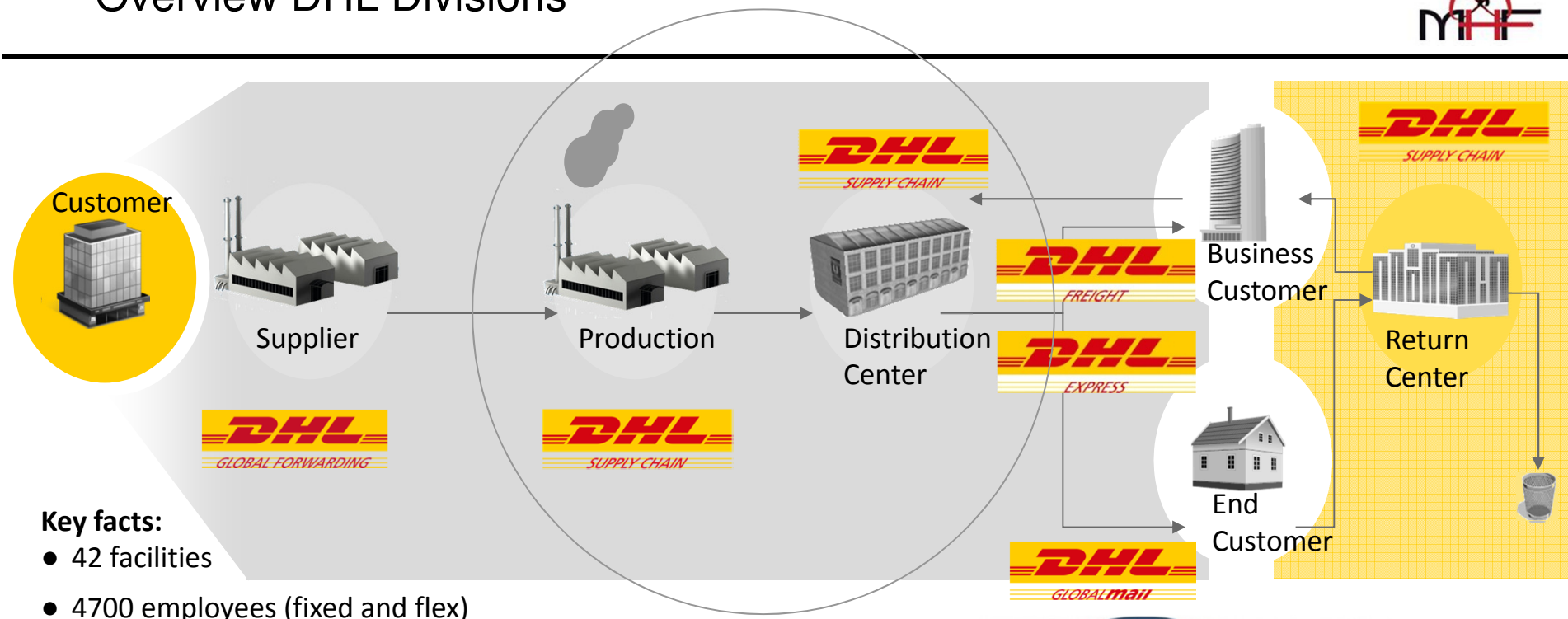
Allow me to introduce myself…

15 years of Supply Chain experience

Now head of Innovation and Product Development
@ DHL Supply Chain

Overview DHL Divisions

Key facts:

- 42 facilities

- 4700 employees (fixed and flex)

- Dedicated management teams for e.g.:
  - Innovation, Engineering, Implementations, Continuous Improvement, Quality, Sustainability, HRM, Information Technology

- Logistic focus:
  - Technology, Healthcare & Life Science, Consumer, Retail & Fashion, Industrial, Energy

- Products:
  - Warehousing, Returns & Repairs, Value Added Services (VAS), e-Fulfillment, Spare parts, Inbound logistics, Technical Distribution, Managed Transport

DHL thinks global, but acts local

Drachten
Enkhuizen
Heerhugowaard
Alkmaar
Zwolle
Amsterdam
Schiphol
Oude Meer
Hoofddorp
Apeldoorn
Hengelo
Enschede
Utrecht
Nieuwegein
Amersfoort
Arnhem
Den Haag
Zevenaar
Rotterdam
Tiel
Ridderkerk
Oss
Nijmegen
Moerdijk
Waalwijk
Den Bosch
Roosendaal
Veghel
Bergen op Zoom
Breda
Best
Tilburg
Venlo
Eindhoven
Beringe
Maastricht

*730 DHL Selektvracht Servicepoints
niet in de kaart opgenomen

Why are flexible warehouses in our view so crucial?

Lets imagine the world in 2050…

Our customers, what's driving them?

Brand image, Community, life-style

Future study "Delivering Tomorrow – Customer Needs in 2020 and Beyond"

4 Key observations…

Brand image, Community, life-style

❶

Product Life Cycle Stages

- Product Life Cycles are getting shorter.
- Volumes fluctuate more than ever.
- Product innovation & introduction is core competence to survival

❷

- Products need to be offered and delivered to customers using multiple sales channels (B2B and B2C)

❸

CUSTOM made

- Customers demand personalized products against the lowest price.
- Products need to be made customer specific at the last moment.

❹

C-to-C

- The products need to be produced and delivered in a green way.
- Also more focus on refurbishment (cradle to cradle) due to increase scarcity of raw materials

Future study "Delivering Tomorrow – Customer Needs in 2020 and Beyond"

Our customers, How are they driving us?
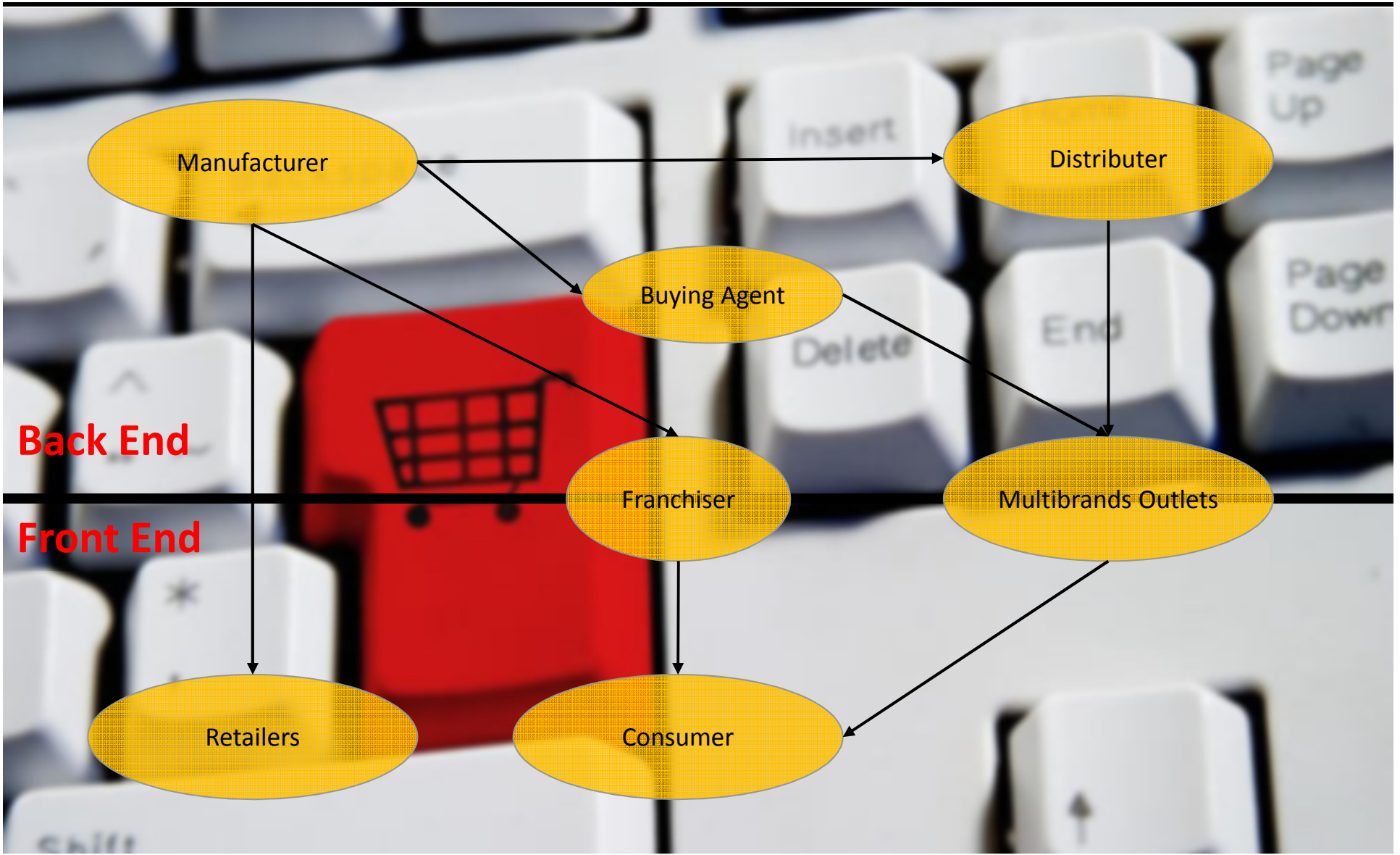
The effect of market trends on logistics
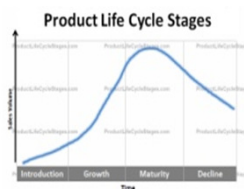
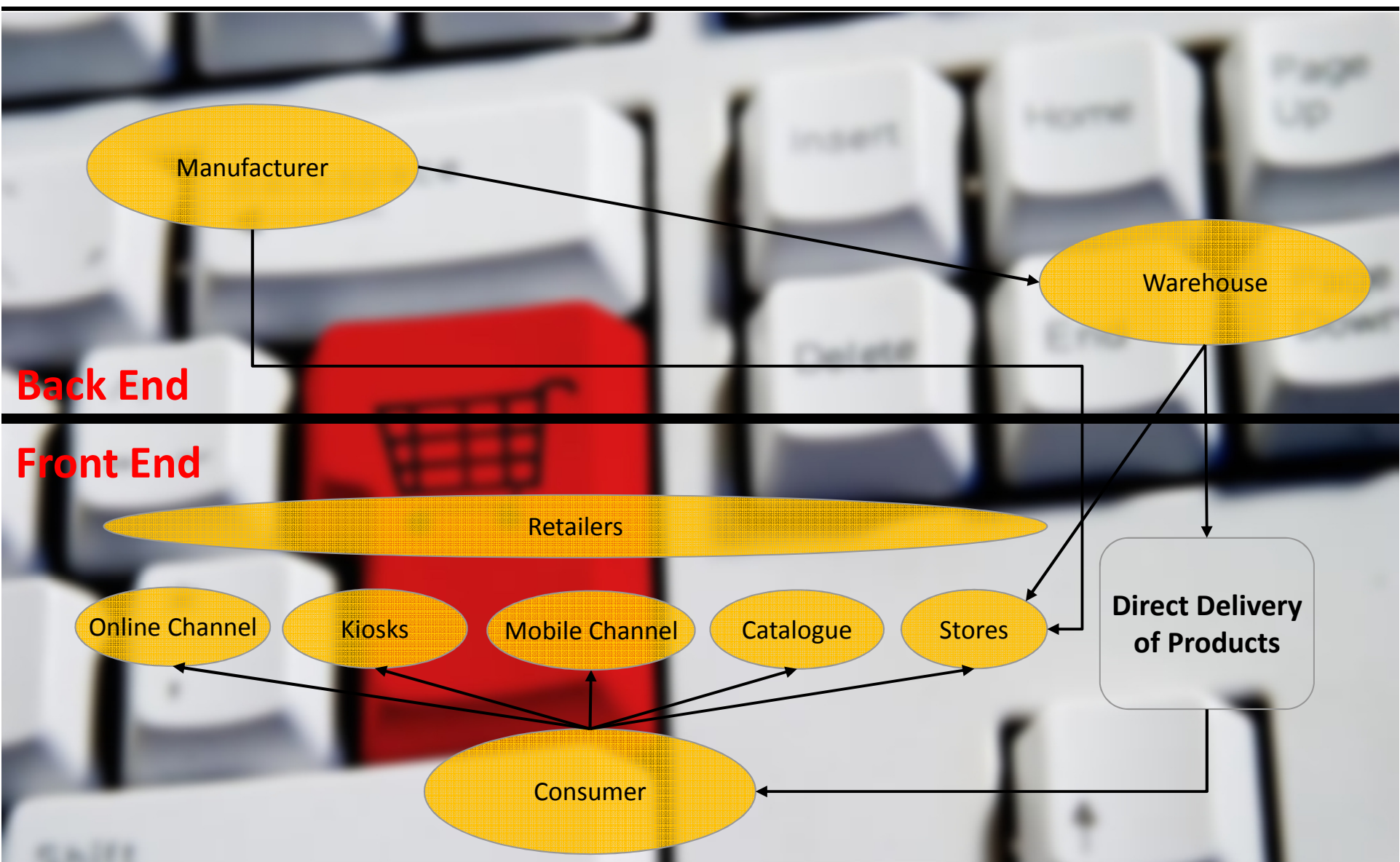| Major Customer Requirements	
Reduced Time to Market	• Ability to Quickly Adapt to changing technological and market conditions
Standardization and consistency	• Standardization and Consistency enables replication of services across countries in shortest timeframe
Integrated solutions	• Solution Development in the area of late customization, technical services, cradle to cradle
Price	• Continuous demand for Cost reduction and Focus on Flexibility in costs (more variable charging versus fixed)
Visibility	• Need for Visibility (real time info on event level) to manage end customer expectations.
Flexibility and scalability	• Flexibility and Scalability in resources, contract terms and closing and start up of operations.

The traditional supply chain model will change…
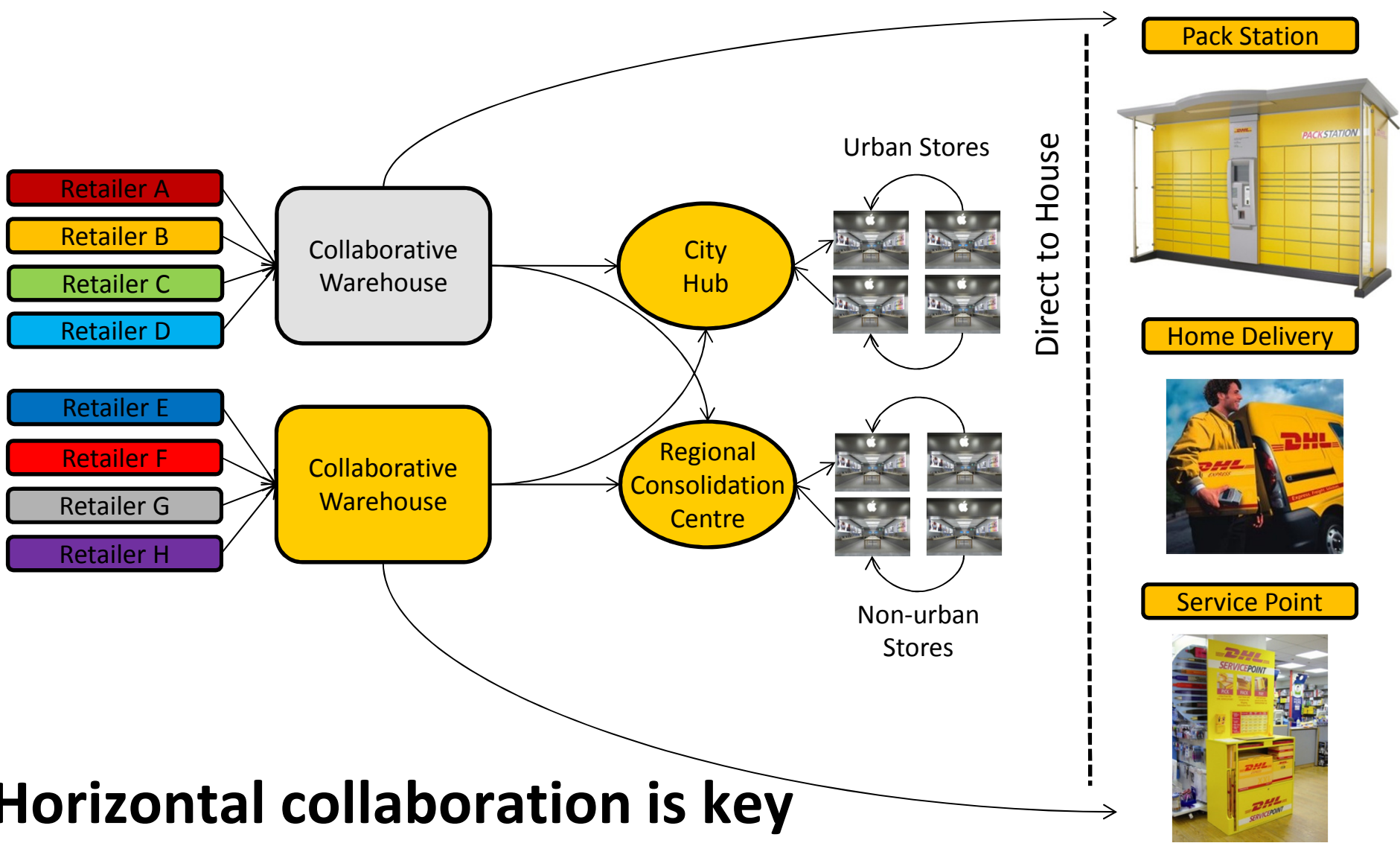

Back End

Front End

Manufacturer

Distributer

Buying Agent

Franchiser

Multibrands Outlets

Retailers

Consumer

…to a consumer driven *"value chain"*…

Back End

Front End

Manufacturer

Warehouse

Retailers

Online Channel

Kiosks

Mobile Channel

Catalogue

Stores

Direct Delivery of Products

Consumer

Both on-line orders as in-store oders fulfilled within 24 hours

Horizontal collaboration is key

But what about Flexibility in warehouses…

Innovation is the key driver!

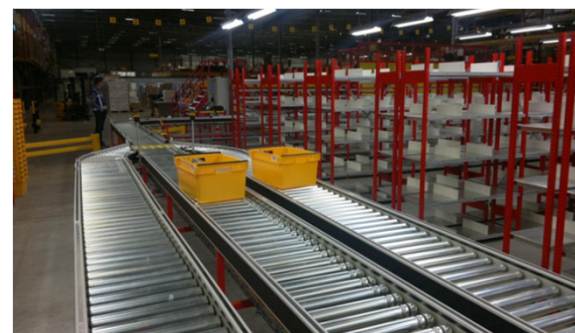# An example: Flexibility in inbound process

Consolidation of returns and inbound process DHL spare parts warehouse

Challenge

- Inbound and Returns process fully separated
- Too long lead-time from returns to outbound

DHL's answer:

- Integrating returns and inbound process
- Fast picking by pick to light and tote system

Value Proposition

Optimization of inbound and outbound processes	Speed of returns availability	Visualization of warehouse Processes
Increasing picking productivity	Reduction and minimization of inventory discrepancies	Reduction of process lead times inventory taking and inventory control

Facts

- Sorting and consolidation of inbound spare parts
- Storage of fast and medium movers in shelving area
- Consolidated picking for outbound from shelving area
- Moving slow movers after consolidation to main warehouse
- Supplier Inther
- 100% operational by end of February 2012

Another example: Flexibility in inventory management

3D-Localization for inventory control in DHL tobacco warehouse

Challenge

- Surveillance of warehouse processes with RFID
- Inbound and outbound control
- Support for daily inventory taking
- Active theft protection / protection from plagiarism

DHL's answer:
- RFID-installation of the Mojix-System in the warehouse
- Track & trace of all pallet movements in the warehouse
- Stock control and inventory taking in real time
- Outbound control and avoidance of misloading

Value Proposition
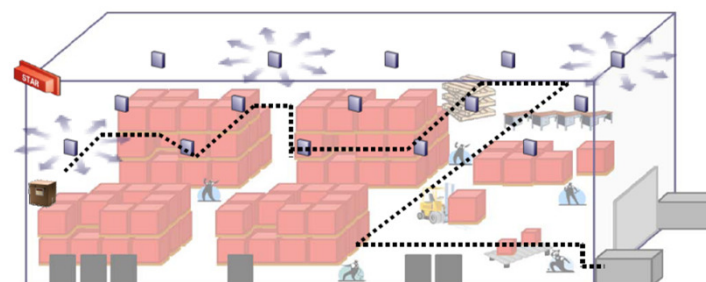
Optimization of inbound and outbound processes	Proactive theft protection / protection from plagiarism	Visualization of warehouse processes & localization of goods
Reduction of misloadings	Reduction and minimization of inventory discrepancies	Reduction of process lead times inventory taking and inventory control

Facts

- Daily inventory taking of all 1200-1500 pallets
- High value of each pallet (20.000-50.000 EUR)
- Up to 150 pallets inbound & outbound per day
- Reduction of misshipped pallets
- Integration of capturing events into Auto-ID platform

A third example: Flexibility integrated in all warehouse processes

Thanks for your attention and let me know what you think

If you want to replay my presentation, please send me an e-mail at alfredo.molin@dhl.com

Twitter: @AlfredoMolin