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Lessons From the Leaders

By Miles Cook and Rob Tyndall

In industry after industry, the supply chain leaders have opened up a dramatic performance gap over their more average competitors. This article taps the findings of a new survey by Bain & Company to highlight the differences in supply chain approaches that help explain this gap. From this analysis, seven powerful supply chain lessons emerge—lessons that can position an organization for sustained success.

> hen San Francisco and its surrounding towns voted to spend \$792 million in 1962 to build the Bay Area Rapid Transit system (BART), authorities figured they would lay

out big bucks up front for state-of-the-art technology and reap the rewards on the back end through lower operating costs. A key driver of savings was that there would be no drivers at all. BART's trains could run without conductors. Trouble was, they didn't run very well that way. Trains flying along 90 seconds apart disappeared from the command center's screen; brakes failed and electric motors that powered the cars shorted and burned. Before inaugurating passenger service, BART authorities decided to tame technology by bringing back the conductor.

The BART example has strong parallels in the world of supply chain management (SCM), where the "trains" of activity that bring materials to manufacturers, take finished goods to retailers, and move inventory onto shelves all too often lack firm guidance from a top-level executive team. And more than one SCM initiative has jumped the track when data tracking has been faulty and when infatuation with technology solutions has prevailed. In its strategic consultancy work over several decades across a wide range of industrial sectors, Bain & Company Inc. has observed many commonalities in approaches to SCM. We have seen lagging organizations make many of the same mistakes—over and over. We've also seen a smaller group of companies invent alternative approaches that work better. But the most striking observation has been the yawning gap between the supply chain performance of leading companies and that of the average businesses in their industries.

Put bluntly, most businesses are staring at a huge cost sink when it comes to managing their supplies and inventories. Independent research¹ reveals that companies on average are running their supply chains only *half* as efficiently as the best performers in their industries—companies such as Toyota, Dell, and Wal-Mart. The top-quartile players are spending just 4.2 percent of revenue on supply chain costs, compared with almost 10 percent for average performers in the same industry. (See Exhibit 1.) If all companies managed their supply chains as well as their best competitors do, they could create hundreds of billions of dollars of value for their shareholders.

To try to explain the gap, Bain polled 300 supply chain executives—mostly general managers or heads of operations, purchasing, and distribution. They were spread across companies in the retail, manufacturing, and technology industries in the United States and Germany. Coupled with Bain's experience from hundreds of operational improvement and strategy cases in the supply chain area, the recently released results uncover some disturbing patterns—and offer clues to how to close the performance gap.

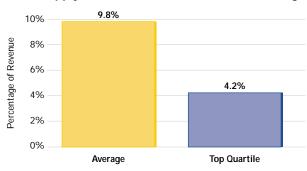
Broadly, Bain's survey shows that companies still struggle with walking the walk in managing their global supply chains. Although nearly 70 percent of the poll respondents rate supply chain improvement as a top priority, it is clear that being aware of the challenges doesn't always mean overcoming them. A majority of companies polled expressed dissatisfaction with their results, and independent research shows most lack an overall strategy for improving the situation. Data on the overall economy support executives' frustration. Across most industries examined, inventory turns are little better than they were a decade ago. (See Exhibit 2.)

Beyond such broad industrial statistics, horror stories from individual companies have emphasized the costs of getting things wrong. In 1999, Whirlpool was hit with big delays in appliance shipments, traceable to massive problems with a large software implementation. That same year, glitches at Hershey Foods kept its candy off shelves at the worst time of year: Halloween.

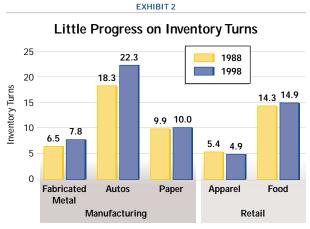
The consequences of such shortfalls are severe. First,



Total Supply Chain Costs: The Best vs. the Average



Source: Performance Measurement Group's Supply Chain Benchmarking Series, 1999-2000



Sources: Bain & Company, U.S. Department of Commerce

there are the obvious cost implications when a significant SCM venture fails to perform to expectations—emergency orders with associated expediting fees, customer price "accommodations," and so on. There is also the opportunity cost of the investment made—in people, training, and management time, as well as in funds.

The really significant hits come when the supply chain's deficiencies become obvious to customers. Hershey's inability to deliver high volumes of its Twizzler candies and Kisses chocolates in time for Halloween allowed rivals to gobble up market share and led to Hershey's stock hitting a three-year low early in 2000. Shareholders also feel the effects when a company's supply chain performance deteriorates. Independent analysis on the performance of 861 public companies² has shown that once a supply chain malfunction is announced, stock prices drop as much as 12 percent and shareholder wealth decreases by at least \$120 million per company. This phenomenon occurs irrespective of who was at fault—the company, its suppliers, or even its customers.

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The personal consequences are uncomfortable, too. In the spring of 2000, after Hershey's technology glitches had helped rivals Mars and Nestle, Hershey's board of directors slashed top officers' bonuses by as much as 81 percent.

At the same time, a few companies have managed to distinguish themselves with consistently superior performance. Dell Computer's lean and flexible supply chain, for example, has allowed it to squeeze inventories to a few days, compared to a month-plus for its competitors. As a result, Dell claims an extra five points of margin and a significant advantage in cash collection time—enviable cushions in tough times. Nokia, Wal-Mart, and others have achieved similar "ahead of the pack" performance in their respective industries.

What can companies learn from these leaders? Survey results and observations of the practices of highly effective

Best-in-class companies are good at tailoring their solutions—whether it is by product, by industry, by channel, or by customer.

supply chain practitioners identify seven imperatives for maximizing supply chain performance. These are the lessons from the leaders that can lay the foundation for market success:

1. Hold Off on the IT Briefings

Ever since the heyday of MRP (materials requirements planning) and MRP II (manufacturing resource planning), supply chains have been recognized for their profit impact, particularly in manufacturing and retail sectors. Software vendors have long recognized (and pitched) the profit opportunity, too. The emergence of an entire SCM software industrywith annual revenues of almost \$7 billion this year, growing to \$21 billion by 2005, according to AMR Research—is testimony to the breadth of that opportunity. Major companies have committed tens of millions of dollars to such tools. Factor in the two- or three-times (and greater) multiplier for the investments in implementation, consultancy, and systems integration to customize the software tools, and SCM investments loom large indeed on corporate budgets. SCM expenditures will soon rival those on enterprise resource planning (ERP) systems; already they account for more than one of every 10 dollars spent on information technology.

Unfortunately, returns on software investments have been elusive. Software projects are notoriously prone to shutdown, and several household-name companies have aborted costly SCM initiatives. Too many companies see salvation in technology when the problems are more operational than technical. On more than one occasion, Bain consultants hired for supply chain initiatives have found that senior managers start with this question: "What software should we use to match the world-class players?" That is the wrong opening question. And it is especially irrelevant if, as in one real-life situation, the sales forecast is off by 50 percent, suppliers are late 40 percent of the time, and inventory reports are only 90 percent accurate.

It is far better to focus on operating improvements and vendor restructuring, and to defer the decisions about IT spending until key strategy elements are in place. According to a Michigan State University study, three of the top four drivers of supply chain excellence are related not to technology, but to alignment of organization and to performance measurement—key factors brought out in Bain's study, too. (For more on this, see the discussion below on replacing rules of thumb with metrics.)

2. Straighten Out the Strategy First

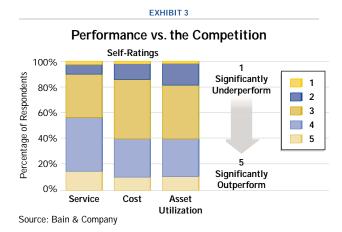
Simply put, strategy means figuring which cost and process improvements can drive real advantage, which service enhancements customers will value, and how to hook the company's operations into those of suppliers and cus-

> tomers so the whole chain is competitive. As an example: If parts availability is an important component of customer service for your industry, then it is appropriate to aim the main elements of your SCM initiative at your parts logistics operation.

Yet strategy appears to be an afterthought for many supply chain managers; at best, it is a work in progress. According to a survey by The Compass and Cranfield School of Management, less than half (45 percent) of the managers queried said they had "most elements" of a supply chain strategy.

Of more concern is a survey finding that betrays managers' attitudes. The Bain survey found that many managers thought their organizations were doing a great job with their supply chains. Asked to compare their companies' performance levels with those of their competitors, more than 40 percent of those polled felt they were outperforming in terms of service, cost, and asset utilization. (See Exhibit 3.) Contrast that to data from independent research showing how far most companies trail the performance of industry leaders. Optimism is usually a primary virtue. But in this case, it is insidious because it helps obscure some tough truths about supply chain performance.

Inherent in matching supply chain activity effectively to strategy is a clear understanding of the business's characteris-



tics. The supply chain masters also focus on what is important in their sectors. For example, many technology companies have as their main objectives minimizing their products' life cycles and delivering products matching their clients' specifications in the shortest possible time. With pressure to move product quickly and keep inventories low, visibility back up the chain to tier one, two, and three suppliers is paramount. Say your business manufactures high-end computer workstations; a shortage of tantalum capacitors two steps upstream will quickly remind you of the need for better upstream supply visibility when it causes shortages of video cards and shipping delays.

Automotive manufacturers are increasingly looking like high-tech companies in their focus back up the supply chain. Bain's work with clients in this sector has shown that reengineering of the inbound supply chain to maximize total value (a step beyond the strategic vendor sourcing that most automotive manufacturers have already begun) has the potential to net auto manufacturers further savings of close to 8 percent.

Retailers, following the example set by Wal-Mart, also work toward increasing their control over inbound product. Through freight-collect deliveries, retailers can control the freight pipeline and exert more control over product availability, thereby improving performance in a key area of their business. But beyond managing inbound products, retailers are increasingly discovering leverage in managing downstream by controlling shelf space allocations and pricing. Analytic tools now becoming available allow retailers to match floor space to demand, putting more of the fast-moving product inventory out where customers can buy it and diminishing the need to replenish shelves during the day. By tweaking the timing of discounts, they can drive sell-through before products become obsolete and avoid the pain and cost of reverse logistics for taking unsold products out of the store. Analysis of one client's operations showed an opportunity to decrease inventory by more than 20 percent and save on store replenishment labor, while simultaneously improving in-stock shelf position by up to 10 percent. Wal-Mart's efforts along the same lines have been rewarded with sales that have increased 2.5 times faster than inventories in the last five years, resulting in a significant gain in profitability. With analysis, in some cases, you can have it all!

For their part, consumer goods producers and distributors are trying to substitute information for physical goods by setting up joint planning and replenishment systems with their downstream customers. By some estimates, the cost of excess inventory in stores, driven by "silo" planning and misaligned trade promotions, amounts to more than 25 percent of annual sales. Leading consumer products companies are focusing on simplifying the task of managing their supply chain by dampening self-inflicted demand swings driven by their own discounting and promotion habits. Consider a related example of supply chain simplification from another industry: Cell-phone maker Nokia keeps things basic with product designs that share parts and make vendors' jobs easier. Such decisions are



Source: Bain & Company

embedded deep in the strategic fabric of the company; no software package can substitute for such foresight.

3. Replace Rules of Thumb With Metrics

Bain's survey confirmed that many companies were flying blind when it came to their supply chain activities. As shown in Exhibit 4, only 25 percent of managers have what they would describe as full information on their supply chains; fully 44 percent of respondents admit to having little or only basic data. The numbers are disappointing, especially given the spotlight, over at least two decades, on the value of highly quantitative business tools.

Supply chain management is largely an engineering problem. The supply chain cannot be run well by gut feel. Yet many companies still use rules of thumb to set inventory targets. They don't track forecast accuracy or vendor performance, or they track it using multiple conflicting measures, none of which are communicated to senior management. They don't know how much of their products would sell at a certain price nor what they've sold at different prices, so they leave money on the table—or overpriced goods on shelves. In short, they are ignorant about how much their supply chain inefficiencies really cost. In this case, no news is definitely not good news.

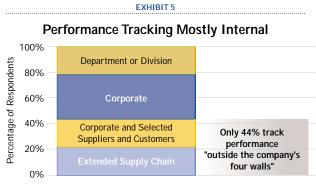
With regard to metrics, what elements distinguish the supply chain leaders? Consider the following.

Math and history rule. If nobody is bringing math and history to bear on supply management, there's probably trouble ahead. The following example underscores the point. A hightech company we worked with used forward coverage rules of thumb to determine how much safety stock it should carry in its distribution centers. These simple rules ignored variation across products in both forecast accuracy and carrying costs—two key inputs to determine optimal safety-stock levels. The impact, at first believed to be minor, turned out to be about 12 percent excess inventory! Further damage came from understocks of popular items, which drained sales at the same time inventory costs were mounting. And most perversely, the lack of analytically set inventory meant that the company's new efforts to forecast better and manage suppliers would have no impact on inventory plans. Fortunately, a quick (60-day) change to more contemporary statistical planning tools enabled the retailer to get things running properly.

Measurements cover the whole chain. Bain's survey found that where supply chain metrics were in place, the bias was toward internal measurements rather than those that measured the entire supply chain, as Exhibit 5 shows. Yet often it is the performance of partners outside the company that really affects performance.

After examining vendor delivery performance, a retail client recently discovered that poor vendor performance was forcing it to hold \$200+ million in safety stock. The inventory was required to maintain adequate in-stock levels given the uncertain timing of delivery. Once the company realized the magnitude of the opportunity, it began to track vendor deliveries rigorously and developed a program to charge vendors back for poor performance. Not surprisingly, vendor performance has improved and inventories are coming down.

Inputs matter, too. Companies often spend significant time managing forecast outputs while ignoring the inputs that drive the forecasts. One company we examined adjusted almost 50 percent of its forecasts. This was necessary because the inputs to its forecasting models were not managed to reflect product life cycle and promotional impacts accurately. The result was a process with few controls, where



Source: Bain & Company

as many as five stakeholders could adjust a given forecast. Because so many forecasts were adjusted, it was impossible to manage and improve the underlying forecasting models and inputs. The remedy to this problem was twofold. First, a set of controls was put in place to limit the adjustments that could be made to the forecasts. This forced the buyers and stakeholders to manage the forecast inputs vs. the outputs. Second, the company focused on improving forecasts for its most important items. As in most businesses, 20 percent of the items were driving 80 percent of the sales and inventory. By focusing on these items, managers were able to free up time to get the forecasts correct. The result: a 25-percent improvement in forecast accuracy within three months.

One metric does not fit all. Cross-functional, process-oriented metrics like flawless order rate are popular topics in today's supply chain publications. But one metric does not fit all. The best companies build a suite of metrics for the relevant business context. One of our clients, a large national retailer, had succeeded for years using just one focal supply chain metric: the out-of-stock rate. However, with increased rates of competition and innovation (and thus, faster obsolescence), the retailer had stumbled relative to other players. A review of the business showed that inventory turns, vendor performance, forecast accuracy, and cash conversion cycle had become just as important in the new context. Not surprisingly, within months of starting to track these new metrics, the organization and its vendors responded to the increased attention, enabling a \$125 million reduction in inventories.

At industry leading companies, senior executives tend to concentrate on a limited set (three to five) of overriding strategic metrics and then break those down into specific operational metrics for the various functional areas. At Cisco Systems, enterprisewide targets like customer satisfaction are broken down into operational drivers, such as on-time deliveries and defect rates, at each level and activity throughout the company and its external partners.

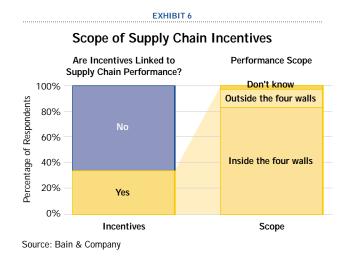
So when companies do measure, what do they measure? Bain found that on-time delivery was tracked by 85 percent of respondents—the highest rate out of the 15 metrics considered. Three-quarters followed logistics and distribution costs, and 53 percent logged fixed asset turns. Cash-to-cash cycle time, the least-measured performance indicator, was charted by only 39 percent of supply chain managers. The low percentage of people tracking this critical driver of return on invested capital simply emphasizes the dearth of effective measurement in general.

4. Build an Organization of A-Players

It seems intuitive: To get world-class results from the supply chain, you should allocate your top talent there—individuals who can craft better forecasts, develop superior vendor strategies, and execute better than most. A global supply chain director at Cisco Systems explains it well: "By putting our best talent into supply chain leadership, we get the best results. In turn, our strong performance attracts the best candidates in the industry." Despite the obvious wisdom of this approach, we have found it is far more common for companies to underinvest in the supply chain organization. Building an effective organization requires three things:

Individual talent levels. The simple truth is that the supply chain has not been viewed as a glamorous area for the organization's best people. Instead, those stars were managed into customer-facing positions. In too many companies, "supply chain" has been synonymous with "transportation" or "logistics," and the goal has been minimizing freight and handling costs. In one example—a manufacturer of cell phones, which have a design life of just nine months—this interpretation of the role prevailed with alarming consequences. Product was held in inventory until demand was sufficient to justify a truckload shipment—at a savings of a few cents per phone in shipping but lost market value as high as 20 percent.

Top-performing companies are clear about the potential impact of their supply chain organization. Take the case of a



major electronic-equipment supplier that recently identified almost \$500 million of inventory that could be eliminated through a concerted focus on planning effectiveness, relentless measurement and goal setting, and superior vendor management. With inventory carrying costs of almost 50 percent per year, the "stars" in this area have found the potential to add \$250 million to the bottom line—annually! In a 10-percent net margin business, that's like boosting annual revenue by \$2.5 billion. Unfortunately, the logic runs in reverse too, and weak performers can allow hundreds of millions of dollars in earnings to leak away through excessive inventory and poor service levels.

Executive-level leadership. Many senior managers wrongly expect the supply chain to perform well while organizational responsibility is fragmented and uncoordinated. Interviews and maps of organization charts show that the best companies hold an executive accountable for the results and practices of the entire supply chain. Typically this is a CEO direct report. This executive is charged with developing endto-end strategy, structure, metrics, incentives, and processes. The capable executive does not necessarily oversee day-today operations but, without exception, enjoys the seniority, visibility, and responsibility to align and coordinate internal and external supply chain activity.

Cross-functional alignment. The best supply chain practitioners see the job as far bigger than the sum of the supply chain staff's skills. They work to align many departments finance and marketing included. Cisco structures (and restructures) its organization around market requirements, not siloed functions. The approach creates end-to-end transparency across different activities and aligns the company with its most important performance drivers. At one leading electronics retailer, however, a strictly functional organization achieves high performance. At lower levels, the retailer's line managers interact daily or weekly across logistics, merchandising, and other functional silos. At higher levels, senior managers regularly meet in cross-functional committees for strategic planning. As these contrasting examples show, the specifics of structure matter less than an overall focus on cross-functional collaboration. In both situations, the electronics retailer and Cisco have intentionally designed and enabled cross-functional collaboration, which has helped to separate them from average performers in their industries.

5. Align Incentives With Superior Performance

A not-so-surprising fact of life is that people tend to do what they are paid to do. Yet in Bain's survey of 300 companies, barely 25 percent of supply chain managers linked incentives to supply chain performance. Of those, virtually all used only a few measures of performance, all of them inside the four walls of the company. (See Exhibit 6.) Furthermore, Bain's consultants often find that the wrong goals are in place. We have regularly met buyers who receive incentives to manage stockouts, but not inventory turns; transportation managers measured on trucking costs, but not on-time performance; even senior supply chain executives with no incentives against return on assets or cash conversion cycle. Pay is not a substitute for clear metrics and goals. But the right pay structure can reinforce goals, and a wrong one can confuse people trying to do the right thing.

Obviously, motivating people with pay for performance depends on their knowing what performance is. If the numbers are unreliable or late, or if they fail to draw attention to critical patterns or variances, they lose effectiveness as behavioral drivers and analytical tools. A major electronics retailer that Bain has worked with uses third-party auditing and posts results electronically for affected parties to review in real time. Performance evaluators also do root-cause analysis on all underperforming metrics, rather than immediately attributing problems to the closest source. The upshot is that employees make decisions that serve the entire system, rather than choosing gaming actions that benefit one particular function or link in the supply chain.

Incentive programs that yield the best results tend to be tailored to the circumstance. Levers to pull include the size of the payout, weighting of different drivers, the balance of the reward currency (for example, cash vs. equity, nondeferred vs. deferred compensation), and organizational depth of application. In all cases, a constructive incentive system must be simple to understand and predict, difficult to game, and easy to administer.

For senior executives, incentives need to be weighted toward enterprisewide supply chain metrics. At the line management level, individual results become more important, but rewards for cross-functional collaboration should also be significant. For example, one business we know rewards its logistics department for serving merchandising well. And at Cisco Systems, a high proportion of employees have incentives related to customer satisfaction. Ideally, incentives will apply outside the company as well. Many high-performing companies compensate customer-, supplier-, and partner-facing activities based on the success or failure of external parties. That raises the next point: working outside the four walls.

6. Work the Chain Beyond Your Four Walls

Bain's study reveals that most businesses take an introverted approach to their supply chain activities.³ Almost 80 percent of companies' efforts have been focused inside their own four walls, and only 15 percent of supply chain initiatives have an end-to-end "network" reach. Although respondents project some improvement going forward, current plans still leave a huge gap. (See Exhibit 7.) Of the three vertical industry sectors we surveyed (retail, manufacturing, and technology), none had impressive levels of data sharing across the extended supply chain. Indeed, more than half failed to collaborate outside the company on critical areas such as demand and production planning. How can a supplier fine-tune its production schedules for the customer's benefit if the customer won't share details on its own forecasts?



The best performers have already linked their operations with those of their customers, suppliers, and third-party logistics providers. Supply chain leaders such as Ford Motor Co. see beyond the supply chain to a supply network or "ecosystem" in which the actions of each member have a direct bearing on every other member. A third-party provider of customs-clearance services might not seem to enjoy the same status as a vendor of a critical component, but consider its significance if a just-in-time delivery is held up.

Like Ford, Dell has used supply chain interdependence to outrun competitors. The PC maker's transparent supply chain—extending forward to customers—enabled it to react rapidly to a sudden surge in orders for two-gigabyte disk drives. Dell switched immediately from the one-gigabyte drives it had been buying. Meanwhile, the disk-drive supplier offered a hefty discount on the surplus one-gigabyte drives to a Dell competitor that used conventional six-week demand forecasts. By the time the rival got its products to market, nobody wanted one-gigabyte drives. As a result, the competitor lost market share and had to take a sizeable write-off.

It is critical to look in both directions along the chain. During the early 1990s, Chrysler took the lead among domestic automakers with its "extended enterprise" approach to external collaboration that went as deep as tier four suppliers. Through a transformation of intercompany organization, metrics, and incentive practices, the manufacturer cut product development time and costs by one-third, eventually reporting \$1.7 billion in supplier-initiated savings and an 8.4-times growth in profit per vehicle.

Although it is difficult to change, introverted supply chain behavior is easy to diagnose. Though many businesses may acknowledge that forecast and sales data can be even more valuable when they are actively shared with supply chain partners, cultural barriers and legacy business processes often get in the way of open communications. Who will disclose data without a guarantee of confidentiality and reciprocity? Lack of trust may prevent supply chain partners from sharing information regarded as too sensitive.⁴

Even when many of the trust issues have been addressed, communication quality can hurt supply chain efficiency. Poor communication can stem from an inefficient communication infrastructure or from incompatible information systems. The best performers take care to attend to and upgrade communication quality. And they build in incentive systems. One major electronics manufacturer, for example, allocates greater quantities of scarce product to those channel partners that share timely sales and forecast data. This is particularly important in the case of product promotions, where the channel requests significantly higher orders than usual over a short period of time.

For the supply chain to become a competitive supply network, companies must choose the most effective partners, provide maximum transparency of information, and impose minimum performance levels on network members. The result will be a network that is reliable, reactive, and costeffective. Such a network's faster and more efficient service will provide customers with added value. At the same time, it will reduce both order and stock processing costs while alleviating cash flow problems by speeding up receipts. These gains add up to extra profitability, either through a price premium, if justified and accepted by the customer, or through a reduction in unit price, which generates additional sales volume. Such a network will also build a strong competitive advantage by leveraging the strengths of each individual company, its highly integrated information systems, and the existence of customized business processes and governance rules between partners.

7. Offer a Range of Solutions

We have observed that best-in-class companies are good at tailoring their solutions, whether it is by product, by industry, by channel, or by customer. Conversely, a clear sign that a supply chain is flawed is when everything flows through it the same way—all vendors deliver on the same terms, every item is stocked in every distribution center, transportation modes are the same for all products, and so on.

Excellent supply chain management means running multiple supply chains in parallel. For example, Wal-Mart uses direct store deliveries for products with rapid obsolescence and time-to-market pressure, but it puts other products through traditional distribution centers when velocity matters less than cost. Dell manages different customer segments differently. The computer maker is willing to compromise its build-to-order approach and carry inventory of prebuilt machines (for a fee) to enable on-a-dime shipments to customers who value speed over cost.

When applied globally, however, a customized approach to business processes has limitations. Experienced supply chain practitioners tend to build one unified global operation—not a collection of regional ones—because those worldwide supply chain organizations run smoothly only when procedures, costs, and quality metrics are standardized. The need for consistency and accountability across geographies and cultures is one reason many of the best supply chain managers turn to global third-party providers. The third party plays the role of prime contractor in assembling a global network, relieving companies of the burden of managing a number of regional providers.

Back to Basics

What hope is there that supply chain practice will improve?

For a start, all of the companies in the Bain survey said they intended to increase their external supply chain activity over the next two years. But that's only a start. Many other companies can expect inventory or supplier trouble as performance pressures grow and software becomes more complex. The results of the Bain study demonstrate that the quest for supply chain advantage is more of a long-distance relay than a sprint, and the leading performers of tomorrow are treating it that way with patient and strategic approaches. But the businesses that reflexively commit to technology purchases before they've developed holistic strategies for managing their supply chain networks cannot expect to step up to the winners' podium any time soon.

Managers would do better to focus on basic issues around organization, performance management, and partner coordination—and get those right first.

Footnotes

¹Performance Measurement Group's 1999-2000 Supply Chain Management Benchmarking Series.

²Study by Vinod Singhal, associate professor of operations management at Georgia Institute of Technology, and Kevin Hendricks, associate professor of operations management at the University of Western Ontario, cited in *Industry Week*, Dec. 27, 2000.

³Philippe Hauguel and Nick Jackson, "Outward-Looking Supply Chain Strategy," *European Business Forum*, September 2001.

⁴J.L. Mariotti, "The Trust Factor in Supply Chain Management," Supply Chain Management Review, Spring 1999, 70-77.