



# Delivering Fulfillment Excellence:

A Global Survey on Fulfillment Trends and Performance

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# Introduction



In late 2003, as part of a company-wide research program, Accenture released a seminal report entitled “Connecting with the Bottom Line: A Global Study of Supply Chain Leadership and Its Contribution to the High-Performance Business.” Foremost among its insights, the report established an empirical connection between companies’ supply chain performance and their ability to increase market capitalization. Accenture also provided evidence that, by transforming their supply chain operations, aggressive, innovative companies can catch up with—and even outpace—traditional supply chain leaders that do not continually improve their capabilities.

Armed with real evidence about the scope, value and impact of superior supply chain performance, Accenture launched several subsequent studies, geared to examining how key components of the supply chain contribute to overall business performance, and what progress companies are (or are

not) making. One such study—the subject of this document—is fulfillment: a term defined simply as “completion of a sales order” or as elaborately as “a process that supplies a product directly from a manufacturing facility to a distributor or end user. The fulfillment cycle may include receiving customer orders, configuring the products to order, shipping and invoicing products to distribution outlets or end users around the world.”

In one sense, fulfillment is an old-school discipline—a logistics cornerstone. However, many companies are using fulfillment to help enhance their performance in the marketplace. They realize that technology breakthroughs and an increasingly global buying environment have changed the competitive landscape. And they are responding with timely new operating models that help forge market dominance and grow profits by leveraging capabilities such as fulfillment. This report examines the successes, challenges and aspirations associated with fulfillment leadership.

Fulfillment costs are stable and product availability is up! Over the last three years, however, inventory turns have fallen sharply, particularly in the Retail and Food & Consumer Products industries. Survey respondents concur that more inter-enterprise collaboration is needed to improve fulfillment performance. But innovative technology and an unshakeable commitment to organizational change are needed to make that happen.

# Key Findings



**In the past three years, most surveyed companies boosted product availability without increasing fulfillment costs. The sticking point was inventory turns.**

Respondents concur that greater levels of inter-enterprise collaboration are needed to raise turns without compromising availability or hiking up costs. In fact, there is strong evidence that collaboration is the single best way to concurrently increase performance along all three fronts: raising availability and holding the line on costs without suffering a drop in inventory turns. Unfortunately, most companies do not appear ready to make collaboration happen: Integration of processes and technologies is sporadic, and organizational barriers are common. In effect, culture and structure often frustrate companies' collaborative intentions.

Beyond collaboration, most respondents feel that optimizing global inbound performance (the receipt and management

of incoming products, components and materials) is their principal priority, and that leading-edge transportation management systems & telematics (embedded, interactive intelligence) are the tools that will help them achieve it.

## Fulfillment Leaders Optimize Conflicting Priorities

Survey respondents (most of whom are European senior executives) know that, to contribute fully to a company's business mission, fulfillment operations must engender superior service. Accordingly, their top fulfillment priority is "ensuring consistent delivery accuracy to customers." In effect, this is an operational excellence issue: delivering the quality of service the customer needs.

Respondents' second-most-important priority—"improving product availability to customers"—can be thought of primarily

as a business-development concern: maximizing income by ensuring that all items are available at the time the customer orders them. Put another way, delivery accuracy optimizes service, while product availability maximizes revenue.

Nearly tied with "improving product availability" was "reducing working capital by reducing inventories." As an obvious cost-management issue, this objective rounds out a trio of priorities: Survey respondents seek to optimize their fulfillment processes by . . .

- Enhancing service (top priority).
- Growing revenue (second priority).
- Containing costs (third priority).

Consistent with their stated priorities, respondents in all surveyed industries have enhanced product availability during the previous two years. However, as noted above, these improvements often inflated inventories and slowed inventory turns—particularly in the Retail and Food & Consumer Products sectors.



Some respondents noted that higher inventories and lower turns are a near-inevitable result of improvements in availability. But Accenture's position is that the reality is not so simple. For example, supply-chain-integration efforts and additional collaboration with suppliers and external business partners often make it possible for companies to improve availability without harming turns or inflating inventories. It also could be reasoned that more inventory and fewer turns are common consequences of a lackluster economy which, in turn, has kept companies from pursuing initiatives that might improve overall supply chain effectiveness.

## The Gap Between Leaders and the Rest is Closing

Another key finding is that, in most industries, leaders have been unable to maintain their lead in terms of fulfillment costs, when compared to the rest of the survey population. As a result the gap separating them from others is narrowing.

This finding is extremely consistent with those described in "Connecting with the Bottom Line: A Global Study of Supply Chain Leadership and Its Contribution to the High-Performance Business." According to both surveys, companies that recently improved their fulfillment (or overall supply chain) performance showed stronger market results than companies that have traditionally been strong in fulfillment (or overall supply chain) operations.

## Collaboration is the Key to Fulfillment Excellence

"Collaboration with multiple partners"—another critical fulfillment issue—is viewed by respondents as their greatest challenge and a significant opportunity.

Unfortunately, the one-to-three-year plans developed by respondents generally fail to address collaboration. Often, the operational sophistication needed to manage collaborative practices is low. In fact, "global inbound solutions" is the only challenge identified by respondents that is well represented on their companies' agendas. Admittedly, the last few years have been tough, and many companies have simply been trying to stay afloat. But with the recession waning, markets are growing and growth-focused ideas that may have been put on the back burner (e.g., collaboration) are being revived. In net, the next wave of aggressive "supply chain transformation" could be at hand. And Accenture believes that collaboration-focused fulfillment will be a key contributor.

# Survey Demographics



Documenting fulfillment's performance trends and its potential to enhance business performance was the mission of this study. In early 2004, Accenture circulated a Web survey to senior executives throughout Europe and North America. The focus of the inquiry was to:

- Understand how companies in various industries leverage fulfillment to improve near- and longer-term business performance.
- Report on respondents' fulfillment objectives and organizational levers.
- Benchmark recent economical and business performance.
- Describe respondents' fulfillment challenges, opportunities and priorities over the next few years.

Web-based questionnaires garnered feedback from 184 executives in 31 countries. Two-thirds of responses came from Europe, 20 percent from the United States and Canada, and the remainder from Asia and the Pacific Rim. Representation from Europe included the United Kingdom (17 percent); Germany/Austria/Switzerland (15 percent); Spain (13 percent); Italy (6 percent); Belgium/Netherlands (5 percent); and France (4 percent).

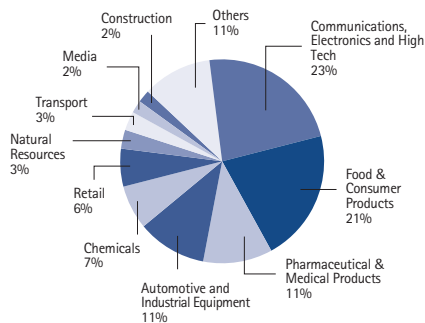


Figure 1: Respondents represent most major industries—particularly those sectors that move physical product.

As shown in Figure 1, a meaningful percentage of respondents was drawn from a variety of major industries—particularly from those sectors that move physical product.

In addition, most of the respondents have global or regional operations, thus increasing the validity of comments and observations relating to worldwide sourcing and international coordination among divisions and business partners (Figure 2).

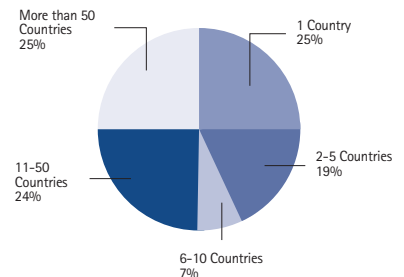


Figure 2: Most of the respondents have global or regional operations.

# Fulfillment Priorities



Fulfillment of customer demand is a critical value driver of any organization, given its ability to affect customer service and drive benefits in operating cost, working capital and revenue generation. As shown in Figure 3, fulfillment costs represent nearly 10 percent of a typical company's sales, so even minimal performance improvements often result in significant bottom-line savings. Fulfillment's value also can be demonstrated in reverse: Studies have shown that poor fulfillment processes can rapidly destroy shareholder value. After all, the fulfillment process is the last thing a customer remembers about a company—good or bad.

North American and European marketplaces are slowly emerging from their economic doldrums. But a lot of catching up is needed in fulfillment. Because of tight budgets, for example, few companies have been investing in fulfillment-related improvements or the collaborative relationships that increase global fulfillment effectiveness. At the same time, the nature of fulfillment is changing rapidly: new

	% of Sales	% of Fulfillment Costs
Transportation	4.36%	47.7%
Distribution	2.40%	26.3%
Inventory Carrying	1.47%	16.1%
Order Entry/Customer Service	0.55%	6.0%
Administration	0.36%	3.9%
<b>Total</b>	<b>9.14%</b>	<b>100%</b>

Figure 3: Overall fulfillment costs for an average company.<sup>(1)</sup>

(1) Source: Establish, Inc. / Herbert W. Davis and Company and Accenture analysis 2001

challenges, different competitors and evolving technologies mean that time-honored solutions may be less effective for a fulfillment environment in which:

- The need for speed, flexibility and responsiveness is increasingly important.
- Business models, processes and customer needs change regularly, and

fulfillment capabilities must be "dynamically customizable."

- Outsourcing continues to increase the need for multi-enterprise process management.
- Mergers and acquisitions require organizations to rapidly integrate fulfillment capabilities, and demonstrate substantial cost savings in the process.

- Companies are working with more supply chain partners.
- Forecasts are still approximate. However, forecasts' impact on business performance is more dramatic, which increases the need for companies to execute in near-real-time as things change.

Mindful of their economic realities and constraints—but more concerned about customer relationships—survey respondents identified “ensuring consistent delivery accuracy to customers” as their top fulfillment priority (Figure 4). In effect, this is an operational excellence issue: delivering the quality of service the customer needs. Respondents' second-most-important priority—“improving product availability to customers”—can be thought of primarily as a business-development concern: maximizing income by ensuring that all items are available at the time the customer orders them.

Basically, delivery accuracy optimizes service, while product availability maximizes revenue.

Following close behind “improving product availability” is “reducing working capital by reducing inventories.” Combined with the fourth priority (“reducing onshore

supply chain costs”), we see that respondents have established a clear hierarchy of fulfillment objectives:

- Enhance service (top priority).
- Grow revenue (second priority).
- Contain costs (third priority).

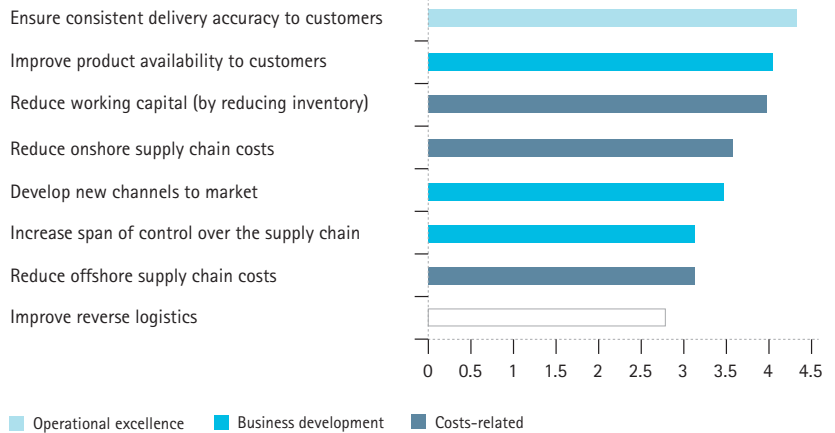


Figure 4: Survey recipients were asked to identify their top five fulfillment priorities. 5.0 is the highest score possible.



Looking at a breakout of responses, we see that fulfillment priorities are often industry dependent (Figure 5). In Chemicals, for example, the nature of the business relationship is predominantly business to business, and thus is often affected by commoditization. Take procurement, where more and more buyers are using Internet purchasing and electronic auctions to drive down pricing. The results are a marked focus on reducing costs, such as those associated with carrying excess inventory.

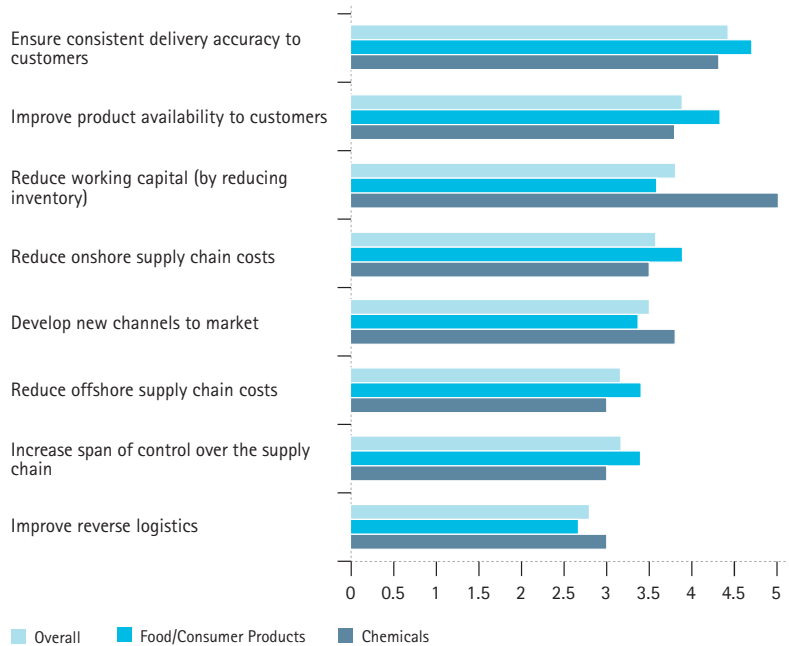


Figure 5: With respect to fulfillment objectives, the Chemicals and Food & Consumer Products industries differ most significantly from the survey composite.

Alternatively, industries that focus on brand (typically those with a consumer bent) may be less intent on reducing cost than they are on improving availability. In Retail, for example, the name of the game is shelf space. For Food & Consumer Products manufacturers service and availability also rule, since shoppers (who generally are more fickle than business customers) are easily lured away. When they switch, they often stay switched.

Another interesting indicator of fulfillment priorities can be found in the boardroom. Accenture has observed that the position of supply chain decision makers in the enterprise hierarchy is directly related to the impact of supply chain operations on the overall profitability of the enterprise. This is particularly noticeable for Retail (Figure 6), an industry whose companies often excel in supply chain performance.

At the other end of the spectrum, sectors with long product-development lead times and/or significant investments in process plants generally focus on other areas. The Pharmaceuticals & Medical Products and

Chemicals industries are good examples. For them, bringing supply chain issues up to the board level may be less of a priority when the overriding emphasis is on managing/controlling supply chain costs.

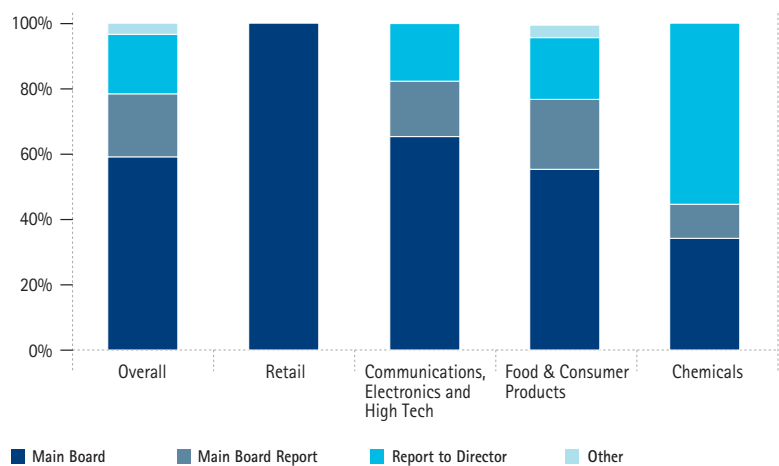


Figure 6: Supply chain decision makers are present on the board of 60 percent of responding companies. In this context, Retail emerges as one of the more advanced supply chain management practitioners. At the other extreme, supply chain board-level representation in the Chemicals and Pharma/Medical Products industries lags behind.

# Fulfillment Performance: Costs, Inventory Turns and Availability



	Cost as % of Sales	Inventory Turns	Product Availability
Automotive & Indust. Equipment	Dark Blue	Dark Blue	Light Blue
Chemicals	Light Blue	Light Blue	Light Blue
Communications, Electronics & High Tech	Light Blue	Light Blue	Light Blue
Food & Consumer Products	Dark Blue	Dark Blue	Light Blue
Pharmaceutical & Medical Products	Light Blue	Light Blue	Dark Blue
Retail	Dark Blue	Dark Blue	Light Blue
Overall	Dark Blue	Dark Blue	Light Blue

Cost as % of Sales	0% to -0.5%	-0.5% to -1%	> -1%
Turns	-10% to -20%	0% to -10%	Stable
Availability	Down	Stable	Up 0% to 2%

Figure 7: Surveyed companies have made significant improvements in product availability—more so than they have in lowering costs or reducing working capital.

Despite the many variations in fulfillment priorities, all sectors have made some improvements in product availability—more than in lowering costs or reducing working capital. According to the Accenture survey:

- Between 2001 and 2003, global costs remained more or less stable as a percent of sales.
- Inventory turns remained steady in 2002 and dropped in 2003.
- Product availability improved consistently throughout 2002 and 2003.
- Cost and inventory performance varied dramatically across industries.

As shown in Figure 7, Retail again is a good indicator. Perpetually seeking greater on-shelf availability, this sector has subsequently been burdened by higher inventory levels and increased costs. Some of these concerns have been successfully passed on to vendor industries. Increasingly, this is the nature of the business beast: downstream squeezes upstream.

Nevertheless, Retail is the only industry that reported increased costs as a percent of sales between 2001 and 2003. Chemicals made the greatest strides in cost reduction (consistent with respondents' priorities noted earlier), while Pharmaceutical & Medical Products and Communications, Electronics & High Tech did the best job of increasing inventory turns.

All in all, the Food & Consumer Products sector would appear to have the most lackluster fulfillment performance: minor gains in availability; small successes in cost-containment; and a 26 percent drop in inventory turns. To an extent, Food & Consumer Products is a more dramatic mirror image of its downstream partner, Retail. Its problems are also evidence of 1) a poor economy and 2) retailers' success

at pushing their inventory problems back on suppliers.

Industry specifics aside, Accenture can point to two largely unavoidable conclusions:

1. Market- and fulfillment leaders will be those that figure out how to make simultaneous improvements in cost, availability and inventory turns. The rest will continue sacrificing one metric in order to demonstrate improvement in the others.
2. Greater levels of inter-enterprise collaboration are the single best way to raise turns without compromising availability or hiking up costs.

## Calculating Costs

Between 2001 and 2003, supply chain costs for all survey respondents decreased slowly but steadily: from 10.2 percent to 9.8 percent of sales (Figure 8). This gradual decrease applies to all industries, with the exception of Retail, whose costs rose.

Retail (the red trend line in Figure 8) showcases the negative impact that achieving higher availability may have. In some cases, the reason for this "higher-availability/higher-cost" paradigm is limited collaboration among enterprises and insufficient supply chain integration between suppliers and their retail customers. However, it also is possible that safety stocks are being used more frequently to hit availability targets, which reduces inventory turns. Another reason for retailers' cost woes could be increased costs to deal with third-party logistics (3PL) services and transportation providers. And in the United Kingdom particularly, "factory gate" delivery costs also have been increasing. Factory gate pricing is defined as retailers collecting products (literally) from the supplier's factory gate.

Between 2001 and 2003, average supply chain costs decreased slowly but steadily—from 10.2 percent to 9.8 percent of sales. The trend applies to all surveyed geographies and industries, with the exception of Retail.

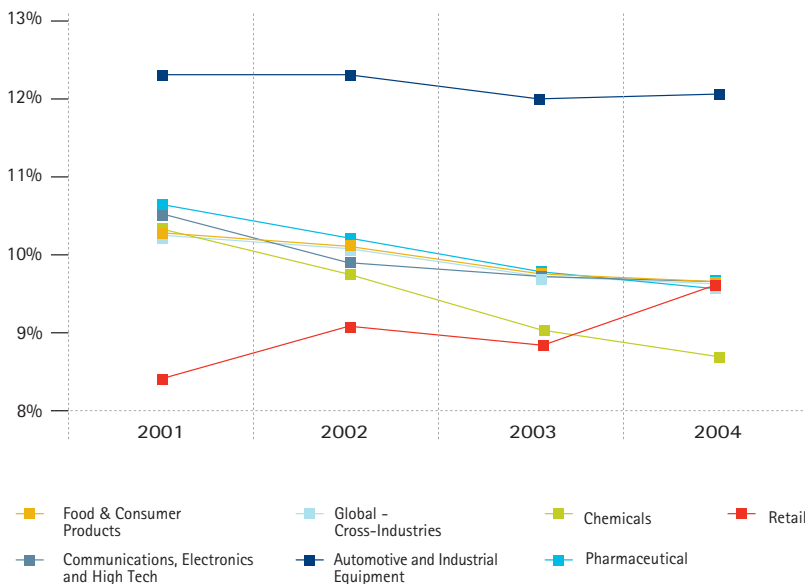


Figure 8: Overall supply chain costs as a percent of sales (by industry).

Taking a different perspective on the same activity, Figure 9 breaks out Europe's supply chain costs in further detail,

showing costs as specific percents of sales. On average, Europe's costs were slightly lower than North America's but, between

2001 and 2003, decreased at about the same rate.

	0 - 2%	3 - 5%	6 - 8%	9 - 11%	12 - 14%	15 - 17%	18 - 20%	≥ 21%
Overall End-to-End Supply Chain (2001)	20%	18%	20%	20%	16%	4%	4%	5%
Overall End-to-End Supply Chain (2002)	11%	16%	27%	16%	18%	4%	4%	4%
Overall End-to-End Supply Chain (2003)	9%	22%	25%	22%	15%	2%	4%	4%
DCs and Outbound Transport (2001)	19%	44%	19%	9%	2%	5%	0%	2%
DCs and Outbound Transport (2002)	21%	45%	16%	9%	2%	4%	2%	2%
DCs and Outbound Transport (2003)	22%	42%	17%	7%	2%	3%	5%	2%
Inbound Transport, Including Internal (2001)	58%	31%	8%	2%	0%	0%	0%	2%
Inbound Transport, Including Internal (2002)	61%	26%	6%	2%	0%	2%	2%	2%
Inbound Transport, Including Internal (2003)	62%	32%	4%	0%	0%	0%	0%	2%

Figure 9: European Supply Chain Costs as a percent of sales—split between inbound transport and delivery centers (DCs) and outbound transport. Looking, for example, at the first row of data, in 2001, 20 percent of respondents stated that their overall end-to-end supply chain costs represented 2 percent or less of sales. In 2003 (according to the next lines), only 9 percent of respondents stated that their overall end-to-end supply chain costs represented 2 percent or less of sales.

Supply chain cost reductions were not the rule across all facets of fulfillment. From 2001 to 2003, inbound costs fell by an average of 0.4 percent (as a percent of sales). But over the same period, distribution center and outbound costs rose by 0.3 percent. On the one hand, the issue could

be increased visibility of (inbound) costs that used to be solely in the supplier domain—and therefore built in to the pricing of the goods. As more and more companies extend their supply chain reach, concepts like factory gate pricing have

significantly changed inbound cost perspectives. On the other hand, it simply may be that opposing forces are exercised slightly differently in inbound versus outbound, and across different industry sectors (Figure 10).

Supply Chain Events Driving Up Costs	Supply Chain Events Driving Down Costs
<ul style="list-style-type: none"> <li>• Rising costs from suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Inventory reductions</li> </ul>
<ul style="list-style-type: none"> <li>• Smaller deliveries</li> </ul>	<ul style="list-style-type: none"> <li>• Increased visibility/collaboration with suppliers</li> </ul>
<ul style="list-style-type: none"> <li>• Increased outsourcing costs</li> </ul>	<ul style="list-style-type: none"> <li>• New information systems and processes</li> </ul>
<ul style="list-style-type: none"> <li>• New product lines</li> </ul>	<ul style="list-style-type: none"> <li>• Inventory outsourcing</li> </ul>
<ul style="list-style-type: none"> <li>• Global sourcing</li> </ul>	<ul style="list-style-type: none"> <li>• Volume consolidation</li> </ul>
<ul style="list-style-type: none"> <li>• Higher fuel costs and security surcharges</li> </ul>	<ul style="list-style-type: none"> <li>• Centralization (flows and processes)</li> </ul>
<ul style="list-style-type: none"> <li>• Product deflation</li> </ul>	<ul style="list-style-type: none"> <li>• New markets</li> </ul>

Figure 10: Supply Chain Cost Drivers.

## Tracking Turns

Inventory turns were stable in 2001 and 2002, but declined in 2003. As we have discussed, much of the decline can be traced to turn-performance problems in the Food & Consumer Products and Retail industries. Intensified Retail competition is a primary reason why turns fell in the Food & Consumer Products sector. In fact, these two sectors degraded similarly, with little of the historically common swapping of inventories. (Figure 11). Without the downstream pressures, many Communications, Electronics and High Tech companies have restructured and outsourced manufacturing to low-cost countries, and thus have been more successful at reducing turns.

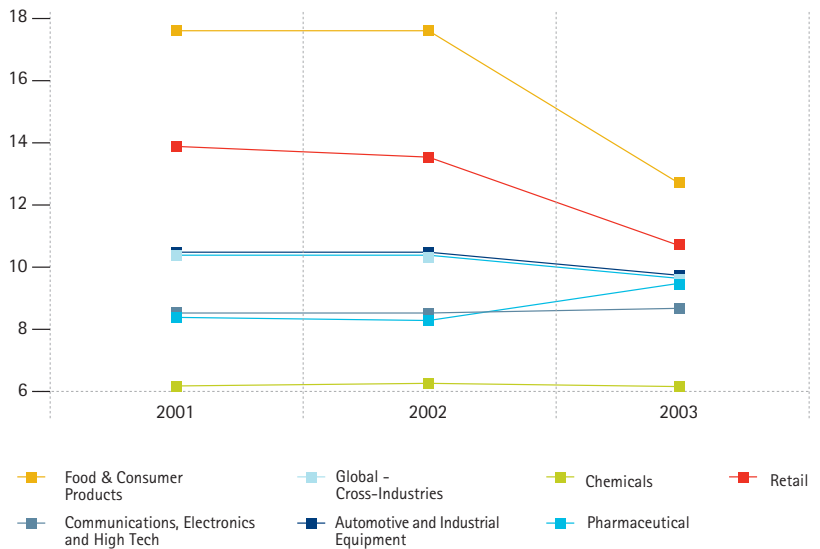


Figure 11: Average inventory turns per industry.

Inventory turns were stable in 2001 and 2002, but declined in 2003. Much of the decline can be traced to turn-performance problems in the Food & Consumer Products and Retail industries.

## Assessing Availability

As noted earlier, cross-industry product availability rose from 87 percent to 90 percent between 2001 and 2003 (Figure 12). More than anything, this reflects a consistently growing emphasis on anticipating and meeting customers' needs—i.e., by having the products and services they need at the time they desire them. This trend is particularly evident in Retail and Chemicals. The latter's increase is typical of commodities businesses, for which maximum availability is needed to ensure consummation of cost-driven purchases. Pharmaceuticals & Medical Products were the only industries that did not report increases in availability.

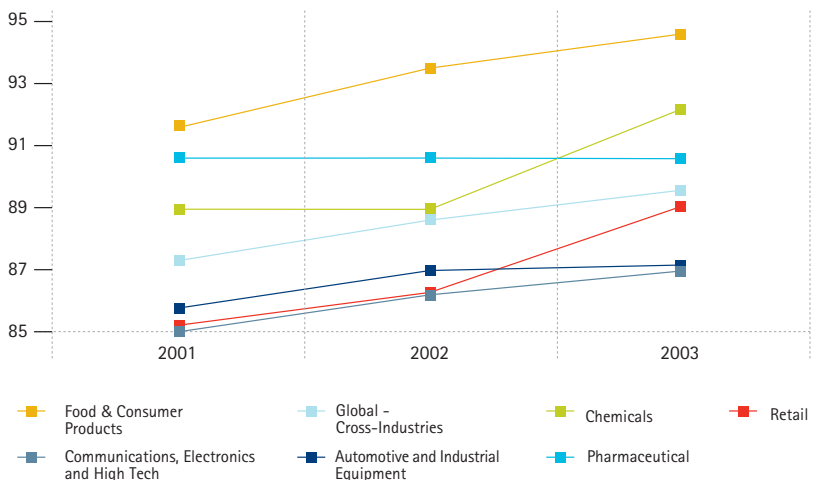


Figure 12: Average product availability per industry.

Product availability rose from 87 percent to 90 percent between 2001 and 2003. Strong improvements were made by the Retail and Chemicals industries. Only Pharmaceuticals & Medical Products reported no increase.

# Industry-Specific Fulfillment Performance



In a majority of industry surveys, overall results reflect the trends that are dominant in most sectors. A few exceptions always exist, but they generally are not dramatic enough to fundamentally change the initiative's basic results. Sometimes, of course, the exceptions are major, and do make a significant difference in the presentation of the aggregated findings. In either case, however, it is important to dissect the findings and investigate the performance of specific industries. Insights at this (vertical) level are more valuable to readers interested in the issues pertaining to their specific business. But they also help us understand the nature and composition of the survey's combined trends. This section examines the cost-, inventory- and availability performance of survey respondents from five industry segments.

In Automotive and Industrial Equipment, minor cost reductions and increases in product availability were offset by a large drop in inventory turns in 2003 (Figure 13). These results are highly reflective of Accenture's survey findings as a whole.

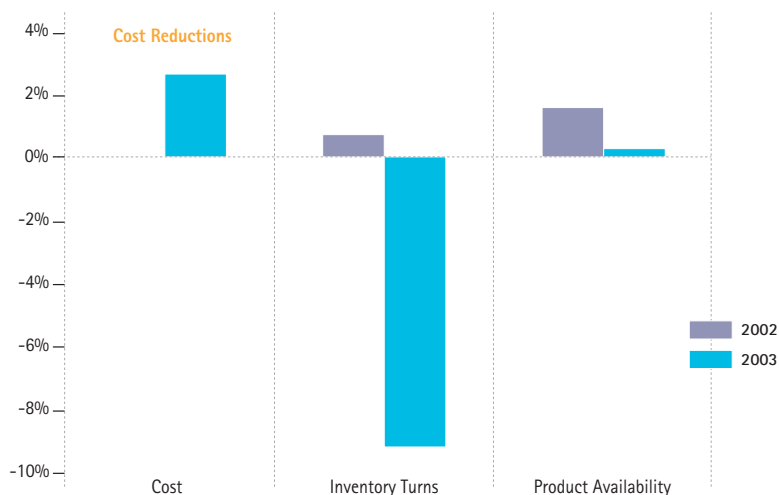


Figure 13: Respondents' fulfillment performance in Automotive and Industrial Equipment. Positive percentages indicate improved performance: reduced costs, increased turns and higher availability.

The Chemicals sector's significant reductions in costs, year on year, are a positive response to commoditization pressures (Figure 14). These reductions (about 7 percent in back-to-back years) were doubly impressive, given that inflation is running at about 2 percent to 3 percent per year. Thus we are actually seeing cost improvements of about 10 percent. However, inventory turns did not improve and are now considered a top priority in this field.

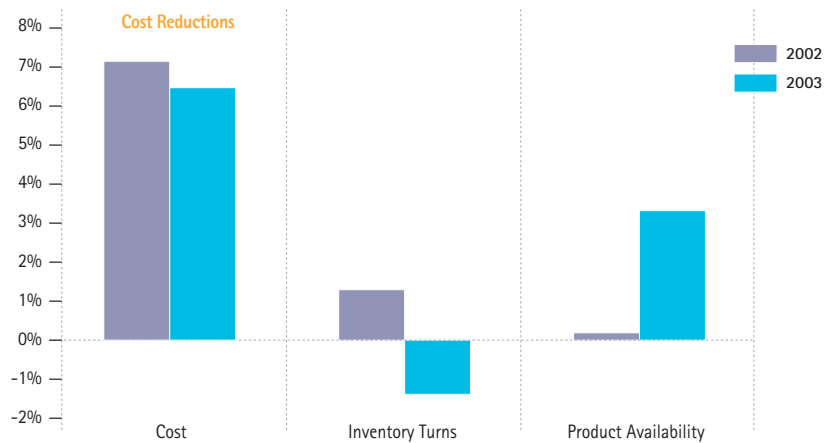


Figure 14: Respondents' fulfillment performance in Chemicals. Positive percentages indicate improved performance: reduced costs, increased turns and higher availability.

**Communications, Electronics & High Tech industries improved in all three segments, despite a largely unfavorable economic climate and bitter competition (Figure 15).**

are particularly important given these industries' uniquely short product lifecycles. Short lifecycles are a strong incentive to outsource manufacturing and/or to relocate manufacturing operations to low-cost regions. Simply put, short lifecycles compel

companies to be as nimble as possible, which could mean transferring manufacturing to highly efficient third parties. Outsourcing production also may shorten ROI, which is critical for new products with short lifecycles.

This segment has demonstrated the strongest performance improvements of all the surveyed industries, particularly in inventory turns, which improved by almost 12 percent in 2003 (even though current levels are still at 40 days).

The most productive moves initiated by these industries may be outsourcing manufacturing and relocating facilities to low-cost countries. Both of these moves have contributed greatly to cost reductions and improvements in inventory turns, which

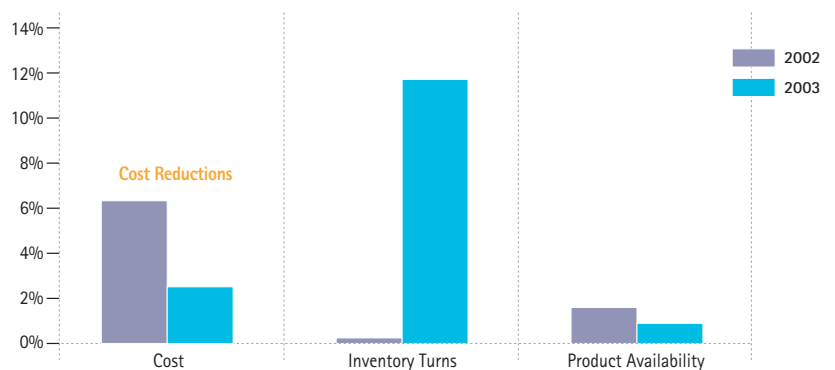


Figure 15: Respondents' fulfillment performance in Communications, Electronics & High Tech. Positive percentages indicate improved performance: reduced costs, increased turns and higher availability.

Another potential driver is increased commoditization. If costs are not kept down, Communications, Electronics & High Tech companies lose the increasing body of customers who are making their buying decisions based solely on price. This is particularly true in personal computers.

Lastly, these sectors bear a particularly close look because they tend to be good "leading indicators" in supply chain management: What may happen down the road in many industries is happening now in Communications, Electronics & High Tech.

Responding to one of their clients' key demands, manufacturers of Food & Consumer Products have reduced supply chain costs to a small degree and increased product availability. However, similar to survey respondents as a whole, the result was a drop in inventory turns (Figure 16).

Interestingly, the degradation of turns in Food & Consumer Products was confined solely to Europe, possibly the result of a worse economic climate (Figure 17). As economic recovery becomes entrenched, companies often will begin pumping product back into the marketplace, anticipating better performance. Since the recovery in Europe has been a very "stop-and-start," overstocks may be the result.

In Retail, mediocre performance results could be attributable to the economic slowdown, which generally inflated inventories and increased the high priority given to product availability. Other operational changes may also have weighed on supply chain costs – for example, logistical expenses related to global sourcing and factory gate pricing, as well as downward pressure on transport and overall logistics costs in several countries.

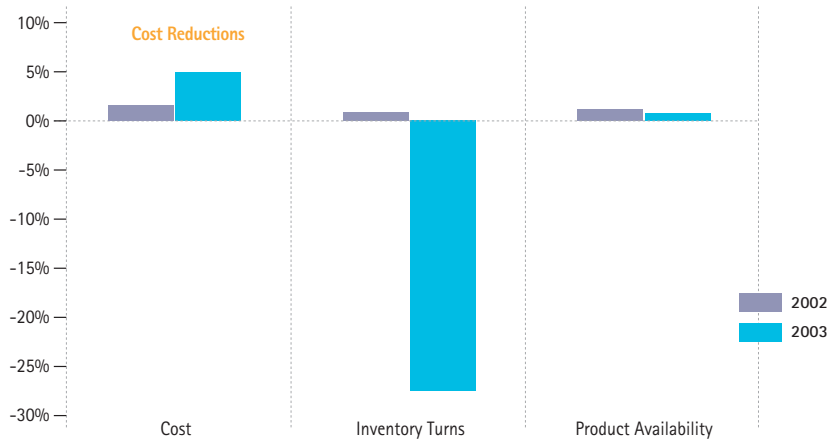


Figure 16: Respondents' fulfillment performance in Food & Consumer Products. Positive percentages indicate improved performance: reduced costs, increased turns and higher availability.

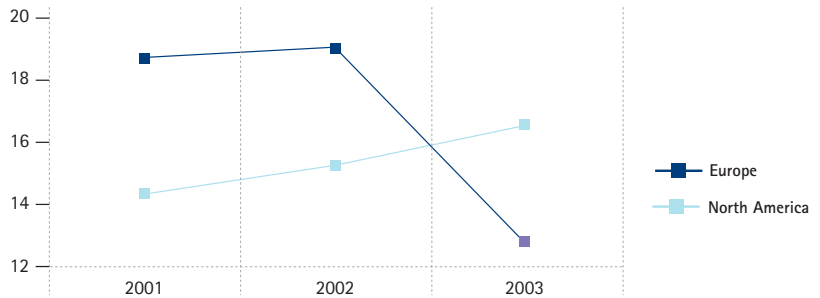


Figure 17: Surprisingly, the Food & Consumer Goods Products industry's drop in inventory turns was confined solely to Europe. (Graphic shows inventory turns per region.)

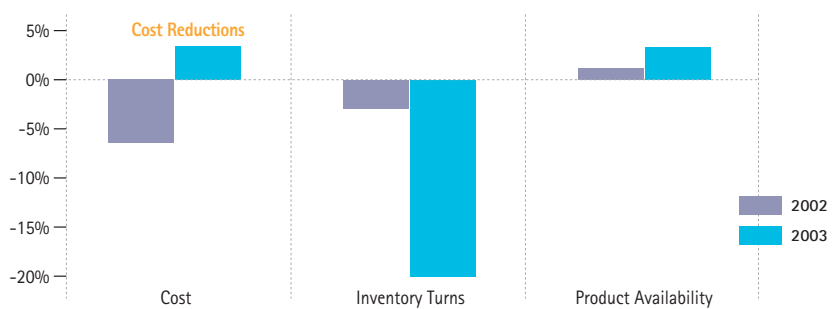


Figure 18: Respondents' fulfillment performance in Retail. Positive percentages indicate improved performance: reduced costs, increased turns and higher availability.

# Fulfillment Performance: "The Best" versus "The Rest"



In most of the industries addressed in this survey, fulfillment "leaders" have been unable to maintain the performance levels that define fulfillment excellence (defined for this survey's purposes as excellence in delivery accuracy, inventory turns and product availability). As a result, the gap separating them from others in their industry is narrowing. This finding is extremely consistent with conclusions described in Accenture's "Connecting with the Bottom Line: A Global Study of Supply Chain Leadership and Its Contribution to the High-Performance Business." The messages gleaned from that report were

- 1) Leaders must constantly strive to innovate and reinvent, lest they lose ground to competitors
- 2) Aggressive supply chain initiatives have the potential to improve challengers' marketplace performance and potentially displace formerly entrenched leaders.

The same basic paradigm is evident in this survey of fulfillment practices and

challenges. For this effort, "top performers" were defined as those companies with costs below 6 percent of sales (2 percent for Food & Consumer Products) and "performance - last quartile" as costs above 14 percent of sales (11 percent for Food & Consumer Products).

As shown in Figure 19, fulfillment-performance differences between "best" and "average" companies are getting smaller across all industries. Overall performance improvements appear to be coming mainly from "middle-of-the-pack" companies. Leaders are pretty much at a standstill.

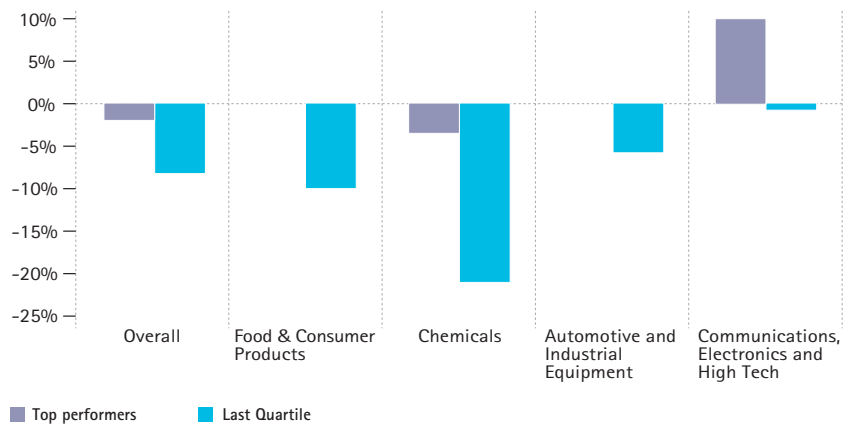


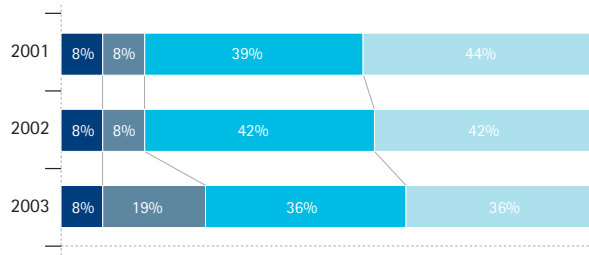
Figure 19: Evolution in percentage of companies reporting top performance or last-quartile performance. "Top performance" is defined as those with costs below 6 percent of sales (2 percent for Food & Consumer Products). "Performance - Last Quartile" is defined as costs above 14 percent of sales (11 percent for Food & Consumer Products).

Across all industries, fulfillment-performance differences between "best" and "average" companies are narrowing.

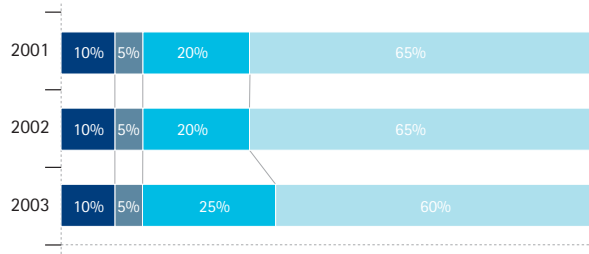
Similar to the research Accenture conducted with INSEAD and Stanford University, "Connecting with the Bottom Line...", this study also reveals a key finding in Communications, Electronics & High Tech, where a number of "leading" companies report solid performance increases. This is one industry where the bar always seems to be higher: more pressure to raise turns, curtail costs, manufacture to order, increase the effectiveness of pricing, and build stronger build-to-demand models. As noted earlier, its supply chain practices are often "leading indicators." However, when "best vs. the rest" is compared for inventory turns, we see that improvements in Communications, Electronics & High Tech between 2001 and 2003 came mostly from average or low performers (Figure 20). The same holds true for the leaders in Food & Consumer Products and Retail (Figure 21).

To arrive at the conclusions shown in Figures 20 and 21, Accenture researchers segregated responding companies according to their annual inventory turns: more than 24 turns is identified as a "best performer"; between 9 to 24 turns is a "top performer"; between 9 to 5 turns is an "average performer"; and less than 5 turns is a "low performer." Respondents then were grouped by category for each of the three years for which inventory turns were reported. Thus, as shown in the Communications, Electronics & High Tech example (Figure 20), the percentage of "best performers" remained constant between 2001 and 2003, but the percentage of "top performers" increased from 8 percent in 2001 to 19 percent in 2003. It can therefore be concluded that turn performance in this industry improved during the period studied.

### Communications, Electronics & High Tech



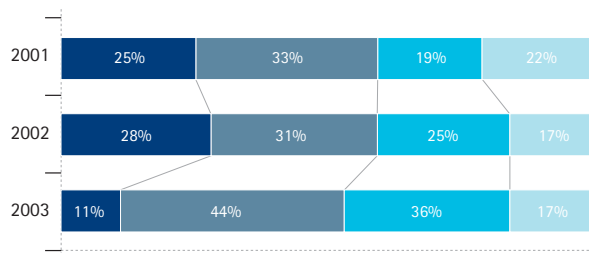
### Pharmaceutical & Medical Products



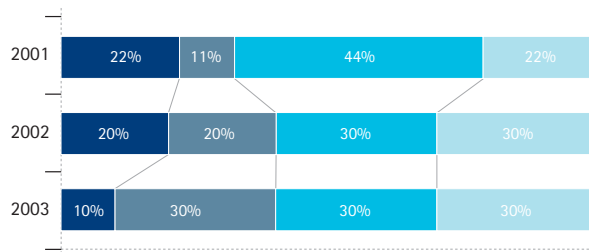
■ Best performer (>24 turns) ■ Top performer (9-24 turns) ■ Average performer (5-9 turns) ■ Low performer (<5 turns)

Figure 20: In Communications, Electronics & High Tech and Pharmaceutical & Medical Products, improvements between 2001 and 2003 came mostly from average or low performers.

### Food & Consumer Products



### Retail



■ Best performer (>24 turns) ■ Top performer (9-24 turns) ■ Average performer (5-9 turns) ■ Low performer (<5 turns)

Figure 21: Among the leaders in Food & Consumer Products and Retail, inventory turns declined between 2001 and 2003.

# Fulfillment Challenges



The greatest fulfillment-related opportunities lie in inventory reduction—more than cutting transaction costs and expanding global sourcing. These opportunities are consistent with survey results and recent economic events (higher inventories, rising costs of capital and services).

Perhaps the simplest conclusion that can be drawn from this extensive research effort is that—because costs and availability have improved and inventory turns have deteriorated—the greatest opportunities are associated with inventory reduction. Simple? . . . yes. True? . . . also yes. In fact, the preeminence of inventory-turn opportunities is consistent with survey results and with a range of recent economic events, such as higher inventories across

industries and widespread increases in the cost of capital and services.

As shown in Figure 22, respondents most commonly cited improved management of inventory levels as a fulfillment-performance opportunity. Clearly, they understand what the survey results show: that while cost and availability appear to be under control, serious deterioration in inventory turns must be dealt with quickly and decisively.

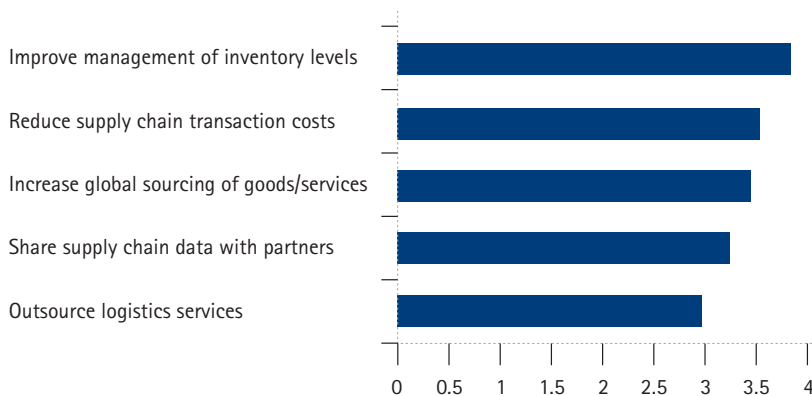


Figure 22: Fulfillment-performance opportunities identified by survey respondents. Average of answers on a scale from 1 (unimportant) to 5 (extremely important).

Conversely, respondents' key fulfillment challenge is largely external: to "optimize collaboration with multiple partners" (Figure 23). In fact, as a means of balancing availability and service levels with inventory and transaction costs, collaboration is ranked first in all industries. This is very consistent with other Accenture research efforts: Greater levels of inter-enterprise collaboration is often one of the best ways to raise across-the-board performance, as opposed to sacrificing progress in one area in order to maximize it in another.

Ranking of factors other than collaboration was far more industry-dependent. For example, "accessing new markets" is emphasized far more heavily in Chemicals; Communications, Electronics & High Tech; and Pharmaceuticals & Medical Products.

Collaboration clearly is a primary "challenge theme," particularly since integration within and among enterprises is seen as the best way to raise availability and service performance, without increasing inventory or transaction costs. Hence, for companies to be truly competitive, they need to develop an integration agenda or risk being left with a cost base that undermines their margins. This finding, too, aligns closely with the body of supply chain research conducted in 2003. In "Connecting with the Bottom Line . . ." Accenture researchers reported that "as companies migrate from internal-only to extended supply chains, collaboration will become the most strategic capability. Supply chains are fast becoming too complex for any one entity to manage effectively. Thus, tomorrow's winners will be the companies that conduct the orchestra, not those that play all the instruments."

Unfortunately, a majority of companies lack the sophistication to fruitfully implement collaborative practices. In fact, when asked "what are your company's key barriers to collaboration?" many of this survey's respondents explicitly stated that organizational structures and a lack of understanding impede their ability to collaborate more effectively (Figure 24).

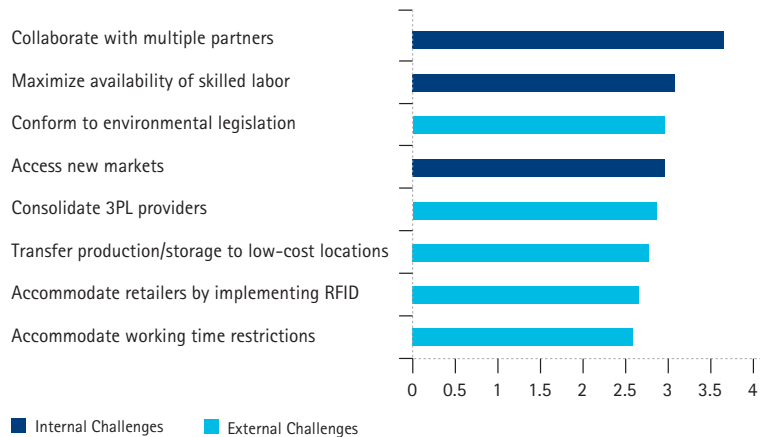


Figure 23: Challenges identified by survey respondents. Average of answers on a scale from 1 (unimportant) to 5 (extremely important).

Similarly, many companies are not organized to effectively manage upstream flows. As a result, global sourcing of goods is a significant challenge. Accenture's fulfillment survey results indicate that 69 percent of companies claim to manage (at least part of) their upstream flows. But in most cases, these capabilities are restricted to a regional level, or they refer primarily to the management of intercontinental freight. For example:

- Only 15 percent of respondents manage most of their upstream flows globally.
- Only 31 percent manage at least part of their global upstream flows.
- Only 12 percent manage intercontinental transport, at least partly.



Figure 24: Respondents were asked, "What are your company's key barriers to collaboration?"

Accordingly, “global inbound management” is seen as a major focal point over the next three years (Figure 25). In fact, global sourcing was the only three-year-plan priority addressed by a majority of players. Nearly 60 percent of respondents plan to implement global inbound solutions within the next three years.

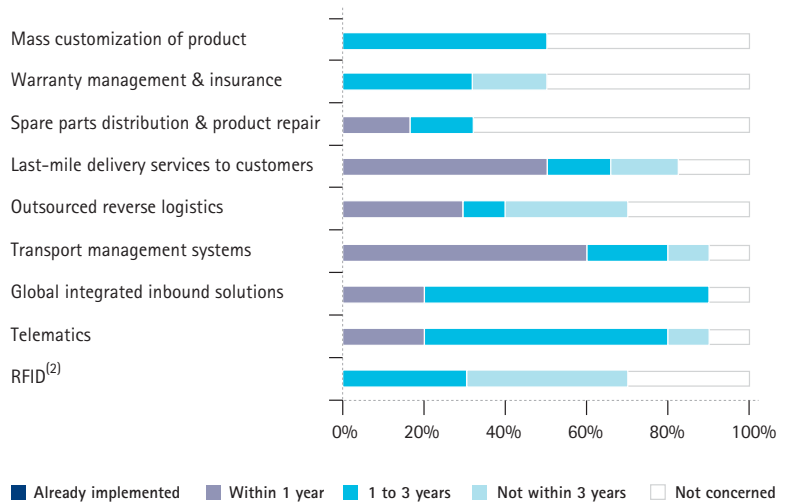
Companies often lack the sophistication to implement collaborative practices. Many respondents stated that “organizational barriers” and “insufficient understanding about how to work collaboratively” are major impediments.

Conversely, most three-year plans point to the perceived value of specific solutions. For example, almost 40 percent of respondents across all industries plan to have a telematics solution within three

### Characteristics of a Fulfillment Leader

Virtually every manufacturing company has a fulfillment function. However, when it comes to fulfillment, most companies have their own unique strengths, weaknesses, problems and priorities. Some leverage (or fall short in) their ability to make delivery operations consistent or highly economical. Others excel at (or are particularly challenged by) enhancing real-time visibility and communicating fulfillment information across the supply chain. Still more have (or have not yet) found the key to efficient and effective after-sale fulfillment.

The reality, however, is that fulfillment-performance leaders do a greater percentage of things right. With deeper



(2) RFID: Radio Frequency Identification

Figure 25: Three-year plan priorities cited by survey respondents.

years<sup>(3)</sup>. And aspirations for transportation management applications are even higher, with more than 60 percent usage within three years.

(3) Telematics generally refers to embedded, interactive intelligence. Originally used to track location and usage levels—e.g., wireless, two-way communication capabilities between vehicles or equipment and their external environment—Telematics now is advancing into many new areas, such as advanced diagnostics and monitoring.

insights, better technology and tighter collaboration, they gather more and better information about materials requirements, vendor capabilities and supply chain options. For example, many engage in regular strategic sourcing “waves”—(re)evaluating sourcing processes, rationalizing supplier bases, negotiating or renegotiating contracts, and tightening relationships with suppliers. Leaders also analyze information more effectively and make better decisions based on the results of their analyses. For instance, their demand plans are quickly consolidated and communicated across business units to ensure accuracy and economic order quantities. In addition, fulfillment leaders excel at performance monitoring—

developing metrics and measures that tell them how and where improvement is needed. And lastly, leaders possess the ability and flexibility to translate their ideas and insights into differentiated operating models and business architectures. In effect, their fulfillment operations are part of an evolving whole, whose continuous change is expected and planned for.

By understanding the issues and opportunities that affect fulfillment leadership, companies can make better decisions about how and where to invest. More importantly, they can recognize how and where competitive advantage resides for them to ultimately improve their fulfillment performance.

# About Accenture



Accenture is a global management consulting, technology services and outsourcing company. Committed to delivering innovation, Accenture collaborates with its clients to help them become high-performance businesses and governments. With deep industry and business process expertise, broad global resources and a proven track record, Accenture can mobilize the right people, skills and technologies to help clients improve their performance. With more than 100,000 people in 48 countries, the

company generated net revenues of US\$13.67 billion for the fiscal year ended Aug. 31, 2004. Its home page is [www.accenture.com](http://www.accenture.com).

The Accenture Supply Chain Management service line works with clients across a broad range of industries to plan and implement innovative operating models that support overall business strategies and enhance revenue, reduce cost, and improve asset productivity and customer service. We combine deep skills and

leading-edge approaches in procurement, supply chain planning, manufacturing and design, and fulfillment to help clients improve their operational performance. The service line also collaborates with its clients to implement new solutions—including supply chain and procurement outsourcing, radio frequency identification technologies, service parts management, and supply chain education—to drive higher performance through supply chain mastery. Its home page is [www.accenture.com/supplychain](http://www.accenture.com/supplychain).

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