

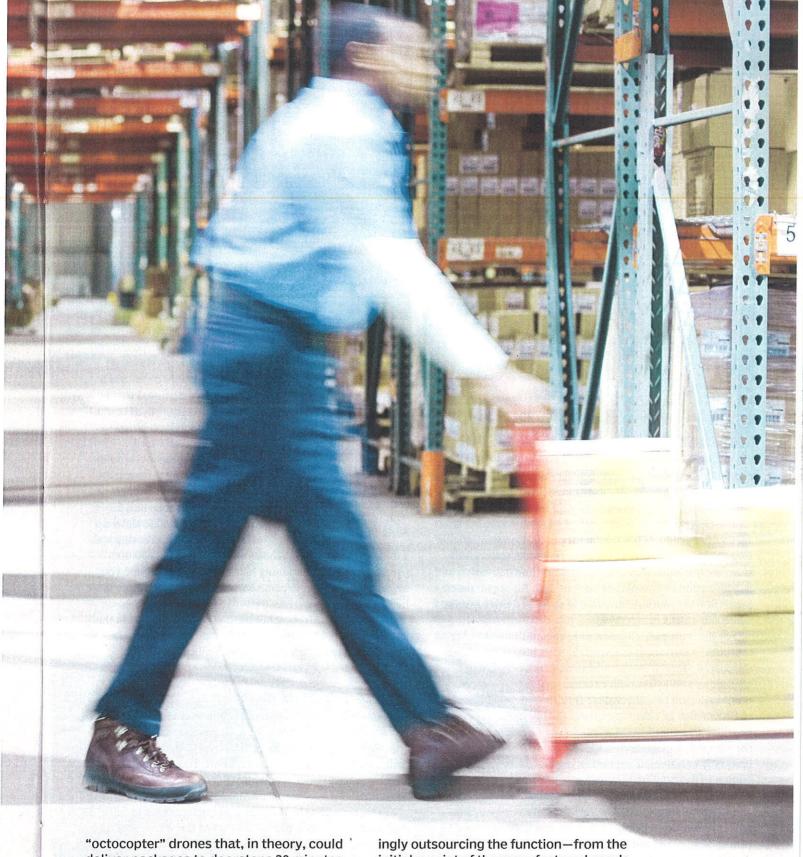
THIRD PARTIES TO HANDLE ORDER FULFILLMENT.

BY RUSS BANHAM



In the management of a supply chain, what goes out is as important as what comes in. Just how important was demonstrated in December, when, swamped by last-minute

orders and beset by bad weather, United Parcel Service and FedEx failed to deliver many gifts in time for Christmas. Also drawing attention that month was the revelation that Amazon is developing unmanned



deliver packages to doorsteps 30 minutes after an order is placed.

Given the crucial role of order fulfillment, it's noteworthy that companies are increasinitial receipt of the manufactured goods to warehousing, pick and pack, delivery of products, and even the handling of customer returns. By doing so they can focus on core



Right: Amazon is developing drones to deliver its packages. Below and far right: Last-minute orders and bad weather wreaked havoc on UPS and FedEx Christmas deliveries.





competencies, obtain access to volume-based shipping discounts, reduce labor costs, and enjoy more-scalable ware-housing rates during peak and trough seasons.

The risk, of course, is the loss of control over the management of products out the factory door. Companies must rely on the outsourcing provider's personnel to carefully store and pack merchandise, ensure on-time deliveries, and handle customer complaints and returns. An organization's reputation may suffer if any one of these activities is mismanaged.

For the most part, these risks have not dimmed the enthusiasm to outsource core distribution operations. "Over the past 10 years, we've moved from a 'Why should I outsource?' to a 'Why shouldn't I outsource?' value proposition," says Sam Israelit, co-leader of the Americas supply chain practice at Bain. "Back then, the big risk was that the provider's customer service would not be consistent with the company's own service. Today, the provider's service is equally excellent, if not better, depending on what you're willing to pay."

Sharing this view is Jack Hayon, senior vice president and CFO at Educational Testing Service, a company that outsources order fulfillment soup-to-nuts. Every year ETS prints, distributes, and scores 13 million paper-based standardized tests like the SAT, GRE, and AP subject exams. A decade ago, the Princeton, New Jersey-based nonprofit company (\$1.5 billion in revenue) internally handled the warehousing and shipping of all those tests, as well as their



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—Sam Israelit, coleader of the Americas supply chain practice at Bain return for scoring purposes. "We'd been doing it this way for 50 years, but had reached a point where we wanted to improve our quality," says Hayon.

On rare occasions, he explains, a box of SAT tests shipped to a high school would arrive late, forcing the school to postpone the examination. Inbound problems such as a finished test that failed to show up on a timely basis for scoring was

another quality issue. "When you're sending out 650,000 parcels each year containing 16 million tests or so, and you expect each of them to come back on time, human error is inevitable," he says.

ETS no longer frets about such things, having made the decision in 2004 to outsource order fulfillment to Accenture. Says Hayon, "It's their responsibility now."

AMAZON UPS THE ANTE

rder fulfillment has a single overarching purpose: customer satisfaction. Consumers have come to expect products delivered to their doorsteps fast, on time, and in perfect condition. To ensure that these expectations are met, a number of activities must occur in tight sequence.

Take, for example, the pick-and-pack process to fulfill a customer order for a pair of shoes. "At the warehouse, the specific pair of shoes in the right size and color is pulled off a shelf, wrapped in paper, put in a branded box with some coupons and the return forms, bubble wrapped, and then packaged in a shipping box," says Katherine Jones, vice president of technology research at Bersin by

Deloitte, a provider of research-based people strategies. "Accuracy, efficiency, and speed in each of these activities are paramount."

That's just one part of the fulfillment process. The same pair of shoes now has to make its way to the customer by air, rail, and/or truck delivery in the time frame that the buyer expects. Nowadays, that means tomorrow or the day after, thanks in no small part to Amazon. The giant eretailer's one-click purchase option and guaranteed overnight shipping (often at no charge) has upped the ante for all retailers, in terms of what are now routine customer expectations.

Not that all companies need to promise one-day shipments to win in their markets. But they do need to have an order fulfillment infrastructure that supports their promised times for delivering product to the customer—that is, the distribution centers and warehouses necessary to meet a one-day, two-day, three-day, or longer fulfillment objective.

For example, a three-to-five-day fulfillment window in the United States generally can be satisfied with from one to three distribution centers, according to Mirko Martich, partner and leader of the North American retail supply chain practice at McKinsey. A two-day window, on the other hand, requires at least 10 distribution points, and next-day delivery insists on as many as 30 to 40. "If the customer is within 100 miles of the distribution center, you can typically get it to them the next day," Martich says. "More than 200 miles, and it's likely a two-day delivery.

It's that last mile of delivery to the consumer that makes a big difference."

What does this have to do with outsourcing? Well, a CFO whose company wants to shorten the product-delivery time frame would need to mull the organiza"It's that last mile of delivery to the consumer that makes a big difference."

-Mirko Martich, partner at McKinsey

tion's distribution footprint and scale to determine whether or not outsourcing might be more cost-effective and efficient from an operational standpoint.

"Say for argument's sake you're trying to build a twoday network and need 10 sites across the country," Martich says. "You then need from \$200 million to as much as \$500 million in sales at each one of these sites to operate with effective scale. If you don't have this scale, then your warehousing, pick-and-pack, and outbound transportation costs are higher. And that's when the trade-off comes in outsourcing."

THE CLEARCLICK CHOICE

or companies that manufacture and ship locally within a 100-mile radius, the last mile is not a problem—their own or leased trucks can deliver the goods at the doorstep the same day an order is made. For national retailers and e-retailers, a different scenario is in play. Enormous scale would be required to lease or own trucks across the country, mimicking what UPS and Fedex do on a daily basis, not to mention manage a series of warehouses.

These realities compelled ClearClick founder and chief executive officer Keith Gilbert to completely outsource the software and electronic company's order fulfillment process to eFulfillment Service. "They do everything when it comes to the inventory, from receiving our products to sending them out and handling customer returns," says Gilbert.

As a college senior, Gilbert came up with the idea for his business, which sells a machine for converting old VHS and cassette tapes into digital formats. "Everyone wants their home movies to be on DVDs, but the only way in the past to get this done was to pay \$20 per tape to a company that would do it for you," says Gilbert. "If you have a couple

dozen tapes, that's a lot of money."

Gilbert came up with a much cheaper alternative. After reaching out to an engineer friend to design the machine, he incorporated ClearClick and began operating the business out of his dorm room. The 23-year-old now operates the company (\$1 million in 2013 gross revenue) from his home in Yorba Linda, California. ClearClick charges \$60 per machine, which is manufactured in China and shipped to eFulfillment's giant warehouse in Traverse City, Michigan.

John Lindberg, eFulfillment's





founder and president, comments on the services his firm performs for ClearClick. "When the machines arrive at our warehouse, we remove them from the inferior cardboard packaging that is common from China-based manufacturers, and then repackage them in ClearClick's higherend, branded boxes," says Lindberg. "Then, when an order comes in, we pick and pack the machine, and deliver it via UPS or Fedex."

ClearClick's **business** depends on outsourcing fulfillment. "I couldn't be in business otherwise."

-Keith Gilbert. founder and CEO, ClearClick

Since eFulfillment manages order fulfillment for thousands of other small and midsize e-commerce businesses, it is able to extract significant volume-based discounts from these and other package carriers. "We do all we do faster and cheaper than many clients can do on their own," says Lindberg.

Comments Gilbert, "I'm paying \$70 a month in fees to them, on average, depending on how much scale I'm doing. I couldn't be in business otherwise."

ETS: EVERYTHING RETURNED TO SENDER

TS is ClearClick on steroids, a much larger company yet one pursuing a very similar order fulfillment outsourcing strategy, in its case with Accenture. "We called them in 2004 to come look at our processes for the purpose of improvement," recalls Hayon. "They spent five months here." Accenture concluded that it could do a much better job than ETS had been doing, given its supply chain management expertise. The two companies inked a deal in late 2004 for a comprehensive order fulfillment outsourcing strategy.

A key element of the engagement was for ETS to retain ownership of its 170,000-square-foot warehouse in nearby Ewing, New Jersey, and lease it to Accenture. "We'd also maintain ownership of the property and the equipment as well, and lease it all to Accenture," says Hayon. "The 300 employees who previously worked for us in our warehouse operations were moved over to Accenture and are now employees of that company."

ETS agreed to make any necessary ongoing investments in order fulfillment systems and processes, but Accenture

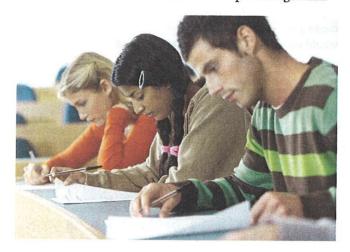


would manage the operation, including the return of tests for scoring. This required something of an adjustment for the outsourcing services provider. While it had experience managing the occasional customer return, it had never had a client where every single outbound customer order would be returned. For SAT tests, that means the collection, packaging, and return of every single test administered at 3,500 sites across the country.

To help perform the task, Accenture first designed and developed an innovative technology solution it calls SeNT, for serial number tracking system. ETS, as per the contract, paid for the software. "We're now able to see via tracking labels on each test which ones might be missing," says Hayon.

Before outsourcing order fulfillment, ETS experienced as many as 10,000 tests per year that it could not score because of lost or late shipments. The number of such tests last year: 20. Cycle time—tests out and back—also has been pared. "For the AP exam, for instance, we would send out and process 2.5 million tests during the month of May," says Hayon. "It used to take us four months to process that volume. It now takes two and a half weeks."

Significant savings also have been achieved in freight and printing expenses. The former owes to Accenture's negotiated discounts with freight carriers, while the latter stems from a more exact number of tests to print. "In the old days, to be sure that every test taker had a test to take, we'd print up extra copies," explains Hayon. "When you're shipping to 3,500 test sites, that extra bundle of prepackaged, shrink-wrapped tests added up to a lot of printing and related costs. Boxes had to be shipped back-even if they were unused-for quality-control purposes, which also added to the cost. Accenture developed an algorithm



Before outsourcing fulfillment, ETS experienced as many as 10,000 tests per year that it could not score because of lost or late shipments. The number last year: 20.

Relationships

to predict a more precise order quantity, which is saving us \$50,000 annually."

That's a decent amount of money, even for a company of ETS's size. But Tushar Narsana, supply chain offering lead at Accenture, says the firm's research indicates that all organizations can reduce their inventory and logistics costs by 30% when outsourcing these tasks.

"We further estimate that product availability can be improved by 5% to 15%, and revenue by 2% to 5%," Narsana adds. "We base these estimates on a variety of factors, but it is safe to say that higher customer satisfaction to some extent leads to the revenue improvement."

Accenture is held to high performance outcomes via the service-level agreements that ETS has contracted, and it is incented annually based on those outcomes. While Hayon acknowledges some bumps in the road early on (chiefly getting Accenture up to speed on the challenging customer-return issue), both organizations share similar cultures, helping them grow together.

"They're continually modernizing the equipment in the warehouse," says Hayon. "Like us, they want to get that 20-test figure down to zero. Our biggest lesson learned is patience—there is still much more we can do to become efficient. It just takes time."

BACK AND FORTH

ertainly, outsourcing order fulfillment is not for every company, particularly those that want to maintain control over every aspect of the business. Some businesses have outsourced and then decided it didn't suit them. A case in point is Nuts.com, an e-retailer of walnuts, macadamia nuts, almonds, pecans, and non-nut snacks like dried fruit and coffee, all of it organic and fresh.

Jeffrey Braverman, whose grandfather owned Newark Nut Company, a retail store located in an indoor mall in Newark, New Jersey, launched Nuts.com seven years ago. Fresh off a stint at private-equity firm Blackstone Group, Braverman hired on at the family business (his father also worked at the shop) and introduced the idea of Internetbased sales. "They thought I was nuts," says Braverman, pun intended.

Sales took off, however, persuading his grandfather to close the shop. Based now in Cranford, New Jersey, Nuts. com tallies 80 employees and \$20 million in annual sales. A good portion of its volume is gift-based-sending, say, a pretty package of chocolate-covered macadamias to Aunt Isabel on her birthday. To boost business in the western part of the U.S., Braverman realized he needed faster shipping to maintain the quality of his products and compete against giant gift-basket e-retailers like Harry and David. In particular, he sought a one-day-delivery promise for potential customers in Los Angeles and San Francisco, which



When he first suggested the idea of Internet-based sales, "they thought I was nuts," says Nuts.com's Braverman.

was problematic when shipping from the warehouse in Cranford.

"I'm a runner, and I remembered ordering a pair of running shoes from Zappos on Christmas Eve that I wanted to run in the next day," says Braverman. "I got them at 9 a.m. that morning. I realized that everyone expects instant gratification these days, meaning nextday delivery."

At the time, order fulfillment was managed entirely from Nuts.com's warehouse operation. Braverman had heard about a regional company called OnTrac that was stealing business away from UPS and Federal Express. The company touted its ability to deliver to 90% of the country within two days, via a purely ground-based distribution network and a multitude of regional warehouses. Braverman contacted the fulfillment provider and transacted a deal, but after five months, he shut down the operation.

"They were able to do everything I needed, but the weather was getting warmer and we no longer needed to ship truckloads of merchandise," explains Braverman. "UPS also had come up with a new product, which dramatically cut costs for products of a certain size. Our average order size of two bags fit within these dimensions, so we went with that."

Down the line, Kenneth Braverman, Jeffrey's father and the company's CFO, says they will return at some point to outsourcing the order fulfillment process as sales increase. "Our product, unlike others, has a shelf life, so as we grow we will have to rely on a provider's warehouses to get product where it needs to be nationwide," he explains. "Right now, we have enough capacity at the warehouse to meet our order volume. We even have some vertical space to accommodate an increase. Eventually, though, we'll need help."

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