Global Market and Supply Chain Challenges from a Manufacturing Company’s Point of View

Dr. Stefan Hartung, Robert Bosch GmbH, Power Tools
The Bosch Group – Home of Power Tools

Structure of the Bosch Group

Bosch Group
Sales: 38.2 bn euros ¹)
Associates 1.1.2010: 270,687

Automotive Technology
Sales: 21.7 bn euros
Share of sales: 57%

Industrial Technology
Sales: 5.1 bn euros
Share of sales: 13%

Consumer Goods and Building Technology
Sales: 11.3 bn euros
Share of sales: 30%

¹) including other
Global Market and Supply Chain Challenges

More than 100 new Products in 2010
Selected new Products
Global Market and Supply Chain Challenges

More than 32 million Bosch Power Tools each year
A Bosch Power Tool is purchased worldwide every second

Users

- 150 million professionals
- 195 million do-it-yourselfers
- 180 million garden owners
Global Market and Supply Chain Challenges

Markets shifting to Emerging Countries
Regional Shares of the Power Tools Market 2002 - 2009

- **Asia Pacific**: 22%
- **Latin America**: 32%
- **Africa / Middle East**: 3%
- **North America**: 39%
- **Europe**: 44%

2002: 16% Asia Pacific, 39% North America, 39% Europe
2006: 15% Asia Pacific, 32% North America, 44% Europe
2009: 18% Asia Pacific, 27% North America, 41% Europe
Global Market and Supply Chain Challenges

External Challenges on today’s Supply Chain
Significant Changes in Business Environment

Customer Markets
- User demanding direct delivery
- Sales shifting to emerging markets
- Demand becoming more volatile

Society / Legal
- Trade regulations tightening (global trade server)
- Import customs creating additional hurdles

Manufacturing footprint options
- More local for local possible
- Possible transport lead times remain long

Technology
- Supply Chain requires data integration
- Goods tracking required (RFID)

Supply Chain
- Availability
- Costs
- Capital employed

Logistics markets
- Shipping capacity getting tighter again
- Shipping costs increase

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PT Supply Chain Excellence covers various fields
Working fields to achieve excellent Supply Chain Management

- Logistics processes (S – M – D)
- Cross-functional processes
- Supply Chain Integration
- IT-Systems
- Performance Management & Improvement
- Value stream design
- Logistics organization
- Competence management

SC results
Robust
Flexible
Effective
Efficient
Adaptive

= Business driver/enabler
Global Market and Supply Chain Challenges

Demand Changes drive increased Collaboration
Challenges and Working Areas of Supply Chain Integration

Challenges
- Direct delivery to professional and private users increasing
- Volatility of demand

Supply Chain Integration
- Customer collaboration: understand demand and improve collaborative planning and forecasting
- Supplier collaboration: improve planning processes with suppliers; support supplier capability; increase reliability and flexibility of supplies
Global Market and Supply Chain Challenges

Manufacturing Footprint Options change
Challenges and Working Areas of Value Stream Design

Challenges
- Local for local manufacturing
- Long transport lead times

Value stream design
- Analyse and revise sourcing options (regional versus overseas, own manufacturing versus buy-out)
- Optimize lead times and increase plant flexibility

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Excellent Global Processes require Qualification

### Challenges and Working Areas of Qualification

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<th>Challenges</th>
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<td>• High process standards are required by customers</td>
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<td>• Qualification levels vary</td>
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#### Competence management

- Define standard roles and their competence requirements
- Identify competence needs and assign development plans
- Build-up Supply Chain Academy to provide standard training worldwide, supported mainly by internal trainers
Summary

Consequent market and customer orientation remains a key success factor in supply chain excellence.

Backbone to every successful supply chain management are:
- KPI
- Lean Operations
- Process competence

Changing conditions require constant adaptation of SC:
- Pursue the right development activities
- Exploit the potential of upcoming trends
- Apply integrated SC approach from supplier to customer