

PART 1 Overview of Logistics 1**CHAPTER 1 Logistics and the Supply Chain 2**

Economic Impacts of Logistics	3
Logistics: What It Is	5
The Increased Importance of Logistics	8
The Systems and Total Cost Approaches to Logistics	10
Logistical Relationships Within the Firm	13
Activities in the Logistical Channel	25
Logistics Careers	27
Summary	28
Questions for Discussion and Review	28
Suggested Readings	29
Case 1-1 Sudsy Soap, Inc.	30
Case 1-2 KiddieLand and the Super Gym	31

CHAPTER 2 The Supply-Chain Concept 35

Key Attributes of Supply-Chain Management	39
Barriers to Supply-Chain Management	44
Supply-Chain Management and Integration	46
Summary	50
Questions for Discussion and Review	50
Suggested Readings	51
Case 2-1 Johnson Toy Company	52
Case 2-2 Wyomo Grocery Buyers' Cooperative	56

CHAPTER 3 Logistics and Information Technology 59

General Types of Information Management Systems	61
Electronic Commerce and Logistics	72
Summary	75

Questions for Discussion and Review	75
Suggested Readings	76
Case 3-1 Sports Car Care	78
Case 3-2 Just-in-Time in Kalamazoo	79
PART 2 Elements of Logistics Systems	83
CHAPTER 4 Order Management and Customer Service	84
Order Management	85
Customer Service	96
The Role of Logistics in Establishing Customer Service Levels	101
Measuring and Controlling Customer Service	104
Meeting Customer Demands	105
Overall Customer Service Policy	107
Summary	108
Suggested Readings	109
Questions for Discussion and Review	109
Case 4-1 Cheezy Wheezy	111
Case 4-2 Handy Andy, Inc.	113
CHAPTER 5 Protective Packaging and Materials Handling	117
Product Characteristics	118
Packaging	126
Unit Loads in Materials Handling	140
Intermodal Containers	144
Materials Handling	149
Summary	157
Questions for Discussion and Review	157
Suggested Readings	158
Case 5-1 Let There Be Light Lamp Shade Company	159
CHAPTER 6 The Domestic Transportation System	161
Small-Volume Shippers	165
LTL Shippers	166
Truckload and Carload Shippers	170
Large Bulk Shippers	172
Project Cargo	178
Oversized Moves	179
Hazardous Materials	181
Comparison of Modes	182
Transportation Regulation and Deregulation	183

Transportation Rates 184
 Summary 189
 Questions for Discussion and Review 189
 Suggested Readings 190
 Case 6-1 Boone Shoe Company 191

CHAPTER 7 Industrial Transportation Management 197

Rate Determination and Negotiation Activities 201
 Rate Regulatory Bodies 209
 Private Transportation 210
 Documentation 212
 Freight Payment and Audit Services 213
 Routing 217
 Diversion and Reconsignment 219
 Tracing and Expediting 219
 Loss and Damage 220
 Transit Privileges 222
 Reparations 224
 Demurrage and Detention 224
 Transportation of Hazardous Materials 225
 Consolidating Small Shipments 226
 Achieving Transportation Quality 231
 Summary 231
 Questions for Discussion and Review 231
 Suggested Readings 233
 Case 7-1 Chippy Potato Chip Company 235
 Case 7-2 Nürnberg Augsburg Maschinenwerke (N.A.M.) 236

CHAPTER 8 Distribution Center, Warehouse, and Plant Location 240

Determining the Number of Facilities 243
 General Factors Influencing Facility Location 245
 Finding the Lowest-Cost Location 256
 Locating Inside Another Firm's Existing Channels 259
 Facility Relocation and Facility Closing 259
 Summary 261
 Questions for Discussion and Review 261
 Suggested Readings 262
 Case 8-1 Aero Marine Logistics 263
 Case 8-2 Alberta Highway Department, Region VI 266

CHAPTER 9 Inventory Management	269
Inventory Classifications	272
Inventory-Related Costs	273
When to Order	276
How Much to Reorder	277
Inventory Flows	280
Contemporary Approaches to Managing Inventory	282
Inventory Management: Special Concerns	286
Summary	293
Questions for Discussion and Review	293
Suggested Readings	294
Case 9-1 Low Nail Company	295
Case 9-2 Jackson's Warehouse	296
CHAPTER 10 Warehousing Management	298
Public, Private, and Contract Warehousing	301
Design Considerations in Warehousing	305
Warehousing Operations	313
Summary	319
Questions for Discussion and Review	320
Suggested Readings	320
Case 10-1 Sandy's Candy	321
Case 10-2 Minnetonka Warehouse	325
CHAPTER 11 Supply Management	327
Purchase for Use in Manufacture	329
Purchasing for Resale	337
Procuring Services	339
Global Sourcing	339
E-Procurement	340
Quality Programs	342
Supplier Selection and Management	344
Purchasing Ethics	346
Summary	347
Questions for Discussion and Review	348
Suggested Readings	348
Case 11-1 Easing Ira's Ire	350
Case 11-2 Tempo Ltd.	352

CHAPTER 12 International Logistics	357
International Marketing	361
International Marketing Channels	364
Government Influences on Foreign Trade	367
International Trade and Supply-Chain Specialists	372
Logistics Channels in International Distribution	380
International Trade Inventories	395
Summary	396
Questions for Discussion and Review	397
Suggested Readings	397
Case 12-1 HDT Truck Company	399
Case 12-2 Belle Tzell Cell Company	403
PART 3 Analyzing, Designing, and Implementing a Logistics System	409
CHAPTER 13 Logistics Systems Controls	410
Financial and Accounting Controls	413
Worker Productivity	416
Product Recalls	424
Controlling Returned and Salvaged Goods	429
Pilferage and Theft	429
Energy-Saving Controls	438
Hazardous Materials Handling	438
Maintaining Channel and Supply-Chain Integrity	439
Protection Against Terrorism	440
Summary	441
Questions for Discussion and Review	441
Suggested Readings	442
Case 13-1 Brant Freezer Company	443
Case 13-2 Red Spot Markets Company	445
CHAPTER 14 Logistics Systems: Analysis, Design, and Integration	449
What is Systems Analysis?	450
Problems in Systems Analysis	452
Partial Systems Analysis	454
Logistics System Design	461
Systems Integration: Logistics Within the Firm	472
Systems Integration: Logistics Activities Outside the Firm	477

Summary	479
Questions for Discussion and Review	480
Suggested Readings	480
Case 14-1 Columbia Lumber Products Company	482
Case 14-2 Trigo Export Co., Ltd.	485
CHAPTER 15 Supply Chains: Future Directions	487
Macro-Environmental Issues	488
Specific Logistics and Supply-Chain Issues	496
Summary	501
Questions for Discussion and Review	501
Suggested Readings	502
Case 15-1 Shimamoto Toy Company	503
Case 15-2 Donnelly Metal Stampings Company	505
Glossary	509
Subject Index	519
Name Index	529