

Handbook of Supply Chain Management

By James B. Ayers

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 any company's supply chain improvement program.

Chapter	Concepts & Tools	Applications
1	"Supply chain" definitions	The company must define which components of the supply chain to include in the initiative. Examples include inbound material, product distribution, manufacturing, partnerships, Internet features, management systems, and organization structure.
2	Supply chain viewpoints	Individual companies have different views of the supply chain and how it supports their goals. This is an area for clarification at the outset. While no one view is correct or incorrect, CGR recommends a broad interpretation and the use of supply chain management techniques to improve strategic position, not just reduce cost.
3-4	Evolution of supply chain models	The chapters provide frameworks for developing the supply chain strategy. They should be reviewed for their applicability to each company.
5	Model for competing	This model is useful for evaluating current supply chain initiatives including systems projects. It will focus management's attention on strategic, cross-functional opportunities.
6	Customer linkages (innovative/functional products)	The framework is useful for classifying company products – some of which are likely to fall into each category. Functional products require cost effective supply chains; innovative products require responsive supply chains.
6-8	Quality Function Deployment (QFD)	The tool aids supply chain design. It captures customer survey feedback to identify supply chain performance specifications.
7	Activity systems	This powerful framework identifies how operations support company strategy. Activity systems set the company apart from its competitors by creating unique networks of supply chain processes.
9	New product tools	The product pipeline will have implications for supply chain design. A new product may require a totally new supply chain.
10	PDCA cycle	Effective use of the cycle and other TQM techniques improves the chances for success.

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10	Top management role	The prestudy defines the involvement of top management. It also defines who is “top management” for the effort. Whether top management is a division CEO or a department head makes a difference in the outcome.
11	Functional roles in supply chain change	Roles will depend on the scope of the effort. A broad charter brings more functional managers into the effort.
12	Supply chain improvement initiatives	Initiatives provide the “skeleton” of the implementation effort. The supply chain effort can build on existing and/or new initiatives.
12	Improvement project approach	Handbook concepts can be modified to fit company practices. Approaches are worked out during the prestudy.
13	Organization forms	Organizations need changing if more aggressive measures are implemented. The Handbook recommends that organization design and change implementation is integral to the process improvement effort.
13	Measurement (balanced scorecard)	Early checks should verify whether measures support or hinder supply chain goals. Management measures should be part of supply chain design.
14	Partnership motivations	What approach to developing partnerships is appropriate? Should the company have more or fewer such arrangements? Should they be expanded into areas not now covered?
15	Emerging partnership model	What opportunities exist to gain strategic leverage from partnerships? An initial effort should identify major partnerships, how they were developed, how they are working, and their structure.
16	Partnership vocabulary	Early supply chain improvement efforts categorize company partnerships using the Handbook approach.
17	SCM as a core competence	This facet of the program is a broad and important one. What core competencies need to be retained? Which internal practices are not core competencies that need to be nourished? What areas of supply chain management are distinct competencies?
18	Defining spheres	As described earlier, this tool is vital to organizing the overall effort, designing organizations, and improving processes.
19	Stage 3 supply chain structure	Stage 3 provides a blueprint for partnerships.
20	DaimlerChrysler Extended Enterprise	Are there models in the automotive and other industries suitable for application to the company? Should benchmarking be performed in these industries?
21	Supply chain systems overview	The flow of information and supporting procedures is begun in the initial phase.
22	Supply chain systems applications	What applications are now employed? How well do they work? What plans exist for upgrading systems?

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23	Supply-Chain Council/SCOR model	The SCOR model offers quick benchmarks and methodologies for competitive comparisons.
24	Root causes for supply chain cost	The prestudy should examine which root causes are most likely to apply to the company.
25	Supply chain cost accounting	Recommended changes are candidates for adaptation. The financial staff should review these for their application.
25	Activity based costing	This approach is seen as a foundation for partner negotiations.
25	Bottlenecks and costs	Recognition of bottlenecks in adding to cost is important to achieving higher returns on investment.
25	Cost mapping	The supply chain project should apply this tool to spheres identified at the outset.
26	Forms of volume variability	Identification of root causes of variability is needed to define solutions. The Handbook describes root causes.
26	Demand-driven supply chain	The generic term means a “pull” versus a “push” approach to supply chain management. Over-reliance on forecasts indicates a need for demand-driven approaches.
26	Time mapping	This tool is useful for identifying priorities for improvement.
26	Toyota Production System	Increasing the deployment of “lean” production processes will shorten cycle times and improve quality.
26	Process variability	Process variability can be a root cause of bottlenecks and resulting high costs.
27	Discovery-driven planning	This tool is useful for planning new products.
27	Stage gate process	This tool provides a method to incorporate supply chain design into new product development processes.
28	Proactive systems	These systems reduce overhead and administrative costs. Systems analysis may or may not show whether “proactive” features are built into company systems.
29	Theory of Constraints (TOC)	TOC is a useful framework for evaluating cycle time, costs, and supply chain bottlenecks.
29	Replenishment rules	These rules support efforts to reduce cycle time and forecast dependence.
29	3C alternative	Will this technique for the demand-driven supply chain help in terms of reducing dependence on forecasting?