Handbook of Supply Chain Management, Second Edition

Best Practices, Concepts, & Tools

The following list outlines tools and topics covered in the Handbook. The table comments on the possible application of the tools to a company's program to improve its supply chain. The table is a checklist useful for structuring downstream tasks as part of the improvement plan.

Chapter	Topics	Concepts, Tools, & Applications
1	Supply chain definitions	The company needs to define which components of the supply chain to include in their improvement initiatives and what their vision of the supply chain actually is.
2	Supply chain viewpoints	While no one viewpoint is correct or incorrect, a broad interpretation and the use of supply chain management (SCM) to improve strategic position, not just reduce cost, will lead to greater returns.
3	Drivers of supply chain change	The chapter covers collaboration, globalization, the flexibility imperative, and the role of innovation in forcing changes in supply chains.
4	SCM & strategy	SCM is often considered an operational responsibility. The chapter shows how it fits strategically. The spectrum of supply chain types found in industry is presented; some industries favor a specific type.
5	SCM assessment tools	Topics include the product life cycle, innovative versus functional products, and product/process innovation. Two self-assessment maturity matrices show how to verify a current position and set goals.
6	Methodologies for incorporating customer requirements	Tools include specifications for supply chain performance, how to interpret customer demand, the role of the supply chain manager, market mediation costs, quality function deployment (QFD), and the role of spheres.
7	Globalization	The chapter includes a discussion of the importance of globalization from "macro" and "company" viewpoints. It encourages a "look before you leap" approach to globalizing a supply chain.
8	Scoping the supply chain strategy	Issues include those associated with beginning a supply chain improvement project. These include the basics of project scoping, an area of high risk for project success.
9	Multiple supply chains, businesses within the business	Many companies require multiple supply chains that recognize the needs of customer segments or product lines. The chapter also describes the role of enabling processes that support multiple supply chains.
10	Activity systems	This chapter explains the application of Michael Porter's activity system framework to supply chain design. Activity systems specify needed cross-functional processes to implement a strategy.

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11	QFD case study	Quality Function Deployment enables a company to use customer polling (voice of the customer) to understand how customers evaluate suppliers in order to set priorities for supply chain process features.
12	The supply chain and new products	The chapter describes how new product characteristics affect supply chain design. The discussion correlates the range of product change and the degree of supply chain change required.
13	Supply chain change	Change in supply chain design seldom works without certain foundation elements. These include top management involvement, addressing barriers to change, and project portfolio management.
14	Functional roles	The commitment of traditional function (department) managers is required to implement change. The chapter describes the requirements from each. It serves as a checklist for participation in supply chain projects.
15	Team framework	The change process requires teams at three levels: a Steering Committee, Design Teams, and Front Line Teams. The process also requires a standardized procedure like the one recommended in the chapter.
16	Institutionalizing changes	Continuity after the initial changes requires follow through in the form of organization structure, process owners, and metrics. The sales and operations planning process (S&OP) also cements change.
17--18	Collaboration	Topics include the traditional way of working with trading partners and the emerging partnership model. Other topics include types of partnership, core competencies, and outsourcing.
19	Partnership vocabulary	The vocabulary includes the partnership purpose, direction, and choice. Companies should use the vocabulary to communicate needs for partnerships and to evaluate proposals for partnering.
20	Vision for multicompany supply chain governance	Stage 3 implementation takes place at the supply chain level. Level 1 is departmental; level 2 is the business unit level. The chapter describes how multiple companies should "govern" their partnering relationships.
21	Supplier base management	The chapter describes how the Chrysler Group (of DaimlerChrysler) manages aspects of its supplier base. Many of the features may find their way into non-automotive supply chains.
22	Supply chain processes	Effective processes are key to effective SCM. The chapter covers techniques for identifying and documenting supply chain processes and assuring they satisfy strategic purposes.
23	Process evaluation	The Supply-Chain Council (SCC) and the Council of Supply Chain Management Professionals (CSCMP) describe best practices for SCM. The chapter describes their work and how to put it to work in process improvement.
24	Process documentation	There are many tools for process documentation. The chapter describes a few favorites and how to apply them. These include both "top down" and "bottom up" perspectives.

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25	Supply chain technology	Caution is warranted in implementing information systems in the supply chain. The chapter describes common applications and the risks in implementing such systems.
26	Costs & the supply chain	Costs receive a lot of management attention. The issue of cost reduction as a strategy is addressed. An introduction to the root causes of supply chain costs introduces the following chapters.
27	Root cause – clarity	The inability to associate costs with the source of the cost makes appropriate actions difficult. The content points to common failures and proposes a progression from traditional cost reporting to activity-based costs by product.
28	Root cause – variability	Application of tools addressing this root cause will lead to the demand-driven supply chain. Elements include lean manufacturing, postponement strategies, Six Sigma, and elimination of self-imposed causes of variation.
29	Addressing design root causes	Two tools focus on product design in reducing cost. These are Discovery-Driven Planning and Stage Gate processes for developing products. Both argue for early supply chain development for new products.
30	Information and cost	Lack of information for decision-making is also a root cause. Workflow or "proactive" processes for acting on the information should accompany connectivity and information sharing.
31	Weak links in the supply chain	Links take the form of weak companies or factories. They also include poor interfaces between supply chain partners. Topics include the Theory of Constraints (TOC) and the 3C Alternative to MRP.
Methodologies & Case Studies		
32	Activity Based Costing	Basic ABC concepts and results produced from applying them. Recommends limited implementation to aid decision-making.
33	3C Alternative Implementation	Example of the working of the methodology. Describes 3C terminology.
34	Starting with the Prestudy	Methodology for performing an initial study to assess the scope and potential of a supply chain initiative.
35	Journey to strategic sourcing	Conversion of a purchasing function to one focused on strategic objectives. Eliminating "sludge" inventory.
36	Enterprise software	How this category of software will be affected by multicompany environment
37	Selecting SCM software	A process for identifying requirements, assessing alternatives, and negotiating with vendors.
38—45	Case Studies	The cases illustrate concepts and tools from the book and how they were properly or improperly implemented.