

Introduction

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Industry has changed. Businesses that once focused on the efficiency, quality and productivity of their operations to bring the most competitive product or service to the market, have found that competition has forced them to look at where their materials and equipment come from. In a world where automated machinery has reduced the cost of labour in many industries, the proportion of cost accounted for by purchased items has grown. At the same time many companies have transferred non-core activities to specialist suppliers, and while cost and quality may have improved, co-ordination and planning problems have made the management challenge more complex. This means that in addition to trying to manage a single business, managers are trying to manage the activities of their suppliers which, contrary to the term, are not always arranged in a linear chain but in a more complex web of relationships where your supplier may also supply to your competitor.

Supply chain management (SCM) therefore involves multiple businesses, with different aims and strategies, information, communication and planning systems, and logistic systems to deliver materials. To improve the management of supply chains, researchers might look at a wide range of management topics as diverse as scheduling deliveries, making contracts and relationships, measuring performance, leadership style, etc. all set within the context of the interconnected organisations and individuals concerned. As our understanding develops, there are many opportunities for new thinking that will make tangible improvements to the delivery of goods and services across the world.

SCM is not a new concept, but its importance has been highlighted in recent years with the effects of the pandemic. A lot has been written about supply chains and their management since the term was first coined in the 80s in both service and manufacturing industries. Although service and manufacturing companies differ in many ways, the most important being that one offers services and another offers physical products, the reality is that this pure distinction is becoming harder to make as most companies have evolved to some combination of both (Rabetino et al., 2018; Li et al., 2020). Moreover, whether businesses focus on the provision of services or products, this does not change the fact that they all have complex supply chains that include all processes and activities involved in creating the product or service to be delivered to the customer/consumer, which includes suppliers, manufacturers, wholesalers, retailers and final consumers.

Plenty of books can be found that define the basics of SCM and its complex nature. A starting point for any student trying to understand SCM would be a book that covers definitions and all the main aspects of SCM in both theory and practice. To name just a few, some examples of the core textbooks most used in undergraduate and postgraduate teaching include:

- “Logistics & Supply Chain Management” by Martin Christopher

- “Supply Chain Management: Strategy, Planning, and Operation” by Sunil Chopra and Peter Meindl
- “Introduction to Operations and Supply Chain Management” by Cecil C. Bozarth and R. Handfield
- “Operations Management” by Nigel Slack and Alistair Brandon-Jones
- “Procurement and Supply Chain Management” by Kenneth Lyons and Brian Farrington
- “Global Logistics and Supply Chain Management” by John Mangan and Chandra C. Lalwani
- “Operations Management: Sustainability and Supply Chain Management” by Jay Heizer, Barry Render and Chuck Munson

To formulate and complete research in this field, it is also important to understand the peculiar nature of its research processes, which is not always clear in these core textbooks. The aim of the above core textbooks is to provide context and explain the main areas of operations and SCM practice, however they do not go deeply into the methods used in SCM research. As a result, students and new researchers into the field of SCM frequently rely on research methods books for social sciences or business studies such as:

- “Research Methods for Business Students” by Mark Saunders, Philip Lewis and Adrian Thornhill
- “Bryman's Social Research Methods” by Tom Clark, Liam Foster, Luke Sloan and Alan Bryman
- “Researching Business and Management” by Harvey Maylor, Kathryn Blackmon and Martina Huemann

These books are excellent in providing understanding of research basics and the process of conducting research in management, but they do not provide guidance as to what to expect in research specific to the SCM field. There are limited books where you can find a focus on SCM methodologies and most of them are rather advanced if you are just starting your exploration of SCM and research methods, but they are certainly worth exploring once you have understood the basics (e.g., Kotzab et al. 2005).

Having this in mind, we have decided to write this handbook to help new MSc or PhD students and new researchers in the field of SCM. We do not aim to exhaustively cover every area of SCM or basic research methods (like the examples of the core textbooks above). Instead, what we propose is an overview of the methods used in SCM with guidance and advice from key authors in this field including some chapters identifying the areas of research that are currently in most need of exploration based on our own knowledge of this field.

For this purpose, this handbook is divided in two parts. In Part I the focus is on explaining how to do SCM research and provide examples of how to do it where appropriate. In Part II the main goal is to provide suggestions for future research on currently popular areas of SCM.

References:

- Kotzab, H., Seuring, S., Müller, M., Reiner, G. (eds.) (2005), *Research Methodologies in Supply Chain Management*, Heidelberg: Physica.
- Li, A.Q., Kumar, M., Claes, B. and Found, P., (2020), "The state-of-the-art of the theory on Product-Service Systems", *International Journal of Production Economics*, **222**(107491), 1-15.
- Rabetino, R., Harmsen, W., Kohtamäki, M. and Sihvonen, J., (2018), "Structuring servitization-related research", *International Journal of Operations & Production Management*, **38**(2), 350-371.