Questions about supply chain performance metrics:

- “Is it quantitative?”
- “Is it easy to understand?”
- “Does it encourage appropriate behavior?”
- “Is the metric visible?”
- “Does it encompass both outputs & inputs?”
- “Does it measure only what is important?”
- “Is it multidimensional?”
- “Does it facilitate trust?”
Supply Chain Performance Metrics commonly used:

- On-time delivery 90%
- Quality of goods/services 83%
- Service capability/performance 69%
- Price competitiveness 55%
- Compliance with contract terms 51%
- Responsiveness 50%
- Lead time 44%
- Technical capability 34%
- Environmental, health, and safety performance 30%
- Innovation 29%

Source: Logistics Management (January 2006)
Supply Chain Performance Metrics

- Successful supply chain performance measurement relies on appropriate metrics that capture the entire essence of the supply chain process.
- Cost has long been recognized as an important metric for determining efficiency.
- The focus on minimizing total supply chain cost requires measuring the cost tradeoffs when making changes to the configuration of the supply chain.
Developing Supply Chain Performance Metrics

- The development of performance metrics program should be a team effort
- Involve customers and suppliers, where appropriate, in the metrics development process
- Develop a tiered structure for the metrics
- Identify metric “owners” and tie metric goal achievement to an individual’s or division’s performance evaluation
- Establish procedure to mitigate conflicts arising from metric development and implementation.
- Secure top management support for supply chain metrics development
<table>
<thead>
<tr>
<th>TIME</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-time delivery/Receipt</td>
<td>Finished goods inventory turns</td>
</tr>
<tr>
<td>Order cycle time</td>
<td>Days sales outstanding</td>
</tr>
<tr>
<td>Order cycle time variability</td>
<td>Cost to serve</td>
</tr>
<tr>
<td>Response time</td>
<td>Cash-to-cash cycle time</td>
</tr>
<tr>
<td>Forecasting/Planning cycle time</td>
<td>Total delivered cost</td>
</tr>
</tbody>
</table>

**Quality**

<table>
<thead>
<tr>
<th>Quality</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall customer satisfaction</td>
<td>Cost of goods</td>
</tr>
<tr>
<td>Processing accuracy</td>
<td>Transportation costs</td>
</tr>
<tr>
<td>Perfect order fulfillment*</td>
<td>Inventory carrying costs</td>
</tr>
<tr>
<td></td>
<td>Material handling costs</td>
</tr>
<tr>
<td></td>
<td>All other costs</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information systems</td>
</tr>
<tr>
<td></td>
<td>Administrative</td>
</tr>
<tr>
<td>Forecast accuracy</td>
<td>Cost of excess capacity</td>
</tr>
<tr>
<td>Planning accuracy</td>
<td>Cost of capacity shortfall</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Approval exceptions to standard</td>
</tr>
<tr>
<td></td>
<td>Minimum order quantity</td>
</tr>
<tr>
<td></td>
<td>Change order timing</td>
</tr>
</tbody>
</table>

**Other/Supporting**

<table>
<thead>
<tr>
<th>Other/Supporting</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule adherence</td>
<td>Availability of information</td>
</tr>
</tbody>
</table>

*Contains a time component.

The Supply Chain–Finance Connection

- Supply chain performance has high impact on financial performance.

- Logistics service affects sales/marketing and corporate profitability.

- Financing inventory affects the amount of capital required to fund the business.
The Supply Chain Financial Impact

- Supply chain plays a critical role in determining the level of profitability.
- A major objective for any corporation is to produce a satisfactory return for stockholders.
- Corporate financial efficiency is judged by the profit it generates in relationship to the assets utilized, or its return on assets (ROA).
Figure 5-10

Supply Chain Impacts on the Balance Sheet

**ASSETS**

- Cash
- Receivables
- Inventories
- Property, plant, and equipment
- Current liabilities
- Debt
- Equity

**LIABILITIES**

- Order cycle time/order to cash
- Order completion rate
- Invoice accuracy
- On-time delivery
- Service levels/stockout rates
- Distribution facilities
- Transportation equipment
- Outsourcing policies
- Financing options for inventory, Warehouses, and equipment
Supply Chain Service Financial Implications

- The results of supply chain service failures are:
  - Costs to correct problems
  - Cost of lost sales
- When service failures occur, some customers experiencing the service failure will request that the orders be corrected and others will refuse the orders.
- The refused orders represent lost sales revenue that must be deducted from total sales.
- For the rectified orders, the customers might request an invoice deduction to compensate them for any inconvenience or added costs.
- Some customers may switch their purchase to competitors permanently and never return. The cost of lost sales can be high when this happens.