HORVÁTH

Next Level Supply Chain Optimization with Horváth's NetCost Model

Capability Statement

Jochen Kröber
Steven Malbrant

September 2021

Companies must be prepared for transformation as various trends continue to disrupt the way business is done today!

Integrative Optimization
procurement, production, warehousing, transportation, customer service, finance

Transparency
Constant information flow, real-time data

Market Dynamics
volatile demand, customer expectations

Network Complexity
suppliers, customers, material flow, information flow

Sustainability
ecological awareness, sense of responsibility, climate neutrality, Supply Chain Law

Resilience & Agility
rapid change, persistence, adaptability, transformation

Especially the need for supply chain transformation has been intensified by latest economic trends and upcoming challenges

Drivers of Supply Chain Transformation

- New business models
- Product customization & value adding services
- Global trade/ supply chain risks
- Customer centric supply chain
- Post Covid-19/ "the new normal"
- Sustainability/ green supply chain
- Germany's supply chain act ("Lieferkettengesetz")
- Digitization, automatization and cost pressure

How companies need to prepare themselves for Supply Chain Transformation

BE COMPETITIVE
Efficiency and optimized costs level to strengthen the market position

BE RESPONSIVE
Flexibility to manage new or changing requirements in a volatile environment

BE SUSTAINABLE
Ecological & social standards to act responsibly and sustainable

As global supply chain management is getting increasingly complex, conventual optimization reaches its limitations

Current Challenges

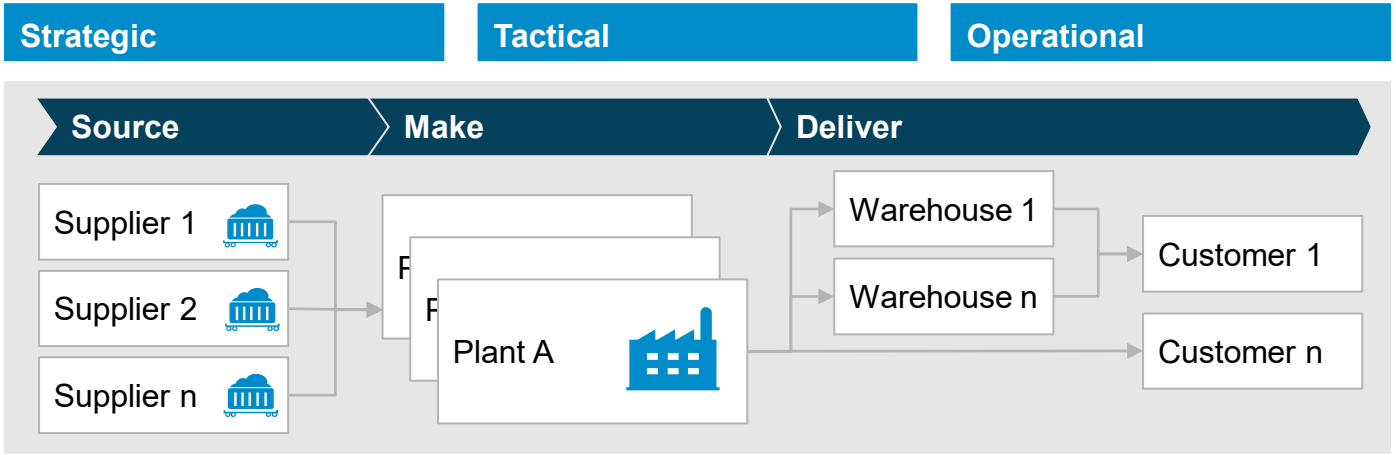
High market dynamics due to volatile demand and customer requirements

Low transparency on profitability implication in sourcing, production, logistics

Silo-based optimization due to order allocation without an overall perspective

Complex network requires advanced optimization

Supply Chain Optimization



Target conflicts (selection)

- Supplier selection
- Sourcing Volume
- Packaging
- Allocation of product to plant
- Production program
- Lot sizes
- Allocation of customer to warehouse
- Inventory allocation
- Safety stock
- Transport modes (road, rail, sea, air)
- Transport lead time (standard vs. express)
- Drop shipment vs. consolidation via hub

Target conflicts and silo-based decisions along the value chain limit the optimization potential

Horváth's NetCost Model facilitates transformation by integrating operations and finance data to achieve holistic decision making

Operations Perspective

- Transport modes (road, rail, sea, air)
- Inventory allocation
- Supplier selection

Horváth's NetCost Model

Finance Perspective

- Target setting
- Budgeting & prioritization
- Growth rate

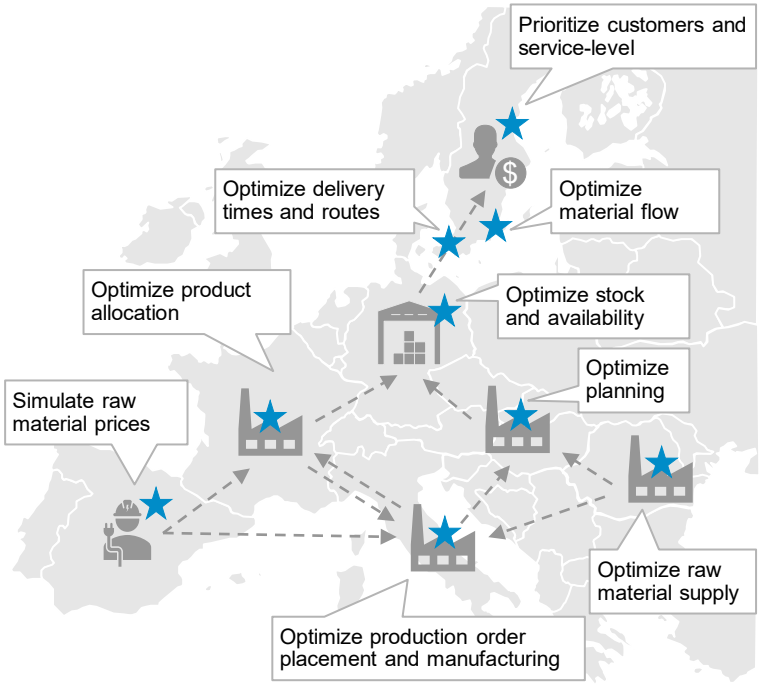
New Capabilities for Data Management

- Big data
- Blockchain
- AI
- Digital twin

Data-driven supply chain optimization based on true P&L effects for sustainable results

Operations Perspective

Key challenges for Supply Chain Management and Operations



Next Level Supply Chain Optimization

Optimization of conflicting challenges in supply chain management

Horváth & Partners' Netcost Model

Decision support based on financial impacts and real P&L effects

Financial Perspective

Profit Loss Statement

Sales and sales deductions		
Net sales		
- Special direct cost sales		COGS
Standard cost	*- Material cost*	COGS
	- Variable production cost	COGS
	Contribution margin I	COGS
	- Fixed production cost	COGS
Contribution margin II		
- Cost object variances		Period/ functional cost
- Cost center variances		Period/ functional cost
- General and admin cost		Period/ functional cost
- Sales and marketing cost		Period/ functional cost
- R&D cost		Period/ functional cost
Contribution margin III		Period/ functional cost
+/- Other operating income/ exp.		Period/ functional cost
EBIT		

Next level supply chain optimization integrates operational constraints directly with a holistic financial evaluation to allow for optimum decision-making based on bottom-line impact!

A specific data model ensures that the cost calculation can be embedded in powerful optimization tools for the supply chain

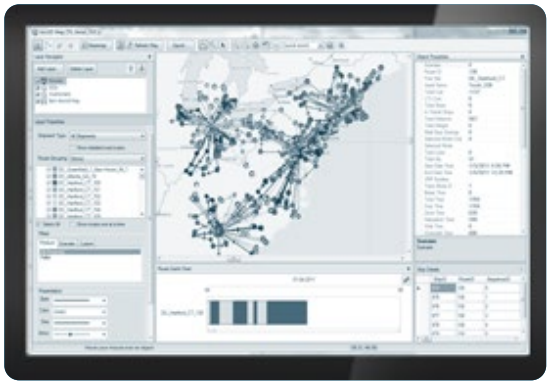
Fixed Parameters

- **Base Parameters:** *network elements, calendar years, currencies, …*
- **Product Master Data:** *products, hierarchies, BOM, weights, packaging type, inventory type, …*
- **Customer/Supplier Master Data:** *ship-to/ shi… from locations, logistics requirements, …*
- **Network Master Data :** *production plants,*

Variable Parameters

- **Demand Forecast:** *per region, per market, … location, per customer, by product/ item leve…*
- **Routing & Production Allocation:** *producti… lines, material flow, utilization, availability*
- **Supplier Selection & Parameters:** *volume, weight, capacity/order constraints, lead time…*
- **Transport Selection & Parameters:** *distanc… lead times, weight, packaging, carrier, …*
- **Production Shift & Parameters:** *#shift, h/week, HC/ FTE'S, overall equipment efficiency, …*
- **Production & SC-r…lated Costs:** *Production*

Tool-Based Supply Chain Optimization



Horváth's Netcost Model

Production Network Cost

- Feasibility of volume allocations
- Capacity transfers/ make-or-buy effects

→ **OPTIMIZE COST-TO-PRODUCE**

S&OP and Fulfillment Cost

- Supply and demand planning
- Service levels and landed costs

→ **OPTIMIZE COST-TO-SERVE**

Sustainability/ Green Supply Chain

- Emissions and carbon footprint
- Energy and resource consumption

→ **OPTIMIZE CARBON-FOOTPRINT**

Working Capital

- Demand-driven inventory allocation
- Decrease of cash-to-cash cycle

→ **RELEASE CAPITAL LOCK-UP**

Solved target-conflicts by scenario-based decision-making integrating all functions along the supply chain

Perspectives

Supply Chain
with transparency on global logistics performance, etc.

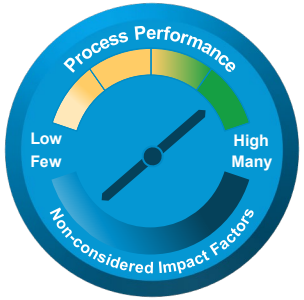
Production
with transparency on production performance, etc.

Sales / CS
with transparency on order fulfillment, service-level, etc.

Finance
with transparency of COGS, NWC, financial KPIs, etc.

Horváth's Integrated Supply Chain & Financial View (NetCost Model)

Derive steering impulses through transparent KPIs and interpretation



Aligned KPIs and metrics in Operations & Finance and their impact on results

Solve target-conflicts through integrated assessment

Fact-based simulation of scenarios and their financial impact

Integrate different perspectives for decision making

"Cost-to-serve"
"Carbon-Footprint"

Aligned decision making based on the financial impact, aggregated to P&L level

There are strong benefits for COO & CFO by investing in the HORVÁTH NetCost Model for SC Optimization

COO

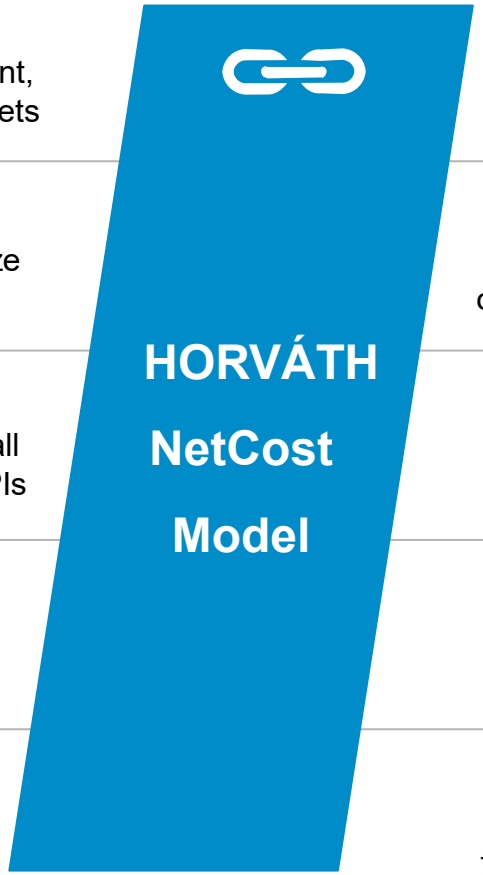
Improved target achievement
The P&L-effect is the best KPI to align Sales, Procurement, Production and SCM to accept compromises in their targets

Increased profitability
The knowledge of P&L-effects for all measures to optimize the supply chain is a precondition to increase profitability

Improved supply chain performance
Optimization potential identified by full understanding of all mechanisms across the supply chain and transparent KPIs

Aligned functional perspectives
Different functional perspectives can be integrated into an aligned perspective to solve any target conflicts

Optimized steering impulses
Deep insights in supply chain scenarios and forecast by common interpretation of feasibility and impacts



CFO

Improved target setting
Better target setting by an integrated financial target logic in supply chain optimization

Consistent financial evaluation
Strategic, tactical and operational decisions rely on a consistent financial assessment methodology

Increased controlling performance
For every measure to improve the supply chain, financial data is available without additional effort

Intensified cooperation
Fostering business partner roles in finance and engage in mutual projects & initiatives

Proactive support of forecasts
Improved forecasts by involving Finance in the forward-looking process of supply chain scenarios

Our scalable "5-step piloting approach" requires a timeframe of approx. 4-6 weeks to derive prioritized optimization potentials

4-6 weeks

Horváth's Pilot Solution (for value cases)

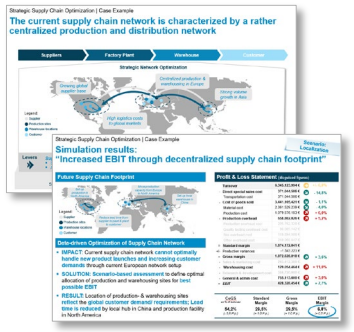
Target Setting and Scoping	Data Collection and Modeling	Proof of Value	Simulation and Analysis	Roadmap and Way Forward
■ Aligned approach ■ Baseline defined ■ Scope and use cases defined	■ Data collected and refined ■ Baseline scenario modelling	■ Identified rough potentials ■ SCM linked with P&L ■ P&L impact aligned	■ P&L based network simulation ■ Validation and adjustments	■ Roadmap aligned ■ Way forward defined

Horváth's Solution

Continuous and integrative optimization

Horváth's NetCost Model

Project Examples



- Experienced NetCost Model implementation partner to minimize efforts and risk
- Potential cost savings between 8-14% achieved and approved
- Average project duration of 5 weeks to implement first value cases
- Projects in various industries (Life Science, Chemicals, Manufacturing, Automotive, Retail, etc.)

Your contacts at Horváth for any further questions or discussion!

Jochen Kröber

Principal
Head of Supply Chain Management

Phoenixbau
Königstr. 5
70173 Stuttgart
Germany

Mobile: +49 162 2886070
JKroeber@horvath-partners.com

Steven Malbrant

Senior Project Manager
Business Segment
Supply Chain Management

Cecilienpalais
Cecilienallee 10
40474 Düsseldorf
Germany

Mobile: +49 162 2786366
SMalbrant@horvath-partners.com


HORVÁTH