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Why Global Supply Chain Management?

John T. Mentzer

Theodore P. Stank

Matthew B. Myers

The term *supply chain management* (SCM) has risen to prominence over the past 15 years, becoming such a “hot topic” that it is difficult to pick up a periodical on manufacturing, distribution, marketing, customer management, or transportation without seeing an article about SCM-related topics. Logistics, one central element of SCM, has long been an area of concern for both practitioners and academics. In fact, the professional association for logistics and SCM professionals—the Council of Logistics Management, which changed its name in 2005 to the Council of Supply Chain Management Professionals (CSCMP) to encompass the broader management area of SCM—holds an annual conference that often draws more than 4,000 participants. Furthermore, every company today either sources globally, sells globally, or competes with some company that does. Thus, global supply chain management (GSCM) represents a central area of focus for many businesses and business schools today.

Although the extraordinary growth of GSCM attests to its robustness and practical importance, the field is diffuse and complex. Many methods and perspectives on GSCM have emerged from logistics, operations, marketing, management, economics, sociology, personnel, information systems, and international relations. Their diversity and rapid growth make it hard to keep abreast of significant developments. Moreover, many of these approaches have evolved with relative independence, paying little attention to how they relate to existing methods or interrelate

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with each other. This makes it difficult to accumulate wisdom in the field and to develop a coherent knowledge base to guide research and practice.

Thus, this handbook is aimed at providing a comprehensive understanding and assessment of the field of GSCM. In each chapter, the authors describe and critically examine the key perspectives guiding GSCM, taking stock of what we know (and do not know) about them. They identify emerging developments and delineate their significance to the practice of GSCM. The chapters are not intended to be exhaustive summaries of all the relevant literature and research, but emphasize basic knowledge and understanding of the field. They pay particular attention to identifying connections among methods and perspectives and exploring how they contribute to integration of knowledge in GSCM.

The handbook maps the broad terrain of GSCM from multiple viewpoints seeking to explain what is already known, what new developments are occurring, and how different methods and approaches are interrelated. For each chapter, we tried to select the most knowledgeable and prominent practitioners and scholars in the global arena to represent the key perspectives in the field. These contributors share their unique perspectives and insights within the broad parameters of this handbook. The result, we believe, is a handbook that offers a comprehensive, yet in-depth, examination of GSCM. Thus, it is intended for all relevant audiences in GSCM. For researchers, the handbook provides a broad inventory of what is currently known about GSCM and identifies significant knowledge gaps and issues that need to be addressed. It provides a fertile ground for future research. Advanced students should use the handbook to gain a solid foundation in GSCM. It will help them understand and appreciate the multiple perspectives that guide the field and show them where GSCM is likely headed. For thoughtful practitioners, the handbook provides a valuable reference and source of ideas and methods for developing organizations. It also provides them with conceptual frameworks for understanding GSCM practice and for creating new methods and techniques.

About Global Supply Chain Management

The current trend toward the globalization of supply chains renders many managers confused as to what *globalization* really means. Often, the term is little more than a battlefield of semantics, of little value to the individual tasked with managing value creation and cost reduction processes in the movement of goods. Clearly, globalization infers the cross-border movement of goods and the emergence of global competitors and opportunities across competing supply chains within an industry. Managers, however, often question the differences between a global market and a single market, in that many of the same conditions exist in both. Although this may be true, the complexities of cross-border operations are exponentially greater than in a single country, and the ability to compete in the global environment often depends on understanding the subtleties that emerge only in cross-border trade—that is, in GSCM.

Why do so many people spend so much time thinking, writing, and doing GSCM? The answer is that it is a considerable source of competitive advantage in

the global marketplace. The fierce competition in today's markets is led by advances in industrial technology, increased globalization of demand and supply sources, tremendous improvements in information availability, plentiful venture capital, and creative business designs (Bovet and Sheffi 1998). In highly competitive markets, the simple pursuit of market share is no longer sufficient to ensure profitability, and thus, companies focus on redefining their competitive space or profit zone (Bovet and Sheffi 1998). For example, companies pursue cooperative relationships to capture lifetime customer share (as opposed to mass market share) through systematic development and management of cooperative and collaborative partnerships (Gruen 1997). Markets have been changed by factors such as power shifts from corporate buyers to end users, the requirement for mass customization, emergence of global consumer segments, time- and quality-based competition, improvements in communications and information technology, increasing knowledge intensity, and changing government policies.

Power in a broad spectrum of supply chains has shifted downstream toward the customer or end user (LaLonde 1997), and as a result, customer satisfaction becomes the ultimate goal of a company. As the customer increasingly is in charge in the marketplace, interfirm cooperation is critical to satisfy customers. Manufacturers and their intermediaries must be nimble and quick or face the prospect of losing market share, and thus, relationships and predictable performance become very important in a supply chain (LaLonde 1997).

Mass customization provides a tremendous increase in variety without sacrificing efficiency, effectiveness, or low costs (Pine 1993). In other words, customers want low cost with high levels of service and customization with availability (Bovet and Sheffi 1998). Pine (1993), therefore, argues that mass customization can be achieved only through the committed involvement of employees, suppliers, distributors, retailers, and end customers.

Firms are competing in a global economy, and thus, the unit of business analysis is the world, not just a country or region. The communications revolution and globalization of consumer culture will not tolerate hand-me-down designs or excessive delivery times (Bovet and Sheffi 1998). In this context, Kotler (1997) states, "As firms globalize, they realize that no matter how large they are, they lack the total resources and requisites for success. Viewing the complete supply chain for producing value, they recognize the necessity of partnering with other organizations" (p. 72).

Time- and quality-based competition focuses on eliminating waste in the form of time, effort, defective units, and inventory in manufacturing-distribution systems (Larson and Lusch 1990; Schonberger and El-Ansary 1984; Schultz 1985). In addition, there has been a significant trend to emphasize quality, not only in the production of products or services but also throughout all areas in a company (Coyle, Bardi, and Langley 1996).

LaLonde and Powers (1993) suggest that the most profound and influential changes that directly affect companies are information technology and communications. With the advent of modern computers and communications, monolithic companies, which had become highly bureaucratic, started eroding. Fast communication that links all members of a company decreased the need for multiple

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layers of people who were once the information channel and control mechanism. The decreased cost and ready availability of information resources allow easy linkages and eliminate time delays in the network (LaLonde and Powers 1993).

In the new competitive landscape, knowledge (information, intelligence, and expertise) is a critical organizational resource and is increasingly a valuable source of competitive advantage (Hitt, Ireland, and Hoskisson 1999). Similarly, LaLonde and Powers (1993) characterized the 1990s as the era of reassembly or reintegration after that of disintegration. Current reintegration is based not on position or prescribed roles in a hierarchy; it is based on knowledge and competence (LaLonde and Powers 1993). Bringing together the knowledge and skills to effectively serve the market requires coordination (Malone and Rockart 1991).

Finally, government policy may encourage cooperative strategies among firms. The U.S. 1996 Telecommunications Act and subsequent court battles have created significant uncertainty for the firms involved; consequently, a significant number of alliances have emerged (Hitt et al. 1999). The enactment of the U.S. National Cooperative Research Act of 1984, as amended in 1993, eased the U.S. government's antitrust policy to encourage firms to cooperate with each other to foster increased competitiveness of American industries (Bowersox and Closs 1996; Barlow 1994).

Today's business environment puts stress on both relations with customers and the service provided to such customers (Hitt et al. 1999). Kotler (1997) argued, "Customers are scarce; without them, the company ceases to exist. Plans must be laid to acquire and keep customers" (p. 109). The level of competition to capture customers in both domestic and international markets demands that organizations be quick, agile, and flexible to compete effectively (LaLonde 1997; Fliedner and Vokurka 1997). This level of flexibility cannot be obtained without coordination of the companies in the global supply chain.

Arguably, SCM has risen to prominence from its beginnings in the logistics management literature (Cooper, Lambert, and Pagh 1997). The CSCMP (2005) defines logistics management as

that part of Supply Chain Management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements. (para. 3)

This definition tells us that logistics management involves all the movement and storage activities that are associated with product and service flows. It is focused on what we call the "focal organization," that is, on managing that organization's inbound and outbound flows of goods, services, and related information. We can imagine that "related information" encompassing inventory quantities and locations, order status, shipment status and location, transportation status and vehicle location, and so on. But what about information that flows up and down a supply chain that is not related to the flow of goods and services? Information on marketing plans, advertising effectiveness, pricing structure, product management status, ownership and title, and financial status do not seem to be within the realm of logistics. For that matter, what about actual financial flows?

There are clearly flows up and down the global supply chain that are not part of the CSCMP definition of logistics management. CSCMP acknowledges that SCM is something more than logistics management by stating that “Logistics Management is that part of Supply Chain Management that . . .” So, SCM must encompass logistics management and these other flows mentioned above.

It was this realization that led the Supply Chain Research Group at the University of Tennessee (Mentzer 2004) to define SCM as

the systemic, strategic coordination of the traditional business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole. (p. 22)

Unlike logistics management, which focuses on the inbound and outbound flow of products, services, and related information from a focal organization’s perspective, this definition leads us to the conclusion that SCM is a management process that deals with inbound and outbound flows, from the perspective of the focal organization, its suppliers, and its customers. This means a fundamental aspect of GSCM is the consideration of not just the cost and profit goals of one company (the focal organization) but of all the companies involved in managing the global supply chain.

About the Handbook

Given these definitions of the scope of GSCM, this handbook is divided into five major parts: (1) “Understanding Global Supply Chains,” (2) “Managing the Functions,” (3) “Resource Management,” (4) “Managing the Relations,” and (5) “Making It Happen.” Each part is summarized in the following pages.

Understanding Global Supply Chains

Understanding the environment in which the firm will operate is critical to strategy development and implementation. Nowhere is this truer than in the global environment. The chapters in this part address the following areas essential to understanding global supply chains: global supply chain management strategy, assessing the global environment, value and customer service management, demand management, knowledge management, and process orientation.

Chapter 2: Global Supply Chain Management Strategy

In this chapter, the strategic management literature is reviewed to provide an underpinning for GSCM strategy (GSCMS). In addition, literature from logistics, operations management, purchasing/procurement, and marketing are reviewed to specify external environmental characteristics and internal processes and

capabilities that are critical to establishing a sustainable competitive advantage through GSCMS.

Chapter 3: Assessing the Global Environment

Since 9/11, the pressures on supply chain managers have intensified, given new security concerns and the ensuing transportation delays that come with increased customs scrutiny. This—coupled with previously existing political, cultural, and economic variance across markets—has contributed to the stress supply chains feel when trying to meet delivery and service expectations, both at home and abroad. Perhaps not coincidentally, security crises arrived simultaneously with increased access to overseas labor, materials, and consumers. This dramatic exposure to both risk and return opportunities leads firms to face environmental challenges outside the realm of previously developed capabilities in SCM.

In this chapter, the authors discuss the environmental conditions influencing global supply chain decisions and effectiveness—that is, those conditions that need continuous assessment by managers. Most important, this discussion takes place in the context of a post-9/11 marketplace, where GSCM depends on effective manipulation of, and preparation for, increasingly volatile environmental conditions.

Chapter 4: Value and Customer Service Management

The concept of value management in global logistics and SCM is closely connected to the idea of value chains (Porter 1985). In the relatively narrow logistics discipline, the idea was then far from new even though it was not common to use the exact term *value chain* but rather the term *supply chain*. The basic thinking about the two concepts was, and is, however, the same—namely, that the fundamental understanding of the company is closely linked to its relations to other actors contributing to the transformation of raw materials to final products required by the ultimate customer or end user. The concept of customer service is fundamental and essential to logistics thinking, as well as to value management. In this chapter, the authors take a closer look into value management based on the idea of value chains. After that, what customer service means to value creation is discussed.

Chapter 5: Demand Management

Demand management activities in any global supply chain consist of three activities: demand management, demand planning, and sales forecasting management. In this chapter, the authors discuss how it is important to note that only one company in any given supply chain is directly affected by independent demand. The rest are affected by derived or dependent demand or both. Equally important, the techniques, systems, and processes necessary to deal with derived and dependent demand are quite different from those of independent demand. Recognizing the differences between independent, dependent, and derived demand; recognizing which type of demand affects a particular company; and developing techniques, systems, and processes to deal with that company's particular type of demand can

have a profound impact on global logistics and supply chain costs and customer service levels. The authors first explore the implications of independent and derived demands, followed by a model of the demand management function in GSCM, and then move on to the role of sales forecasting management within demand management.

Chapter 6: Knowledge Management

A key reason for the failure of knowledge management initiatives is that few managers understand either the nature of knowledge or how to manage it. Many managers mistake information processing for knowledge management. As a result, they narrowly focus efforts on improving information management by carrying out a series of disjointed projects. A fundamental insight of companies that excel in knowledge management is that a firm is not an assembly of interchangeable machine parts. Firms are made up of human beings. Like people, firms develop knowledge by learning. Learning includes not only acquiring “hard” (i.e., quantifiable explicit) information but also mastering “soft” skills (i.e., tacit know-how). A firm cannot build knowledge management competence project by project; rather, this task must be approached holistically. Building knowledge management competence requires engaging the whole organization in a commitment to learning.

Effective knowledge management strategies ensure a holistic approach by developing knowledge management as a core competence of the firm. Building knowledge management competence is like constructing a three-legged stool that rests equally on the *climate*, *processes*, and *infrastructure* for knowledge management. The tendency to focus on one leg while ignoring the other two can produce unfortunate effects. In this chapter, the authors discuss the components of knowledge management competence and provide real-world examples of how these components work in global supply chains.

Chapter 7: Process Orientation

In Chapter 7, the authors argue that core processes decide the competitiveness of the firm, and they differentiate between successful and less successful organizations. Core processes should be targeted to the unique features of different business strategies, environments, and customers. Uniquely designed core supply chain processes enable firms to reach “next best practice” ahead of what could be reached using standardized processes and subprocesses that do not account for the specific features, strategies, or success factors of different companies or supply chains. On the other hand, certain noncore processes might very well be standardized, at least within the same organization.

Managing the Functions

The traditional business and logistics functions must be coordinated and managed within the context of the global supply chain. Thus, the chapters in this part address

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the following topics: marketing and sales management, product management and global product launch, operations management, integrated logistics management, inventory management, transportation management, warehouse management, supply management, and personnel.

Chapter 8: Marketing and Sales Management

Many organizations are finding that sales force changes are needed to match the needs of more demanding customers in an increasingly competitive world. Global supply chain innovations have necessitated changes in the way sales forces are organized, compensated, developed, and measured. The goal of this chapter is to explain how to make effective sales force and sales program decisions for maximum marketing efficiency and effectiveness in a global supply chain environment.

Chapter 9: Product Management

Product management focuses on both new and current products, where new product encompasses conceptualizing, developing, producing, and testing efforts and current product management encompasses sustaining and eventual disposal considerations. The processes of commercializing and launching overlap the domains of new versus current products and pose unique and pressing issues stemming from an oversimplifying presumption that there is a clean break between activities related to managing new versus current products. Often, product launch is assumed to be a stopping point for product development—something that is not really true. During and after launch, product managers continue to critique the new product to possibly broaden the brand or product line, as well as delineate market trends and customer needs that future offerings should serve. Launch is, therefore, a focal topic requiring keen attention. As companies expand beyond their domestic markets toward establishing a global presence, global product launch is emerging as a preeminent contemporary topic for product management. Accordingly, in this chapter the authors detail the role of product management, with particular emphasis on managing the global product launch.

Chapter 10: Operations Management

Globalization of supply bases and marketplaces, advances in information technology software and hardware, and the widespread recognition and acceptance of supply chain concepts are enabling managers to redefine their operational strategies at the enterprise and network levels, thereby providing significant opportunities for innovation and threats for those locked into the traditional functional perspective of operations management. In this chapter, the authors examine the current perspectives of operations management and provide projections for its future development in the global economy. Toward this end, operations management is defined, its decision-making scope discussed, significant points in its historical development are used to differentiate between the functional and process perspective of operations management, factors that are rapidly changing the role of

the operations manager are identified, and several key operations management success factors for the future are proposed.

Chapter 11: Integrated Logistics Management

The objective of integrated logistics is the coordinated flow and storage of materials across the supply chain. Integrated logistics management is achieved by integrating the logistics business processes of the partners in a supply chain. The very essence of GSCM depends on the ability to coordinate the flow and storage of materials across multiple partners using integrated business processes. It is the glue that holds a supply chain together. In this chapter, the author examines logistics in the context of GSCM, explores the benefits of integrated business processes, and presents a framework and guidelines for the design and implementation of integrated logistics management.

Chapter 12: Inventory Management

Effective inventory management is a critical concern for firms in all industries and plays a major role in determining a firm's success. Striking a balance between the economic benefits and costs of inventory investment is a central success element for any company. The authors review the most widely applied models for planning and controlling independent demand inventory, identify the environmental parameters driving each one, indicate the appropriate application of each, and discuss a variety of emerging supply chain inventory strategies that are being implemented by leading firms to tackle the complexities associated with increased product variety, demand for higher levels of customer service, and the globally expanding marketplace.

Chapter 13: Transportation Management

In this chapter, the authors explore the global environment for transportation management, surveying the cost and service aspects of transportation operations, opportunities for collaboration among shippers and carriers, and key global transportation issues, and they review the decision scope of transportation-related decisions in logistics and SCM.

Chapter 14: Warehouse Management

Warehousing functions play a vital role in the overall supply chain process. In the past, the warehouse was generally regarded as simply a place to store goods. As supply chains have evolved, the warehouse has assumed a larger role in the global supply chain process because of the ability to reduce overall supply chain costs and improve service to the ultimate customer through the performance of many functions. In this chapter, the author provides an overview of the role of the warehouse in the global supply chain process, describing the rationale for warehousing, activities performed in the warehouse, the relationship of warehousing to other supply

chain functions, the technology applicable to warehousing operations, and key warehousing business issues.

Chapter 15: Supply Management

With the professionalization of supply management, standard processes have been developed that are used by many organizations to guide their global procurement endeavors. In this chapter, the authors introduce the standardized, step-by-step approach to strategic supply management. As part of this process, a classic approach to commodity segmentation is also presented. The chapter ends with a presentation of cutting-edge supply management trends.

Chapter 16: Personnel

The goal of this chapter is to identify and discuss the core principles for developing and supporting employees in the new and dynamically competitive global supply chain environment, with the ultimate goal of leveraging human resources for their tangible and intangible supply chain value.

Resource Management

To remain competitive, companies in global supply chains must efficiently and effectively manage their resources. Thus, the topics addressed in this part are lean supply chains, financial management, risk management, and interpretation systems.

Chapter 17: The Lean Supply Chain

The lean supply chain involves more than just-in-time or doing more, faster. Rather, there are a number of basic principles applied in any supply chain configuration: begin with customer requirements, deliver what is demanded, build what is sold, supply what is consumed, and balance the flow. However, these basic principles must fit within the basic product and process supply chain structure. In addition, the basic principles must be applied within the strategic configuration required by the customer. Thus, two configuration dimensions give rise to a variety of design combinations, none of which can be thought of as necessarily dominant. The authors identify the importance of matching the time interval for demanding the product mix with all upstream execution time intervals. Once this is accomplished, capacity rates and boundaries are established for all elements of the supply chain. The actual execution of flow fits within these planned capacities and flexes with short-term variation. With these principles in place, certain supply chains are able to exhibit stable, repetitive, and predictive performance.

Chapter 18: Financial Management

All companies compete against each other in the financial markets. Those companies offering a competitive return tend to prosper and grow. Those that do not

are limited in their ability to grow and many times cease to exist. Providing a competitive return is becoming more complex because of increasingly demanding customers, heightened competition, and ever-changing technologies. SCM has the potential to provide solutions. There are three common impediments to companies making the financial-SCM connection. First, many executives view SCM as a tactical backroom cost-center activity and not a key tool for managing overall financial performance. Fortunately, this view appears to be changing. Second, most SCM professionals do not speak the language of finance. Hence, they lack the ability to link SCM to key financial metrics and articulate how SCM drives financial performance. Third, SCM drives performance throughout the enterprise. Therefore, SCM strategic and tactical decisions cannot be made in a vacuum. Yet most SCM scorecards and analysis of SCM initiatives are incomplete because they are not from an enterprisewide perspective. In this chapter, the author explores the connection between financial performance and SCM with a three-step top-down approach.

Chapter 19: Risk Management

There is little debate that global supply chains are sources of considerable competitive advantage. The global configurations of firms provide access to cheap labor and raw materials, subsidized financing opportunities, larger product markets, arbitrage opportunities, and additional incentives such as tax rebates offered by foreign governments to attract foreign capital. These benefits are available to firms today because of (1) unprecedented transnational mobility of capital, information, people, products, and services; (2) tremendous leaps in information and communications technology; and (3) increased opportunities and willingness to engage in e-commerce. However, along with these benefits are the challenges that businesses need to overcome when operating globally. These challenges are related to foreign national economies, logistics, cultures, competition, and infrastructure. These challenges give rise to several risks in global supply chains. In this chapter, the authors explore these global supply chain risks and how to manage them.

Chapter 20: Interpretation Systems

The authors of this chapter suggest that managers can benefit from viewing supply chains as interpretation systems. Specifically, managers need to recognize that creating and maintaining fit across knowledge elements and strategy can help ensure supply chain success.

Managing the Relations

Much of the emphasis of GSCM centers on the relationships between supply chain partners and between functions within a given company. Thus, the topics addressed in this part are relationship management, logistics outsourcing, international sourcing, negotiating throughout the supply chain, interfunctional coordination, intercorporate coordination, and global supply chain control.

Chapter 21: Relationship Management

Relationship management is becoming a strategic function and a key factor in competitive positioning. In this chapter, the authors suggest that next-generation competitive advantage may come from effective relationships with supply chain partners. The primary reasons for the emphasis on supply chain partners are changes in most market spaces that have witnessed consolidation of firms within industries, continuous product evolution, and constant pressure on costs. Although relationship management is of strategic importance to a firm, good relationships between customers and suppliers are elusive. Firms realize that collaborative business relationships improve their ability to respond to the new business environment by allowing them to focus on their core businesses and to reduce costs in business processes. Firms, therefore, need to emphasize aspects that enhance supply chain partner relationships. The authors discuss the emergence of supply chain relationships and how this shift has changed and will continue to change the role, processes, and strategies of firms.

Chapter 22: Logistics Outsourcing

Although increased logistics outsourcing has been beneficial for logistics service providers, it has not come without its costs, mostly due to heightened expectations that logistics outsourcing clients have for the value delivered by service providers. Logistics service contracts have become more sophisticated and place more pressure on service providers to continually invest in process and cost improvements and to share these benefits with clients. Although success stories in this new environment are plentiful, logistics outsourcing has also been a victim of poor planning, lack of understanding, inadequate performance, and in some cases, abject failure. There are a number of reasons for this, but lack of understanding on the part of both client and provider often is the major cause of difficulty and failure in logistics outsourcing relationships. This comment is even more poignant when made in relation to global logistics outsourcing. Until recently, although any number of firms had operations in foreign countries, in most cases their logistics activities were confined to the countries in which they were located and those in close proximity. Today, products are routinely moved back and forth throughout the world. To many firms, global logistics outsourcing has become more important than it is in their domestic markets. In this chapter, the authors highlight the business case for global logistics outsourcing and provide a guide for the outsourcing process. The specific case of global logistics outsourcing is considered, and keys and barriers to success are identified.

Chapter 23: International Sourcing

This chapter expressly focuses on international sourcing (or offshoring) as it adds many more complexities that do not apply in domestic sourcing strategy. In developing viable international sourcing strategies, companies must consider not only manufacturing and delivery costs, the costs of various resources, and exchange

rate fluctuations but also availability of infrastructure (including transportation, communications, and energy), industrial and cultural environments, the ease of working with foreign host governments, and so on. Furthermore, the complex nature of sourcing strategy on a global scale spawns many barriers to its successful execution. In particular, logistics, inventory management, distance, nationalism, and lack of working knowledge about foreign business practices, among others, are major operational problems identified by both U.S. and foreign multinational companies engaging in international sourcing. From a contractual point of view, the international sourcing of intermediate products such as components and services by companies takes place in two ways: (1) from the parents or their foreign subsidiaries on an “intrafirm” basis (i.e., internal sourcing) and (2) from independent suppliers on a “contractual” basis (i.e., external sourcing). The authors propose that there is a negative curvilinear relationship between the extent of international sourcing and the performance of the firm, such that firms should neither keep all their activities at home nor outsource everything to faraway locations. With this model in hand, the authors discuss the variables that predict the extent of international sourcing firms ought to engage in, and examine some practical implications of the model.

Chapter 24: Negotiating Throughout the Supply Chain

The elements of the negotiation process include the environments that surround the parties to the negotiation (negotiation environmental factors), the nature of the relative relationship between the parties (negotiation potential), the activities of preparation that take place to ensure that necessary information is available for decision making during the interactions between the parties (negotiation preparation), the actual discussions that take place between the parties (bargaining), and the interpretation of the outcomes of the negotiation process (negotiation outcome). All of these elements are critical to creating successful negotiation outcomes and are discussed in this chapter, along with seven types of supplier and customer relationships.

Chapter 25: Interfunctional Coordination

In this chapter, the authors define interfunctional coordination and its essential elements: communication, collaboration, and an organizational climate that supports the two. Once the groundwork has been laid, the authors explore important dimensions for effective interfunctional coordination within the company. The mechanisms that can be used to drive coordination within a company are then discussed. Finally, the authors offer some examples of interfunctional coordination and the state of the art in business today.

Chapter 26: Intercorporate Coordination

Many firms have turned to coordination with supply chain partners as a way of facing the challenges of operating in the rapidly changing marketplace. Supply

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chain relationships have moved from adversarial exchanges toward more collaborative ventures. Thus, instead of relationships based on opportunism and competition, many supply chain exchanges now put a greater emphasis on trust, interdependency, and coordination solutions to operational issues that benefit all parties involved. In this chapter, the author highlights the various strategic behaviors involved in global supply chain coordination efforts and environmental issues that support more effective global supply chain coordination.

Chapter 27: Global Supply Chain Control

The purpose of this chapter is to specify the control processes associated with implementing a supply chain strategy across institutional arrangements and environments in a global context. The authors introduce a model detailing the connections between the characteristics of the supply chain strategy developed by a multinational corporation, the magnitude and scope of the control requirements inherent in the strategy, and the impact of a foreign market's institutional environment on implementation effectiveness. The authors analyze the characteristics of the controller's strategy, the dimensions of the strategy's control requirements, and the implications for implementation effectiveness from institutional arrangements and environments.

Making It Happen

Strategy means little if it cannot be implemented. Thus, this part is about how companies make global logistics and SCM happen and, as a result, create competitive advantage. The specific topics addressed are supply chain innovation, global supply chain security, diagnosing the supply chain, and change management.

Chapter 28: Supply Chain Innovation

In this chapter, the authors discuss the notion of innovation as strategy, innovation in supply chains, what constitutes supply chain innovations, and processes for being innovative. They then discuss these concepts and implications within a global context.

Chapter 29: Global Supply Chain Security

Lengthy, complex global supply chains are especially vulnerable to disruptions caused by a myriad of major disasters such as terrorist attacks, electric power blackouts, and hurricanes. Such disruptions have significant negative impacts on supply chain effectiveness and efficiency that, in turn, devastate corporate performance and profitability. Consequently, global supply chain managers must have a basic understanding of disasters and their likely effects on the supply chain, plus knowledge regarding the process of disaster preparedness.

Chapter 30: Diagnosing the Supply Chain

In this chapter, a variety of tools for diagnosing potential problems in a supply chain are reviewed and discussed. These diagnostic tools vary in terms of format, complexity, and cost. Quantitative approaches as well as some qualitative diagnostic tools are described. Some of these tools require less data gathering than others and are, therefore, less time-consuming. Discussion as to when one tool versus another might be used is also included. The tools listed are suitable either for self-assessment or for assessment employing a small team of facilitators.

Chapter 31: Change Management

Change management is defined as those strategies and action plans that support and maintain transition from the current state to a new outcome. Maintaining the transition is often more difficult than implementing initial change. Change management involves two very different critical processes: training and the buy-in process. Once an organization accepts the change, a well-designed and executed training plan is essential. Prior to that, the process of organizational buy-in sets the organization up for change and is arguably the most challenging aspect of any new initiative. The coming change must be embraced not only cross-functionally but also at all organizational levels. Achieving organizational support for change is thus critical to achieving the goals set forth in any change management initiative.

Conclusions

The editors' intention in producing this handbook is to facilitate the evolution of a thought process among both academic researchers and practicing managers that recognizes at once the complexities of a global, cross-functional, cross-enterprise view of business and fosters an appreciation for key dimensions that contribute to success within this new environment. The layout of the book, as highlighted above, is designed to guide the reader through five distinct "layers" of thought regarding GSCM.

The first part, "Understanding Global Supply Chains," provides a broad perspective on GSCM that can be used to frame and scope the phenomenon, as well as provide general insights into the issues that managers and researchers engaged in GSCM must confront. The second part, "Managing the Functions," is designed to provide in-depth insight into how specific functional areas must change to conform to a GSCM perspective. The third part, "Resource Management," highlights the critical need to link functional activity management to strategic resource allocation and provides guidance as to how to approach this complex task. Part IV, "Managing the Relations," illuminates issues related to the management of the essential enablers of effective GSCM—internal functional and external organizational relationships. Finally, Part V, "Making It Happen," provides guidance on four key processes that are vital to implementing GSCM strategy.

We hope this handbook becomes a tool to which readers can refer frequently along their journeys toward a better understanding of the business world of the 21st century.

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