Why Amazon Is The World's Most Innovative Company Of 2017

A rapid expansion of Prime plus bold bets in the physical world are allowing the retailer to offer even more, even faster and smarter.

"Our job," says Amazon CEO Jeff Bezos, "is to invent new options that nobody's ever thought of before and see if customers like them."

[Photo: Peter Hapak]
Picture your ideal neighborhood. What does it look like? Is it manicured, with buildings set in a pattern so that everything flows together, designed for perfection? Or is it gritty and spontaneous, the kind of place where a restaurant might move into the space that used to house a dry cleaner? Boxes bearing the Amazon logo can arrive at doorsteps in either of these environments, of course, but Amazon’s founder and CEO, Jeff Bezos, prefers the second type.

"I think neighborhoods, cities, and towns that have evolved are more interesting and delightful than ones that have been carefully top-down planned," he tells me when I meet him at Amazon’s Seattle headquarters in November. "There’s just something very human" about them, he says.

"Our customers are loyal to us right up until the second somebody offers them a better service,"
It’s a surprising answer from a man known for his disciplined adherence to Six Sigma–style processes and data-driven decision making. But it’s also revealing. Over its nearly 22 years, Amazon has moved into one sector after another and gentrified it, even if that meant tearing down its own existing structures. Amazon’s Echo smart speaker rose on the lot where its Fire Phone flamed out. The latest version of Amazon’s streaming music service, Amazon Music Unlimited, was constructed on top of its initial music store, Amazon MP3, which opened nine years ago. Amazon Studios’ Emmy Award–winning original TV shows are built upon a crowdsourcing platform that the company first introduced in 2010 for aspiring scriptwriters. Even the company’s fashion business—Amazon is now the second-largest seller of apparel in the U.S., according to Morgan Stanley—evolved from brand experiments in outdoor furniture (2004), home goods (2008), electronic accessories (2009), diapers (2014), and now perishables such as organic, fair-trade-certified coffee.

Unlike Apple, Google, and Microsoft, Amazon is not fixated on a tightly designed ecosystem of interlocking apps and services. Bezos instead emphasizes platforms that each serves its own
customers in the best and fastest possible way. "Our customers are loyal to us right up until the second somebody offers them a better service," he says. "And I love that. It’s super-motivating for us." That impulse has spawned an awesome stream of creative firsts. Just this past year, Prime Video became available in more than 200 countries and territories, following the November debut of *The Grand Tour*, Amazon’s most-watched premiere ever. Twitch, the streaming video-game network that Amazon acquired in 2014, unveiled its first three original titles from its recently formed studios. Amazon invested millions in startups that will build voice-control apps for the intelligent assistant Alexa and give her thousands of new skills. The company opened two dozen new fulfillment centers, became the largest online store in India, and made its first delivery by autonomous drone in the United Kingdom.

Bezos’s strategy of continuous evolution has allowed the company to experiment in adjacent areas—and then build them into franchises. The website that once sold only books now lets anyone set up a storefront and sell just about anything. The warehouse and logistics capabilities that Amazon built to sort, pack, and ship those books are available, for a price, to any seller. Amazon Web
Services, which grew out of the company’s own e-commerce infrastructure needs, has become a $13 billion business that not only powers the likes of Airbnb and Netflix, but stores your Kindle e-book library and makes it possible for Alexa to tell you whether or not you’ll need an umbrella today.

**VIDEO: HOW FORD IS INTEGRATING AMAZON’S ALEXA INTO ALL OF ITS CARS**

Amazon is a singular enterprise, one that rises to the top of *Fast Company’s* Most Innovative Companies list because it has continued to be nimble even as it has achieved enviable scale. To truly understand how Bezos is meshing size and agility in 2017, though, you need to look beyond sales figures ($100 billion in 2015) and the stock price (up more than 300% in the past five years) and consider three initiatives that drive Amazon today: Prime, the company’s rapidly proliferating $99-per-year membership program; an incursion into the physical world with brick-and-mortar stores, something the company has long resisted; and a restless rethinking of logistics, epitomized
by a new fulfillment center an hour outside Seattle that features high-tech robots working alongside human workers like a factory of the future.

Our mobile-first, on-demand world finds its roots in Amazon’s founding idea: that digital commerce will radically reshape our marketplace. The company’s impact has already been staggering. In January, the nonprofit Institute for Local Self-Reliance conducted a survey of nearly 3,000 independent businesses, half of them retailers, asking them to cite the biggest threats they faced. Competition from chains and big-box stores, health care, finding employees, and rising rents all ranked near the bottom as modest concerns. "Way above everything was competition from Amazon," says ILSR codirector Stacy Mitchell. (The study also found that Amazon’s expansion in 2015 led to a net loss across all businesses of 149,000 jobs.)

Despite all the twists and surprises in recent decades—all the newcomers with youth, funding, and can-do enthusiasm—Amazon remains the undisputed leader, a startup at heart still striving to remake our expectations. And to repeatedly remake itself.

Nearly all of Amazon’s most recent innovations share a connection to Prime, which by some estimates accounts for 60% of the total dollar value of all merchandise sold on the site. Between 40 million and 50 million people in the United States use Prime, and, according to Morgan Stanley, those customers spend around $2,500 on
Amazon annually, more than four times what nonmembers spend. (Amazon refuses to offer any hard numbers related to Prime membership—that would be competitor focused rather than customer obsessed, as the executives there say—but it will confirm that Prime members spend more and shop across a greater number of categories than other users.)

If you somehow manage to take advantage of every Prime membership feature, it’s undeniably a good bargain. Along with free two-day shipping for millions of products, and tens of thousands of items available at your door in an hour or less through Prime Now, there is one-hour restaurant delivery, a free e-book a month (including the entire *Harry Potter* series), and ad-free viewing of a streaming video-game channel on Twitch—all included in the annual fee. You can get early access to Amazon’s best deals, 20% off diapers, and unlimited photo storage. For a few more dollars, Prime can be upgraded to include unlimited audiobooks, grocery delivery, and a subscription to HBO that can be watched on Amazon’s Fire TV streaming media player. More than 50 "benefits" were added for members around the globe in the second half of 2016 alone, says Greg Greeley, Amazon’s global VP in charge
of Prime. "I would like to say that the team thinks, 'Oh, boy, we'll take a deep breath here,'" he says. "But the way this company [is], it wouldn’t surprise me if we continue to keep accelerating."

What Amazon Prime is selling most of all is time. Every executive I spoke to, when asked about how it all fits together, cites this desire to get you whatever you want in the shortest window possible. Stephenie Landry, the Amazon vice president who launched Prime Now in 2014 and has overseen its expansion into 49 cities in seven countries, explains that her business merely has to answer two questions: "Do you have what I want, and can you get it to me when I need it?" The rest of the customer experience is built around answering both questions in the affirmative.

The more products and services Amazon is able to cram into Prime, the more likely users are to renew their membership and buy more stuff, which gives Amazon more data about their tastes and what they are likely to buy next. That information is used to spin out new products and services, such as the Dash button, which replenishes popular items with a tap, and Alexa, which is built, in part, for shopping. "You can just say, 'Alexa, reorder toothpaste,'" says Bezos. "And it knows which kind of toothpaste." That’s why he has repeatedly called Prime the company’s "flywheel": a device used in engines that provides constant energy. It is both an accelerant to Amazon’s forward motion and a beneficiary.
Bezos says that people have been asking him for 20 years whether he would ever open physical stores. The answer, consistently, has been no. "I’ve answered pretty much the same way the whole time, which is that we will if we have a differentiated idea," Bezos tells me. Yet today, suddenly, Amazon has four concepts in the works.

Why the shift? In part it links back to Prime; retail stores offer a tangible lure for the uninitiated. But, as Bezos explains, Amazon’s technological sophistication also now makes it possible for in-store shoppers to interact with its digital platforms in all-new manners. Monitoring the interplay is a classic Amazon way to spot new opportunities.

The first wave of Amazon stores is somewhat traditional: More than 30 pop-up shops showcasing Amazon’s electronic gadgets—Kindle,
Echo, Fire TV, Fire tablets, and Dash buttons—dotted the country by late last year. The next phase: expanding the highly curated Amazon Books stores—which showcase titles with a higher-than-four-stars customer rating alongside excerpts of reviews from the website—from three locations to eight. But it is the third leg of the company’s retail experiment that begins to rattle expectations. Amazon Go is a convenience-store concept the company announced in December (it will launch publicly in Seattle in early 2017). After a shopper swipes a code on her mobile phone at the entryway turnstile, she can grab whatever items she likes; they are magically added to her digital cart and automatically paid for when she leaves, through her existing account. This ability to skip both the line and any cash register on the way out is made possible by Amazon’s cloud computing, machine learning, voice control, and logistics know-how. It’s also another example of Amazon creating a technology platform that could be sold to other businesses.

Finally, and more quietly, another grocery-store concept is also being prepped. Although no one inside Amazon is willing to talk about it, documents filed with local buildings departments in Seattle and the San Francisco suburbs of Sunnyvale and San Carlos show that the company is erecting stores in all three locales.
Construction at the Seattle location—where a Chinese restaurant once stood, on a busy commercial thoroughfare in the fast-growing Ballard neighborhood—appears to be nearly complete.) The documents describe a system that would seem to extend the AmazonFresh grocery service: Customers load their digital carts remotely and pay online, then schedule a physical pickup within a two-hour window. "When picking up purchased items, customers either can drive into a designated parking area with eight parking stalls where the purchased items will be delivered to their cars, or they can walk into the retail area to pick up their items," the filings say.

These stores are not likely to change the way most Americans get their cornflakes overnight. Still, Amazon has always been good at being patient—and incrementally improving its offerings. Since AmazonFresh launched in 2007, the service has slowly expanded to dozens of cities. The Amazon neighborhood continues to change.

Planted on the edge of a military base, Amazon’s recently opened fulfillment center, in DuPont, Washington, looks from the outside like a generic warehouse, with a line of idling trucks snaking around the building waiting to load and unload product. But what’s inside represents a huge advance in the way Amazon sorts, packs, and ships orders.

It starts with a "vision tunnel," a conveyor belt tented by a dome full of cameras and scanners. As
each box comes off the truck, it is photographed and scanned on all sides. Image-recognition algorithms then sort each parcel based on variables such as the type of product or size and weight. What takes humans with bar-code scanners an hour to accomplish at older fulfillment centers can now be done in half that time.

Boxes are towed from the docks into the million-square-foot warehouse, sometimes by driverless vehicles. This facility handles the largest items that Amazon ships, which is why there’s also a huge, 6-ton yellow robot on the main floor. It has a six-axis arm that could pick up a car with ease, but today it’s mostly lifting pallets loaded 4 feet high with diapers and Keurig cups to the second floor of the warehouse where they will await shipping. The arm performs a constant, mostly silent waltz with an ensemble of rolling Amazon robots, which represent the next-generation offspring of the company’s $775 million acquisition of Kiva Systems in 2012, and were only fully integrated into the fulfillment center workflow last year.
Once a package leaves the warehouse, it may end up on a Boeing 767 with the Prime Air logo emblazoned on its side. Bezos rolled out the first in a fleet of 40 wide-bodies last summer, which will be operated in partnership with two aircraft-leasing companies. In January, Amazon announced that the fleet would be supported by a new air hub in Kentucky that will employ 2,000 workers—a $1.49 billion investment, according to a spokeswoman with the Cincinnati/Northern Kentucky International Airport. The planes, like the thousands of cargo trailers that already sport the Prime logo, make Amazon less dependent on its partnerships with FedEx, DHL, and the United States Postal Service. And, pending FAA approval, those fully operational Amazon delivery drones might one day cut delivery time down to 30 minutes or less.

Amazon stresses that its new automated fulfillment centers actually require more human workers than the old ones did, because the warehouse can store a significantly larger number
of products—which all still need people for boxing and general oversight (plus, someone’s got to service those robots when they need repairs). The plant in DuPont, active almost 24/7, employs more than a thousand people full time. At stow station 1405, for instance, I watch a young guy with tattoos, a man bun, and large-gauge flesh-tunnel earrings grab item after item from orange robots, scan each one, and, after the computer gives the green light, send it to be boxed. Over the holiday season, Amazon hired an extra 120,000 workers at centers nationwide to help meet demand. This is what the future of American factory work might look like.
Amazon's business is not without its challenges. The company's imperative to deliver more stuff faster has racheted up its annual shipping costs north of $11 billion, reinforcing the pressure to wring efficiencies out of the company's processes and its people. In the run-up to last year's holiday shopping season, pilots who work for Amazon’s Prime Air shipping contractors went on strike, demanding hiring increases to reduce their workload. It's no wonder that the blistering 2015 New York Times article about bruising work
environments at Amazon remains in the popular consciousness.

Amazon is working to counteract this legacy. The company pledged in January to create more than 100,000 full-time positions over the next 18 months, and it’s building a new headquarters complex in the heart of downtown Seattle. Five buildings and a 2,000-seat auditorium will surround a trio of glass-enclosed spheres that, when completed in 2018, will contain more than 3,000 species of plants and trees from around the world. There will be flexible, couch-filled work spaces and an "Expressions Lab," where employees can learn to knit or attend a "Bob Ross Paint Night." One floor will include a small outdoor dog park, and there will be several markets and cafeterias. Amazon is also funding an additional streetcar for the city, as well as bicycle paths leading to the three-block complex, which includes 1.7 acres of public space. "The biggest thing is probably just that we’re not in a suburban campus," says Bezos, "which I think would change the vibrancy and energy of Amazon."

In November, Amazon released a video ad portraying a pair of aging friends—a priest and an imam—laughing, hugging, and then ordering the same knee braces for each other. It is a sensitive and moving vignette, portraying Amazon as a connector of cultures, the kind of compassionate business it has not always been given credit for being. The ad arrived just two weeks after Donald Trump was elected president, so I ask Bezos what the company’s role might be in bridging the
divides that exist in the U.S. After all, he bankrolls the *Washington Post*, which went after Trump aggressively during the presidential campaign (and was an early and influential opponent of Trump's immigration ban). His answer is almost laughably narrow. "Well, I'll tell you one way that I don’t think anybody is divided," Bezos replies. "Everybody wants fast delivery. Low prices. I’m serious about this. Our job is to provide a great customer experience, and that is something that is universally desired all over the world."

It’s tough to argue with his words. And yet this Bezosian boilerplate is certainly less than the full story. Because Amazon is doing more than delivering our next tube of toothpaste. By using the "divine discontent of the customer as a North Star," as Bezos puts it, the company is energizing a culture of relentless progress. The neighborhood may be changing, but maybe that’s good. Maybe that’s what business in the modern era is all about.

This article is part of our coverage of the **World's Most Innovative Companies of 2017.**

*A version of this article appeared in the March 2017 issue of Fast Company magazine.*