

Case 8: A European Coatings Business launched an effort to identify ways to improve the business performance looking 3-5 years out

- There were two main business units at different points and consensus they should change from product and country-oriented businesses into a more regional, customer needs segments based business
- They had a growing understanding of customer needs segments (3) and desire to align to them: “lowest cost”, “flexibility”, “reliability”
- Lean/Operations team’s goal: improve CY/NY PTOI, give directional recommendations how to transform the businesses, and develop a business case and transformation plan
- They started an effort with 3 main focus areas
 - 1) Supply Chain Transformation – align supply chains with customer needs segments to better serve those segments, start pan-European S&OP
 - 2) Asset Restructuring – close two sites
 - 3) Lean – rollout Lean concepts to facilitate site closures, reduce inventories, improve delivery times & reduce costs; priority focus is on Locations M, L & B.

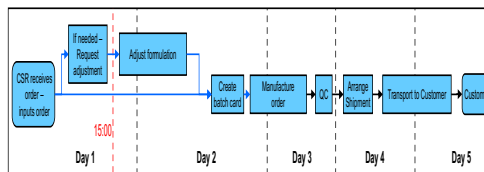


Impact: They used lean supply chain design to improve their PTOI & better serve their various market segments: **€4.6MM** year one benefit with **>€30MM** NPV impact

Segment Opportunities

<p>Flexibility Segment</p> <p>Significant market potential when meeting 5 day delivery time</p> <p>Grow to 30% share in this segment in Germany area</p> <p>Corresponds with 4 ktonnes extra sales – achievable over several years</p> <p>Short term opportunities in France, Benelux, Spain</p> <p>Approximately 0.5 ktonnes</p> <p>Significant opportunities in Central & Eastern Europe</p> <p>Several ktonnes – requires local presence</p>	<p>Reliability Segment</p> <p>Current performance in general meets requirements of the market</p> <p>Main potential is to reduce working capital and costs</p> <p>– Poorer than required total SC costs</p>
	<p>Lowest Cost Segment</p> <p>Could be used to fill capacity</p> <p>Currently over serving this segment</p> <p>– Better than required leadtime and reliability</p> <p>– Poorer than required total SC costs</p>

Lean Process Improvement



- This requires addressing several issues in the current processes:**
- Improve planning & scheduling, & production according to plan
 - Avoid overloading assets
 - Improve master data entry processes
 - Improve technology / laboratory lead time to adjust formulations
 - Avoid double formulation validation – delegate to producing site

S&OP Basics

Family	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	CY1	NY1	
Material																									
Inventory																									
Call equip. OEE																									
Prod Equipment																									
Collaboration																									
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Balance Supply Chain demand with capabilities - by product families

- Polyester Primid
- Polyester PTB10
- Polyester TGIC
- Hybrids
- Epoxy
- Super Durables
- Acrylics
- Bonded
- Sublicat

How to define "Demand" and "Supply"

Production or Rework

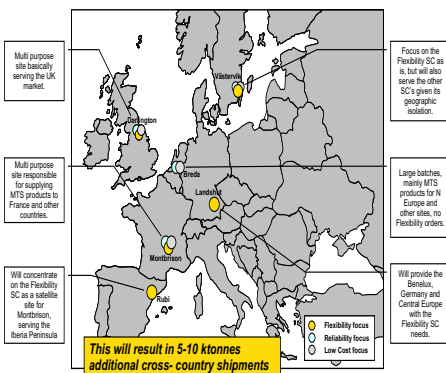
Finished Product Inventory

Shipments

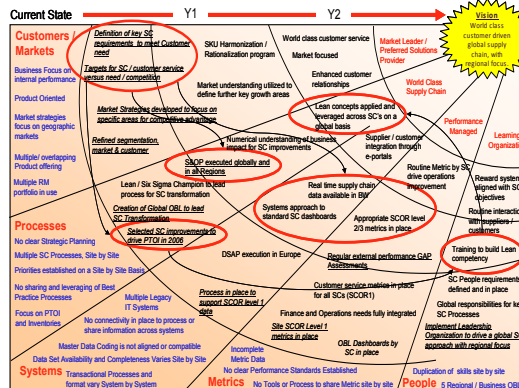
Returns

- Review deviations - to learn and improve
- Focus on future - beyond next month
- Plan prepared, balanced and communicated before the meeting
- Issues needing resolution highlighted before the meeting – discuss only those issues which require European management to resolve
- Plan gives boundaries to the sites, not a frozen production schedule
- This is a meeting to resolve real business issues and make decisions associated with demand and supply

Focused Site Asset Network



Transformation Map



Business Case & Transition Plan

Topic	Current Performance	Lean Impact	Improvement	Financials
Material Flow	Customer 4%, working, reworking	Uptime Improvement	10-20%, 13% to	000k
Inventory	72 days??	Lower Inventory	30-35%	000k
Call equip. OEE	Productivity 100-100Qh and head	Productivity Improvement	10-20%	000k
Prod Equipment		OEE, TPM, RCA	30-50% of 28FT	000k
Scalability and Growth	88000 labor hours = 53 people	Lean supply reduction approach	30-50%, 400k additional volume	1,000k
Customer Response Time	10 days	Order planning	Estimated 1 day	
Yield	95 to 97%	Defect Analysis in VSM	0.5%	000k