How Do I Use SCOR?

Supply Chain World - April, 2001

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What is Supply Chain?

The integrated processes of Plan, Source, Make and Deliver, spanning your suppliers’ supplier to your customers’ customer, aligned with Operational Strategy, Material, Work & Information Flows.
SCOR Project Roadmap

- **Analyze Basis of Competition**
  - Operations Strategy
    - Supply Chain Scope
    - Performance Metrics
    - Supply Chain SCORcard
    - Competitive Performance Requirements
    - SCORcard Gap Analysis
    - Business Case

- **Configure Supply Chain**
  - Material Flow
    - AS IS Geographic Map
    - Disconnects & ROI
    - Design Specifications
    - TO BE Geographic Map
    - AS IS Process Flow
    - TO BE Process Flow

- **Align Performance Levels, Practices, and Systems**
  - Information and Work Flow
    - AS IS Work/Information Map
    - Disconnects
    - Design Specifications
    - TO BE Work/Information Map
    - Prioritized List of Changes

- **Implement Supply-Chain Changes**
  - Implementation
    - Master Schedule of Projects
    - Detail Design
    - Technology Selection
    - Pilot
    - Roll Out
Project Approach

Edcuate

Support

Discover

Opportunity

Analyze

Strategy

Design

Solution

Develop

Prototype

Implement

Install

- Workshops
- Executive Briefings
- Customized Training

Analyze Basis of Competition

Configure Supply Chain

Align Performance Levels, Practices & Systems

Implement Supply Chain Changes

1 Week

1-2 Weeks

3-4 Months

6+ Months
Educate for Support

**WHO**
- The Evangelist
- Core Team Buy IN
- Active Executive Sponsorship

**WHAT**
- General SCOR Workshops
- Customized SCOR Workshops
- Executive Briefing
Discover Opportunity

Business Team

✓ Value Proposition
✓ Profit & Loss Statement
✓ Balance Sheet
✓ Critical Success Factors
✓ Critical Business Issues
✓ Internal Profile
✓ External Profile
Discover Opportunity

Performance Issues

✓ Deficiency
✓ Improvement
✓ Core Competency Investment

Goals, Design, & Management

✓ Organization
✓ Process
✓ Technology
✓ Jobs/People
Discover Deliverable
Project Charter

I. Introduction
   ✓ Maintenance of the Project Charter

II. Project Overview
   ✓ Scope
   ✓ Business Objectives
   ✓ Project Objectives

III. Project Approach
   ✓ Methodology
   ✓ Project Schedule
   ✓ Project Milestones & Deliverables
   ✓ Dependencies

IV. Project Budget

V. Project Organization
   ✓ Organization Chart
   ✓ Project Resources
   ✓ Roles and Responsibilities

VI. Measures of Success
   ✓ Stakeholder Expectations
   ✓ Benchmarks
   ✓ Benefit Analysis

VII. Project Communication
   ✓ Communication Plan
   ✓ Control Procedures
Discover Deliverable
Project Organization

- CLIENT Advisory/Steering Committee
- CLIENT Project Sponsor
- PRAGMATEK SME
- CLIENT Project Manager
- PRAGMATEK Extended Team
- CLIENT Design Team
- CLIENT Extended Team
Discover Deliverable
Project Plan

- Analyze
- Design
- Develop
- Implement

Supply Chain Design/Pilot
Roll Out Quick Hit Changes
Roll Out Non-Technical Changes

Technology Assessment/Optimization
Functional Requirements
Conference Room Pilot
Roll Out Integrated Solution

3/20 5/1 6/1 7/1 8/1 9/1 +
Analyze

Drive a Tight Supply Chain Scope
Benchmark Defines Business Opportunity
Supply Chain SCORcard “Hot Links” to the P&L
Business Management Team Ownership
# Analyze Deliverable SCORcard

<table>
<thead>
<tr>
<th>Actual SCORcard</th>
<th>Actual Performance Versus Consumer Packaged Goods Benchmarks</th>
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<tbody>
<tr>
<td><strong>Customer</strong></td>
<td></td>
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<tr>
<td>Delivery Reliability</td>
<td></td>
</tr>
<tr>
<td>Order Fillrate</td>
<td>Actual</td>
</tr>
<tr>
<td>98%</td>
<td>76%</td>
</tr>
<tr>
<td>Line Fillrate</td>
<td>N/A</td>
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<tr>
<td>Flexibility &amp; Responsiveness</td>
<td></td>
</tr>
<tr>
<td>Fulfillment Leadtime, (Order Receipt to Customer Receipt)</td>
<td>5 - 12 days</td>
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<tr>
<td><strong>Internal Facing</strong></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>COGS, (Cost of Sales % to Net Sales)</td>
<td>34.7%</td>
</tr>
<tr>
<td>Warranty/Returns, (Returns as % of Net Sales)</td>
<td>16.0%</td>
</tr>
<tr>
<td>Total Supply Chain Cost, (As a % of Net Sales)</td>
<td>-----</td>
</tr>
<tr>
<td>Order Management, (Customer Service Allocation + Freight + Fulfillment)</td>
<td>8.5%</td>
</tr>
<tr>
<td>Material Acquisition</td>
<td>Very Low</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Cash to-Cash, (Inventory days of supply + days sales outstanding - average payment period)</td>
<td>7 days</td>
</tr>
<tr>
<td>Net Asset Turns, (Total gross product revenue/Total net assets)</td>
<td>TBD</td>
</tr>
</tbody>
</table>
### Analyze Deliverable

**Competitive Performance Requirements**

<table>
<thead>
<tr>
<th>Performance Attribute</th>
<th>Performance vs. Competition</th>
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<tbody>
<tr>
<td></td>
<td>MATURE</td>
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<tr>
<td>Delivery Reliability</td>
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</tr>
<tr>
<td>Flexibility/ Responsiveness</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>Asset</td>
<td></td>
</tr>
</tbody>
</table>

#### Legend

- Superior
- Advantage
- Parity
Design Material Flow

Geographic Map
- Physical Locations
- Product ID, SKU, and/or Family

Disconnects
- Drive the ROI
- Prioritize the Work

SCOR Level 2 defines types of processes used by physical location
- “Lean Manufacturing” concepts
Design
Material Flow Deliverable
Design
Material Flow Deliverable

1 = Forecasting
2 = Competitive Part Material Flow
3 = Non-working Inventory
4 = Inbound Freight
5 = Reorder Point
6 = Schedule Agreements
7 = Current/Non-current (TBD)
Design

Material Flow Deliverable

4. Inbound Transportation between Suppliers is not optimized which includes both Parcel and LTL, normal and expedite shipping, and cross dock operations. This is further complicated by the conflict between physical space for staging shipments to support truck utilization AND leadtime to dealer order needs.

<table>
<thead>
<tr>
<th>Metric</th>
<th>P&amp;L Line</th>
<th>Impact</th>
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</thead>
<tbody>
<tr>
<td>Line Fillrate</td>
<td>Net Sales</td>
<td>No impact on Line Fillrate.</td>
</tr>
<tr>
<td>Backorder Duration</td>
<td>Net Sales</td>
<td>Minimum of 2 days of backorder duration due to transportation time.</td>
</tr>
<tr>
<td>COGS</td>
<td>Gross Profit</td>
<td>Inbound transportation as a rule shows up in STANDARD COST, MFG Variance and Purchase Variance. 60% of the shipments are parcel. Actual spend in 1999 was $2.5M.</td>
</tr>
<tr>
<td>Supply Chain Cost</td>
<td>Direct Profit Contribution</td>
<td>The inbound cost of supply chain cost shows up in Warehouse line via allocation. Actual spend in 1999 was $.5M.</td>
</tr>
<tr>
<td>Assets</td>
<td>CVA/EVA</td>
<td>The FOB destination as currently practiced, is the Supplier’s dock which impacts the Inventory by an estimated $.1M (25 days)</td>
</tr>
</tbody>
</table>
Design
Material Flow Deliverable

Ease of Implementation

Easy

Tough

Business Impact

Small Pay-Off

Big Pay-Off

Quick Hits

Gems

Caution

Extra Effort

$1M Annual Savings
Design

Work & Information Flow

Defines the work and information which moves the material
Incorporates the major system applications and transactions
“Swim Diagram” approach
Illustrates the impact of “e” to your business
Additive to the ROI derived in Material Flow
Design

Work & Information Flow Deliverable
AS IS
Design
Work & Information Flow Deliverable
TO BE

- **Marketing**
  - Consensus Unit Plan

- **Purchasing**
  - P1.4 Establish Supply Chain Plans
  - P1.3 Balance Supply Chain Resources With Supply Chain Reqsmts
  - P1.2 Identify, Assess, & Aggregate Supply Chain Resources

- **Manufacturing**
  - Net Unit Supply Plan
  - P1.1 Identify, Prioritize, and Aggregate Supply Chain Reqsmts
  - Rolling 12 mo Aggregate Unit Plan (to P2)
  - Unit Forecast
  - Existing Inventory
  - Profit Contribution $$

- **Inventory Control**
  - Existing Inventory
Develop Solution

Balance Quick Hits and Non-Technology Changes with Longer payback projects

Leverage a Conference Room Pilot Scenario

Link a formal Technology Selection Process to the Design Process

Transition Team from “Design” to “Implementation”

Detail “TO BE” Design at Level 4
# Develop Solution Deliverable

## Recommendation Summary

<table>
<thead>
<tr>
<th><strong>Recommendation:</strong></th>
<th><strong>Opportunity/Benefit:</strong></th>
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<tbody>
<tr>
<td>Design, test and implement an integrated supply chain demand planning/forecasting solution for Business Unit</td>
<td><strong>$2M</strong> Inventory reduction</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Project Manager:</strong></th>
<th><strong>Change Required:</strong></th>
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<tbody>
<tr>
<td>Elaine Reichardt</td>
<td>- Organizational metrics</td>
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<tr>
<td></td>
<td>- Process changes/additions</td>
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<td>- Separate demand and supply planning</td>
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<td>- Technology changes</td>
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<thead>
<tr>
<th><strong>Challenges/Dependencies:</strong></th>
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<tr>
<td>- Define Requirements</td>
<td></td>
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<td>- Explore tool options</td>
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<td>- Test/prove design</td>
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<td>- Enlist support from MRP controllers</td>
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<td>- Data integrity</td>
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Develop Solution

**Pace of Change**

- **Fast**
  - Tactical: Focused Improvement
  - Strategic: Focused Restructuring
- **Measured**
  - Tactical: Continuous Improvement
  - Strategic: Business Process Innovation

**Balanced Project Mix**

**Scope of Change**

- Tactical
- Strategic
## Develop Solution Deliverable
### Master Project Schedule

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PROJECT NAME</th>
<th>START END</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
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<td>Non Working Inventory Reduction</td>
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<td>Plan</td>
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<td>Strategic</td>
<td>Efficient Material Acquisition</td>
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<td>Direct to Consumer Transportation</td>
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<td>Deliver</td>
<td>Rick Hardcopf</td>
<td>12/31/00</td>
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</table>

- **SUPPLY CHAIN SCOPE**
- **STRATEGIC DELIVERABLES:**
- **Make-to-Order:**
- **Source:**
- **Integrate Supply Chain Planning:**
- **Efficient Material Acquisition:**
- **Direct to Consumer Transportation:**
Develop Solution Deliverable
Level 4 Work & Information Flow
Implement

Implementation of supply changes can be described in 3 phases

- Transition
- Installation
- Institutionalization

Installation is an iterative process

- Develop
- Prepare
- Cut-Over
- Evaluate
Implementation Deliverable
Dashboard, Self Funding Project

Define

Design & Improve

Make

Deliver

Processes

Flows

Performance

Results

Plan

Source

OPS Strategy

INFORMATION

WORK FLOW

MATERIALS

Logistics Cost
Inventory Days
DSO/AR
Order Lead-time
Fill Rate
Rework
Asset Turns
Cash Cycle Time

As Is
Rev (COGS)
Gross (SG&A)
NOI (Inv + AR -AP/I%)
EVA

To Be
Rev (COGS)
Gross (SG&A)
NOI (Inv + AR -AP/I%)
EVA