CONTENTS

About the contributors xii Preface xxi Acknowledgements xxvi

01 Re-thinking supply chain strategy 1

Martin Christopher Introduction 1 The search for agility 3 The need for end-to-end planning 4 Building structural flexibility into the supply chain 5 Supply chain orchestration 7 The changing risk profile 8 Achieving resilience 10 Conclusion 12 References 13

02 Linking supply chain management to financial performance 14

Heimo Losbichler and Farzad Mahmoodi
Introduction 14
Financial performance and its drivers 15
Linking supply chain management and financial performance 20
Framework to identify initiatives that create the most shareholder value 24

Difficulties in improving supply chain financial performance 31 References 33

03 Supply chain risk management: finance – the forgotten perspective? 36

Carolyn Somorowsky and Lars Stemmler Introduction 36

Risk management and the supply chain: an established perception! 37

From operational resilience to financial stability 40

Financing investments collaboratively: reducing the risk of supply chain breakdowns 46 Conclusions 48 Notes 49 References 50

04 Supply chain vulnerability and resilience 52

Alan Braithwaite

05

Black swans: long tails and unintentional self-harm 52 Probability versus impact 57 Mapping the landscape of risk and vulnerability 57 The evolution of supply chain risk management thinking 60 The financial impact of supply chain disruptions 62 Frameworks for designing for resilience 65 Some examples of disasters and the implications for resilience 72 Digital toolsets and services for risk management 74 In conclusion: supply chain resilience is a capability 77 References 77

Fulfilling customer needs in the 2020s with marketing and logistics 79

David B Grant Introduction 79 Logistics customer service today 82 Logistics customer service elements and issues 83 Logistics customer service strategies 86 Summary 91 References 92

06 New procurement directions in supply chain management 95

Louise Knight, Frederik Vos and Joanne Meehan Perspectives on procurement 95 Procurement directions for 'improved business-as-usual' 101 New procurement directions for 'business-not-as-usual' 108 Contrasting 'improving business-as-usual' and 'business-not-asusual' perspectives 111 References 112

Maximizing capacity utilization in freight transport 119

Alan McKinnon Introduction 119 Assessing the utilization of freight transport capacity 120 Factors constraining capacity utilization 125 Measures to improve capacity utilization 129 Conclusion 137 References 137

08 Retail logistics 142

07

John Fernie Introduction 142 The evolution of the logistics concept 143 Logistics and competitive strategy in retailing 146 The internationalization of the retail supply chain 149 CSR and sustainable supply chains 151 The online revolution 153 The future 158 References 160

09 Trends and strategies in global logistics and supply chain management 164

Christian F Durach and Frank Straube Introduction 164 Research design and research sample 165 Key trends and strategies 168 Strategic delivery reliability 183 Digital transformation in logistics 185 Conclusion and outlook 187 Notes 188 References 188

10 Global sourcing and supply 190

Alan Braithwaite

Global trade – economic lifeblood 190 The product economics that have driven global sourcing 193 Sustainability and the UN'S SDGS 197 The key features of 'good practice' in global sourcing 199 Emerging risks and their implications for future sourcing strategies 203
Emerging technologies and their impacts 204
Re-shoring, near-shoring and supply chain reconfiguration 206
In conclusion 208
References 208

11 Supply chain relationships: the foundation of success 210

Patrick Daly The historical strateg

The historical strategic context 210 The importance of inter-organizational relationships 214 The importance of clear objectives 217 Relevant metrics to measure progress towards achieving

objectives 222 Summary 227 References 229

12 Delivering sustainability through supply chain management 231

Maria Huge-Brodin and Edward Sweeney Introduction 231 Sustainability as corporate performance 232 How supply chains can foster sustainable development 235 Sustainable supply chains: contemporary and future challenges 239 Some concluding comments 243 References 244

13 Greening of logistics: cutting pollution and greenhouse gas emissions 246

Alan McKinnon Introduction 246 Emissions from logistics 247 Managerial and analytical frameworks 252 Repowering logistics with cleaner, low-carbon energy 255 Raising the energy efficiency of logistics operations 259 Increasing the utilization of logistics assets 261 Shifting freight to greener transport modes 262 Reducing the demand for freight movement 264 Conclusions 265 References 266

14 People powering contemporary supply chains 270

John Gattorna Introduction 270 Tensegrity: balancing external and internal forces acting on the enterprise 271 Segmenting customers versus segmenting supply chains 273 Managing in a parallel universe 275 Digitalization is mandatory 277 From 'static' to 'dynamic' organization designs 280 New focus on the supply side 285 Resilience, delivered 287 A final word 288 Notes 288 References 288

15

Leadership in logistics 289

Richard I Atkinson What is leadership, and why should we develop leadership skills? 289 Better practice, and the law 290 The problem (opportunity) 292 What leadership is not 294 What should we do? 295 Leading innovation 296 Strategy 300 Engagement 301 'How' not 'who' 301 Summary 304 References 305

Ethics in supply chains: an illustrated survey 306 16

> Steve New Introduction 306 Characterizing the field of supply chain ethics 307 Two key issues in supply chain ethics 315

The Boohoo case 320 Concluding comments 327 Notes 328 References 330

18

17 Humanitarian logistics and supply chain management 338

Yasmine Sabri
Introduction 338
The significance of humanitarian logistics and supply chain management 339
Humanitarian logistics and supply chains phases 341
A framework for managing humanitarian logistics and supply chains 344
Pandemic supply chain: Covid-19 supply chain systems 349
Concluding remarks 352
Notes 353
References 353

Digitalization in global supply chain operations 358
Andreas Taschner and Hazel Gruenewald
Introduction 358
Digital technologies and their relevance for global supply chains 359
Current adoption of digital technologies 364
Conclusions 379
Note 380
References 380

19 Digitalization and Industry 4.0 in logistics 382

Pietro Evangelista and Witold Bahr
Introduction 382
The uneasy road to digitalization in logistics: from Industry 4.0 to Logistics 4.0 383
Digitalization in the logistics service industry: challenges towards Logistics 4.0 385
Conclusions 388
References 389

Performance measurement and management in the supply chain 391

Alan Braithwaite
Measure to manage 391
Measuring outcomes versus inputs 394
The balanced scorecard: the strategic standard for goal setting and measurement 395
The fundamentals of supply chain performance measurement 399
Mastering the complexity of supply chain and logistics performance management 401
Setting goals across the chain through service level agreements 402
The delivery, recovery and governance model 406
Defining the specific metrics across the chain 408

Control towers: collecting, managing and using data 412

Future directions in performance measurement 414

Conclusion 416

20

21

References 417

Aligning technology, manufacturing and supply chain: why it matters and how to do it 418

Aristides Matopoulos, Brian Price and Yuchun Xu Introduction 418 The evolution of concurrent engineering 419 How to align technology, manufacturing and supply chain 421 Conclusion and future research 424 References 425

22 The 'deglobalization' of logistics and supply chains: operating in an increasingly nationalistic and risky world 427

David B Grant, David A Menachof and Christopher Bovis Introduction 427 Background 428 Research approach 432 Proposed risk framework to address deglobalization 433 Conclusions 440 References 443

Index 447