





Europe

- General trends logistics context
- Collaboration stages of capability
- Pharma trends industry initiatives
- Collaboration implementation/modeling or how to share the cake











Warehouse consolidations, improve flexibility & control net working capital through oursourcing

Market challenges

The financial crisis and a more demanding customer have significant implications on the supply chains ...

... increase balancing on costs versus customer service

<u>Cost</u> leadership vs. Quality <u>reliability</u> vs. <u>Agility</u> and speed

Supply Chains response

- Consolidation in regional network structures
- Enhance supply chains flexibility & agility
- Apply stringent risk management
- Control net working capital / inventory value

Solutions ...

OUTSOURCING





Logistics outsourcing

Main outsourcing drivers are costs & customer service



Source: LogXpert & VIL benchmark





Since 2008 logistics costs have increased despite industry efforts on logistics optimization

Logistics Costs / CoGS (%)



Source: ELA 2008











1. Why collaboration:

- No <u>further value</u> available to top tier companies without exploring collaboration
- <u>Technology</u> has put more complex collaboration in reach

2. Collaborative Logistics:

 The key to collaborative logistics lies in identifying and reducing all (hidden) logistics costs and assets that all entities within a supply chain bear but do not control individually

3. Shipper collaboration:

- Shipper working together to identify opportunities to <u>reduce costs</u>, <u>improve service</u> and provide tangible value for <u>both</u> organizations





Europe

Path of growth for logistics collaboration



Stage 1 – functional focus



Stage 2 – internal integration



Stage 3 – external integration



Stage 4 – cross collaboration network



As one illustration we focus on our experiences with transport sharing

Knowledge sharing	Experience sharing
 Create platforms on logistics approach (e.g. Lean SixSigma) Share information on legal issues per country 	 Select vendors based on experience in FMCG / with validation If possible, purchase equipment / systems based on validated status
Facility sharing	Transport sharing



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Transport pooling: consists of grouping together flows (order processes, storage, handling, inbound transport, and <u>mainly outbound deliveries</u>) from several manufacturers who have compatible finished goods intended for the same distribution networks, with <u>shared points</u> of departure and receipt.





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Industry	3PLs
 Operational savings Reduction of supply chains assets Committed capacity Risk pooling 	 Increased assets utilization Predictable efficiencies
Customers	Environment













Source: Datamonitor





Logistics costs / CoGS (%) 2008



Source: ELA 2008



Healthcare industry lags behind other industries on logistics collaboration initiatives



Respond to these challenges through outsourcing and one step further logistics collaboration

- Increasing convergence in the sector, with further integration between drugs, devices and diagnostics;
- Increasing use of information technology to accelerate drug discovery, streamline clinical development and drive down costs;
- Pressure on national healthcare budgets leads to a greater focus on costs
- Increased need for temperature control and tracking of products demands more complex and higher risk supply chains
- Alternative routes to market require specialised supply chains:
 - Home delivery of drugs and consumables
 - Direct to Pharmacy and Direct to Hospital initiatives
 - Role of supermarkets and private hospitals in supply chain

The growing trend by big pharma businesses towards outsourcing, partnering and corporate venturing





Groenewout

October 27, 2010 Rotterdam, NL

Supply Chains Collaboration

Implementation/modeling or how to share the cake





Example casus





Example casus







Implementation / modeling Example casus

3 7.856 drops 6.190 drops **EUR 597k** 1&3 EUR 346k 1,2&3 2&3 1&2 2 5.410 drops **EUR 342k** GROENEWOUT



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Profit allocation

Profit sharing principle	Methodology	Pros / Cons		
Equal share	Total Profit (€) Number of Partners	Divides profit equally among participating shippers Not considering the contribution differences		
Proportionally	Stand Alone Costs Total costs ★ Total Profit (€)	Most commonly used solution, easy to compute & understand awarding the same relative savings not considering the contribution differences		
Shapley value	Average marginal contribution to the grand coalition, adding one member at a time	Considers the individual contribution per shipper as an absolute € although not taking into account the impact on the relative cost savings		
Weighted Relative Savings Model (WRSM)	Average marginal contribution to the grand coalition, adding one member at a time and all participants have a similar relative profit	Considers the individual contribution per shipper while making the (weighted) relative savings as similar as possible		

Screen shots – input settings

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Screen shots – input data

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Screen shots – output dashboard







Screen shots – consolidation of shipments





Screen shots – common customer addresses





Screen shots – transport costs





Screen shots – CO2 emissions





Screen shots – profit sharing principles







Screen shots – profit sharing principles





- Collaborating is a good choice under the background of the international financial crisis ...
- ... potential cost savings can be large (between 7% and 19%) and every participant can gain more profits as compared to a stand-alone solution...
- ... in order to realize the benefits, the collaborative profit allocation mechanisms must support a rightful partnership ...
- ... this requires periodic maintenance to create a sustainable partnership alliance





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CONSULTANTS & ENGINEERS

Nijverheidssingel 313, P.O.Box 3290 4800 DG Breda The Netherlands Tel: +31 (0)76 5330440 Fax:+31 (0)76 5310191 Visit us at www.groenewout.com

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Supply	Chains & Lo	ogistics Con	sulting
Strategical	 Feasibility studies Warehouse tendering for building, logistics equipment & IT 	 Distribution Network Studies Global sourcing Non Product Related Purchasing (NPR) 	 Organizational - & functional design Business process (re-)design Key Performance Indicators (KPI's)
Tactical	 Warehouse (lay-out) design Plant (lay-out) design Lean warehousing Insourcing / out- sourcing warehousing 	 Transport tendering Service Level Agreements (SLA) Insourcing / out- sourcing transport Benchmarks 	 Sales & Operations Planning (S&OP) Production planning Collaborative Planning Forecasting & Replenishment
Operational	 Loss Prevention & Security (LP&S) Facilities electrical, HVAC & temperature engineering 	 Location studies & site selections 	 IS selection & implementation (WMS/TMS/APS) Inventory Mgt.
	Materials Mgt.	Physical Distribution	Supply Chains Mgt.







