Supply Risk Management

Webcast

November 19, 2007

Boston • Dubai • Shanghai
Who We Are

• Supply Chain Research
• Supply Market Forecasts
• Supply Chain Consulting
Agenda

• What is supply risk management?
• Why is it important?
• What can you do about it?
• How does each approach perform?
• What is the best way to cope with supply risk?
Supply Chain Risk: A Hot Topic

Supply Chain Risk
(ISM Conference 2004)

Supply Network Design
(MIT)

Supply Risk
(Supply Chain Planet)

Risk Management
(Inside Supply Management)

Supply Management Risk
(International Journal of Supply Management)

Holistic Risk Management
(Purchasing Magazine)

Breaking Point
(Journal of Commerce)

Risk Control
(APICS Performance Advantage)

Supply Risk
(Supply Chain Management Review)

Balanced Scorecard
(Harvard Business Review)

Supply Continuity Planning
(Inside Supply Management)
Categories of Risk

Practical Categories of Risk

Supply Risk
- Material Availability
  - Steel on allocation
  - Specialty chemicals
- Cost Predictability
  - Industrial chemicals up x% last year
  - Energy prices up x% last 3 years

Supply Chain Risk
- Disaster Avoidance
  - 9/11 recovery
  - Tsunami
- Regulatory Compliance
  - 24-hour rule
  - CSI

Disaster Recovery
- 9/11
  - Viruses and hackers

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Leadtime increases have been painful
Raw materials costs have gone wild, and budget variances are increasing

- Expense: 50% are over-budget, 62% worsening
- Capital: 60% are over-budget, 73% worsening
High stakes

- Stock market devaluation
- Financial loss
- Lost productivity
- Lost speed to market
- Personal stress
- Career disruption
### Potential risk management strategies

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<thead>
<tr>
<th>Avoid risk</th>
<th>Diversify risk</th>
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<td>1. Reduce consumption</td>
<td>1. Decentralize purchasing</td>
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<td>2. Pass costs on to customers</td>
<td>2. Join a buying consortium</td>
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<th>Hedge risk</th>
<th>Minimize risk</th>
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<td>1. Buy options</td>
<td>1. Buy in advance at the current price</td>
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<tr>
<td>2. Study and anticipate market conditions</td>
<td>2. Sign long-term contracts at forecast rates</td>
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Avoidance is best; hedging is often practical

Percent Savings by Strategy

- Buying consortium
- Centralized Purchasing
- Value Engineering
- Options
- Stockpile
- Contracts
- Surcharges
- Price Increase
- Spot

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Managed risk

- Mapped and benchmarked price curves

- Solid strategies for managing risk
1 Highlights

Demand: Mill roll demand will continue to grow through 2012, in step with robust capital investment in iron and steel production.

- Capital investments will grow at 10-12% per year from 2006-2012.
- Chinese demand will increase at an average of 10% per year over that period.
- Stainless steel and high-growth segments will fuel a demand for various specialized mills.

Supply: Suppliers are adding capacity, but the incremental capacity will not alleviate the current...
Boston Logistics helps supply chain executives make critical supply chain decisions that involve investment and risk by forecasting the evolution of supply markets and technologies. Our mission is to help our clients develop globally competitive supply networks that maximize Supply Chain Value.™ Our products and services include:

- **Supply Chain Research** that helps investors and policy makers quantify the benefit of emerging technologies and decide whether or not to invest in them
- **Supply Market Forecasts** that help purchasing managers decide how, where, and when to buy critical externally-purchased materials and services
- **Supply Chain Consulting** that supports high-stakes decisions such as acquisitions, outsourcing, off-shoring, and make-or-buy

**Industries Served:**

- Supply Chain Solutions Providers: Advanced Planning and Scheduling (APS), Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Location-Based Services (LBS), Transportation Management Systems (TMS), Warehouse Management Systems (WMS)
- Discrete Manufacturing: Machinery, Equipment, Vehicles, Parts, Mechanical and Electrical Devices
- Transportation: Railroads, Ocean Shipping Lines, Airlines, Trucking Companies, Package Delivery, Intermodal
- Logistics: Dedicated and Third Party Logistics, Ports, Stevedoring, Storage, Material Handling, Distribution, Maintenance, Retail