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GET BIG FAST

Amazon.com and the Birth of Ecommerce

If the code had finally been cracked in terms of making money on the Internet, then it seems inevitable that people would eventually use the web to sell things. There was more than a century of precedent for doing commerce remotely: the multibillion-dollar catalog sales industry. A webpage could be a more dynamic and effective catalog than what Sears or Lands' End could offer. And the Secure Sockets Layer technology developed by Netscape made actual transactions possible on the web; no need for 1-800 numbers or customer service reps to take the orders. Indeed, perhaps the longest-lasting legacy of Netscape Navigator setting the standard for the early web is that, to this day, SSL, via its descendant, TLS, enables the vast majority of online commercial transactions worldwide.

But if you were willing to look deeper at the opportunity presented by web commerce, then you could envision even greater possibilities, even greater efficiencies and economies of scale. Just as the newspaper industry dreamed of delivering its product without the need for costly delivery and production expenses, a forward-thinking retailer could dream of a world without the need for costly commercial real estate expenses and perhaps vastly simplified warehousing and logistics costs. To early commerce pioneers, the promise wasn't that the web would allow them to do something fundamentally different than before—this was still about selling goods to consumers—but that it could radically transform the way they would do it.

Nearly twenty-five years on, this vision has largely come to pass, and in the

popular imagination it has come to pass because of one company. Pioneers of new technologies are rarely the ones who survive long enough to dominate their categories; often it is the copycat or follow-on names that are still with us to this day: Google, not AltaVista, in search; Facebook, not Friendster, in social networks. But in a case of the exception proving the rule, the company that broke the most ground in what would be known as ecommerce is still the company that dominates today: Amazon.



IN 1992, TWENTY-EIGHT-YEAR-OLD Jeff Bezos was the youngest-ever senior vice president at a Wall Street hedge fund company known as D. E. Shaw. One of Bezos's chief duties at the firm was to help launch new business initiatives. Around 1993, he was tasked with investigating the business opportunities inherent on the Internet. And among the many ideas that Bezos presented, the one that really caught Bezos's boss's fancy was the one that D. E. Shaw employees would later remember gained the nickname "everything store." The idea was simply to harness computer networks and the Internet to be a sort of intermediary between buyers and sellers of every product sold, creating efficiencies and taking a small percentage for the trouble. But Bezos quickly decided that an everything store was a bit too grandiose, and so he instead began investigating product categories that might be suitable as a proof of concept. He weighed roughly twenty different possibilities, including computer software, office supplies and CDs. He settled on books as the best test case because, as Brad Stone put it in his history of Amazon called, not coincidentally, *The Everything Store*, books were "pure commodities; a copy of a book in one store was identical to the same book carried in another, so buyers always knew what they were getting."¹ This is different than something like clothing, which has all sorts of vagaries when it comes to details like size, cut, shape, and color. Books also had an advantage over something like CDs because, at that time, there were only two major book distributors that every bookseller in the country worked with, Ingram and Baker & Taylor. This compared favorably to the several major and hundreds of minor record labels in the world. And as Stone also points out, books have what we would now refer to as a strong long tail: there were three million different titles of books in print worldwide, as opposed to only 300,000 different titles on CD.² No single store could shelve all those titles. But an online store could. As Bezos himself would later say, "With that huge diversity of products [titles] you could build a store online that simply could not exist in any other way."³

It seems that in the course of his research, Bezos, like Jim Clark, was bowled over by the sheer growth numbers he encountered. He ran across some data by an analyst who claimed that the amount of bytes transmitted over the web from January 1993 to January 1994 had increased roughly 205,700%.⁴ As Bezos himself later pointed out, “Things just don’t grow this fast outside of petri dishes.”⁵

In the spring of 1994, Jeff Bezos left D. E. Shaw and struck out on his own to found an online bookseller. In multiple retellings of this founding story, Bezos has mythologized the moment as the classic entrepreneur’s dilemma. He would be leaving a safe, lucrative career on Wall Street to go off on his own, with uncertain prospects for success. But that was okay. “I knew when I was eighty that I would never, for example, think about why I walked away from my 1994 Wall Street bonus,” Bezos said later. “That kind of thing just isn’t something you worry about when you’re eighty years old. At the same time, I knew that I might sincerely regret not having participated in this thing called the Internet that I thought was going to be a revolutionizing event.”⁶

The well-worn legend is that Jeff Bezos and his wife MacKenzie packed up their car and headed west, unsure of where they were going, with Jeff typing up a business plan on his laptop as they drove and phoning angel investors along the way on his cell phone. But the truth is, Bezos had already flown out to California to recruit software engineering talent. And according to multiple accounts, he likely knew the destination of his cross-country car trip would be Seattle. His careful research had shown him that Seattle had the advantage of being a tech hub—home to Microsoft of course, and thus filthy with tech talent—and also that it was a six-hour drive from a major warehouse that book distributor Ingram operated in Roseburg, Oregon. Also, Washington State was not nearly as populous as California. No doubt, his research had also led Bezos to realize that a company did not have to charge sales tax unless it had a physical presence in the state a customer ordered from. So, Washington being less populous than California was a major plus. Other locations Bezos considered for the benefits of tax purposes were Portland, Oregon; Boulder, Colorado; and Lake Tahoe, Nevada.

The company that would become Amazon was founded in the summer of 1994 in the garage of the home that Jeff and MacKenzie Bezos rented in Bellevue, Washington, at 10704 N.E. 28th Street.⁷ Jeff and MacKenzie were the founding employees, along with a couple of programming talents that Jeff had recruited earlier. One was Shel Kaphan, who would go on to write much of the initial structure that would become the Amazon site and who many people thus

think of as a cofounder of Amazon in all but title. “When I got there, [the company] was basically not even a business plan on paper,” Kaphan says. “It was a couple of spreadsheets and a verbal description of [the concept]. The garage, which had been converted, was just a not particularly well-heated part of the house.”⁸

As a *Star Trek* fan, Bezos originally kicked around the idea of naming his company MakeItSo.com, after Captain Picard’s famous catchphrase. Relentless.com was also considered as a way to suggest that the company would be relentlessly focused on customer service. But that was rejected as sounding too menacing. For a long time, a strong contender was Cadabra, but Kaphan talked Bezos out of that name, claiming it sounded too close to cadaver. Browse.com and Bookmall.com were also rejected, as were the alphabetically advantageous Aard.com and Awake.com. Finally, Bezos himself settled on Amazon. As he would later say, “This is not only the largest river in the world, it’s many times larger than the next biggest river. It blows all the other rivers away.”⁹ The earth’s biggest river; the earth’s biggest bookstore. The domain name was registered on November 1, 1994.



IT’S INTERESTING TO REALIZE, given Amazon’s later reputation for warehousing, logistics and fulfillment mastery, that at launch, the company didn’t have the resources for a proper warehouse. Initially, Amazon would take a catalog of available books entitled Books In Print, sent out by R. R. Bowker of New Jersey, bring it online, add some search functionality and allow customers to find the books they wanted.¹⁰ Books In Print was basically the industry bible, the source that every bookseller in the country, large and small, used to order titles. When you went to your local bookseller and asked for a specific book to be special ordered, Books In Print was the resource they referenced to see if they could accommodate you. All Amazon did was take this resource, insert itself as the middleman, and take it directly to consumers. Could R. R. Bowker have put Books In Print online itself? Probably. But it didn’t, and Jeff Bezos did. Amazon supplemented this catalog with inventory data from the two major book distributors, Ingram and Baker & Taylor. When a customer searched for a book, Amazon ordered the title itself, took delivery of it temporarily, and then turned around and shipped it to the customer.

In the spring of 1995, Amazon conducted a semiprivate beta test among friends and family. Almost right away, Bezos and company discovered that the promise of “every” book in the world was enticing to people. The first orders to

come in weren't for the latest bestsellers, but for obscure titles that might not be carried at your average bookstore. The first-ever order of the beta test, and thus the first-ever Amazon order, was from a former coworker of Shel Kaphan named John Wainwright, whom Kaphan had invited to the beta test. Wainwright ordered the book *Fluid Concepts and Creative Analogies* by Douglas Hofstadter on April 3, 1995.

Amazon offered the bestsellers too, of course, and heavily discounted them as loss leaders. But it would be more obscure titles like *Fluid Concepts and Creative Analogies* that would allow Amazon to create a rabid following among early adopters. The bestselling title for Amazon's first year of existence was *How to Set Up and Maintain a World Wide Web Site: The Guide for Information Providers* by Lincoln D. Stein.¹¹

But obscure titles presented problems of their own. Amazon tried to deliver books to customers within a week. Rare finds could take as much as a month to track down. And even then, Amazon still had to order the books, receive them, repackage them, and send them back out to customers. Furthermore, it turned out that distributors required retailers to order a minimum of ten books at a time. During the beta, Amazon of course didn't have that sort of sales volume. "We found a loophole!" Bezos would later remember proudly. "Their systems were programmed in such a way that you didn't have to receive ten books, you only had to *order* ten books."¹² So the Amazon team found an obscure book about lichens that was listed in the system but was regularly out of stock. They began ordering the one book they wanted and nine copies of the lichens book. The book they wanted would ship while the distributor promised to track down more copies of the lichens book.

Many, if not most, of the early customers phoned in their credit card numbers, not trusting the online transactions to be safe. "Some people would even just email their full credit card number to us," says Kaphan, "as if that was somehow more secure than entering it in a form on the web."¹³ To make sure that the orders were secure from hackers, credit card numbers were recorded on one computer, copied to a floppy disc and then physically walked to a second computer, which would batch the transactions. This was known within Amazon as sneakernet. The sneakernet system was eventually retired, but as Kaphan notes, "It was quite a while, actually, before we had enough business to justify a full-time connection to a credit card processor."¹⁴

Amazon was by no means the first ecommerce player to launch; but it had the ambition to incorporate some key innovations the web made possible, many

of which we take for granted today. These innovations were meant to show that ecommerce could do things traditional commerce couldn't. For one thing, think of the basic user interface of ecommerce: the shopping cart. If users are shopping your site, they might have several things to purchase. You don't want them to have to begin the checkout process for each item they want to order. You need a virtual place to store the items customers are considering. You want a virtual shopping cart. Amazon popularized this metaphor. From a technical perspective, remembering a given customer from one visit to the next is a useful thing. Amazon remembered what a customer had ordered previously—or almost ordered, before abandoning their cart—so it could store that information and prompt the returning customer accordingly. Again, using cookies, Kaphan and his small team set up the site to change so that once a customer bought a book, it wouldn't be promoted to them again. Today we're used to the idea that when I visit an ecommerce site I might see offers for entirely different products than you might, based on our different shopping histories. Amazon was one of the first sites to tailor its storefront individually in this way.

And then there was the brilliant innovation of product reviews. Prior to the Internet, few general retailers offered reviews of the products they were selling. A supermarket doesn't say one brand of toothpaste is higher-rated by shoppers than another. Quite the opposite in fact: a traditional retailer wants to be seen as a neutral broker. But Amazon felt it needed to mimic a real-world book retailer in one key aspect: acting as a source of recommendations. So, Shel Kaphan hacked together a rudimentary rating system over a weekend and initially designed it to provide editorial content from Amazon itself. But this soon evolved into allowing reviews from anyone and everyone. User ratings and reviews were controversial, as, obviously, authors resented bad reviews getting posted prominently alongside their books on the sales page. But to its credit, Amazon stuck to its guns, believing that honest reviews, as well as a reputation for helping customers make smart purchasing decisions, would be a key differentiator compared with offline retail.

In coming years, all these innovations would combine to give birth to the famous recommendation engine. Tying in with the cookies and session ID systems, the recommendation engine would parse your own browsing history, your own purchasing history, as well as the purchasing history of everyone else on Amazon, to help give users that classic prompt: if you liked x, then you will probably like y. Today, this is a key component of not just ecommerce, but of things like Netflix and music-streaming services like Spotify. Initially for Amazon, however, it was just another differentiator from offline retail, a way to

prove that ecommerce could do things traditional retail could never dream of.



AMAZON'S FULL WEBSITE launched to the public on July 16, 1995. The only graphics included the early Amazon logo (which was a field with a river running through it, and a giant A) and tiny pictures of the covers of featured books that Amazon was promoting. All books on the site were discounted by a blanket 10%, but the spotlight books were discounted 20% to 30%.

Sales were slow. Early on, a dozen purchases constituted a good day. But that was a good thing because everything was being done by hand. When an order came in, Amazon turned around and ordered the book from the distributor, who shipped the book to Amazon's meager offices. Then, the handful of Amazon employees, Bezos and Kaphan included, reboxed the books and shipped them to customers. The company had one public-facing email address and all the employees would take turns responding to customer inquiries.

Over its first week in business, Amazon rang up \$12,438 worth of book sales. But it was able to ship only \$846 worth out to customers.¹⁵ By October, Amazon had its first hundred-order day. And though those numbers sound good for a business blazing an entirely new trail, the fact of the matter was, it would not be enough to sustain operations for very long. For one thing, around the time of the site launch, Amazon had moved into a larger space at 2714 First Avenue South in the SoDo neighborhood of Seattle, across the street from the headquarters of Starbucks. They were a real business now, and they were trying their best to learn to act like one, which did not come cheap.

In later SEC filings, we can see that despite steadily growing sales, by the end of 1994, Amazon lost \$52,000. In its first full year of operations, 1995, Amazon was able to sell half a million dollars' worth of books, and yet it was still in the red to the tune of \$303,000.¹⁶ And that brings us to the question of financing, which, if you'll notice, we haven't really mentioned up until this point. That's because for as long as he possibly could, Bezos was determined to self-fund the business. Drawing from the money he had socked away over his years on Wall Street, as well as with a mixture of credit card loans and personal guarantees, Bezos was able to fund the company through early development. In the summer of 1995, in the name of her family trust, Jeff's mother, Jackie, invested \$145,000 in the company, a literal friends-and-family round. But that wouldn't be enough to keep the lights on very much longer.

So, in the summer of 1995, Jeff Bezos started to try to raise money for Amazon for the first time. He didn't want to approach big-name venture capital

firms, and instead solicited from Seattle connections he knew personally. The business plan Bezos shopped around to these local investors was projecting \$74 million to \$114 million in sales for Amazon by the year 2000.¹⁷ On the strength of these projections, Bezos was able to raise \$981,000 by the end of 1995, giving away around 20% of the company.¹⁸ Of course, those investors would do quite well, because that best-case scenario they bought into was not even close to what Amazon would eventually achieve. By the year 2000, Amazon would record \$1.64 billion in net sales, more than fourteen times Bezos's rosier estimate.

The true turning point for the company came when Amazon was featured on the front page of the *Wall Street Journal* on May 16, 1996. Under the headline "Wall Street Whiz Finds Niche Selling Books on the Internet," the *Journal* described Bezos as "a whiz-kid programmer on Wall Street" who "suddenly fell under the spell of one of the iffiest business propositions of modern times: retailing on the Internet."¹⁹ The impact of the article was instantaneous. Almost overnight, Amazon went from being a tiny curio on the corner of the Internet to becoming the standard-bearer for a whole new industry. The search engines and AOL came calling, interested in forming partnerships. Just as important, the big-name venture capital firms that Jeff Bezos had deliberately avoided until now began circling as well. Amazon held out for the *crème de la crème*, and successfully landed an \$8 million investment from Kleiner Perkins for 13% of the company, with no less than John Doerr agreeing to sit on Amazon's board of directors.²⁰

"Jeff was always an expansive thinker, but access to capital was an enabler," Doerr has said of Bezos.²¹ Suddenly, a new motto was making the rounds at Amazon, a phrase that would become the standard rallying cry for every dot-com-era business: Get Big Fast. Netscape coined the term originally, but Jeff Bezos and Amazon turned it into something just short of an official motto. In essence, the initial thinking behind Get Big Fast was practical. The publicity surrounding the *Wall Street Journal* article no doubt alerted bigger competitors to Amazon's existence. Borders and Barnes & Noble were now aware of Amazon, if they hadn't been already. In the *Journal* article, it was noted that Amazon had been on track to do about \$5 million in revenue that year, which represented the yearly sales of a single Barnes & Noble superstore. Bezos knew Amazon would have to do better than that, and quickly, before Barnes & Noble launched a website of its own. If the "Earth's biggest bookstore" really could go toe-to-toe with the entire book-retailing industry, it was time to put the pedal to the metal.

To this end, Bezos and Amazon began spending the recently raised capital infusion on people: warehouse staff, technical support, product reviewers, *etc.* So many people were brought on board so quickly that an early Amazon HR manager sent a much-remembered pronouncement to local recruiting firms to “send us your freaks,” the oddballs and misfits who might not suit a typical office or typical company, but might be able to thrive in the chaos of a Get Big Fast company.

In November of 1996, Amazon moved again, into new digs in South Seattle, across the street from a pawn shop and a strip club that advertised “12 beautiful women and one ugly one.”²² This new building housed a proper distribution facility, boasting 93,000 square feet of space.²³ This move coincided with the hiring of Oswaldo-Fernando Duenas, a 20-year veteran of FedEx who was the first person at Amazon with extensive logistics and warehousing experience. Also around this time, roughly the fall of 1996 through the spring of 1997, Amazon hired veterans of Kraft Foods and Symantec to handle marketing, an ex-Microsoft engineer, brought in to handle product development, and an executive from Barnes & Noble to head business expansion.

Barnes & Noble had certainly taken notice of what Amazon was up to. In late 1996, the Riggio brothers, Leonard and Stephen, who had built Barnes & Noble into the 466-store juggernaut that made it the Wal-Mart of the book-retailing industry, flew out to Seattle to have dinner with Bezos. According to Tom Alberg, an advisor to Bezos at the time, the Riggios said they admired what Amazon was doing, but when and if Barnes & Noble got around to selling books online, it would crush Amazon. According to Alberg, the Riggios originally wanted some vague partnership, with Len Riggio saying, “I want to invest. I want to own 20 percent of you. I don’t care what the price is.”²⁴ But Bezos didn’t take the bait.

The question was, if Barnes & Noble created a website, could it do so better than Amazon? Bezos calculated that they could not. In short, he would lure the offline retailers onto a battlefield of his choosing, which was the web. He trusted that the web offered Amazon an advantage in skill sets that would prove decisive. While the offline retailers would spend millions to copy Amazon’s operations online, Amazon would meanwhile be outflanking them by moving into new markets.

Barnes & Noble launched its own website on May 12, 1997, and locked up an exclusive agreement with AOL to become that service’s exclusive bookseller.²⁵ This was back when accessing AOL’s 8 million early online

subscribers was invaluable for young web companies hoping to compete. And of course, Barnes & Noble attempted to leverage customer familiarity with those 600-odd physical stores scattered around the country. Very smart people looked at the competitive situation and declared that Amazon was doomed. In September of 1997, *Fortune* magazine had a story with the title “Why Barnes & Noble May Crush Amazon.” In the article, the author posited, “Anything Amazon.com can do on the Internet, so, too, can Barnes & Noble.”²⁶ Famously, Forrester Research released a report in early 1997 entitled “Amazon.toast.”²⁷

But Amazon fought back with the Netscape playbook. It IPOed on May 15, 1997, gaining the now-requisite flood of media attention. Shares went out at \$14 to \$16 per share, but closed on the first day of trading at \$23.50.²⁸ It wasn’t a mind-blowing first-day pop like Netscape or Yahoo, but investors had been intrigued by Amazon’s strong growth numbers. In 1996, sales were \$15.7 million. In 1997, sales would top \$147 million.²⁹ At the time of the IPO, Amazon was recording a 900% growth in revenue.³⁰ The promised efficiencies of the ecommerce model that Bezos had so much faith in were actually panning out. Amazon was turning over its inventory 150 times a year; traditional physical bookstores like Barnes & Noble turned inventory only 3 or 4 times a year.³¹

Just as Bezos had anticipated, he, not the Riggios, was the incumbent on the web. Barnes & Noble had to spend tens of millions of dollars to create a website, and even after doing so, it never drew significant numbers of shoppers back from Amazon. Amazon, meanwhile, was steadily poaching customers from Barnes & Noble’s website, while at the same time chipping away at offline retail sales. It wasn’t clear, in fact, that having a nationwide chain of stores offered any sort of advantage whatsoever against an online insurgent. This was antithetical to everything people understood about retail sales. Being local neighbors, Howard Shultz, CEO of Starbucks, once met with Bezos to propose some sort of partnership that would allow Amazon to place merchandise in Starbucks’s own stores, perhaps in a bid to emulate Barnes & Noble’s cafés. Shultz told Bezos, “You have no physical presence. That is going to hold you back.” Bezos shot back that physical presence wasn’t necessary: “We are going to take this thing to the moon.”³²

Disruption is the word that has come into common parlance to describe the nature of these encounters and the Barnes & Noble/Amazon battle would be the first of the great contests between online disrupter and offline incumbent. So, it’s interesting to note: Amazon didn’t exactly trounce its initial competition. Barnes & Noble is still around (though Borders is gone). Bookstores are still around,

unlike, say, video rental stores or music stores. Amazon didn't surpass Barnes & Noble in total revenue as a company until 2004.³³ Amazon didn't even become the biggest book retailer in the world until 2007.³⁴ But it didn't really matter, because just as had been the plan all along, while the incumbent booksellers raced to copy Amazon, Amazon was already moving toward new horizons. Jeff Bezos didn't care if Amazon ever definitively "won" in books, frankly, because his real aim was to take increasingly bigger bites of other markets, and then other markets, and other markets, until one day, Amazon had a piece of *every* market.

It seems that at some point between researching the web at D. E. Shaw and the Kleiner Perkins investment, Jeff Bezos convinced himself ecommerce really was a markedly superior way of doing business. Like Andreessen and Clark at Netscape, Bezos saw the horizons on the Internet as being unlimited. Time and again, in several different interviews and speeches, Bezos would talk of how this was "day one" of the Internet revolution. Bezos believed Amazon had a chance to not only establish ecommerce as a viable proposition, but also to disrupt the entire system of buying and selling everything. Bezos wasn't just thinking about books, but about retail itself, a business model that went back millennia to that first day merchants gathered in a central location to hawk their goods to a local population. In Bezos's vision, the products would come to the people. First books, then anything else. In the end, he would make the everything store a reality.

As Amazon executive Joy Covey remembered, Bezos "always had a large appetite. It was just a question of staging the opportunities at the right time." Amazon launched its music store in June of 1997 and its movies store in November of 1997.³⁵ A mere 120 days after launching the music store, Amazon.com could claim to be the largest online seller of music. The motto on the top of the website was changed from reading Earth's Largest Bookstore to now read Books, Music and More, and eventually would simply say Earth's Biggest Selection.³⁶

In the mid-nineties, a cautionary tale began to be bandied about the business world: beware because your industry could suddenly be Amazoned! No matter what you sold or what service you provided, you had to be on the lookout for a web startup (often Amazon itself) that might come along and attack your market. This upstart might seem like a tiny pretender at first, but their web magic would start wooing customers, and before you knew it, that little dot-com might have a bigger market cap than you did. A key factor that would contribute to the coming dot-com bubble would be the untold billions that companies in all

industries spent in an attempt to be proactive and come up with an “Internet strategy.” To avoid being Amazoned. Bezos himself would later say of his first competitor’s sudden efforts to compete on the web, “Barnes & Noble isn’t doing this because they wanted to. They’re doing this because of us.”³⁷