

Preface

Since the environment has started paying back what humanity has done with the environment. People from all segments of life realized that living unsustainability is not an option for the human race. According to the Anthropocene theory, the concept that the Earth has moved into a novel geological epoch characterized by human domination of the planetary system. Where the actions of humans can cause irreparable changes to the environment. We, being a manufacturer demolish mountains and dig the land to extract resources from the earth. Furthermore, technological advancement has enabled us to alter the shape and climate of the entire world.

Social and economic behaviors are the main cause of anthropocentric effects. We are producing and consuming plenty of products and services that are leaving a hazardous impact on the environment. Thus, considering the environmental conditions can handle our production and consumption pattern way under the sustainable development goals (SDG 2030). In fact, if we fail to replace our consumption with sustainable consumption will require more depletions of resources. This book provides up-to-date text and sustainable supply chain management trends at a reasonable price. Continuously the scope of a sustainable supply chain is growing speedily, which is reflected in the content of this book. This book combines different aspects and trends that emerge in supply chain operations during the COVID-19 Pandemic.

ORGANIZATION OF THE BOOK

There are 10 chapters in the book. A brief description of each of the chapters follows:

Chapter 1 aims to explain the phenomenon of fast developing digital era, digital transformations take place within every industry, and they have a great impact on the management of supply chains. Sustainability drives today's digital transformation, and the digital transformation of supply chains is essential for the sustainable viability of firms in the era of Industry 4.0.

Chapter 2 discusses and unwraps the detailed literature review and highlights the development of growing research on behalf of the supply chain in the era of

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COVID-19. Earlier research on different disasters shows that there is a lack of research on pandemics. Therefore, the present study signifies the multi-perspective literature review on behalf of the supply chain associated with COVID-19.

Chapter 3 discusses and explores the basics of Digital Technologies and Supply Chain Management; from Historic, Current, and Future Perspectives. This chapter provides a comprehensive overview of digital transformation, enabling technologies, and the impact on traditional Supply Chain Management (SCM) processes. It starts with the introduction of the SCM, followed by the digital shift and its consequences for organizations.

Environmental concerns and sustainability issues attracted many practitioners' and researchers' attention still numerous small- and medium-sized enterprises (SMEs) in emerging economies are reluctant to invest in environment-friendly practices with a doubt that investment in such practices might lead to negative production performance outcomes. To settle down this tension, our study examines the effect of green production practices on production performance and the intervening effect of lean practices between green production practices and production performance.

Chapter 4 describes the nexus between environmental concerns and sustainability issues and attracted many practitioners' and researchers' attention still numerous small- and medium-sized enterprises (SMEs) in emerging economies are reluctant to invest in environment-friendly practices with a doubt that investment in such practices might lead to negative production performance outcomes. To settle down this tension, our study examines the effect of green production practices on production performance and the intervening effect of lean practices between green production practices and production performance.

Chapter 5 explores how the humanitarian supply chain has received significant value from scholars and contributed to society during the crisis. A humanitarian supply chain performs under special circumstances compared to a commercial supply chain such as a lack of communication system, electricity, and destabilized transport infrastructure after a disaster. However, disasters are unpredictable; therefore, the demand for supplies (relief items), casualties, and required transportation modes to access the affected area are also unpredictable.

Chapter 6 signifies the importance of Lean, Green, and Agile Supply Chain Practices. The chapter discusses how the potential for supply chains to facilitate the introduction of innovative management practices is seen as crucial to the sector's future success. Three ideas "lean," "green," and "agile" deserve serious consideration because of their potential to significantly improve supply chain efficiency. However, combining agile and lean principles to lessen environmental consequences is a relatively new issue that is not well-defined in terms of structure.

Chapter 7 reflects the development of simulation models to explore their effects on CO₂ emissions. The main aim of this chapter is to explore the carbon neutrality

supply chain through pooling logistics strategies. Pooling logistics is one innovative supply chain management solution to improve its sustainability. We carried out a comparison-based simulation study of multi-pick, multi-drop, with hub and hybridization of hub and multi-drop pooling strategies effects on CO2 emissions of supply chains.

Chapter 8 discusses the involvement Banking Sector, Sustainable Blockchain Technology, Circular Economy, Food, and Health Sector. This chapter aims to discuss the relationship between sustainable blockchain technology and circular economy. Blockchain and circular economy have brought a revolutionary change in the global economy by making data transparent and decentralized. The circular economy focuses on recycling, including re-manufacturing, restoration, reprocessing, and reclamation. Blockchain technology plays a potential role in sharing information to overcome fraud by providing quick, fast, timely, and accurate data. Blockchain technology is used in the banking sector, but there is a need of the hour to improve it in the banking field.

Chapter 9 examines how businesses in the value chains of manufactured products must rebalance their operations to better manage the inherent risk in their operations. Indicators of the risk in any given industry's value chain include the industry's susceptibility to various shocks and the inherent weaknesses of companies and the overall chain.

Chapter 10 highlights the importance of sustainable Belt and Road (OBOR) Development - A Case of the China-Pakistan Economic Corridor. This book chapter aims to examine the implications of CPEC trade routes in terms of cost and delivery between China and other regions i.e., Saudi Arabia, Iraq, Angola, Oman, Kuwait, and the United Arab Emirates via Gwadar Port, Pakistan. The results demonstrate a significant reduction in cost and delivery time via the CPEC route in comparison with traditional trade routes.

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