



Introduction to Strategic Logistics & Supply Chain Management

AMAT EXECUTIVE CONSULTANTS

Based on Materials From

Supply Chain Management, Chopra & Meindl, 2001 [A]
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Fundamentals of Logistics Management, Grant, Lambert, Stock & Ellram, 2006 [B]
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Topic 4

Logistics Strategy

Objectives...

- Look at the concept of strategy and strategic planning
- To understand how logistics contributes to the achievement of strategic objectives
- To appreciate the important role of logistics in the strategic planning process
- To outline how to develop a logistics strategic plan
- To look briefly at some of the trends and issues emerging for logistics managers

Strategy...

“The direction and scope of an organisation over the long term which achieves advantage for the organisation...” [B] P. 385.

- The corporate mission statement is the overriding objective of the organisation which serves to guide strategic, activities and goals
- All functional areas and most employees should know the organisation's mission and associated strategic objectives
- Otherwise, they will not be able to formulate strategies of their own that will support the achievement of the overall strategy

Why Strategy is Important to Logistics?

- If logistics managers do not know the strategy, they will not be able to make decisions that are in the best interests of the organisation
- E.g. if a strategic objective is to achieve differentiation by offering fast, accurate and reliable deliveries, logistics managers would choose trucks over trains
- Trucks would most likely be a more expensive option than rail
- If the strategic objective was to compete on low cost, the cheaper rail option might be chosen
- This is typical of the trade-offs that logistic managers must make – in this case, the trade-off is cost versus quality of delivery services
- It is obvious if the logistics manager does not understand the corporate strategy, they cannot make decisions that are consistently in the best interests of the overall organisation

How Logistics can Contribute?

- Intel has identified 6 ways that show how logistics supports corporate strategy
 - Increased planning capability and reduced inventory as a result of reliable delivery time
 - Increased margin and improved customer service
 - Reduced inventory levels through shorter cycle times
 - Increased marketing advantage from consistent, shorter order cycles
 - Uninterrupted supply of inbound material
 - Reduced total cost by incorporating logistics into the corporate planning process

How Logistics can Contribute (Cont.)?

- Logistics provides data and analysis related to the existing logistics network including:
 - Current storage and distribution facilities owned and rented
 - Equipment capacity and capabilities at each location
 - Current transportation arrangements in the supply chain
 - Current operational costs and future projections
 - Proposals for future capital investment in the supply chain

Why Plan?

- “If you don’t know where you’re going, how can you expect to get there?”
- Planning should ideally be an ongoing exercise
- All plans should take account of the overall strategy and move things in the direction that will help achieve that strategy
- Without adequate planning, organisations will be constantly fire fighting and the resulting crisis management approach will prevent an orderly progression in achieving overall strategic objectives

Logistics Strategic Planning

“A unified, comprehensive, and integrated planning process to achieve competitive advantage through increased value and customer service, which results in superior customer satisfaction (where we want to be), by anticipating future demand for logistics services and managing the resources of the entire supply chain (how to get there). This planning is done within the context of the overall corporate goals and plan.”

The Hierarchy of Planning

Type	Time frame	Focus	Level of detail	Level of integration
Strategic	5-10yrs or more	Competition, resources, Stakeholders	Few financials, more goal oriented	Integrated-corporate & supply chain
Tactical	>1-5yrs	Event	Somewhat financially oriented	Integrated-functional
Operational	Day-to-day, <1yr	Efficiency	Heavy financial orientation	Functional

Strategic Logistics and Other Organisational Functions

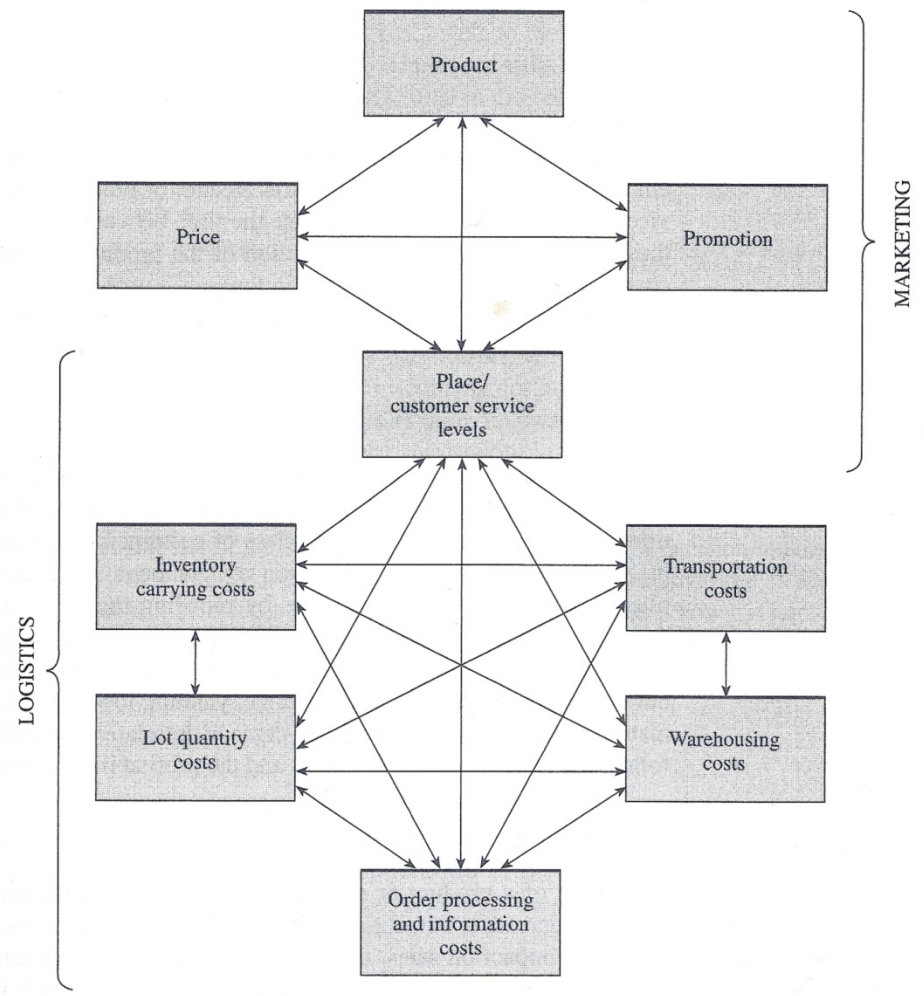
- The strategic logistics plan can not be developed in isolation
- It depends on inputs from a number of key functional areas
- Chief among them are:
 1. Marketing
 2. Manufacturing
 3. Finance

1. Logistics Plan – Marketing Inputs

Marketing provides key inputs to the logistics plan due to its close interrelationship

- Policies in relation to 4Ps of marketing e.g. product or service offerings, pricing and promotion can have a profound impact on logistics
- E.g. planned sales volume per month, product introduction and retirement, customer service policies for types of customers and regions

FIGURE 1-4
 Cost trade-offs required in marketing and logistics



Logistics & Marketing

Marketing objective:
 Allocate resources to the marketing mix to maximise long term profitability.

Logistics objective:
 minimise total costs given the customer service objective. Total cost = sum of all costs i.e.
 Transportation cost +
 warehousing costs + order processing and information costs +
 inventory carrying costs etc.

2. Logistics Plan – Manufacturing Inputs

- | Locations of current and planned facilities
- Volumes planned per facility
- Product mix per facility
- Optimum servicing of markets (where the same product is manufactured in more than one facility)

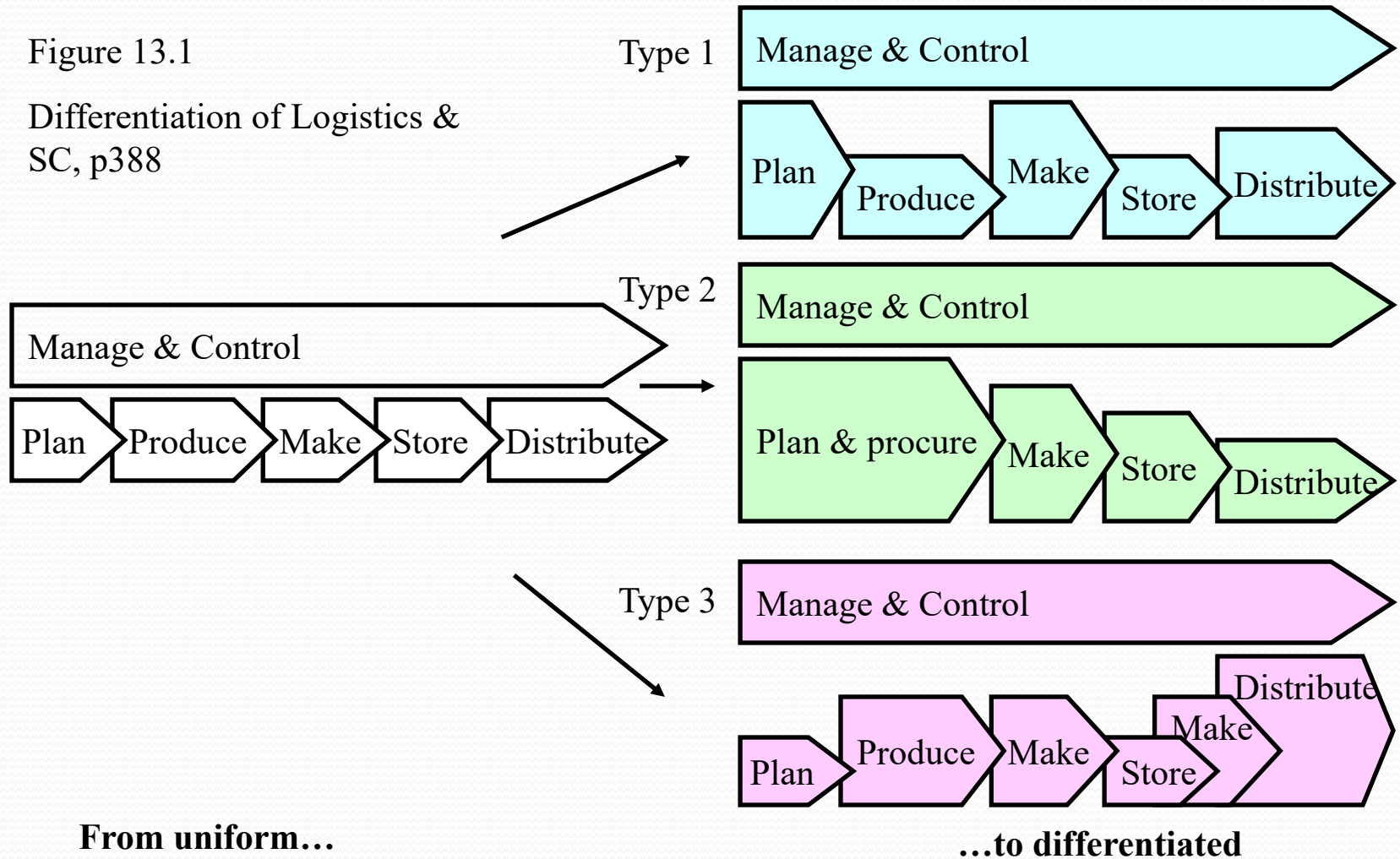
3. Logistics Plan – Finance Inputs

- | Cost forecasts e.g. inflation / deflation rates
- Assumptions underlying growth predictions
- Cost data / analysis to allow logistics managers to make cost trade-off decisions
- Budgets including capital budgets available to finance projects to improve logistics equipment and infrastructure

Planning for Differentiation in Logistics / SC...

Figure 13.1

Differentiation of Logistics & SC, p388



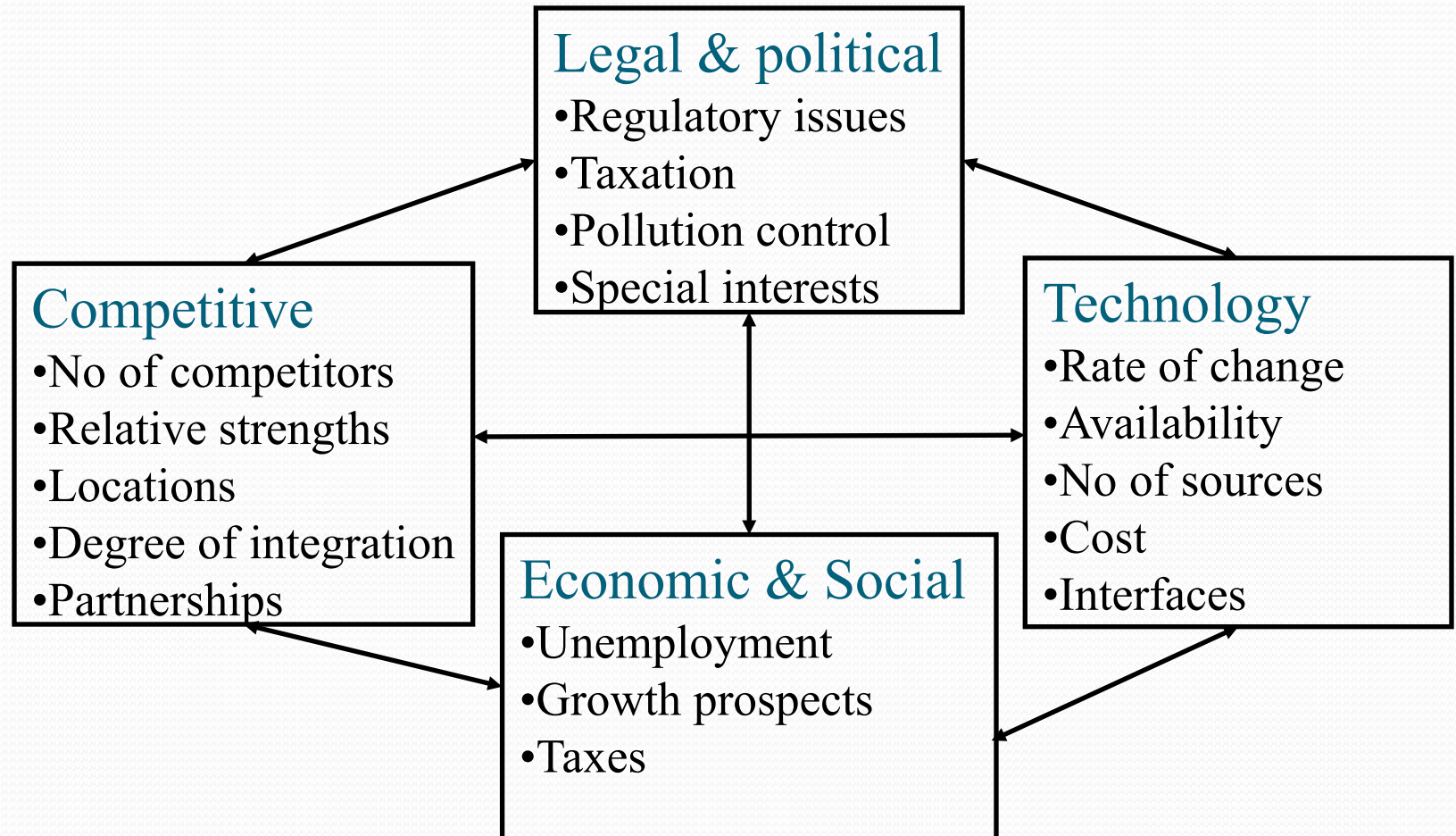
From uniform...

...to differentiated

Recent Studies have Concluded...

- Organisations need to take a proactive role in the strategic logistics planning process in their companies, and differentiate their activities from a uniform and “predictable” model to more responsive models in order to handle increasing complexity
- Type 1- lean & efficient op that is dominated by making products
- Type 2 – supplying complex product to specific requirements, with long lead-time, which require collaborative planning with SC partners
- Type 3 – maximising efficiency to meet customer demands in terms of volume & mix -. flexibility & late configuration of finished goods
- - Another study sponsored by the former council of logistics Mgmt reported that a majority of logistics professionals surveyed indicated their company’s executives believed that the logistics plan was critical to the corporation’s strategic plan
- Also, strategic planning in marketing or manufacturing is more common than the one in logistics

Environmental Planning Influences



Major Steps in the Corporate Strategic Planning Process

1. Evaluation of customer and/or industrial customer needs
2. Identification of possible target markets
3. Evaluation of target markets
4. Selection of target markets
5. Formulation of channel objectives and strategy
6. Identification and evaluation of channel structure alternatives
7. Selection of the channel structure
8. Development of the strategic logistics plan

[B] Figure 13.3, p391

The Strategic Logistics Plan - strategy

decision before Planning

- Logistics audit by logistics audit team
- Review of organisational strategy
- Development of Key issues to investigate
- Identifying Critical Measures & Variables
 - Customer service effectiveness
 - Logistics efficiency
 - Asset utilisation
 - Analysis of Competitor Performance - benchmarking
- External & Internal Audit
- Analysis of Audit Results

Decision Making & the Strategic Logistics Plan

Logistics decisions tend to be made hierarchically, but in an iterative manner



[B] Figure 13.6, Making Logistic Decisions, p401

Outline of the Strategic Logistics Plan

Logistics mission

- **Key issues & objectives**
 - Customer service performance
 - Information Systems
 - HR management
 - Supplier relationships
 - Outsourcing

Comparison with previous plan performance

- **Internal analysis (current position)**
 - Organisation
 - HR
 - Transportation Relations with Internal customers
 - Quality
 - Service
- **External/situational analysis**
 - Competitor logistics performance
 - Trends
 - Public, private and contract warehouses
 - Public, private and contract carriage
- **Five-year vision**
- **Action Plan to achieve plan**
- **Implementation issues**
- **Other critical issues**

Table13.3, Example outline of Logistic Plan, p402

Future challenges & Critical Issues

- SCM & Integrated Channel Management
- Quick response (QR) & efficient consumer response (ECR)
- Total Quality Management (TQM)
- Just-in-time (JIT)
- Information Systems
- Reengineering
- Time-based competition
- Environment issues
- Reverse logistics
- Life cycle analysis
- Legislation

Future challenges & Critical Issues Supply Chain Management

- SCM is growing and as per definition, is different from logistics in that it takes a systems or a more holistic perspective
- SCM should be part of the modern strategic planning process where key decisions such as to what extent to manage the supply chain, and what activities should be performed where, when and by whom are made
- An SCM approach is obviously relevant when one considers what SCM brings i.e. a focus on the whole channel(s) through information sharing, efficient inventory placement and coordinated decision making across all key business processes

Future challenges & Critical Issues

Quality Management (TQM)

- TQM should be kept at the forefront of strategic decision making and implementation
- Quality brings trade-offs e.g. versus cost or time to market
- However, is always a key aspect of customer service and levels of customer service are usually part of a company's strategic objectives
- Logistics decisions can have a profound impact on the perception of quality of service
- Therefore, all logistics decisions should include an impact analysis on the quality objectives of the organisation
- And remember, the customer determines the level of quality and only the customer can truly determine the impact of logistics decisions on their service levels

Future challenges & Critical Issues Just In Time (JIT)

- The use of JIT has significant impact on logistics activities
- JIT has a philosophy of reduction of waste throughout the entire production system
- JIT, when part of SCM, will extend this philosophy beyond the immediate organisation into the wider supply chain
- Organisations that currently use, or are planning to use JIT, should consider the following when doing strategic logistics planning:
 - Which parts of the organisation will implement JIT?
 - Which members of the supply chain should be utilised for JIT and how can they be selected (a prerequisite for JIT is a reduction and consolidation of carriers, suppliers etc.)
 - What information needs to be shared and what ICT platforms can be used to share it?
 - How will the logistics function interface with the manufacturing function to coordinate shipments and deliveries?

Future challenges & Critical Issues Information Systems

- Logistics activities are transaction intensive e.g. receiving, stocking, order filling and shipment to name but a few
- This generates vast amounts of data and it would be impossible to manage logistics without the support of significant IT systems
- This data can be invaluable especially if the tools and intelligence is in place to transform it into relevant information e.g. data warehousing and data mining techniques
- Such data and the information it provides can support logistics managers in making informed decisions at all levels including the strategic level
- Examples of information systems and platforms include EDI, POS, EFP, RFID, ERP, MRP

Future challenges & Critical Issues

Reengineering

- Reengineering focuses on the elimination of old methods and the creation of new and better approaches
- It is the opposite to the old saying of “if it ain’t broke, don’t fix it”
- Reengineering starts from the perspective that it is broke and it needs replacing not fixing
- Provides opportunities for major progress instead of the usual incremental progress based on tinkering with the current way of doing things
- The following analogy has been used to describe reengineering:
 - The optimist sees the glass as half-full
 - The pessimist sees the glass as half-empty
 - The reengineer sees the glass as twice as large as is needed

[B] P. 408

Future challenges & Critical Issues

Time-based Competition

- Refers to ways of compressing time or taking time out of operations
- E.g. reducing order cycle time or introducing products to market faster
- The longer the process, the greater the chance of inefficiencies, the greater the need for inventories, the more monitoring required and higher the levels of error and obsolescence
- Logistics is well positioned to take time out of operations by working within the supply chain with carriers, suppliers and customers
- This can be achieved by sharing information to identify current inefficiencies and to compress time within key supply chain processes
- Logistics therefore, can be a source of competitive advantage in this regard