Preface

ABOUT THE EDITORS

Hello dear reader, thank you for picking up this book and checking it out. The reason you choose to read this book is because you have an interest in Supply chain or retail management or in both. We believe in sharing of knowledge and if you choose to read through this book, we are sure that you will enjoy and learn as much as we have enjoyed and learnt editing through this book.

Both the editors work with JDA Software, a product company with deep supply chain expertise. JDA Software is the leading provider of end-to-end, integrated retail and supply chain planning and execution solutions for more than 4,000 customers worldwide. JDA's unique solutions empower its clients to achieve more by optimizing costs, increasing revenue, and reducing time to value so they can always deliver on their customer promises. JDA’s game-changing solutions address the complexities of today's global, consumer-driven marketplace, and span the entire supply chain from “planning to delivery” through any channel. Named “leader” in all five Gartner Magic Quadrants on supply chain planning and execution, these essential solutions scale to unlock value and solve the toughest problems for the world's best companies.

Dr. Narasimha Kamath works with JDA Software as a Product Director and has over 15 years of rich experience in Product Management, Supply Chain Management, e-commerce, Project Management, Team Management, Liaison & Coordination, and Key Account Management. A Ph.D. (Fellow Program in Management) holder from Indian Institute of Management Calcutta, he collaboratively works with Academia, IIM Bangalore's supply chain management centre, IIT Guwahati's Department of Design, and IIT Bombay's Optimization group. He has many international publications to his credit that includes patents, journals, cases and conferences papers.

Swapnil Saurav works with JDA Software as a Project Manager. Swapnil is an ambitious, creative, and a highly motivated individual, who has a passion for supply chain with focus on retail and manufacturing industries, and an uncompromising commitment to quality and outstanding customer service. He has been invited as keynote speaker at various industry forums and has a passion for teaching & developing leaders of tomorrow.
HOW THE IDEA OF WRITING THIS BOOK WAS BORN

JDA Software, as a company, constantly promotes industry and academia interaction. JDA actively participates in events like Supply Chain Practitioners Council (SCPC) and organizes Optimisation Summit (OptSum) year on year.

A daylong event, the SCPC aims to bring together the leading supply chain practitioners from across industries to showcase achievements and share best practices, while building a community which can influence policy making. JDA Software proudly hosts OptSum, which brings Analytics experts and Optimisation gurus from industry and academia on a single platform. JDA has a large client base in manufacturing, distribution, retail, category management, and store operations. After hosting and participating in events like SCPC and JDA, we felt that there is a disconnect between industry and academia, especially in India. We firmly believe that industry and academia should work and exchange ideas for the betterment of the supply chain community. This book is a small effort from our side aiming to bridge the gap.

ABOUT THE TITLE OF THE BOOK

Supply chain is a network of organizations and business process for procuring raw materials, transforming them into intermediate and finished products, and distributing them to customers. Supply Chain Management (SCM) is the flow of materials, finances, information, and knowledge whose purpose is to satisfy end user requirements with products and services from multiple linked manufacturers and suppliers. SCM is the design, maintenance, and operation of supply chain processes for satisfaction of end user needs. In the light of cut throat competition in the market, organizations have to focus on continuous improvement of the extended supply chain processes. The battleground thus becomes supply chain versus supply chain. The coordination of materials, information, and financial flows among suppliers, manufacturers, distributors, and retailers of products and services enables higher supply chain efficiency, quicker delivery, and higher customer service at substantially lower cost. Retailers and their suppliers are under tremendous pressure to deliver goods to more destinations faster and, at the same time, be cost efficient.

With the advancement in technology, Retail management field has become exciting and is flourishing with new and bigger opportunities. Experts in the Retail Management field are constantly looking for new innovative ways to buy, develop, and sell products, and to enhance customer experience leading to higher sales. At the same time, the industry is also facing the challenge of meeting the demands where the requirements of customers are ever changing. We are also witnessing a renewed interest in topics like Cold Chain Logistics and Green Supply Chain. Emergence of online shopping and the need for Omni Channel experience requires retail management professionals to think outside the box along with excellent decision making skills. One needs strong problem solving skills with sole focus on providing excellent customer service. With the emergence of social media, the power has shifted to customers. Starved of time, consumers seek both convenience and great customer service. They demand constant product availability, expect regular promotions and price reductions, and have an infinite range of nutritional, lifestyle, and fashion preferences. Smart shoppers also want consistent pricing across various channels and stay more informed through the information available via social media. SCM has played, and continues to play, a strategic role in retail organizations throughout the recession and remains a key driver of business success and competitive advantage in today’s challenging market.
OBJECTIVE

Supply chain experts are always on the lookout for tips for tracking and expediting inventory in today’s ‘I-want-it-now,’ multi-channel retail world. So what steps can, and should, retailers take to make sure that their supply chain operations are running smoothly? Over the past few decades, companies have embraced supply chain management as a vital area of emphasis for companies. Many companies have risen to the top of their respective industries by forging effective supply chain management techniques into strategic weapons. In short, supply chain management means effectively handling the relationships between one’s suppliers and buyers. But in practice, the field covers a wide range of issues, including supplier selection, purchasing, risk management, logistics, distribution, pricing, demand and supply management, and channel coordination.

This comprehensive and timely publication aims to be an essential reference source, building on the available literature in the field of supply chain management focusing on aspects of retail, analytics, and risk management. It explores the risks, challenges, and opportunities in the SCM space. Our aim is to discuss the latest developments in the field of retail management and provide insights into this dynamic industry. It is our hope that this book will provide the necessary resources for policy makers, technology developers, and managers to adopt and implement supply chain best practices. The topics of the book are applicable to all regions as the supply chains these days are global in nature.

TOPICS THAT HAVE BEEN COVERED

We are very pleased with the response we received for our call for chapters. We received over 60 abstracts. Only 35 abstracts were shortlisted based on the strict review criteria that we had set for the book. We received full chapters for all these, which went through triple blind review process and only the top 20 of it made it to his book. These chapters includes the following topics relating to Retail, analytics, e-commerce, and risk in the area of supply chain management:

- Retail Management,
- Supply Chain Planning and Inventory management,
- Omni Channel Retail,
- Supply Chain Analytics / Big data in SCM,
- Perishable Goods Supply Chain Management,
- Coordination and Collaboration in supply chain networks,
- Challenges and Opportunities in Distribution/Warehousing/Transportation,
- Supply chain visibility and risk management,
- Green Supply Chain,
- e-commerce supply chain,
- Agile and responsive supply chains,
- Payments & Cards: e-commerce/m-commerce,
- Customer Loyalty,
- Innovation in Retail Management.
This book has been designed to provide a variety of interesting supply chain risks, challenges, and opportunities. Overall, the 20 chapters in the book touch upon many of the important supply chain issues facing modern retail organizations. Each chapter contains real-time challenges for the management of retail organization or those supporting the retailers’ business, leaving enough room for the reader to ponder, analyze, and practice the next best steps. Most of the chapters are primarily based on qualitative research, while couple of chapters are based on the authors’ experience and presented as case studies and quantitative analysis. The book is truly the “strategic supply chain for retailers” where the topics cover almost all aspects of retail supply chain.

One of the most attractive features of this book is that we have equal contribution of information from both industry experts and academic world. Not only are many supply chains’ discussion global in nature, but the chapters also discuss the challenges faced by the industry and the areas where researchers are putting their effort to solve the same. Even though the coordination between the academic world and industry experts could be improved, we are glad to find that there is no disconnect between them. This book also serves this purpose. We have put in our best effort to bring both the industry experts and researchers on the same page.

INTRODUCTION TO BOOK CHAPTERS

We present brief introduction about each of the chapter here:

**Chapter 1: Retail Supply Chain Management Trends – Past, Present and Future**

Improving the organization’s performance and securing competitive advantage over others greatly depends on the supply chain management as it is seen that the competition is no longer between the organizations, rather they are amongst their supply chains. This study is based on collecting the information and data about the supply chain management from 60 retail organizations. This study will show the aspects of supply chain management in the retail domain highlighting the challenges, capabilities, and the priorities for the next 2-3 years.

**Chapter 2: The Economic and Environmental Benefits of VMI Adoption in Multi-Retailer Systems**

There is an increasing push towards integrating environmental considerations in decision making in organizations. Rethinking and realigning existing business processes has been touted to offer significant potential in reducing the ecological footprint. Specifically, the role of logistics and supply chain has come into prominence in this regard. In this chapter, a supply chain with a single vendor and multiple retailers has been considered for analysis.

**Chapter 3: Supply Chain Hub & Spoke Model for Convenience Store**

As grocery retailers have limited profit margin, the players in the industry are constantly looking for cost effective supply chain model for increasing profit margins. This chapter proposes a new way to handle the supply chain for the convenience store, that is, Hub and Spoke model between Hypermarket/Super-
market/ Supercenter and Convenience stores. In this new model, Spoke (Convenience Store) receives all inventory from single source, that is, Hub (Hypermarket/Supermarket/Supercenter), hence there is a significant reduction in the logistics cost. This will allow the retailer to be more focused on customer service, which in turn will make more loyalists for the store.

**Chapter 4: Agile Supply Chain Management**

This chapter reviews some basic researches on agility and derives the various factors, aspects, dimensions, characteristics, and distinguishing attributes that drive an agile supply chain. There are certain characteristics for an overall agile supply chain, but there are certain fine nuances for each echelon. This chapter discusses certain specifics to enable agility for retail businesses.

**Chapter 5: Customer Service – A Key Differentiator in Retailing**

Customer Experience Management is a strategy that focuses the operations and processes of a business around the needs of the customers. This chapter focusses on following major themes: assortment and inventory planning, markdown, and store execution of retailer and their strategies for next couple of years. In today’s Omni-channel world, it is important for retailers to enhance customer experience, irrespective of the store formats.

**Chapter 6: Encouraging Supply Chain Networks and Customer Loyalty in Global Supply Chain**

This chapter aims to encourage supply chain networks and customer loyalty in global supply chain, thus distinguishing the theoretical and practical concepts of Supply Chain Management (SCM) and supply chain networks; the multifaceted applications of supply chain network design (SCND); the overview of customer loyalty in global supply chain concerning customer value, customer satisfaction, switching barriers, customer loyalty programs, and customer-company identification (CCID); and the linkage between customer loyalty and supply chain networks in the retail setting. Encouraging supply chain networks and customer loyalty is critical for modern organizations that seek to serve suppliers and customers, increase business performance, strengthen competitiveness, and achieve continuous success in global supply chain. This chapter argues that encouraging supply chain networks and customer loyalty has the potential to improve organizational performance and gain sustainable competitive advantage in global supply chain scenarios.

**Chapter 7: A Customer Loyalty Model for Online Retail in India**

Sustaining long term growth requires businesses to manage customer loyalty very judiciously. This chapter describes a theoretical model for investigating the influence of the antecedents: e-satisfaction, e-trust, e-service quality, and fulfilment on e-loyalty in the online retail context in India. The theoretical model is used as a basis to formulate hypotheses. The hypotheses are tested with data collected from a survey of online customers. The output from these tests shows that e-satisfaction is the variable which affects e-loyalty to the maximum followed by e-service quality variables.
**Chapter 8: Customer Experience Impacting Retail Management: Study of Customer Centricity Strategy by Retailers**

The customers’ profile is evolving at an enormous pace. The differences between retailers are not significant in terms of value delivered; hence it is important that they understand the customer profiles and create differentiation by fulfilling the customers’ needs. This chapter looks at the shopping orientation of the shoppers; it indicates that the shoppers seek emotional value more than the functional value of shopping. This chapter also studies how the shoppers’ orientation towards this routine activity has been changing over the years.

**Chapter 9: Supply Chain Management and Strategy Implementation for Perishable Goods**

Supply chain management is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage for a longer time. The chapter looks at the issues of concern that need attention, like huge losses in perishables (food) because of infrastructural challenges.

**Chapter 10: An Overview of Fruits and Vegetable’s Retail Supply Chain Models in India**

India is the second largest food producer in the world. Various high temperate Fruits and Vegetables (F&V) are widely grown in Himalayas and Terai region of India. They are important to the various retailers in the plain areas across all the seasons. This chapter presents an overview of F&V retail supply chain in India as it plays a very vital role in the growth of Indian economy, and is also directly related to the health and happiness of the customers. The different types of retail supply chain models which are currently followed by Indian F&V retail formats/retailers (traditional or unorganized retailer and modern or organized retailers) and various issues related to the retail supply chain of this sector are also discussed in this chapter.

**Chapter 11: Dynamics of Supply Chains for Perishable and Non-Perishable Items**

This chapter analyzes the dynamics of supply chains for perishable and non-perishable items and compares them. It starts with a single echelon supply chain with widely used inventory management and ordering policies; and then generalizes it to multi-echelon supply chain.

**Chapter 12: Building a Strategic Framework for Supply Chain Analytics**

This chapter attempts to answer the question, “Why investments in analytics haven’t always improved the performance?” The concept of strategic fit between retail analytics and retail supply chain is established. It argues that a strategic framework blending analytics and supply chain is imperative for superior performance over time. Such a framework helps to clarify goals of supply chain analytics and identify managerial actions that can improve supply chain performance in terms of desired goals over a period of time.
Chapter 13: Omni-Channel Retailing – Enriching Customers’ Shopping Experience

Omni-channel can be defined as a synchronized operating model in which all company’s channels are aligned and presented as a single face to the customer, thereby showcasing a consistent way of doing business to its customers. This chapter concentrates on various challenges faced by retailers in implementing the omni-channel business and strategies implemented by them to achieve higher customer satisfaction. Also, this research talks about future outlook for the omni-channel retailing in terms of challenges and opportunities for the players in this industry.

Chapter 14: Trimming Safety Stock – Empirically, Realizing Working Capital Gains

Retailers have a natural tendency to keep a very close watch on various costs in whichever way they can be curtailed or controlled. This chapter looks at the application of appropriate statistical techniques on the right set of products that can help retailers to get a trimmed down safety stock numbers, which are still capable in addressing the demand and supply variability.

Chapter 15: Big Data Analytics in Retail Supply Chain

This chapter talks about how big data can bring paradigm shift in the retail sector. Data generated at different stages of the retailing process can be recorded, digitized, and transformed into matrices and strategic information. These matrices & information would prove to be the vital element for retail industries in their strategic decisions and business plans.

Chapter 16: Green Retailing - A New Paradigm in Supply Chain Management

Sustainable development with ecological protection has gained global significance across society because of continuing environmental degradation. It causes green supply-chain management to be an area of interest among researchers and practitioners. This chapter discusses about the drivers, barriers, different dimensions, issues, existing environmental practices and policies adopted by leading retailers, future research avenues, and different green polices adopted by various organizations and government bodies in the area of retailing. Thus it facilitates researchers, industry practitioners, policy makers to find the existing works, new research opportunities, as well as to improve practices and policies.

Chapter 17: End to End Supply Chain Planning for a Fashion Retailer in India

This study presented in the chapter initially explains all the Supply chain processes involved in fashion retail business and later discusses about the real time challenges faced by fashion retailer in India. It also throws light on how IT can improve the supply chain aspects in fashion retail. Why fashion retailers in India are more resistant towards IT solutions? What obstacles are faced by fashion retailers in India in becoming an omni-channel business? This study helps the IT providers to understand how to build their products solving the real time challenges faced by fashion retailers. Also helps retailers to improve their supply chain planning by leveraging IT solutions.
Chapter 18: Intelligent Slotting for the Warehouse

In the current and future Supply Chain landscape, we need to ensure that we keep the warehouse ship sailing amidst the turbulent waters of dynamic business growth and rapid changes in technology. There are several challenges to overcome, and many opportunities to be embraced on the path to achieving this feat. In this chapter, the authors detail one of the key problems facing the warehouse, and that is Slotting. They look at the various business drivers, and technological drivers impacting Slotting. They propose a solution to tackle this problem by using Market Basket Analysis and Machine Learning.

Chapter 19: A Study of Virtual Trial Room

This chapter talks about Virtual trial room as a facility for the online users. This will help the customer to virtually try the apparels for the size. The customers’ can also share their trailed clothes on the social media, so that they can get suggestions on it from family, friends, designers, and fashion experts. As the technology advances, the customer can also print out a small piece of the cloth to have a look and feel of the material.

Chapter 20: Retail Healthcare Market in India and Consumer Readiness

This chapter is different than rest of the chapters. The main objective of this chapter is to explore the motivations and willingness of Indian consumers to accept and consult retail clinics if they are made available in India. The chapter concludes that the future of retail clinics in India will most likely be determined by their service and cost-effectiveness.

TARGET AUDIENCE

This book has been designed to appeal to Policy makers, academicians, researchers, advanced-level students, technology developers, and government officials. University instructors will find useful information that can be used for their curriculum. We also expect that supply chain managers and business professionals in general will find the book to be of great interest. The chapters are full of ideas for addressing sticky supply chain issues. Plus, it always helps to consider how to address challenges before actually facing them. Although some topics are vast and lengthy, many of the chapters in this book are intentionally designed to be relatively short and focused, allowing the reader to delve directly into the issues at hand. We hope that you will find this book useful in extending your research exposure to pertinent topics in retail supply chain management and assisting in furthering research efforts in this field.

CONCLUSION

We have compiled various chapters in this book that discusses and addresses the risks, challenges, and opportunities in the retail space of supply chain management. We have shortlisted chapters that address different aspects of merchandizing, assortment, fulfillment, distribution, store operations, and related
topics. The authors of the chapters have explored the current trends and evaluated the industry best practices. It is a handbook for both researchers and practitioners, and provides the current state of the art on recent trending topics. Looking ahead, the study also cites several key issues that should be on the radar of SCM executives moving forward, including sustainability, fluctuating fuel costs, government regulations, streamlining multi-channel supply chain operations, and utilizing the latest technological advancements. We hope you will find the information useful.

Thank you for your time and happy reading!