
Management for Professionals

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Guide to Supply Chain Management

An End to End Perspective

Second Edition

 Springer

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Foreword

This guide is a really useful reminder of what good practice is and how it should be applied within supply chain management. The book is relevant for students of supply chain management and professional practitioners alike.

The key aspects of supply chain are laid out clearly—plan, source, make, deliver, and return. The book is well constructed in totality—and I can envisage revisiting specific chapters in isolation whilst constructing and delivering supply chain strategy.

This is the first book that I have come across that is focused more upon the concepts underpinning the total supply chain rather than the physical execution of the supply chain. Its range is from forecasting, inventory management and cash through execution strategy and development. I would add it to my arsenal and recommend it to others.

The content is relevant; concepts are clearly explained and supported by case studies that bring the concepts to life. The language used is clear and contemporary; visualisations re-enforce the concepts well. The additional suggested reading at the end of each chapter offers an added opportunity to further develop understanding of specific elements of the supply chain.

Organisations operating on a global stage have to get this stuff right, in both process and physical terms: it is an essential element to delivering profitable growth. This book offers an invaluable guide to understanding the specific dynamics of your supply chain and the fundamentals underpinning it. It provides the framework for delivering a supply chain strategy based upon recognised best practice.

Dyson Limited
Wiltshire, UK

Martin McCourt

Preface

Welcome to the second edition. Supply chain management is a fast-changing business. Recently, it has driven companies around the world to change structure and—maybe more importantly—the way they think about operating in an increasingly volatile global environment. Everything we consume from the food we eat and the clothes we wear to the technology we use is configured from components that have travelled from different corners of the world. As consumers request high-quality products at lower cost, supply chain management has become as critical as sales, marketing and finance in today's organisations.

The goal for supply chain management is to beat the competition and to provide better service at lower cost with a sustainability remit. A key element of success within supply chain management is the speed and effectiveness of innovation. Therefore, within this second edition, we have included more content around this subject.

During our work with large multinational companies in various industries, we have met professionals all over the world who are passionate about achieving these goals. This guide is designed to help professionals, students and everyone else with an interest in this topic to structure their thoughts and methodologies.

Business practitioners who work in supply chain management and those whose business functions interact with it have an interest in reading the guide in both the digital and paper format. Students, whether studying at universities or in vocational training, find this guide a comprehensive introduction to supply chain management. But also people working in other contexts, such as charity projects and professional industry bodies, appreciate this text with its intuitive models and many practical examples.

In writing this guide, we have tried to connect with our readers by using simple and straightforward models. By including more real-life case studies of best practice in this second edition, the guide brings supply chain theory to life. The practical approach and format enables readers to capitalise on the insights presented in the guide.

In preparing this book, we have drawn greatly on the thoughts and concepts of others. If we have omitted to give any credits where credits are due, we apologise and hope that they will make contact to include in future editions. Learning is an interactive experience, so we welcome any feedback or ideas of how to improve this

guide. After all, we have learned most from the people we worked with, for which we are very thankful.

If you would like to get in touch with the authors, please find us online or email us: supplychain@grangepartnership.com

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About the Authors

Colin Scott is an author, learning specialist and executive coach for global companies with over 30 years of experience in business and supply chain management. In his operational career, he worked for manufacturers and third-party logistics providers and managed major change projects. He was responsible for international transport operations as well as systems strategy and implementation, holding Commercial Manager positions, focusing on customer account management and regional financial responsibility, including the management of client inventory and the implementation of strategic sourcing processes.

Over the past two decades, Colin has focused on management development, designing and delivering learning programmes around the globe for some of the world's largest companies. He thoroughly enjoys supporting large retailers, manufacturers, consultancies, transportation and logistics companies in meeting the ever-increasing challenges in customer service, cost, innovation and sustainability.

Educated at Durham University and Nottingham Business School, Colin holds diplomas in logistics and management studies and is an accredited trainer and assessor in Team Management Profiling. He works with some of the world's leading business schools supporting their executive leadership and supply chain development programmes. Colin is also a non-executive director of a global manufacturing company.

Henriette Lundgren is an author, coach and business trainer. With more than 15 years of experience, her main focus is on corporate learning and leadership development for international businesses. Previously, she worked in various line management and project management positions, leading demand planning and sourcing teams in the consumer goods and chemical industry. She also oversaw the implementation of SAP systems in manufacturing, planning and customer service at the international level.

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Paul Thompson is an author, coach and business learning specialist with extensive experience in designing and running global programmes for large corporations. He enjoys working with leading companies and has developed and delivered learning activities across a wide range of industries. Many of Paul's programmes include the use of business simulations, which improve interaction during the event and increase learning transfer after it. He is a qualified assessor for the Margerison–McCann Team Management Wheel.

After graduating with a first-class degree in manufacturing sciences, Paul spent a decade managing different parts of the business for two of the world's largest and most successful companies. In his roles, Paul has managed sales, finance, planning, supply chain, logistics, warehousing and manufacturing operations.

He has led major change management projects including outsourcing international warehousing and distribution and implementing customer service excellence systems. In addition, he also oversaw the implementation of both SAP and JD Edwards successfully within the supply chain.

In his free time, Paul coaches local sports teams and supports local community projects.

Abbreviations

2D	Two-dimensional
3PL	Third-party logistics
AI	Artificial intelligence
AS	Average stockholding
ASN	Advanced shipment notice
B2B	Business to business
B2C	Business to consumer
CFO	Chief financial officer
CILT	Chartered Institute of Logistics and Transportation
CLSC	Closed-loop supply chain
CM	Category management
COC	Cost of capital
COFC	Container on flat car
COG	Centre of gravity
CRP	Capacity requirements planning
CS	Category sourcing
CSR	Corporate social responsibility
DC	Distribution centre
DRP	Distribution requirements planning
DSD	Direct store delivery
EDI	Electronic data interchange
ELV	End-of-life vehicle
EOQ	Economic order quantity
EPA	Environmental Protection Agency
EURIDICE	European Interdisciplinary Research on Intelligent Cargo for Efficient, Safe and Environmentally Friendly Logistics
FA	Forecast accuracy
FE	Forecast error
FG	Finished goods
FMCG	Fast-moving consumer goods
FTL	Full truck load
GHG	Greenhouse gas
GSCM	Green supply chain management

HAZMAT	Hazardous material
IF	In full
IP	Intellectual property
ITT	Invitation to tender
JIT	Just in time
KPI	Key performance indicator
L&D	Learning and development
LCA	Life cycle assessment
LNG	Liquid natural gas
LT	Lead time
LTL	Less than a truck load
MAPE	Mean absolute percentage error
MPS	Master production schedule
MRP	Materials requirements planning
NDC	National distribution centre
NLP	Neuro-linguistic programming
NVA	Non-value added
OEE	Overall equipment effectiveness
OEM	Original equipment manufacturer
OOS	Out of stock
OT	On time
OTIF	On time in full
P&L	Profit and loss
Q	Order quantity
R&D	Research & Development
RCCP	Rough cut capacity planning
RDC	Regional distribution centre
RFI	Request for information
RFID	Radio frequency identification
RFP	Request for proposal
RFQ	Request for quotation
RL	Reverse logistics
RM	Raw materials
ROCE	Return on capital employed
RRT	Rolling road train
S&OP	Sales and operations planning
SC	Supply chain
SCC	Supply Chain Council
SCM	Supply chain management
SCOR	Supply chain operations reference
SKU	Stock keeping unit
SLA	Service level agreement
SLF	Service level factor
SRM	Supplier relationship management

SS	Safety stock
SU	Supplier uncertainty
TCO	Total cost of ownership
TOC	Theory of constraints
TOFC	Trailer on flat car
TPS	Toyota Production System
TQM	Total quality management
ULD	Unit load device
VARK	Visual, auditory, read/write, kinaesthetic
VFFS	Vertical form fill and seal
WACC	Weighted average cost of capital
WEEE	Waste electrical and electronic equipment
WEF	World Economic Forum
WIP	Work in progress