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Harald Gleissner  
J. Christian Femerling

# Logistics

Basics – Exercises – Case Studies

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Harald Gleissner • J. Christian Femerling

# Logistics

Basics – Exercises – Case Studies

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## Preface

Globalization and Logistics are closely connected, just as Globalization and Academic Lecturing are. This poses new challenges in studying Logistics and makes textbooks in English an important tool in college and university curricula that deal with transportation, logistics, and supply chain management.

The idea of offering a textbook in two languages was conceived after the success of the first volume of *Logistik: Grundlagen – Übungen – Fallbeispiele*, published in 2008. At that time, it was an early textbook primarily intended for students enrolled in bachelor degree programs in Logistics, and was extremely well received among academics and industry experts. Based on their own teaching experience, the authors later decided to prepare an English edition of the book to support international academic environments.

In 2012, Gleissner and Femerling published a second edited volume in German, expanded by two additional chapters, “Logistics Infrastructure” and “Logistics and Finance,” which are also included in this English edition. In comparison to the German edition, the bibliography of this edition contains additional references concerning relevant US and British literature.

The goal of the book is to present basic logistics concepts and principles in a format that is useful for students as well as practitioners dealing with logistic issues for the first time.

The chapters therefore will help readers by providing:

- Learning objectives at the beginning of each chapter
- In-depth case studies
- Corporate applications in the industry
- End-of-chapter questions
- Chapter-specific references
- Chapter-specific recommendations for further reading

For application and further information, readers are advised to consult *Gleissner and Möller: Case Studies in Logistics* from 2011.

We owe considerable thanks to all companies involved for their cooperation in providing insights into their business in the form of examples and case studies. We also wish to thank our publisher for encouraging us to pen the English edition of this book. Our special thanks for finishing the book in English go to Patrick Speckamp

(London, UK), Ralph G. Kauffman (Houston, Texas, US), Vin Nguyen Truc (Perth, Australia), Claudia Wittmann (Berlin, Germany), and last but not least Anja Foerster and Stefan Baier (Berlin, Germany) for much-appreciated editing work. It was a pleasure working with all of them.

Berlin, Germany  
May 2013

Harald A. Gleissner und J. Christian Femerling

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# Abbreviations

AG	Aktiengesellschaft = Public Limited Company (PLC)
AGV	Automated Guided Vehicle Systems
ANSI	American National Standards Institute
APS	Advanced Planning and Scheduling Systems
ARA	Antwerp-Rotterdam-Amsterdam Range
B2B	Business to Business
B2C	Business to Customer
BASF	Badische Anilin- & Soda-Fabrik
BMG	Baugruppen- und Modulfertigung GmbH
BMW	Bayrische Motorenwerke
BSC	Balanced Score Card
BSHG	Bosch und Siemens Hausgeräte GmbH
bt	Billion Ton
CD	Cross Docking
CEN	Comité Européen Normalisation
CEP	Courier, Express, Parcel
CIF	Cost, Insurance, Freight
CMI	Co Managed Inventory
CPFR	Collaborative Planning Forecasting Replenishment
CRM	Customer Relationship Management
CRP	Continuous Replenishment Programs
CW	Central Warehouse
DB	Deutsche Bahn
DCF	Discounted Cash Flow
DCM	Demand Chain Management
DDP	Delivered Duty Paid
DIN e. V.	German Institute for Standardization
DIY	Do It Yourself
DOS	Days of Stock
DP	Desktop Purchasing
DPWN	Deutsche Post World Net
DTD	Document Type Definition
DW	Distribution Warehouse
E-Commerce	Electronic Commerce



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E-Procurement	Electronic Procurement
E-Purchasing	Electronic Purchasing
E-Sales	Electronic Sales
EAN	European Article Number
ECR	Efficient Consumer Response
EDC	European Distribution Centers
EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
EDP	Electronic Data Processing
ELA	European Logistics Association
EPC	Electronic Product Code
ERMTS	European Railway Transport Management System
ERP	Enterprise Resource Planning System
EU	European Union
EWI	European Economic Institute
EXW	EX Works
FeFo	First EXPIRED-FIRST OUT
FiFo	First In-First Out
FOB	Free On Board
FRG	Federal Republic of Germany
ft	Feet
FUL	Full Truck Load transport
GDP	Gross Domestic Product
GLN	Global Location Number
Glonass	Globalnaja Nawigazionnaja Sputnikowaja Sistema
GmbH	Gesellschaft mit beschränkter Haftung = Limited Company (Ltd)
GPS	Global Positioning System
GRAI	Global Returnable Asset Identifier
GSM	Global System for Mobile Communication
GSM-R	Global System for Mobile Communication Railways
GTIN	Global Trade Item Number
ha	Hektare
HGB	Handelsgesetzbuch= German Commercial Code
HP	Hewlett Packard
HR	Human Resource
IATA	International Air Transport Association
INCOTERMS	International Commercial Terms
ICAO	International Civil Aviation Organization
ID	Identification
IP	Internet Protocol
ISDN	Integrated Service Digital Network
ISO	International Standards Organization
IT	Information Technology

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JIS	Just in Sequence
JIT	Just in Time
Kg	Kilogram
Km	Kilometer
KPI	Key Performance Indicator
L x W x H	Length × Wide × High
LANs	Local Area Networks
LiFo	Last In-First Out
LPG	Liquid Petroleum Gas
LTL	Less Than Truck Load Transport
m	Meter
MFS	Material Flow System
MRP I	Material Requirements Planning
MRP II	Manufacturing Resource Planning
NVOCC	Non-Vessel-Operating Common Carriers
OBU	On-Board (Computer) Unit
OCR	Optical Character Reading
ODETTE	Organization for Data Exchange by Tele Transmission in Europe
OEM	Original Equipment Manufacturer
p.a.	per anno
PC	Personal Computer
PLC	Programmable Logic Controller
PLU	Product-Lookup
pm	Past
PPS	Production Planning Systems
PU	Polyurethane
PW	Production Warehouse
QR	Quick Response
R&D	Research & Development
RDT	Remote Data Transmission
RFID	Radio Frequency Identification
ROI	Return on Investment
RoRo	Roll-On/Roll-Off
RW	Regional Warehouse
SCE	Supply Chain Execution
SCD	Supply Chain Design
SCM	Supply Chain Management
SCP	Supply Chain Planning
SEDAS	Standardregelungen einheitlicher Datenaustauschsysteme – Standard Regulations of Uniform Data Exchange Systems
SPC	Special Purpose Company
SSCC	Serial Shipping Container Code
t	Ton

TEU	Twenty Foot Equivalent Unit
TFL	Thiel Fashion Lifestyle
Tkm	Ton kilometer
TÜV	Technischer Überwachungsverein
TV	Television
UMTS	Universal Mobile Telecommunication System
UPC	Universal Product Code
US	United States
USA	United States of America
VDA	German Association of the Automotive Industry
VMI	Vendor Managed Inventory
VPN	Virtual Private Network
VW	Volkswagen
WANs	Wide Area Networks
WC3	World Wide Web Consortium for Standardization of www-Technologies
WMS	Warehouse Management System
WOTIF	Work On Time In Full
WTO	World Trade Organization
XML	Extensible Markup Language
XSL	Extensible Style Sheet Language

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# Contents

<b>1</b>	<b>Introduction</b>	1
<b>2</b>	<b>The Principles of Logistics</b>	3
2.1	Definitions and Significance of Logistics	4
2.2	Logistical System of Services	7
2.3	Agents and Elements of Logistics	10
2.4	Distinction between Procurement Logistics, Production Logistics and Distribution Logistics	12
2.5	Service Level	14
	Additional Literature	18
<b>3</b>	<b>Logistics Systems</b>	19
3.1	Logistics and Corporate Strategy	20
3.2	Supply Chains and Networks	21
3.3	Management of Logistics Systems	24
3.3.1	Basic Management Systems	24
3.3.2	System Leadership	26
3.4	Organizational Variables in Logistics Systems	26
3.4.1	Organizational and Operational Structures of Logistics	26
3.4.2	Inter-Organizational Optimization Through Supply Chain Management	31
3.4.3	Intra-Organizational Behavior and Changed Staff Requirements	33
	Additional Literature	35
<b>4</b>	<b>Logistical Infrastructure</b>	37
4.1	Basic Terminology, Types and Functions	38
4.2	Transport Infrastructure and Suprastructure	39
4.2.1	Transport Routes and Transport Networks	39
4.2.2	Airports	40
4.2.3	Sea Ports and Inland Ports	41
4.2.4	Rail Stations and Railroad Systems	42
4.2.5	Terminals and Transshipment Facilities	43

4.2.6	Logistics Real Estate, Logistics Parks, and Freight Villages . . . . .	47
4.3	Information Infrastructure and Communication Infrastructure . . .	49
4.3.1	Telecommunication Infrastructure . . . . .	49
4.3.2	Satellite Systems and Satellite Navigation . . . . .	51
	Additional Literature . . . . .	52
<b>5</b>	<b>Transport Systems and Logistics Services . . . . .</b>	<b>53</b>
5.1	Transport Basics . . . . .	54
5.2	Significance and Development . . . . .	54
5.3	Modes of Transport and Transport Technologies . . . . .	56
5.3.1	Transport Value and Transport Affinity . . . . .	56
5.3.2	Road Freight Transport . . . . .	58
5.3.3	Rail Freight Transport . . . . .	60
5.3.4	Sea Freight Transport . . . . .	65
5.3.5	Inland Waterway Transport . . . . .	69
5.3.6	Air Freight Transport . . . . .	73
5.3.7	Pipeline Transport . . . . .	75
5.4	Transport Systems and Means of Transport . . . . .	78
5.4.1	Transport Chain . . . . .	78
5.4.2	Means of Transport . . . . .	80
5.5	Logistics Service Providers . . . . .	87
5.5.1	Carriers and Forwarders . . . . .	87
5.5.2	Courier, Express, Parcel and Mail Service Providers . . . . .	89
5.5.3	Systems Service Providers and Contract Logistics Providers . . . . .	91
	Additional Literature . . . . .	94
<b>6</b>	<b>Warehousing, Handling, and Picking Systems . . . . .</b>	<b>95</b>
6.1	Warehousing Basics . . . . .	96
6.2	Storage Facilities . . . . .	97
6.2.1	Static Storage Systems . . . . .	98
6.2.2	Dynamic Storage Systems . . . . .	101
6.3	Conveyors . . . . .	105
6.3.1	Discontinuous Conveyors . . . . .	106
6.3.2	Continuous Conveyors . . . . .	112
6.3.3	Sorters . . . . .	117
6.4	Packages, Loading Units, and Load Carriers . . . . .	119
6.5	Picking and Handling . . . . .	123
6.5.1	Picking . . . . .	123
6.5.2	Handling . . . . .	127
6.6	Warehouse Organization . . . . .	128
	Additional Literature . . . . .	137

<b>7</b>	<b>Inventory, Stock and Provisioning Management</b>	139
7.1	Inventory Basics	140
7.1.1	Contents and Objectives	140
7.1.2	Determination of Requirements	140
7.1.3	Functions of Inventory	141
7.1.4	Inventory Cost	142
7.2	Inventory Planning and Management	145
7.2.1	Disposition Procedures	145
7.2.2	Warehousing Strategies	146
7.2.3	Safety Stocks	148
7.3	Provisioning of Goods	149
7.3.1	Individual Procurement and Bulk Procurement	149
7.3.2	Production Synchronized Provisioning	149
7.3.3	Just-In-Time Concepts	149
7.3.4	Goods Receiving Functions	151
7.4	Transport, Warehouse, and Location Concepts	152
7.4.1	Regional Freight Carrier Concept	152
7.4.2	External Provisioning Warehouse	153
7.4.3	Supplier Settlements and Supplier Parks	154
7.5	Cooperation Concepts of Inventory and Provisioning Management	155
7.5.1	Efficient Consumer Response	155
7.5.2	Vendor Managed Inventory	157
7.5.3	Collaborative Planning, Forecasting and Replenishment	158
	Additional Literature	160
<b>8</b>	<b>Logistics Network Planning</b>	161
8.1	Strategic Network Planning	162
8.2	Overview Logistics Networks	163
8.2.1	Representation of Logistics Networks	163
8.2.2	Domains of Decision Making in the Network Design	164
8.2.3	Structures of Logistics Networks	164
8.3	Warehouse Networks	165
8.3.1	Warehouse Network Planning	165
8.3.2	Degree of Centralization	166
8.3.3	Capacity Planning	169
8.3.4	Layout Planning	170
8.4	Transport Networks	171
8.4.1	Transport Network Planning	171
8.4.2	Transport Network Configurations	172
8.4.3	Transport Consolidation	176
8.4.4	Transport Logistics Concepts	182
8.5	Outsourcing, Tendering and Placing of Transport and Logistics Services	184
	Additional Literature	188

<b>9 IT in Logistics</b> . . . . .	189
9.1 Electronic Data Transmission . . . . .	190
9.1.1 Communication Standards . . . . .	190
9.1.2 Identification Standards . . . . .	197
9.2 Identification Technology . . . . .	198
9.3 Stock Management and Warehouse Control . . . . .	204
9.3.1 Classification of IT in the Fields of Inventory and Warehousing . . . . .	204
9.3.2 ERP Systems . . . . .	205
9.3.3 Warehouse Management Systems . . . . .	207
9.3.4 Material Flow Systems and Lower-Level Control Systems . . . . .	208
9.4 Transport Planning and Controlling . . . . .	209
9.5 Strategic and Operative Planning Systems . . . . .	212
9.5.1 Site and Network Planning . . . . .	212
9.5.2 E-procurement . . . . .	213
9.5.3 Enterprise Resource Planning . . . . .	214
9.5.4 Supply Chain Planning . . . . .	215
Additional Literature . . . . .	223
<b>10 Investment and Financing in Logistics</b> . . . . .	225
10.1 The Basics . . . . .	226
10.1.1 Managing Capital Requirement, Origin of Capital and Capital Utilization . . . . .	226
10.1.2 Managing Fixed Assets and Current Assets . . . . .	228
10.1.3 Financial Supply Chain Concept . . . . .	230
10.2 Financing Deliveries of Goods and Inventory . . . . .	233
10.2.1 Overdraft Facilities and Supplier's Credit . . . . .	233
10.2.2 Factoring, Forfaiting, Cash Forwarding . . . . .	234
10.2.3 Inventory Management and Off-Balance Sheet Inventory Financing . . . . .	236
10.3 Financing of Logistics Real Estate . . . . .	237
10.3.1 Self Financing and External Financing . . . . .	237
10.3.2 Rent and Leasing . . . . .	238
10.4 Financing of Logistics Movables . . . . .	239
10.4.1 Internal and External Financing . . . . .	239
10.4.2 Leasing . . . . .	240
10.4.3 Build-Operate-Transfer Models . . . . .	241
Additional Literature . . . . .	243
<b>11 Logistics Controlling</b> . . . . .	245
11.1 Conceptual Basics . . . . .	246
11.2 Logistical Costs and Performance Accounting . . . . .	249
11.3 Key Figure Systems . . . . .	252

---

11.4	Further Controlling Concepts . . . . .	261
11.4.1	Process Cost Accounting . . . . .	261
11.4.2	Supply Chain Controlling . . . . .	262
11.5	Costs and Cost Effects; Performance and Performance Effects . . . . .	262
	Additional Literature . . . . .	265
<b>12</b>	<b>Business Models and Industry Solutions . . . . .</b>	<b>267</b>
12.1	Business Models . . . . .	268
12.2	Logistical Industry Solutions . . . . .	268
12.2.1	Industry Solutions in Manufacturing . . . . .	268
12.2.2	Industry Solutions in Trade . . . . .	273
12.2.3	Industry Solutions in the Service Sector . . . . .	276
12.2.4	Industry Solutions in E-Business . . . . .	277
12.3	International and Global Business Models . . . . .	279
12.4	Development of Logistics Services Offers . . . . .	281
	Additional Literature . . . . .	283
<b>13</b>	<b>Outline Solutions to Case Studies . . . . .</b>	<b>285</b>
13.1	Solution to Case Study 6-1 . . . . .	285
13.2	Solution to Case Study 6-2 . . . . .	286
13.3	Solution to Case Study 6-6 . . . . .	286
13.4	Solution to Case Study 8-2 . . . . .	286
13.5	Solution to Case Study 8-5 . . . . .	286
13.5.1	Selective Inventory . . . . .	286
13.5.2	Regional Warehouses . . . . .	287
13.5.3	C Articles Management . . . . .	287
13.5.4	Direct Supply . . . . .	287
13.6	Solution to Case Study 11-2 . . . . .	289
	<b>Bibliography . . . . .</b>	<b>293</b>
	<b>Index . . . . .</b>	<b>303</b>





---

# List of Figures

Fig. 1.1	Logistics and its branches .....	2
Fig. 2.1	Elements of logistics tasks .....	5
Fig. 2.2	Logistical problems and solutions .....	5
Fig. 2.3	Changes in the understanding of logistics .....	6
Fig. 2.4	System of logistical services .....	8
Fig. 2.5	Elements of logistics .....	11
Fig. 2.6	Functional distinctions of logistics .....	13
Fig. 2.7	Differentiation of business enterprise .....	14
Fig. 2.8	Determinants of the logistical service level .....	15
Fig. 3.1	Model of a logistics chain (supply chain) .....	21
Fig. 3.2	Model of a complex logistics network .....	22
Fig. 3.3	Model of a detergent supply chain .....	24
Fig. 3.4	Determining elements of logistics organization structures .....	27
Fig. 3.5	Organization and supply chain .....	28
Fig. 3.6	Logistical organization models .....	29
Fig. 4.1	Schematic outline of Berlin's airport 'Willy Brandt' .....	41
Fig. 4.2	Rail infrastructure .....	43
Fig. 4.3	Layout of a container terminal .....	45
Fig. 4.4	Schematic layout of a door-to-door logistics chain .....	46
Fig. 5.1	Tonnage transported according to transport modes in Germany .....	57
Fig. 5.2	Tonne-kilometer performance according to modes of transport in Germany .....	57
Fig. 5.3	Tonne-kilometer performance according to market share in 2011 in Germany .....	58
Fig. 5.4	Distinguishing characteristics of road freight transport .....	59
Fig. 5.5	Market players in rail freight transport .....	61
Fig. 5.6	Group structure of the Deutsche Bahn AG .....	62
Fig. 5.7	Rail freight transport products .....	62
Fig. 5.8	Railroad transport network of BASF Schwarzheide GmbH .....	65
Fig. 5.9	Most important forms of inland waterway transport .....	70
Fig. 5.10	Network of North European inland waterways .....	72
Fig. 5.11	Pipeline network and refineries in Germany .....	77
Fig. 5.12	Pre-carriage, main carriage and on-carriage .....	78

Fig. 5.13	Setup of transport chains .....	79
Fig. 5.14	Transport means in road freight transport .....	81
Fig. 5.15	Railway wagons .....	83
Fig. 5.16	Ship generations in container transport .....	84
Fig. 5.17	Transport means of inland waterway transport .....	84
Fig. 5.18	Airplane types .....	85
Fig. 5.19	Air freight containers .....	86
Fig. 5.20	Loading profiles of all-cargo planes .....	86
Fig. 5.21	Competition matrix: forwarder/integrator .....	90
Fig. 5.22	Air and road network of TNT Express .....	92
Fig. 6.1	Block storage figure .....	98
Fig. 6.2	Pallet rack .....	99
Fig. 6.3	Drive-in rack and drive-through rack .....	100
Fig. 6.4	Bay shelf .....	101
Fig. 6.5	Cantilever shelf .....	101
Fig. 6.6	Live storage shelf .....	102
Fig. 6.7	Push-back shelf .....	102
Fig. 6.8	Vertical carousel .....	103
Fig. 6.9	Horizontal carousel .....	104
Fig. 6.10	Slide shelves .....	104
Fig. 6.11	Manual lift truck .....	106
Fig. 6.12	Lift pallet truck .....	106
Fig. 6.13	Counterbalance forklift or frontload truck .....	107
Fig. 6.14	Reach truck .....	108
Fig. 6.15	Narrow aisle truck .....	109
Fig. 6.16	Stacker crane .....	109
Fig. 6.17	Automated Guided Vehicle (AGV) .....	109
Fig. 6.18	Comparison of common conveyors .....	110
Fig. 6.19	Roller conveyor .....	112
Fig. 6.20	Chain conveyor .....	113
Fig. 6.21	Belt conveyor .....	113
Fig. 6.22	Circular conveyor .....	114
Fig. 6.23	Electric pallet ground conveyor .....	115
Fig. 6.24	Floor-mounted drag chain conveyor at the Dachser logistics center in Berlin/Brandenburg .....	116
Fig. 6.25	Tilt-tray sorter .....	117
Fig. 6.26	Crossbelt sorter .....	118
Fig. 6.27	Sliding sorter or slat sorter .....	118
Fig. 6.28	Transition from feeding belt to tilt-tray sorter .....	119
Fig. 6.29	Euro pallet .....	121
Fig. 6.30	Wire-mesh pallet .....	121
Fig. 6.31	Single-stage, one-dimensional picking with manual withdrawal and centralized handover .....	125
Fig. 6.32	Static provisioning, one-dimensional movement, manual withdrawal and decentralized handover .....	125

Fig. 6.33	Static provisioning, two-dimensional movement, manual withdrawal and centralized handover .....	126
Fig. 6.34	Dynamic provisioning, one-dimensional movement, manual withdrawal and decentralized handover .....	127
Fig. 6.35	Loading and un-loading of trucks with and without the use of ramps .....	129
Fig. 6.36	Gate system .....	130
Fig. 6.37	Possible goods receiving (ingoing) – goods issuing (outgoing) layouts .....	130
Fig. 6.38	Warehouse layout Gebr. Heinemann, KG .....	133
Fig. 7.1	Distinction of types of material demand .....	141
Fig. 7.2	Warehousing strategies and order policies of the t-q policy ...	146
Fig. 7.3	Warehousing strategies and order policies of the t-S policy ...	147
Fig. 7.4	Warehousing strategies and order policies of the s-q policy ...	147
Fig. 7.5	Warehousing strategies and order policies of the s-S policy ...	148
Fig. 7.6	Factory premises at smart France .....	154
Fig. 7.7	ECR overview .....	157
Fig. 7.8	CPFR process model .....	158
Fig. 8.1	Goal conflict in logistics performance .....	162
Fig. 8.2	Representation of a network for the flow of goods .....	165
Fig. 8.3	Number and degree of centralization of distribution systems ...	166
Fig. 8.4	Concept of selective warehousing .....	167
Fig. 8.5	Logistics network BSHG .....	169
Fig. 8.6	Forms of net structures .....	172
Fig. 8.7	Net configuration: grid .....	173
Fig. 8.8	Net configuration: hub-and-spoke .....	173
Fig. 8.9	Combinations of grid and hub-and-spoke nets .....	174
Fig. 8.10	Load and consignee acquisition .....	177
Fig. 8.11	Ordinary delivery versus delivery with multi-pick concepts ...	178
Fig. 8.12	The cross-docking principle .....	179
Fig. 8.13	Cross-docking variants in the METRO Group Logistics system .....	181
Fig. 8.14	Existing distribution structure .....	186
Fig. 9.1	The EDI principle .....	191
Fig. 9.2	Information flow in logistics with EANCOM® standards ...	194
Fig. 9.3	Information flow in the distribution of goods with EANCOM® standards .....	198
Fig. 9.4	Mechanical reading in automatic data acquisition .....	199
Fig. 9.5	Characters for optical recognition .....	199
Fig. 9.6	EAN barcodes for individual items .....	200
Fig. 9.7	EAN-128 as SSCC .....	201
Fig. 9.8	EAN-128 transport label – concrete example of SSCC .....	201
Fig. 9.9	2-D codes for postage and train tickets .....	202
Fig. 9.10	Logic of the RFID data flow .....	203
Fig. 9.11	Transponder (smart label) .....	203