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Harald Gleissner • J. Christian Femerling

# Logistics

Basics – Exercises – Case Studies

 Springer

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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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