# **READING: From bean to cup: How Starbucks transformed its supply chain**

**Q4 2010** | By James A. Cooke – **CSCMP’s Supply Chain Quarterly (https://www.supplychainquarterly.com/topics/Procurement/scq201004starbucks/)**

**With operational costs rising and sales declining, the global coffee purveyor implemented a three-step plan to improve supply chain performance, cut costs, and prepare for the future.**

It takes a well-run supply chain to ensure that a barista pours a good cup of Starbucks coffee. That's because the journey from bean to cup is a complicated one. Coffee and other merchandise must be sourced from around the globe and then successfully delivered to the Starbucks Corporation's 16,700 retail stores, which serve some 50 million customers in 51 countries each week.

But in 2008, Starbucks wasn't sure that its supply chain was meeting that goal. One clue that things were not quite right: the company's operational costs were rising even though sales were cooling. Between October 2007 and October 2008, for example, supply chain expenses in the United States rose from US $750 million to more than US $825 million, yet sales for U.S. stores that had been open for at least one year dropped by 10 percent during that same period.

In part, Starbucks was a victim of its own success. Because the company was opening stores around the world at a rapid pace, the supply chain organization had to focus on keeping up with that expansion. "We had been growing so fast that we had not done a good enough job of getting the [supply chain] fundamentals in place," says Peter D. Gibbons, executive vice president of global supply chain operations. As a result, he says, "the costs of running the supply chain—the operating expenses—were rising very steeply."

To hold those expenses in check and achieve a balance between cost and performance, Starbucks would have to make significant changes to its operations. Here is a look at the steps Gibbons and his colleagues took and the results they achieved.

**A plan for reorganization**
Starbucks' supply chain transformation had support from the very top. In 2008, Chairman, President, and Chief Executive Officer Howard Schultz tapped Gibbons, who was then senior vice president of global manufacturing operations, to run the company's supply chain. This was a familiar role for Gibbons; prior to joining Starbucks in 2007, he had been executive vice president of supply chain for The Glidden Co., a subsidiary of ICI Americas Inc.

The first two things Gibbons did in his new position were assess how well the supply chain was serving stores and find out where costs were coming from. He soon learned that less than half of store deliveries were arriving on time. "My quick diagnosis was ... that we were not spending enough attention on how good we were at delivering service to stores," he recalls. Following that assessment, Gibbons began visiting Starbucks' retail stores to see the situation for himself and get input from employees. "The visits were made to confirm that our supply chain could improve significantly," he explains. "The best people to judge the need for change were those at the customer-facing part of our business."

A cost analysis revealed excessive outlays for outsourcing; 65 to 70 percent of Starbucks' supply chain operating expenses were tied to outsourcing agreements for transportation, third-party logistics, and contract manufacturing. "Outsourcing had been used to allow the supply chain to expand rapidly to keep up with store openings, but outsourcing had also led to significant cost inflation," Gibbons observes.

In response to those findings, Gibbons and his leadership team devised a three-step supply chain transformation plan and presented it to Starbucks' board of directors. Under that plan, the company would first reorganize its supply chain organization, simplifying its structure and more clearly defining functional roles. Next, Starbucks would focus on reducing the cost to serve its stores while improving its day-to-day supply chain execution. Once these supply chain fundamentals were firmly under control, the company could then lay the foundation for improved supply chain capability for the future.

**Simplifying the complex**
The first step of the transformation plan, reorganizing Starbucks' supply chain organization, got under way in late 2008. According to Gibbons, that involved taking a complex structure and simplifying it so that every job fell into one of the four basic supply chain functions: plan, source, make, and deliver. For instance, anybody involved in planning—be it production planning, replenishment, or new product launches—was placed in the planning group. Sourcing activities were grouped into two areas: coffee and "non-coffee" procurement. (Starbucks spends US $600 million on coffee each year. Purchases of other items, such as dairy products, baked goods, store furniture, and paper goods, total US $2.5 billion annually.) All manufacturing, whether done in-house or by contract manufacturers, was assigned to the "make" functional unit. And finally, all personnel working in transportation, distribution, and customer service were assigned to the "deliver" group.

After the supply chain functions were reorganized, the various departments turned their attention to the second objective of the supply chain transformation: reducing costs and improving efficiencies. As part of that effort, the sourcing group worked on identifying the cost drivers that were pushing up prices. "We went out to understand the contracts we had, the prices we were paying, and the shipping costs, and we began breaking items down by ingredient rather than just purchase price," Gibbons says. "We built more effective 'should cost' models, including benchmarking ingredients and processes, which showed that we could negotiate better prices."

Meanwhile, the manufacturing group developed a more efficient model for delivering coffee beans to its processing plants, with the goal of manufacturing in the region where the product is sold. Starbucks already owned three coffee plants in the United States, in Kent, Washington; Minden, Nevada; and York, Pennsylvania. In 2009, the company added a fourth U.S. plant, in Columbia, South Carolina. The benefits of that approach were quickly apparent; regionalizing its coffee production allowed Starbucks to reduce its transportation costs and lead times, says Gibbons. Moreover, once the new facility was up and running, all of the U.S. coffee plants were able to switch from seven-day operations to five days.

In addition to the four coffee facilities it owns in the United States, Starbucks also operates a coffee plant in Amsterdam, the Netherlands, and a processing plant for its Tazo Tea subsidiary in Portland, Oregon. The company also relies on 24 co-manufacturers, most of them in Europe, Asia, Latin America, and Canada.

Even though it spread production across a wide territory, transportation, distribution, and logistics made up the bulk of Starbucks' operating expenses because the company ships so many different products around the world. Getting that under control presented a daunting challenge for the supply chain group. "Whether coffee from Africa or merchandise from China, [our task was to integrate] that together into one global logistics system, the combined physical movement of all incoming and outgoing goods," says Gibbons. "It's a big deal because there's so much spend there, and so much of our service depends on that. ... With 70,000 to 80,000 deliveries per week plus all the inbound shipments from around the world, we want to manage these logistics in one system."

**One world, one logistics system**
The creation of a single, global logistics system was important for Starbucks because of its far-flung supply chain. The company generally brings coffee beans from Latin America, Africa, and Asia to the United States and Europe in ocean containers. From the port of entry, the "green" (unroasted) beans are trucked to six storage sites, either at a roasting plant or nearby. After the beans are roasted and packaged, the finished product is trucked to regional distribution centers, which range from 200,000 to 300,000 square feet in size. Starbucks runs five regional distribution centers (DCs) in the United States; two are company-owned and the other three are operated by third-party logistics companies (3PLs). It also has two distribution centers in Europe and two in Asia, all of which are managed by 3PLs. Coffee, however, is only one of many products held at these warehouses. They also handle other items required by Starbucks' retail outlets—everything from furniture to cappuccino mix.

Depending on their location, the stores are supplied by either the large, regional DCs or by smaller warehouses called central distribution centers (CDCs). Starbucks uses 33 such CDCs in the United States, seven in the Asia/Pacific region, five in Canada, and three in Europe; currently, all but one are operated by third-party logistics companies. The CDCs carry dairy products, baked goods, and paper items like cups and napkins. They combine the coffee with these other items to make frequent deliveries via dedicated truck fleets to Starbucks' own retail stores and to retail outlets that sell Starbucks-branded products.

Because delivery costs and execution are intertwined, Gibbons and his team set about improving both. One of their first steps was to build a global map of Starbucks' transportation expenditures—no easy task, because it involved gathering all supply chain costs by region and by customer, Gibbons says. An analysis of those expenditures allowed Starbucks to winnow its transportation carriers, retaining only those that provided the best service.

The logistics team also met with its 3PLs and reviewed productivity and contract rates. To aid the review process, the team created weekly scorecards for measuring those vendors. "There are very clear service metrics, clear cost metrics, and clear productivity metrics, and those were agreed with our partners," Gibbons notes.

The scorecard assessments of a 3PL's performance were based on a very simple system, using only two numbers: 0 and 1. For example, if a vendor operating a warehouse or DC picked a product accurately, it earned a "1" for that activity. If a shipment was missing even one pallet, the 3PL received a score of "0." As part of the scorecard initiative, Starbucks also began making service data by store, delivery lane, and stock-keeping unit (SKU) available to its supply chain partners. "The scorecard and the weekly rhythm (for review of the scorecard) ensured transparency in how we were improving the cost base while maintaining a focus on looking after our people and servicing our customers," Gibbons says.

Although Starbucks has a raft of metrics for evaluating supply chain performance, it focuses on four high-level categories to create consistency and balance across the global supply chain team: safety in operations, service measured by on-time delivery and order fill rates, total end-to-end supply chain costs, and enterprise savings. This last refers to cost savings that come from areas outside logistics, such as procurement, marketing, or research and development.

In undertaking all of those steps to reduce operating costs and improve execution, Gibbons says, Starbucks was laying the foundation for future supply chain capabilities. "We tell the stores that we have got to get the fundamentals right—the things that give people confidence. ... We don't ship things that aren't right," he explains.

**Earning the company's confidence**
Since Starbucks began its supply chain transformation effort, it has curtailed costs worldwide without compromising service delivery. "As a company," Gibbons says, "we have talked publicly of over $500 million of savings in the last two years, and the supply chain has been a major contributor to that."

In Gibbons' eyes, the transformation effort has been a success. "Today there's a lot of confidence in our supply chain to execute every day, to make 70,000 deliveries a week, to get new products to market, and to manage product transitions, new product introductions, and promotions," he says. "There's a lot of confidence that we now are focused on service and quality to provide what our stores need and what our other business customers need."

To sustain that momentum for improvement and to ensure a future flow of talent into the organization, Starbucks recently began an initiative to recruit top graduates of supply chain education programs. (For more on this initiative, see the sidebar "Starbucks: The next generation.") Along with its recruiting program, the company plans to provide ongoing training for its existing employees to help them further develop their supply chain knowledge and skills. "We want to make sure we have thought leaders [in our supply chain organization]," Gibbons says. Starbucks considers this initiative to be so important, in fact, that Gibbons now spends 40 to 50 percent of his time on developing, hiring, and retaining supply chain talent.

The infusion of new recruits will allow Starbucks to stay focused on its supply chain mission of delivering products with a high level of service at the lowest possible cost to its stores in the United States and around the globe. As Gibbons observes, "No one is going to listen to us talking about supply chain strategy if we can't deliver service, quality, and cost on a daily basis."