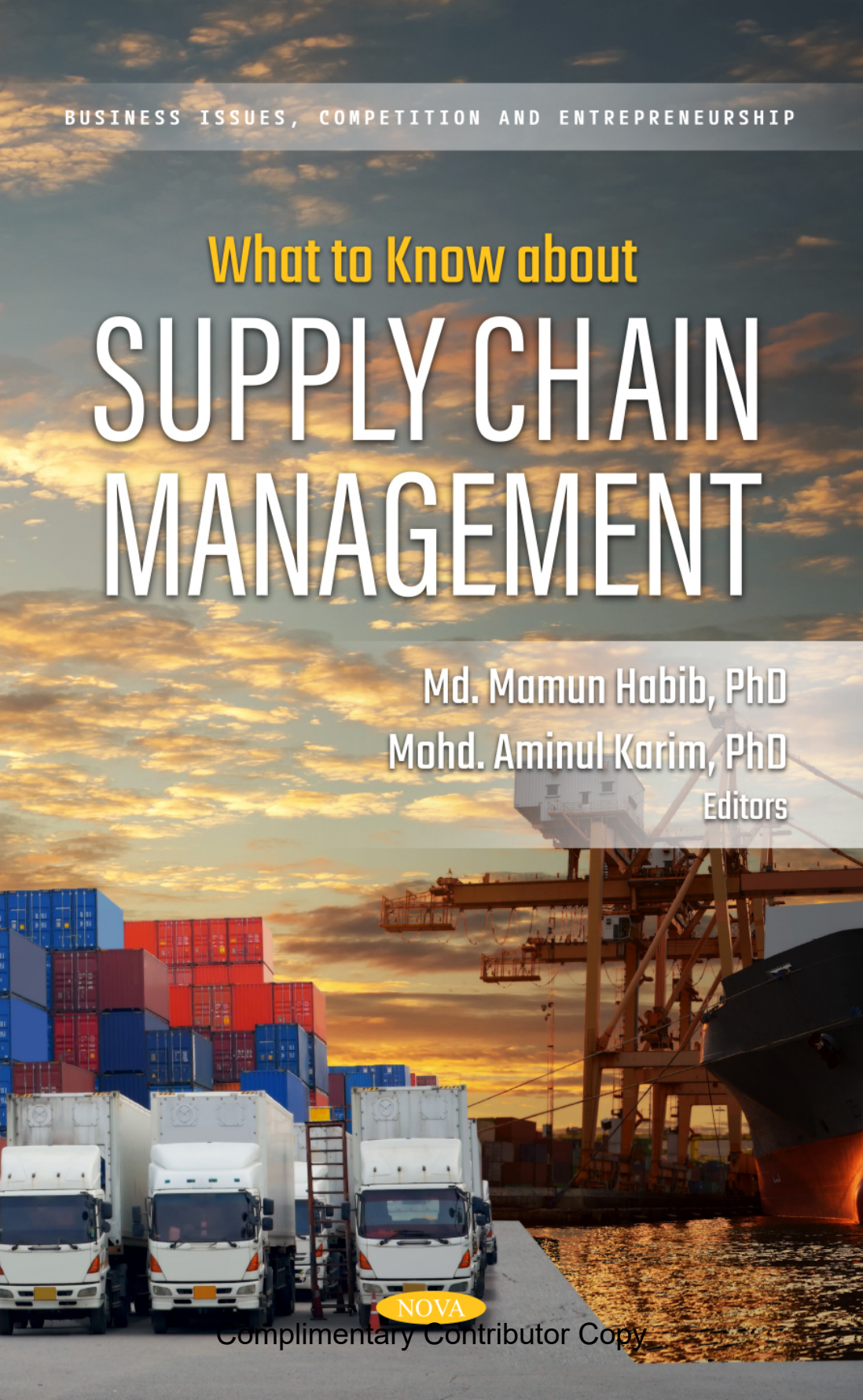

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BUSINESS ISSUES, COMPETITION AND ENTREPRENEURSHIP

WHAT TO KNOW ABOUT SUPPLY CHAIN MANAGEMENT

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WHAT TO KNOW ABOUT SUPPLY CHAIN MANAGEMENT

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*Dedicated to my beloved father, Late **Alhaj Md. Habibur Rahman**,*
who lies at Jannatul Baqi, Madinah, Saudi Arab
and
*To my dear mother, **Alhaja Shirin Habib***

- Md. Mamun Habib

*Dedicated to my grandchildren **Sakina** and **Zahra***

- Mohd. Aminul Karim

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PREFACE

The objective of supply chain management (SCM) is to incorporate activities across and within organizations for providing the customer/stakeholders value. SCM has been widely researched in numerous application domains during the last decade. Despite the popularity of SCM research and applications, considerable confusion remains as to its meaning. There are several attempts made by researchers and practitioners to appropriately define SCM. Amidst fierce competition in all industries, SCM has gradually been embraced as a proven managerial approach to achieving sustainable profits and growth. This book entitled "What to Know about Supply Chain Management" consists of nine (9) chapters.

Chapter 1 - This paper offers an analysis of Supply Chain Modelling studies for three specific agricultural commodities in Indonesia, palm oil, cacao and kenaf. The three commodities have similar and different characteristics. The aim of this paper is to discuss how researchers, working on the three different commodities, attempted to develop models using different environments and goals. Next researchers delved into the nature of research techniques and methods used to identify what aspects can be learned from each so that in future studies they can either collaborate or make use of the techniques/methods to conduct researches with better results. Initially each researcher discussed the nature of the

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industry, goals and approaches, comparing methods and outcomes of the simulation. After all, modelling always follows similar if not the same steps. While there is no perfect generic model of the supply chain, especially in the agricultural business, there is always an opportunity to improve the quality of models in terms of their usability by the supply chain actors. The first two models made use of the combined agent-based fuzzy-AHP approach while the third made use of the soft system methodology and sought to develop an intelligent decision making tool to assist the farmers in order to optimize their added value and measure performances. Readers of this paper will find that interaction and collaboration between the three studies will reveal ways to fine tune their research techniques and methods that will benefit future endeavours.

Chapter 2 - The importance of SCM has grown over time and continues to grow in a ponderous trend. Researchers have been examining the adoption of SCM in different industries. SCM is gaining endless attention. Indeed, the effectiveness of SCM is impactful on the quality of product value, logistics and by extension on customer satisfaction and organizational profitability. Therefore, a strong and efficient relationship has to exist between manufacturers and consumers to ensure the commercial and practical achievement of manufacturers. Ideally, the performance measurement model should consider quantitative as well as qualitative approach and have the capacity to apply different measuring tools. A significant number of studies have been carried out on SC performance measurement, yet a lot of corporations were unsuccessful in implementing effective performance measurement methods in their operations. The authors have unlocked a large number of articles and models which have investigated supply chain performance measurement (SCPM). Each model has its own merits and criticisms from various reviewers and some of the most observed deficiencies from the existing performance measurement models. Based on the gap analysis, the researchers have proposed ten attributes which should be embedded into the supply chain performance measurement (SCPM) for the manufacturing industry and the ISCPM model has been developed. The ten supply chain performance measurement attributes proposed are - Financial Health (FH),

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Collaboration (CL), Velocity (VC), Resilience (RE), Reliability (RL), Continuous Improvement (CI), Visibility (VS), Work Place Health (WPH), Sustainability (SS), and Service Excellence (SE).

Chapter 3 - India is known as the fruit and vegetable basket of the world. It is the second largest producer of overall fruits and vegetables production in the world after China and one of the centers of origin of fruits and vegetables. This chapter examines the existing position of fruits and vegetables sector in India and tries to give a conceptual coverage of supply chain management, the supply chain relating to fruits and vegetables sector. The efficiency of fruits and vegetables supply chain is analyzed and the need and importance of the research for efficient supply chain in fruits and vegetables sector has been discussed. It has been evident from the literature that the fruits and vegetables supply chain is highly inefficient. This chapter undertakes a thorough review of basic and contemporary literature available and attempts to identify the business problem in the supply chain of fruits and vegetables sector in India.

Chapter 4 - In this chapter the authors discuss what can be done with regards to supply chain management, in response to the COVID-19 pandemic. The pandemic has disrupted supply chains around the world. Most firms, if not all, faced some degree of disruption in procurement and/or distribution. The authors argue that firms were not prepared to face so much disruption, and therefore struggled. The authors propose two types of solutions for this problem: management-based and market-based. Under the management-based approach, the authors emphasize source and market diversification, introduction of higher level of automation, and maintaining a higher buffer of materials among others. For the market-based approach, the authors emphasize passing the extra cost to consumers, which will not only help producers, but also curb extra demand to ease the gap between supply and demand.

Chapter 5 - This exploratory study addresses a conceptual supply chain management (SCM) model for the ready-made garments (RMG) industry of Bangladesh. The ready-made garments (RMG) industry in Bangladesh has some typical landscapes like low-cost labor, green factory concept, supply chain, time-frame, compliances and effective and efficient supply

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chain management, which are at the core among all the features. Supply chain management is a multidimensional approach and it is even more complex for the Bangladesh ready-made garments industry due to different actors of the global supply chain like price, process and lead time. As different parties i.e., the suppliers, manufacturers, distributors, retailers and buyers etc. are involved in different phases of the supply chain of this industry, every stage (procurement, manufacturing, replenishment, customer order) is conflicting with its next stage due to time and process constraints. The conceptual model demonstrated here has taken an effort to create the layout and design of the procurement of raw materials, work-in-process, inventory and finished goods from various sources to the ultimate consumer in the garment business. The model also takes an attempt to show that the manufacturing costs can be reduced and profit can be increased if the supply chain information and integration process can be used carefully. This framework provides the opportunity to integrate and optimize the supply chain process of the ready-made garments industry of Bangladesh. The proposed conceptual framework for the ready-made garments industry provides a novel approach for decision-makers of supply chain components to review and appraise the performance toward fulfillment of ultimate goals, i.e., producing high-quality garments product, reducing the wastage of human labor, time and money with high competitiveness, efficiency and productivity.

Chapter 6 - The COVID-19 pandemic that out broke out in late 2019 has interrupted supply chains across the globe. However, the most prominent disruptions have been experienced in healthcare supply chains (HCSC). Hospitals globally have been overwhelmed in their efforts to manage the flow of COVID-19 positive patients with their limited resources of required medicines, equipment, testing kits, protective gear as well as healthcare professionals themselves. Moreover, the supply of these resources was disrupted due to government-imposed travel restrictions, lockdown measures, and the temporary closure and/or underutilization of suppliers' facilities due to labor and raw materials' shortages. A large number of healthcare professionals were falling sick, which created further pressure on the healthcare service delivery chain. Scholars, policymakers,

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and practitioners across the world have proposed and developed a number of innovative ways to combat the aforementioned situation, which also serve as important lessons for the future. This paper is a review of literature focused on the impacts of the COVID-19 pandemic on healthcare supply chains. It attempts to identify key lessons learnt from the journey to date, and offers recommendations to tackle similar future disruptions. The researcher reviewed the findings, analysis, and recommendations from 30 relevant research papers published since December 2019 for this study. Thematic analysis revealed five broad themes: 1. Surge in sudden demand; 2. Virus containment measures 3. Further demand flight; 4. Supply chain disruptions; and 5. HCSCs responses. Recommendations are derived from HCSCs' experiences, and responses to the pandemic and required interventions suggested in the literature. Practitioners and policymakers can use the findings of this paper as a guide when tackling similar situations. Moreover, some of the paper's findings may trigger a number of fundamental changes in the healthcare supply and service delivery chain. The paper also disseminates new perspectives of HCSCs.

Chapter 7 - The COVID-19 pandemic is having an impact on global supply chains with the sudden lockdown of cities or countries hampering the whole business activity except the most critical of supply chain activities. In this situation, total supply chain activities can't be hampered as livelihoods totally depend on this functionality. Thus looking for more flexible, automated and sophisticated supply chain technologies that are now more relevant than ever. This pandemic situation helps to rethink the supply chain leaders in a different way for the successfulness of the Supply Chain activities. As this pandemic is not going away so early, challenges like sourcing, locational issues, logistical advancements, technological upgradation and stock level buffering, all of these are playing vital role/s. These challenges combined with ongoing price and trade wars, diplomatic relationships among countries, shifts in manpower for manufacturing and competitive advantage will make dynamic and flexible remarks of success looking forward. To stay ahead of global supply chain challenges, leaders must concentrate on re-skilling the workforce, re-assessment of risk

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management in depth of the supply chain process for the successful and uninterruptable management in this ongoing COVID situation and so on.

Chapter 8 - This research is intended to examine the relationship between Efficiency (EF), Performance (PE), Response (RE), Quality (QU), Facility (FA), and pandemic business management (PBM) in the F&B (Food & Beverage) retail industry in Bangladesh. In total, 309 valid responses were received through the survey questions asked at the retail companies in Bangladesh. In addition, systematic random sampling is used to achieve the research objectives of this study. The data has been examined through Partial Least Squares Structural Equation Modeling (PLS-SEM). The study findings showed that Efficiency (EF), Performance (PE), Response (RE), Quality (QU), Facility (FA), and pandemic business management (PBM) (dependent variable) have an influence on the F&B retail business industry in Bangladesh. Future researchers may replicate the findings of this study in different settings (e.g., developing nations), in various industries (e.g., manufacturing, electronics, and health) and then utilize analogous constructions to enhance the body of knowledge, which may help different stakeholders and industries. This work contributes to the limited body of literature on pandemic business management. According to the authors, the findings may help to understand the effect of the pandemic on the retail business industry. Furthermore, it may also help to identify the essential aspects that can have an impact on the retail sector in the post-pandemic environment.

Chapter 9 - Globalization has turned modern business more unpredictable and challenging. Customers can now order and collect goods from any corner of the world within a very short time. In the past, mass production was the key concern in order to keep the cost low. At present, frequent change in customer preference has made the market more competitive. Therefore, businesses nowadays compete over supply chain's performance rather than simply on cost or on quality. Successful supply chain itself is considered as a key competitive advantage for any company. Modern supply chain has introduced two standardized models that can evade the market fluctuations in certain ways. One of these is "lean" and the other is known as "agile" supply chain mechanism. Though both run

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on customer demand, lean emphasizes on cost by eliminating wastages while agile supply chain focus on quality and responsiveness. Both of these models require significant investment especially in technology and innovation. In addition, organizations need to render training and motivate their human resources in order to ensure flawless operation of any of these two supply chain processes. On the other hand, such strategic implementation also demands managers' educative judgment and speculation of near future. As a result, time investment is equality important to achieve the set goal. This chapter has drawn a detailed layout of the two models and their strategic implications in order to attain a certain level of efficiency or responsiveness. Various lean principles like six sigma, kanban, JIT etc. will encourage managers to walk through the way of waste elimination, while three key elements of the agile supply chain (agility drivers, capabilities and agility providers) will guide them towards a higher level of responsiveness. Meanwhile, a new formula known as the "Leagile supply chain strategy" has been identified, which is a combination of both lean and agile supply chain management. This hybrid supply chain sometimes aims to become a "mass customizer" - producing progressively smaller batch sizes (sometimes even one item) targeted to satisfy unique customers' demand. However, managers should always need to be ready for uncertainty in business as there is no scientific tool that can lead towards complete success. Through proper assessment, adjustment, and by establishing required advancement (along the supply chain drivers and strategies), a company can reach the zenith of profitability - this chapter aims to shed light on this process.

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The editorial book entitled *What to Know about Supply Chain Management* encompasses nine chapters. From that point of view, the concept of the editorial book solely depends on the contributors of the book chapters. Therefore, special thanks and gratitude must go to the book chapters' authors. However, review process is also very lengthy but significant in order to ensure uniqueness of the book chapters. The jobs of reviewers and proofreaders, particularly *Ms. Farzana Chowdhury*, were highly appreciable. In addition, the Editor acknowledges a great debt to NOVA Publishers for publishing this book on time.

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Md. Mamun Habib
The Editor

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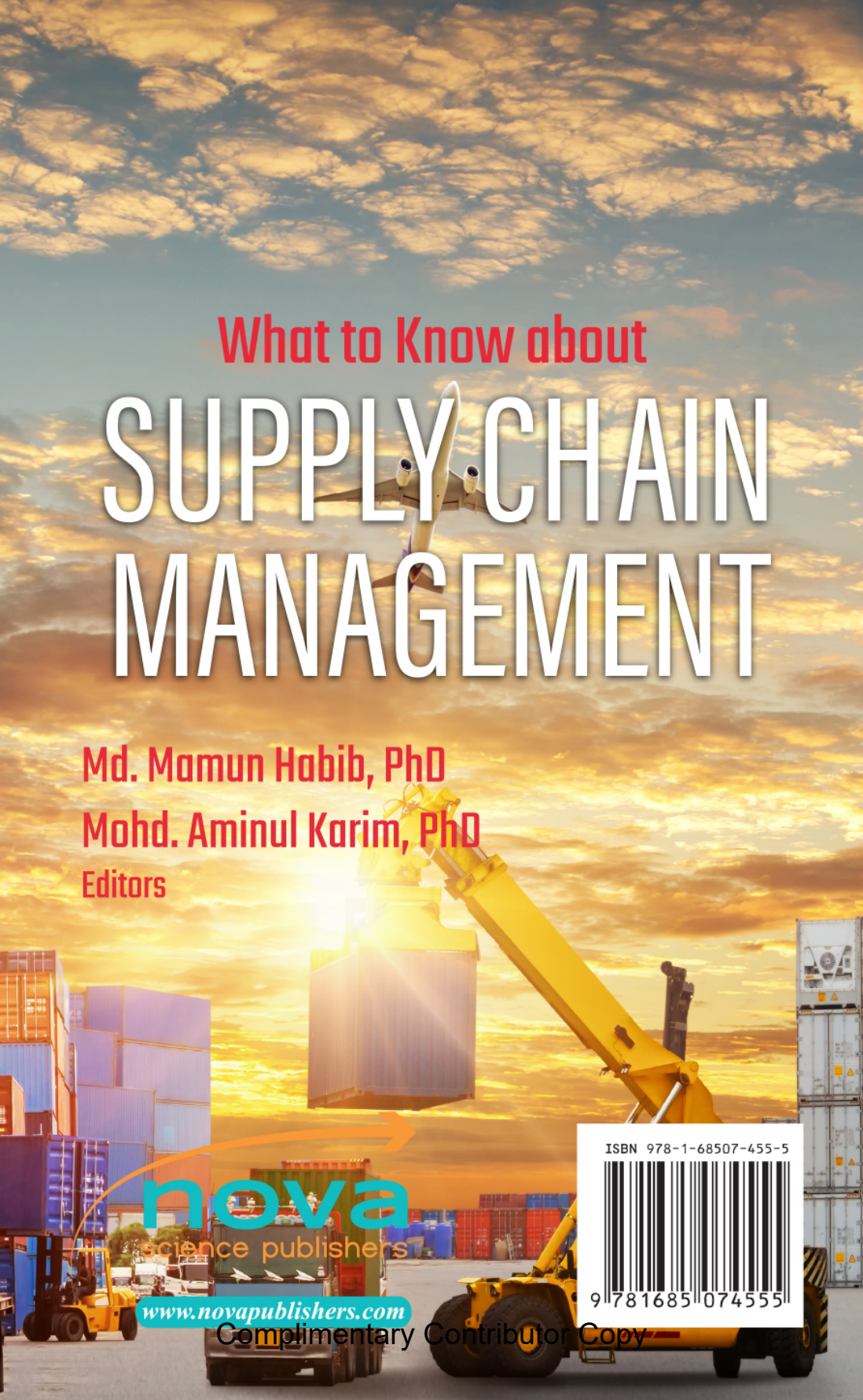

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