
Contents

Introduction: Logistics at the Brink of Change 1
Luca Graf and Christian Wurst

Driving Forces of Digital Disruption

Digitizing and Automating Processes in Logistics 9
Wolfgang Lehmacher

How Utilization of Assets is Impacted by Digitalization and Automation 29
Christian Wurst

Toward Logistics Pricing Transparency 41
Zvi Schreiber

Supply Chain Visibility and Exception Management 51
David Nothacker

Business Models Disrupting the Existing Logistics Solutions

Rate Comparison and Marketplaces—The Platform Era and Global Freight 65
Eytan Buchman

The Last Mile Problem and Its Innovative Challengers 79
Aike Festini and David Roth

E-commerce Order Fulfillment Supply Chain—How New Entrants Are Changing the Industry 93
Johannes Plehn

Selection of the Appropriate Asset Tracking Solution 105
Andreas Giessler

Advanced Analytics and Big Data in Supply Chain Planning 121
Jan Sigmund

SaaS and Big Data Solutions in the Area of Logistics Related Services	137
Pierre Francois	
Human–Robot Collaboration: The Future of Smart Warehousing	149
Raffaello D’Andrea	
Digital Freight Forwarders Disrupt Road Freight Space	163
Philip Ortwein and Jennifer Kuchinke	
A Revolution in Value-Delivery Across Air and Sea Freight	177
Richard Fattal	
Autonomous Vehicles as the Ultimate Efficiency Driver in Logistics	191
Luca Graf and Fabrizio Anner	
Distributed Ledger Technology: Toward a Decentralized Logistics Ecosystem	207
Frank Kottler and Konstantin Graf	
Key Players Behind the Disruption	
Digital Transformation in Airfreight	223
Boris Hueske	
How Freight Forwarders Are Challenged by and Respond to the Digital Disruption	235
Christian Wurst	
The Evolution of Supply Chain Startups	251
Anya Klyukanova	
Transactions & Valuation in the Global Logistics Market	261
Steffen Wagner and David Klein	
Financing Disruption—The Role of Venture Capital in the Logistics Industry	279
Christian Saller and Felix Klühr	