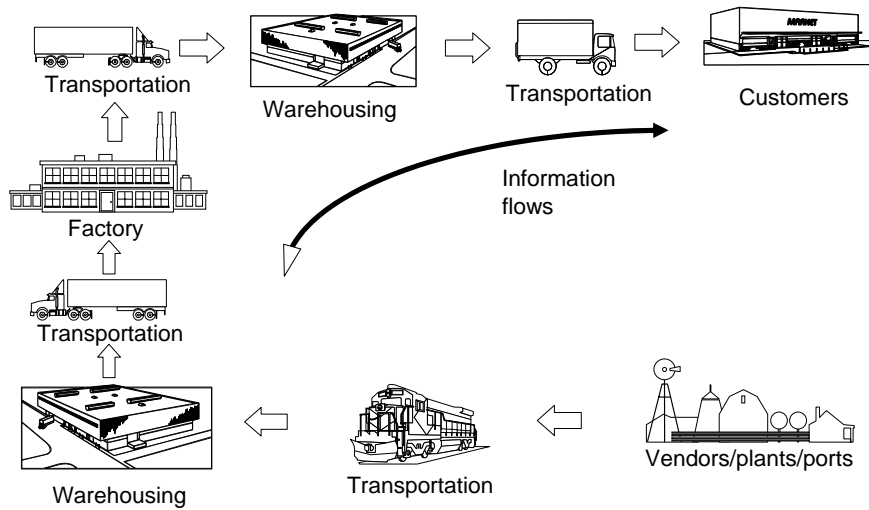


Business Logistics/Supply Chain—A Vital Subject

The supply chain is simply another way of saying “the whole process of business.”

1-1

The Immediate Supply Chain for an Individual Firm



1-2

Logistics Defined

Logistics is the process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to point of consumption for the purpose of conforming to customer requirements.

Council of Logistics Management

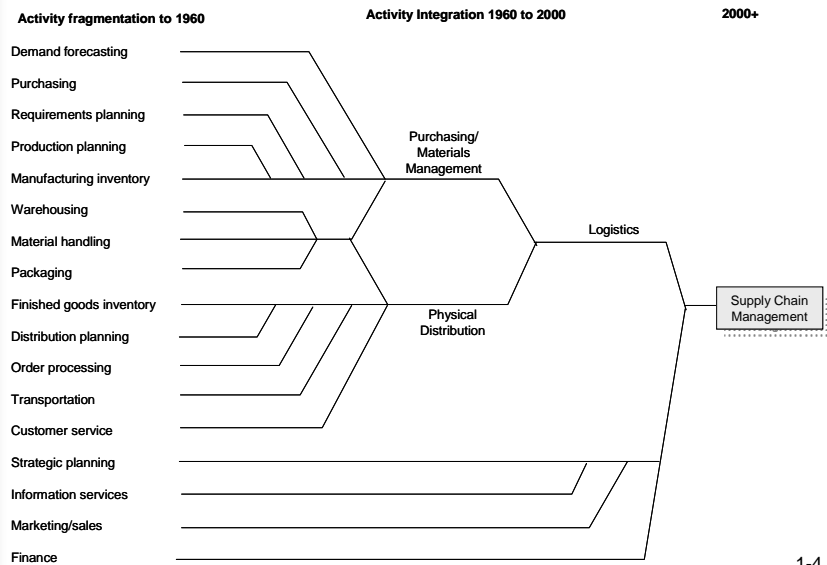
Supply Chain Management Defined

SCM is the integration of all activities associated with the flow and transformation of goods from raw materials through to end user, as well as information flows, through improved supply chain relationships, to achieve a sustainable competitive advantage.

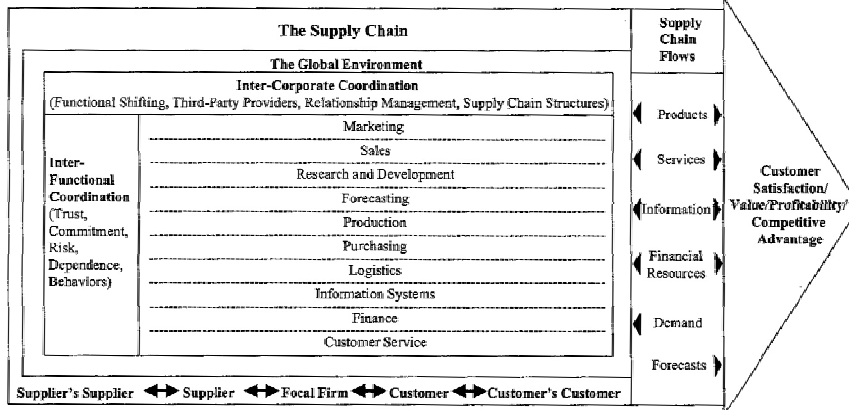
Handfield and Nichols

1-3

Evolution of Supply Chain Management



Supply Chain Schematic



1-5

The Logistics/SC Mission

Getting the *right goods* or *services* to the *right place*, at the *right time*, and in the *desired condition* at the lowest cost and highest return on investment.

1-6

A Revised Strategy is Generating Great Top Management Interest

Historical perspective of distribution:
“The last frontier of cost economies”

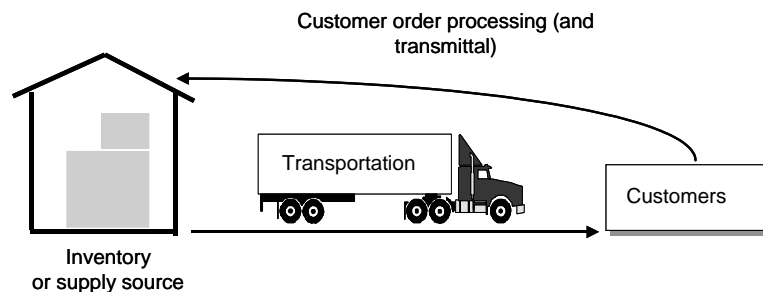
Peter Drucker, 1962

The contemporary view:
Distribution is a new frontier for demand generation—a competitive weapon.

Both views are now important!

1-7

Critical Customer Service Loop



1-8

Physical Distribution Costs

Category	Percent of sales	\$/cwt.
Transportation	3.34%	\$26.52
Warehousing	2.02	18.06
Order entry	0.43	4.58
Administration	0.41	2.79
Inventory carrying	<u>1.72</u>	<u>22.25</u>
Total	7.65%	\$67.71

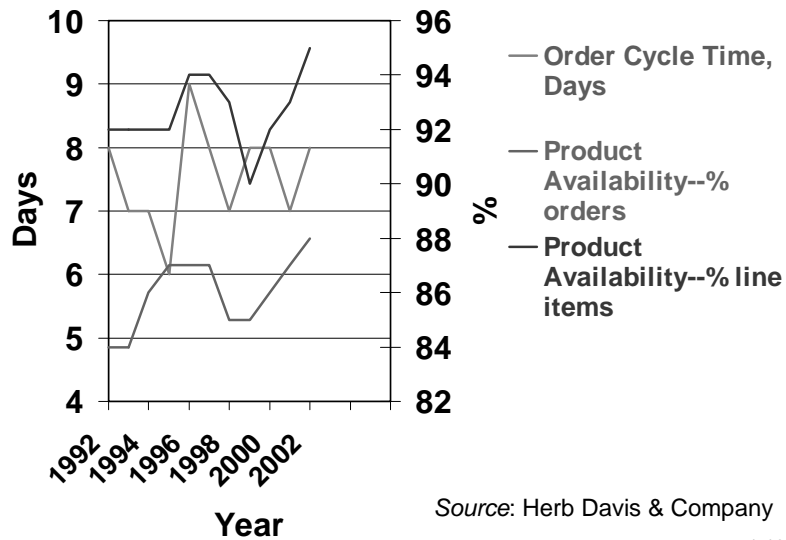
Add one-third for inbound supply costs

Logistics cost are about 10% of sales w/o purchasing costs

Source: Herb Davis & Company

1-9

Customer Service Performance



Source: Herb Davis & Company

1-10

Significance of Logistics

- **Costs are high**
 - About 10.5% of GDP domestically
 - About 12% of GDP internationally
 - A range of 4 to 30% of sales for individual firms, avg. about 10%
 - A high as 70-80% of sales if purchasing and production are included
- **Customers are more demanding of the supply chain**
 - Desire for quick response
 - Desire for mass customization
- **An integral part of company strategy**
 - Generate revenue
 - Improve profit
- **Logistical lines are lengthening**
 - Local vs. long distance supply
- **Logistics is a key to trade and an increased standard of living**
 - Law of comparative economic advantage applies
- **Logistics adds value**
 - Time and place utilities

1-11

Wal-Mart Wins with Logistics!

- Costs are lower than K-Mart or Target Stores
- CEO is a former logistician
- Wal-Mart is the largest retailer in the *world!*

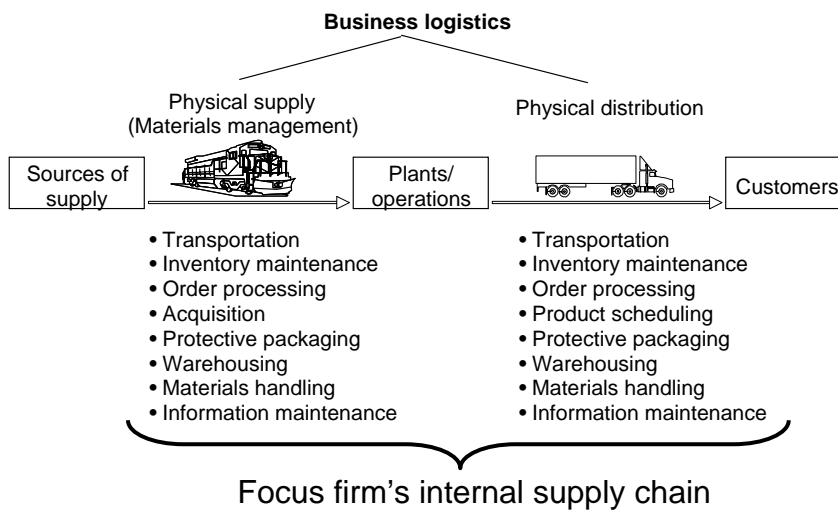
1-12

Effect on Logistics Foreign Outsourcing

Domestic sourcing	Foreign sourcing
Profit	Profit Increase
G & A	G & A
Marketing	Marketing
Logistics	Logistics Increase
Overhead	Tariffs
	Overhead
Materials	Materials
Labor	Labor Reduction

1-13

Scope of the Supply Chain for Most Firms



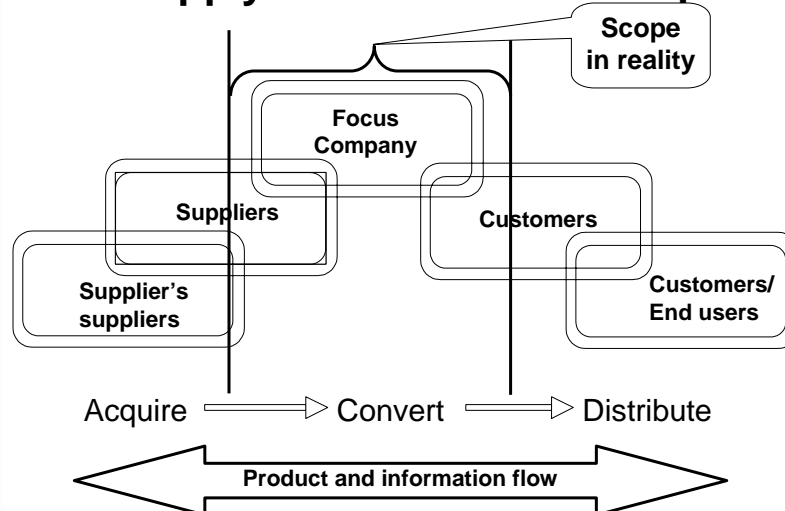
1-14

Key Activities/Processes

- *Primary*
 - Setting customer service goals
 - Transportation
 - Inventory management
 - Location
- *Secondary, or supporting*
 - Warehousing
 - Materials handling
 - Acquisition (purchasing)
 - Protective packaging
 - Product scheduling
 - Order processing

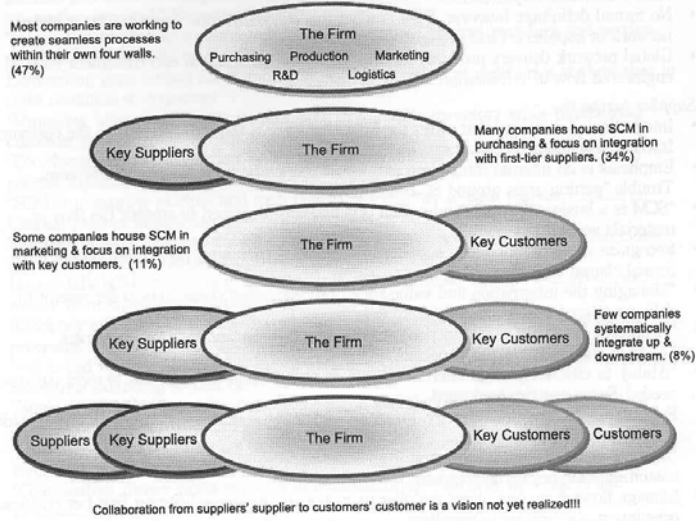
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The Supply Chain is Multi-Enterprise



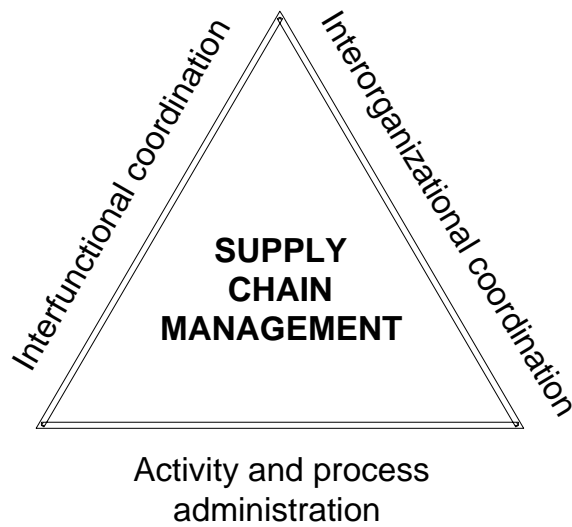
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Reality of SC Scope



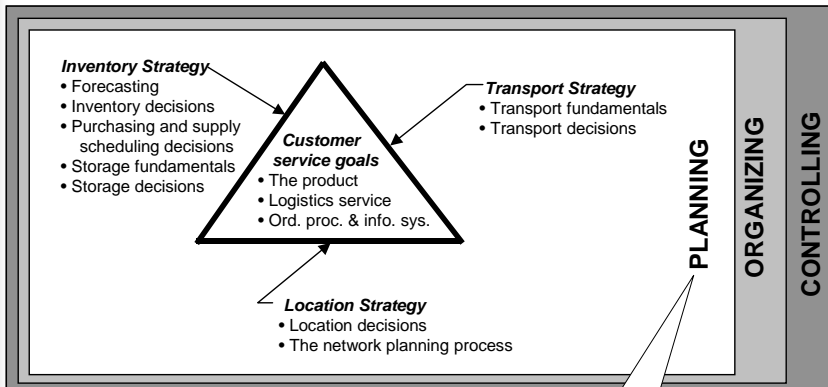
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The Multi-Dimensions of SC



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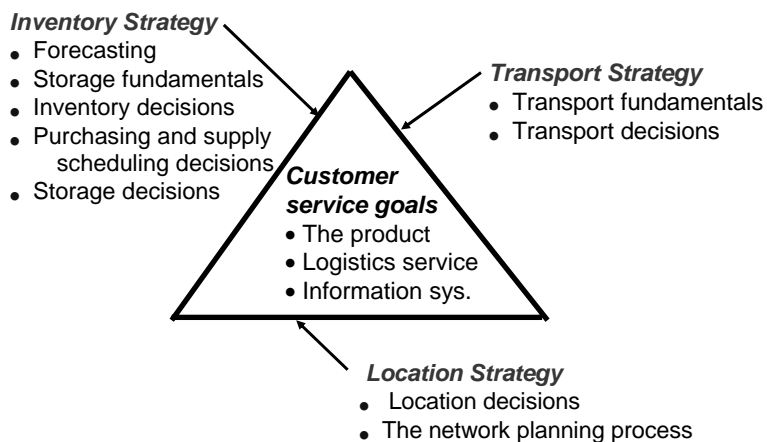
Study Framework



The focus is here

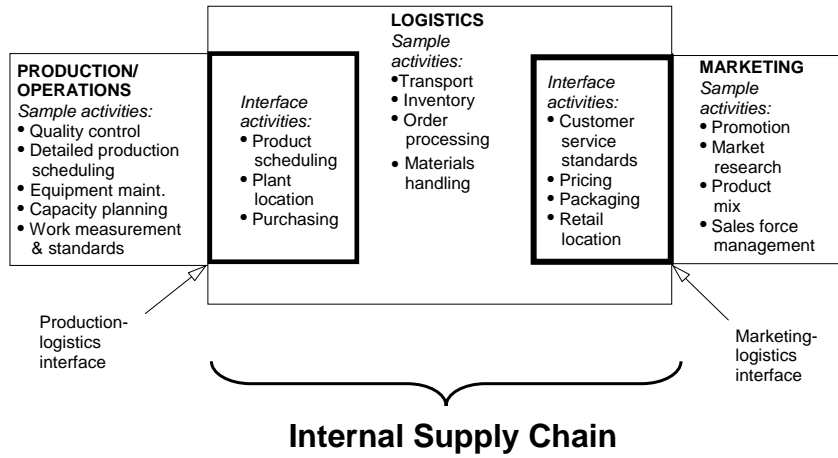
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The Logistics Strategy Triangle



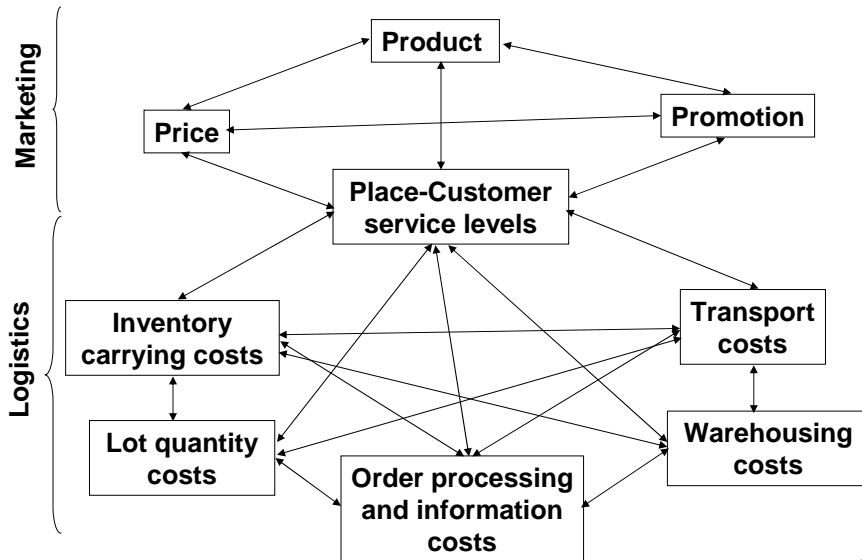
1-20

Relationship of Logistics to Marketing and Production



1-21

Relationship of Logistics to Marketing



1-22



Relationship of Logistics to Production

- Coordinates through scheduling and strategy—*make-to-order* or *make-to-stock*
- An integral part of the the supply chain
 - Affects total response time for customers
 - Shares activities such as inventory planning
- Costs are in tradeoff
 - Production lot quantities affect inventory levels and transportation efficiency
 - Production response affects transportation costs and customer service
 - Production and warehouse location are interrelated

1-23



Logistics/SC in Diverse Areas

- Manufacturing—most common
- Environment—causing restrictions
- Service—emerging opportunities
- Non-profits—little explored
- Military—long history

1-24



Contemporary Logistics Terms

- Value stream/logistics process
- Quick response and flexible manufacturing
- Mass customization
- Supply chain management/
collaborative logistics
- Reverse logistics
- Service logistics
- Continuous replenishment
- Lean logistics
- Integrated logistics

1-25