Northeast Supply Chain Conference

Strategic Supply Chain Management: The Five Disciplines for Top Performance

September 20, 2005
Outline

- Emergence of Strategic Supply Chain Management: The Five Core Disciplines
- The 5 Core Disciplines and Performance: Insights From Benchmark Data
- Adopting the 5 Core Disciplines
- Wrap Up / Q&A
- About PRTM
Northeast Supply Chain Conference

Emergence of Strategic Supply Chain Management: The Five Core Disciplines
Supply Chain Management Has Evolved From A Technology Focus To A Strategic Focus

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of Entry</strong></td>
<td>Functional “SCM”</td>
<td>Robust processes (plan, source, make, deliver, return)</td>
<td>Adoption of new processes and technology</td>
</tr>
<tr>
<td><strong>Competitive Differentiator</strong></td>
<td>Production and inventory control skills</td>
<td>Robust processes</td>
<td>Ability to rapidly align supply chains to new strategies – “anywhere… ...anytime”</td>
</tr>
<tr>
<td><strong>Key Metrics</strong></td>
<td>Functional efficiency</td>
<td>Supply chain scorecard with efficiency focus</td>
<td>SCS integrated into corporate performance management</td>
</tr>
</tbody>
</table>
Trends Showed the Emergence of Five “Core Disciplines” of Strategic SCM

Observed Trends

- Executive Team attention to SC
- Formal SC strategy processes
- SC process standards (e.g. SCOR)
- Focus on simplification
- Integration of SC and other enterprise processes
- Shift from transactions to business management
- Global SC core operations units
- SC career paths
- Formal SC scorecards
- Supplier and customer metrics
- SC on the corporate balanced scorecard
- Fewer “one-off” collaborative pilots
- Technology maturity and standardization
- Removal of the “weakest links”

“Core Disciplines”

- View your supply chain as a strategic asset
- Develop an end-to-end process architecture
- Design your organization for performance
- Use metrics to drive business success
- Build the right collaborative model
But Do Companies That Follow The Five Disciplines Have Better Supply Chain and Business Performance?

How?
Northeast Supply Chain Conference

The 5 Core Disciplines and Performance: Insights From Benchmark Data

Leading thinking for lasting results
The Answer Starts With a Clear Definition of Supply Chain Practice Maturity Levels

The Performance Measurement Group (PMG) Supply Chain Maturity Model

Stage 1: Functional Focus
Stage 2: Internal Integration
Stage 3: Integration External
Stage 4: Cross-Enterprise Collaboration & Optimization

Degree of IT Enablement
Operational Maturity
Performance

Low Maturity Practices  High Maturity Practices
PRTM’s Benchmarking Has Long Shown That Practice Maturity Improves Performance

- Companies with high supply chain practice maturity have better supply chain performance...
  - 17% lower inventories
  - 11% better delivery performance
  - 16% lower supply chain management costs

- …which translates into better business performance
  - 4x greater sales growth
  - 40% higher profitability
Defining the Impact of Strategic SCM Practices on Performance

Collected quantitative and qualitative data across 89 supply chains from 65 companies in PMG’s benchmark database

Evaluated maturity for selected practices in the Maturity Model that represent the 5 Core Disciplines

Evaluated quantitative performance of High Maturity vs. Low Maturity companies using a set of SCOR®-compliant metrics

Relationship of Strategic SCM Practices to Quantitative Performance
The Core Disciplines Lead to Significant Performance Advantage in Key SCM Metrics

<table>
<thead>
<tr>
<th>Companies that follow mature practices for:</th>
<th>Achieve:</th>
<th>By Using These Best Practices:</th>
</tr>
</thead>
</table>
| Developing End-to-End Process Architectures | 28% Lower Inventories | ▪ Actively involve partners in planning processes  
▪ Integrate IT integration with suppliers and customers  
▪ Joint Service Agreements |
| Design Their Organization for Performance | 10% Better Delivery to Request | ▪ Actively identify key skills, develop and upgrade to get them  
▪ Align org structure to key processes and incentives |
| Developing Strong Collaborative Models | 19% Shorter Cash Cycles | ▪ Align supply chain partners with Basis of Competition |
| Using Metrics to Drive Business Success | 13% Lower Supply Chain Costs | ▪ Openly share performance data with suppliers, customers  
▪ Regular external benchmarking |
Aligning the Supply Chain Strategy, and Maturity in All 5 Disciplines Drive Profitability

*Strategic SCM companies use their supply chains as strategic assets to achieve almost double the profitability of their competitors*

![Bar chart showing profitability vs. industry average across different disciplines with high and low maturity.

EBIT as % of revenue data were normalized to industry averages to remove effects of industry profitability differences. Overall, EBIT as % of revenues were:

- BICC: 12.7%
- All Others: 6.5%
Northeast Supply Chain Conference

Adopting the 5 Core Disciplines

Leading thinking for lasting results
The Five Core Disciplines are the foundation for Strategic Supply Chain Management

1. View your supply chain as a strategic asset
2. Develop an end-to-end process architecture
3. Design your organization for performance
4. Build the right collaborative model
5. Use metrics to drive business success
Discipline 1: View Your Supply Chain as a Strategic Asset

1. View your supply chain as a strategic asset

Design the supply chain around a defined basis of competition to enable the overall business strategy
A Good Supply Chain Strategy Meets Four Basic Criteria

<table>
<thead>
<tr>
<th>1. It is aligned with the business strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each business strategy requires a distinct supply chain structure, processes, systems, and skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. It is aligned with customer needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand each segment’s requirements and configure the supply chain appropriately</td>
</tr>
<tr>
<td>If necessary, create separate or multiple supply chains</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. It is aligned with the company’s power position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before making big changes, understand who has the power in the supply chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. It is adaptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chains have a shelf life and should be continuously evaluated to see if change is needed</td>
</tr>
</tbody>
</table>
Discipline 2: Develop an End-to-End Process Architecture

Develop integrated supply chain processes and systems that interface efficiently with the rest of the enterprise.
There Are Four Tests An Effective End-to-end Process Architecture Must Meet

1. Strategic Fit — Enables execution of your supply chain strategy
2. End-to-end Focus — Ensures end-to-end vision and management
3. Simplicity — Is composed of simple, streamlined processes
4. Integrity — Is highly reliable, with robust links between processes, data, and information systems

Leverage SCOR to set the context for supply chain process improvement

Source: Supply-Chain Council
Discipline 3: Design Your Organization for Performance

Develop and maintain organizational structure and skills to define and manage the supply chain of the future

Design your organization for performance
Follow Four Design Rules to Align Your Organization to Achieve Your Strategy

1. Know, grow, and keep your core capabilities
2. Organize around the skills you need, not the skills you have
3. Every process needs an accountable function or individual
4. Form should follow function—the organization should mirror the process

High-Performance Integrated Supply Chain Organization

- General Manager
- Finance & Administration
- Marketing & Sales
- R&D
- Supply Chain Manager
  - Supplier Management
  - Purchasing
  - Order Management
  - Order Fulfillment
  - Manufacturing
What Skills Will My Supply Chain Need In The Future?

*The end-to-end supply chain will need new management skills that most companies do not possess today*

- **Supply Chain Process Improvement Manager**
  - Understand and know how to implement supply chain best practices

- **Supply Chain Performance Analyst**
  - Understand and know how to implement supply chain metrics and continuous improvement programs

- **Outsourcing Partner Relationship Manager**
  - Negotiate alliances and partnerships
  - Inspire collaboration and best-in-class performance

- **Global Commodity Manager**
  - Manage key relationships and global supply at lowest cost

- **Customer Relationship Manager**
  - Detailed understanding of customer requirements and supply chain process capabilities
Discipline 4: Build the Right Collaborative Model

Understand core competencies and choose partners to maximize focus and profitability

Build the right collaborative model
Four Basic Models of Collaboration
Not One-Size-Fits-All

The Collaboration Spectrum

- **Transactional** — Efficient execution of transactions between partners
- **Cooperative** — Higher-level information sharing
- **Coordinated** — Reliance on each other’s capabilities
- **Synchronized** — Information developed jointly with longer horizon
Collaborative Partnerships Will Continue to Evolve Over Time

- Most of today’s collaborative relationships are transactional or cooperative
- As companies move away from traditional vertical integration, the need for deeper collaboration intensifies
Discipline 5: Use Metrics to Drive Business Success

Use metrics to measure the health of each core supply chain process and identify problem areas.
Metrics Help Gauge The Health Of Your Supply Chain and Drive Desired Behaviors

- **Effective metrics are:**
  - Linked to the business strategy
  - Balanced and comprehensive
  - Used as a continuous improvement tool
  - Implemented via a formal implementation plan
  - Highly visible and monitored at all levels of the company
  - Based on both internal and external benchmarking
  - Based on targets that are aggressive, but achievable
SCOR Level 1 Metrics Provide A Starting Point For A Balanced Strategic Supply Chain Scorecard

<table>
<thead>
<tr>
<th>Key Supply Chain Management Metrics</th>
<th>Delivery Performance/Responsiveness</th>
<th>Flexibility</th>
<th>Cost</th>
<th>Asset Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Performance</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order Fulfillment Lead Time</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production Flexibility</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Total Supply Chain Management Cost</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Value-Added Productivity</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Inventory Days of Supply</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Cash-to-Cash Cycle Time</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Net Asset Turns</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Northeast Supply Chain Conference

Questions?

Leading thinking for lasting results
“Cohen and Roussel effectively capture and communicate the critical elements and roadmap of world-class supply chain management. Put into practice, this book will serve as a timeless tool for those looking to transform their organization’s supply chain into a sustainable competitive advantage.”

—Jim Miller
Vice President, Operations
Cisco Systems

McGraw Hill, August 2004
PRTM Is An Innovator Of Practical And Highly-valued Supply Chain Solutions

Co-developed the Supply-Chain Operations Reference-model® SCOR®, adapted by the 750+ member Supply-Chain Council

Founding member of the Supply-Chain Council in 1996 (www.supply-chain.org)

Conducted leading benchmarking studies since 1985

Founded The Performance Measurement Group, LLC – the leader in Supply Chain Benchmarking (www.pmgbenchmarking.com)

We “wrote the book” on supply chain management, Strategic Supply Chain Management McGraw-Hill, August 2004

More than 1000 supply chain improvement engagements over the last 10 years

Over $5 Billion in documented cost reduction/revenue enhancement
PRTM Is the Leading Management Consulting Firm For Breakthrough Supply Chain Transformation

Background
Founded in 1976 with a unique focus
- Product- and innovation-based companies
- Operational results through hands-on implementation

Experience and Innovation
More than 1,200 technology-/product-based clients
- Over 6,000 successful projects
- 90% level of repeat business

Thought Leadership and Innovation
- Product And Cycle-time Excellence® (PACE®)
- Supply-Chain Operations Reference-model® (SCOR®)
- PMG—Web-based benchmarking

Technical Competence
More than 450 consultants
- Technical and business backgrounds
- Practical industry experience

Global Footprint

Preeminent Reputation

Life Sciences

Communications

Consumer Goods

Automotive and Industrial

Chemicals and Energy

Product And Cycle-time Excellence® and PACE® are the registered trademarks of PRTM
Supply-Chain Operations Reference-model® and SCOR® are the registered trademarks of the Supply-Chain Council and were developed by PRTM
Northeast Supply Chain Conference

Thank You!

Leading thinking for lasting results