AMAZONFRESH IS JEFF BEZOS' LAST MILE QUEST FOR TOTAL RETAIL DOMINATION

The first thing you notice about Jeff Bezos is how he strides into a room.

A surprisingly diminutive figure, clad in blue jeans and a blue pinstripe button-down, Bezos flings open the door with an audible whoosh and instantly commands the space with his explosive voice, boisterous manner, and a look of total confidence. "How are you?" he booms, in a way that makes it sound like both a question and a high-decibel announcement.

Each of the dozen buildings on Amazon's

Seattle campus is named for a milestone in the company's history--Wainwright, for instance, honors its first customer. Bezos and I meet in a six-floor structure known as Day One North. The name means far more than the fact that Amazon, like every company in the universe, opened on a certain date (in this case, it's July 16, 1995). No, Day One is a central motivating idea for Bezos, who has been reminding the public since his first letter to shareholders in 1997 that we are only at Day One in the development of both the Internet and his ambitious retail enterprise. In one recent update for shareholders he went so far as to assert, with typical I-know-something-you-don't flair, that "the alarm clock hasn't even gone off yet." So I ask Bezos: "What exactly does the rest of day one look like?" He pauses to think, then exclaims, "We're still asleep at that!"

He's a liar.



Amazon is a company that is anything but asleep. Amazon, in fact, is an eyeswide-open army fighting--and winning--a battle that no one can map as well as its general. Yes, it is still the ruthless king of books--especially after Apple's recent loss in a book price-fixing suit. But nearly two decades after its real day one, the e-commerce giant has evolved light-years from being just a book peddler. More than 209 million active customers rely on Amazon for everything from flat-panel TVs to dog food. Over the past five years, the retailer has snatched up its most sophisticated competition--shoe seller Zappos and Quidsi, parent of such sites as Diapers.com, Soap.com, Wag.com, and BeautyBar.com. It has purchased the robot maker Kiva Systems, because robots accelerate the speed at which Amazon can assemble customer orders, sometimes getting it down to 20 minutes from click to ship. Annual sales have quadrupled over the same period to a whopping \$61 billion. Along the way, incidentally, Amazon also became the world's most trusted company. Consumers voted it so in a recent Harris Poll, usurping the spot formerly held by Apple.

Amazon has done a lot more than become a stellar retailer. It has reinvented, disrupted, redefined, and renovated the global marketplace. Last year, e-commerce sales around the world surpassed \$1 trillion for the first time; Amazon accounted for more than 5% of that volume. This seemingly inevitable shift has claimed plenty of victims, with more to come. Big-box retailers like Circuit City and Best Buy bore the brunt of Amazon's digital assault, while shopping-mall mainstays such as Sears and JCPenney have also seen sales tank. Malls in general, which once seemed to offer some shelter from the online pummeling, have been hollowed out. By Green Street Advisors' estimate, 10% of the country's large malls will close in the next decade. It has become painfully clear that the chance to sift through bins of sweaters simply isn't enough of a draw for shoppers anymore. "It has been this way in retail forever," says Kevin Sterneckert, a research VP at Gartner who focuses on shopping trends, and who lays out a strategy that should blow nobody's mind: "If you don't innovate and address who your customers are, you become irrelevant." And now that means fending off threats from every phone, tablet, and laptop on the planet.

Amazon's increasing dominance is now less about what it sells than how it sells. And that portends a second wave of change that will further devastate competitors and transform retail again. It's not just "1-Click Ordering" on Amazon's mobile app, which is tailor-made for impulse buying. It's not just the company's "Subscribe & Save" feature, which lets customers schedule regular replenishments of essentials like toilet paper and deodorant. It's not just Amazon's "Lockers" program, in which huge metal cabinets are installed at 7-Elevens and Staples in select cities, letting customers securely pick up packages at their convenience instead of risking missed (or stolen) deliveries.

"AmazonFresh is really a Trojan horse. It's not about winning in grocery services. It's about dominating the market in same-day deliveries. "

No, it's all this, plus something more primal: speed. Bezos has turned Amazon into an unprecedented speed demon that can give you anything you want. Right. Now. To best understand Amazon's aggressive game plan--and its true ambitions--you need to begin with Amazon Prime, the company's \$79-per-year, second-day delivery program. "I think Amazon Prime is the best bargain in the history of shopping," Bezos tells me, noting that the service now includes free shipping on more than 15 million items, up from the 1 million it launched with in 2005. Prime members also gain access to more than 40,000 streaming Instant Video programs and 300,000 free books in the Kindle Owners' Lending Library. As annoying as this might be to Netflix, it is not intended primarily as an assault on that business. Rather, Bezos is willing to lose money on shipping and services in exchange for loyalty. Those 10 million Prime members (up from 5 million two years ago, according to Morningstar) are practically addicted to using Amazon. The average Prime member spends an astounding \$1,224 a year on Amazon, which is \$700 more than a regular user. Members' purchases and membership fees make up more than a third of Amazon's U.S. profit. And memberships are projected to rise 150%, to 25 million, by 2017.



Nadia Shouraboura of Hointer, a new store that represents how retail must adapt in the Age of Amazon

Robbie Schwietzer, VP of Prime, is more candid than his boss when explaining Prime's true purpose: "Once you become a Prime member, your human nature takes over. You want to leverage your \$79 as much as possible," he says. "Not only do you buy more, but you buy in a broader set of categories. You discover all the selections we have that you otherwise wouldn't have thought to look to Amazon for." And what you buy at Amazon you won't buy from your local retailer. Prime is phase one in a three-tiered scheme that also involves expanding Amazon's local fulfillment capabilities and a nascent program called AmazonFresh. Together, these pillars will remake consumers' expectations about retail. Bezos seems to relish the coming changes. "In the old world, you could make a living by hoping that your customer didn't know whether your price was actually competitive. That's a very"--Bezos pauses for a second to rummage for the least insulting word--"tenuous strategy in the new world. [Now] you can't convince people you have the low price; you actually have to have the low price. You can't persuade people that your delivery speeds are fast; you actually have to have fast delivery speeds!" With that last challenge, he erupts in a thunderous laugh, throwing his cleanly depilated head so far back that you can see the dark fillings on his upper molars. He really does seem to know something the rest of us don't. We're still asleep, he says? The alarm clock at Amazon went off hours ago. Whether the rest of the retail world has woken up yet is another question.

Amazon's 1-million-square-foot Phoenix fulfillment center produces a steady and syncopated rhythm. It is the turn of mechanical conveyor belts, the thud of boxes hitting metal, the beeping of forklifts moving to and fro, and the hum of more than 100 industrial-size air conditioners whirring away. This is the sound of speed--a sonic representation of what it takes to serve millions of customers scattered across the globe.

In centers like this one, of which there are 89 globally (with more to come), Amazon has built the complex machinery to make sure a product will ship out in less than 2.5 hours from the time a customer clicks *place your order*. From that click, a set of algorithms calculates the customer's location, desired shipping speed, and product availability; it then dispatches the purchase request to "pickers" on duty at the nearest fulfillment center. The system directs the new order to the picker who is closest on the floor to that product, popping up with a bleep on the picker's handheld scanner gun. These men and women roam the sea of product shelves with carts, guided by Amazon's steady hand to the precise location of the product on the color-coded shelves. The picker gathers the item and puts it into a bin with other customer orders. And from there, the item zooms off on a conveyor belt to a boxing station, where a computer instructs a worker on what size box to grab and what items belong in that box. After the packer completes an order, the word success lights up in big green letters on a nearby computer screen. Then the package goes back on a conveyor, where the fastest delivery method is calculated by scanning the box, which is then kicked down a winding chute to the appropriate truck.

The process is efficient, but still lower tech than it could be. Although Amazon shelled out \$775 million last year for those orange Kiva robots, it says it's still "evaluating" how to deploy the bots, and they're nowhere to be seen here. "Fulfillment by Amazon" is still a very human endeavor--and the company's creativity thrives within that limitation. A team at the Phoenix center is constantly thinking of ways to chip away at the 2.5hour processing time. For instance, when products arrive from Amazon's vendors and the 2 million third-party merchants who sell their goods on the site, workers now scan them into Amazon's inventory system (again, with a handheld gun) instead of entering the details manually. Also, products have been stowed on shelves in what otherwise might appear to be a random way--for example, a single stuffed teddy bear might be next to a college biology book--because it reduces the potential distance a worker must trek between popular products that might be ordered together. Small tweaks like these have an impact: In the past two years, Amazon has reduced the time it took to move a product by a quarter. During the past holiday season, the company processed 306 items per second worldwide.

These centers aren't just about warehouse speed, though: They're also about proximity. Over the past several years, Bezos has poured billions into building them in areas closer and closer to customers. The Phoenix warehouse, one of four in the region, serves a metro area of nearly 4 million. Robbinsville, New Jersey, is roughly one hour from 8 million New Yorkers. Patterson, California, is an hour and a half from 7 million people living in the San Francisco Bay

Area. Three locations in Texas--Coppell, Haslet, and Schertz--will serve not only the nearly 9 million citizens of the Dallas and San Antonio metro areas but also the other 17 million or so customers in the state (and possibly neighboring states too) who live only a few hundred miles away.

"What you see happening," Bezos explains, "is that we can have inventory geographically near major urban populations. If we can be smart enough--and when I say 'smart enough,' I mean have the right technology, the right software systems, machine-learning tools--to position inventory in all the right places, over time, your items never get on an airplane. It's lower cost, less fuel burned, and faster delivery."

The holy grail of shipping--same-day delivery--is tantalizingly within reach. Amazon already offers that service in select cities, what it calls "local express" delivery, but the big trick is to do it nationally. And the crucial element of this ambitious plan is revealed by something wonkier than a bunch of buildings. It is something only an accountant could see coming: a cunning shift in tax strategy.

""In the new digital world," says Bezos, "you can't convince people you have the low price; you actually have to have the low price.""

If you were a competitor who knew what to listen for, you'd practically hear the Jaws theme every time Bezos said the word *taxes*. For years, Amazon fervently avoided establishing what is called a "tax nexus"--that is, a large-enough physical presence--in states that could potentially force it to collect sales tax from its customers, something brick-and-mortar and mom-and-pop stores had long argued would finally remove Amazon's unfair pricing advantage. In states that dared to challenge Amazon, the company would quickly yank operations. The scrutiny even extended to its sale of products by other merchants. "We had to be very careful, even with the third-party business, about not incurring tax-nexus stuff," recalls John Rossman, a former Amazon executive and current managing director at Alvarez and Marsal, a Seattle-based consulting firm.

But Amazon has since changed its mind. It determined that the benefits of more fulfillment centers--and all the speed they'll provide--will outweigh the tax cost they'll incur. So it began negotiating with states for tax incentives. South Carolina agreed to let the company slide without collecting sales tax until 2016, in exchange for bringing 2,000 jobs to the state. In California, Amazon was given a year to start collecting taxes in exchange for building three new warehouses. And at the end of 2011, Amazon even threw its support behind a federal bill that would mandate all online retailers with sales of more than \$1 million to collect tax in states in which they sold to customers. In 2012 alone, Amazon spent \$2.5 million lobbying for issues that included what's known as the Marketplace Fairness Act--the same law, essentially, it had once moved heaven and earth to eradicate. The bill recently cleared the U.S. Senate and awaits passage in the House.

"The general perception is companies thinking, Oh, great, finally a level playing field," Rossman says. "But other retailers are going to regret the day. Sales tax was one of the few things impeding Amazon from expanding. Now it's like wherever Amazon wants to be, whatever Amazon wants to do, they are going to do it."

There's yet another weapon in Amazon's offensive, and it's ready for rollout. It's called AmazonFresh, a grocery delivery service that has long been available only in Seattle. The site has a selection of 100,000 items, and from my hotel room in that city on a recent Saturday at 11 a.m., I gave it a try. I clicked on chips, bananas, apples, yogurt, and a case of bottled water--along with a DVD of *Silver Linings Playbook* and a Moleskine reporter's notebook. After checking out and paying the \$10 delivery fee, I requested my goods to arrive during the 7 p.m. to 8 p.m window. At 7:15 that evening, De, my AmazonFresh delivery woman, showed up in the lobby. She helped carry my bags up the elevator and to my hotel room, and tried several times to refuse a \$5 tip for the trouble I put

her through in the name of research. It was simple, easy--and for Amazon competitors, very threatening.

De and the Kiva robots are central to what Amazon sees as the future of shopping: whatever you want, whenever you want it, wherever you want it, as fast as you demand it. AmazonFresh is expected to expand soon to 20 more urban markets--including some outside America. Los Angeles became the second AmazonFresh market, this past June, and customers there were offered something the folks in Seattle must wish they got: a free trial of Prime Fresh, the upgrade version of Amazon Prime, which provides free shipping of products *and* free delivery of groceries for orders over \$35. Subscribers will pay an annual fee of \$299. Considering that grocery delivery otherwise costs between \$8 and \$10 each time (depending on order size), the subscription covers itself after about 30 deliveries--which busy families will quickly exceed.

Bezos, in his cagey, friendly way, seems more excited about my Fresh experience than he is about describing Fresh's future. He seems almost surprised that the service worked so well at a hotel, given that it was designed for home delivery. "Thank you!" he shouts. After peppering me with questions on how, precisely, the delivery went down, he finally gets around to addressing the service's business purpose.

"We won't invest in a company unless they can tell us why they won't get steamrolled by Amazon."

"We'd been doing a very efficient job with our current distribution model for a wide variety of things," Bezos says. "Diapers? Fine, no problem. Even Cheerios. But there are a bunch of products that you can't just wrap up in a cardboard box and ship 'em. It doesn't work for milk. It doesn't work for hamburger." So he developed a service that would work--not because he suddenly wanted to become your full-service grocer but because of how often people buy food.

AmazonFresh is actually a Trojan horse, a service designed for a much greater purpose. "It was articulated [in the initial, internal pitch to Bezos] that this would work with the broader rollout of same-day delivery," says Tom Furphy, a former Amazon executive who launched Fresh in 2007 and ran it until 2009. Creating a same-day delivery service poses tremendous logistical and economic hurdles. It's the so-called last-mile problem--you can ship trucks' worth of packages from a warehouse easily enough, but getting an individual package to wind its way through a single neighborhood and arrive at a single consumer's door isn't easy. The volume of freight and frequency of delivery must outweigh the costs of fuel and time, or else this last mile is wildly expensive. You can't hire a battalion of Des unless they earn their keep. So by expanding grocery delivery, Amazon hopes to transform monthly customers to weekly--or even thrice-weekly--customers. And that, in turn, will produce the kind of order volume that makes same-day delivery worth investing in. "Think of the synergy between Prime, same-day delivery, and Fresh," says Furphy. "When all of those things start working in concert, it can be a very beautiful thing."

AmazonFresh is arguably the last link in Bezos's big plan: to make Amazon the dominant servicer--not just seller--of the entire retail experience. The difference is crucial. Third-party sellers, retailers large and small, now account for 40% of Amazon's product sales. Amazon generally gets up to a 20% slice of each transaction. Those sellers are also highly incentivized to use Fulfillment by Amazon (known as FBA). Rather than shipping their products themselves after a sale is made on the Amazon site, these retailers let Amazon do the heavy lifting, picking and packing at places like the Phoenix center. For the sellers, an FBA agreement grants them access to Prime shipping speeds, which can help them win new customers and can allow them to sell at slightly higher prices. For Amazon, FBA increases sales, profits, and the likelihood that any shopper can find any item on its website.

"Now you have smart brick-and-mortar stores saying, 'Why isn't our experience more intuitive, as it is on the web?"

The burgeoning AmazonFresh transportation network will help expand these

numbers. In Los Angeles and Seattle, a fleet of Fresh trucks delivers everything from full-course meals to chocolate from local merchants. The bright green branded trucks--with polite drivers in branded uniforms--let Amazon personify its brand, giving it the same kind of trustworthy familiarity that fueled the rise of UPS in the 1930s. "If you have all kinds of fly-by-night operations coming to your door, people don't like that," says Yossi Sheffi, professor and director of the MIT Center for Transportation and Logistics. "It's different with someone in a U.S. Postal Service or FedEx uniform. Those brands inspire confidence."

As Amazon evolves into a same-day delivery service, its active transportation fleet could become yet another competitive advantage. By supplementing its long-term relationships with UPS and FedEx with its own Fresh trucks, Amazon may well be able to deliver faster than retailers that depend entirely on outside services. "Pretty soon, if you're a retailer with your online business, you're going to be faced with a choice," says Brian Walker, a former analyst at Forrester Research who is now with Hybris, a provider of e-commerce software. "You're not going to be able to match Amazon, so you're going to have to consider partnering with them and leveraging their network."

This shift could even turn Amazon into a competitor to UPS and FedEx, the long-standing duopoly of next-day U.S. shipping. "If Amazon could do it at enough scale, they could offer shipping at a great value and still eke out some margin," says Walker. "In classic Amazon fashion, they could leverage the in-frastructure they've built for themselves, take a disruptive approach to the pricing, and run it as an efficiency play."

Amazon has been down this road before. Its Web Services began as an efficient, reliable back end to handle its own web operations--then became so adept that it now provides digital services for an enormous range of customers, including Netflix and, reportedly, Apple. It's not impossible to imagine Amazon doing the same with shipping. Last year, the company cut its shipping costs as a percentage of sales from 5.4% to 4.5%. As it builds more distribution centers, in-

stalls more lockers, and builds out its fleet, Amazon is likely to drive those efficiency costs down even further.

So is Amazon Freight Services Bezos's next mission? When I ask, the laugh lines vanish from his face as if someone flipped a switch on his back. He contends that same-day delivery is too expensive outside of urban markets and that it only makes sense for Amazon to deliver its own products within the Fresh program. In China, he explains, Amazon does in fact deliver products via many couriers and bicycle messengers. "But in a country like the United States," he says, "we have such a sophisticated last-mile delivery system that it makes more sense for Amazon to use that system to reach its customers in a rapid and accurate way." When I ask whether he would consider, say, buying UPS, with its 90,000 trucks--or even more radically, purchasing the foundering USPS, with its 213,000 vehicles running daily through America's cities and towns--Bezos scoffs. But he won't precisely say no.

Rivals aren't waiting for an answer. EBay has launched eBay Now, a \$5 service that uses its own branded couriers in New York, San Francisco, and San Jose, to fetch products from local retail stores like Best Buy and Toys "R" Us and deliver them to customers within an hour. Google, fully aware that Amazon's market share in product search is substantial (now 30% to Google's 13%), has launched a pilot service called Google Shopping Express, which partners with courier companies. Walmart--which has booted all Kindles from its stores--started testing same-day delivery in select cities during the last holiday season, shipping items directly from its stores. (Joel Anderson, chief executive of Walmart.com, even suggested paying in-store shoppers to deliver online orders to other customers the same day. Come for a handsaw, leave with a job!)

These are the sort of ideas that retailers--both e-commerce and physical, large and small--will have to consider as Amazon expands. Guys like Jeff Jordan, partner at well-known venture firm Andreessen Horowitz, will make sure of it. His firm follows and invests in direct-to-consumer businesses. "We won't invest in a company," he says, "unless they can tell us why they won't get steam**Given the astounding** growth of Amazon, and the seemingly infinite ways it has defied the critics, Bezos may have proved himself the best CEO in the world at taking the long view. But he doesn't like talking about it. "Did you bring the crystal ball? I left mine at home today," he quips. He does, however, like discussing what the future might bring for his customers. In fact, he likes talking about his customer so much that the word can seem like a conversational tic; he used it 40 times, by my count, in just one interview. "It's impossible to imagine that 10 years from now, I could interview an Amazon customer and they would tell me, 'Yeah, I really love Amazon. I just wish your prices were a little higher," he says. "Or, 'I just wish you'd deliver a little more slowly." In Bezos's world, the goal of the coming decade is a lot like the goal of the past two: Be cheap. Be fast. That's how you win.

There is, naturally, no guarantee that Bezos will simply win and win and win. The bigger Amazon gets, the greater the number and variety of stakeholders required to make the Amazon machine hum. Many seem to be getting increasingly frustrated. Consider Amazon's third-party sellers--that group making up 40% of the company's product sales. Earlier this year, Amazon issued a series of fee hikes for use of its fulfillment services, ranging from as low as 5 cents per smallish unit to as much as \$100 for heavier or awkwardly shaped items (like a whiteboard, say, or roll-away bed). Many sellers took to Amazon's forums to complain, and others threatened to go to eBay, which mostly leaves fulfillment to its sellers. "I think Amazon is a necessary evil," says Louisa Eyler, distributor for Lock Laces, a shoelace product that sells as many as 3,000 units per week on Amazon. After the price hike, Eyler says her total fees for the \$7.99 item went from \$2.37 to \$3.62. She says Amazon now makes more per unit than she does.

Or consider the frustrations of Amazon employees, who are striking at two of its eight German facilities in an effort to wrest higher wages and overtime pay. At the height of the conflict, on June 17, 1,300 workers walked off the job. (It is

one of Amazon's largest walk-offs in its biggest foreign market, and could result in shipping delays.) Meanwhile, Amazon workers in the U.S. have filed a lawsuit claiming that they've been subject to excessive security checks--to search for pilfered items--at warehouses. The suit alleges their wait could last as long as 25 minutes, an inconvenience Amazon would never subject its customers to. "It means there's a broken process somewhere," says Annette Gleneicki, an executive at Confirmit, a software company that helps businesses capture customer and employee feedback. "[Bezos] clearly inspires passion in his employees, but that's only sustainable for so long."

The company could be vulnerable on other fronts as well. Target and Walgreens have "geo-fenced" their stores so their mobile apps can guide customers directly to the products they desire. Walmart and Macy's have begun making their stores do double-duty, both as a place to shop and a warehouse from which to ship products. (The strategy seems to be paying off for Macy's, which recently reported a jump in first-quarter profit and is now fulfilling 10% of its online purchases from its stores.) They're proving that retail won't go away--it'll learn and adapt. "Now you have smart brick-and-mortar stores saying, Why isn't our experience more intuitive, as it is on the web?" says Doug Stephens, author of *The Retail Revival: Re-Imagining Business for the New Age of Consumerism*. "We should know a consumer when they walk in, and what they bought before, in the same way as Amazon's recommendation engine."

Bezos won't admit to any deep concern. While Amazon's paper-thin profits continue to perplex observers (the company netted only \$82 million in the first quarter of 2013), the three primary weapons in its retail takeover--fulfillment centers, Amazon Prime, and now AmazonFresh--are coming to maturity. If the next year tells us anything about Amazon's future, it should reveal whether Bezos's decision to plow billions back into these operations will give the company an end-to-end service advantage that might be nearly impossible for its competitors to overcome.

The sun seems to be setting on Bezos's big Day One. Before we part ways in

Seattle, I ask him what we can expect to see on Day Two. "Day Two will be when the rate of change slows," he replies. "But there's still so much you can do with technology to improve the customer experience. And that's the sense in which I believe it's still Day One, and that it's early in the day. If anything, the rate of change is accelerating."

Of course, Bezos is the accelerator.

[Photo by Pari Dukovic, grooming: Erin Skipley; José Mandojana (Shouraboura)]