How Do I Use SCOR?

Supply Chain World - April, 2001

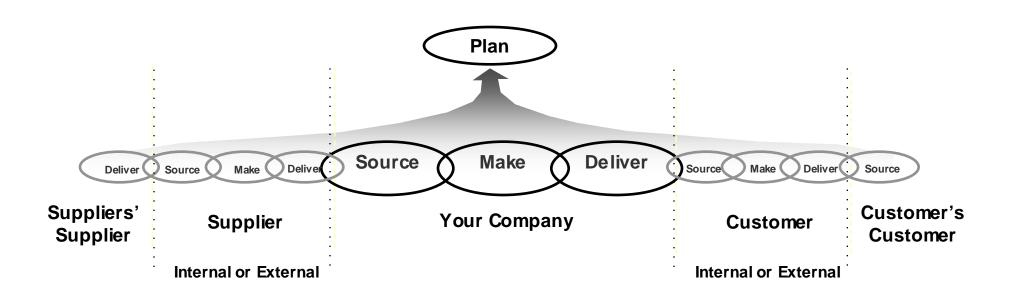


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Supply-Chain Council

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.



← Supply Chain Operations Reference Model →

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

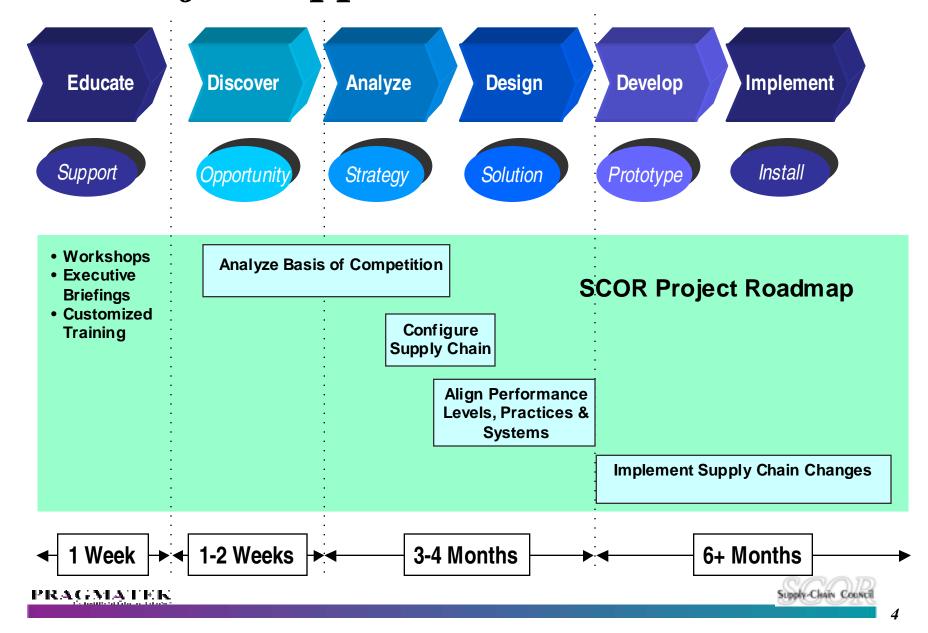
- •AS IS Work/Information Map
- Disconnects
- Design Specifications
- •TO BE Work/Information Map
- Prioritized List of Changes

Implement Supply-Chain Changes **Implementation**

- •Master Schedule of Projects
- Detail Design
- •Technology Selection
- •Pilot
- •Roll Out

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Project Approach



Educate for Support

<u>WHO</u>

- -The Evangelist
- -Core Team Buy IN
- Active ExecutiveSponsorship

WHAT

- General SCORWorkshops
- Customized SCORWorkshops
- -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 <u>Issues</u>

- ✓ Deficiency
- ✓ Improvement
- ✓ Core Competency Investment

Goals, Design, & Management

- ✓ Organization
- ✓ Process
- ✓ Technology
- ✓ Jobs/People



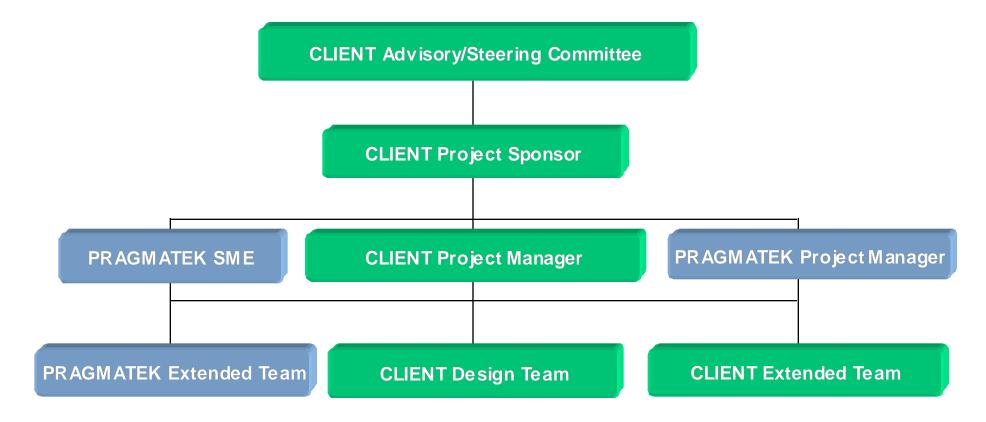
Discover Deliverable Project Charter

- 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 8
- VII. Project Communication
 - ✓ Communication Plan
 - ✓ Control Procedures



Discover Deliverable Project Organization





Discover Deliverable Project Plan

	Analyze	Design	Develop	Implement	
•	: : :				
Business	Supply Chain	Design/Pilot	Roll Out Quick Hit Changes	Roll Out Non-Technical Changes	
Technical	Technology Assessm Optimization	ent/ Functional Requirements	Conference Room Pilot	Roll Out Integrated Solution	
3/	20 5/1	6/1 7	/1 8	/1 9/1	+

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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

Facing	Actual SCORcard		Actual Performance Versus Consumer Packaged Goods Benchmarks				
Fac		SCOR Level 1 Metric	Actual	Parity	Advantage	Superior	Value from Improvements
Sustomer		Order Fillrate	98%	76%	87%	97%	Ne ed To Maintain Superior Performance
C	Delivery Re lia bility	Line Fillrate	N/A	90%	96%	98+%	N/A
	Flexibility & Responsiveness	Fulfillment Leadtime, (Order Receipt to Customer Receipt)	5 - 12 days	3 days	2 days	1 day	Opportunity for Competitive Advantage
3	Cost	COGS, (Cost of Sales % to Net Sales)	34.7%	60.0%	TBD	TBD	Ne ed To Maintain Superior Performance
l Facing		Warranty/Returns, (Retums as % of Net Sales)	16.0%	TBD	TBD	TBD	Opportunity for Pe formance Improvem ent
Internal		Total Supply Chain Cost, (As a % of Net Sales)		8.0%	7.0%	5.0%	Opportunity for SG&A Reduction
		Order Management. (Customer Service Alboation + Freight+ Fulfillment)	8.5%	4.0%	3.0%	1.5%	\$2.5M estimated Home Delivery opportunity
		Material Acquisition	Very Low	3.0%	2.0%	0.5%	Need To Maintain Superior Performance
	Assets	Cash to-Cash, (Invertory days of supply + days sales outstanding - average payment period)	7 days	65 days	40 days	20 days	Need To Maintain Superior Performance
		Net Asset Turns, (Total gross product revenue/Total net assets)	TBD	2.5	5	7	TBD

Analyze Deliverable Competitive Performance Requirements

Performance Attribute	Performance vs. Competition	
7 ttti ibato	MATURE	NEW
Delivery Reliability	0	
Flexibility/ Responsiveness	0	0
Cost		0
Asset	0	0

Legend

Superior	Advantage	Parity
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Design Material Flow

Geographic Map

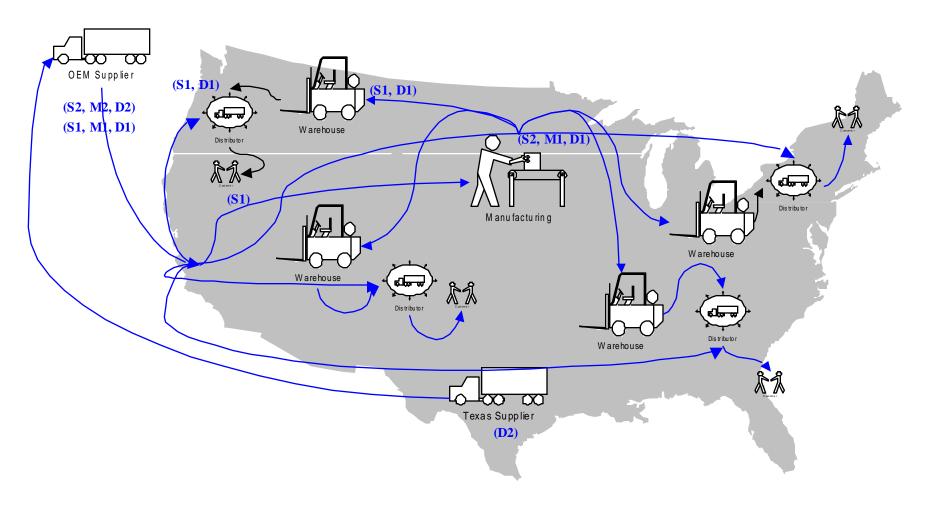
- -Physical Locations
- -Product ID, SKU, and/or Family

Disconnects

- –Drive the ROI
- -Prioritize the Work

SCOR Level 2 defines types of processes used by physical location

-"Lean Manufacturing" concepts



- 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)

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.

Metric	P&L Line	Impact
Line Fillrate	Net Sales	No impact on Line Fillrate.
Backorder	Net Sales	Minimum of 2 days of backorder
Duration	CVA/EVA	duration due to transportation time.
COGS	Gross Profit	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.
Supply Chain Cost	Direct Profit Contribution	The inbound cost of supply chain cost shows up in Warehouse line via allocation. Actual spend in 1999 was \$.5M.
Assets	CVA/EVA	The FOB destination as currently practiced, is the Supplier's dock which impacts the Inventory by an estimated \$.1 M (25 days)



Ease of Implementation

\$ 1M Annual Savings

Guick Hits

Caution

3 4
Gems

Tough

Caution

Extra Effort

Business *Impact*

Small Pay-Off

Big Pay-Off

Design Work & Information Flow

Defines the work and information which moves the material

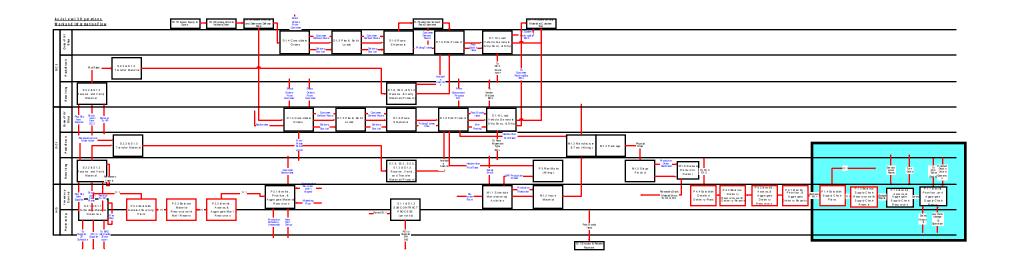
Incorporates the major system applications and transactions

"Swim Diagram" approach

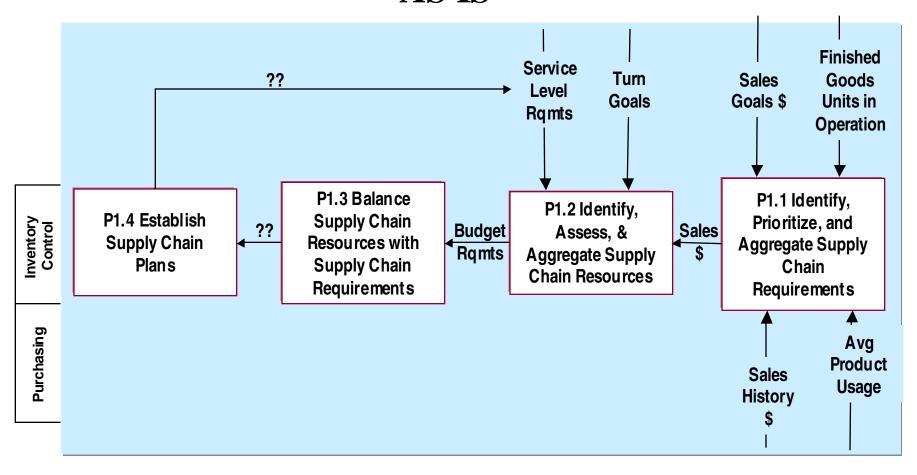
Illustrates the impact of "e" to your business

Additive to the ROI derived in Material Flow

Design Work & Information Flow Deliverable

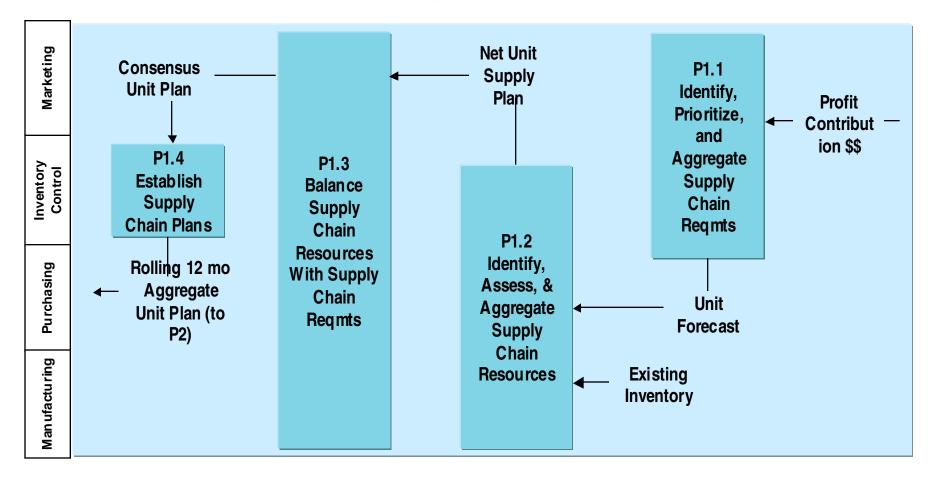


Design Work & Information Flow Deliverable AS IS



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Design Work & Information Flow Deliverable TO BE



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

Recommendation:

Design, test and implement an integrated supply chain demand planning/forecasting solution for Business Unit

Project Manager:

Elaine Reichardt

Challenges/Dependencies:

- Define Requirements
- Explore tool options
- Test/prove design
- Enlist support from MRP controllers
- Data integrity

Opportunity/Benefit:

\$2M

Inventory reduction

Change Required:

- Organizational metrics
- Process changes/additions
- Separate demand and supply planning
- Technology changes

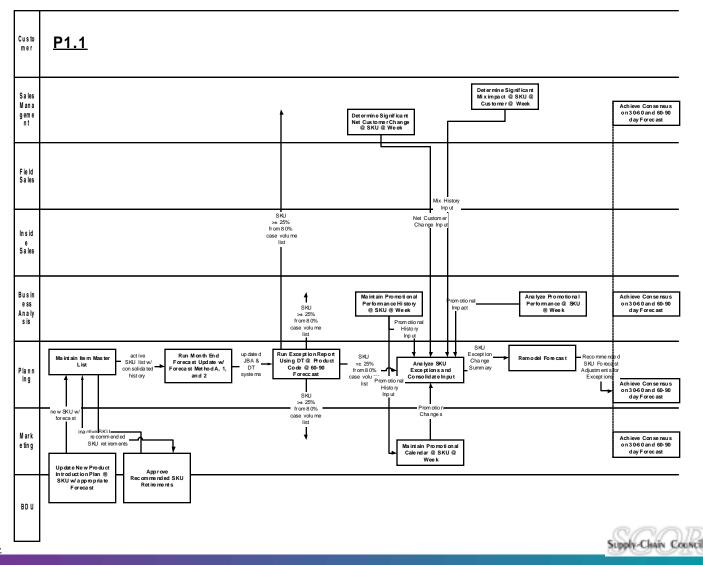
Develop Solution

	Balanced	Pace of Change			
	Project Mix	Fast	Measured		
Scope of Change	Tactical	Focused Improvement	Continuous Improvement		
Scope of	Strategic	Focused Restructuring	Business Process Innovation		

Develop Solution Deliverable Master Project Schedule

TYPE	PROJECT NAME		START	
SCOR	PROJECT MANAGER	RESULTS PLAN	END	JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
SUPPLY	CHAIN SCOPE	.	•	
Strategic	Available to Promise	Service Flexibility	02/08/00	V V
Deliver	Jo Ellsw orth	Cost Assets	12/31/00	
				Session Action Quarter Plan Quarter Plan Quarter Plan Plan
Strategic	Make-to-Order	Service Flexibility	10/01/99	V V
Make	David Hendrickson	Assets	06/30/00	Complete Complete Test Complete Capital Plan Complete Test Implementation
Strategic	Outsource Reconfiguration	Service Flexibility	12/03/99	9 🗘
Source	Deb Lynch	Cost Assets	12/31/00	
				Validation Cut over
Deficiency	Non Working Inventory Reduction		07/19/99	9 🗘
Deliver	Jay Gaustad	Assets	04/30/00	
		•		Review Dat a Integration
Deficiency	Integrated Supply Chain Planning	Service Flexibility	08/16/99	
Plan	Peter Bolstorff	Cost Assets	TBD	Disconnects Action
		•		Reviewed Plan
Deficiency	Texas Consignment	Service Flexibility		Det ermine Sched ule
Source	Joe Comerford	Cost Assets		7
		•	•	
Strategic	Efficient Material Acquisition			Det ermine Sched ule
Source	Elaine Reichardt	Cost		1
		•	•	
Strategic	Direct to Consumer Transportation	Service Flexibility	03/01/00	2001 plan
Deliver	Rick Hardcopf	Assets	12/31/00	Brainstorm
		<u> </u>		Project Objectives; Set Strategy

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

Measure

P & L

Plan

Source

Make

Deliver

OPS Strategy







Logistics Cost

Inventory Days

DSO/AR
Order Lead-time

METRICS

Fill Rate

Rework

Asset Turns

Cash Cycle Time

As Is	To Be
Rev	Rev
(COGS)	(COGS)
Gross	Gross
(SG&A)	(<u>SG&A)</u>
NOI	NOI
(Inv + AR	(Inv + AR
<u>-AP/I%)</u>	<u>-AP/I%)</u>
<u>EVA</u>	_EVA_

Processes

Flows

Performance

Results