



Chapter 1 Introduction to International Logistics

Book: International Logistics: Global Supply
Chain Management by Douglas Long

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Outline

- What is logistics?
- What is the goal of logistics?
- Regional logistics assessment
- The role of transportation
- A brief history of logistics and transportation



What is logistics?

- Peter Drucker (1962)
 - The economy's dark continent
 - Logistics is the most neglected and most promising business area
 - Businesses are still learning how to use logistics effectively



What is Logistics?

- Definition of logistics management
 - Part of the supply chain management
 - plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements



What is Logistics?

- Business logistics: moving cargo
- General logistics: moving cargo and moving people
- Moving cargo vs. moving people
- We refer to business logistics



What is Logistics?

- Definition of supply chain management
 - Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities.
 - Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers.
 - In essence, supply chain management integrates supply and demand management within and across companies

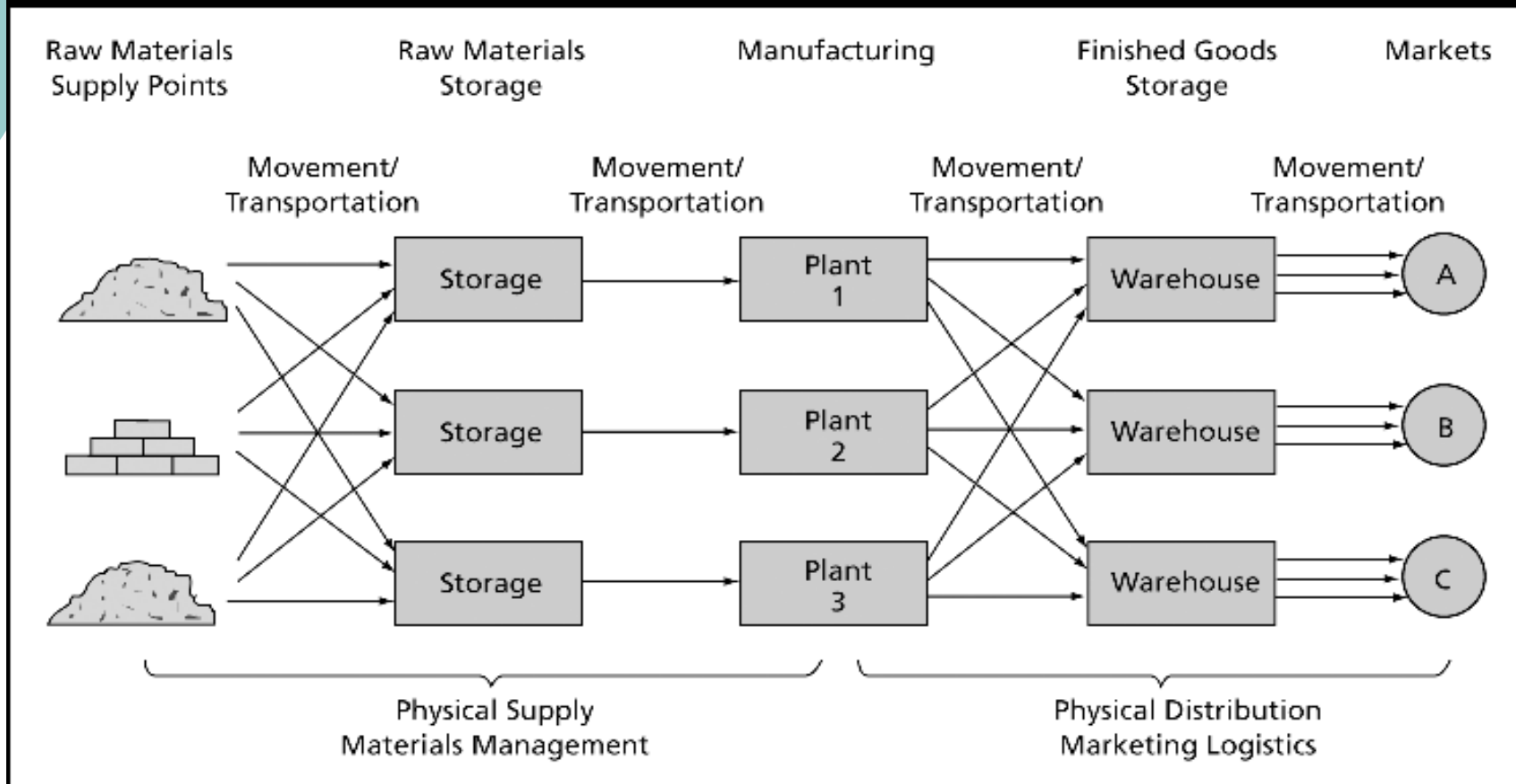


What is Logistics?

- Materials management
 - What a company does with inputs
 - The way a company acquires materials such as raw materials or parts, how a company handle them once they arrive at the company, and how they are shipped out
- Physical distribution
 - The way a company delivers its product to the market, which could be the customers or retailers

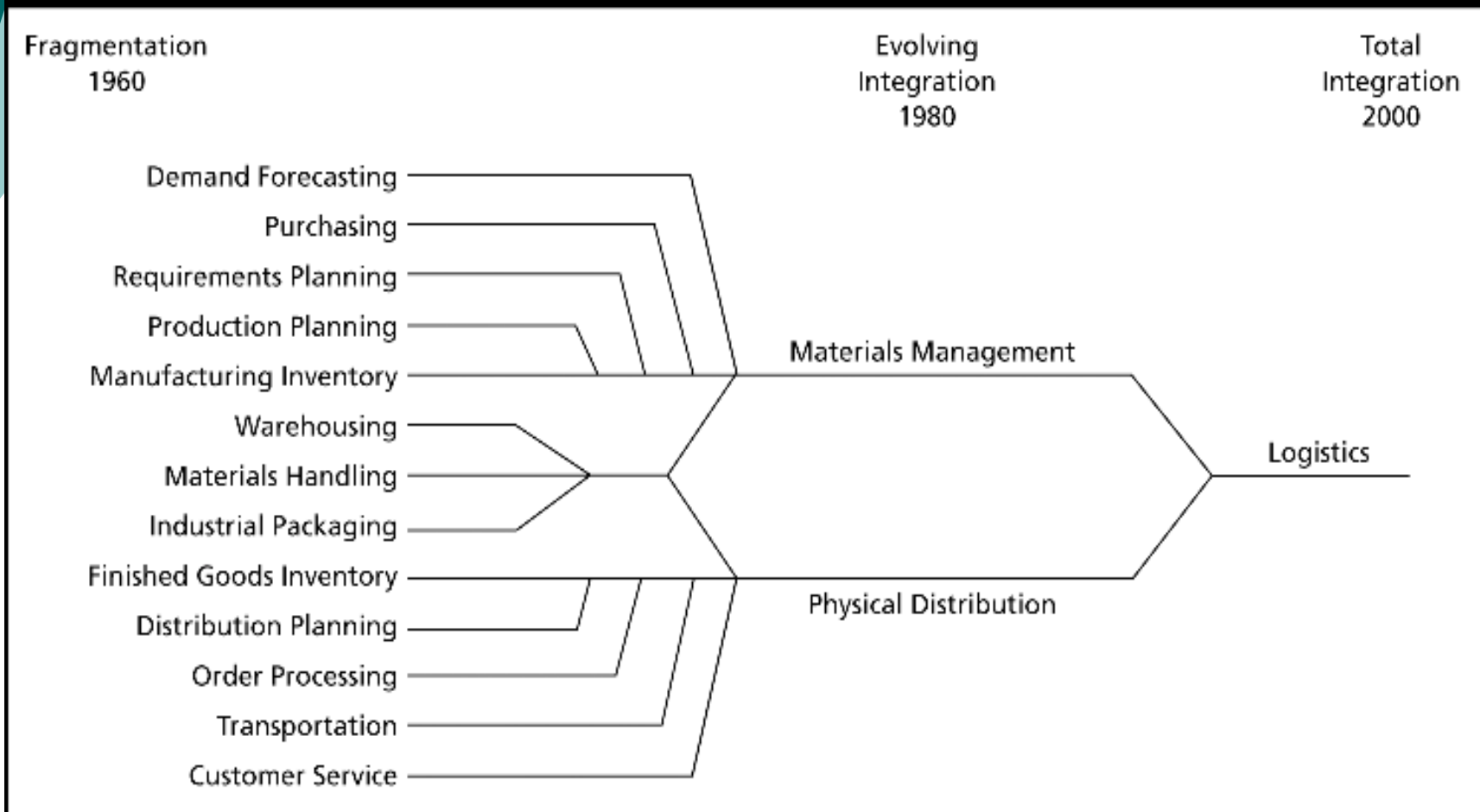
What is Logistics?

FIGURE 1.1 Typical Logistics Network—Physical Distribution



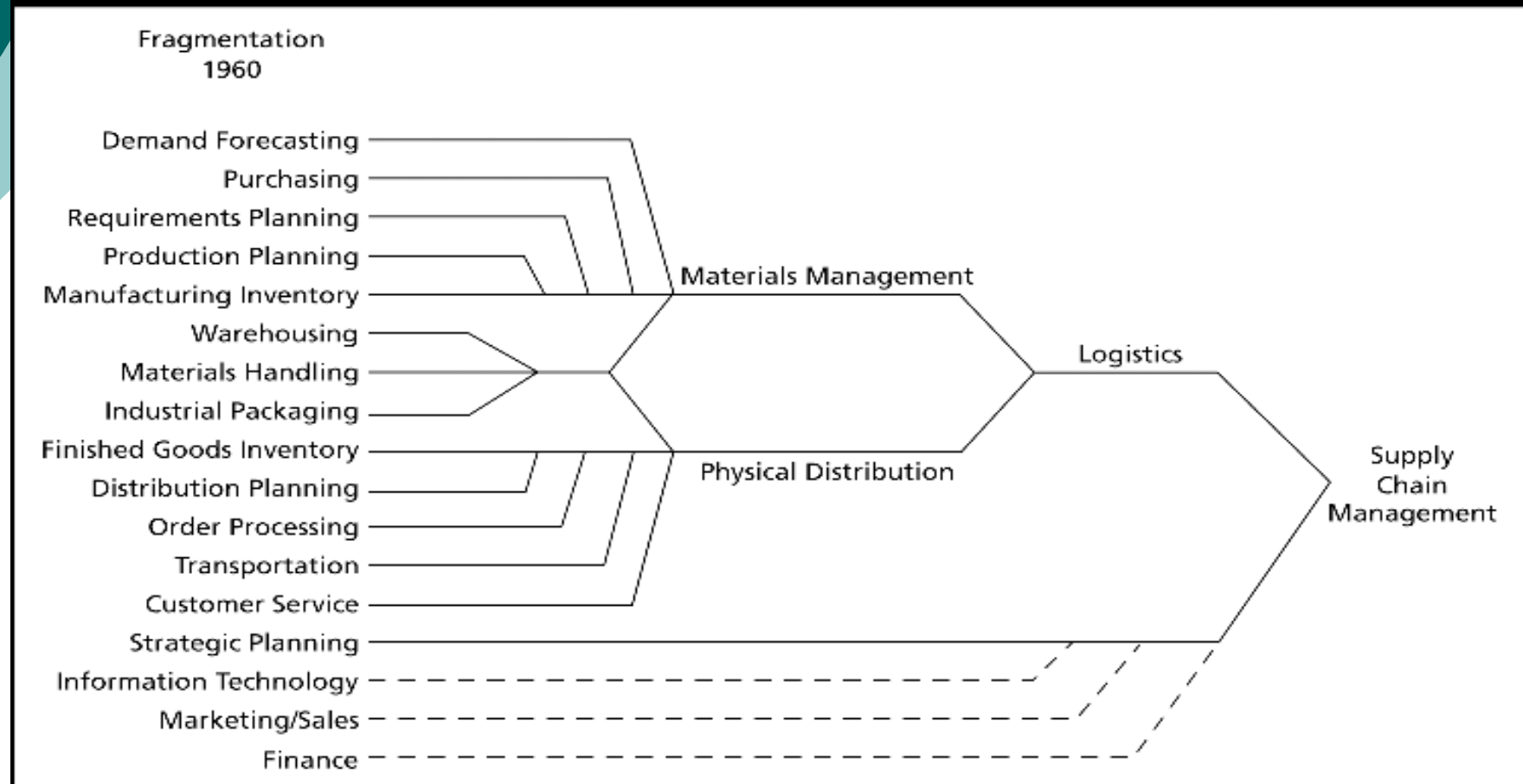
What is Logistics?

FIGURE 1.3 The Logistics Evolution



What is Logistics?

FIGURE 1.4 Logistics Evolution to Supply Chain Management





What is the Goal of Logistics?

- Logistics is about getting things to where they need to be, but is much broader than transportation
- The overall goal of logistics
 - To achieve a targeted level of customer service at the lowest possible cost



What is the Goal of Logistics?

- Logistics Activities

- Network design
- Information
- Transportation
- Inventory
- Warehousing, material handling and packaging



What is the Goal of Logistics?

- Operational objectives of a logistics system
 - Rapid response
 - Minimum variance
 - Minimum inventory
 - Movement consolidation
 - Quality
 - Life cycle support



What is the Goal of Logistics?

- A couple of terms
 - Business logistics
 - Integrated logistics: emphasizes the need to coordinate with suppliers and customers.
 - Operations: logistics is a support function to operations
 - Inbound logistics
 - Operations logistics
 - Outbound logistics



What is the Goal of Logistics?

- Inter-firm logistics
- Intra-firm logistics
- International logistics



What is the Goal of Logistics?

- How much is spent on logistics?
 - 1993, USA, 10.7% of GDP goes to cover the cost of logistics, twice on national defense
 - 1985, 25-35% of product's sale value for international logistics, 8-10% for domestic logistics
 - 2000, USA, 10% of the price of all goods attributed to the cost of logistics



What is the Goal of Logistics?

- Spending on logistics depends on three factors
 - Level of economic activity
 - Efficiency
 - From goods and toward services



Regional Logistics Assessment

- Logistics assets
 - Geography: some geographic features are natural aids while others are obstacles
 - Physical infrastructure: macro infrastructure; micro infrastructure
 - Legal/business infrastructure: trade and logistics requires a wide variety of services provided by other business and the government.
 - Example: Switzerland vs. Chad



Regional Logistics Assessment

- Three logistics environments
 - Military
 - Business: product, service
 - Civil: public, private



Regional Logistics Assessment

- Performance cycle
 - Most basic unit of logistical analysis in a business
 - Also called fulfillment
 - Those activities involved from the point of recognizing demand from a customer through delivering the goods or services to the customer, complete with an invoice or similar instrument to facilitate the collections of payment.



Regional Logistics Assessment

- Three different channels in action during in performance cycle:
 - Transaction
 - Distribution
 - Documentation/communication



The Role of Transportation

- Transportation plays a central role in logistics
- “get something to where it needs to be”: most important of all is the physical transportation
- International logistics: the role of transportation become even more important



The Role of Transportation

- Three perspectives to transportation
 - Shipper
 - Carrier
 - consignee



The Role of Transportation

- Characteristics of international transportation
 - Cross a national boundary
 - Political issues
 - Regulations
 - Documentation
 - Longer distance
 - Intermodalism: multiple modes of transportation



Brief History of Logistics and Transportation

- Logistics was originally a military term
- Before 1950s, no logistics. Reasons:
 - Computers were not seen in integrating functions
 - Volatile economic condition led management to concentrate on cost containment
 - Difficulty in quantifying the returns that could be gained



Brief History of Logistics and Transportation

- Things that changed logistics to be a valuable part of the company
 - Computerization
 - Quality management
 - Partnerships and alliances
 - Deregulation
- Transportation played an important role in logistics development: intermodalism



Brief History of Logistics and Transportation

- Logistics will play a central role in the global economy as we proceed into the 21 century.