



Book Supply Chain Optimization

Building the Strongest Total Business Network

Stephen E. Reiter and Charles C. Poirier
Berrett-Koehler, 1996

Recommendation

Authors Charles C. Poirier and Stephen E. Reiter envision a trip down your supply chain like an effortless sail on calm seas. Your organization can reach this placid efficiency, they explain, by forming partnerships with suppliers and others in your business network. But the authors don't ask you to take their word; instead they present detailed case studies of companies that have implemented supply-chain optimization strategies and reaped prodigious benefits. The book's only flaw is its style. It is densely written and often weighed down by prose as murky as a rural delivery system and twice as difficult to penetrate. But *GetAbstract.com* recommends that business owners, corporate managers, executives and logisticians of all levels take the time required to patiently excavate the practical and pragmatic information that lies within.

Take-Aways

- The supply chain is the path your products take from concept to your customers.
- All businesses are under pressure to make their supply chains more efficient.
- Supply chain optimization is essential to accomplishing this goal.
- With supply chain optimization, you break down the boundaries that have separated supply chain participants from one another.
- To begin, analyze your entire process, from initial supply to ultimate consumption, so you can identify goals and avoid pitfalls.
- Optimization is a joint effort of manufacturers, suppliers, distributors and retailers.
- Companies achieve optimization by forming partnerships with these parties.
- These partnerships are a win-win situation for all involved.
- By partnering, small firms reap benefits previously available only to larger companies.
- Partnering helps all parties solve problems and meet current market needs.

Summary

The Supply Chain

A supply chain is the journey your products or services take from concept and creation through delivery to your customers' outlets and, finally, into the hands of your ultimate consumers.

Today, businesses are under extreme pressure to find new and more effective ways for their products and services to traverse the supply chain. Supply chain optimization is essential to accomplishing this goal, because it breaks down the boundaries that have traditionally separated supply chain participants from one another. That separation has fractionalized each participant's earning power, so by breaking down those boundaries, you can increase your earnings.

“No force can stop the drive by retailers to try to extract every potential saving from the supply system.”

When you analyze your entire supply chain process, from manufacture to consumption, you can identify your goals, avoid pitfalls and implement a focused optimizing plan. You want to mobilize a joint effort and focus the resources of your suppliers, manufacturers, distributors and retailers on initiatives that seem to have good potential. Many companies are already using the methods suggested here to achieve supply chain optimization, including Procter and Gamble, Baxter Healthcare Corporation, Packaging Corporation of America and Dominick's.

“Not all customers are equally important to the future.”

By establishing partnerships and forming groups that can compete with the volume leverage of large companies, superstores, and warehouse stores, smaller companies can reap benefits typically only available to larger companies. When these groups analyze their shared supply chain and pool their resources, they can find hidden savings to protect their profit margins and remain competitive.

“Only by incessantly chasing every possible avenue of process improvement and seeking any beneficial enhancement to quality, productivity, cost and customer satisfaction can companies hope to survive into the next century.”

The supply chain network is always evolving. Its historical evolution has already led to such ideas as efficient consumer response (ECR), continuous replenishment process (CRP), electric data interchange (EDI) and other replenishment and quick-response methods. Use these concepts throughout your organization to achieve supply chain optimization. You must move from a buyer-versus-seller philosophy to one in which the supply chain network endeavors to build a supply system with a united, organizational purpose. The typical "let's only worry about our company's way of doing business" that drives much of supply chain management today is simply not effective.

The "Interenterprise" Solution

The "interenterprise" solution unites everyone in the supply chain in a four-step model, which has superseded the typical three-step model. The three-step model included only the manufacturer, distributor and retail outlets. Today's four-step model adds a new dimension: the suppliers' relationship with the manufacturers or the primary suppliers' relationship with a servicing supplier. The interenterprise solution addresses the organizations and transactions you must scrutinize before you can optimize your supply chain. You must look at your entire supply network. Don't neglect the importance of establishing partnerships with all the constituencies that affect your intended end result. You want to achieve an error-free, low-cost, low-inventory system that is electronically linked as completely as possible and that completely satisfies the ultimate consumer.

Partnering Creates Improvement

By partnering, you can form a network that focuses on optimization across your supply chain. Partnering efforts across supply networks typically realize these improvements:

- Inventory reductions of 40% to 60% result from working out communications systems and just-in-time deliveries that reduce the need for safety stocks.

- Inventory turns of five to seven increase to 25 to 30 because the supply chain achieves more pull-through of demanded products with lower inventories and fewer stock-outs.
- Cycle-time improvements of 50% to 60% result from collectively mapping and analyzing flowcharts, creating new ideas and bringing these innovations to commercial realization. The largest factor in this improvement is eliminating steps that do not add value.
- Sales and market share increase by 45% to 55%, as a result of creating the most responsive system and inducing the final consumer to shop the network.
- Profit improvements of 15% to 30% are achieved through improved process designs that eliminate waste and reduce costs.
- Customer relations improve 20% to 40% as you respond to customers who identify their true supply needs.

“Reengineering will threaten the livelihood of many of those doing the work.”

You can overcome the many obstacles that get in the way of creating and maintaining working partnerships across your full supply chain. These conflicts usually start with one party's flawed perception of the value of good relationships among those in the same supply chain. These perceptions are based on a lack of trust, a necessary ingredient in making any alliance function. Everyone needs to adopt the perception that partnering will work if every entity involved applies mutual resources for everyone's mutual benefit. Anything less than that perception will doom the parties to short-term maneuvering by buyers and sellers, with no real improvement in the competitive advantage of partnering in the supply network.

Effective Partnering Techniques

The partnering techniques that work the best don't have to be complex. National Semiconductor of Santa Clara, Calif., worked with a supplier of silicon wafers, Siltec, to cut expenses. Fortune magazine writer Shawn Tully reported, "At National's plant in South Portland, Maine, workers on the loading dock used to discard the expensive plastic cassettes that silicon wafers arrived in. Now a giant box sits on the loading dock, already inscribed with the address of Siltec's plant in Salem, Oregon. As workers unload the wafers, they chuck the cassettes into the box. When the box is full, a driver from UPS carts it off to be returned to Siltec, which passes the resulting savings along to National - more than \$300,000 a year."

“Downsizing has become such a natural element in the lexicon of management control that hardly a firm has avoided being restructured.”

Tully also notes that AT&T's purchasing chief, Daniel Carroll, calls for helping key suppliers "manufacture more efficiently and thereby hold down prices." That is the so-called win-win situation for AT&T. In the spirit of partnering, AT&T allows these suppliers to have "a share of the savings," and that's a win for the suppliers. Jack Barry, a former purchasing specialist with Electronic Data Systems Corporation's A.T. Kearney consulting division, sees a promising future for those in partnering relationships. He says, "As we move to a seller's market, companies win by treating suppliers not as adversaries but partners."

“Partnering starts with a prioritized list of objectives that creates the strategies and actions needed to accomplish these objectives.”

Whirlpool found itself under a short time constraint as it prepared to present a new line of refrigerators to Sears, one of its major customers. To extricate itself, Whirlpool got the help of a software supplier. Together they made a presentation that used virtual reality techniques to demonstrate the new line of refrigerators on a computer network. "The buyers at Sears were regaled with a show on the interactive computer network they were watching that took them into a kitchen to use the innovative features contained in the new line of products."

“As with most management concepts, reengineering is not a magic pill.”

The basic purpose of customer partnering is to find the best way to meet current market needs.

Advanced Partnering Techniques

Successful advanced partnering techniques include the following:

- Share valuable engineering and design talent - Focus on projects that have a clearly defined market advantage. This kind of sharing, which goes beyond the typical electronic linkages available through computer-aided systems, also includes joint identification of development and improvement projects and the assignment of joint resources to work out innovative and saleable solutions. The automobile industry is becoming quite adept at using supplier talent to design and engineer features on new cars.
- The most skilled trainer from any participating organization can conduct joint training sessions for everyone - With combined planning, material covered can include problem solving, the latest business planning techniques, skills applied to planning and scheduling tools, and the use of logistics capabilities. A larger group shares the cost of the sessions. Partners develop techniques to share the valuable resources and knowledge that result as they search for beneficial opportunities. The Atlanta Consulting Group stands out as an organization that effectively conducts these sessions.
- Executives should take an overview that focuses on joint practices that could benefit both parties. The supplier and the customer can arrange briefing sessions about the best practices they have observed and used.
- Under the conditions of advanced partnering, the firms can quickly set up a test to find the real benefits of an idea - Companies generally avoid pilot studies that are intended to test improvement ideas because they are difficult to establish and arrange. But partners can make joint investments in focused facilities or specialized equipment. The partners share the cost of the new machinery and the savings from the new results. For example, partnering efforts can focus on improving packaging costs. This might lead to an investment in cutting-edge machines that increase packaging speed and efficiency to a new level, double or triple the previous "Best Performances."
- Your firm can set up experiments using qualified third-party organizations to test new technologies or systems - For example, firms can enter partnering arrangements as part of trying to make their supply chains more effective by finding and adopting improved electronic data exchange techniques. Some of these arrangements allow the supplier and the customer to engage third parties who have hardware and software knowledge plus the ability to plan and equip test sites. This enables the partners to test a wide variety of potential enhancements.

Redesigned Logistics Networks

Companies that have applied these new approaches and have redesigned their logistics networks have an advantage over those who are still struggling to catch up with the fast-paced business world. Companies with redesigned networks can find more logistical advantages by using new techniques, information technology and partnering concepts to meet shifting customer demands. The questions that will dominate supply-chain logistics in the future include:

- How can you achieve standardization and simplification in an environment that is increasingly complex, both structurally and operationally?
- How can you negate years of operating under the win-lose mentality that hinders progress toward more effective systems? How can you create networks built on trust and mutual benefits?
- What structure can companies use to manage their logistics systems in the face of increased demand for speed, accuracy and the quickest possible responses?
- How can companies shift those who manage logistics away from shipping and transportation and toward a more holistic approach that includes forecasting, purchasing, planning and selective outsourcing of services?

The one factor of paramount importance to the retailers with whom we have had discussions is that manufacturers and distributors should have the correct priorities."

You need to answer these questions and many others as your company analyzes its supply systems. Logistics play a key role in these systems, and will become the major catalyst as you work to establish partnerships along your supply chain.

About the Authors

Charles C. Poirier is a partner in the National Supply Chain Practice of Computer Science Corporation. He is the author of *Business Partnering for Continuous Improvement* and *Avoiding the Pitfalls of Total Quality Management*. **Stephen E. Reiter** is a partner in the National Consumer Goods Practice of Computer Sciences Corporation, focusing on information technology.