

Amazon.com passed many milestones in 1997: by year-end, we had served more than 1.5 million customers, yielding 838% revenue growth to \$147.8 million, and extended our market leadership despite aggressive competitive entry.

But this is Day 1 for the Internet and, if we execute well, for Amazon.com. Today, online commerce saves customers money and precious time. Tomorrow, through personalization, online commerce will accelerate the very process of discovery. Amazon.com uses the Internet to create real value for its customers and, by doing so, hopes to create an enduring franchise, even in established and large markets.

We have a window of opportunity as larger players marshal the resources to pursue the online opportunity and as customers, new to purchasing online, are receptive to forming new relationships. The competitive landscape has continued to evolve at a fast pace. Many large players have moved online with credible offerings and have devoted substantial energy and resources to building awareness, traffic, and sales. Our goal is to move quickly to solidify and extend our current position while we begin to pursue the online commerce opportunities in other areas. We see substantial opportunity in the large markets we are targeting. This strategy is not without risk: it requires serious investment and crisp execution against established franchise leaders.

## It's All About the Long Term

We believe that a fundamental measure of our success will be the shareholder value we create over the *long term*. This value will be a direct result of our ability to extend and solidify our current market leadership position. The stronger our market leadership, the more powerful our economic model. Market leadership can translate directly to higher revenue, higher profitability, greater capital velocity, and correspondingly stronger returns on invested capital.

Our decisions have consistently reflected this focus. We first measure ourselves in terms of the metrics most indicative of our market leadership: customer and revenue growth, the degree to which our customers continue to purchase from us on a repeat basis, and the strength of our brand. We have invested and will continue to invest aggressively to expand and leverage our customer base, brand, and infrastructure as we move to establish an enduring franchise.

Because of our emphasis on the long term, we may make decisions and weigh tradeoffs differently than some companies. Accordingly, we want to share with you our fundamental management and decision-making approach so that you, our shareholders, may confirm that it is consistent with your investment philosophy:

We will continue to focus relentlessly on our customers.

- We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.
- We will continue to measure our programs and the effectiveness of our investments analytically, to jettison those that do not provide acceptable returns, and to step up our investment in those that work best. We will continue to learn from both our successes and our failures.
- We will make bold rather than timid investment decisions where we see a
  sufficient probability of gaining market leadership advantages. Some of these
  investments will pay off, others will not, and we will have learned another
  valuable lesson in either case.
- When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows.
- We will share our strategic thought processes with you when we make bold choices (to the extent competitive pressures allow), so that you may evaluate for yourselves whether we are making rational long-term leadership investments.
- We will work hard to spend wisely and maintain our lean culture. We understand the importance of continually reinforcing a cost-conscious culture, particularly in a business incurring net losses.
- We will balance our focus on growth with emphasis on long-term profitability and capital management. At this stage, we choose to prioritize growth because we believe that scale is central to achieving the potential of our business model.
- We will continue to focus on hiring and retaining versatile and talented employees, and continue to weight their compensation to stock options rather than cash. We know our success will be largely affected by our ability to attract and retain a motivated employee base, each of whom must think like, and therefore must actually be, an owner.

We aren't so bold as to claim that the above is the "right" investment philosophy, but it's ours, and we would be remiss if we weren't clear in the approach we have taken and will continue to take

With this foundation, we would like to turn to a review of our business focus, our progress in 1997, and our outlook for the future.

### Obsess Over Customers

From the beginning, our focus has been on offering our customers compelling value. We realized that the Web was, and still is, the World Wide Wait. Therefore, we set out to offer customers something they simply could not get any other way, and began serving them with books. We brought them much more selection than was possible in a physical store (our store would now occupy 6 football fields), and presented it in a useful, easy-to-search, and easy-to-browse format in a store open 365 days a year, 24 hours a day. We maintained a dogged focus on improving the shopping experience, and in 1997 substantially enhanced our store. We now offer customers gift certificates, 1-Click(SM) shopping, and vastly more reviews, content, browsing options, and recommendation features. We dramatically lowered prices, further increasing customer value. Word of mouth remains the most powerful customer acquisition tool we have, and we are grateful for the trust our customers have placed in us. Repeat purchases and word of mouth have combined to make Amazon.com the market leader in online bookselling.

By many measures, Amazon.com came a long way in 1997:

- Sales grew from \$15.7 million in 1996 to \$147.8 million -- an 838% increase
- Cumulative customer accounts grew from 180,000 to 1,510,000 -- a 738% increase.
- The percentage of orders from repeat customers grew from over 46% in the fourth quarter of 1996 to over 58% in the same period in 1997.
- In terms of audience reach, per Media Metrix, our Web site went from a rank of 90th to within the top 20.
- We established long-term relationships with many important strategic partners, including America Online, Yahoo!, Excite, Netscape, GeoCities, AltaVista, @Home, and Prodigy.

## *Infrastructure*

During 1997, we worked hard to expand our business infrastructure to support these greatly increased traffic, sales, and service levels:

- Amazon.com's employee base grew from 158 to 614, and we significantly strengthened our management team.
- Distribution center capacity grew from 50,000 to 285,000 square feet, including a 70% expansion of our Seattle facilities and the launch of our second distribution center in Delaware in November.
- Inventories rose to over 200,000 titles at year-end, enabling us to improve availability for our customers.
- Our cash and investment balances at year-end were \$125 million, thanks to our initial public offering in May 1997 and our \$75 million loan, affording us substantial strategic flexibility.

# Our Employees

The past year's success is the product of a talented, smart, hard-working group, and I take great pride in being a part of this team. Setting the bar high in our approach to hiring has been, and will continue to be, the single most important element of Amazon.com's success.

It's not easy to work here (when I interview people I tell them, "You can work long, hard, or smart, but at Amazon.com you can't choose two out of three"), but we are working to build something important, something that matters to our customers, something that we can all tell our grandchildren about. Such things aren't meant to be easy. We are incredibly fortunate to have this group of dedicated employees whose sacrifices and passion build Amazon.com.

## Goals for 1998

We are still in the early stages of learning how to bring new value to our customers through Internet commerce and merchandising. Our goal remains to continue to solidify and extend our brand and customer base. This requires sustained investment in systems and infrastructure to support outstanding customer convenience, selection, and service while we grow. We are planning to add music to our product offering, and over time we believe that other products may be prudent investments. We also believe there are significant opportunities to better serve our customers overseas, such as reducing delivery times and better tailoring the customer experience. To be certain, a big part of the challenge for us will lie not in finding new ways to expand our business, but in prioritizing our investments.

We now know vastly more about online commerce than when Amazon.com was founded, but we still have so much to learn. Though we are optimistic, we must remain vigilant and maintain a sense of urgency. The challenges and hurdles we will face to make our long-term vision for Amazon.com a reality are several: aggressive, capable, well-funded competition; considerable growth challenges and execution risk; the risks of product and geographic expansion; and the need for large continuing investments to meet an expanding market opportunity. However, as we've long said, online bookselling, and online commerce in general, should prove to be a very large market, and it's likely that a number of companies will see significant benefit. We feel good about what we've done, and even more excited about what we want to do.

1997 was indeed an incredible year. We at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

/s/ JEFFREY P. BEZOS Jeffrey P. Bezos Founder and Chief Executive Officer Amazon.com, Inc.



To our shareholders, customers, and employees:

The last 3½ years have been exciting. We've served a cumulative 6.2 million customers, exited 1998 with a \$1 billion revenue run rate, launched music, video, and gift stores in the U.S., opened shop in the U.K. and Germany, and, just recently, launched Amazon.com Auctions.

We predict the next 3½ years will be even more exciting. We are working to build a place where tens of millions of customers can come to find and discover anything they might want to buy online. It is truly Day 1 for the Internet and, if we execute our business plan well, it remains Day 1 for Amazon.com. Given what's happened, it may be difficult to conceive, but we think the opportunities and risks ahead of us are even greater than those behind us. We will have to make many conscious and deliberate choices, some of which will be bold and unconventional. Hopefully, some will turn out to be winners. Certainly, some will turn out to be mistakes.

# A Recap of 1998

Heads-down focus on customers helped us make substantial progress in 1998:

- Sales grew from \$148 million in 1997 to \$610 million a 313% increase.
- Cumulative customer accounts grew from 1.5 million at the end of 1997 to 6.2 million at the end of 1998 an increase of over 300%.
- Despite this strong new customer growth, the percentage of orders placed on the Amazon.com Web site by repeat customers grew from over 58% in the fourth quarter of 1997 to over 64% in the same period in 1998.
- Our first major product expansion, the Amazon.com music store, became the leading online music retailer in its first full quarter.
- Following their October launch under the Amazon brand and with Amazon.com technology, the combined fourth-quarter sales in the U.K. and German stores nearly quadrupled over the third quarter, establishing Amazon.co.uk and Amazon.de as the leading online booksellers in their markets.
- The addition of music was followed by the addition of video and gifts in November, and we became the leading online video retailer in only 6 weeks.
- 25% of our fourth-quarter 1998 sales was derived from Amazon.co.uk, Amazon.de, and music, video, and gift sales on Amazon.com, all very new businesses.
- We significantly improved the customer experience, with innovations like 1-Click shopping, Gift Click, store-wide sales rank, and instant recommendations.

1998's revenue and customer growth and achievement of continued growth in 1999 were and are dependent on expansion of our infrastructure. Some highlights:

- In 1998 our employee base grew from approximately 600 to over 2,100, and we significantly strengthened our management team.
- We opened distribution and customer service centers in the U.K. and Germany, and in early 1999, announced the lease of a highly-mechanized distribution center of approximately 323,000 square feet in Fernley, Nevada. This latest addition will more than double our total distribution capacity and allows us to even further improve time-to-mailbox for customers.
- Inventories rose from \$9 million at the beginning of the year to \$30 million by year end, enabling us to improve product availability for our customers and improve product costs through direct purchasing from manufacturers.
- Our cash and investment balances, following our May 1998 high yield debt offering and early 1999 convertible debt offering, now stand at well over \$1.5 billion (on a pro forma basis), affording us substantial financial strength and strategic flexibility.

We're fortunate to benefit from a business model that is cash-favored and capital efficient. As we do not need to build physical stores or stock those stores with inventory, our centralized distribution model has allowed us to build our business to a billion-dollar sales rate with just \$30 million in inventory and \$30 million in net plant and equipment. In 1998, we generated \$31 million in operating cash flow which more than offset net fixed asset additions of \$28 million.

## Our Customers

We intend to build the world's most customer-centric company. We hold as axiomatic that customers are perceptive and smart, and that brand image follows reality and not the other way around. Our customers tell us that they choose Amazon.com and tell their friends about us because of the selection, ease-of-use, low prices, and service that we deliver.

But there is no rest for the weary. I constantly remind our employees to be afraid, to wake up every morning terrified. Not of our competition, but of our customers. Our customers have made our business what it is, they are the ones with whom we have a relationship, and they are the ones to whom we owe a great obligation. And we consider them to be loyal to us – right up until the second that someone else offers them a better service.

We must be committed to constant improvement, experimentation, and innovation in every initiative. We love to be pioneers, it's in the DNA of the company, and it's a good thing, too, because we'll need that pioneering spirit to succeed. We're proud of the differentiation we've built through constant innovation and relentless focus on customer experience, and we believe our initiatives in 1998 reflect it: our music, video, U.K. and German stores, like our U.S. bookstore, are best of breed.

# Work Hard, Have Fun, Make History

It would be impossible to produce results in an environment as dynamic as the Internet without extraordinary people. Working to create a little bit of history isn't supposed to be easy, and, well, we're finding that things are as they're supposed to be! We now have a team of 2,100 smart, hard-working, passionate folks who put customers first. Setting the bar high in our approach to hiring has been, and will continue to be, the single most important element of Amazon.com's success.

During our hiring meetings, we ask people to consider three questions before making a decision:

- Will you admire this person? If you think about the people you've admired in your life, they are probably people you've been able to learn from or take an example from. For myself, I've always tried hard to work only with people I admire, and I encourage folks here to be just as demanding. Life is definitely too short to do otherwise.
- Will this person raise the average level of effectiveness of the group they're entering? We want to fight entropy. The bar has to continuously go up. I ask people to visualize the company 5 years from now. At that point, each of us should look around and say, "The standards are so high now -- boy, I'm glad I got in when I did!"
- Along what dimension might this person be a superstar? Many people have unique skills, interests, and perspectives that enrich the work environment for all of us. It's often something that's not even related to their jobs. One person here is a National Spelling Bee champion (1978, I believe). I suspect it doesn't help her in her everyday work, but it does make working here more fun if you can occasionally snag her in the hall with a quick challenge: "onomatopoeia!"

As we look forward, we believe that the overall e-commerce opportunity is enormous, and 1999 will be an important year. Although Amazon.com has established a strong leadership position, it is certain that competition will even further accelerate. We plan to invest aggressively to build the foundation for a multi-billion-dollar revenue company serving tens of millions of customers with operational excellence and high efficiency. Although this level of forward investment is costly and carries many inherent risks, we believe it will provide the best end-to-end experience for customers, and actually offer the least risky long-term value creation approach for investors.

The elements of our 1999 plan may not surprise you:

Distribution capacity – We intend to build out a significant distribution infrastructure to ensure that we can support all the sales our customers demand, with speedy access to a deep product inventory.

Systems capacity – We'll be expanding our systems capacity to support similar growth levels. The systems group has a significant task: expand to meet near term growth, restructure systems for multi-billion dollar scale and tens of millions of customers, build out features and systems for new initiatives and new innovations, and increase operational excellence and efficiency. All while keeping a billion dollar, 8 million customer store up and available on a 24x7 basis.

Brand promise – Amazon.com is still a small and young company relative to the major offline retailers, and we must ensure that we build wide, strong customer relationships during this critical period.

Expanded product and service offerings – In 1999, we will continue to enhance the scope of our current product and service offerings, as well as add new initiatives. Amazon.com Auctions is our most recent addition. If any of you have not tried this new service, I encourage you to run – not walk – to <a href="https://www.amazon.com">www.amazon.com</a> and click on the Auctions tab. As an Amazon.com customer, you are pre-registered to both bid and sell. As a seller, you have access to Amazon.com's 8 million experienced online shoppers.

Bench strength and processes – We've complicated our business dramatically with new products, services, geographies, acquisitions and additions to our business model. We intend to invest in teams, processes, communication and people development practices. Scaling in this way is among the most challenging and difficult elements of our plan.

Amazon.com has made a number of strides forward in the past year, but there is still an enormous amount to learn and to do. We remain optimistic, but we also know we must remain vigilant and maintain a sense of urgency. We face many challenges and hurdles. Among them, aggressive, capable and well-funded competition; the growth challenges and execution risk associated with our own expansion; and the need for large continuing investments to meet an expanding market opportunity.

The most important thing I could say in this letter was said in last years' letter, which detailed our long-term investment approach. Because we have so many new shareholders (this year we're printing more than 200,000 of these letters – last year we printed about 13,000), we've appended last year's letter immediately after this year's. I invite you to please read the section entitled *It's All About the Long Term*. You might want to read it twice to make sure we're the kind of company you want to be invested in. As it says there, we don't claim it's the right philosophy, we just claim it's ours!

All the best and sincere thanks once again to our customers and shareholders and all the folks here who are working passionately every day to build an important and lasting company.

Jeffrey P. Bezos Founder and Chief Executive Officer Amazon.com, Inc.



The first 4½ years of our journey have yielded some amazing results: we've now served over 17 million customers in over 150 countries and built the leading global e-commerce brand and platform.

In the coming years we expect to benefit from the continued adoption of online commerce around the world as millions of new consumers connect to the Internet for the first time. As the online shopping experience continues to improve, consumer trust and confidence will increase, driving further adoption. And, if we at Amazon.com do our job right, we can be uniquely positioned to serve these new customers best and benefit as a result.

# A Recap of 1999

During 1999, our relentless focus on customers worked:

- Sales grew from \$610 million in 1998 to \$1.64 billion a 169 percent increase.
- We added 10.7 million new customers, increasing cumulative customer accounts from 6.2 million to 16.9 million.
- The percentage of orders placed by repeat customers grew from over 64 percent in the fourth quarter of 1998 to greater than 73 percent in the same period in 1999.
- Customers around the world are now choosing Amazon.com for a wide array of products. Only two years ago, Amazon.com's U.S. Books business represented 100 percent of our sales. Today, despite strong growth in U.S. Books, other areas account for more than half our sales. Major 1999 initiatives included Auctions, zShops, Toys, Consumer Electronics, Home Improvement, Software, Video Games, Payments and our wireless initiative, Amazon Anywhere.
- We've continued to be recognized as best-of-breed not only in our more established areas such as books, but in our newer stores as well. Just to focus on one area, Amazon Toys has received multiple awards, including being rated the best online toy store in an MSNBC survey, a ranking as the No. 1 on-line toy store by Forrester Research, and the top e-Rating from Consumer Reports in the toys category, in each case beating out a number of longer-established players.
- Sales outside of the US accounted for 22 percent of our business, totaling \$358 million. In the U.K. and Germany, we added Music, Auctions and zShops. In fact, Amazon.co.uk, Amazon.de, and Amazon.com are now the #1, #2, and #3 most popular online retail domains in Europe.
- We grew worldwide distribution capacity from roughly 300,000 square feet to over 5 million square feet in less than 12 months.

• In part because of this infrastructure, we were able to grow revenues 90 percent in just three months, while shipping well over 99 percent of our holiday orders in time for the holidays. As far as we can determine, no other company has ever grown 90 percent in three months on a sales base of over \$1 billion.

I'm incredibly proud of everyone at Amazon.com for their tireless efforts to deliver what has become the standard-setting, Amazon.com-class customer experience while simultaneously handling such extraordinary growth rates. If any of you shareholders would like to thank this incredible worldwide team of Amazonians, please feel free to send an email to <a href="mailto:jeff@amazon.com">jeff@amazon.com</a>. With help from my astounding office staff, I'll compile them and send them to the company. I know it would be appreciated. (As a side benefit I'll get to see if anyone reads these letters!)

In 1999, we continued to benefit from a business model that is inherently capital efficient. We don't need to build physical stores or stock those stores with inventory, and our centralized distribution model has allowed us to build a business with over \$2 billion in annualized sales but requiring just \$220 million in inventory and \$318 million in fixed assets. Over the last five years, we've cumulatively used just \$62 million in operating cash.

## What Do You Own?

At a recent event at the Stanford University campus, a young woman came to the microphone and asked me a great question: "I have 100 shares of Amazon.com. What do I own?"

I was surprised I hadn't heard it before, at least not so simply put. What do you own? You own a piece of the leading e-commerce platform.

The Amazon.com platform is comprised of brand, customers, technology, distribution capability, deep e-commerce expertise, and a great team with a passion for innovation and a passion for serving customers well. We begin the year 2000 with 17 million customers, a world-wide reputation for customer focus, the best e-commerce software systems, and purpose-built distribution and customer service infrastructure. We believe we have reached a "tipping point," where this platform allows us to launch new e-commerce businesses faster, with a higher quality of customer experience, a lower incremental cost, a higher chance of success, and a faster path to scale and profitability than any other company.

Our vision is to use this platform to build Earth's most customer-centric company, a place where customers can come to find and discover anything and everything they might want to buy online. We won't do so alone, but together with what will be thousands of partners of all sizes. We'll listen to customers, invent on their behalf, and personalize the store for each of them, all while working hard to continue to earn their trust. As is probably clear, this platform affords an unusually large scale opportunity, one that should

prove very valuable for both customers and shareholders if we can make the most of it. Despite the many risks and complexities, we are deeply committed to doing so.

## Goals for 2000

In the year 2000, Amazon.com has six major goals: growth in both the number of our customers and the strength of the relationship we have with each of them; continued rapid expansion of the products and services we offer; driving operational excellence in all areas of the company; international expansion; expanding our partnership programs; and last, importantly, driving toward profitability in each and every business we are in. I'll spend a moment on each goal.

Growing and strengthening customer relationships — We will continue to invest heavily in introductions to new customers. Though it's sometimes hard to imagine with all that has happened in the last five years, this remains Day 1 for e-commerce, and these are the early days of category formation where many customers are forming relationships for the first time. We must work hard to grow the number of customers who shop with us, the number of products they purchase, the frequency with which they shop, and the level of satisfaction they have when they do so.

**Product and service expansion** — We are working to build a place where customers can find and discover anything they want to buy, anytime, anywhere. Each new product and service we offer makes us more relevant to a wider group of customers and can increase the frequency with which they visit our store. So, as we expand our offering, we create a virtuous cycle for the whole business. The more frequently customers visit our store, the less time, energy, and marketing investment is required to get them to come back again. In sight, in mind.

Further, as we expand, each new store has a dedicated team working to make it best-of-breed in its category; thus each new store is also a new opportunity to demonstrate to customers our focus on them. Finally, each new product or service further leverages our investments in distribution, customer service, technology, and brand, and can yield increased leverage on our bottom line.

**Operational excellence** — To us, operational excellence implies two things: delivering continuous improvement in customer experience and driving productivity, margin, efficiency, and asset velocity across all our businesses.

Often, the best way to drive one of these is to deliver the other. For instance, more efficient distribution yields faster delivery times, which in turn lowers contacts per order and customer service costs. These, in turn, improve customer experience and build brand, which in turn decreases customer acquisition and retention costs.

Our whole company is highly focused on driving operational excellence in each area of our business in 2000. Being world class in both customer experience and operations will allow us to grow faster and deliver even higher service levels.

**International expansion** — We think that consumers outside the U.S. are even more under-served by retail than those within it, and, with our platform in place, Amazon.com is well positioned to be a leading global retailer. We already have significant brand, sales and customer presence around the world, as we've been shipping into over 150 countries for almost five years. I'm pleased to report that our stores in the UK and Germany are off to a strong start – they are already in the top 10 Web properties and the # 1 e-commerce site in each of their respective countries. Our customers and shareholders around the world can look forward to further geographic expansion from this base during the coming year.

**Expanding our partnership program** — Through our platform, we are able to bring tremendous value to our partners, such as drugstore.com. In fact, our experience so far suggests that Amazon.com may easily be the most efficient, effective means for our partners to build their businesses. In many areas, partnering is the best way for us to rapidly expand our store in a customer-focused, cost-effective manner. One point worth emphasizing: the quality of customer experience a partner delivers is the single most important criteria in our selection process — we simply won't build a partnership with any company that does not share our passion for serving customers.

We love these kinds of partnerships because they please customers, please our partners, and are financially attractive, pleasing our shareholders – you and us.

**Drive toward profitability in each business we are in**—Each of the previous goals I've outlined contribute to our long-standing objective of building the best, most profitable, highest return on capital, long-term franchise. So in a way, driving profitability is the foundation underlying all of these goals. In the coming year, we expect to deliver substantial margin improvement and cost leverage as we drive continuous improvement in our partnerships with suppliers, in our own productivity and efficiency, in our management of fixed and working capital, and our expertise in managing product mix and price.

Each successive product and service we launch this year should build on our platform, so our investment curve can be less steep and the time to profitability for each business should, in general, continue to shorten.

## It's All About the Long Term

In our 1997 letter to shareholders (our first), we detailed our long-term investment approach. Because we continue to add many new shareholders, we've appended that letter immediately after this year's. I invite you to please read the section entitled *It's All About the Long Term*, as it is the best way I know to help make sure we're the kind of company you want to be invested in. As we wrote there, we don't claim it's the right philosophy, we just claim it's ours!

In closing, consider this most important point: the current online shopping experience is the worst it will ever be. It's good enough today to attract 17 million customers, but it will get so much better. Increased bandwidth will result in faster page views and richer content. Further improvements will lead to "always-on access" (which I expect will be a strong boost to online shopping at home, as opposed to the office) and we'll see significant growth in non-PC devices and wireless access. Moreover, it's great to be participating in what is a multi-trillion dollar global market, in which we are so very, very tiny. We are doubly-blessed. We have a market-size unconstrained opportunity in an area where the underlying foundational technology we employ improves every day. That is not normal.

As always, we at Amazon.com remain grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement. Many, many thanks.

Jeffrey P. Bezos Founder and Chief Executive Officer Amazon.com, Inc.



Ouch. It's been a brutal year for many in the capital markets and certainly for Amazon.com shareholders. As of this writing, our shares are down more than 80% from when I wrote you last year. Nevertheless, by almost any measure, Amazon.com the company is in a stronger position now than at any time in its past.

- We served 20 million customers in 2000, up from 14 million in 1999.
- Sales grew to \$2.76 billion in 2000 from \$1.64 billion in 1999.
- Pro forma operating loss shrank to 6% of sales in Q4 2000, from 26% of sales in Q4 1999.
- Pro forma operating loss in the U.S. shrank to 2% of sales in Q4 2000, from 24% of sales in Q4 1999.
- Average spend per customer in 2000 was \$134, up 19%.
- Gross profit grew to \$656 million in 2000, from \$291 million in 1999, up 125%.
- Almost 36% of Q4 2000 U.S. customers purchased from one of our "non-BMV" stores such as electronics, tools, and kitchen.
- International sales grew to \$381 million in 2000, from \$168 million in 1999.
- We helped our partner Toysrus.com sell more than \$125 million of toys and video games in Q4 2000.
- We ended 2000 with cash and marketable securities of \$1.1 billion, up from \$706 million at the end of 1999, thanks to our early 2000 euroconvert financing.
- And, most importantly, our heads-down focus on the customer was reflected in a score of 84 on the American Customer Satisfaction Index. We are told this is the highest score ever recorded for a service company in any industry.

So, if the company is better positioned today than it was a year ago, why is the stock price so much lower than it was a year ago? As the famed investor Benjamin Graham said, "In the short term, the stock market is a voting machine; in the long term, it's a weighing machine." Clearly there was a lot of voting going on in the boom year of '99—and much less weighing. We're a company that wants to be weighed, and over time, we will be—over the long term, all companies are. In the meantime, we have our heads down working to build a heavier and heavier company.

Many of you have heard me talk about the "bold bets" that we as a company have made and will continue to make—these bold bets have included everything from our investment in digital and wireless technologies, to our decision to invest in smaller e-commerce companies, including living.com and Pets.com, both of which shut down operations in 2000. We were significant shareholders in both and lost a significant amount of money on both.

We made these investments because we knew we wouldn't ourselves be entering these particular categories any time soon, and we believed passionately in the "land rush" metaphor for the Internet. Indeed, that metaphor was an extraordinarily useful decision aid for several years starting in 1994, but we now believe its usefulness largely faded away over the last couple of years. In retrospect, we significantly underestimated how much time would be available to enter these categories and underestimated how difficult it would be for single-category e-commerce companies to achieve the scale necessary to succeed.

Online selling (relative to traditional retailing) is a scale business characterized by high fixed costs and relatively low variable costs. This makes it difficult to be a medium-sized e-commerce company. With a long

enough financing runway, Pets.com and living.com may have been able to acquire enough customers to achieve the needed scale. But when the capital markets closed the door on financing Internet companies, these companies simply had no choice but to close their doors. As painful as that was, the alternative—investing more of our own capital in these companies to keep them afloat—would have been an even bigger mistake.

Future: Real Estate Doesn't Obey Moore's Law.

Let's move to the future. Why should you be optimistic about the future of e-commerce and the future of Amazon.com?

Industry growth and new customer adoption will be driven over the coming years by relentless improvements in the customer experience of online shopping. These improvements in customer experience will be driven by innovations made possible by dramatic increases in available bandwidth, disk space, and processing power, all of which are getting cheap fast.

Price performance of processing power is doubling about every 18 months (Moore's Law), price performance of disk space is doubling about every 12 months, and price performance of bandwidth is doubling about every 9 months. Given that last doubling rate, Amazon.com will be able to use 60 times as much bandwidth per customer 5 years from now while holding our bandwidth cost per customer constant. Similarly, price performance improvements in disk space and processing power will allow us to, for example, do ever more and better real-time personalization of our Web site.

In the physical world, retailers will continue to use technology to reduce costs, but not to transform the customer experience. We too will use technology to reduce costs, but the bigger effect will be using technology to drive adoption and revenue. We still believe that some 15% of retail commerce may ultimately move online.

While there are no foregone conclusions, and we still have much to prove, Amazon.com today is a unique asset. We have the brand, the customer relationships, the technology, the fulfillment infrastructure, the financial strength, the people, and the determination to extend our leadership in this infant industry and to build an important and lasting company. And we will do so by keeping the customer first.

The year 2001 will be an important one in our development. Like 2000, this year will be a year of focus and execution. As a first step, we've set the goal of achieving a pro forma operating profit in the fourth quarter. While we have a tremendous amount of work to do and there can be no guarantees, we have a plan to get there, it's our top priority, and every person in this company is committed to helping with that goal. I look forward to reporting to you our progress in the coming year.

As I usually do, I've appended our 1997 letter, our first letter to shareholders. It gets more interesting every year that goes by, in part because so little has changed. I especially draw your attention to the section entitled "It's All About the Long Term."

We at Amazon.com remain grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement. Many, many thanks.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



In July of last year, Amazon.com reached an important way station. After four years of single-minded focus on growth, and then just under two years spent almost exclusively on lowering costs, we reached a point where we could afford to balance growth and cost improvement, dedicating resources and staffed projects to both. Our major price reduction in July, moving to discount books over \$20 by 30% off list, marked this change.

This balance began to pay off in the fourth quarter, when we both significantly exceeded our own goals on the bottom line and simultaneously reaccelerated growth in our business. We lowered prices again in January when we offered a new class of shipping that is free (year-round) on orders over \$99. Focus on cost improvement makes it possible for us to afford to lower prices, which drives growth. Growth spreads fixed costs across more sales, reducing cost per unit, which makes possible more price reductions. Customers like this, and it's good for shareholders. Please expect us to repeat this loop.

As I mentioned, we exceeded our goals for the fourth quarter with pro forma operating profit of \$59 million and pro forma net profit of \$35 million. Thousands of Amazon.com employees around the world worked hard to achieve that goal; they are, and should be, proud of the accomplishment. More highlights from a notable year:

- Sales grew 13% from \$2.76 billion in 2000 to \$3.12 billion in 2001; we achieved our first billion-dollar quarter on reaccelerated sales and 23% year-over-year unit growth in Q4.
- We served 25 million customer accounts in 2001, compared to 20 million in 2000 and 14 million in 1999.
- International sales grew 74% in 2001, and more than one-quarter of sales came from outside the U.S. The U.K. and Germany, our largest international markets, had a combined pro forma operating profit for the first time in Q4. Open only a year, Japan grew to a \$100 million annual run rate in Q4.
- Hundreds of thousands of small businesses and individuals made money by selling new and used products to our customers directly from our highly trafficked product detail pages. These Marketplace orders grew to 15% of U.S. orders in Q4, far surpassing our expectations when we launched Marketplace in November 2000.
- Inventory turns increased from 12 in 2000 to 16 in 2001.

 Most important, we stayed relentlessly focused on the customer, as reflected in a chart-topping score of 84 for the second year in a row on the widely followed American Customer Satisfaction Index conducted by the University of Michigan. We are told this is the highest score ever recorded--not just for any retailer, but for any service company.

Obsess over customers: our commitment continues

Until July, Amazon.com had been primarily built on two pillars of customer experience: selection and convenience. In July, as I already discussed, we added a third customer experience pillar: relentlessly lowering prices. You should know that our commitment to the first two pillars remains as strong as ever.

We now have more than 45,000 items in our electronics store (about seven times the selection you're likely to find in a big-box electronics store), we've tripled our kitchen selection (you'll find all the best brands), we've launched computer and magazine subscriptions stores, and we've added selection with strategic partners such as Target and Circuit City.

We've improved convenience with features like Instant Order Update, which warns you if you're about to buy the same item twice (people are busy--they forget that they've already bought it!).

We've dramatically improved customer self-service capabilities. Customers can now easily find, cancel, or modify their own orders. To find an order, just make sure you are signed in and recognized by the site, and do a regular search on any product in your order. When you get to that product's detail page, a link to your order will be at the top of the page.

We built a new feature called Look Inside the Book. Customers can view large high-resolution images of not only the front cover of a book, but also the back cover, index, table of contents, and a reasonable sample of the inside pages. They can Look Inside the Book before making a buying decision. It's available on over 200,000 of our millions of titles (as a point of comparison, a typical book superstore would carries about 100,000 titles).

As my last example, I'll just point out that one of the most important things we've done to improve convenience and experience for customers also happens to be a huge driver of variable cost productivity: eliminating mistakes and errors at their root. Every year that's gone by since Amazon.com's founding, we've done a better and better job of eliminating errors, and this past year was our best ever. Eliminating the root causes of errors saves us money and saves customers time.

Our consumer franchise is our most valuable asset, and we will nourish it with innovation and hard work.

# An investment framework

In every annual letter (including this one), we attach a copy of our original 1997 letter to shareholders to help investors decide if Amazon.com is the right kind of investment for them, and to help us determine if we have remained true to our original goals and values. I think we have.

In that 1997 letter, we wrote, "When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows."

Why focus on cash flows? Because a share of stock is a share of a company's future cash flows, and, as a result, cash flows more than any other single variable seem to do the best job of explaining a company's stock price over the long term.

If you could know for certain just two things--a company's future cash flows and its future number of shares outstanding--you would have an excellent idea of the fair value of a share of that company's stock today. (You'd also need to know appropriate discount rates, but if you knew the future cash flows *for certain*, it would also be reasonably easy to know which discount rates to use.) It's not easy, but you can make an informed forecast of future cash flows by examining a company's performance in the past and by looking at factors such as the leverage points and scalability in that company's model. Estimating the number of shares outstanding in the future requires you to forecast items such as option grants to employees or other potential capital transactions. Ultimately, your determination of cash flow per share will be a strong indicator of the price you might be willing to pay for a share of ownership in any company.

Since we expect to keep our fixed costs largely fixed, even at significantly higher unit volumes, we believe Amazon.com is poised over the coming years to generate meaningful, sustained, free cash flow. Our goal for 2002 reflects just that. As we said in January when we reported our fourth quarter results, we plan this year to generate positive operating cash flow, leading to free cash flow (the difference between the two is up to \$75 million of planned capital expenditures). Our trailing twelve-month pro forma net income should, roughly but not perfectly, trend like trailing twelve-month cash flow.

Limiting share count means more cash flow per share and more long-term value for owners. Our current objective is to target net dilution from employee stock options (grants net of cancellations) to an average of 3% per year over the next five years, although in any given year it might be higher or lower.

# Relentless commitment to long-term shareholder value

As I've discussed many times before, we are firm believers that the long-term interests of shareholders are tightly linked to the interests of our customers: if we do our jobs right, today's customers will buy more tomorrow, we'll add more customers in the process, and it will all add up to more cash flow and more long-term value for our shareholders. To that end, we are

committed to extending our leadership in e-commerce in a way that benefits customers and therefore, inherently, investors--you can't do one without the other.

As we kick off 2002, I am happy to report that I am as enthusiastic as ever about this business. There is more innovation ahead of us than behind us, we are close to demonstrating the operating leverage of our business model, and I get to work with this amazing team of Amazonians all over the world. I am lucky and grateful. We thank you, our owners, for your support, your encouragement, and for joining us on this adventure. If you're a customer, we thank you again!

Jeffrey P. Bezos

Founder and Chief Executive Officer

Amazon.com, Inc.



In many ways, Amazon.com is not a normal store. We have deep selection that is unconstrained by shelf space. We turn our inventory 19 times in a year. We personalize the store for each and every customer. We trade real estate for technology (which gets cheaper and more capable every year). We display customer reviews critical of our products. You can make a purchase with a few seconds and one click. We put used products next to new ones so you can choose. We share our prime real estate—our product detail pages—with third parties, and, if they can offer better value, we let them.

One of our most exciting peculiarities is poorly understood. People see that we're determined to offer both world-leading customer experience *and* the lowest possible prices, but to some this dual goal seems paradoxical if not downright quixotic. Traditional stores face a time-tested tradeoff between offering high-touch customer experience on the one hand and the lowest possible prices on the other. How can Amazon.com be trying to do both?

The answer is that we transform much of customer experience—such as unmatched selection, extensive product information, personalized recommendations, and other new software features—into largely a fixed expense. With customer experience costs largely fixed (more like a publishing model than a retailing model), our costs as a percentage of sales can shrink rapidly as we grow our business. Moreover, customer experience costs that remain variable—such as the variable portion of fulfillment costs—improve in our model as we reduce defects. Eliminating defects improves costs and leads to better customer experience.

We believe our ability to lower prices and simultaneously drive customer experience is a big deal, and this past year offers evidence that the strategy is working.

First, we do continue to drive customer experience. The holiday season this year is one example. While delivering a record number of units to customers, we also delivered our best-ever experience. Cycle time, the amount of time taken by our fulfillment centers to process an order, improved 17% compared with last year. And our most sensitive measure of customer satisfaction, contacts per order, saw a 13% improvement.

Inside existing product categories, we've worked hard to increase selection. Electronics selection is up over 40% in the U.S. alone over the prior year, and we now offer 10 times the selection of a typical big box electronics store. Even in U.S. books, where we've been working for 8 years, we increased selection by 15%, mostly in harder-to-find and out-of-print titles. And, of course, we've added new categories. Our Apparel and Accessories store has more than 500 top clothing brands, and in its first 60 days, customers bought 153,000 shirts, 106,000 pairs of pants, and 31,000 pairs of underwear.

In this year's American Customer Satisfaction Index, the most authoritative study of customer satisfaction, Amazon.com scored an 88, the highest score ever recorded—not just online, not just in retailing—but the highest score ever recorded in any service industry. In ACSI's words:

"Amazon.com continues to show remarkably high levels of customer satisfaction. With a score of 88 (up 5%), it is generating satisfaction at a level unheard of in the service industry.... Can customer satisfaction for Amazon climb more? The latest ACSI data suggest that it is indeed possible. Both service and the value proposition offered by Amazon have increased at a steep rate."

Second, while focused on customer experience, we've also been lowering price substantially. We've been doing so broadly across product categories, from books to electronics, and we've eliminated shipping fees with our 365 day-per-year Free Super Saver Shipping on orders over \$25. We've been taking similar actions in every country in which we do business.

Our pricing objective is not to discount a small number of products for a limited period of time, but to offer low prices everyday and apply them broadly across our entire product range. To illustrate this point, we recently did a price comparison versus a major well-known chain of book superstores. We did not hand pick a choice group of books against which we wanted to compare. Instead, we used their published list of their 100 bestsellers for 2002. It was a good representation of the kinds of books people buy most, consisting of 45 hardcover titles and 55 paperbacks across many different categories, including Literature, Romance, Mystery and Thrillers, Nonfiction, Children's, Self-Help, and so on.

We priced all 100 titles by visiting their superstores in both Seattle and New York City. It took us six hours in four of their different superstores to find all 100 books on their list. When we added up everything we spent, we discovered that:

- At their stores, these 100 bestselling books cost \$1,561. At Amazon.com, the same books cost \$1,195 for a total savings of \$366, or 23%.
- For 72 of the 100 books, our price was cheaper. On 25 of the books, our price was the same. On 3 of the 100, their prices were better (we subsequently reduced our prices on these three books).
- In these physical-world superstores, only 15 of their 100 titles were discounted—they were selling the other 85 at full list price. At Amazon.com, 76 of the 100 were discounted and 24 were sold at list price.

To be sure, you may find reasons to shop in the physical world—for instance, if you need something immediately—but, if you do so, you'll be paying a premium. If you want to save money and time, you'll do better by shopping at Amazon.com.

Third, our determination to deliver low price *and* customer experience is generating financial results. Net sales this year increased 26% to a record \$3.9 billion, and unit sales

grew at an even faster 34%. Free cash flow—our most important financial measure—reached \$135 million, a \$305 million improvement over the prior year.<sup>1</sup>

In short, what's good for customers is good for shareholders.

Once again this year, I attach a copy of our original 1997 letter and encourage current and prospective shareowners to take a look at it. Given how much we've grown and how much the Internet has evolved, it's notable that the fundamentals of how we do business remain the same.

As always, we at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

Jeffrey P. Bezos

Founder and Chief Executive Officer Amazon.com, Inc.

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<sup>&</sup>lt;sup>1</sup> Free cash flow for 2002 of \$135 million is net cash provided by operating activities of \$174 million less purchases of fixed assets of \$39 million. Free cash flow for 2001 of negative \$170 million is net cash used in operating activities of \$120 million less purchases of fixed assets of \$50 million.



Long-term thinking is both a requirement and an outcome of true ownership. Owners are different from tenants. I know of a couple who rented out their house, and the family who moved in nailed their Christmas tree to the hardwood floors instead of using a tree stand. Expedient, I suppose, and admittedly these were particularly bad tenants, but no owner would be so short-sighted. Similarly, many investors are effectively short-term tenants, turning their portfolios so quickly they are really just renting the stocks that they temporarily "own."

We emphasized our long-term views in our 1997 letter to shareholders, our first as a public company, because that approach really does drive making many concrete, non-abstract decisions. I'd like to discuss a few of these non-abstract decisions in the context of customer experience. At Amazon.com, we use the term customer experience broadly. It includes every customer-facing aspect of our business—from our product prices to our selection, from our website's user interface to how we package and ship items. The customer experience we create is by far the most important driver of our business.

As we design our customer experience, we do so with long-term owners in mind. We try to make all of our customer experience decisions—big and small—in that framework.

For instance, shortly after launching Amazon.com in 1995, we empowered customers to review products. While now a routine Amazon.com practice, at the time we received complaints from a few vendors, basically wondering if we understood our business: "You make money when you sell things—why would you allow negative reviews on your website?" Speaking as a focus group of one, I know I've sometimes changed my mind before making purchases on Amazon.com as a result of negative or lukewarm customer reviews. Though negative reviews cost us some sales in the short term, helping customers make better purchase decisions ultimately pays off for the company.

Another example is our Instant Order Update feature, which reminds you that you've already bought a particular item. Customers lead busy lives and cannot always remember if they've already purchased a particular item, say a DVD or CD they bought a year earlier. When we launched Instant Order Update, we were able to measure with statistical significance that the feature slightly reduced sales. Good for customers? Definitely. Good for shareowners? Yes, in the long run.

Among the most expensive customer experience improvements we're focused on are our everyday free-shipping offers and our ongoing product price reductions. Eliminating defects, improving productivity, and passing the resulting cost savings back to customers in the form of lower prices is a long-term decision. Increased volumes take time to materialize, and price reductions almost always hurt current results. In the long term, however, relentlessly driving the "price-cost structure loop" will leave us with a stronger, more valuable business. Since many of our costs, such as software engineering, are relatively fixed and many of our variable costs can also be better managed at larger scale, driving more volume through our cost structure reduces those costs as a percentage of sales. To give one small example, engineering a feature like Instant Order Update for use by 40 million customers costs nowhere near 40 times what it would cost to do the same for 1 million customers.

Our pricing strategy does not attempt to maximize margin *percentages*, but instead seeks to drive maximum value for customers and thereby create a much larger bottom line—in the long term. For example, we're targeting gross margins on our jewelry sales to be substantially lower than industry norms because we believe over time—customers figure these things out—this approach will produce more value for shareholders.

We have a strong team of hard-working, innovative folks building Amazon.com. They are focused on the customer and focused on the long term. On that time scale, the interests of shareowners and customers are aligned.

As always, I attach our 1997 letter and believe it is still worth a read. Here's to not being a tenant!

Jeffrey P. Bezos

Founder and Chief Executive Officer Amazon.com, Inc.

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P.S. Again this year, the widely-followed American Customer Satisfaction Index gave Amazon.com a score of 88—the highest customer satisfaction score ever recorded in any service industry, online or off. A representative of the ACSI was quoted as saying, "If they go any higher, they will get a nose bleed." We're working on that.



Our ultimate financial measure, and the one we most want to drive over the long-term, is free cash flow per share.

Why not focus first and foremost, as many do, on earnings, earnings per share or earnings growth? The simple answer is that earnings don't directly translate into cash flows, and shares are worth only the present value of their future cash flows, not the present value of their future earnings. Future earnings are a component—but not the only important component—of future cash flow per share. Working capital and capital expenditures are also important, as is future share dilution.

Though some may find it counterintuitive, a company can actually impair shareholder value in certain circumstances by growing earnings. This happens when the capital investments required for growth exceed the present value of the cash flow derived from those investments.

To illustrate with a hypothetical and very simplified example, imagine that an entrepreneur invents a machine that can quickly transport people from one location to another. The machine is expensive—\$160 million with an annual capacity of 100,000 passenger trips and a four year useful life. Each trip sells for \$1,000 and requires \$450 in cost of goods for energy and materials and \$50 in labor and other costs.

Continue to imagine that business is booming, with 100,000 trips in Year 1, completely and perfectly utilizing the capacity of one machine. This leads to earnings of \$10 million after deducting operating expenses including depreciation—a 10% net margin. The company's primary focus is on earnings; so based on initial results the entrepreneur decides to invest more capital to fuel sales and earnings growth, adding additional machines in Years 2 through 4.

Here are the income statements for the first four years of business:

		Earnings				
	Year 1	Year 2	Year 3	Year 4		
		(in thousands)				
Sales	\$100,000	\$200,000	\$400,000	\$800,000		
Units sold	100	200	400	800		
Growth	N/A	100%	100%	100%		
Gross profit	55,000	110,000	220,000	440,000		
Gross margin	55%	55%	55%	55%		
Depreciation	40,000	80,000	160,000	320,000		
Labor & other costs	5,000	10,000	20,000	40,000		
Earnings	\$ 10,000	\$ 20,000	\$ 40,000	\$ 80,000		
Margin	10%	10%	10%	10%		
Growth	N/A	100%	100%	100%		

It's impressive: 100% compound earnings growth and \$150 million of cumulative earnings. Investors considering only the above income statement would be delighted.

However, looking at cash flows tells a different story. Over the same four years, the transportation business generates cumulative negative free cash flow of \$530 million.

		Cash Flows					
	Year 1	Year 2	Year 3	Year 4			
		(in thousands)					
Earnings	\$ 10,000	\$ 20,000	\$ 40,000	\$ 80,000			
Depreciation	40,000	80,000	160,000	320,000			
Working capital	_	_	_	_			
Operating Cash Flow	50,000	100,000	200,000	400,000			
Capital expenditures	160,000	160,000	320,000	640,000			
•	<u> </u>						
Free Cash Flow	\$(110,000)	\$ (60,000)	\$(120,000)	\$(240,000)			

There are of course other business models where earnings more closely approximate cash flows. But as our transportation example illustrates, one cannot assess the creation or destruction of shareholder value with certainty by looking at the income statement alone.

Notice, too, that a focus on EBITDA—Earnings Before Interest, Taxes, Depreciation and Amortization—would lead to the same faulty conclusion about the health of the business. Sequential annual EBITDA would have been \$50, \$100, \$200 and \$400 million—100% growth for three straight years. But without taking into account the \$1.28 billion in capital expenditures necessary to generate this 'cash flow,' we're getting only part of the story—EBITDA isn't cash flow.

What if we modified the growth rates and, correspondingly, capital expenditures for machinery—would cash flows have deteriorated or improved?

Year 2, 3 and 4 Sales and Earnings Growth Rate	Number of Machines in Year 4	Year 1 to 4 Cumulative Earnings	Year 1 to 4 Cumulative Free Cash Flow
		(in thousands)	
0%, 0%, 0%	1	\$ 40,000	\$ 40,000
100%, 50%, 33%	4	\$100,000	\$(140,000)
100%, 100%, 100%	8	\$150,000	\$(530,000)

Paradoxically, from a cash flow perspective, the slower this business grows the better off it is. Once the initial capital outlay has been made for the first machine, the ideal growth trajectory is to scale to 100% of capacity quickly, then stop growing. However, even with only one piece of machinery, the gross cumulative cash flow doesn't surpass the initial machine cost until Year 4 and the net present value of this stream of cash flows (using 12% cost of capital) is still negative.

Unfortunately our transportation business is fundamentally flawed. There is no growth rate at which it makes sense to invest initial or subsequent capital to operate the business. In fact, our example is so simple and clear as to be obvious. Investors would run a net present value analysis on the economics and quickly determine it doesn't pencil out. Though it's more subtle and complex in the real world, this issue—the duality between earnings and cash flows—comes up all the time.

Cash flow statements often don't receive as much attention as they deserve. Discerning investors don't stop with the income statement.

Our Most Important Financial Measure: Free Cash Flow Per Share

Amazon.com's financial focus is on long-term growth in free cash flow per share.

Amazon.com's free cash flow is driven primarily by increasing operating profit dollars and efficiently managing both working capital and capital expenditures. We work to increase operating profit by focusing on improving all aspects of the customer experience to grow sales and by maintaining a lean cost structure.

We have a cash generative operating cycle<sup>1</sup> because we turn our inventory quickly, collecting payments from our customers before payments are due to suppliers. Our high inventory turnover means we maintain relatively low levels of investment in inventory—\$480 million at year end on a sales base of nearly \$7 billion.

The capital efficiency of our business model is illustrated by our modest investments in fixed assets, which were \$246 million at year end or 4% of 2004 sales.

Free cash flow<sup>2</sup> grew 38% to \$477 million in 2004, a \$131 million improvement over the prior year. We are confident that if we continue to improve customer experience—including increasing selection and lowering prices—and execute efficiently, our value proposition, as well as our free cash flow, will further expand.

As to dilution, total shares outstanding plus stock-based awards are essentially unchanged at the end of 2004 compared with 2003, and are down 1% over the last three years. During that same period, we've also eliminated over six million shares of potential future dilution by repaying more than \$600 million of convertible debt that was due in 2009 and 2010. Efficiently managing share count means more cash flow per share and more long-term value for owners.

This focus on free cash flow isn't new for Amazon.com. We made it clear in our 1997 letter to shareholders—our first as a public company—that when "forced to choose between optimizing GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows." I'm attaching a copy of our complete 1997 letter and encourage current and prospective shareowners to take a look at it.

As always, we at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.

April 2005

The operating cycle is number of days of sales in inventory plus number of days of sales in accounts receivable minus accounts payable days.

Free cash flow is defined as net cash provided by operating activities less purchases of fixed assets, including capitalized internal-use software and website development, both of which are presented on our statements of cash flows. Free cash flow for 2004 of \$477 million is net cash provided by operating activities of \$567 million less purchases of fixed assets, including capitalized internal-use software and website development costs, of \$89 million. Free cash flow for 2003 of \$346 million is net cash provided by operating activities of \$392 million less purchases of fixed assets, including capitalized internal-use software and website development costs, of \$46 million.



Many of the important decisions we make at Amazon.com can be made with data. There is a right answer or a wrong answer, a better answer or a worse answer, and math tells us which is which. These are our favorite kinds of decisions.

Opening a new fulfillment center is an example. We use history from our existing fulfillment network to estimate seasonal peaks and to model alternatives for new capacity. We look at anticipated product mix, including product dimensions and weight, to decide how much space we need and whether we need a facility for smaller "sortable" items or for larger items that usually ship alone. To shorten delivery times and reduce outbound transportation costs, we analyze prospective locations based on proximity to customers, transportation hubs, and existing facilities. Quantitative analysis improves the customer's experience and our cost structure.

Similarly, most of our inventory purchase decisions can be numerically modeled and analyzed. We want products in stock and immediately available to customers, and we want minimal total inventory in order to keep associated holding costs, and thus prices, low. To achieve both, there is a right amount of inventory. We use historical purchase data to forecast customer demand for a product and expected variability in that demand. We use data on the historical performance of vendors to estimate replenishment times. We can determine where to stock the product within our fulfillment network based on inbound and outbound transportation costs, storage costs, and anticipated customer locations. With this approach, we keep over one million unique items under our own roof, immediately available for customers, while still turning inventory more than fourteen times per year.

The above decisions require us to make some assumptions and judgments, but in such decisions, judgment and opinion come into play only as junior partners. The heavy lifting is done by the math.

As you would expect, however, not all of our important decisions can be made in this enviable, math-based way. Sometimes we have little or no historical data to guide us and proactive experimentation is impossible, impractical, or tantamount to a decision to proceed. Though data, analysis, and math play a role, the prime ingredient in these decisions is judgment.<sup>1</sup>

As our shareholders know, we have made a decision to continuously and significantly lower prices for customers year after year as our efficiency and scale make it possible. This is an example of a very important decision that cannot be made in a math-based way. In fact, when we lower prices, we go against the math that we can do, which always says that the smart move is to *raise* prices. We have significant data related to price elasticity. With fair accuracy, we can predict that a price reduction of a certain percentage will result in an increase in units sold of a certain percentage. With rare exceptions, the volume increase in the short term is never enough to pay for the price decrease. However, our quantitative understanding of elasticity is short-term. We can estimate what a price reduction will do this week and this quarter. But we cannot numerically estimate the effect that consistently lowering prices will have on our business over five years or ten years or more. Our *judgment* is that relentlessly returning efficiency improvements and scale economies to customers in the form of lower prices

<sup>&</sup>quot;The Structure of 'Unstructured' Decision Processes" is a fascinating 1976 paper by Henry Mintzberg, Duru Raisinghani, and Andre Theoret. They look at how institutions make strategic, "unstructured" decisions as opposed to more quantifiable "operating" decisions. Among other gems you will find in the paper is this: "Excessive attention by management scientists to operating decisions may well cause organizations to pursue inappropriate courses of action more efficiently." They are not debating the importance of rigorous and quantitative analysis, but only noting that it gets a lopsided amount of study and attention, probably because of the very fact that it is more quantifiable. The whole paper is available at www.amazon.com/ir/mintzberg.

creates a virtuous cycle that leads over the long term to a much larger dollar amount of free cash flow, and thereby to a much more valuable Amazon.com. We've made similar judgments around Free Super Saver Shipping and Amazon Prime, both of which are expensive in the short term and—we believe—important and valuable in the long term.

As another example, in 2000 we invited third parties to compete directly against us on our "prime retail real estate"—our product detail pages. Launching a single detail page for both Amazon retail and third-party items seemed risky. Well-meaning people internally and externally worried it would cannibalize Amazon's retail business, and—as is often the case with consumer-focused innovations—there was no way to prove in advance that it would work. Our buyers pointed out that inviting third parties onto Amazon.com would make inventory forecasting more difficult and that we could get "stuck" with excess inventory if we "lost the detail page" to one of our third-party sellers. However, our judgment was simple. If a third party could offer a better price or better availability on a particular item, then we wanted our customer to get easy access to that offer. Over time, third-party sales have become a successful and significant part of our business. Third-party units have grown from 6% of total units sold in 2000 to 28% in 2005, even as retail revenues have grown three-fold.

Math-based decisions command wide agreement, whereas judgment-based decisions are rightly debated and often controversial, at least until put into practice and demonstrated. Any institution unwilling to endure controversy must limit itself to decisions of the first type. In our view, doing so would not only limit controversy —it would also significantly limit innovation and long-term value creation.

The foundation of our decision-making philosophy was laid out in our 1997 letter to shareholders, a copy of which is attached:

- We will continue to focus relentlessly on our customers.
- We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.
- We will continue to measure our programs and the effectiveness of our investments analytically, to
  jettison those that do not provide acceptable returns, and to step up our investment in those that work
  best. We will continue to learn from both our successes and our failures.
- We will make bold rather than timid investment decisions where we see a sufficient probability of
  gaining market leadership advantages. Some of these investments will pay off, others will not, and we
  will have learned another valuable lesson in either case.

You can count on us to combine a strong quantitative and analytical culture with a willingness to make bold decisions. As we do so, we'll start with the customer and work backwards. In our judgment, that is the best way to create shareholder value.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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At Amazon's current scale, planting seeds that will grow into meaningful new businesses takes some discipline, a bit of patience, and a nurturing culture.

Our established businesses are well-rooted young trees. They are growing, enjoy high returns on capital, and operate in very large market segments. These characteristics set a high bar for any new business we would start. Before we invest our shareholders' money in a new business, we must convince ourselves that the new opportunity can generate the returns on capital our investors expected when they invested in Amazon. And we must convince ourselves that the new business can grow to a scale where it can be significant in the context of our overall company.

Furthermore, we must believe that the opportunity is currently underserved and that we have the capabilities needed to bring strong customer-facing differentiation to the marketplace. Without that, it's unlikely we'd get to scale in that new business.

I often get asked, "When are you going to open physical stores?" That's an expansion opportunity we've resisted. It fails all but one of the tests outlined above. The potential size of a network of physical stores is exciting. However: we don't know how to do it with low capital and high returns; physical-world retailing is a cagey and ancient business that's already well served; and we don't have any ideas for how to build a physical world store experience that's meaningfully differentiated for customers.

When you do see us enter new businesses, it's because we believe the above tests have been passed. Our acquisition of Joyo.com is a first step in serving the most populous country in the world. E-commerce in China is still in its early days, and we believe it's an excellent business opportunity. Shoes, apparel, groceries: these are big segments where we have the right skills to invent and grow large-scale, high-return businesses that genuinely improve customer experience.

Fulfillment by Amazon is a set of web services API's that turns our 12 million square foot fulfillment center network into a gigantic and sophisticated computer peripheral. Pay us 45 cents per month per cubic foot of fulfillment center space, and you can stow your products in our network. You make web services calls to alert us to expect inventory to arrive, to tell us to pick and pack one or more items, and to tell us where to ship those items. You never have to talk to us. It's differentiated, can be large, and passes our returns bar.

Amazon Web Services is another example. With AWS, we're building a new business focused on a new customer set ... software developers. We currently offer ten different web services and have built a community of over 240,000 registered developers. We're targeting broad needs universally faced by developers, such as storage and compute capacity—areas in which developers have asked for help, and in which we have deep expertise from scaling Amazon.com over the last twelve years. We're well positioned to do it, it's highly differentiated, and it can be a significant, financially attractive business over time.

In some large companies, it might be difficult to grow new businesses from tiny seeds because of the patience and nurturing required. In my view, Amazon's culture is unusually supportive of small businesses with big potential, and I believe that's a source of competitive advantage.

Like any company, we have a corporate culture formed not only by our intentions but also as a result of our history. For Amazon, that history is fairly fresh and, fortunately, it includes several examples of tiny seeds growing into big trees. We have many people at our company who have watched multiple \$10 million seeds turn into billion dollar businesses. That first-hand experience and the culture that has grown up around those

successes is, in my opinion, a big part of why we can start businesses from scratch. The culture demands that these new businesses be high potential and that they be innovative and differentiated, but it does not demand that they be large on the day that they are born.

I remember how excited we were in 1996 as we crossed \$10 million in book sales. It wasn't hard to be excited—we had grown to \$10 million from zero. Today, when a new business inside Amazon grows to \$10 million, the overall company is growing from \$10 billion to \$10.01 billion. It would be easy for the senior executives who run our established billion dollar businesses to scoff. But they don't. They watch the growth rates of the emerging businesses and send emails of congratulations. That's pretty cool, and we're proud it's a part of our culture.

In our experience, if a new business enjoys runaway success, it can only *begin* to be meaningful to the overall company economics in something like three to seven years. We've seen those time frames with our international businesses, our earlier non-media businesses, and our third party seller businesses. Today, international is 45% of sales, non-media is 34% of sales, and our third party seller businesses account for 28% of our units sold. We will be happy indeed if some of the new seeds we're planting enjoy similar successes.

We've come a distance since we celebrated our first \$10 million in sales. As we continue to grow, we'll work to maintain a culture that embraces new businesses. We will do so in a disciplined way, with an eye on returns, potential size, and the ability to create differentiation that customers care about. We won't always choose right, and we won't always succeed. But we will be choosy, and we will work hard and patiently.

As always, I attach our 1997 letter to shareholders. You'll see that our philosophy and approach have not changed. Many thanks for your support and encouragement.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



### To our shareowners:

November 19, 2007, was a special day. After three years of work, we introduced Amazon Kindle to our customers.

Many of you may already know something of Kindle—we're fortunate (and grateful) that it has been broadly written and talked about. Briefly, Kindle is a purpose-built reading device with wireless access to more than 110,000 books, blogs, magazines, and newspapers. The wireless connectivity isn't WiFi—instead it uses the same wireless network as advanced cell phones, which means it works when you're at home in bed or out and moving around. You can buy a book directly from the device, and the whole book will be downloaded wirelessly, ready for reading, in less than 60 seconds. There is no "wireless plan," no year-long contract you must commit to, and no monthly service fee. It has a paper-like electronic-ink display that's easy to read even in bright daylight. Folks who see the display for the first time do a double-take. It's thinner and lighter than a paperback, and can hold 200 books. Take a look at the Kindle detail page on Amazon.com to see what customers think—Kindle has already been reviewed more than 2,000 times.

As you might expect after three years of work, we had sincere hopes that Kindle would be well received, but we did not expect the level of demand that actually materialized. We sold out in the first  $5\frac{1}{2}$  hours, and our supply chain and manufacturing teams have had to scramble to increase production capacity.

We started by setting ourselves the admittedly audacious goal of improving upon the physical book. We did not choose that goal lightly. Anything that has persisted in roughly the same form and resisted change for 500 years is unlikely to be improved easily. At the beginning of our design process, we identified what we believe is the book's most important feature. It *disappears*. When you read a book, you don't notice the paper and the ink and the glue and the stitching. All of that dissolves, and what remains is the author's world.

We knew Kindle would have to *get out of the way*, just like a physical book, so readers could become engrossed in the words and forget they're reading on a device. We also knew we shouldn't try to copy every last feature of a book—we could never out-book the book. We'd have to add *new* capabilities—ones that could never be possible with a traditional book.

The early days of Amazon.com provide an analog. It was tempting back then to believe that an online bookstore should have all the features of a physical bookstore. I was asked about a particular feature dozens of times: "How are you going to do electronic book signings?" Thirteen years later, we still haven't figured that one out! Instead of trying to duplicate physical bookstores, we've been inspired by them and worked to find things we could do in the new medium that could never be done in the old one. We don't have electronic book signings, and similarly we can't provide a comfortable spot to sip coffee and relax. However, we can offer literally *millions* of titles, help with purchase decisions through customer reviews, and provide discovery features like "customers who bought this item also bought." The list of useful things that can be done only in the new medium is a long one.

I'll highlight a few of the useful features we built into Kindle that go beyond what you could ever do with a physical book. If you come across a word you don't recognize, you can look it up easily. You can search your books. Your margin notes and underlinings are stored on the server-side in the "cloud," where they can't be lost. Kindle keeps your place in each of the books you're reading, automatically. If your eyes are tired, you can change the font size. Most important is the seamless, simple ability to find a book and have it in 60 seconds. When I've watched people do this for the first time, it's clear the capability has a profound effect on them. Our vision for Kindle is every book ever printed in any language, all available in less than 60 seconds.

Publishers—including all the major publishers—have embraced Kindle, and we're thankful for that. From a publisher's point of view, there are a lot of advantages to Kindle. Books never go out of print, and they never go out of stock. Nor is there ever waste from over-printing. Most important, Kindle makes it more convenient for readers to buy more books. Anytime you make something simpler and lower friction, you get more of it.

We humans co-evolve with our tools. We change our tools, and then our tools change us. Writing, invented thousands of years ago, is a grand whopper of a tool, and I have no doubt that it changed us dramatically. Five hundred years ago, Gutenberg's invention led to a significant step-change in the cost of books. Physical books ushered in a new way of collaborating and learning. Lately, networked tools such as desktop computers, laptops, cell phones and PDAs have changed us too. They've shifted us more toward information snacking, and I would argue toward shorter attention spans. I value my BlackBerry—I'm convinced it makes me more productive—but I don't want to read a three-hundred-page document on it. Nor do I want to read something hundreds of pages long on my desktop computer or my laptop. As I've already mentioned in this letter, people do more of what's convenient and friction-free. If our tools make information snacking easier, we'll shift more toward information snacking and away from long-form reading. Kindle is purpose-built for long-form reading. We hope Kindle and its successors may gradually and incrementally move us over years into a world with longer spans of attention, providing a counterbalance to the recent proliferation of info-snacking tools. I realize my tone here tends toward the missionary, and I can assure you it's heartfelt. It's also not unique to me but is shared by a large group of folks here. I'm glad about that because missionaries build better products. I'll also point out that, while I'm convinced books are on the verge of being improved upon, Amazon has no sinecure as that agent. It will happen, but if we don't execute well, it will be done by others.

Your team of missionaries here is fervent about driving free cash flow per share and returns on capital. We know we can do that by putting customers first. I guarantee you there is more innovation ahead of us than behind us, and we do not expect the road to be an easy one. We're hopeful, and I'd even say optimistic, that Kindle, true to its name, will "start a fire" and improve the world of reading.

As always, I attach our 1997 letter to shareholders. You'll see that Kindle exemplifies our philosophy and long-term investment approach as discussed in that letter. Happy reading and many thanks!

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.

April 2008



### To our shareowners:

In this turbulent global economy, our fundamental approach remains the same. Stay heads down, focused on the long term and obsessed over customers. Long-term thinking levers our existing abilities and lets us do new things we couldn't otherwise contemplate. It supports the failure and iteration required for invention, and it frees us to pioneer in unexplored spaces. Seek instant gratification – or the elusive promise of it – and chances are you'll find a crowd there ahead of you. Long-term orientation interacts well with customer obsession. If we can identify a customer need and if we can further develop conviction that that need is meaningful and durable, our approach permits us to work patiently for multiple years to deliver a solution. "Working backwards" from customer needs can be contrasted with a "skills-forward" approach where existing skills and competencies are used to drive business opportunities. The skills-forward approach says, "We are really good at X. What else can we do with X?" That's a useful and rewarding business approach. However, if used exclusively, the company employing it will never be driven to develop fresh skills. Eventually the existing skills will become outmoded. Working backwards from customer needs often *demands* that we acquire new competencies and exercise new muscles, never mind how uncomfortable and awkward-feeling those first steps might be.

Kindle is a good example of our fundamental approach. More than four years ago, we began with a long-term vision: every book, ever printed, in any language, all available in less than 60 seconds. The customer experience we envisioned didn't allow for any hard lines of demarcation between Kindle the device and Kindle the service – the two had to blend together seamlessly. Amazon had never designed or built a hardware device, but rather than change the vision to accommodate our then-existing skills, we hired a number of talented (and missionary!) hardware engineers and got started learning a new institutional skill, one that we needed to better serve readers in the future.

We're grateful and excited that Kindle sales have exceeded our most optimistic expectations. On February 23, we began shipping Kindle 2. If you haven't seen it, Kindle 2 is everything customers loved about the original Kindle, only thinner, faster, with a crisper display, and longer battery life, and capable of holding 1,500 books. You can choose from more than 250,000 of the most popular books, magazines, and newspapers. Wireless delivery is free, and you'll have your book in less than 60 seconds. We've received thousands of feedback emails from customers about Kindle, and – remarkably – 26% of them contain the word "love."

### Customer Experience Pillars

In our retail business, we have strong conviction that customers value low prices, vast selection, and fast, convenient delivery and that these needs will remain stable over time. It is difficult for us to imagine that ten years from now, customers will want higher prices, less selection, or slower delivery. Our belief in the durability of these pillars is what gives us the confidence required to invest in strengthening them. We know that the energy we put in now will continue to pay dividends well into the future.

Our pricing objective is to earn customer trust, not to optimize short-term profit dollars. We take it as an article of faith that pricing in this manner is the best way to grow our aggregate profit dollars over the long term. We may make less per item, but by consistently earning trust we will sell many more items. Therefore, we offer low prices across our entire product range. For the same reason, we continue to invest in our free shipping programs, including Amazon Prime. Customers are well-informed and smart, and they evaluate the total cost, including delivery charges, when making their purchasing decisions. In the last 12 months, customers worldwide have saved more than \$800 million by taking advantage of our free shipping offers.

We're relentlessly focused on adding selection, both by increasing selection inside existing categories and by adding new categories. We've added 28 new categories since 2007. One business that is rapidly growing and continues to surprise me is our shoe store, Endless.com, which we launched in 2007.

Fast, reliable delivery is important to customers. In 2005, we launched Amazon Prime. For \$79 per year,¹ Prime members get unlimited express two-day shipping for free and upgrades to one-day delivery for just \$3.99. In 2007, we launched Fulfillment by Amazon, a new service for third-party sellers. With FBA, sellers warehouse their inventory in our global fulfillment network, and we pick, pack, and ship to the end customer on the sellers' behalf. FBA items are eligible for Amazon Prime and Super Saver Shipping – just as if the items were Amazon-owned inventory. As a result, FBA both improves the customer experience and drives seller sales. In the fourth quarter of 2008, we shipped more than 3 million units on behalf of sellers who use Fulfillment by Amazon, a win-win for customers and sellers.

### **Prudent Spending**

The customer-experience path we've chosen requires us to have an efficient cost structure. The good news for shareowners is that we see much opportunity for improvement in that regard. Everywhere we look (and we all look), we find what experienced Japanese manufacturers would call "muda" or waste.<sup>2</sup> I find this incredibly energizing. I see it as potential – years and years of variable and fixed productivity gains and more efficient, higher velocity, more flexible capital expenditures.

Our primary financial goal remains maximizing long-term free cash flow and doing so with high rates of return on invested capital. We are investing heartily in Amazon Web Services, in tools for third-party sellers, in digital media, in China, and in new product categories. And we make these investments with the belief that they can be of meaningful scale and can clear our high bar for returns.

Around the world, amazing, inventive, and hard-working Amazonians are putting customers first. I take great pride in being part of this team. We thank you, our owners, for your support, for your encouragement, and for joining us on our continuing adventure.

As always, I attach our 1997 letter to shareowners. Even as the rate of change accelerates, we hope and believe our focus on what stays the same should serve us well.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.

April 2009

Prime is a global program. ¥3,900 in Japan, £48 in the UK, €29 in Germany, and €49 in France.

At a fulfillment center recently, one of our Kaizen experts asked me, "I'm in favor of a clean fulfillment center, but why are you cleaning? Why don't you eliminate the source of dirt?" I felt like the Karate Kid.



The financial results for 2009 reflect the cumulative effect of 15 years of customer experience improvements: increasing selection, speeding delivery, reducing cost structure so we can afford to offer customers ever-lower prices, and many others. This work has been done by a large number of smart, relentless, customer-devoted people across all areas of the company. We are proud of our low prices, our reliable delivery, and our in-stock position on even obscure and hard-to-find items. We also know that we can still be much better, and we're dedicated to improving further.

# Some notable highlights from 2009:

- Net sales increased 28% year-over-year to \$24.51 billion in 2009. This is 15 times higher than net sales 10 years ago when they were \$1.64 billion in 1999.
- Free cash flow increased 114% year-over-year to \$2.92 billion in 2009.
- More customers are taking advantage of Amazon Prime, with worldwide memberships up significantly
  over last year. The number of different items available for immediate shipment grew more than 50% in
  2009.
- We added 21 new product categories around the world in 2009, including Automotive in Japan, Baby in France, and Shoes and Apparel in China.
- It was a busy year for our shoes business. In November we acquired Zappos, a leader in online apparel and footwear sales that strives to provide shoppers with the best possible service and selection. Zappos is a terrific addition to our Endless, Javari, Amazon, and Shopbop selection.
- The apparel team continued to enhance customer experience with the launch of our Denim Shop offering 100 brands, including Joe's Jeans, Lucky Brand, 7 For All Mankind, and Levi's.
- The shoes and apparel teams created over 121,000 product descriptions and uploaded over 2.2 million images to the website providing customers with a vivid shopping experience.
- Approximately 7 million customer reviews were added to websites worldwide.
- Sales of products by third party sellers on our websites represented 30% of unit sales in 2009. Active
  seller accounts increased 24% to 1.9 million for the year. Globally, sellers using Fulfillment By Amazon
  stowed more than one million unique items in our fulfillment center network, thereby making these
  items available for Free Super Saver Shipping and Amazon Prime.
- Amazon Web Services continued its rapid pace of innovation, launching many new services and
  features, including the Amazon Relational Database Service, Virtual Private Cloud, Elastic MapReduce,
  High-Memory EC2 Instances, Reserved and Spot Instances, Streaming for Amazon CloudFront, and
  Versioning for Amazon S3. AWS also continued to expand its global footprint to include additional
  services in the EU, a new Northern California Region and plans for a presence in the Asia-Pacific
  Region in 2010. The continued innovation and track record for operational performance helped AWS
  add more customers in 2009 than ever before, including many large enterprise customers.
- The U.S. Kindle Store now has more than 460,000 books, an increase from 250,000 last year, and includes 103 of the 110 New York Times Bestsellers, more than 8,900 blogs, and 171 top U.S. and International newspapers and magazines. We have shipped Kindles to more than 120 countries, and we now provide content in six different languages.

Senior leaders that are new to Amazon are often surprised by how little time we spend discussing actual financial results or debating projected financial outputs. To be clear, we take these financial outputs seriously, but we believe that focusing our energy on the controllable inputs to our business is the most effective way to maximize

financial outputs over time. Our annual goal setting process begins in the fall, and concludes early in the new year after we've completed our peak holiday quarter. Our goal setting sessions are lengthy, spirited, and detail-oriented. We have a high bar for the experience our customers deserve and a sense of urgency to improve that experience.

We've been using this same annual process for many years. For 2010, we have 452 detailed goals with owners, deliverables, and targeted completion dates. These are not the only goals our teams set for themselves, but they are the ones we feel are most important to monitor. None of these goals are easy and many will not be achieved without invention. We review the status of each of these goals several times per year among our senior leadership team and add, remove, and modify goals as we proceed.

A review of our current goals reveals some interesting statistics:

- 360 of the 452 goals will have a direct impact on customer experience.
- The word revenue is used eight times and free cash flow is used only four times.
- In the 452 goals, the terms *net income*, *gross profit* or *margin*, and *operating profit* are not used once.

Taken as a whole, the set of goals is indicative of our fundamental approach. Start with customers, and work backwards. Listen to customers, but don't *just* listen to customers – also invent on their behalf. We can't assure you that we'll meet all of this year's goals. We haven't in past years. However, we can assure you that we'll continue to obsess over customers. We have strong conviction that that approach – in the long term – is every bit as good for owners as it is for customers.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.

April 2010



Random forests, naïve Bayesian estimators, RESTful services, gossip protocols, eventual consistency, data sharding, anti-entropy, Byzantine quorum, erasure coding, vector clocks ... walk into certain Amazon meetings, and you may momentarily think you've stumbled into a computer science lecture.

Look inside a current textbook on software architecture, and you'll find few patterns that we don't apply at Amazon. We use high-performance transactions systems, complex rendering and object caching, workflow and queuing systems, business intelligence and data analytics, machine learning and pattern recognition, neural networks and probabilistic decision making, and a wide variety of other techniques. And while many of our systems are based on the latest in computer science research, this often hasn't been sufficient: our architects and engineers have had to advance research in directions that no academic had yet taken. Many of the problems we face have no textbook solutions, and so we -- happily -- invent new approaches.

Our technologies are almost exclusively implemented as *services*: bits of logic that encapsulate the data they operate on and provide hardened interfaces as the only way to access their functionality. This approach reduces side effects and allows services to evolve at their own pace without impacting the other components of the overall system. Service-oriented architecture -- or SOA -- is the fundamental building abstraction for Amazon technologies. Thanks to a thoughtful and far-sighted team of engineers and architects, this approach was applied at Amazon long before SOA became a buzzword in the industry. Our e-commerce platform is composed of a federation of hundreds of software services that work in concert to deliver functionality ranging from recommendations to order fulfillment to inventory tracking. For example, to construct a product detail page for a customer visiting Amazon.com, our software calls on between 200 and 300 services to present a highly personalized experience for that customer.

State management is the heart of any system that needs to grow to very large size. Many years ago, Amazon's requirements reached a point where many of our systems could no longer be served by any commercial solution: our key data services store many petabytes of data and handle millions of requests per second. To meet these demanding and unusual requirements, we've developed several alternative, purpose-built persistence solutions, including our own key-value store and single table store. To do so, we've leaned heavily on the core principles from the distributed systems and database research communities and invented from there. The storage systems we've pioneered demonstrate extreme scalability while maintaining tight control over performance, availability, and cost. To achieve their ultra-scale properties these systems take a novel approach to data update management: by relaxing the synchronization requirements of updates that need to be disseminated to large numbers of replicas, these systems are able to survive under the harshest performance and availability conditions. These implementations are based on the concept of eventual consistency. The advances in data management developed by Amazon engineers have been the starting point for the architectures underneath the cloud storage and data management services offered by Amazon Web Services (AWS). For example, our Simple Storage Service, Elastic Block Store, and SimpleDB all derive their basic architecture from unique Amazon technologies.

Other areas of Amazon's business face similarly complex data processing and decision problems, such as product data ingestion and categorization, demand forecasting, inventory allocation, and fraud detection. Rule-based systems can be used successfully, but they can be hard to maintain and can become brittle over time. In many cases, advanced machine learning techniques provide more accurate classification and can self-heal to adapt to changing conditions. For example, our search engine employs data mining and machine learning algorithms that run in the background to build topic models, and we apply information extraction algorithms to identify attributes and extract entities from unstructured descriptions, allowing customers to narrow their searches and quickly find the desired product. We consider a large number of factors in search relevance to

predict the probability of a customer's interest and optimize the ranking of results. The diversity of products demands that we employ modern regression techniques like trained random forests of decision trees to flexibly incorporate thousands of product attributes at rank time. The end result of all this behind-the-scenes software? Fast, accurate search results that help you find what you want.

All the effort we put into technology might not matter that much if we kept technology off to the side in some sort of R&D department, but we don't take that approach. Technology infuses all of our teams, all of our processes, our decision-making, and our approach to innovation in each of our businesses. It is deeply integrated into everything we do.

One example is Whispersync, our Kindle service designed to ensure that everywhere you go, no matter what devices you have with you, you can access your reading library and all of your highlights, notes, and bookmarks, all in sync across your Kindle devices and mobile apps. The technical challenge is making this a reality for millions of Kindle owners, with hundreds of millions of books, and hundreds of device types, living in over 100 countries around the world—at 24x7 reliability. At the heart of Whispersync is an eventually consistent replicated data store, with application defined conflict resolution that must and can deal with device isolation lasting weeks or longer. As a Kindle customer, of course, we hide all this technology from you. So when you open your Kindle, it's in sync and on the right page. To paraphrase Arthur C. Clarke, like any sufficiently advanced technology, it's indistinguishable from magic.

Now, if the eyes of some shareowners dutifully reading this letter are by this point glazing over, I will awaken you by pointing out that, in my opinion, these techniques are not idly pursued – they lead directly to free cash flow.

We live in an era of extraordinary increases in available bandwidth, disk space, and processing power, all of which continue to get cheap fast. We have on our team some of the most sophisticated technologists in the world – helping to solve challenges that are right on the edge of what's possible today. As I've discussed many times before, we have unshakeable conviction that the long-term interests of shareowners are perfectly aligned with the interests of customers.

And we like it that way. Invention is in our DNA and technology is the fundamental tool we wield to evolve and improve every aspect of the experience we provide our customers. We still have a lot to learn, and I expect and hope we'll continue to have so much fun learning it. I take great pride in being part of this team.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

Amazon.com, Inc.



#### The Power of Invention

"To us, the value of Amazon Web Services is undeniable – in twenty seconds, we can double our server capacity. In a high-growth environment like ours and with a small team of developers, it's very important for us to trust that we have the best support to give to the music community around the world. Five years ago, we would have crashed and been down without knowing when we would be back. Now, because of Amazon's continued innovation, we can provide the best technology and continue to grow." That's Christopher Tholen, the Chief Technology Officer of BandPage. His comments about how AWS helps with the critical need to scale compute capacity quickly and reliably are not hypothetical: BandPage now helps 500,000 bands and artists connect with tens of millions of fans.

"So, I started selling on Amazon in April of 2011, and by the time we became the top Amazon lunchbox seller in June, we had between 50 and 75 orders a day. When we hit August and September – our busiest time, with the start of the school year – we had 300, sometimes 500 orders a day. It was just phenomenal... I'm using Amazon to fulfill my orders, which makes my life easier. Plus, when my customers found out they could get free shipping with Prime subscriptions, the lunchboxes began selling like crazy." Kelly Lester is the "mom entrepreneur" of EasyLunchboxes, her own innovative line of easy-to-pack, environmentally friendly lunchbox containers.

"I sort of stumbled onto it, and it opened a whole new world for me. Since I had over a thousand [book] titles at my house, I thought, 'I'll give this a try.' I sold some and I kept expanding it and expanding it, and come to find out this was so much fun I decided I don't ever want to get another job again. And I've got no boss – other than my wife, that is. What could be better than that? We actually work together on this. We both go out hunting, so it's a team effort that's worked out very well. We sell about 700 books a month. We ship between 800 and 900 to Amazon each month and Amazon ships out the 700 that people buy. Without Amazon handling shipping and customer service, my wife and I would have to be running to the post office or someplace every day with dozens of packages. With that part taken care of for us, life is much simpler... This is a terrific program and I love it. After all, Amazon supplies the customers and even ships the books. I mean, how can it get better than that?" Bob Frank founded RJF Books and More after getting laid off in the midst of the economic downturn. He and his wife split their time between Phoenix and Minneapolis, and he describes finding the books he sells like "a treasure hunt every day."

"Because of Kindle Direct Publishing, I earn more royalties in one month than I ever did in a year of writing for a traditional house. I have gone from worrying about if I will be able to pay the bills – and there were many months when I couldn't – to finally having real savings, even thinking about a vacation; something I haven't done in years... Amazon has allowed me to really spread my wings. Prior, I was boxed into a genre, yet I had all of these other books I wanted to write. Now I can do just that. I manage my career. I feel as if I finally have a partner in Amazon. They understand this business and have changed the face of publishing for the good of the writer and the reader, putting choices back into our hands." That's A. K. Alexander, author of *Daddy's Home*, one of the top 100 best-selling Kindle books in March.

"I had no idea that March of 2010, the first month I decided to publish on KDP, would be a defining moment in my life. Within a year of doing so, I was making enough on a monthly basis to quit my day job and focus on writing full time! The rewards that have sprung out of deciding to publish through KDP have been nothing short of life changing. Financially. Personally. Emotionally. Creatively. The ability to write full time, to be home with my family, and to write exactly what I want without the input of a legacy publisher marketing committee wanting to have a say in every detail of my writing, has made me a stronger writer, a more prolific writer, and most importantly a far happier one.... Amazon and KDP are literally enabling creativity in the

publishing world and giving writers like me a shot at their dream, and for that I am forever grateful." That's Blake Crouch, author of several thrillers, including the Kindle best seller *Run*.

"Amazon has made it possible for authors like me to get their work in front of readers and has changed my life. In a little over a year, I have sold nearly 250,000 books through the Kindle and have traded in old dreams for bigger and better ones. Four of my books have hit the Top 100 Kindle Best Sellers List. Also, I have been approached by agents, foreign sales people, and two movie producers, and have received mentions in the LA Times, Wall Street Journal, and PC Magazine, and was recently interviewed by USA Today. Mostly, I am excited that all writers now have the opportunity to get their work in front of readers without jumping through insurmountable hoops. Writers have more options and readers have more choices. The publishing world is changing fast, and I plan to enjoy every minute of the ride." Theresa Ragan is the KDP author of multiple Kindle best sellers including *Abducted*.

"Past age 60 and in the midst of the recession, my wife and I found our income options severely limited. KDP was my one shot at a lifelong dream – our only chance at financial salvation. Within months of publishing, KDP has completely changed our lives, enabling this aging nonfiction writer to launch a brand-new career as a best-selling novelist. I can't say enough on behalf of Amazon and the many tools that they make available to independent authors. Without reservation, I urge fellow writers to investigate and seize the opportunities that KDP offers. As I've happily discovered, there is zero downside risk – and the potential is virtually unlimited." Robert Bidinotto is the author of the Kindle best seller *Hunter: A Thriller*.

"I leveraged KDP's technology to blow through all the traditional gatekeepers. Can you imagine how that feels, after struggling so hard, for so long, for every ... single ... reader? Now, inspirational fiction lovers I never would have reached are enjoying *Nobody* and my other two novels from the Kindle Store at \$2.99. I've always wanted to write a Cinderella story. Now I have. And, thanks to Prince Charming (KDP), there will be more to come..." Creston Mapes is the author of the Kindle best seller *Nobody*.

Invention comes in many forms and at many scales. The most radical and transformative of inventions are often those that empower *others* to unleash *their* creativity – to pursue *their* dreams. That's a big part of what's going on with Amazon Web Services, Fulfillment by Amazon, and Kindle Direct Publishing. With AWS, FBA, and KDP, we are creating powerful self-service platforms that allow thousands of people to boldly experiment and accomplish things that would otherwise be impossible or impractical. These innovative, large-scale platforms are not zero-sum – they create win-win situations and create significant value for developers, entrepreneurs, customers, authors, and readers.

Amazon Web Services has grown to have thirty different services and thousands of large and small businesses and individual developers as customers. One of the first AWS offerings, the Simple Storage Service, or S3, now holds over 900 billion data objects, with more than a billion new objects being added every day. S3 routinely handles more than 500,000 transactions per second and has peaked at close to a million transactions per second. All AWS services are pay-as-you-go and radically transform capital expense into a variable cost. AWS is self-service: you don't need to negotiate a contract or engage with a salesperson – you can just read the online documentation and get started. AWS services are elastic – they easily scale up and easily scale down.

In just the last quarter of 2011, Fulfillment by Amazon shipped tens of millions of items on behalf of sellers. When sellers use FBA, their items become eligible for Amazon Prime, for Super Saver Shipping, and for Amazon returns processing and customer service. FBA is self-service and comes with an easy-to-use inventory management console as part of Amazon Seller Central. For the more technically inclined, it also comes with a set of APIs so that you can use our global fulfillment center network like a giant computer peripheral.

I am emphasizing the self-service nature of these platforms because it's important for a reason I think is somewhat non-obvious: even well-meaning gatekeepers slow innovation. When a platform is self-service, even the improbable ideas can get tried, because there's no expert gatekeeper ready to say "that will never work!" And guess what – many of those improbable ideas do work, and society is the beneficiary of that diversity.

Kindle Direct Publishing has quickly taken on astonishing scale – more than a thousand KDP authors now each sell more than a thousand copies a month, some have already reached hundreds of thousands of sales, and two have already joined the Kindle Million Club. KDP is a big win for authors. Authors who use KDP get to keep their copyrights, keep their derivative rights, get to publish on their schedule – a typical delay in traditional publishing can be a year or more from the time the book is finished – and ... saving the best for last ... KDP authors can get paid royalties of 70%. The largest traditional publishers pay royalties of only 17.5% on ebooks (they pay 25% of 70% of the selling price which works out to be 17.5% of the selling price). The KDP royalty structure is completely transformative for authors. A typical selling price for a KDP book is a reader-friendly \$2.99 – authors get approximately \$2 of that! With the legacy royalty of 17.5%, the selling price would have to be \$11.43 to yield the same \$2 per unit royalty. I assure you that authors sell many, many more copies at \$2.99 than they would at \$11.43.

Kindle Direct Publishing is good for readers because they get lower prices, but perhaps just as important, readers also get access to more diversity since authors that might have been rejected by establishment publishing channels now get their chance in the marketplace. You can get a pretty good window into this. Take a look at the Kindle best-seller list, and compare it to the New York Times best-seller list – which is more diverse? The Kindle list is chock-full of books from small presses and self-published authors, while the New York Times list is dominated by successful and established authors.

Amazonians are leaning into the future, with radical and transformational innovations that create value for thousands of authors, entrepreneurs, and developers. Invention has become second nature at Amazon, and in my view the team's pace of innovation is even accelerating – I can assure you it's very energizing. I'm extremely proud of the whole team, and feel lucky to have a front row seat.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1!

Jeffrey P. Bezos

Founder and Chief Executive Officer

1 Regr

Amazon.com, Inc.



As regular readers of this letter will know, our energy at Amazon comes from the desire to impress customers rather than the zeal to best competitors. We don't take a view on which of these approaches is more likely to maximize business success. There are pros and cons to both and many examples of highly successful competitor-focused companies. We do work to pay attention to competitors and be inspired by them, but it is a fact that the customer-centric way is at this point a defining element of our culture.

One advantage – perhaps a somewhat subtle one – of a customer-driven focus is that it aids a certain type of proactivity. When we're at our best, we don't wait for external pressures. We are *internally* driven to improve our services, adding benefits and features, before we have to. We lower prices and increase value for customers before we have to. We invent before we have to. These investments are motivated by customer focus rather than by reaction to competition. We think this approach earns more trust with customers and drives rapid improvements in customer experience – importantly – even in those areas where we are already the leader.

"Thank you. Every time I see that white paper on the front page of Amazon, I know that I'm about to get more for my money than I thought I would. I signed up for Prime for the shipping, yet now I get movies, and TV and books. You keep adding more, but not charging more. So thanks again for the additions." We now have more than 15 million items in Prime, up 15x since we launched in 2005. Prime Instant Video selection tripled in just over a year to more than 38,000 movies and TV episodes. The Kindle Owners' Lending Library has also more than tripled to over 300,000 books, including an investment of millions of dollars to make the entire *Harry Potter* series available as part of that selection. We didn't "have to" make these improvements in Prime. We did so proactively. A related investment – a major, multi-year one – is Fulfillment by Amazon. FBA gives third-party sellers the option of warehousing their inventory alongside ours in our fulfillment center network. It has been a game changer for our seller customers because their items become eligible for Prime benefits, which drives their sales, while at the same time benefitting consumers with additional Prime selection.

We build automated systems that look for occasions when we've provided a customer experience that isn't up to our standards, and those systems then proactively refund customers. One industry observer recently received an automated email from us that said, "We noticed that you experienced poor video playback while watching the following rental on Amazon Video On Demand: Casablanca. We're sorry for the inconvenience and have issued you a refund for the following amount: \$2.99. We hope to see you again soon." Surprised by the proactive refund, he ended up writing about the experience: "Amazon 'noticed that I experienced poor video playback...' And they decided to give me a refund because of that? Wow...Talk about putting customers first."

When you pre-order something from Amazon, we guarantee you the lowest price offered by us between your order time and the end of the day of the release date. "I just received notice of a \$5 refund to my credit card for pre-order price protection. . . What a great way to do business! Thank you very much for your fair and honest dealings." Most customers are too busy themselves to monitor the price of an item after they pre-order it, and our policy could be to require the customer to contact us and ask for the refund. Doing it proactively is more expensive for us, but it also surprises, delights, and earns trust.

We also have authors as customers. Amazon Publishing has just announced it will start paying authors their royalties monthly, sixty days in arrears. The industry standard is twice a year, and that has been the standard for a long time. Yet when we interview authors as customers, infrequent payment is a major dissatisfier. Imagine how you'd like it if you were paid twice a year. There isn't competitive pressure to pay authors more than once every six months, but we're proactively doing so. By the way – though the research was taxing, I struggled through and am happy to report that I recently saw many Kindles in use at a Florida beach. There are five generations of Kindle, and I believe I saw every generation in use except for the first. Our business approach is to sell premium

hardware at roughly breakeven prices. We want to make money when people use our devices – not when people buy our devices. We think this aligns us better with customers. For example, we don't need our customers to be on the upgrade treadmill. We can be very happy to see people still using four-year-old Kindles!

I can keep going – Kindle Fire's FreeTime, our customer service Andon Cord, Amazon MP3's AutoRip – but will finish up with a very clear example of internally driven motivation: Amazon Web Services. In 2012, AWS announced 159 new features and services. We've reduced AWS prices 27 times since launching 7 years ago, added enterprise service support enhancements, and created innovative tools to help customers be more efficient. AWS Trusted Advisor monitors customer configurations, compares them to known best practices, and then notifies customers where opportunities exist to improve performance, enhance security, or save money. Yes, we are actively telling customers they're paying us more than they need to. In the last 90 days, customers have saved millions of dollars through Trusted Advisor, and the service is only getting started. All of this progress comes in the context of AWS being the widely recognized leader in its area – a situation where you might worry that external motivation could fail. On the other hand, internal motivation – the drive to get the customer to say "Wow" – keeps the pace of innovation fast.

Our heavy investments in Prime, AWS, Kindle, digital media, and customer experience in general strike some as too generous, shareholder indifferent, or even at odds with being a for-profit company. "Amazon, as far as I can tell, is a charitable organization being run by elements of the investment community for the benefit of consumers," writes one outside observer. But I don't think so. To me, trying to dole out improvements in a justin-time fashion would be too clever by half. It would be risky in a world as fast-moving as the one we all live in. More fundamentally, I think long-term thinking squares the circle. Proactively delighting customers earns trust, which earns more business from those customers, even in new business arenas. Take a long-term view, and the interests of customers and shareholders align.

As I write this, our recent stock performance has been positive, but we constantly remind ourselves of an important point – as I frequently quote famed investor Benjamin Graham in our employee all-hands meetings – "In the short run, the market is a voting machine but in the long run, it is a weighing machine." We don't celebrate a 10% increase in the stock price like we celebrate excellent customer experience. We aren't 10% smarter when that happens and conversely aren't 10% dumber when the stock goes the other way. We want to be weighed, and we're always working to build a heavier company.

As proud as I am of our progress and our inventions, I know that we will make mistakes along the way – some will be self-inflicted, some will be served up by smart and hard-working competitors. Our passion for pioneering will drive us to explore narrow passages, and, unavoidably, many will turn out to be blind alleys. But – with a bit of good fortune – there will also be a few that open up into broad avenues.

I am incredibly lucky to be a part of this large team of outstanding missionaries who value our customers as much as I do and who demonstrate that every day with their hard work. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

1 Regr

Amazon.com, Inc.

April 2013



I'm so proud of what all the teams here at Amazon have accomplished on behalf of customers this past year. Amazonians around the world are polishing products and services to a degree that is beyond what's expected or required, taking the long view, reinventing normal, and getting customers to say "Wow."

I'd like to take you on a tour that samples a small subset of our various initiatives, ranging from Prime to Amazon Smile to Mayday. The goal is to give you a sense for how much is going on across Amazon and how exciting it is to work on these programs. This broad array of initiatives is only possible because a large team of talented people at every level are exercising their good judgment every day and always asking, how do we make this better?

Ok, let's get started on the tour.

### Prime

Customers love Prime. More than one million customers joined Prime in the third week of December alone, and there are now tens of millions of Prime members worldwide. On a per customer basis, Prime members are ordering more items, across more categories, than ever before. Even internally, it's easy for us to forget that Prime was a new, unproven (some even said foolhardy) concept when we launched it nine years ago: all-you-can-eat, two-day shipping for a flat annual fee. At that time, we had one million eligible Prime products. This year, we passed 20 million eligible products, and we continue to add more. We've made Prime better in other ways too, adding new digital benefits – including the Kindle Owners' Lending Library and Prime Instant Video. And we're not done. We have many ideas for how to make Prime even better.

### Readers & Authors

We're investing heavily on behalf of readers. The all-new, high-resolution, high-contrast Kindle Paperwhite launched to rave reviews. We integrated the very impressive Goodreads into Kindle, introduced FreeTime for Kindle, and launched Kindle in India, Mexico, and Australia. Bringing joy to air travelers, the FAA approved the use of electronic devices during takeoff and landing. Our public policy team, with the help of many allies, worked patiently for four years on this, at one point loading a test plane with 150 active Kindles. Yes, it all worked fine!

Joining CreateSpace, Kindle Singles, and Kindle Direct Publishing, is the new service Kindle Worlds, the literary journal Day One, eight new Amazon Publishing imprints, and the launch of Amazon Publishing in the UK and Germany. Thousands of authors are already using these services to build fulfilling writing careers. Many write and tell us how we have helped them send their children to college, pay off medical bills, or purchase a home. We are missionaries for reading and these stories inspire and encourage us to keep inventing on behalf of writers and readers.

# Prime Instant Video

Prime Instant Video is experiencing tremendous growth across all metrics – including new customers, repeat usage, and total number of streams. These are output metrics and they suggest we are on a good path, focusing on the right inputs. Two of the key inputs are the growth of selection and the desirability of that selection. Since we launched PIV in 2011 with 5,000 titles, we've grown selection to more than 40,000 movies and TV episodes – all included in your Prime membership. PIV has exclusives on hundreds of sought after TV seasons including *Downton Abbey*, the ratings blockbuster *Under the Dome, The Americans, Justified, Grimm, Orphan Black, Suits*, and kids programs such as *SpongeBob SquarePants, Dora the Explorer*, and *Blue's Clues*. In addition, our Amazon Studios team continues to invest heavily in original content. Garry Trudeau's *Alpha House*, starring John Goodman, debuted last year and quickly became the most-watched show on Amazon. We

recently greenlit six more originals, including *Bosch*, by Michael Connelly, *The After*, from Chris Carter of *The X-Files*, *Mozart in the Jungle*, from Roman Coppola and Jason Schwartzman, and Jill Soloway's beautiful *Transparent*, which some have called the best pilot in years. We like our approach and are replicating it with our recent rollout of PIV in both the UK and Germany. The early customer response in those countries has been terrific, surpassing our expectations.

### Fire TV

Just this past week, after two years of hard work, our hardware team launched Fire TV. Not only is Fire TV the best way to watch Amazon's video offerings, it also embraces non-Amazon content services like Netflix, Hulu Plus, VEVO, WatchESPN, and many more. Fire TV has big hardware specs in a category that's previously been hardware-light. It shows. Fire TV is fast and fluid. And our ASAP technology predicts what you might want to watch and pre-buffers it, so shows start instantly. Our team also put a small microphone in the remote control. Hold down the mic button on the remote, and you can speak your search term rather than type it into an alphabet grid. The team has done a terrific job – the voice search actually works.

In addition to Prime Instant Video, Fire TV gives you instant access to over 200,000 movies and TV episodes available a la carte, including new releases like *Gravity*, 12 Years a Slave, Dallas Buyers Club, Frozen, and more. As a bonus, Fire TV also lets you play high-quality, inexpensive games on your living room TV. We hope you try it out. If you do, let us know what you think. The team would love to hear your feedback.

### Amazon Game Studios

It's early in the twenty-second century and Earth is threatened by an alien species, the Ne'ahtu. The aliens infected Earth's energy grid with a computer virus to disable the planet's defenses. Before they could strike, computer science prodigy Amy Ramanujan neutralized the alien virus and saved the planet. Now, the Ne'ahtu are back and Dr. Ramanujan must prevent them from launching an all-out invasion on Earth. She needs your help.

That's how *Sev Zero*, the first Fire TV exclusive from Amazon Game Studios, begins. The team combined tower defense with shooter gameplay and created a co-op mode where one player leads on the ground with their gamepad controller while a second player provides air support from a tablet. I can assure you that there are some intense moments when you'll appreciate a well-timed air-strike. When you see it, you may be surprised that this level of game play is possible on an inexpensive streaming media device. *Sev Zero* is only the first of a collection of innovative and graphically beautiful games we're building from the ground up for Fire tablets and Fire TV.

# Amazon Appstore

The Amazon Appstore now serves customers in almost 200 countries. Selection has grown to include over 200,000 apps and games from top developers around the globe – nearly tripling in size over the past year. We introduced Amazon Coins, a virtual currency that saves customers up to 10% on app and in-app purchases. Our Whispersync for Games technology lets you start a game on one device and continue it on another without losing your progress. Developers can use the Mobile Associates program to offer millions of physical products from Amazon inside their apps, and earn referral fees when customers buy those items. We introduced Appstore Developer Select, a marketing program that promotes new apps and games on Kindle Fire tablets and on Amazon's Mobile Ad Network. We created Analytics and A/B Testing services – free services that empower developers to track user engagement and optimize their apps for iOS, Android, and Fire OS. Also this year, we embraced HTML5 web app developers. They too can now offer their apps on Kindle Fire and through the Amazon Appstore.

### Spoken Word Audio

2013 was a landmark year for Audible, the world's largest seller and producer of audiobooks. Audible makes it possible for you to read when your eyes are busy. Millions of customers download hundreds of millions of audiobooks and other spoken-word programming from Audible. Audible customers downloaded close to 600 million listening hours in 2013. Thanks to Audible Studios, people drive to work listening to Kate Winslet, Colin Firth, Anne Hathaway, and many other stars. One big hit in 2013 was Jake Gyllenhaal's performance of

The Great Gatsby, which has already sold 100,000 copies. Whispersync for Voice allows customers to switch seamlessly back and forth between reading a book on their Kindle and listening to the corresponding Audible book on their smart phone. The Wall Street Journal called Whispersync for Voice "Amazon's new killer app for books." If you haven't already, I recommend you give it a try – it's fun and expands the amount of time you have available to read.

# Fresh Grocery

After trialing the service for five years in Seattle (no one accuses us of a lack of patience), we expanded Amazon Fresh to Los Angeles and San Francisco. Prime Fresh members pay \$299 a year and receive same-day and early morning delivery not only on fresh grocery items but also on over 500,000 other items ranging from toys to electronics to household goods. We're also partnering with favorite local merchants (the Cheese Store of Beverly Hills, Pike Place Fish Market, San Francisco Wine Trading Company, and many more) to provide the same convenient home delivery on a great selection of prepared foods and specialty items. We'll continue our methodical approach – measuring and refining Amazon Fresh – with the goal of bringing this incredible service to more cities over time.

### Amazon Web Services

AWS is eight years old, and the team's pace of innovation is actually accelerating. In 2010, we launched 61 significant services and features. In 2011, that number was 82. In 2012, it was 159. In 2013: 280. We're also expanding our geographic footprint. We now have 10 AWS regions around the world, including the East Coast of the U.S., two on the West Coast, Europe, Singapore, Tokyo, Sydney, Brazil, China, and a government-only region called GovCloud. We have 26 availability zones across regions and 51 edge locations for our content distribution network. The development teams work directly with customers and are empowered to design, build, and launch based on what they learn. We iterate continuously, and when a feature or enhancement is ready, we push it out and make it instantly available to all. This approach is fast, customer-centric, and efficient – it's allowed us to reduce prices more than 40 times in the past 8 years – and the teams have no plans to slow down.

# Employee Empowerment

We challenge ourselves to not only invent outward facing features, but also to find better ways to do things internally – things that will both make us more effective and benefit our thousands of employees around the world.

Career Choice is a program where we pre-pay 95% of tuition for our employees to take courses for indemand fields, such as airplane mechanic or nursing, regardless of whether the skills are relevant to a career at Amazon. The goal is to enable choice. We know that for some of our fulfillment center employees, Amazon will be a career. For others, Amazon might be a stepping stone on the way to a job somewhere else – a job that may require new skills. If the right training can make the difference, we want to help.

The second program is called *Pay to Quit*. It was invented by the clever people at Zappos, and the Amazon fulfillment centers have been iterating on it. Pay to Quit is pretty simple. Once a year, we offer to pay our associates to quit. The first year the offer is made, it's for \$2,000. Then it goes up one thousand dollars a year until it reaches \$5,000. The headline on the offer is "Please Don't Take This Offer." We hope they don't take the offer; we want them to stay. Why do we make this offer? The goal is to encourage folks to take a moment and think about what they really want. In the long-run, an employee staying somewhere they don't want to be isn't healthy for the employee or the company.

A third inward innovation is our *Virtual Contact Center*. It's an idea we started a few years back and have continued to grow with terrific results. Under this program, employees provide customer service support for Amazon and Kindle customers while working from home. This flexibility is ideal for many employees who, perhaps because they have young children or for another reason, either cannot or prefer not to work outside the home. Our Virtual Contact Center is our fastest growing "site" in the U.S., operating in more than ten states today. This growth will continue as we hope to double our state footprint in 2014.

## Veteran Hiring

We seek leaders who can invent, think big, have a bias for action, and deliver results on behalf of customers. These principles look familiar to men and women who've served our country in the armed forces, and we find that their experience leading people is invaluable in our fast-paced work environment. We're a member of Joining Forces and the 100,000 Jobs Mission – two national efforts that encourage businesses to offer service members and their families career opportunities and support. Our Military Talent team attended more than 50 recruiting events last year to help veterans find job opportunities at Amazon. In 2013, we hired more than 1,900 veterans. And once veterans join our team, we offer several programs that help them transition more easily into the civilian workforce and that connect them with our internal network of veterans for mentoring and support. These programs have earned us recognition as a top employer by G.I. Jobs Magazine, U.S. Veterans Magazine, and Military Spouse Magazine, and we'll continue to invest in military veteran hiring as we grow.

### Fulfillment Innovation

Nineteen years ago, I drove the Amazon packages to the post office every evening in the back of my Chevy Blazer. My vision extended so far that I dreamed we might one day get a forklift. Fast-forward to today and we have 96 fulfillment centers and are on our 7th generation of fulfillment center design. Our operations team is extraordinary – methodical and ingenious. Through our Kaizen program, named for the Japanese term "change for the better," employees work in small teams to streamline processes and reduce defects and waste. Our Earth Kaizens set energy reduction, recycling, and other green goals. In 2013, more than 4,700 associates participated in 1,100 Kaizens.

Sophisticated software is key in our FCs. This year, we rolled out 280 major software improvements across the FC network. Our goal is to continue to iterate and improve on the design, layout, technology, and operations in these buildings, ensuring that each new facility we build is better than the last. I invite you to come see one for yourself. We offer fulfillment center tours open to the public, ages six and above. You can find info on the available tours at www.amazon.com/fctours. I'm always amazed when I visit one of our FCs, and I hope you'll arrange a tour. I think you'll be impressed.

## Urban Campus

In 2013, we added 420,000 square feet of new headquarters space in Seattle and broke ground on what will become four city blocks and several million square feet of new construction. It is a fact that we could have saved money by instead building in the suburbs, but for us, it was important to stay in the city. Urban campuses are much greener. Our employees are able to take advantage of existing communities and public transit infrastructure, with less dependence on cars. We're investing in dedicated bike lanes to provide safe, pollution-free, easy access to our offices. Many of our employees can live nearby, skip the commute altogether, and walk to work. Though I can't prove it, I also believe an urban headquarters will help keep Amazon vibrant, attract the right talent, and be great for the health and wellbeing of our employees and the city of Seattle.

## Fast Delivery

In partnership with the United States Postal Service, we've begun for the first time to offer Sunday delivery to select cities. Sunday delivery is a win for Amazon customers, and we plan to roll it out to a large portion of the U.S. population throughout 2014. We've created our own fast, last-mile delivery networks in the UK where commercial carriers couldn't support our peak volumes. In India and China, where delivery infrastructure isn't yet mature, you can see Amazon bike couriers delivering packages throughout the major cities. And there is more invention to come. The Prime Air team is already flight testing our 5th and 6th generation aerial vehicles, and we are in the design phase on generations 7 and 8.

# Experiments and More Experiments

We have our own internal experimentation platform called "Weblab" that we use to evaluate improvements to our websites and products. In 2013, we ran 1,976 Weblabs worldwide, up from 1,092 in 2012, and 546 in 2011. One recent success is our new feature called "Ask an owner". It was many years ago that we pioneered the

idea of online customer reviews – customers sharing their opinion on a product to help other customers make an informed purchase decision. "Ask" is in that same tradition. From a product page, customers can ask any question related to the product. *Is the product compatible with my TV/Stereo/PC? Is it easy to assemble? How long does the battery last?* We then route these questions to *owners* of the product. As is the case with reviews, customers are happy to share their knowledge to directly help other customers. Millions of questions have already been asked and answered.

# Apparel and Shoes

Amazon Fashion is booming. Premium brands are recognizing that they can use Amazon to reach fashion-conscious, high-demo customers, and customers are enjoying the selection, free returns, detailed photos, and video clips that let them see how clothes move and drape as the models walk and turn. We opened a new 40,000 square foot photo studio in Brooklyn and now shoot an average of 10,413 photos every day in the studio's 28 bays. To celebrate the opening, we hosted a design contest with students from Pratt, Parsons, School of Visual Arts, and the Fashion Institute of Technology that was judged by a panel of industry leaders including Steven Kolb, Eva Chen, Derek Lam, Tracy Reese, and Steven Alan. Kudos to Parsons who took home the top prize.

## Frustration-Free Packaging

Our battle against annoying wire ties and plastic clamshells rages on. An initiative that began five years ago with a simple idea that you shouldn't have to risk bodily injury opening your new electronics or toys, has now grown to over 200,000 products, all available in easy-to-open, recyclable packaging designed to alleviate "wrap rage" and help the planet by reducing packaging waste. We have over 2,000 manufacturers in our Frustration-Free Packaging program, including Fisher-Price, Mattel, Unilever, Belkin, Victorinox Swiss Army, Logitech, and many more. We've now shipped many millions of Frustration-Free items to 175 countries. We are also reducing waste for customers – eliminating 33 million pounds of excess packaging to date. This program is a perfect example of a missionary team staying heads-down focused on serving customers. Through hard work and perseverance, an idea that started with only 19 products is now available on hundreds of thousands and benefiting millions of customers.

### Fulfillment by Amazon

The number of sellers using Fulfillment by Amazon grew more than 65% last year. Growth like that at such large scale is unusual. FBA is unique in many ways. It's not often you get to delight two customer sets with one program. With FBA, sellers can store their products in our fulfillment centers, and we pick, pack, ship, and provide customer service for these products. Sellers benefit from one of the most advanced fulfillment networks in the world, easily scaling their businesses to reach millions of customers. And not just any customers – Prime members. FBA products can be eligible for Prime free two-day shipping. Customers benefit from this additional selection – they get even more value out of their Prime membership. And, unsurprisingly, sellers see increased sales when they join FBA. In a 2013 survey, nearly three out of four FBA respondents reported that their unit sales increased on Amazon.com more than 20% after joining FBA. It's a win-win.

"FBA is the best employee I have ever had. ... One morning I woke up and realized FBA had shipped 50 units. As soon as I realized I could sell products while I sleep, it was a no-brainer." – Thanny Schuck, Action Sports LLC

"Starting out as an unknown brand, it was difficult to find retailers willing to stock our goods. No such barriers existed at Amazon. The beauty of Amazon is that someone can say, 'I want to start a business,' and they can go on Amazon and really start a business. You don't have to get a lease on a building or even have any employees at first. You can just do it on your own. And that's what I did." – Wendell Morris, YogaRat

## Login and Pay with Amazon

For several years we've enabled Amazon customers to pay on other sites, such as Kickstarter, SmugMug, and Gogo Inflight, using the credit cards and shipping addresses already stored in their Amazon account. This

year, we expanded that capability so customers can also sign in using their Amazon account credentials, saving them the annoyance of needing to remember yet another account name and password. It's convenient for the customer and a business builder for the merchant. Cymax Stores, the online furniture retailer, has seen tremendous success with Login and Pay. It now accounts for 20% of their orders, tripling their new account registrations, and increasing purchase conversion 3.15% in the first three months. This example isn't unusual. We are seeing results like these with many partners, and the team is excited and encouraged. You should look for more in 2014.

#### Amazon Smile

In 2013 we launched Amazon Smile – a simple way for customers to support their favorite charitable organizations every time they shop. When you shop at smile.amazon.com, Amazon donates a portion of the purchase price to the charity of your choice. You'll find the same selection, prices, shipping options, and Prime eligibility on smile.amazon.com as you do on Amazon.com – you'll even find your same shopping cart and wish lists. In addition to the large, national charities you would expect, you can also designate your local children's hospital, your school's PTA, or practically any other cause you might like. There are almost a million charities to choose from. I hope you'll find your favorite on the list.

### The Mayday Button

"Not only is the device awesome but the Mayday feature is absolutely FANTASTIC!!!!! The Kindle team has hit it out of the park with this one."

"Just tried the mayday button on my hdx. 15 second response time...amazon has done it again. Thoroughly impressed."

Nothing gives us more pleasure at Amazon than "reinventing normal" – creating inventions that customers love and resetting their expectations for what normal should be. Mayday reimagines and revolutionizes the idea of on-device tech support. Tap the Mayday button, and an Amazon expert will appear on your Fire HDX and can co-pilot you through any feature by drawing on your screen, walking you through how to do something yourself, or doing it for you – whatever works best. Mayday is available 24x7, 365 days a year, and our response time goal is 15 seconds or less. We beat that goal – with an average response time of only 9 seconds on our busiest day, Christmas.

A few of the Maydays have been amusing. Mayday Tech Advisors have received 35 marriage proposals from customers. 475 customers have asked to talk to Amy, our Mayday television personality. 109 Maydays have been customers asking for assistance with ordering a pizza. By a slim margin, Pizza Hut wins customer preference over Domino's. There are 44 instances where the Mayday Tech Advisor has sung Happy Birthday to the customer. Mayday Tech Advisors have been serenaded by customers 648 times. And 3 customers have asked for a bedtime story. Pretty cool.

I hope that gives you some sense of the scope of our opportunity and initiatives, as well the inventive spirit and push for exceptional quality with which they're undertaken. I should underscore again that this is a subset. There are many programs I've omitted in this letter that are just as promising, consequential, and interesting as those I've highlighted.

We have the good fortune of a large, inventive team and a patient, pioneering, customer-obsessed culture – great innovations, large and small, are happening everyday on behalf of customers, and at all levels throughout the company. This decentralized distribution of invention throughout the company – not limited to the company's senior leaders – is the only way to get robust, high-throughput innovation. What we're doing is challenging and fun – we get to work in the future.

Failure comes part and parcel with invention. It's not optional. We understand that and believe in failing early and iterating until we get it right. When this process works, it means our failures are relatively small in size

(most experiments can start small), and when we hit on something that is really working for customers, we double-down on it with hopes to turn it into an even bigger success. However, it's not always as clean as that. Inventing is messy, and over time, it's certain that we'll fail at some big bets too.

I'd like to close by remembering Joy Covey. Joy was Amazon's CFO in the early days, and she left an indelible mark on the company. Joy was brilliant, intense, and so fun. She smiled a lot and her eyes were always wide, missing nothing. She was substance over optics. She was a long-term thinker. She had a deep keel. Joy was bold. She had a profound impact on all of us on the senior team and on the company's entire culture. Part of her will always be here, making sure we watch the details, see the world around us, and all have fun.

I feel super lucky to be a part of the Amazon team. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.

April 2014



A dreamy business offering has at least four characteristics. Customers love it, it can grow to very large size, it has strong returns on capital, and it's durable in time – with the potential to endure for decades. When you find one of these, don't just swipe right, get married.

Well, I'm pleased to report that Amazon hasn't been monogamous in this regard. After two decades of risk taking and teamwork, and with generous helpings of good fortune all along the way, we are now happily wed to what I believe are three such life partners: Marketplace, Prime, and AWS. Each of these offerings was a bold bet at first, and sensible people worried (often!) that they could not work. But at this point, it's become pretty clear how special they are and how lucky we are to have them. It's also clear that there are no sinecures in business. We know it's our job to always nourish and fortify them.

We'll approach the job with our usual tools: customer obsession rather than competitor focus, heartfelt passion for invention, commitment to operational excellence, and a willingness to think long-term. With good execution and a bit of continuing good luck, Marketplace, Prime, and AWS can be serving customers and earning financial returns for many years to come.

# Marketplace

Marketplace's early days were not easy. First, we launched Amazon Auctions. I think seven people came, if you count my parents and siblings. Auctions transformed into zShops, which was basically a fixed price version of Auctions. Again, no customers. But then we morphed zShops into Marketplace. Internally, Marketplace was known as SDP for Single Detail Page. The idea was to take our most valuable retail real estate – our product detail pages – and let third-party sellers compete against our own retail category managers. It was more convenient for customers, and within a year, it accounted for 5% of units. Today, more than 40% of our units are sold by more than two million third-party sellers worldwide. Customers ordered more than two billion units from sellers in 2014.

The success of this hybrid model accelerated the Amazon flywheel. Customers were initially drawn by our fast-growing selection of Amazon-sold products at great prices with a great customer experience. By then allowing third parties to offer products side-by-side, we became more attractive to customers, which drew even more sellers. This also added to our economies of scale, which we passed along by lowering prices and eliminating shipping fees for qualifying orders. Having introduced these programs in the U.S., we rolled them out as quickly as we could to our other geographies. The result was a marketplace that became seamlessly integrated with all of our global websites.

We work hard to reduce the workload for sellers and increase the success of their businesses. Through our Selling Coach program, we generate a steady stream of automated machine-learned "nudges" (more than 70 million in a typical week) – alerting sellers about opportunities to avoid going out-of-stock, add selection that's selling, and sharpen their prices to be more competitive. These nudges translate to billions in increased sales to sellers.

To further globalize Marketplace, we're now helping sellers in each of our geographies – and in countries where we don't have a presence – reach out to our customers in countries outside their home geographies. We hosted merchants from more than 100 different countries last year, and helped them connect with customers in 185 nations.

Almost one-fifth of our overall third-party sales now occur outside the sellers' home countries, and our merchants' cross-border sales nearly doubled last year. In the EU, sellers can open a single account, manage their

business in multiple languages, and make products available across our five EU websites. More recently, we've started consolidating cross-border shipments for sellers and helping them obtain ocean shipping from Asia to Europe and North America at preferential, bulk rates.

Marketplace is the heart of our fast-growing operations in India, since all of our selection in India is offered by third-party sellers. Amazon.in now offers more selection than any other e-commerce site in India – with more than 20 million products offered from over 21,000 sellers. With our Easy Ship service, we pick up products from a seller and handle delivery all the way to the end customer. Building upon Easy Ship, the India team recently piloted Kirana Now, a service that delivers everyday essentials from local kirana (mom and pop) stores to customers in two to four hours, adding convenience for our customers and increasing sales for the stores participating in the service.

Perhaps most important for sellers, we've created Fulfillment by Amazon. But I'll save that for after we discuss Prime.

#### **Amazon Prime**

Ten years ago, we launched Amazon Prime, originally designed as an all-you-can-eat free and fast shipping program. We were told repeatedly that it was a risky move, and in some ways it was. In its first year, we gave up many millions of dollars in shipping revenue, and there was no simple math to show that it would be worth it. Our decision to go ahead was built on the positive results we'd seen earlier when we introduced Free Super Saver Shipping, and an intuition that customers would quickly grasp that they were being offered the best deal in the history of shopping. In addition, analysis told us that, if we achieved scale, we would be able to significantly lower the cost of fast shipping.

Our owned-inventory retail business was the foundation of Prime. In addition to creating retail teams to build each of our category-specific online "stores," we have created large-scale systems to automate much of inventory replenishment, inventory placement, and product pricing. The precise delivery-date promise of Prime required operating our fulfillment centers in a new way, and pulling all of this together is one of the great accomplishments of our global operations team. Our worldwide network of fulfillment centers has expanded from 13 in 2005, when we launched Prime, to 109 this year. We are now on our eighth generation of fulfillment center design, employing proprietary software to manage receipt, stowing, picking, and shipment. Amazon Robotics, which began with our acquisition of Kiva in 2012, has now deployed more than 15,000 robots to support the stowing and retrieval of products at a higher density and lower cost than ever before. Our owned-inventory retail business remains our best customer-acquisition vehicle for Prime and a critical part of building out categories that attract traffic and third-party sellers.

Though fast delivery remains a core Prime benefit, we are finding new ways to pump energy into Prime. Two of the most important are digital and devices.

In 2011 we added Prime Instant Video as a benefit, now with tens of thousands of movies and TV episodes available for unlimited streaming in the U.S., and we've started expanding the program into the U.K. and Germany as well. We're investing a significant amount on this content, and it's important that we monitor its impact. We ask ourselves, is it worth it? Is it driving Prime? Among other things, we watch Prime free trial starts, conversion to paid membership, renewal rates, and product purchase rates by members entering through this channel. We like what we see so far and plan to keep investing here.

While most of our PIV spend is on licensed content, we're also starting to develop original content. The team is off to a strong start. Our show *Transparent* became the first from a streaming service to win a Golden Globe for best series and *Tumble Leaf* won the Annie for best animated series for preschoolers. In addition to the critical acclaim, the numbers are promising. An advantage of our original programming is that its first run is on Prime – it hasn't already appeared anywhere else. Together with the quality of the shows, that first run status appears to be one of the factors leading to the attractive numbers. We also like the fixed cost nature of original programming. We get to spread that fixed cost across our large membership base. Finally, our business model for original content is unique. I'm pretty sure we're the first company to have figured out how to make winning a Golden Globe pay off in increased sales of power tools and baby wipes!

Amazon designed and manufactured devices – from Kindle to Fire TV to Echo – also pump energy into Prime services such as Prime Instant Video and Prime Music, and generally drive higher engagement with every element of the Amazon ecosystem. And there's more to come – our device team has a strong and exciting roadmap ahead.

Prime isn't done improving on its original fast and free shipping promise either. The recently launched Prime Now offers Prime members free two-hour delivery on tens of thousands of items or one-hour delivery for a \$7.99 fee. Lots of early reviews read like this one, "In the past six weeks my husband and I have made an embarrassing number of orders through Amazon Prime Now. It's cheap, easy, and insanely fast." We've launched in Manhattan, Brooklyn, Miami, Baltimore, Dallas, Atlanta, and Austin, and more cities are coming soon.

Now, I'd like to talk about Fulfillment by Amazon. FBA is so important because it is glue that inextricably links Marketplace and Prime. Thanks to FBA, Marketplace and Prime are no longer two things. In fact, at this point, I can't really think about them separately. Their economics and customer experiences are now happily and deeply intertwined.

FBA is a service for Marketplace sellers. When a seller decides to use FBA, they stow their inventory in our fulfillment centers. We take on all logistics, customer service, and product returns. If a customer orders an FBA item and an Amazon owned-inventory item, we can ship both items to the customer in one box - a huge efficiency gain. But even more important, when a seller joins FBA, their items can become Prime eligible.

Maintaining a firm grasp of the obvious is more difficult than one would think it should be. But it's useful to try. If you ask, what do sellers want? The correct (and obvious) answer is: they want more sales. So, what happens when sellers join FBA and their items become Prime eligible? They get more sales.

Notice also what happens from a Prime member's point of view. Every time a seller joins FBA, Prime members get more Prime eligible selection. The value of membership goes up. This is powerful for our flywheel. FBA completes the circle: Marketplace pumps energy into Prime, and Prime pumps energy into Marketplace.

In a 2014 survey of U.S. sellers, 71% of FBA merchants reported more than a 20% increase in unit sales after joining FBA. In the holiday period, worldwide FBA units shipped grew 50% over the prior year and represented more than 40% of paid third-party units. Paid Prime memberships grew more than 50% in the U.S. last year and 53% worldwide. FBA is a win for customers and a win for sellers.

# **Amazon Web Services**

A radical idea when it was launched nine years ago, Amazon Web Services is now big and growing fast. Startups were the early adopters. On-demand, pay-as-you-go cloud storage and compute resources dramatically increased the speed of starting a new business. Companies like Pinterest, Dropbox, and Airbnb all used AWS services and remain customers today.

Since then, large enterprises have been coming on board as well, and they're choosing to use AWS for the same primary reason the startups did: speed and agility. Having lower IT cost is attractive, and sometimes the absolute cost savings can be enormous. But cost savings alone could never overcome deficiencies in performance or functionality. Enterprises are dependent on IT – it's mission critical. So, the proposition, "I can save you a significant amount on your annual IT bill and my service is almost as good as what you have now," won't get too many customers. What customers really want in this arena is "better and faster," and if "better and faster" can come with a side dish of cost savings, terrific. But the cost savings is the gravy, not the steak.

IT is so high leverage. You don't want to imagine a competitor whose IT department is more nimble than yours. Every company has a list of technology projects that the business would like to see implemented as soon as possible. The painful reality is that tough triage decisions are always made, and many projects never get done. Even those that get resourced are often delivered late or with incomplete functionality. If an IT department can figure out how to deliver a larger number of business-enabling technology projects faster, they'll be creating significant and real value for their organization.

These are the main reasons AWS is growing so quickly. IT departments are recognizing that when they adopt AWS, they get more done. They spend less time on low value-add activities like managing datacenters, networking, operating system patches, capacity planning, database scaling, and so on and so on. Just as important, they get access to powerful APIs and tools that dramatically simplify building scalable, secure, robust, high-performance systems. And those APIs and tools are continuously and seamlessly upgraded behind the scenes, without customer effort.

Today, AWS has more than a million active customers as companies and organizations of all sizes use AWS in every imaginable business segment. AWS usage grew by approximately 90% in the fourth quarter of 2014 versus the prior year. Companies like GE, Major League Baseball, Tata Motors, and Qantas are building new applications on AWS – these range from apps for crowdsourcing and personalized healthcare to mobile apps for managing fleets of trucks. Other customers, like NTT DOCOMO, the Financial Times, and the Securities and Exchange Commission are using AWS to analyze and take action on vast amounts of data. And many customers like Condé Nast, Kellogg's, and News Corp are migrating legacy critical applications and, in some cases, entire datacenters to AWS.

We've increased our pace of innovation as we've gone along – from nearly 160 new features and services in 2012, to 280 in 2013, and 516 last year. There are many that would be interesting to talk about – from WorkDocs and WorkMail to AWS Lambda and the EC2 Container Service to the AWS Marketplace – but for purposes of brevity, I'm going to limit myself to one: our recently introduced Amazon Aurora. We hope Aurora will offer customers a new normal for a very important (but also very problematic) technology that is a critical underpinning of many applications: the relational database. Aurora is a MySQL-compatible database engine that offers the speed and availability of high-end commercial databases with the simplicity and cost effectiveness of open source databases. Aurora's performance is up to 5x better than typical MySQL databases, at one-tenth the cost of commercial database packages. Relational databases is an arena that's been a pain point for organizations and developers for a long time, and we're very excited about Aurora.

I believe AWS is one of those dreamy business offerings that can be serving customers and earning financial returns for many years into the future. Why am I optimistic? For one thing, the size of the opportunity is big, ultimately encompassing global spend on servers, networking, datacenters, infrastructure software, databases, data warehouses, and more. Similar to the way I think about Amazon retail, for all practical purposes, I believe AWS is market-size unconstrained.

Second, its current leadership position (which is significant) is a strong ongoing advantage. We work hard – very hard – to make AWS as easy to use as possible. Even so, it's still a necessarily complex set of tools with rich functionality and a non-trivial learning curve. Once you've become proficient at building complex systems with AWS, you do not want to have to learn a new set of tools and APIs assuming the set you already understand works for you. This is in no way something we can rest on, but if we continue to serve our customers in a truly outstanding way, they will have a rational preference to stick with us.

In addition, also because of our leadership position, we now have thousands of what are effectively AWS ambassadors roaming the world. Software developers changing jobs, moving from one company to another, become our best sales people: "We used AWS where I used to work, and we should consider it here. I think we'd get more done." It's a good sign that proficiency with AWS and its services is already something software developers are adding to their resumes.

Finally, I'm optimistic that AWS will have strong returns on capital. This is one we as a team examine because AWS is capital intensive. The good news is we like what we see when we do these analyses. Structurally, AWS is far less capital intensive than the mode it's replacing – do-it-yourself datacenters – which have low utilization rates, almost always below 20%. Pooling of workloads across customers gives AWS much higher utilization rates, and correspondingly higher capital efficiency. Further, once again our leadership position helps: scale economies can provide us a relative advantage on capital efficiency. We'll continue to watch and shape the business for good returns on capital.

AWS is young, and it is still growing and evolving. We think we can continue to lead if we continue to execute with our customers' needs foremost in mind.

#### Career Choice

Before closing, I want to take a moment to update shareowners on something we're excited about and proud of. Three years ago we launched an innovative employee benefit – the Career Choice program, where we pre-pay 95% of tuition for employees to take courses for in-demand fields, such as airplane mechanic or nursing, regardless of whether the skills are relevant to a career at Amazon. The idea was simple: enable choice.

We know that, for some of our fulfillment and customer service center employees, Amazon will be a career. For others, Amazon might be a stepping stone on the way to a job somewhere else – a job that may require new skills. If the right training can make the difference, we want to help, and so far we have been able to help over 2,000 employees who have participated in the program in eight different countries. There's been so much interest that we are now building onsite classrooms so college and technical classes can be taught inside our fulfillment centers, making it even easier for associates to achieve these goals.

There are now eight FCs offering 15 classes taught onsite in our purpose-built classrooms with high-end technology features, and designed with glass walls to inspire others to participate and generate encouragement from peers. We believe Career Choice is an innovative way to draw great talent to serve customers in our fulfillment and customer service centers. These jobs can become gateways to great careers with Amazon as we expand around the world or enable employees the opportunity to follow their passion in other in-demand technical fields, like our very first Career Choice graduate did when she started a new career as a nurse in her community.

I would also like to invite you to come join the more than 24,000 people who have signed up so far to see the magic that happens after you click buy on Amazon.com by touring one of our fulfillment centers. In addition to U.S. tours, we are now offering tours at sites around the world, including Rugeley in the U.K. and Graben in Germany and continuing to expand. You can sign up for a tour at www.amazon.com/fctours.

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Marketplace, Prime, and Amazon Web Services are three big ideas. We're lucky to have them, and we're determined to improve and nurture them – make them even better for customers. You can also count on us to work hard to find a fourth. We've already got a number of candidates in work, and as we promised some twenty years ago, we'll continue to make bold bets. With the opportunities unfolding in front of us to serve customers better through invention, we assure you we won't stop trying.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, because it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



This year, Amazon became the fastest company ever to reach \$100 billion in annual sales. Also this year, Amazon Web Services is reaching \$10 billion in annual sales ... doing so at a pace even faster than Amazon achieved that milestone.

What's going on here? Both were planted as tiny seeds and both have grown organically without significant acquisitions into meaningful and large businesses, quickly. Superficially, the two could hardly be more different. One serves consumers and the other serves enterprises. One is famous for brown boxes and the other for APIs. Is it only a coincidence that two such dissimilar offerings grew so quickly under one roof? Luck plays an outsized role in every endeavor, and I can assure you we've had a bountiful supply. But beyond that, there is a connection between these two businesses. Under the surface, the two are not so different after all. They share a distinctive organizational culture that cares deeply about and acts with conviction on a small number of principles. I'm talking about customer obsession rather than competitor obsession, eagerness to invent and pioneer, willingness to fail, the patience to think long-term, and the taking of professional pride in operational excellence. Through that lens, AWS and Amazon retail are very similar indeed.

A word about corporate cultures: for better or for worse, they are enduring, stable, hard to change. They can be a source of advantage or disadvantage. You can write down your corporate culture, but when you do so, you're discovering it, uncovering it – not creating it. It is created slowly over time by the people and by events – by the stories of past success and failure that become a deep part of the company lore. If it's a distinctive culture, it will fit certain people like a custom-made glove. The reason cultures are so stable in time is because people self-select. Someone energized by competitive zeal may select and be happy in one culture, while someone who loves to pioneer and invent may choose another. The world, thankfully, is full of many high-performing, highly distinctive corporate cultures. We never claim that our approach is the right one – just that it's ours – and over the last two decades, we've collected a large group of like-minded people. Folks who find our approach energizing and meaningful.

One area where I think we are especially distinctive is failure. I believe we are the best place in the world to fail (we have plenty of practice!), and failure and invention are inseparable twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment. Most large organizations embrace the idea of invention, but are not willing to suffer the string of failed experiments necessary to get there. Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a ten percent chance of a 100 times payoff, you should take that bet every time. But you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs. The difference between baseball and business, however, is that baseball has a truncated outcome distribution. When you swing, no matter how well you connect with the ball, the most runs you can get is four. In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments.

AWS, Marketplace and Prime are all examples of bold bets at Amazon that worked, and we're fortunate to have those three big pillars. They have helped us grow into a large company, and there are certain things that only large companies can do. With a tip of the hat to our Seattle neighbors, no matter how good an entrepreneur you are, you're not going to build an all-composite 787 in your garage startup – not one you'd want to fly in anyway. Used well, our scale enables us to build services for customers that we could otherwise never even contemplate. But also, if we're not vigilant and thoughtful, size could slow us down and diminish our inventiveness.

As I meet with teams across Amazon, I am continually amazed at the passion, intelligence and creativity on display. Our teams accomplished a lot in the last year, and I'd like to share a few of the highlights of our efforts to nourish and globalize our three big offerings – Prime, Marketplace and AWS. And while I'll focus on those three, I assure you that we also remain hard at work on finding a fourth.

#### Prime

We want Prime to be such a good value, you'd be irresponsible not to be a member.

We've grown Prime two-day delivery selection from 1 million items to over 30 million, added Sunday Delivery, and introduced Free Same-Day Delivery on hundreds of thousands of products for customers in more than 35 cities around the world. We've added music, photo storage, the Kindle Owners' Lending Library, and streaming films and TV.

Prime Now offers members one-hour delivery on an important subset of selection, and was launched only 111 days after it was dreamed up. In that time, a small team built a customer-facing app, secured a location for an urban warehouse, determined which 25,000 items to sell, got those items stocked, recruited and on-boarded new staff, tested, iterated, designed new software for internal use – both a warehouse management system and a driver-facing app – and launched in time for the holidays. Today, just 15 months after that first city launch, Prime Now is serving members in more than 30 cities around the world.

Prime Video offers exclusives from some of the world's most passionate storytellers. We want brilliant creators like Jill Soloway, Jason Schwartzman and Spike Lee to take risks and push boundaries. Our original series have already earned more than 120 nominations and won nearly 60 awards, including Golden Globe and Emmy awards. Many of these are stories that might never have been told in the traditional linear programming model. In the pipeline and coming soon are new series and movies from creators like Jeremy Clarkson, David E. Kelley, Woody Allen and Kenneth Lonergan.

The Man in the High Castle, based on the Philip K. Dick novel, explores an alternate history where the U.S. lost World War II. It debuted on Prime Video on November 20th and in four weeks became our most-viewed show – receiving acclaim from critics like "...Amazon has the best new drama of the season in The Man in the High Castle" and "The Man in the High Castle accomplishes so much, where most new broadcast TV dramas these days don't even try."

These shows are great for customers, and they feed the Prime flywheel – Prime members who watch Prime Video are more likely to convert from a free trial to a paid membership, and more likely to renew their annual subscriptions.

Finally, our first ever Prime Day surpassed all our expectations – more new members tried Prime that day than any other day in our history. Worldwide order growth increased 266% over the same day the year before, and sellers whose products are Prime-eligible through FBA saw record-breaking sales – with growth nearing 300%.

Prime has become an all-you-can-eat, physical-digital hybrid that members love. Membership grew 51% last year – including 47% growth in the U.S. and even faster internationally – and there are now tens of millions of members worldwide. There's a good chance you're already one of them, but if you're not – please be responsible – join Prime.

## Marketplace

We took two big swings and missed – with Auctions and zShops – before we launched Marketplace over 15 years ago. We learned from our failures and stayed stubborn on the vision, and today close to 50% of units sold on Amazon are sold by third-party sellers. Marketplace is great for customers because it adds unique selection, and it's great for sellers – there are over 70,000 entrepreneurs with sales of more than \$100,000 a year selling on

Amazon, and they've created over 600,000 new jobs. With FBA, that flywheel spins faster because sellers' inventory becomes Prime-eligible – Prime becomes more valuable for members, and sellers sell more.

This year, we created a new program called Seller Fulfilled Prime. We invited sellers who are able to meet a high bar for shipping speed and consistency in service to be part of the Prime program and ship their own orders at Prime speed directly. Those sellers have already seen a significant bump in sales, and the program has led to hundreds of thousands of additional items that are available to Prime customers via free two-day or next-day shipping in the U.S., U.K. and Germany.

We also created the Amazon Lending program to help sellers grow. Since the program launched, we've provided aggregate funding of over \$1.5 billion to micro, small and medium businesses across the U.S., U.K. and Japan through short-term loans, with a total outstanding loan balance of about \$400 million. Stephen Aarstol, surfer and owner of Tower Paddle Boards, is one beneficiary. His business has become one of the fastest-growing companies in San Diego, in part with a little help from Amazon Lending. Click-to-cash access to capital helps these small enterprises grow, benefits customers with greater selection, and benefits Amazon since our marketplace revenue grows along with the sellers' sales. We hope to expand Amazon Lending and are now working on ways to partner with banks so they can use their expertise to take and manage the bulk of the credit risk.

In addition to nourishing our big offerings, we work to globalize them. Our Marketplace creates opportunities for sellers anywhere to reach buyers around the world. In the past, many sellers would limit their customer base to their home country due to the practical challenges of selling internationally. To globalize Marketplace and expand the opportunities available to sellers, we built selling tools that empowered entrepreneurs in 172 countries to reach customers in 189 countries last year. These cross-border sales are now nearly a quarter of all third-party units sold on Amazon. To make this possible, we translated hundreds of millions of product listings and provided conversion services among 44 currencies. Even small and niche sellers can now tap into our global customer base and global logistics network. The end result is very different from sellers handling their own one-at-a-time, cross-border fulfillment. Plugable Technologies' CEO, Bernie Thompson, put it this way: "It really changes the paradigm when you're able to ship the goods in bulk to a warehouse in Europe or Japan and have those goods be fulfilled in one day or two days."

India is another example of how we globalize an offering like Marketplace through customer obsession and a passion for invention. Last year we ran a program called Amazon Chai Cart where we deployed three-wheeled mobile carts to navigate in a city's business districts, serve tea, water and lemon juice to small business owners and teach them about selling online. In a period of four months, the team traveled 15,280 km across 31 cities, served 37,200 cups of tea and engaged with over 10,000 sellers. Through this program and other conversations with sellers, we found out there was a lot of interest in selling online, but that sellers struggled with the belief that the process was time-consuming, tedious and complex. So, we invented Amazon Tatkal, which enables small businesses to get online in less than 60 minutes. Amazon Tatkal is a specially designed studio-on-wheels offering a suite of launch services including registration, imaging and cataloguing services, as well as basic seller training mechanisms. Since its launch on February 17th, we have reached sellers in 25 cities.

We're also globalizing Fulfillment by Amazon, adapting the service to local customer needs. In India, we launched a program called Seller Flex to combine Amazon's logistics capabilities with sellers' selection at the local neighborhood level. Sellers set aside a part of their warehouse for storing items to be sold on Amazon, and we configure it as a fulfillment center in our network that can receive and fulfill customer orders. Our team provides guidance on warehouse layout, IT and operational infrastructure, and trains the seller on standard operating procedures to be followed onsite. We've now launched 25 operational Seller Flex sites across ten cities.

#### **Amazon Web Services**

Just over 10 years ago, AWS started in the U.S. with its first major service, a simple storage service. Today, AWS offers more than 70 services for compute, storage, databases, analytics, mobile, Internet of Things, and enterprise applications. We also offer 33 Availability Zones across 12 geographic regions worldwide, with

another five regions and 11 Availability Zones in Canada, China, India, the U.S., and the U.K. to be available in the coming year. AWS started with developers and startups, and now is used by more than a million customers from organizations of every size across nearly every industry – companies like Pinterest, Airbnb, GE, Enel, Capital One, Intuit, Johnson & Johnson, Philips, Hess, Adobe, McDonald's, and Time Inc.

AWS is bigger than Amazon.com was at 10 years old, growing at a faster rate, and – most noteworthy in my view – the pace of innovation continues to accelerate – we announced 722 significant new features and services in 2015, a 40% increase over 2014.

Many characterized AWS as a bold – and unusual – bet when we started. "What does this have to do with selling books?" We could have stuck to the knitting. I'm glad we didn't. Or did we? Maybe the knitting has as much to do with our approach as the arena. AWS is customer obsessed, inventive and experimental, long-term oriented, and cares deeply about operational excellence.

Given 10 years and many iterations, that approach has allowed AWS to rapidly expand into the world's most comprehensive, widely adopted cloud service. As with our retail business, AWS is made up of many small teams with single-threaded owners, enabling rapid innovation. The team rolls out new functionality almost daily across 70 services, and that new functionality just "shows up" for customers – there's no upgrading.

Many companies describe themselves as customer-focused, but few walk the walk. Most big technology companies are competitor focused. They see what others are doing, and then work to fast follow. In contrast, 90 to 95% of what we build in AWS is driven by what customers tell us they want. A good example is our new database engine, Amazon Aurora. Customers have been frustrated by the proprietary nature, high cost, and licensing terms of traditional, commercial-grade database providers. And while many companies have started moving toward more open engines like MySQL and Postgres, they often struggle to get the performance they need. Customers asked us if we could eliminate that inconvenient trade-off, and that's why we built Aurora. It has commercial-grade durability and availability, is fully compatible with MySQL, has up to 5 times better performance than the typical MySQL implementation, but is 1/10th the price of the traditional, commercial-grade database engines. This has struck a resonant chord with customers, and Aurora is the fastest-growing service in the history of AWS. Nearly this same story could be told about Redshift, our managed data warehouse service, which is the second fastest growing service in AWS history – both small and large companies are moving their data warehouses to Redshift.

Our approach to pricing is also driven by our customer-centric culture – we've dropped prices 51 times, in many cases before there was any competitive pressure to do so. In addition to price reductions, we've also continued to launch new lower cost services like Aurora, Redshift, QuickSight (our new Business Intelligence service), EC2 Container Service (our new compute container service), and Lambda (our pioneering server-less computing capability), while extending our services to offer a range of highly cost-effective options for running just about every type of application or IT use case imaginable. We even roll out and continuously improve services like Trusted Advisor, which alerts customers when they can save money – resulting in hundreds of millions of dollars in savings for our customers. I'm pretty sure we're the only IT vendor telling customers how to stop spending money with us.

Whether you are a startup founded yesterday or a business that has been around for 140 years, the cloud is providing all of us with unbelievable opportunities to reinvent our businesses, add new customer experiences, redeploy capital to fuel growth, increase security, and do all of this so much faster than before. MLB Advanced Media is an example of an AWS customer that is constantly reinventing the customer experience. MLB's Statcast tracking technology is a new feature for baseball fans that measures the position of each player, the baserunners, and the ball as they move during every play on the field, giving viewers on any screen access to empirical data that answers age-old questions like "what could have happened if..." while also bringing new questions to life. Turning baseball into rocket science, Statcast uses a missile radar system to measure every pitched ball's movements more than 2,000 times per second, streams and collects data in real-time through Amazon Kinesis (our service for processing real-time streaming data), stores the data on Amazon S3, and then performs analytics in Amazon EC2. The suite of services will generate nearly 7 TB of raw statistical data per game and up to 17 PB per season, shedding quantitative light on age-old, but never verified, baseball pearls of wisdom like "never slide into first."

About seven years ago, Netflix announced that they were going to move all their applications to the cloud. Netflix chose AWS because it provided them with the greatest scale and the broadest set of services and features. Netflix recently completed their cloud migration, and stories like theirs are becoming increasingly common as companies like Infor, Intuit, and Time Inc., have made plans to move all of their applications to AWS.

AWS is already good enough today to attract more than 1 million customers, and the service is only going to get better from here. As the team continues their rapid pace of innovation, we'll offer more and more capabilities to let builders build unfettered, it will get easier and easier to collect, store and analyze data, we'll continue to add more geographic locations, and we'll continue to see growth in mobile and "connected" device applications. Over time, it's likely that most companies will choose not to run their own data centers, opting for the cloud instead.

### **Invention Machine**

We want to be a large company that's also an invention machine. We want to combine the extraordinary customer-serving capabilities that are enabled by size with the speed of movement, nimbleness, and risk-acceptance mentality normally associated with entrepreneurial start-ups.

Can we do it? I'm optimistic. We have a good start on it, and I think our culture puts us in a position to achieve the goal. But I don't think it'll be easy. There are some subtle traps that even high-performing large organizations can fall into as a matter of course, and we'll have to learn as an institution how to guard against them. One common pitfall for large organizations – one that hurts speed and inventiveness – is "one-size-fits-all" decision making.

Some decisions are consequential and irreversible or nearly irreversible – one-way doors – and these decisions must be made methodically, carefully, slowly, with great deliberation and consultation. If you walk through and don't like what you see on the other side, you can't get back to where you were before. We can call these Type 1 decisions. But most decisions aren't like that – they are changeable, reversible – they're two-way doors. If you've made a suboptimal Type 2 decision, you don't have to live with the consequences for that long. You can reopen the door and go back through. Type 2 decisions can and should be made quickly by high judgment individuals or small groups.

As organizations get larger, there seems to be a tendency to use the heavy-weight Type 1 decision-making *process* on most decisions, including many Type 2 decisions. The end result of this is slowness, unthoughtful risk aversion, failure to experiment sufficiently, and consequently diminished invention. We'll have to figure out how to fight that tendency.

And one-size-fits-all thinking will turn out to be only one of the pitfalls. We'll work hard to avoid it... and any other large organization maladies we can identify.

### **Sustainability and Social Invention**

Our growth has happened fast. Twenty years ago, I was driving boxes to the post office in my Chevy Blazer and dreaming of a forklift. In absolute numbers (as opposed to percentages), the past few years have been especially significant. We've grown from 30,000 employees in 2010 to more than 230,000 now. We're a bit like parents who look around one day and realize their kids are grown – you blink and it happens.

One thing that's exciting about our current scale is that we can put our inventive culture to work on moving the needle on sustainability and social issues.

Two years ago we set a long-term goal to use 100% renewable energy across our global AWS infrastructure. We've since announced four significant wind and solar farms that will deliver 1.6 million megawatt hours per

<sup>&</sup>lt;sup>1</sup> The opposite situation is less interesting and there is undoubtedly some survivorship bias. Any companies that habitually use the light-weight Type 2 decision-making process to make Type 1 decisions go extinct before they get large.

year of additional renewable energy into the electric grids that supply AWS data centers. Amazon Wind Farm Fowler Ridge has already come online. We reached 25% sustainable energy use across AWS last year, are on track to reach 40% this year, and are working on goals that will cover all of Amazon's facilities around the world, including our fulfillment centers.

We'll keep expanding our efforts in areas like packaging, where our culture of invention led to a big winner – the Frustration-Free Packaging program. Seven years ago we introduced the initiative with 19 products. Today, there are more than 400,000 globally. In 2015, the program eliminated tens of millions of pounds of excess packaging material. Frustration-Free Packaging is a customer delighter because the packages are easier to open. It's good for the planet because it creates less waste. And it's good for shareholders because, with tighter packaging, we ship less "air" and save on transportation costs.

We also continue to pioneer new programs for employees – like Career Choice, Leave Share, and Ramp Back. Career Choice pre-pays 95% of tuition for courses that teach in-demand skills, regardless of whether those skills are relevant to a career at Amazon. We'll pay for nursing certifications, airplane mechanic courses, and many others. We're building classrooms with glass walls right in our fulfillment centers as a way to encourage employees to participate in the program and to make it easy. We see the impact through stories like Sharie Warmack – a single mother of eight who worked in one of our Phoenix fulfillment centers. Career Choice paid for Sharie to get licensed to drive an 18-wheeler. Sharie worked hard, passed her tests, and she's now a long-haul driver for Schneider Trucking – and loving it. This coming year, we're launching a program to teach other interested companies the benefits of Career Choice and how to implement it.

Leave Share and Ramp Back are programs that give new parents flexibility with their growing families. Leave Share lets employees share their Amazon paid leave with their spouse or domestic partner if their spouse's employer doesn't offer paid leave. Ramp Back gives birth mothers additional control over the pace at which they return to work. Just as with our health care plan, these benefits are egalitarian – they're the same for our fulfillment center and customer service employees as they are for our most senior executives.

Renewable energy, Frustration-Free Packaging, Career Choice, Leave Share, and Ramp Back are examples of a culture that embraces invention and long-term thinking. It's very energizing to think that our scale provides opportunities to create impact in these areas.

I can tell you it's a great joy for me to get to work every day with a team of such smart, imaginative, and passionate people. On behalf of all of us at Amazon, thank you for your support as shareholders. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



"Jeff, what does Day 2 look like?"

That's a question I just got at our most recent all-hands meeting. I've been reminding people that it's Day 1 for a couple of decades. I work in an Amazon building named Day 1, and when I moved buildings, I took the name with me. I spend time thinking about this topic.

"Day 2 is stasis. Followed by irrelevance. Followed by excruciating, painful decline. Followed by death. And *that* is why it is *always* Day 1."

To be sure, this kind of decline would happen in extreme slow motion. An established company might harvest Day 2 for decades, but the final result would still come.

I'm interested in the question, how do you fend off Day 2? What are the techniques and tactics? How do you keep the vitality of Day 1, even inside a large organization?

Such a question can't have a simple answer. There will be many elements, multiple paths, and many traps. I don't know the whole answer, but I may know bits of it. Here's a starter pack of essentials for Day 1 defense: customer obsession, a skeptical view of proxies, the eager adoption of external trends, and high-velocity decision making.

#### True Customer Obsession

There are many ways to center a business. You can be competitor focused, you can be product focused, you can be technology focused, you can be business model focused, and there are more. But in my view, obsessive customer focus is by far the most protective of Day 1 vitality.

Why? There are many advantages to a customer-centric approach, but here's the big one: customers are *always* beautifully, wonderfully dissatisfied, even when they report being happy and business is great. Even when they don't yet know it, customers want something better, and your desire to delight customers will drive you to invent on their behalf. No customer ever asked Amazon to create the Prime membership program, but it sure turns out they wanted it, and I could give you many such examples.

Staying in Day 1 requires you to experiment patiently, accept failures, plant seeds, protect saplings, and double down when you see customer delight. A customer-obsessed culture best creates the conditions where all of that can happen.

#### **Resist Proxies**

As companies get larger and more complex, there's a tendency to manage to proxies. This comes in many shapes and sizes, and it's dangerous, subtle, and very Day 2.

A common example is process as proxy. Good process serves you so you can serve customers. But if you're not watchful, the process can become the thing. This can happen very easily in large organizations. The process becomes the proxy for the result you want. You stop looking at outcomes and just make sure you're doing the process right. Gulp. It's not that rare to hear a junior leader defend a bad outcome with something like, "Well, we followed the process." A more experienced leader will use it as an opportunity to investigate and improve the process. The process is not the thing. It's always worth asking, do we own the process or does the process own us? In a Day 2 company, you might find it's the second.

Another example: market research and customer surveys can become proxies for customers – something that's especially dangerous when you're inventing and designing products. "Fifty-five percent of beta testers report being satisfied with this feature. That is up from 47% in the first survey." That's hard to interpret and could unintentionally mislead.

Good inventors and designers *deeply* understand their customer. They spend tremendous energy developing that intuition. They study and understand many anecdotes rather than only the averages you'll find on surveys. They *live* with the design.

I'm not against beta testing or surveys. But you, the product or service owner, must understand the customer, have a vision, and love the offering. Then, beta testing and research can help you find your blind spots. A remarkable customer experience starts with heart, intuition, curiosity, play, guts, taste. You won't find any of it in a survey.

### **Embrace External Trends**

The outside world can push you into Day 2 if you won't or can't embrace powerful trends quickly. If you fight them, you're probably fighting the future. Embrace them and you have a tailwind.

These big trends are not that hard to spot (they get talked and written about a lot), but they can be strangely hard for large organizations to embrace. We're in the middle of an obvious one right now: machine learning and artificial intelligence.

Over the past decades computers have broadly automated tasks that programmers could describe with clear rules and algorithms. Modern machine learning techniques now allow us to do the same for tasks where describing the precise rules is much harder.

At Amazon, we've been engaged in the practical application of machine learning for many years now. Some of this work is highly visible: our autonomous Prime Air delivery drones; the Amazon Go convenience store that uses machine vision to eliminate checkout lines; and Alexa,¹ our cloud-based AI assistant. (We still struggle to keep Echo in stock, despite our best efforts. A high-quality problem, but a problem. We're working on it.)

But much of what we do with machine learning happens beneath the surface. Machine learning drives our algorithms for demand forecasting, product search ranking, product and deals recommendations, merchandising placements, fraud detection, translations, and much more. Though less visible, much of the impact of machine learning will be of this type – quietly but meaningfully improving core operations.

Inside AWS, we're excited to lower the costs and barriers to machine learning and AI so organizations of all sizes can take advantage of these advanced techniques.

Using our pre-packaged versions of popular deep learning frameworks running on P2 compute instances (optimized for this workload), customers are already developing powerful systems ranging everywhere from early disease detection to increasing crop yields. And we've also made Amazon's higher level services available in a convenient form. Amazon Lex (what's inside Alexa), Amazon Polly, and Amazon Rekognition remove the heavy lifting from natural language understanding, speech generation, and image analysis. They can be accessed with simple API calls – no machine learning expertise required. Watch this space. Much more to come.

# High-Velocity Decision Making

Day 2 companies make high-quality decisions, but they make high-quality decisions slowly. To keep the energy and dynamism of Day 1, you have to somehow make high-quality, high-velocity decisions. Easy for start-ups and very challenging for large organizations. The senior team at Amazon is determined to keep our decision-making velocity high. Speed matters in business – plus a high-velocity decision making environment is more fun too. We don't know all the answers, but here are some thoughts.

First, never use a one-size-fits-all decision-making process. Many decisions are reversible, two-way doors. Those decisions can use a light-weight process. For those, so what if you're wrong? I wrote about this in more detail in last year's letter.

<sup>&</sup>lt;sup>1</sup> For something amusing, try asking, "Alexa, what is sixty factorial?"

Second, most decisions should probably be made with somewhere around 70% of the information you wish you had. If you wait for 90%, in most cases, you're probably being slow. Plus, either way, you need to be good at quickly recognizing and correcting bad decisions. If you're good at course correcting, being wrong may be less costly than you think, whereas being slow is going to be expensive for sure.

Third, use the phrase "disagree and commit." This phrase will save a lot of time. If you have conviction on a particular direction even though there's no consensus, it's helpful to say, "Look, I know we disagree on this but will you gamble with me on it? Disagree and commit?" By the time you're at this point, no one can know the answer for sure, and you'll probably get a quick yes.

This isn't one way. If you're the boss, you should do this too. I disagree and commit all the time. We recently greenlit a particular Amazon Studios original. I told the team my view: debatable whether it would be interesting enough, complicated to produce, the business terms aren't that good, and we have lots of other opportunities. They had a completely different opinion and wanted to go ahead. I wrote back right away with "I disagree and commit and hope it becomes the most watched thing we've ever made." Consider how much slower this decision cycle would have been if the team had actually had to *convince* me rather than simply get my commitment.

Note what this example is not: it's not me thinking to myself "well, these guys are wrong and missing the point, but this isn't worth me chasing." It's a genuine disagreement of opinion, a candid expression of my view, a chance for the team to weigh my view, and a quick, sincere commitment to go their way. And given that this team has already brought home 11 Emmys, 6 Golden Globes, and 3 Oscars, I'm just glad they let me in the room at all!

Fourth, recognize true *misalignment* issues early and escalate them *immediately*. Sometimes teams have different objectives and fundamentally different views. They are not aligned. No amount of discussion, no number of meetings will resolve that deep misalignment. Without escalation, the default dispute resolution mechanism for this scenario is exhaustion. Whoever has more stamina carries the decision.

I've seen many examples of sincere misalignment at Amazon over the years. When we decided to invite third party sellers to compete directly against us on our own product detail pages – that was a big one. Many smart, well-intentioned Amazonians were simply not at all aligned with the direction. The big decision set up hundreds of smaller decisions, many of which needed to be escalated to the senior team.

"You've worn me down" is an awful decision-making process. It's slow and de-energizing. Go for quick escalation instead – it's better.

So, have you settled only for decision quality, or are you mindful of decision velocity too? Are the world's trends tailwinds for you? Are you falling prey to proxies, or do they serve you? And most important of all, are you delighting customers? We can have the scope and capabilities of a large company and the spirit and heart of a small one. But we have to choose it.

A huge thank you to each and every customer for allowing us to serve you, to our shareowners for your support, and to Amazonians everywhere for your hard work, your ingenuity, and your passion.

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeff

Jeffrey P. Bezos Founder and Chief Executive Officer Amazon.com. Inc.

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The American Customer Satisfaction Index recently announced the results of its annual survey, and for the 8<sup>th</sup> year in a row customers ranked Amazon #1. The United Kingdom has a similar index, The U.K. Customer Satisfaction Index, put out by the Institute of Customer Service. For the 5<sup>th</sup> time in a row Amazon U.K. ranked #1 in that survey. Amazon was also just named the #1 business on LinkedIn's 2018 Top Companies list, which ranks the most sought after places to work for professionals in the United States. And just a few weeks ago, Harris Poll released its annual Reputation Quotient, which surveys over 25,000 consumers on a broad range of topics from workplace environment to social responsibility to products and services, and for the 3<sup>rd</sup> year in a row Amazon ranked #1.

Congratulations and thank you to the now over 560,000 Amazonians who come to work every day with unrelenting customer obsession, ingenuity, and commitment to operational excellence. And on behalf of Amazonians everywhere, I want to extend a huge thank you to customers. It's incredibly energizing for us to see your responses to these surveys.

One thing I love about customers is that they are divinely discontent. Their expectations are never static – they go up. It's human nature. We didn't ascend from our hunter-gatherer days by being satisfied. People have a voracious appetite for a better way, and yesterday's 'wow' quickly becomes today's 'ordinary'. I see that cycle of improvement happening at a faster rate than ever before. It may be because customers have such easy access to more information than ever before – in only a few seconds and with a couple taps on their phones, customers can read reviews, compare prices from multiple retailers, see whether something's in stock, find out how fast it will ship or be available for pick-up, and more. These examples are from retail, but I sense that the same customer empowerment phenomenon is happening broadly across everything we do at Amazon and most other industries as well. You cannot rest on your laurels in this world. Customers won't have it.

How do you stay ahead of ever-rising customer expectations? There's no single way to do it – it's a combination of many things. But *high standards* (widely deployed and at all levels of detail) are certainly a big part of it. We've had some successes over the years in our quest to meet the high expectations of customers. We've also had billions of dollars' worth of failures along the way. With those experiences as backdrop, I'd like to share with you the essentials of what we've learned (so far) about high standards inside an organization.

# **Intrinsic or Teachable?**

First, there's a foundational question: are high standards intrinsic or teachable? If you take me on your basketball team, you can teach me many things, but you can't teach me to be taller. Do we first and foremost need to *select* for "high standards" people? If so, this letter would need to be mostly about hiring practices, but I don't think so. I believe high standards are teachable. In fact, people are pretty good at learning high standards simply through exposure. High standards are contagious. Bring a new person onto a high standards team, and they'll quickly adapt. The opposite is also true. If low standards prevail, those too will quickly spread. And though exposure works well to teach high standards, I believe you can accelerate that rate of learning by articulating a few core principles of high standards, which I hope to share in this letter.

# **Universal or Domain Specific?**

Another important question is whether high standards are universal or domain specific. In other words, if you have high standards in one area, do you automatically have high standards elsewhere? I believe high standards are domain specific, and that you have to learn high standards separately in every arena of interest. When I started Amazon, I had high standards on inventing, on customer care, and (thankfully) on hiring. But I didn't have high standards on operational process: how to keep fixed problems fixed, how to eliminate defects at the root, how to inspect processes, and much more. I had to learn and develop high standards on all of that (my colleagues were my tutors).

Understanding this point is important because it keeps you humble. You can consider yourself a person of high standards *in general* and still have debilitating blind spots. There can be whole arenas of endeavor where you may not even *know* that your standards are low or non-existent, and certainly not world class. It's critical to be open to that likelihood.

### **Recognition and Scope**

What do you need to achieve high standards in a particular domain area? First, you have to be able to *recognize* what good looks like in that domain. Second, you must have realistic expectations for how hard it should be (how much work it will take) to achieve that result – the *scope*.

Let me give you two examples. One is a sort of toy illustration but it makes the point clearly, and another is a real one that comes up at Amazon all the time.

### **Perfect Handstands**

A close friend recently decided to learn to do a perfect free-standing handstand. No leaning against a wall. Not for just a few seconds. Instagram good. She decided to start her journey by taking a handstand workshop at her yoga studio. She then practiced for a while but wasn't getting the results she wanted. So, she hired a handstand coach. Yes, I know what you're thinking, but evidently this is an actual thing that exists. In the very first lesson, the coach gave her some wonderful advice. "Most people," he said, "think that if they work hard, they should be able to master a handstand in about two weeks. The reality is that it takes about six months of daily practice. If you think you should be able to do it in two weeks, you're just going to end up quitting." Unrealistic beliefs on scope – often hidden and undiscussed – kill high standards. To achieve high standards yourself or as part of a team, you need to form and proactively communicate realistic beliefs about how hard something is going to be – something this coach understood well.

# **Six-Page Narratives**

We don't do PowerPoint (or any other slide-oriented) presentations at Amazon. Instead, we write narratively structured six-page memos. We silently read one at the beginning of each meeting in a kind of "study hall." Not surprisingly, the quality of these memos varies widely. Some have the clarity of angels singing. They are brilliant and thoughtful and set up the meeting for high-quality discussion. Sometimes they come in at the other end of the spectrum.

In the handstand example, it's pretty straightforward to *recognize* high standards. It wouldn't be difficult to lay out in detail the requirements of a well-executed handstand, and then you're either doing it or you're not. The writing example is very different. The difference between a great memo and an average one is much squishier. It would be extremely hard to write down the detailed requirements that make up a great memo. Nevertheless, I find that much of the time, readers react to great memos very similarly. They know it when they see it. The standard is there, and it is real, even if it's not easily describable.

Here's what we've figured out. Often, when a memo isn't great, it's not the writer's inability to *recognize* the high standard, but instead a wrong expectation on *scope*: they mistakenly believe a high-standards, six-page memo can be written in one or two days or even a few hours, when really it might take a week or more! They're trying to perfect a handstand in just two weeks, and we're not coaching them right. The great memos are written and re-written, shared with colleagues who are asked to improve the work, set aside for a couple of days, and then edited again with a fresh mind. They simply can't be done in a day or two. The key point here is that you can improve results through the simple act of teaching scope – that a great memo probably should take a week or more.

## Skill

Beyond recognizing the standard and having realistic expectations on scope, how about *skill*? Surely to write a world class memo, you have to be an extremely skilled writer? Is it another required element? In my view, not so much, at least not for the individual in the context of teams. The football coach doesn't need to be able to throw, and a film director doesn't need to be able to act. But they both do need to recognize high standards for those things and teach realistic expectations on scope. Even in the example of writing a six-page memo, that's

teamwork. *Someone* on the team needs to have the skill, but it doesn't have to be you. (As a side note, by tradition at Amazon, authors' names never appear on the memos – the memo is from the whole team.)

# **Benefits of High Standards**

Building a culture of high standards is well worth the effort, and there are many benefits. Naturally and most obviously, you're going to build better products and services for customers – this would be reason enough! Perhaps a little less obvious: people are drawn to high standards – they help with recruiting and retention. More subtle: a culture of high standards is protective of all the "invisible" but crucial work that goes on in every company. I'm talking about the work that no one sees. The work that gets done when no one is watching. In a high standards culture, doing that work well is its own reward – it's part of what it means to be a professional.

And finally, high standards are fun! Once you've tasted high standards, there's no going back.

So, the four elements of high standards as we see it: they are *teachable*, they are *domain specific*, you must *recognize* them, and you must explicitly coach realistic *scope*. For us, these work at all levels of detail. Everything from writing memos to whole new, clean-sheet business initiatives. We hope they help you too.

Insist on the Highest Standards
Leaders have relentlessly high standards – many people may think these standards are unreasonably high.

-- from the Amazon Leadership Principles

## **Recent Milestones**

The high standards our leaders strive for have served us well. And while I certainly can't do a handstand myself, I'm extremely proud to share some of the milestones we hit last year, each of which represents the fruition of many years of collective effort. We take none of them for granted.

- <u>Prime</u> 13 years post-launch, we have exceeded 100 million paid Prime members globally. In 2017 Amazon shipped more than five billion items with Prime worldwide, and more new members joined Prime than in any previous year both worldwide and in the U.S. Members in the U.S. now receive unlimited free two-day shipping on over 100 million different items. We expanded Prime to Mexico, Singapore, the Netherlands, and Luxembourg, and introduced Business Prime Shipping in the U.S. and Germany. We keep making Prime shipping faster as well, with Prime Free Same-Day and Prime Free One-Day delivery now in more than 8,000 cities and towns. Prime Now is available in more than 50 cities worldwide across nine countries. Prime Day 2017 was our biggest global shopping event ever (until surpassed by Cyber Monday), with more new Prime members joining Prime than any other day in our history.
- <u>AWS</u> It's exciting to see Amazon Web Services, a \$20 billion revenue run rate business, accelerate its already healthy growth. AWS has also accelerated its pace of innovation especially in new areas such as machine learning and artificial intelligence, Internet of Things, and serverless computing. In 2017, AWS announced more than 1,400 significant services and features, including Amazon SageMaker, which radically changes the accessibility and ease of use for everyday developers to build sophisticated machine learning models. Tens of thousands of customers are also using a broad range of AWS machine learning services, with active users increasing more than 250 percent in the last year, spurred by the broad adoption of Amazon SageMaker. And in November, we held our sixth re:Invent conference with more than 40,000 attendees and over 60,000 streaming participants.
- Marketplace In 2017, for the first time in our history, more than half of the units sold on Amazon worldwide were from our third-party sellers, including small and medium-sized businesses (SMBs). Over 300,000 U.S.-based SMBs started selling on Amazon in 2017, and Fulfillment by Amazon shipped billions of items for SMBs worldwide. Customers ordered more than 40 million items from SMBs worldwide during Prime Day 2017, growing their sales by more than 60 percent over Prime Day 2016. Our Global Selling program (enabling SMBs to sell products across national borders) grew by over 50% in 2017 and cross-border ecommerce by SMBs now represents more than 25% of total third-party sales.

- Alexa Customer embrace of Alexa continues, with Alexa-enabled devices among the best-selling items across all of Amazon. We're seeing extremely strong adoption by other companies and developers that want to create their own experiences with Alexa. There are now more than 30,000 skills for Alexa from outside developers, and customers can control more than 4,000 smart home devices from 1,200 unique brands with Alexa. The foundations of Alexa continue to get smarter every day too. We've developed and implemented an on-device fingerprinting technique, which keeps your device from waking up when it hears an Alexa commercial on TV. (This technology ensured that our Alexa Super Bowl commercial didn't wake up millions of devices.) Far-field speech recognition (already very good) has improved by 15% over the last year; and in the U.S., U.K., and Germany, we've improved Alexa's spoken language understanding by more than 25% over the last 12 months through enhancements in Alexa's machine learning components and the use of semi-supervised learning techniques. (These semi-supervised learning techniques reduced the amount of labeled data needed to achieve the same accuracy improvement by 40 times!) Finally, we've dramatically reduced the amount of time required to teach Alexa new languages by using machine translation and transfer learning techniques, which allows us to serve customers in more countries (like India and Japan).
- Amazon devices 2017 was our best year yet for hardware sales. Customers bought tens of millions of Echo devices, and Echo Dot and Fire TV Stick with Alexa were the best-selling products across all of Amazon across all categories and all manufacturers. Customers bought twice as many Fire TV Sticks and Kids Edition Fire Tablets this holiday season versus last year. 2017 marked the release of our all-new Echo with an improved design, better sound, and a lower price; Echo Plus with a built-in smart home hub; and Echo Spot, which is compact and beautiful with a circular screen. We released our next generation Fire TV, featuring 4K Ultra HD and HDR; and the Fire HD 10 Tablet, with 1080p Full HD display. And we celebrated the 10th anniversary of Kindle by releasing the all-new Kindle Oasis, our most advanced reader ever. It's waterproof take it in the bathtub with a bigger 7" high-resolution 300 ppi display and has built-in audio so you can also listen to your books with Audible.
- Prime Video Prime Video continues to drive Prime member adoption and retention. In the last year we made Prime Video even better for customers by adding new, award-winning Prime Originals to the service, like The Marvelous Mrs. Maisel, winner of two Critics' Choice Awards and two Golden Globes, and the Oscar-nominated movie The Big Sick. We've expanded our slate of programming across the globe, launching new seasons of Bosch and Sneaky Pete from the U.S., The Grand Tour from the U.K., and You Are Wanted from Germany, while adding new Sentosha shows from Japan, along with Breathe and the award-winning Inside Edge from India. Also this year, we expanded our Prime Channels offerings, adding CBS All Access in the U.S. and launching Channels in the U.K. and Germany. We debuted NFL Thursday Night Football on Prime Video, with more than 18 million total viewers over 11 games. In 2017, Prime Video Direct secured subscription video rights for more than 3,000 feature films and committed over \$18 million in royalties to independent filmmakers and other rights holders. Looking forward, we're also excited about our upcoming Prime Original series pipeline, which includes Tom Clancy's Jack Ryan starring John Krasinski; King Lear, starring Anthony Hopkins and Emma Thompson; The Romanoffs, executive produced by Matt Weiner; Carnival Row starring Orlando Bloom and Cara Delevingne; Good Omens starring Jon Hamm; and Homecoming, executive produced by Sam Esmail and starring Julia Roberts in her first television series. We acquired the global television rights for a multi-season production of The Lord of the Rings, as well as Cortés, a miniseries based on the epic saga of Hernán Cortés from executive producer Steven Spielberg, starring Javier Bardem, and we look forward to beginning work on those shows this year.
- <u>Amazon Music</u> Amazon Music continues to grow fast and now has tens of millions of paid customers. Amazon Music Unlimited, our on-demand, ad-free offering, expanded to more than 30 new countries in 2017, and membership has more than doubled over the past six months.
- <u>Fashion</u> Amazon has become the destination for tens of millions of customers to shop for fashion. In 2017, we introduced our first fashion-oriented Prime benefit, Prime Wardrobe a new service that brings the fitting room directly to the homes of Prime members so they can try on the latest styles before they buy. We introduced Nike and UGG on Amazon along with new celebrity collections by Drew Barrymore and Dwyane Wade, as well as dozens of new private brands, like Goodthreads and

- Core10. We're also continuing to enable thousands of designers and artists to offer their exclusive designs and prints on demand through Merch by Amazon. We finished 2017 with the launch of our interactive shopping experience with Calvin Klein, including pop-up shops, on-site product customization, and fitting rooms with Alexa-controlled lighting, music, and more.
- Whole Foods When we closed our acquisition of Whole Foods Market last year, we announced our commitment to making high-quality, natural and organic food available for everyone, then immediately lowered prices on a selection of best-selling grocery staples, including avocados, organic brown eggs, and responsibly-farmed salmon. We followed this with a second round of price reductions in November, and our Prime member exclusive promotion broke Whole Foods' all-time record for turkeys sold during the Thanksgiving season. In February, we introduced free two-hour delivery on orders over \$35 for Prime members in select cities, followed by additional cities in March and April, and plan continued expansion across the U.S. throughout this year. We also expanded the benefits of the Amazon Prime Rewards Visa Card, enabling Prime members to get 5% back when shopping at Whole Foods Market. Beyond that, customers can purchase Whole Foods' private label products like 365 Everyday Value on Amazon, purchase Echo and other Amazon devices in over a hundred Whole Foods stores, and pick-up or return Amazon packages at Amazon Lockers in hundreds of Whole Foods stores. We've also begun the technical work needed to recognize Prime members at the point of sale and look forward to offering more Prime benefits to Whole Foods shoppers once that work is completed.
- Amazon Go Amazon Go, a new kind of store with no checkout required, opened to the public in January in Seattle. Since opening, we've been thrilled to hear many customers refer to their shopping experience as "magical." What makes the magic possible is a custom-built combination of computer vision, sensor fusion, and deep learning, which come together to create Just Walk Out shopping. With JWO, customers are able to grab their favorite breakfast, lunch, dinner, snack, and grocery essentials more conveniently than ever before. Some of our top-selling items are not surprising caffeinated beverages and water are popular but our customers also love the Chicken Banh Mi sandwich, chocolate chip cookies, cut fruit, gummy bears, and our Amazon Meal Kits.
- Treasure Truck Treasure Truck expanded from a single truck in Seattle to a fleet of 35 trucks across 25 U.S. cities and 12 U.K. cities. Our bubble-blowing, music-pumping trucks fulfilled hundreds of thousands of orders, from porterhouse steaks to the latest Nintendo releases. Throughout the year, Treasure Truck also partnered with local communities to lift spirits and help those in need, including donating and delivering hundreds of car seats, thousands of toys, tens of thousands of socks, and many other essentials to community members needing relief, from those displaced by Hurricane Harvey, to the homeless, to kids needing holiday cheer.
- <u>India</u> Amazon.in is the fastest growing marketplace in India, and the most visited site on both desktop and mobile, according to comScore and SimilarWeb. The Amazon.in mobile shopping app was also the most downloaded shopping app in India in 2017, according to App Annie. Prime added more members in India in its first year than any previous geography in Amazon's history. Prime selection in India now includes more than 40 million local products from third-party sellers, and Prime Video is investing in India original video content in a big way, including two recent premiers and over a dozen new shows in production.
- Sustainability We are committed to minimizing carbon emissions by optimizing our transportation network, improving product packaging, and enhancing energy efficiency in our operations, and we have a long-term goal to power our global infrastructure using 100% renewable energy. We recently launched Amazon Wind Farm Texas, our largest wind farm yet, which generates more than 1,000,000 megawatt hours of clean energy annually from over 100 turbines. We have plans to host solar energy systems at 50 fulfillment centers by 2020, and have launched 24 wind and solar projects across the U.S. with more than 29 additional projects to come. Together, Amazon's renewable energy projects now produce enough clean energy to power over 330,000 homes annually. In 2017 we celebrated the 10-year anniversary of Frustration-Free Packaging, the first of a suite of sustainable packaging initiatives that have eliminated more than 244,000 tons of packaging materials over the past 10 years. In addition, in 2017 alone our programs significantly reduced packaging waste, eliminating the

equivalent of 305 million shipping boxes. And across the world, Amazon is contracting with our service providers to launch our first low-pollution last-mile fleet. Already today, a portion of our European delivery fleet is comprised of low-pollution electric and natural gas vans and cars, and we have over 40 electric scooters and e-cargo bikes that complete local urban deliveries.

- Empowering Small Business Millions of small and medium-sized businesses worldwide now sell their products through Amazon to reach new customers around the globe. SMBs selling on Amazon come from every state in the U.S., and from more than 130 different countries around the world. More than 140,000 SMBs surpassed \$100,000 in sales on Amazon in 2017, and over a thousand independent authors surpassed \$100,000 in royalties in 2017 through Kindle Direct Publishing.
- Investment & Job Creation Since 2011, we have invested over \$150 billion worldwide in our fulfillment networks, transportation capabilities, and technology infrastructure, including AWS data centers. Amazon has created over 1.7 million direct and indirect jobs around the world. In 2017 alone, we directly created more than 130,000 new Amazon jobs, not including acquisitions, bringing our global employee base to over 560,000. Our new jobs cover a wide range of professions, from artificial intelligence scientists to packaging specialists to fulfillment center associates. In addition to these direct hires, we estimate that Amazon Marketplace has created 900,000 more jobs worldwide, and that Amazon's investments have created an additional 260,000 jobs in areas like construction, logistics, and other professional services.
- <u>Career Choice</u> One employee program we're particularly proud of is Amazon Career Choice. For hourly associates with more than one year of tenure, we pre-pay 95% of tuition, fees, and textbooks (up to \$12,000) for certificates and associate degrees in high-demand occupations such as aircraft mechanics, computer-aided design, machine tool technologies, medical lab technologies, and nursing. We fund education in areas that are in high demand and do so regardless of whether those skills are relevant to a career at Amazon. Globally more than 16,000 associates (including more than 12,000 in the U.S.) have joined Career Choice since the program launched in 2012. Career Choice is live in ten countries and expanding to South Africa, Costa Rica, and Slovakia later this year. Commercial truck driving, healthcare, and information technology are the program's most popular fields of study. We've built 39 Career Choice classrooms so far, and we locate them behind glass walls in high traffic areas inside our fulfillment centers so associates can be inspired by seeing their peers pursue new skills.

The credit for these milestones is deserved by many. Amazon is 560,000 employees. It's also 2 million sellers, hundreds of thousands of authors, millions of AWS developers, and hundreds of millions of divinely discontent customers around the world who push to make us better each and every day.

### Path Ahead

This year marks the 20th anniversary of our first shareholder letter, and our core values and approach remain unchanged. We continue to aspire to be Earth's most customer-centric company, and we recognize this to be no small or easy challenge. We know there is much we can do better, and we find tremendous energy in the many challenges and opportunities that lie ahead.

A huge thank you to each and every customer for allowing us to serve you, to our shareowners for your support, and to Amazonians everywhere for your ingenuity, your passion, and your high standards.

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



### To our shareowners:

Something strange and remarkable has happened over the last 20 years. Take a look at these numbers:

1999	3%
2000	3%
2001	6%
2002	17%
2003	22%
2004	25%
2005	28%
2006	28%
2007	29%
2008	30%
2009	31%
2010	34%
2011	38%
2012	42%
2013	46%
2014	49%
2015	51%
2016	54%
2017	56%
2018	58%

The percentages represent the share of physical gross merchandise sales sold on Amazon by independent third-party sellers – mostly small- and medium-sized businesses – as opposed to Amazon retail's own first party sales. Third-party sales have grown from 3% of the total to 58%. To put it bluntly:

Third-party sellers are kicking our first party butt. Badly.

And it's a high bar too because our first-party business has grown dramatically over that period, from \$1.6 billion in 1999 to \$117 billion this past year. The compound annual growth rate for our first-party business in that time period is 25%. But in that same time, third-party sales have grown from \$0.1\$ billion to \$160\$ billion – a compound annual growth rate of 52%. To provide an external benchmark, eBay's gross merchandise sales in that period have grown at a compound rate of 20%, from \$2.8\$ billion to \$95\$ billion.

Why did independent sellers do so much better selling on Amazon than they did on eBay? And why were independent sellers able to grow so much faster than Amazon's own highly organized first-party sales organization? There isn't one answer, but we do know one extremely important part of the answer:

We helped independent sellers compete against our first-party business by investing in and offering them *the very best selling tools we could imagine and build*. There are many such tools, including tools that help sellers manage inventory, process payments, track shipments, create reports, and sell across borders – and we're inventing more every year. But of great importance are Fulfillment by Amazon and the Prime membership program. In combination, these two programs meaningfully improved the customer experience of buying from independent sellers. With the success of these two programs now so well established, it's difficult for most people to fully appreciate today just how radical those two offerings were at the time we launched them. We invested in both of these programs at significant financial risk and after much internal debate. We had to continue investing

significantly over time as we experimented with different ideas and iterations. We could not foresee with certainty what those programs would eventually look like, let alone whether they would succeed, but they were pushed forward with intuition and heart, and nourished with optimism.

### Intuition, curiosity, and the power of wandering

From very early on in Amazon's life, we knew we wanted to create a culture of builders – people who are curious, explorers. They like to invent. Even when they're experts, they are "fresh" with a beginner's mind. They see the way we do things as just the way we do things *now*. A builder's mentality helps us approach big, hard-to-solve opportunities with a humble conviction that success can come through iteration: invent, launch, reinvent, relaunch, start over, rinse, repeat, again and again. They know the path to success is anything but straight.

Sometimes (often actually) in business, you *do* know where you're going, and when you do, you can be efficient. Put in place a plan and execute. In contrast, wandering in business is not efficient ... but it's also not random. It's *guided* – by hunch, gut, intuition, curiosity, and powered by a deep conviction that the prize for customers is big enough that it's worth being a little messy and tangential to find our way there. Wandering is an essential counter-balance to efficiency. You need to employ both. The outsized discoveries – the "non-linear" ones – are highly likely to require wandering.

AWS's millions of customers range from startups to large enterprises, government entities to nonprofits, each looking to build better solutions for their end users. We spend a lot of time thinking about what those organizations want and what the people inside them – developers, dev managers, ops managers, CIOs, chief digital officers, chief information security officers, etc. – want.

Much of what we build at AWS is based on *listening* to customers. It's critical to ask customers what they want, listen carefully to their answers, and figure out a plan to provide it thoughtfully and quickly (speed matters in business!). No business could thrive without that kind of customer obsession. But it's also not enough. The biggest needle movers will be things that customers don't know to ask for. We must invent on their behalf. We have to tap into our own inner imagination about what's possible.

AWS itself – as a whole – is an example. No one asked for AWS. No one. Turns out the world was in fact ready and hungry for an offering like AWS but didn't know it. We had a hunch, followed our curiosity, took the necessary financial risks, and began building – reworking, experimenting, and iterating countless times as we proceeded.

Within AWS, that same pattern has recurred many times. For example, we invented DynamoDB, a highly scalable, low latency key-value database now used by thousands of AWS customers. And on the listening-carefully-to-customers side, we heard loudly that companies felt constrained by their commercial database options and had been unhappy with their database providers for decades – these offerings are expensive, proprietary, have high-lock-in and punitive licensing terms. We spent several years building our own database engine, Amazon Aurora, a fully-managed MySQL and PostgreSQL-compatible service with the same or better durability and availability as the commercial engines, but at one-tenth of the cost. We were *not* surprised when this worked.

But we're also optimistic about specialized databases for specialized workloads. Over the past 20 to 30 years, companies ran most of their workloads using relational databases. The broad familiarity with relational databases among developers made this technology the go-to even when it wasn't ideal. Though sub-optimal, the data set sizes were often small enough and the acceptable query latencies long enough that you could make it work. But today, many applications are storing very large amounts of data – terabytes and petabytes. And the requirements for apps have changed. Modern applications are driving the need for low latencies, real-time processing, and the ability to process millions of requests per second. It's not just key-value stores like DynamoDB, but also in-memory databases like Amazon ElastiCache, time series databases like Amazon Timestream, and ledger solutions like Amazon Quantum Ledger Database – the right tool for the right job saves money and gets your product to market faster.

We're also plunging into helping companies harness Machine Learning. We've been working on this for a long time, and, as with other important advances, our initial attempts to externalize some of our early internal Machine Learning tools were failures. It took years of wandering – experimentation, iteration, and refinement, as well as valuable insights from our customers – to enable us to find SageMaker, which launched just 18 months ago. SageMaker removes the heavy lifting, complexity, and guesswork from each step of the machine learning process – democratizing AI. Today, thousands of customers are building machine learning models on top of AWS with SageMaker. We continue to enhance the service, including by adding new reinforcement learning capabilities. Reinforcement learning has a steep learning curve and many moving parts, which has largely put it out of reach of all but the most well-funded and technical organizations, until now. None of this would be possible without a culture of curiosity and a willingness to try totally new things on behalf of customers. And customers are responding to our customer-centric wandering and listening – AWS is now a \$30 billion annual run rate business and growing fast.

# **Imagining the impossible**

Amazon today remains a small player in global retail. We represent a low single-digit percentage of the retail market, and there are much larger retailers in every country where we operate. And that's largely because nearly 90% of retail remains offline, in brick and mortar stores. For many years, we considered how we might serve customers in physical stores, but felt we needed first to invent something that would really delight customers in that environment. With Amazon Go, we had a clear vision. Get rid of the worst thing about physical retail: checkout lines. No one likes to wait in line. Instead, we imagined a store where you could walk in, pick up what you wanted, and leave.

Getting there was hard. Technically hard. It required the efforts of hundreds of smart, dedicated computer scientists and engineers around the world. We had to design and build our own proprietary cameras and shelves and invent new computer vision algorithms, including the ability to stitch together imagery from hundreds of cooperating cameras. And we had to do it in a way where the technology worked so well that it simply receded into the background, invisible. The reward has been the response from customers, who've described the experience of shopping at Amazon Go as "magical." We now have 10 stores in Chicago, San Francisco, and Seattle, and are excited about the future.

## Failure needs to scale too

As a company grows, *everything* needs to scale, including the size of your failed experiments. If the size of your failures isn't growing, you're not going to be inventing at a size that can actually move the needle. Amazon will be experimenting at the right scale for a company of our size if we occasionally have multibillion-dollar failures. Of course, we won't undertake such experiments cavalierly. We will work hard to make them good bets, but not all good bets will ultimately pay out. This kind of large-scale risk taking is part of the service we as a large company can provide to our customers and to society. The good news for shareowners is that a single big winning bet can more than cover the cost of many losers.

Development of the Fire phone and Echo was started around the same time. While the Fire phone was a failure, we were able to take our learnings (as well as the developers) and accelerate our efforts building Echo and Alexa. The vision for Echo and Alexa was inspired by the Star Trek computer. The idea also had origins in two other arenas where we'd been building and wandering for years: machine learning and the cloud. From Amazon's early days, machine learning was an essential part of our product recommendations, and AWS gave us a front row seat to the capabilities of the cloud. After many years of development, Echo debuted in 2014, powered by Alexa, who lives in the AWS cloud.

No customer was asking for Echo. This was definitely us wandering. Market research doesn't help. If you had gone to a customer in 2013 and said "Would you like a black, always-on cylinder in your kitchen about the size of a Pringles can that you can talk to and ask questions, that also turns on your lights and plays music?" I guarantee you they'd have looked at you strangely and said "No, thank you."

Since that first-generation Echo, customers have purchased more than 100 million Alexa-enabled devices. Last year, we improved Alexa's ability to understand requests and answer questions by more than 20%, while adding billions of facts to make Alexa more knowledgeable than ever. Developers doubled the number of Alexa skills to over 80,000, and customers spoke to Alexa tens of billions more times in 2018 compared to 2017. The number of devices with Alexa built-in more than doubled in 2018. There are now more than 150 different products available with Alexa built-in, from headphones and PCs to cars and smart home devices. Much more to come!

One last thing before closing. As I said in the first shareholder letter more than 20 years ago, our focus is on hiring and retaining versatile and talented employees who can think like owners. Achieving that requires investing in our employees, and, as with so many other things at Amazon, we use not just analysis but also intuition and heart to find our way forward.

Last year, we raised our minimum wage to \$15-an-hour for all full-time, part-time, temporary, and seasonal employees across the U.S. This wage hike benefitted more than 250,000 Amazon employees, as well as over 100,000 seasonal employees who worked at Amazon sites across the country last holiday. We strongly believe that this will benefit our business as we invest in our employees. But that is not what drove the decision. We had always offered competitive wages. But we decided it was time to lead – to offer wages that went beyond competitive. We did it because it seemed like the right thing to do.

Today I challenge our top retail competitors (you know who you are!) to match our employee benefits and our \$15 minimum wage. Do it! Better yet, go to \$16 and throw the gauntlet back at us. It's a kind of competition that will benefit everyone.

Many of the other programs we have introduced for our employees came as much from the heart as the head. I've mentioned before the Career Choice program, which pays up to 95% of tuition and fees towards a certificate or diploma in qualified fields of study, leading to in-demand careers for our associates, even if those careers take them away from Amazon. More than 16,000 employees have now taken advantage of the program, which continues to grow. Similarly, our Career Skills program trains hourly associates in critical job skills like resume writing, how to communicate effectively, and computer basics. In October of last year, in continuation of these commitments, we signed the President's Pledge to America's Workers and announced we will be upskilling 50,000 U.S. employees through our range of innovative training programs.

Our investments are not limited to our current employees or even to the present. To train tomorrow's workforce, we have pledged \$50 million, including through our recently announced Amazon Future Engineer program, to support STEM and CS education around the country for elementary, high school, and university students, with a particular focus on attracting more girls and minorities to these professions. We also continue to take advantage of the incredible talents of our veterans. We are well on our way to meeting our pledge to hire 25,000 veterans and military spouses by 2021. And through the Amazon Technical Veterans Apprenticeship program, we are providing veterans on-the-job training in fields like cloud computing.

A huge thank you to our customers for allowing us to serve you while always challenging us to do even better, to our shareowners for your continuing support, and to all our employees worldwide for your hard work and pioneering spirit. Teams all across Amazon are *listening* to customers and *wandering* on their behalf!

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



### To our shareowners:

One thing we've learned from the COVID-19 crisis is how important Amazon has become to our customers. We want you to know we take this responsibility seriously, and we're proud of the work our teams are doing to help customers through this difficult time.

Amazonians are working around the clock to get necessary supplies delivered directly to the doorsteps of people who need them. The demand we are seeing for essential products has been and remains high. But unlike a predictable holiday surge, this spike occurred with little warning, creating major challenges for our suppliers and delivery network. We quickly prioritized the stocking and delivery of essential household staples, medical supplies, and other critical products.

Our Whole Foods Market stores have remained open, providing fresh food and other vital goods for customers. We are taking steps to help those most vulnerable to the virus, setting aside the first hour of shopping at Whole Foods each day for seniors. We have temporarily closed Amazon Books, Amazon 4-star, and Amazon Pop Up stores because they don't sell essential products, and we offered associates from those closed stores the opportunity to continue working in other parts of Amazon.

Crucially, while providing these essential services, we are focused on the safety of our employees and contractors around the world—we are deeply grateful for their heroic work and are committed to their health and well-being. Consulting closely with medical experts and health authorities, we've made over 150 significant process changes in our operations network and Whole Foods Market stores to help teams stay healthy, and we conduct daily audits of the measures we've put into place. We've distributed face masks and implemented temperature checks at sites around the world to help protect employees and support staff. We regularly sanitize door handles, stairway handrails, lockers, elevator buttons, and touch screens, and disinfectant wipes and hand sanitizer are standard across our network.

We've also introduced extensive social distancing measures to help protect our associates. We have eliminated stand-up meetings during shifts, moved information sharing to bulletin boards, staggered break times, and spread out chairs in breakrooms. While training new hires is challenging with new distancing requirements, we continue to ensure that every new employee gets six hours of safety training. We've shifted training protocols so we don't have employees gathering in one spot, and we've adjusted our hiring processes to allow for social distancing.

A next step in protecting our employees might be regular testing of all Amazonians, including those showing no symptoms. Regular testing on a global scale, across all industries, would both help keep people safe and help get the economy back up and running. For this to work, we as a society would need vastly more testing capacity than is currently available. If every person could be tested regularly, it would make a huge difference in how we fight this virus. Those who test positive could be quarantined and cared for, and everyone who tests negative could re-enter the economy with confidence.

We've begun the work of building incremental testing capacity. A team of Amazonians—from research scientists and program managers to procurement specialists and software engineers—moved from their normal day jobs onto a dedicated team to work on this initiative. We have begun assembling the equipment we need to build our first lab and hope to start testing small numbers of our frontline employees soon. We are not sure how far we will get in the relevant timeframe, but we think it's worth trying, and we stand ready to share anything we learn.

While we explore longer-term solutions, we are also committed to helping support employees now. We increased our minimum wage through the end of April by \$2 per hour in the U.S., \$2 per hour in Canada, £2 per hour in the UK, and €2 per hour in many European countries. And we are paying associates double our regular rate for any overtime worked—a minimum of \$34 an hour—an increase from time and a half. These wage increases will cost more than \$500 million, just through the end of April, and likely more than that over time. While we recognize this is expensive, we believe it's the right thing to do under the circumstances. We also established the Amazon Relief Fund—with an initial \$25 million in funding—to support our independent delivery service partners and their drivers, Amazon Flex participants, and temporary employees under financial distress.

In March, we opened 100,000 new positions across our fulfillment and delivery network. Earlier this week, after successfully filling those roles, we announced we were creating another 75,000 jobs to respond to customer demand. These new hires are helping customers who depend on us to meet their critical needs. We know that many people around the world have suffered financially as jobs are lost or furloughed. We are happy to have them on our teams until things return to normal and either their former employer can bring them back or new jobs become available. We've welcomed Joe Duffy, who joined after losing his job as a mechanic at Newark airport and learned about an opening from a friend who is an Amazon operations analyst. Dallas preschool teacher Darby Griffin joined after her school closed on March 9th and now helps manage new inventory. We're happy to have Darby with us until she can return to the classroom.

Amazon is acting aggressively to protect our customers from bad actors looking to exploit the crisis. We've removed over half a million offers from our stores due to COVID-based price gouging, and we've suspended more than 6,000 selling accounts globally for violating our fair-pricing policies. Amazon turned over information about sellers we suspect engaged in price gouging of products related to COVID-19 to 42 state attorneys general offices. To accelerate our response to price-gouging incidents, we created a special communication channel for state attorneys general to quickly and easily escalate consumer complaints to us.

Amazon Web Services is also playing an important role in this crisis. The ability for organizations to access scalable, dependable, and highly secure computing power—whether for vital healthcare work, to help students continue learning, or to keep unprecedented numbers of employees online and productive from home—is critical in this situation. Hospital networks, pharmaceutical companies, and research labs are using AWS to care for patients, explore treatments, and mitigate the impacts of COVID-19 in many other ways. Academic institutions around the world are transitioning from in-person to virtual classrooms and are running on AWS to help ensure continuity of learning. And governments are leveraging AWS as a secure platform to build out new capabilities in their efforts to end this pandemic.

We are collaborating with the World Health Organization, supplying advanced cloud technologies and technical expertise to track the virus, understand the outbreak, and better contain its spread. WHO is leveraging our cloud to build large-scale data lakes, aggregate epidemiological country data, rapidly translate medical training videos into different languages, and help global healthcare workers better treat patients. We are separately making a public AWS COVID-19 data lake available as a centralized repository for up-to-date and curated information related to the spread and characteristics of the virus and its associated illness so experts can access and analyze the latest data in their battle against the disease.

We also launched the AWS Diagnostic Development Initiative, a program to support customers working to bring more accurate diagnostic solutions to market for COVID-19. Better diagnostics help accelerate treatment and containment of this pandemic. We committed \$20 million to accelerate this work and help our customers harness the cloud to tackle this challenge. While the program was established in response to COVID-19, we also are looking toward the future, and we will fund diagnostic research projects that have the potential to blunt future infectious disease outbreaks.

Customers around the world have leveraged the cloud to scale up services and stand up responses to COVID-19. We joined the New York City COVID-19 Rapid Response Coalition to develop a conversational agent to enable at-risk and elderly New Yorkers to receive accurate, timely information about medical and other important needs. In response to a request from the Los Angeles Unified School District to transition 700,000 students to remote learning, AWS helped establish a call center to field IT questions, provide remote support, and enable staff to answer calls. We are providing cloud services to the CDC to help thousands of public health practitioners and clinicians gather data related to COVID-19 and inform response efforts. In the UK, AWS provides the cloud computing infrastructure for a project that analyzes hospital occupancy levels, emergency room capacity, and patient wait times to help the country's National Health Service decide where best to allocate resources. In Canada, OTN—one of the world's largest virtual care networks—is scaling its AWS-powered video service to accommodate a 4,000% spike in demand to support citizens as the pandemic continues. In Brazil, AWS will provide the São Paulo State Government with cloud computing infrastructure to guarantee online classes to 1 million students in public schools across the state.

Following CDC guidance, our Alexa health team built an experience that lets U.S. customers check their risk level for COVID-19 at home. Customers can ask, "Alexa, what do I do if I think I have COVID-19?" or "Alexa, what do I do if I think I have coronavirus?" Alexa then asks a series of questions about the person's symptoms and possible exposure. Based on those responses, Alexa then provides CDC-sourced guidance. We created a similar service in Japan, based on guidance from the Japanese Ministry of Health, Labor, and Welfare.

We're making it easy for customers to use Amazon.com or Alexa to donate directly to charities on the front lines of the COVID-19 crisis, including Feeding America, the American Red Cross, and Save the Children. Echo users have the option to say, "Alexa, make a donation to Feeding America COVID-19 Response Fund." In Seattle, we've partnered with a catering business to distribute 73,000 meals to 2,700 elderly and medically vulnerable residents in Seattle and King County during the outbreak, and we donated 8,200 laptops to help Seattle Public Schools students gain access to a device while classes are conducted virtually.

## **Beyond COVID**

Although these are incredibly difficult times, they are an important reminder that what we do as a company can make a big difference in people's lives. Customers count on us to be there, and we are fortunate to be able to help. With our scale and ability to innovate quickly, Amazon can make a positive impact and be an organizing force for progress.

Last year, we co-founded The Climate Pledge with Christiana Figueres, the UN's former climate change chief and founder of Global Optimism, and became the first signatory to the pledge. The pledge commits Amazon to meet the goals of the Paris Agreement 10 years early—and be net zero carbon by 2040. Amazon faces significant challenges in achieving this goal because we don't just move information around—we have extensive physical infrastructure and deliver more than 10 billion items worldwide a year. And we believe if Amazon can get to net zero carbon ten years early, any company can—and we want to work together with all companies to make it a reality.

To that end, we are recruiting other companies to sign The Climate Pledge. Signatories agree to measure and report greenhouse gas emissions regularly, implement decarbonization strategies in line with the Paris Agreement, and achieve net zero annual carbon emissions by 2040. (We'll be announcing new signatories soon.)

We plan to meet the pledge, in part, by purchasing 100,000 electric delivery vans from Rivian—a Michigan-based producer of electric vehicles. Amazon aims to have 10,000 of Rivian's new electric vans on the road as early as 2022, and all 100,000 vehicles on the road by 2030. That's good for the environment, but the promise is even greater. This type of investment sends a signal to the marketplace to start inventing and developing new technologies that large, global companies need to transition to a low-carbon economy.

We've also committed to reaching 80% renewable energy by 2024 and 100% renewable energy by 2030. (The team is actually pushing to get to 100% by 2025 and has a challenging but credible plan to pull that off.) Globally, Amazon has 86 solar and wind projects that have the capacity to generate over 2,300 MW and deliver more than 6.3 million MWh of energy annually—enough to power more than 580,000 U.S. homes.

We've made tremendous progress cutting packaging waste. More than a decade ago, we created the Frustration-Free Packaging program to encourage manufacturers to package their products in easy-to-open, 100% recyclable packaging that is ready to ship to customers without the need for an additional shipping box. Since 2008, this program has saved more than 810,000 tons of packaging material and eliminated the use of 1.4 billion shipping boxes.

We are making these significant investments to drive our carbon footprint to zero despite the fact that shopping online is already inherently more carbon efficient than going to the store. Amazon's sustainability scientists have spent more than three years developing the models, tools, and metrics to measure our carbon footprint. Their detailed analysis has found that shopping online consistently generates less carbon than driving to a store, since a single delivery van trip can take approximately 100 roundtrip car journeys off the road on average. Our scientists developed a model to compare the carbon intensity of ordering Whole Foods Market groceries online versus driving to your nearest Whole Foods Market store. The study found that, averaged across all basket sizes, online grocery deliveries generate 43% lower carbon emissions per item compared to shopping in stores. Smaller basket sizes generate even greater carbon savings.

AWS is also inherently more efficient than the traditional in-house data center. That's primarily due to two things—higher utilization, and the fact that our servers and facilities are more efficient than what most companies can achieve running their own data centers. Typical single-company data centers operate at roughly 18% server utilization. They need that excess capacity to handle large usage spikes. AWS benefits from multitenant usage patterns and operates at far higher server utilization rates. In addition, AWS has been successful in increasing the energy efficiency of its facilities and equipment, for instance by using more efficient evaporative cooling in certain data centers instead of traditional air conditioning. A study by 451 Research found that AWS's infrastructure is 3.6 times more energy efficient than the median U.S. enterprise data center surveyed. Along with our use of renewable energy, these factors enable AWS to do the same tasks as traditional data centers with an 88% lower carbon footprint. And don't think we're not going to get those last 12 points—we'll make AWS 100% carbon free through more investments in renewable energy projects.

# Leveraging scale for good

Over the last decade, no company has created more jobs than Amazon. Amazon directly employs 840,000 workers worldwide, including over 590,000 in the U.S., 115,000 in Europe, and 95,000 in Asia. In total, Amazon directly and indirectly supports 2 million jobs in the U.S., including 680,000-plus jobs created by Amazon's investments in areas like construction, logistics, and professional services, plus another 830,000 jobs created by small and medium-sized businesses selling on Amazon. Globally, we support nearly 4 million jobs. We are especially proud of the fact that many of these are entry-level jobs that give people their first opportunity to participate in the workforce.

And Amazon's jobs come with an industry-leading \$15 minimum wage and comprehensive benefits. More than 40 million Americans—many making the federal minimum wage of \$7.25 an hour—earn less than the lowest-paid Amazon associate. When we raised our starting minimum wage to \$15 an hour in 2018, it had an immediate and meaningful impact on the hundreds of thousands of people working in our fulfillment centers. We want other big employers to join us by raising their own minimum pay rates, and we continue to lobby for a \$15 federal minimum wage.

We want to improve workers' lives beyond pay. Amazon provides every full-time employee with health insurance, a 401(k) plan, 20 weeks paid maternity leave, and other benefits. These are the same benefits that Amazon's most senior executives receive. And with our rapidly changing economy, we see more clearly than ever the need for workers to evolve their skills continually to keep up with technology. That's why we're spending \$700 million to provide more than 100,000 Amazonians access to training programs, at their places of work, in high-demand fields such as healthcare, cloud computing, and machine learning. Since 2012, we have offered Career Choice, a pre-paid tuition program for fulfillment center associates looking to move into high-demand occupations. Amazon pays up to 95% of tuition and fees toward a certificate or diploma in qualified fields of study, leading to enhanced employment opportunities in high-demand jobs. Since its launch, more than 25,000 Amazonians have received training for in-demand occupations.

To ensure that future generations have the skills they need to thrive in a technology-driven economy, we started a program last year called Amazon Future Engineer, which is designed to educate and train low-income and disadvantaged young people to pursue careers in computer science. We have an ambitious goal: to help hundreds of thousands of students each year learn computer science and coding. Amazon Future Engineer currently funds Introduction to Computer Science and AP Computer Science classes for more than 2,000 schools in underserved communities across the country. Each year, Amazon Future Engineer also gives 100 four-year, \$40,000 college scholarships to computer science students from low-income backgrounds. Those scholarship recipients also receive guaranteed, paid internships at Amazon after their first year of college. Our program in the UK funds 120 engineering apprenticeships and helps students from disadvantaged backgrounds pursue technology careers.

For now, my own time and thinking continues to be focused on COVID-19 and how Amazon can help while we're in the middle of it. I am extremely grateful to my fellow Amazonians for all the grit and ingenuity they are showing as we move through this. You can count on all of us to look beyond the immediate crisis for insights and lessons and how to apply them going forward.

Reflect on this from Theodor Seuss Geisel:

"When something bad happens you have three choices. You can either let it define you, let it destroy you, or you can let it strengthen you."

I am very optimistic about which of these civilization is going to choose.

Even in these circumstances, it remains Day 1. As always, I attach a copy of our original 1997 letter.

Sincerely,

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



### To our shareowners:

In Amazon's 1997 letter to shareholders, our first, I talked about our hope to create an "enduring franchise," one that would reinvent what it means to serve customers by unlocking the internet's power. I noted that Amazon had grown from having 158 employees to 614, and that we had surpassed 1.5 million customer accounts. We had just gone public at a split-adjusted stock price of \$1.50 per share. I wrote that it was Day 1.

We've come a long way since then, and we are working harder than ever to serve and delight customers. Last year, we hired 500,000 employees and now directly employ 1.3 million people around the world. We have more than 200 million Prime members worldwide. More than 1.9 million small and medium-sized businesses sell in our store, and they make up close to 60% of our retail sales. Customers have connected more than 100 million smart home devices to Alexa. Amazon Web Services serves millions of customers and ended 2020 with a \$50 billion annualized run rate. In 1997, we hadn't invented Prime, Marketplace, Alexa, or AWS. They weren't even ideas then, and none was preordained. We took great risk with each one and put sweat and ingenuity into each one.

Along the way, we've created \$1.6 trillion of wealth for shareowners. Who are they? Your Chair is one, and my Amazon shares have made me wealthy. But more than 7/8ths of the shares, representing \$1.4 trillion of wealth creation, are owned by others. Who are they? They're pension funds, universities, and 401(k)s, and they're Mary and Larry, who sent me this note out of the blue just as I was sitting down to write this shareholder letter:

March 5, 2021

Mr. Jeff Bezos Executive Chairman Amazon.com. Inc. 410 Terry Avenue North Seattle, WA 98109

Dear Mr. Bezos,

Thanks for making Amazon a great company! We thought you would like to know how it has benefited our family.

Back in 1997 when you made Amazon public, our son, Ryan, was 12 years old and a voracious reader. For his birthday, , 1997, we bought two shares of your new book selling company, which was all we could afford at the time. Within a year or so, the shares split 2 for 1, then 3 for 1, then 2 for 1 again, giving him 24 shares. The shares were in our names because of his age. We meant to put it in custody for him but we never got around to it but he knew they were for him.

Several times over the years, Ryan would want to cash in the stock but we always said we would "buy" it from him and then eventually turn around and give it back to him as a "gift". It was kind of a running joke in the family.

Due to the exponential growth in value, we decided to split the stock between ourselves and both of our children, Ryan and Katy.

This year Ryan is buying a house and would like to sell some shares. After searching for the original certificates, we needed to convert the paper shares into digital before selling them. We noticed that the first share certificate was a very low number, issue # ... I can't image how many more shares have been issued since that date!

Included is a copy of the had a copy of the had a wonderful influence on our family. We all enjoyed watching Amazon value grow year after year and it's a story we love to tell others.

Congratulations on a great career as CEO of Amazon. We can't even imagine how hard you and your team have worked to make Amazon the most successful and inventive company on the planet. Now may you have time to relax and catch up on things you want to do. like space exploration!

We cannot wait to see where Amazon delivers next! Next Day to Mars!

Sincerely

Mary and Larry

P.S. We wished we had bought 10 shares!

I am approached with similar stories all the time. I know people who've used their Amazon money for college, for emergencies, for houses, for vacations, to start their own business, for charity – and the list goes on. I'm proud of the wealth we've created for shareowners. It's significant, and it improves their lives. But I also know something else: it's not the largest part of the value we've created.

# **Create More Than You Consume**

If you want to be successful in business (in life, actually), you have to create more than you consume. Your goal should be to create value for everyone you interact with. Any business that doesn't create value for those it touches, even if it appears successful on the surface, isn't long for this world. It's on the way out.

Remember that stock prices are not about the past. They are a prediction of *future* cash flows discounted back to the present. The stock market anticipates. I'm going to switch gears for a moment and talk about the past. How much value did we create for shareowners in 2020? This is a relatively easy question to answer because accounting systems are set up to answer it. Our net income in 2020 was \$21.3 billion. If, instead of being a publicly traded company with thousands of owners, Amazon were a sole proprietorship with a single owner, that's how much the owner would have earned in 2020.

How about employees? This is also a reasonably easy value creation question to answer because we can look at compensation expense. What is an expense for a company is income for employees. In 2020, employees earned \$80 billion, plus another \$11 billion to include benefits and various payroll taxes, for a total of \$91 billion.

How about third-party sellers? We have an internal team (the Selling Partner Services team) that works to answer that question. They estimate that, in 2020, third-party seller profits from selling on Amazon were between \$25 billion and \$39 billion, and to be conservative here I'll go with \$25 billion.

For customers, we have to break it down into consumer customers and AWS customers.

We'll do consumers first. We offer low prices, vast selection, and fast delivery, but imagine we ignore all of that for the purpose of this estimate and value only one thing: we save customers time.

Customers complete 28% of purchases on Amazon in three minutes or less, and half of all purchases are finished in less than 15 minutes. Compare that to the typical shopping trip to a physical store – driving, parking, searching store aisles, waiting in the checkout line, finding your car, and driving home. Research suggests the typical physical store trip takes about an hour. If you assume that a typical Amazon purchase takes 15 minutes and that it saves you a couple of trips to a physical store a week, that's more than 75 hours a year saved. That's important. We're all busy in the early 21st century.

So that we can get a dollar figure, let's value the time savings at \$10 per hour, which is conservative. Seventy-five hours multiplied by \$10 an hour and subtracting the cost of Prime gives you value creation for each Prime member of about \$630. We have 200 million Prime members, for a total in 2020 of \$126 billion of value creation.

AWS is challenging to estimate because each customer's workload is so different, but we'll do it anyway, acknowledging up front that the error bars are high. Direct cost improvements from operating in the cloud versus on premises vary, but a reasonable estimate is 30%. Across AWS's entire 2020 revenue of \$45 billion, that 30% would imply customer value creation of \$19 billion (what would have cost them \$64 billion on their own cost \$45 billion from AWS). The difficult part of this estimation exercise is that the direct cost reduction is the smallest portion of the customer benefit of moving to the cloud. The bigger benefit is the increased speed of software development – something that can significantly improve the customer's competitiveness and top line. We have no reasonable way of estimating that portion of customer value except to say that it's almost certainly larger than the direct cost savings. To be conservative here (and remembering we're really only trying to get ballpark estimates), I'll say it's the same and call AWS customer value creation \$38 billion in 2020.

Adding AWS and consumer together gives us total customer value creation in 2020 of \$164 billion.

Summarizing:

Shareholders \$21B Employees \$91B 3P Sellers \$25B Customers \$164B Total \$301B

If each group had an income statement representing their interactions with Amazon, the numbers above would be the "bottom lines" from those income statements. These numbers are part of the reason why people work for us, why sellers sell through us, and why customers buy from us. We create value for them. And this value creation is not a zero-sum game. It is not just moving money from one pocket to another. Draw the box big around all of society, and you'll find that invention is the root of all real value creation. And value created is best thought of as a metric for innovation.

Of course, our relationship with these constituencies and the value we create isn't exclusively dollars and cents. Money doesn't tell the whole story. Our relationship with shareholders, for example, is relatively simple. They invest and hold shares for a duration of their choosing. We provide direction to shareowners infrequently on matters such as annual meetings and the right process to vote their shares. And even then they can ignore those directions and just skip voting.

Our relationship with employees is a very different example. We have processes they follow and standards they meet. We require training and various certifications. Employees have to show up at appointed times. Our interactions with employees are many, and they're fine-grained. It's not just about the pay and the benefits. It's about all the other detailed aspects of the relationship too.

Does your Chair take comfort in the outcome of the recent union vote in Bessemer? No, he doesn't. I think we need to do a better job for our employees. While the voting results were lopsided and our direct relationship with employees is strong, it's clear to me that we need a better *vision* for how we create value for employees – a vision for their success.

If you read some of the news reports, you might think we have no care for employees. In those reports, our employees are sometimes accused of being desperate souls and treated as robots. That's not accurate. They're sophisticated and thoughtful people who have options for where to work. When we survey fulfillment center employees, 94% say they would recommend Amazon to a friend as a place to work.

Employees are able to take informal breaks throughout their shifts to stretch, get water, use the rest room, or talk to a manager, all without impacting their performance. These informal work breaks are in addition to the 30-minute lunch and 30-minute break built into their normal schedule.

We don't set unreasonable performance goals. We set achievable performance goals that take into account tenure and actual employee performance data. Performance is evaluated over a long period of time as we know that a variety of things can impact performance in any given week, day, or hour. If employees are on track to miss a performance target over a period of time, their manager talks with them and provides coaching.

Coaching is also extended to employees who are excelling and in line for increased responsibilities. In fact, 82% of coaching is positive, provided to employees who are meeting or exceeding expectations. We terminate the employment of less than 2.6% of employees due to their inability to perform their jobs (and that number was even lower in 2020 because of operational impacts of COVID-19).

## Earth's Best Employer and Earth's Safest Place to Work

The fact is, the large team of thousands of people who lead operations at Amazon have always cared deeply for our hourly employees, and we're proud of the work environment we've created. We're also proud of the fact that Amazon is a company that does more than just create jobs for computer scientists and people with advanced degrees. We create jobs for people who never got that advantage.

Despite what we've accomplished, it's clear to me that we need a better vision for our employees' success. We have always wanted to be Earth's Most Customer-Centric Company. We won't change that. It's what got us here. But I am committing us to an addition. We are going to be Earth's Best Employer and Earth's Safest Place to Work.

In my upcoming role as Executive Chair, I'm going to focus on new initiatives. I'm an inventor. It's what I enjoy the most and what I do best. It's where I create the most value. I'm excited to work alongside the large team of passionate people we have in Ops and help invent in this arena of Earth's Best Employer and Earth's Safest Place to Work. On the details, we at Amazon are always flexible, but on matters of vision we are stubborn and relentless. We have never failed when we set our minds to something, and we're not going to fail at this either.

We dive deep into safety issues. For example, about 40% of work-related injuries at Amazon are related to musculoskeletal disorders (MSDs), things like sprains or strains that can be caused by repetitive motions. MSDs are common in the type of work that we do and are more likely to occur during an employee's first six months. We need to invent solutions to reduce MSDs for new employees, many of whom might be working in a physical role for the first time.

One such program is WorkingWell – which we launched to 859,000 employees at 350 sites across North America and Europe in 2020 – where we coach small groups of employees on body mechanics, proactive wellness, and safety. In addition to reducing workplace injuries, these concepts have a positive impact on regular day-to-day activities outside work.

We're developing new automated staffing schedules that use sophisticated algorithms to rotate employees among jobs that use different muscle-tendon groups to decrease repetitive motion and help protect employees from MSD risks. This new technology is central to a job rotation program that we're rolling out throughout 2021.

Our increased attention to early MSD prevention is already achieving results. From 2019 to 2020, overall MSDs decreased by 32%, and MSDs resulting in time away from work decreased by more than half.

We employ 6,200 safety professionals at Amazon. They use the science of safety to solve complex problems and establish new industry best practices. In 2021, we'll invest more than \$300 million into safety projects, including an initial \$66 million to create technology that will help prevent collisions of forklifts and other types of industrial vehicles.

When we lead, others follow. Two and a half years ago, when we set a \$15 minimum wage for our hourly employees, we did so because we wanted to lead on wages – not just run with the pack – and because we believed it was the right thing to do. A recent paper by economists at the University of California-Berkeley and Brandeis University analyzed the impact of our decision to raise our minimum starting pay to \$15 per hour. Their assessment reflects what we've heard from employees, their families, and the communities they live in.

Our increase in starting wage boosted local economies across the country by benefiting not only our own employees but also other workers in the same community. The study showed that our pay raise resulted in a 4.7% increase in the average hourly wage among other employers in the same labor market.

And we're not done leading. If we want to be Earth's Best Employer, we shouldn't settle for 94% of employees saying they would recommend Amazon to a friend as a place to work. We have to aim for 100%. And we'll do that by continuing to lead on wages, on benefits, on upskilling opportunities, and in other ways that we will figure out over time.

If any shareowners are concerned that Earth's Best Employer and Earth's Safest Place to Work might dilute our focus on Earth's Most Customer-Centric Company, let me set your mind at ease. Think of it this way. If we can operate two businesses as different as consumer ecommerce and AWS, and do both at the highest level, we can certainly do the same with these two vision statements. In fact, I'm confident they will reinforce each other.

## The Climate Pledge

In an earlier draft of this letter, I started this section with arguments and examples designed to demonstrate that human-induced climate change is real. But, bluntly, I think we can stop saying that now. You don't have to say that photosynthesis is real, or make the case that gravity is real, or that water boils at 100 degrees Celsius at sea level. These things are simply true, as is the reality of climate change.

Not long ago, most people believed that it would be good to address climate change, but they also thought it would cost a lot and would threaten jobs, competitiveness, and economic growth. We now know better. Smart action on climate change will not only stop bad things from happening, it will also make our economy more efficient, help drive technological change, and reduce risks. Combined, these can lead to more and better jobs, healthier and happier children, more productive workers, and a more prosperous future. This doesn't mean it will be easy. It won't be. The coming decade will be decisive. The economy in 2030 will need to be vastly different from what it is today, and Amazon plans to be at the heart of the change. We launched The Climate Pledge together with Global Optimism in September 2019 because we wanted to help drive this positive revolution. We need to be part of a growing team of corporations that understand the imperatives and the opportunities of the 21<sup>st</sup> century.

Now, less than two years later, 53 companies representing almost every sector of the economy have signed The Climate Pledge. Signatories such as Best Buy, IBM, Infosys, Mercedes-Benz, Microsoft, Siemens, and Verizon have committed to achieve net-zero carbon in their worldwide businesses by 2040, 10 years ahead of the Paris Agreement. The Pledge also requires them to measure and report greenhouse gas emissions on a regular basis; implement decarbonization strategies through real business changes and innovations; and neutralize any remaining emissions with additional, quantifiable, real, permanent, and socially beneficial offsets. Credible, quality offsets are precious, and we should reserve them to compensate for economic activities where low-carbon alternatives don't exist.

The Climate Pledge signatories are making meaningful, tangible, and ambitious commitments. Uber has a goal of operating as a zero-emission platform in Canada, Europe, and the U.S. by 2030, and Henkel plans to source 100% of the electricity it uses for production from renewable sources. Amazon is making progress toward our own goal of 100% renewable energy by 2025, five years ahead of our initial 2030 target. Amazon is the largest corporate buyer of renewable energy in the world. We have 62 utility-scale wind and solar projects and 125 solar rooftops on fulfillment and sort centers around the globe. These projects have the capacity to generate over 6.9 gigawatts and deliver more than 20 million megawatt-hours of energy annually.

Transportation is a major component of Amazon's business operations and the toughest part of our plan to meet net-zero carbon by 2040. To help rapidly accelerate the market for electric vehicle technology, and to help all companies transition to greener technologies, we invested more than \$1 billion in Rivian – and ordered 100,000 electric delivery vans from the company. We've also partnered with Mahindra in India and Mercedes-Benz in Europe. These custom electric delivery vehicles from Rivian are already operational, and they first hit the road in Los Angeles this past February. Ten thousand new vehicles will be on the road as early as next year, and all 100,000 vehicles will be on the road by 2030 – saving millions of metric tons of carbon. A big reason we want companies to join The Climate Pledge is to signal to the marketplace that businesses should start inventing and developing new technologies that signatories need to make good on the Pledge. Our purchase of 100,000 Rivian electric vans is a perfect example.

To further accelerate investment in new technologies needed to build a zero-carbon economy, we introduced the Climate Pledge Fund last June. The investment program started with \$2 billion to invest in visionary companies that aim to facilitate the transition to a low-carbon economy. Amazon has already announced investments in CarbonCure Technologies, Pachama, Redwood Materials, Rivian, Turntide Technologies, ZeroAvia, and Infinium – and these are just some of the innovative companies we hope will build the zero-carbon economy of the future.

I have also personally allocated \$10 billion to provide grants to help catalyze the systemic change we will need in the coming decade. We'll be supporting leading scientists, activists, NGOs, environmental justice organizations, and others working to fight climate change and protect the natural world. Late last year, I made my first round of grants to 16 organizations working on innovative and needle-moving solutions. It's going

to take collective action from big companies, small companies, nation states, global organizations, and individuals, and I'm excited to be part of this journey and optimistic that humanity can come together to solve this challenge.

# Differentiation is Survival and the Universe Wants You to be Typical

This is my last annual shareholder letter as the CEO of Amazon, and I have one last thing of utmost importance I feel compelled to teach. I hope all Amazonians take it to heart.

Here is a passage from Richard Dawkins' (extraordinary) book The Blind Watchmaker. It's about a basic fact of biology.

"Staving off death is a thing that you have to work at. Left to itself – and that is what it is when it dies – the body tends to revert to a state of equilibrium with its environment. If you measure some quantity such as the temperature, the acidity, the water content or the electrical potential in a living body, you will typically find that it is markedly different from the corresponding measure in the surroundings. Our bodies, for instance, are usually hotter than our surroundings, and in cold climates they have to work hard to maintain the differential. When we die the work stops, the temperature differential starts to disappear, and we end up the same temperature as our surroundings. Not all animals work so hard to avoid coming into equilibrium with their surrounding temperature, but all animals do some comparable work. For instance, in a dry country, animals and plants work to maintain the fluid content of their cells, work against a natural tendency for water to flow from them into the dry outside world. If they fail they die. More generally, if living things didn't work actively to prevent it, they would eventually merge into their surroundings, and cease to exist as autonomous beings. That is what happens when they die."

While the passage is not intended as a metaphor, it's nevertheless a fantastic one, and very relevant to Amazon. I would argue that it's relevant to all companies and all institutions and to each of our individual lives too. In what ways does the world pull at you in an attempt to make you normal? How much work does it take to maintain your distinctiveness? To keep alive the thing or things that make you special?

I know a happily married couple who have a running joke in their relationship. Not infrequently, the husband looks at the wife with faux distress and says to her, "Can't you just be normal?" They both smile and laugh, and of course the deep truth is that her distinctiveness is something he loves about her. But, at the same time, it's also true that things would often be easier – take less energy – if we were a little more normal.

This phenomenon happens at all scale levels. Democracies are not normal. Tyranny is the historical norm. If we stopped doing all of the continuous hard work that is needed to maintain our distinctiveness in that regard, we would quickly come into equilibrium with tyranny.

We all know that distinctiveness – originality – is valuable. We are all taught to "be yourself." What I'm really asking you to do is to embrace and be realistic about how much energy it takes to maintain that distinctiveness. The world wants you to be typical – in a thousand ways, it pulls at you. Don't let it happen.

You have to pay a price for your distinctiveness, and it's worth it. The fairy tale version of "be yourself" is that all the pain stops as soon as you allow your distinctiveness to shine. That version is misleading. Being yourself is worth it, but don't expect it to be easy or free. You'll have to put energy into it continuously.

The world will always try to make Amazon more typical – to bring us into equilibrium with our environment. It will take continuous effort, but we can and must be better than that.

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As always, I attach our 1997 shareholder letter. It concluded with this: "We at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement." That hasn't changed a bit. I want to especially thank Andy Jassy for agreeing to take on the CEO role. It's a hard job with a lot of responsibility. Andy is brilliant and has the highest

of high standards. I guarantee you that Andy won't let the universe make us typical. He will muster the energy needed to keep alive in us what makes us special. That won't be easy, but it is critical. I also predict it will be satisfying and oftentimes fun. Thank you, Andy.

To all of you: be kind, be original, create more than you consume, and never, never let the universe smooth you into your surroundings. It remains Day 1.

Sincerely,

Jeffrey P. Bezos

Founder and Chief Executive Officer

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Amazon.com, Inc.



### Dear shareholders:

Over the past 25 years at Amazon, I've had the opportunity to write many narratives, emails, letters, and keynotes for employees, customers, and partners. But, this is the first time I've had the honor of writing our annual shareholder letter as CEO of Amazon. Jeff set the bar high on these letters, and I will try to keep them worth reading.

When the pandemic started in early 2020, few people thought it would be as expansive or long-running as it's been. Whatever role Amazon played in the world up to that point became further magnified as most physical venues shut down for long periods of time and people spent their days at home. This meant that hundreds of millions of people relied on Amazon for PPE, food, clothing, and various other items that helped them navigate this unprecedented time. Businesses and governments also had to shift, practically overnight, from working with colleagues and technology on-premises to working remotely. AWS played a major role in enabling this business continuity. Whether companies saw extraordinary demand spikes, or demand diminish quickly with reduced external consumption, the cloud's elasticity to scale capacity up and down quickly, as well as AWS's unusually broad functionality helped millions of companies adjust to these difficult circumstances.

Our AWS and Consumer businesses have had different demand trajectories during the pandemic. In the first year of the pandemic, AWS revenue continued to grow at a rapid clip—30% year over year ("YoY") in 2020 on a \$35 billion annual revenue base in 2019—but slower than the 37% YoY growth in 2019. This was due in part to the uncertainty and slowing demand that so many businesses encountered, but also in part to our helping companies optimize their AWS footprint to save money. Concurrently, companies were stepping back and determining what they wanted to change coming out of the pandemic. Many concluded that they didn't want to continue managing their technology infrastructure themselves, and made the decision to accelerate their move to the cloud. This shift by so many companies (along with the economy recovering) helped re-accelerate AWS's revenue growth to 37% YoY in 2021.

Conversely, our Consumer revenue grew dramatically in 2020. In 2020, Amazon's North America and International Consumer revenue grew 39% YoY on the very large 2019 revenue base of \$245 billion; and, this extraordinary growth extended into 2021 with revenue increasing 43% YoY in Q1 2021. These are astounding numbers. We realized the equivalent of three years' forecasted growth in about 15 months.

As the world opened up again starting in late Q2 2021, and more people ventured out to eat, shop, and travel, consumer spending returned to being spread over many more entities. We weren't sure what to expect in 2021, but the fact that we continued to grow at double digit rates (with a two-year Consumer compounded annual growth rate of 29%) was encouraging as customers appreciated the role Amazon played for them during the pandemic, and started using Amazon for a larger amount of their household purchases.

This growth also created short-term logistics and cost challenges. We spent Amazon's first 25 years building a very large fulfillment network, and then had to double it in the last 24 months to meet customer demand. As we were bringing this new capacity online, the labor market tightened considerably, making it challenging both to receive all of the inventory our vendors and sellers wanted to send us and to place that inventory as close to customers as we typically do. Combined with ocean, air, and trucking capacity becoming scarcer and more expensive, this created extra transportation and productivity costs. Supply chains were disrupted in ways none of us had seen previously. We hoped that the major impact from COVID-19 would recede as 2021 drew to a close, but then omicron reared its head in December, which had worldwide ramifications, including impacting people's ability to work. And then in late February, with Russia's invasion of Ukraine, fuel costs and inflation became bigger issues with which to contend.

So, 2021 was a crazy and unpredictable year, continuing a trend from 2020. But, I'm proud of the incredible commitment and effort from our employees all over the world. I'm not sure any of us would have gotten

through the pandemic the same way without the dedication and extraordinary efforts shown by our teams during this period, and I'm eternally grateful.

It's not normal for a company of any size to be able to respond to something as discontinuous and unpredictable as this pandemic turned out to be. What is it about Amazon that made it possible for us to do so? It's because we weren't starting from a standing start. We had been iterating on and remaking our fulfillment capabilities for nearly two decades. In every business we pursue, we're constantly experimenting and inventing. We're divinely discontented with customer experiences, whether they're our own or not. We believe these customer experiences can always be better, and we strive to make customers' lives better and easier every day. The beauty of this mission is that you never run out of runway; customers always want better, and our job is both to listen to their feedback and to imagine what else is possible and invent on their behalf.

People often assume that the game-changing inventions they admire just pop out of somebody's head, a light bulb goes off, a team executes to that idea, and presto—you have a new invention that's a breakaway success for a long time. That's rarely, if ever, how it happens. One of the lesser known facts about innovative companies like Amazon is that they are relentlessly debating, re-defining, tinkering, iterating, and experimenting to take the seed of a big idea and make it into something that resonates with customers and meaningfully changes their customer experience over a long period of time.

Let me give you some Amazon examples.

Our Fulfillment Network: Going back to the pandemic, there's no way we could have started working on our fulfillment network in March 2020 and satisfied anything close to what our customers needed. We'd been innovating in our fulfillment network for 20 years, constantly trying to shorten the time to get items to customers. In the early 2000s, it took us an average of 18 hours to get an item through our fulfillment centers and on the right truck for shipment. Now, it takes us two. To deliver as reliably and cost-effectively as we desire, and to serve Amazon Prime members expecting shipments in a couple of days, we spent years building out an expansive set of fulfillment centers, a substantial logistics and transportation capability, and reconfigured how we did virtually everything in our facilities. For perspective, in 2004, we had seven fulfillment centers in the U.S. and four in other parts of the world, and we hadn't yet added delivery stations, which connect our fulfillment and sortation centers to the last-mile delivery vans you see driving around your neighborhood. Fast forward to the end of 2021, we had 253 fulfillment centers, 110 sortation centers, and 467 delivery stations in North America, with an additional 157 fulfillment centers, 58 sortation centers, and 588 delivery stations across the globe. Our delivery network grew to more than 260,000 drivers worldwide, and our Amazon Air cargo fleet has more than 100 aircraft. This has represented a capital investment of over \$100 billion and countless iterations and small process improvements by over a million Amazonians in the last decade and a half.

Ironically, just before COVID started, we'd made the decision to invest billions of incremental dollars over several years to deliver an increasing number of Prime shipments in one day. This initiative was slowed by the challenges of the pandemic, but we've since resumed our focus here. Delivering a substantial amount of shipments in one day is hard (especially across the millions of items that we offer) and initially expensive as we build out the infrastructure to scale this efficiently. But, we believe our over 200 million Prime customers, who will tell you very clearly that faster is almost always better, will love this. So, this capability to ship millions of items within a couple days (and increasingly one day) was not from one aha moment and not developed in a year or two. It's been hard-earned by putting ourselves in the shoes of our customers, knowing what they wanted, organizing Amazonians to work together to invent better solutions, and investing a large amount of financial and people resources over 20 years (often well in advance of when it would pay out). This type of iterative innovation is never finished and has periodic peaks in investment years, but leads to better long-term customer experiences, customer loyalty, and returns for our shareholders.

AWS: As we were defining AWS and working backwards on the services we thought customers wanted, we kept triggering one of the biggest tensions in product development—where to draw the line on functionality in V1. One early meeting in particular—for our core compute service called Elastic Compute Cloud ("EC2")—was scheduled for an hour, and took three, as we animatedly debated whether we could launch a compute service without an accompanying persistent block storage companion (a form of network attached storage).

Everybody agreed that having a persistent block store was important to a complete compute service; however, to have one ready would take an extra year. The question became could we offer customers a useful service where they could get meaningful value before we had all the features we thought they wanted? We decided that the initial launch of EC2 could be feature-poor if we also organized ourselves to listen to customers and iterate quickly. This approach works well if you indeed iterate quickly; but, is disastrous if you can't. We launched EC2 in 2006 with one instance size, in one data center, in one region of the world, with Linux operating system instances only (no Windows), without monitoring, load balancing, auto-scaling, or yes, persistent storage. EC2 was an initial success, but nowhere near the multi-billion-dollar service it's become until we added the missing capabilities listed above, and then some.

In the early days of AWS, people sometimes asked us why compute wouldn't just be an undifferentiated commodity. But, there's a lot more to compute than just a server. Customers want various flavors of compute (e.g. server configurations optimized for storage, memory, high-performance compute, graphics rendering, machine learning), multiple form factors (e.g. fixed instance sizes, portable containers, serverless functions), various sizes and optimizations of persistent storage, and a slew of networking capabilities. Then, there's the CPU chip that runs in your compute. For many years, the industry had used Intel or AMD x86 processors. We have important partnerships with these companies, but realized that if we wanted to push price and performance further (as customers requested), we'd have to develop our own chips, too. Our first generalized chip was Graviton, which we announced in 2018. This helped a subset of customer workloads run more cost-effectively than prior options. But, it wasn't until 2020, after taking the learnings from Graviton and innovating on a new chip, that we had something remarkable with our Graviton2 chip, which provides up to 40% better price-performance than the comparable latest generation x86 processors. Think about how much of an impact 40% improvement on compute is. Compute is used for every bit of technology. That's a huge deal for customers. And, while Graviton2 has been a significant success thus far (48 of the top 50 AWS EC2 customers have already adopted it), the AWS Chips team was already learning from what customers said could be better, and announced Graviton3 this past December (offering a 25% improvement on top of Graviton2's relative gains). The list of what we've invented and delivered for customers in EC2 (and AWS in general) is pretty mind-boggling, and this iterative approach to innovation has not only given customers much more functionality in AWS than they can find anywhere else (which is a significant differentiator), but also allowed us to arrive at the much more game-changing offering that AWS is today.

**Devices**: Our first foray into devices was the Kindle, released in 2007. It was not the most sophisticated industrial design (it was creamy white in color and the corners were uncomfortable for some people to hold), but revolutionary because it offered customers the ability to download any of over 90,000 books (now millions) in 60 seconds—and we got better and faster at building attractive designs. Shortly thereafter, we launched a tablet, and then a phone (with the distinguishing feature of having front-facing cameras and a gyroscope to give customers a dynamic perspective along with varied 3D experiences). The phone was unsuccessful, and though we determined we were probably too late to this party and directed these resources elsewhere, we hired some fantastic long-term builders and learned valuable lessons from this failure that have served us well in devices like Echo and FireTV.

When I think of the first Echo device—and what Alexa could do for customers at that point—it was noteworthy, yet so much less capable than what's possible today. Today, there are hundreds of millions of Alexa-enabled devices out there (in homes, offices, cars, hotel rooms, Amazon Echo devices, and third-party manufacturer devices); you can listen to music—or watch videos now; you can control your lights and home automation; you can create routines like "Start My Day" where Alexa tells you the weather, your estimated commute time based on current traffic, then plays the news; you can easily order retail items on Amazon; you can get general or customized news, updates on sporting events and related stats—and we're still quite early with respect to what Alexa and Alexa-related devices will do for customers. Our goal is for Alexa to be the world's most helpful and resourceful personal assistant, who makes people's lives meaningfully easier and better. We have a lot more inventing and iterating to go, but customers continue to indicate that we're on the right path. We have several other devices at varying stages of evolution (e.g. Ring and Blink provide the leading digital home security solutions, Astro is a brand new home robot that we just launched in late 2021), but it's safe to say that every one of our devices, whether you're talking about Kindle, FireTV, Alexa/Echo, Ring, Blink, or Astro is an invention-in-process with a lot more coming that will keep improving customers' lives.

Prime Video: We started in 2006 with an offering called Amazon Unbox where customers could download about a thousand movies from major studios. This made sense as bandwidth was slower those days (it would take an hour to download a video). But, as bandwidth got much faster to people's homes and mobile devices, along with the advent of connected TVs, streaming was going to be a much better customer solution, and we focused our efforts on streaming. In 2011, we started offering over 5,000 streaming movies and shows as part of customers' Amazon Prime subscriptions. Initially, all of our content was produced by other studios and entertainment companies. These deals were expensive, country-specific, and only available to us for a limited period; so, to expand our options, we started creating our own original shows. Our early efforts included short-lived shows like Alpha House and Betas, before we had our first award-winning series in Transparent, and eventually created multi-year franchises in The Marvelous Mrs. Maisel, The Boys, Bosch, and Jack Ryan. Along the way, we've learned a lot about producing compelling entertainment with memorable moments and using machine learning and other inventive technology to provide a superior-quality streaming experience (with useful, relevant data about actors, TV shows, movies, music, or sports stats a click away in our unique X-Ray feature). You might have seen some of this in action in our recent new hit series, Reacher, and you'll hopefully see it in our upcoming Lord of the Rings series launch (coming Labor Day 2022). We also expect that you'll see this iterative invention when we launch Thursday Night Football, the NFL's first weekly, prime time, streaming-only broadcast, airing exclusively on Prime Video starting in September 2022. Our agreement with the NFL is for 11 years, and we will work relentlessly over the next several years to reinvent the NFL viewing experience for football fans.

This track record of frequent invention is not only why more sports entities are choosing to work with Prime Video, but also why so many large entertainment companies have become Prime Video Channels partners. Channels is a program that enables entertainment companies to leverage Prime Video's unique technology and viewing experience, as well as its very large member base to offer monthly subscriptions to their content. Companies like Warner Bros. Discovery, Paramount, Starz, Corus Entertainment, and Globo have found that they're driving substantial incremental membership and better customer experience through Channels. While there is so much progress in Prime Video from where we started, we have more invention in front of us in the next 15 years than the last 15—and our team is passionately committed to providing customers with the most expansive collection of compelling content anywhere in the world.

This same sort of iterative invention can be applied to efforts supporting people and communities. Last summer, we added two new Leadership Principles: Strive to be Earth's Best Employer and Success and Scale Bring Broad Responsibility. These concepts were always implicit at Amazon, but explicit Leadership Principles help us ask ourselves—and empower more Amazonians at all levels to ask—whether we're living up to these principles.

For example, more than a million Amazonians work in our fulfillment network. In 2018, we championed the \$15 minimum wage (which is more than double the federal minimum wage), but haven't stopped there. We continued to increase compensation such that our average starting hourly salary is currently over \$18. Along with this compensation, we offer very robust benefits, including full health insurance, a 401K plan, up to 20 weeks of parental leave, and full tuition coverage for associates who want to get a college education (whether they remain with us or not). We're not close to being done in how we improve the lives of our employees. We've researched and created a list of what we believe are the top 100 employee experience pain points and are systematically solving them. We're also passionate about further improving safety in our fulfillment network, with a focus on reducing strains, sprains, falls, and repetitive stress injuries. Our injury rates are sometimes misunderstood. We have operations jobs that fit both the "warehousing" and "courier and delivery" categories. In the last U.S. public numbers, our recordable incident rates were a little higher than the average of our warehousing peers (6.4 vs. 5.5), and a little lower than the average of our courier and delivery peers (7.6 vs. 9.1). This makes us about average relative to peers, but we don't seek to be average. We want to be best in class. When I first started in my new role, I spent significant time in our fulfillment centers and with our safety team, and hoped there might be a silver bullet that could change the numbers quickly. I didn't find that. At our scale (we hired over 300,000 people in 2021 alone, many of whom were new to this sort of work and needed training), it takes rigorous analysis, thoughtful problem-solving, and a willingness to invent to get to where you want. We've been dissecting every process path to discern how we can further improve. We have a variety of programs in flight (e.g. rotational programs that help employees avoid spending too much time doing the same repetitive motions, wearables that prompt employees when

they're moving in a dangerous way, improved shoes to provide better toe protection, training programs on body mechanics, wellness, and safety practices). But, we still have a ways to go, and we'll approach it like we do other customer experiences—we'll keep learning, inventing, and iterating until we have more transformational results. We won't be satisfied until we do.

Similarly, at our scale, we have a significant carbon footprint. It's a big part of why we created The Climate Pledge a few years ago (a pledge to be net-zero carbon by 2040, ten years ahead of the Paris Agreement). We're making significant progress on this effort (we're committed to powering our operations with 100% renewable energy by 2025—five years ahead of our original target of 2030, we have ordered over 100,000 electric vans to deliver packages, and have over 300 companies who've joined us in The Climate Pledge). But, we have a different challenge than most companies given the diversity and intensity of our operations (including shipping billions of packages per year). We're committed to the challenge, but it will take relentless invention.

We also are trying to increase the amount of affordable housing in the communities in which we have a large presence. Our more than \$2 billion Housing Equity Fund that we started a year ago has already allocated \$1.2 billion toward affordable housing initiatives in the areas around Washington state's Puget Sound region, Arlington (Virginia), and Nashville (Tennessee).

A final quick example is Kuiper, our low Earth orbit satellite network that we're spending over \$10 billion to build in the next several years. Kuiper will serve customers with minimal to no fixed broadband connectivity, changing access to information and resources for many communities (analysts estimate approximately 300-400 million customers globally are in this category). We're optimistic that there is a pretty good business model for us too, but we'll see—and it's a real game changer for underserved families and businesses that will unfold over many years as we keep evolving its capabilities.

This type of iterative innovation is pervasive across every team at Amazon. I could have given comparable examples in Advertising, Grocery, Gaming, Amazon Music, Amazon Care (our telemedicine offering), or Pharmacy, to name a few. All of these stories are still being written as we rapidly experiment, learn, and continue to try to make our customer experience better every day.

If this approach sounds appealing, a natural question is what's required to get good at it? It's easier said than done, but here are some components that have helped us:

- 1/ Hire the Right Builders: We disproportionately index in hiring builders. We think of builders as people who like to invent, who look at customer experiences, dissect what doesn't work well about them, and seek to reinvent them. We want people who keep asking why can't it be done? We want people who like to experiment and tinker, and who realize launch is the starting line, not the finish line.
- 2/ Organize Builders into Teams That Are as Separable and Autonomous as Possible: It's hard for teams to be deep in what customers care about in multiple areas. It's also hard to spend enough time on the new initiatives when there's resource contention with the more mature businesses; the surer bets usually win out. Single-threaded teams will know their customers' needs better, spend all their waking work hours inventing for them, and develop context and tempo to keep iterating quickly.
- 3/ Give Teams the Right Tools and Permission to Move Fast: Speed is not pre-ordained. It's a leadership choice. It has trade-offs, but you can't wake up one day and start moving fast. It requires having the right tools to experiment and build fast (a major part of why we started AWS), allowing teams to make two-way door decisions themselves, and setting an expectation that speed matters. And, it does. Speed is disproportionally important to every business at every stage of its evolution. Those that move slower than their competitive peers fall away over time.
- 4/ You Need Blind Faith, But No False Hope: This is a lyric from one of my favorite Foo Fighters songs ("Congregation"). When you invent, you come up with new ideas that people will reject because they haven't been done before (that's where the blind faith comes in), but it's also important to step back and make sure you have a viable plan that'll resonate with customers (avoid false hope). We're lucky that we have builders who challenge each other, feedback loops that give us access to customer feedback, and a product

development process of working backwards from the customer where having to write a Press Release (to flesh out the customer benefits) and a Frequently Asked Questions document (to detail how we'd build it) helps us have blind faith without false hope (at least usually).

5/ Define a Minimum Loveable Product (MLP), and Be Willing to Iterate Fast: Figuring out where to draw the line for launch is one of the most difficult decisions teams must make. Often, teams wait too long, and insist on too many bells and whistles, before launching. And, they miss the first mover advantage or opportunity to build mindshare in fast-moving market segments before well-executing peers get too far ahead. The launch product must be good enough that you believe it'll be loved from the get-go (why we call it a "Minimum Loveable Product" vs. a "Minimum Viable Product"), but in newer market segments, teams are often better off getting this MLP to customers and iterating quickly thereafter.

6/ Adopt a Long-term Orientation: We're sometimes criticized at Amazon for not shutting much down. It's true that we have a longer tolerance for our investments than most companies. But, we know that transformational invention takes multiple years, and if you're making big bets that you believe could substantially change customer experience (and your company), you have to be in it for the long-haul or you'll give up too quickly.

7/ Brace Yourself for Failure: If you invent a lot, you will fail more often than you wish. Nobody likes this part, but it comes with the territory. When it's clear that we've launched something that won't work, we make sure we've learned from what didn't go well, and secure great landing places for team members who delivered well—or your best people will hesitate to work on new initiatives.

Albert Einstein is sometimes credited with describing compound interest as the eighth wonder of the world ("He who understands it, earns it. He who doesn't, pays it"). We think of iterative innovation in much the same way. Iterative innovation creates magic for customers. Constantly inventing and improving products for customers has a compounding effect on the customer experience, and in turn on a business's prospects.

Time is your friend when you are compounding gains. Amazon is a big company with some large businesses, but it's still early days for us. We will continue to be insurgent—inventing in businesses that we're in, in new businesses that we've yet to launch, and in new ideas that we haven't even imagined yet. It remains Day 1.

Sincerely,

Andy Jassy

President and Chief Executive Officer

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Amazon.com, Inc.

P.S. As we have always done, our original 1997 Shareholder Letter follows. What's written there is as true today as it was in 1997.



### Dear shareholders:

As I sit down to write my second annual shareholder letter as CEO, I find myself optimistic and energized by what lies ahead for Amazon. Despite 2022 being one of the harder macroeconomic years in recent memory, and with some of our own operating challenges to boot, we still found a way to grow demand (on top of the unprecedented growth we experienced in the first half of the pandemic). We innovated in our largest businesses to meaningfully improve customer experience short and long term. And, we made important adjustments in our investment decisions and the way in which we'll invent moving forward, while still preserving the long-term investments that we believe can change the future of Amazon for customers, shareholders, and employees.

While there were an unusual number of simultaneous challenges this past year, the reality is that if you operate in large, dynamic, global market segments with many capable and well-funded competitors (the conditions in which Amazon operates all of its businesses), conditions rarely stay stagnant for long.

In the 25 years I've been at Amazon, there has been constant change, much of which we've initiated ourselves. When I joined Amazon in 1997, we had booked \$15M in revenue in 1996, were a books-only retailer, did not have a third-party marketplace, and only shipped to addresses in the US. Today, Amazon sells nearly every physical and digital retail item you can imagine, with a vibrant third-party seller ecosystem that accounts for 60% of our unit sales, and reaches customers in virtually every country around the world. Similarly, building a business around a set of technology infrastructure services in the cloud was not obvious in 2003 when we started pursuing AWS, and still wasn't when we launched our first services in 2006. Having virtually every book at your fingertips in 60 seconds, and then being able to store and retrieve them on a lightweight digital reader was not "a thing" yet when we launched Kindle in 2007, nor was a voice-driven personal assistant like Alexa (launched in 2014) that you could use to access entertainment, control your smart home, shop, and retrieve all sorts of information.

There have also been times when macroeconomic conditions or operating inefficiencies have presented us with new challenges. For instance, in the 2001 dot-com crash, we had to secure letters of credit to buy inventory for the holidays, streamline costs to deliver better profitability for the business, yet still prioritized the long-term customer experience and business we were trying to build (if you remember, we actually lowered prices in most of our categories during that tenuous 2001 period). You saw this sort of balancing again in 2008-2009 as we endured the recession provoked by the mortgage-backed securities financial crisis. We took several actions to manage the cost structure and efficiency of our Stores business, but we also balanced this streamlining with investment in customer experiences that we believed could be substantial future businesses with strong returns for shareholders. In 2008, AWS was still a fairly small, fledgling business. We knew we were on to something, but it still required substantial capital investment. There were voices inside and outside of the company questioning why Amazon (known mostly as an online retailer then) would be investing so much in cloud computing. But, we knew we were inventing something special that could create a lot of value for customers and Amazon in the future. We had a head start on potential competitors; and if anything, we wanted to accelerate our pace of innovation. We made the long-term decision to continue investing in AWS. Fifteen years later, AWS is now an \$85B annual revenue run rate business, with strong profitability, that has transformed how customers from start-ups to multinational companies to public sector organizations manage their technology infrastructure. Amazon would be a different company if we'd slowed investment in AWS during that 2008-2009 period.

Change is always around the corner. Sometimes, you proactively invite it in, and sometimes it just comes a-knocking. But, when you see it's coming, you have to embrace it. And, the companies that do this well over a long period of time usually succeed. I'm optimistic about our future prospects because I like the way our team is responding to the changes we see in front of us.

Over the last several months, we took a deep look across the company, business by business, invention by invention, and asked ourselves whether we had conviction about each initiative's long-term potential to drive enough revenue, operating income, free cash flow, and return on invested capital. In some cases, it led to us shuttering certain businesses. For instance, we stopped pursuing physical store concepts like our Bookstores and 4 Star stores, closed our Amazon Fabric and Amazon Care efforts, and moved on from some newer devices where we didn't see a path to meaningful returns. In other cases, we looked at some programs that weren't producing the returns we'd hoped (e.g. free shipping for all online grocery orders over \$35) and amended them. We also reprioritized where to spend our resources, which ultimately led to the hard decision to eliminate 27,000 corporate roles. There are a number of other changes that we've made over the last several months to streamline our overall costs, and like most leadership teams, we'll continue to evaluate what we're seeing in our business and proceed adaptively.

We also looked hard at how we were working together as a team and asked our corporate employees to come back to the office at least three days a week, beginning in May. During the pandemic, our employees rallied to get work done from home and did everything possible to keep up with the unexpected circumstances that presented themselves. It was impressive and I'm proud of the way our collective team came together to overcome unprecedented challenges for our customers, communities, and business. But, we don't think it's the best long-term approach. We've become convinced that collaborating and inventing is easier and more effective when we're working together and learning from one another in person. The energy and riffing on one another's ideas happen more freely, and many of the best Amazon inventions have had their breakthrough moments from people staying behind after a meeting and working through ideas on a whiteboard, or continuing the conversation on the walk back from a meeting, or just popping by a teammate's office later that day with another thought. Invention is often messy. It wanders and meanders and marinates. Serendipitous interactions help it, and there are more of those in-person than virtually. It's also significantly easier to learn, model, practice, and strengthen our culture when we're in the office together most of the time and surrounded by our colleagues. Innovation and our unique culture have been incredibly important in our first 29 years as a company, and I expect it will be comparably so in the next 29.

A critical challenge we've continued to tackle is the rising cost to serve in our Stores fulfillment network (i.e. the cost to get a product from Amazon to a customer)—and we've made several changes that we believe will meaningfully improve our fulfillment costs and speed of delivery.

During the early part of the pandemic, with many physical stores shut down, our consumer business grew at an extraordinary clip, with annual revenue increasing from \$245B in 2019 to \$434B in 2022. This meant that we had to double the fulfillment center footprint that we'd built over the prior 25 years and substantially accelerate building a last-mile transportation network that's now the size of UPS (along with a new sortation center network to assist with efficiency and speed when items needed to traverse long distances)—all in the span of about two years. This was no easy feat, and hundreds of thousands of Amazonians worked very hard to make this happen. However, not surprisingly, with that rate and scale of change, there was a lot of optimization needed to yield the intended productivity. Over the last several months, we've scrutinized every process path in our fulfillment centers and transportation network and redesigned scores of processes and mechanisms, resulting in steady productivity gains and cost reductions over the last few quarters. There's more work to do, but we're pleased with our trajectory and the meaningful upside in front of us.

We also took this occasion to make larger structural changes that set us up better to deliver lower costs and faster speed for many years to come. A good example was reevaluating how our US fulfillment network was organized. Until recently, Amazon operated one national US fulfillment network that distributed inventory from fulfillment centers spread across the entire country. If a local fulfillment center didn't have the product a customer ordered, we'd end up shipping it from other parts of the country, costing us more and increasing delivery times. This challenge became more pronounced as our fulfillment network expanded to hundreds of additional nodes over the last few years, distributing inventory across more locations and increasing the complexity of connecting the fulfillment center and delivery station nodes efficiently. Last year, we started rearchitecting our inventory placement strategy and leveraging our larger fulfillment center footprint to move from a national fulfillment network to a regionalized network model. We made significant internal changes (e.g. placement and logistics software, processes, physical operations) to create eight interconnected regions in smaller geographic areas. Each of these regions has broad, relevant selection to operate in a largely self-sufficient way, while still being able to ship nationally when necessary. Some of the most meaningful and hard

work came from optimizing the connections between this large amount of infrastructure. We also continue to improve our advanced machine learning algorithms to better predict what customers in various parts of the country will need so that we have the right inventory in the right regions at the right time. We've recently completed this regional roll out and like the early results. Shorter travel distances mean lower cost to serve, less impact on the environment, and customers getting their orders faster. On the latter, we're excited about seeing more next day and same-day deliveries, and we're on track to have our fastest Prime delivery speeds ever in 2023. Overall, we remain confident about our plans to lower costs, reduce delivery times, and build a meaningfully larger retail business with healthy operating margins.

AWS has an \$85B annualized revenue run rate, is still early in its adoption curve, but at a juncture where it's critical to stay focused on what matters most to customers over the long-haul. Despite growing 29% year-overyear ("YoY") in 2022 on a \$62B revenue base, AWS faces short-term headwinds right now as companies are being more cautious in spending given the challenging, current macroeconomic conditions. While some companies might obsess over how they could extract as much money from customers as possible in these tight times, it's neither what customers want nor best for customers in the long term, so we're taking a different tack. One of the many advantages of AWS and cloud computing is that when your business grows, you can seamlessly scale up; and conversely, if your business contracts, you can choose to give us back that capacity and cease paying for it. This elasticity is unique to the cloud, and doesn't exist when you've already made expensive capital investments in your own on-premises datacenters, servers, and networking gear. In AWS, like all our businesses, we're not trying to optimize for any one quarter or year. We're trying to build customer relationships (and a business) that outlast all of us; and as a result, our AWS sales and support teams are spending much of their time helping customers optimize their AWS spend so they can better weather this uncertain economy. Many of these AWS customers tell us that they're not cost-cutting as much as costoptimizing so they can take their resources and apply them to emerging and inventive new customer experiences they're planning. Customers have appreciated this customer-focused, long-term approach, and we think it'll bode well for both customers and AWS.

While these short-term headwinds soften our growth rate, we like a lot of the fundamentals that we're seeing in AWS. Our new customer pipeline is robust, as are our active migrations. Many companies use discontinuous periods like this to step back and determine what they strategically want to change, and we find an increasing number of enterprises opting out of managing their own infrastructure, and preferring to move to AWS to enjoy the agility, innovation, cost-efficiency, and security benefits. And most importantly for customers, AWS continues to deliver new capabilities rapidly (over 3,300 new features and services launched in 2022), and invest in long-term inventions that change what's possible.

Chip development is a good example. In last year's letter, I mentioned the investment we were making in our general-purpose CPU processors named Graviton. Graviton2-based compute instances deliver up to 40% better price-performance than the comparable latest generation x86-based instances; and in 2022, we delivered our Graviton3 chips, providing 25% better performance than the Graviton2 processors. Further, as machine learning adoption has continued to accelerate, customers have yearned for lower-cost GPUs (the chips most commonly used for machine learning). AWS started investing years ago in these specialized chips for machine learning training and inference (inferences are the predictions or answers that a machine learning model provides). We delivered our first training chip in 2022 ("Trainium"); and for the most common machine learning models, Trainium-based instances are up to 140% faster than GPU-based instances at up to 70% lower cost. Most companies are still in the training stage, but as they develop models that graduate to large-scale production, they'll find that most of the cost is in inference because models are trained periodically whereas inferences are happening all the time as their associated application is being exercised. We launched our first inference chips ("Inferentia") in 2019, and they have saved companies like Amazon over a hundred million dollars in capital expense already. Our Inferentia2 chip, which just launched, offers up to four times higher throughput and ten times lower latency than our first Inferentia processor. With the enormous upcoming growth in machine learning, customers will be able to get a lot more done with AWS's training and inference chips at a significantly lower cost. We're not close to being done innovating here, and this long-term investment should prove fruitful for both customers and AWS. AWS is still in the early stages of its evolution, and has a chance for unusual growth in the next decade.

Similarly high potential, Amazon's Advertising business is uniquely effective for brands, which is part of why it continues to grow at a brisk clip. Akin to physical retailers' advertising businesses selling shelf space, end-caps, and placement in their circulars, our sponsored products and brands offerings have been an integral part

of the Amazon shopping experience for more than a decade. However, unlike physical retailers, Amazon can tailor these sponsored products to be relevant to what customers are searching for given what we know about shopping behaviors and our very deep investment in machine learning algorithms. This leads to advertising that's more useful for customers; and as a result, performs better for brands. This is part of why our Advertising revenue has continued to grow rapidly (23% YoY in Q4 2022, 25% YoY overall for 2022 on a \$31B revenue base), even as most large advertising-focused businesses' growth have slowed over the last several quarters.

We strive to be the best place for advertisers to build their brands. We have near and long-term opportunities that will help us achieve that mission. We're continuing to make large investments in machine learning to keep honing our advertising selection algorithms. For the past couple of years, we've invested in building comprehensive, flexible, and durable planning and measurement solutions, giving marketers greater insight into advertising effectiveness. An example is Amazon Marketing Cloud ("AMC"). AMC is a "clean room" (i.e. secure digital environment) in which advertisers can run custom audience and campaign analytics across a range of first and third-party inputs, in a privacy-safe manner, to generate advertising and business insights to inform their broader marketing and sales strategies. The Advertising and AWS teams have collaborated to enable companies to store their data in AWS, operate securely in AMC with Amazon and other third-party data sources, perform analytics in AWS, and have the option to activate advertising on Amazon or third-party publishers through the Amazon Demand-Side Platform. Customers really like this concerted capability. We also see future opportunity to thoughtfully integrate advertising into our video, live sports, audio, and grocery products. We'll continue to work hard to help brands uniquely engage with the right audience, and grow this part of our business.

While it's tempting in turbulent times only to focus on your existing large businesses, to build a sustainable, long-lasting, growing company that helps customers across a large number of dimensions, you can't stop inventing and working on long-term customer experiences that can meaningfully impact customers and your company.

When we look at new investment opportunities, we ask ourselves a few questions:

- If we were successful, could it be big and have a reasonable return on invested capital?
- Is the opportunity being well-served today?
- Do we have a differentiated approach?
- And, do we have competence in that area? And if not, can we acquire it quickly?

If we like the answers to those questions, then we'll invest. This process has led to some expansions that seem straightforward, and others that some folks might not have initially guessed.

The earliest example is when we chose to **expand from just selling Books**, to adding categories like Music, Video, Electronics, and Toys. Back then (1998-1999), it wasn't universally applauded, but in retrospect, it seems fairly obvious.

The same could be said for our **international Stores expansion**. In 2022, our international consumer segment drove \$118B of revenue. In our larger, established international consumer businesses, we're big enough to be impacted by the slowing macroeconomic conditions; however, the growth in 2019-2021 on a large base was remarkable—30% compound annual growth rate ("CAGR") in the UK, 26% in Germany, and 21% in Japan (excluding the impact of FX). Over the past several years, we've invested in new international geographies, including India, Brazil, Mexico, Australia, various European countries, the Middle East, and parts of Africa. These new countries take a certain amount of fixed investment to get started and to scale, but we like the trajectory they're on, and their growth patterns resemble what we've seen in North America and our established international geographies. Emerging countries sometimes lack some of the infrastructure and services that our business relies on (e.g. payment methods, transportation services, and internet/telecom infrastructure). To solve these challenges, we continue to work with various partners to deliver solutions for customers. Ultimately, we believe that this investment in serving a broader geographical footprint will allow us to help more customers across the world, as well as build a larger free cash flow-generating consumer business.

Beyond geographic expansion, we've been working to expand our customer offerings across some large, unique product retail market segments. Grocery is an \$800B market segment in the US alone, with the average household shopping three to four times per week. Amazon has built a somewhat unusual, but significant grocery business over nearly 20 years. Similar to how other mass merchants entered the grocery space in the 1980s, we began by adding products typically found in supermarket aisles that don't require temperature control such as paper products, canned and boxed food, candy and snacks, pet care, health and personal care, and beauty. However, we offer more than three million items compared to a typical supermarket's 30K for the same categories. To date, we've also focused on larger pack sizes, given the current cost to serve online delivery. While we're pleased with the size and growth of our grocery business, we aspire to serve more of our customers' grocery needs than we do today. To do so, we need a broader physical store footprint given that most of the grocery shopping still happens in physical venues. Whole Foods Market pioneered the natural and organic specialty grocery store concept 40 years ago. Today, it's a large and growing business that continues to raise the bar for healthy and sustainable food. Over the past year, we've continued to invest in the business while also making changes to drive better profitability. Whole Foods is on an encouraging path, but to have a larger impact on physical grocery, we must find a mass grocery format that we believe is worth expanding broadly. Amazon Fresh is the brand we've been experimenting with for a few years, and we're working hard to identify and build the right mass grocery format for Amazon scale. Grocery is a big growth opportunity for Amazon.

Amazon Business is another example of an investment where our ecommerce and logistics capabilities position us well to pursue this large market segment. Amazon Business allows businesses, municipalities, and organizations to procure products like office supplies and other bulk items easily and at great savings. While some areas of the economy have struggled over the past few years, Amazon Business has thrived. Why? Because the team has translated what it means to deliver selection, value, and convenience into a business procurement setting, constantly listening to and learning from customers, and innovating on their behalf. Some people have never heard of Amazon Business, but, our business customers love it. Amazon Business launched in 2015 and today drives roughly \$35B in annualized gross sales. More than six million active customers, including 96 of the global Fortune 100 companies, are enjoying Amazon Business' one-stop shopping, real-time analytics, and broad selection on hundreds of millions of business supplies. We believe that we've only scratched the surface of what's possible to date, and plan to keep building the features our business customers tell us they need and want.

While many brands and merchants successfully sell their products on Amazon's marketplace, there are also a large number of brands and sellers who have launched their own direct-to-consumer websites. One of the challenges for these merchants is driving conversion from views to purchases. We invented **Buy with Prime** to help with this challenge. Buy with Prime allows third-party brands and sellers to offer their products on their own websites to our large Amazon Prime membership, and offer those customers fast, free Prime shipping and seamless checkout with their Amazon account. Buy with Prime provides merchants several additional benefits, including Amazon handling the product storage, picking, packing, delivery, payment, and any returns, all through Amazon Pay and Fulfillment by Amazon. Buy with Prime has recently been made available to all US merchants; and so far, Buy with Prime has increased shopper conversion on third-party shopping sites by 25% on average. Merchants are excited about converting more sales and fulfilling these shipments more easily, Prime members love that they can use their Prime benefits on more destinations, and Buy with Prime allows us to improve the shopping experience across more of the web.

Expanding internationally, pursuing large retail market segments that are still nascent for Amazon, and using our unique assets to help merchants sell more effectively on their own websites are somewhat natural extensions for us. There are also a few investments we're making that are further from our core businesses, but where we see unique opportunity. In 2003, AWS would have been a classic example. In 2023, Amazon Healthcare and Kuiper are potential analogues.

Our initial efforts in **Healthcare** began with pharmacy, which felt less like a major departure from ecommerce. For years, Amazon customers had asked us when we'd offer them an online pharmacy as their frustrations mounted with current providers. Launched in 2020, Amazon Pharmacy is a full-service, online pharmacy that offers transparent pricing, easy refills, and savings for Prime members. The business is growing quickly, and continues to innovate. An example is Amazon Pharmacy's recent launch of RxPass, which for a \$5 per

month flat fee, enables Prime members to get as many of the eligible prescription medications as they need for dozens of common conditions, like high blood pressure, acid reflux, and anxiety. However, our customers have continued to express a strong desire for Amazon to provide a better alternative to the inefficient and unsatisfying broader healthcare experience. We decided to start with primary care as it's a prevalent first stop in the patient journey. We evaluated and studied the existing landscape extensively, including some early Amazon experiments like Amazon Care. During this process, we identified One Medical's patient-focused experience as an excellent foundation upon which to build our future business; and in July 2022, we announced our acquisition of One Medical. There are several elements that customers love about One Medical. It has a fantastic digital app that makes it easy for patients to discuss issues with a medical practitioner via chat or video conference. If a physical visit is required, One Medical has offices in cities across the US where patients can book same or next day appointments. One Medical has relationships with specialty physicians in each of its cities and works closely with local hospital systems to make seeing specialists easy, so One Medical members can quickly access these resources when needed. Going forward, we strongly believe that One Medical and Amazon will continue to innovate together to change what primary care will look like for customers.

Kuiper is another example of Amazon innovating for customers over the long term in an area where there's high customer need. Our vision for Kuiper is to create a low-Earth orbit satellite system to deliver high-quality broadband internet service to places around the world that don't currently have it. There are hundreds of millions of households and businesses who don't have reliable access to the internet. Imagine what they'll be able to do with reliable connectivity, from people taking online education courses, using financial services, starting their own businesses, doing their shopping, enjoying entertainment, to businesses and governments improving their coverage, efficiency, and operations. Kuiper will deliver not only accessibility, but affordability. Our teams have developed low-cost antennas (i.e. customer terminals) that will lower the barriers to access. We recently unveiled the new terminals that will communicate with the satellites passing overhead, and we expect to be able to produce our standard residential version for less than \$400 each. They're small: 11 inches square, 1 inch thick, and weigh less than 5 pounds without their mounting bracket, but they deliver speeds up to 400 megabits per second. And they're powered by Amazon-designed baseband chips. We're preparing to launch two prototype satellites to test the entire end-to-end communications network this year, and plan to be in beta with commercial customers in 2024. The customer reaction to what we've shared thus far about Kuiper has been very positive, and we believe Kuiper represents a very large potential opportunity for Amazon. It also shares several similarities to AWS in that it's capital intensive at the start, but has a large prospective consumer, enterprise, and government customer base, significant revenue and operating profit potential, and relatively few companies with the technical and inventive aptitude, as well as the investment hypothesis to go after it.

One final investment area that I'll mention, that's core to setting Amazon up to invent in every area of our business for many decades to come, and where we're investing heavily is Large Language Models ("LLMs") and Generative AI. Machine learning has been a technology with high promise for several decades, but it's only been the last five to ten years that it's started to be used more pervasively by companies. This shift was driven by several factors, including access to higher volumes of compute capacity at lower prices than was ever available. Amazon has been using machine learning extensively for 25 years, employing it in everything from personalized ecommerce recommendations, to fulfillment center pick paths, to drones for Prime Air, to Alexa, to the many machine learning services AWS offers (where AWS has the broadest machine learning functionality and customer base of any cloud provider). More recently, a newer form of machine learning, called Generative AI, has burst onto the scene and promises to significantly accelerate machine learning adoption. Generative AI is based on very Large Language Models (trained on up to hundreds of billions of parameters, and growing), across expansive datasets, and has radically general and broad recall and learning capabilities. We have been working on our own LLMs for a while now, believe it will transform and improve virtually every customer experience, and will continue to invest substantially in these models across all of our consumer, seller, brand, and creator experiences. Additionally, as we've done for years in AWS, we're democratizing this technology so companies of all sizes can leverage Generative AI. AWS is offering the most price-performant machine learning chips in Trainium and Inferentia so small and large companies can afford to train and run their LLMs in production. We enable companies to choose from various LLMs and build applications with all of the AWS security, privacy and other features that customers are accustomed to using. And, we're delivering applications like AWS's CodeWhisperer, which revolutionizes

developer productivity by generating code suggestions in real time. I could write an entire letter on LLMs and Generative AI as I think they will be that transformative, but I'll leave that for a future letter. Let's just say that LLMs and Generative AI are going to be a big deal for customers, our shareholders, and Amazon.

So, in closing, I'm optimistic that we'll emerge from this challenging macroeconomic time in a stronger position than when we entered it. There are several reasons for it and I've mentioned many of them above. But, there are two relatively simple statistics that underline our immense future opportunity. While we have a consumer business that's \$434B in 2022, the vast majority of total market segment share in global retail still resides in physical stores (roughly 80%). And, it's a similar story for Global IT spending, where we have AWS revenue of \$80B in 2022, with about 90% of Global IT spending still on-premises and yet to migrate to the cloud. As these equations steadily flip—as we're already seeing happen—we believe our leading customer experiences, relentless invention, customer focus, and hard work will result in significant growth in the coming years. And, of course, this doesn't include the other businesses and experiences we're pursuing at Amazon, all of which are still in their early days.

I strongly believe that our best days are in front of us, and I look forward to working with my teammates at Amazon to make it so.

Sincerely,

Andy Jassy

President and Chief Executive Officer

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Amazon.com, Inc.

P.S. As we have always done, our original 1997 Shareholder Letter follows. What's written there is as true today as it was in 1997.



### Dear Shareholders:

Last year at this time, I shared my enthusiasm and optimism for Amazon's future. Today, I have even more. The reasons are many, but start with the progress we've made in our financial results and customer experiences, and extend to our continued innovation and the remarkable opportunities in front of us.

In 2023, Amazon's total revenue grew 12% year-over-year ("YoY") from \$514B to \$575B. By segment, North America revenue increased 12% YoY from \$316B to \$353B, International revenue grew 11% YoY from \$118B to \$131B, and AWS revenue increased 13% YoY from \$80B to \$91B.

Further, Amazon's operating income and Free Cash Flow ("FCF") dramatically improved. Operating income in 2023 improved 201% YoY from \$12.2B (an operating margin of 2.4%) to \$36.9B (an operating margin of 6.4%). Trailing Twelve Month FCF adjusted for equipment finance leases improved from -\$12.8B in 2022 to \$35.5B (up \$48.3B).

While we've made meaningful progress on our financial measures, what we're most pleased about is the continued customer experience improvements across our businesses.

In our Stores business, customers have enthusiastically responded to our relentless focus on selection, price, and convenience. We continue to have the broadest retail selection, with hundreds of millions of products available, tens of millions added last year alone, and several premium brands starting to list on Amazon (e.g. Coach, Victoria's Secret, Pit Viper, Martha Stewart, Clinique, Lancôme, and Urban Decay).

Being sharp on price is always important, but particularly in an uncertain economy, where customers are careful about how much they're spending. As a result, in Q4 2023, we kicked off the holiday season with Prime Big Deal Days, an exclusive event for Prime members to provide an early start on holiday shopping. This was followed by our extended Black Friday and Cyber Monday holiday shopping event, open to all customers, that became our largest revenue event ever. For all of 2023, customers saved nearly \$24B across millions of deals and coupons, almost 70% more than the prior year.

We also continue to improve delivery speeds, breaking multiple company records. In 2023, Amazon delivered at the fastest speeds ever to Prime members, with more than 7 billion items arriving same or next day, including more than 4 billion in the U.S. and more than 2 billion in Europe. In the U.S., this result is the combination of two things. One is the benefit of regionalization, where we re-architected the network to store items closer to customers. The other is the expansion of same-day facilities, where in 2023, we increased the number of items delivered same day or overnight by nearly 70% YoY. As we get items to customers this fast, customers choose Amazon to fulfill their shopping needs more frequently, and we can see the results in various areas including how fast our everyday essentials business is growing (over 20% YoY in Q4 2023).

Our regionalization efforts have also trimmed transportation distances, <u>helping lower our cost to serve</u>. In 2023, for the first time since 2018, we reduced our cost to serve on a per unit basis globally. In the U.S. alone, cost to serve was down by more than \$0.45 per unit YoY. Decreasing cost to serve allows us both to invest in speed improvements and afford adding more selection at lower Average Selling Prices ("ASPs"). More selection at lower prices puts us in consideration for more purchases.

As we look toward 2024 (and beyond), we're not done lowering our cost to serve. We've challenged every closely held belief in our fulfillment network, and reevaluated every part of it, and found several areas where we believe we can lower costs even further while also delivering faster for customers. Our inbound fulfillment architecture and resulting inventory placement are areas of focus in 2024, and we have optimism there's more upside for us.

<u>Internationally</u>, we like the trajectory of our established countries, and see meaningful progress in our emerging geographies (e.g. India, Brazil, Australia, Mexico, Middle East, Africa, etc.) as they continue to

expand selection and features, and move toward profitability (in Q4 2023, Mexico became our latest international Stores locale to turn profitable). We have high conviction that these new geographies will continue to grow and be profitable in the long run.

Alongside our Stores business, <u>Amazon's Advertising progress remains strong</u>, growing 24% YoY from \$38B in 2022 to \$47B in 2023, primarily driven by our sponsored ads. We've added Sponsored TV to this offering, a self-service solution for brands to create campaigns that can appear on up to 30+ streaming TV services, including Amazon Freevee and Twitch, and have no minimum spend. Recently, we've expanded our streaming TV advertising by introducing ads into Prime Video shows and movies, where brands can reach over 200 million monthly viewers in our most popular entertainment offerings, across hit movies and shows, award-winning Amazon MGM Originals, and live sports like *Thursday Night Football*. Streaming TV advertising is growing quickly and off to a strong start.

Shifting to AWS, we started 2023 seeing substantial cost optimization, with most companies trying to save money in an uncertain economy. Much of this optimization was catalyzed by AWS helping customers use the cloud more efficiently and leverage more powerful, price-performant AWS capabilities like Graviton chips (our generalized CPU chips that provide ~40% better price-performance than other leading x86 processors), S3 Intelligent Tiering (a storage class that uses AI to detect objects accessed less frequently and store them in less expensive storage layers), and Savings Plans (which give customers lower prices in exchange for longer commitments). This work diminished short-term revenue, but was best for customers, much appreciated, and should bode well for customers and AWS longer-term. By the end of 2023, we saw cost optimization attenuating, new deals accelerating, customers renewing at larger commitments over longer time periods, and migrations growing again.

The past year was also a significant delivery year for AWS. We announced our next generation of generalized CPU chips (Graviton4), which provides up to 30% better compute performance and 75% more memory bandwidth than its already-leading predecessor (Graviton3). We also announced AWS Trainium2 chips, which will deliver up to four times faster machine learning training for generative AI applications and three times more memory capacity than Trainium1. We continued expanding our AWS infrastructure footprint, now offering 105 Availability Zones within 33 geographic Regions globally, with six new Regions coming (Malaysia, Mexico, New Zealand, the Kingdom of Saudi Arabia, Thailand, and a second German region in Berlin). In Generative AI ("GenAI"), we added dozens of features to Amazon SageMaker to make it easier for developers to build new Foundation Models ("FMs"). We invented and delivered a new service (Amazon Bedrock) that lets companies leverage existing FMs to build GenAI applications. And, we launched the most capable coding assistant around in Amazon Q. Customers are excited about these capabilities, and we're seeing significant traction in our GenAI offerings. (More on how we're approaching GenAI and why we believe we'll be successful later in the letter.)

We're also making progress on many of our newer business investments that have the potential to be important to customers and Amazon long-term. Touching on two of them:

We have increasing conviction that <u>Prime Video</u> can be a large and profitable business on its own. This confidence is buoyed by the continued development of compelling, exclusive content (e.g. *Thursday Night Football, Lord of the Rings, Reacher, The Boys, Citadel, Road House*, etc.), Prime Video customers' engagement with this content, growth in our marketplace programs (through our third-party Channels program, as well as the broad selection of shows and movies customers rent or buy), and the addition of advertising in Prime Video.

In October, we hit a major milestone in our journey to commercialize Project <u>Kuiper</u> when we launched two end-to-end prototype satellites into space, and successfully validated all key systems and sub-systems—rare in an initial launch like this. Kuiper is our low Earth orbit satellite initiative that aims to provide broadband connectivity to the 400-500 million households who don't have it today (as well as governments and enterprises seeking better connectivity and performance in more remote areas), and is a very large revenue opportunity for Amazon. We're on track to launch our first production satellites in 2024. We've still got a long way to go, but are encouraged by our progress.

Overall, 2023 was a strong year, and I'm grateful to our collective teams who delivered on behalf of customers. These results represent a lot of invention, collaboration, discipline, execution, and reimagination

across Amazon. Yet, I think every one of us at Amazon believes that we have a long way to go, in every one of our businesses, before we exhaust how we can make customers' lives better and easier, and there is considerable upside in each of the businesses in which we're investing.

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In my annual letter over the last three years, I've tried to give shareholders more insight into how we're thinking about the company, the businesses we're pursuing, our future opportunities, and what makes us tick. We operate in a diverse number of market segments, but what ties Amazon together is our joint mission to make customers' lives better and easier every day. This is true across every customer segment we serve (consumers, sellers, brands, developers, enterprises, and creators). At our best, we're not just customer obsessed, but also inventive, thinking several years out, learning like crazy, scrappy, delivering quickly, and operating like the world's biggest start-up.

We spend enormous energy thinking about how to empower builders, inside and outside of our company. We characterize builders as people who like to invent. They like to dissect a customer experience, assess what's wrong with it, and reinvent it. Builders tend not to be satisfied until the customer experience is perfect. This doesn't hinder them from delivering improvements along the way, but it drives them to keep tinkering and iterating continually. While unafraid to invent from scratch, they have no hesitation about using high-quality, scalable, cost-effective components from others. What matters to builders is having the right tools to keep rapidly improving customer experiences.

The best way we know how to do this is by building **primitive services**. Think of them as discrete, foundational building blocks that builders can weave together in whatever combination they desire. Here's how we described primitives in our 2003 AWS Vision document:

"Primitives are the raw parts or the most foundational-level building blocks for software developers. They're indivisible (if they can be functionally split into two they must) and they do one thing really well. They're meant to be used together rather than as solutions in and of themselves. And, we'll build them for maximum developer flexibility. We won't put a bunch of constraints on primitives to guard against developers hurting themselves. Rather, we'll optimize for developer freedom and innovation."

Of course, this concept of primitives can be applied to more than software development, but they're especially relevant in technology. And, over the last 20 years, primitives have been at the heart of how we've innovated quickly.

One of the many advantages to thinking in primitives is speed. Let me give you two counter examples that illustrate this point. First, we built a successful owned-inventory retail business in the early years at Amazon where we bought all our products from publishers, manufacturers, and distributors, stored them in our warehouses, and shipped them ourselves. Over time, we realized we could add broader selection and lower prices by allowing third-party sellers to list their offerings next to our own on our highly trafficked search and product detail pages. We'd built several core retail services (e.g. payments, search, ordering, browse, item management) that made trying different marketplace concepts simpler than if we didn't have those components. A good set of primitives? Not really.

It turns out that these core components were too jumbled together and not partitioned right. We learned this the hard way when we partnered with companies like Target in our Merchant.com business in the early 2000s. The concept was that target.com would use Amazon's ecommerce components as the backbone of its website, and then customize however they wished. To enable this arrangement, we had to deliver those components as separable capabilities through application programming interfaces ("APIs"). This decoupling was far more difficult than anticipated because we'd built so many dependencies between these services as Amazon grew so quickly the first few years.

This coupling was further highlighted by a heavyweight mechanism we used to operate called "NPI." Any new initiative requiring work from multiple internal teams had to be reviewed by this NPI cabal where each team would communicate how many people-weeks their work would take. This bottleneck constrained what we accomplished, frustrated the heck out of us, and inspired us to eradicate it by refactoring these

ecommerce components into true primitive services with well-documented, stable APIs that enabled our builders to use each other's services without any coordination tax.

In the middle of the Target and NPI challenges, we were contemplating building a new set of infrastructure technology services that would allow both Amazon to move more quickly and external developers to build anything they imagined. This set of services became known as AWS, and the above experiences convinced us that we should build a set of primitive services that could be composed together how anybody saw fit. At that time, most technology offerings were very feature-rich, and tried to solve multiple jobs simultaneously. As a result, they often didn't do any one job that well.

Our AWS primitive services were designed from the start to be different. They offered important, highly flexible, but focused functionality. For instance, our first major primitive was Amazon Simple Storage Service ("S3") in March 2006 that aimed to provide highly secure object storage, at very high durability and availability, at Internet scale, and very low cost. In other words, be stellar at object storage. When we launched S3, developers were excited, and a bit mystified. It was a very useful primitive service, but they wondered, why just object storage? When we launched Amazon Elastic Compute Cloud ("EC2") in August 2006 and Amazon SimpleDB in 2007, people realized we were building a set of primitive infrastructure services that would allow them to build anything they could imagine, much faster, more cost-effectively, and without having to manage or lay out capital upfront for the datacenter or hardware. As AWS unveiled these building blocks over time (we now have over 240 at builders' disposal—meaningfully more than any other provider), whole companies sprang up quickly on top of AWS (e.g. Airbnb, Dropbox, Instagram, Pinterest, Stripe, etc.), industries reinvented themselves on AWS (e.g. streaming with Netflix, Disney+, Hulu, Max, Fox, Paramount), and even critical government agencies switched to AWS (e.g. CIA, along with several other U.S. Intelligence agencies). But, one of the lesser-recognized beneficiaries was Amazon's own consumer businesses, which innovated at dramatic speed across retail, advertising, devices (e.g. Alexa and FireTV), Prime Video and Music, Amazon Go, Drones, and many other endeavors by leveraging the speed with which AWS let them build. Primitives, done well, rapidly accelerate builders' ability to innovate.

So, how do you build the right set of primitives?

Pursuing primitives is not a guarantee of success. There are many you could build, and even more ways to combine them. But, a good compass is to pick real customer problems you're trying to solve.

Our logistics primitives are an instructive example. In Amazon's early years, we built core capabilities around warehousing items, and then picking, packing, and shipping them quickly and reliably to customers. As we added third-party sellers to our marketplace, they frequently requested being able to use these same logistics capabilities. Because we'd built this initial set of logistics primitives, we were able to introduce Fulfillment by Amazon ("FBA") in 2006, allowing sellers to use Amazon's Fulfillment Network to store items, and then have us pick, pack, and ship them to customers, with the bonus of these products being available for fast, Prime delivery. This service has saved sellers substantial time and money (typically about 70% less expensive than doing themselves), and remains one of our most popular services. As more merchants began to operate their own direct-to-consumer ("DTC") websites, many yearned to still use our fulfillment capabilities, while also accessing our payments and identity primitives to drive higher order conversion on their own websites (as Prime members have already shared this payment and identity information with Amazon). A couple years ago, we launched Buy with Prime to address this customer need. Prime members can check out quickly on DTC websites like they do on Amazon, and receive fast Prime shipping speeds on Buy with Prime items—increasing order conversion for merchants by ~25% vs. their default experience.

As our Stores business has grown substantially, and our supply chain become more complex, we've had to develop a slew of capabilities in order to offer customers unmatched selection, at low prices, and with very fast delivery times. We've become adept at getting products from other countries to the U.S., clearing customs, and then shipping to storage facilities. Because we don't have enough space in our shipping fulfillment centers to store all the inventory needed to maintain our desired in-stock levels, we've built a set of lower-cost, upstream warehouses solely optimized for storage (without sophisticated end-user, pick, pack, and ship functions). Having these two pools of inventory has prompted us to build algorithms predicting when we'll run out of inventory in our shipping fulfillment centers and automatically replenishing from these upstream

warehouses. And, in the last few years, our scale and available alternatives have forced us to build our own last mile delivery capability (roughly the size of UPS) to affordably serve the number of consumers and sellers wanting to use Amazon.

We've solved these customer needs by building additional fulfillment primitives that both serve Amazon consumers better and address external sellers' increasingly complex ecommerce activities. For instance, for sellers needing help importing products, we offer a Global Mile service that leverages our expertise here. To ship inventory from the border (or anywhere domestically) to our storage facilities, we enable sellers to use either our first-party Amazon Freight service or third-party freight partners via our Partnered Carrier Program. To store more inventory at lower cost to ensure higher in-stock rates and shorter delivery times, we've opened our upstream Amazon Warehousing and Distribution facilities to sellers (along with automated replenishment to our shipping fulfillment centers when needed). For those wanting to manage their own shipping, we've started allowing customers to use our last mile delivery network to deliver packages to their end-customers in a service called Amazon Shipping. And, for sellers who wish to use our fulfillment network as a central place to store inventory and ship items to customers regardless of where they ordered, we have a Multi-Channel Fulfillment service. These are all primitives that we've exposed to sellers.

Building in primitives meaningfully expands your degrees of freedom. You can keep your primitives to yourself and build compelling features and capabilities on top of them to allow your customers and business to reap the benefits of rapid innovation. You can offer primitives to external customers as paid services (as we have with AWS and our more recent logistics offerings). Or, you can compose these primitives into external, paid applications as we have with FBA, Buy with Prime, or Supply Chain by Amazon (a recently released logistics service that integrates several of our logistics primitives). But, you've got options. You're only constrained by the primitives you've built and your imagination.

Take the new, same-day fulfillment facilities in our Stores business. They're located in the largest metro areas around the U.S. (we currently have 58), house our top-moving 100,000 SKUs (but also cover millions of other SKUs that can be injected from nearby fulfillment centers into these same-day facilities), and streamline the time required to go from picking a customer's order to being ready to ship to as little as 11 minutes. These facilities also constitute our lowest cost to serve in the network. The experience has been so positive for customers that we're planning to double the number of these facilities.

But, how else might we use this capability if we think of it as a core building block? We have a very large and growing grocery business in organic grocery (with Whole Foods Market) and non-perishable goods (e.g. consumables, canned goods, health and beauty products, etc.). We've been working hard on building a mass, physical store offering (Amazon Fresh) that offers a great perishable experience; however, what if we used our same-day facilities to enable customers to easily add milk, eggs, or other perishable items to any Amazon order and get same day? It might change how people think of splitting up their weekly grocery shopping, and make perishable shopping as convenient as non-perishable shopping already is.

Or, take a service that some people have questioned, but that's making substantial progress and we think of as a very valuable future primitive capability—our delivery drones (called Prime Air). Drones will eventually allow us to deliver packages to customers in less than an hour. It won't start off being available for all sizes of packages and in all locations, but we believe it'll be pervasive over time. Think about how the experience of ordering perishable items changes with sub-one-hour delivery?

The same is true for Amazon Pharmacy. Need throat lozenges, Advil, an antibiotic, or some other medication? Same-day facilities already deliver many of these items within hours, and that will only get shorter as we launch Prime Air more expansively. Highly flexible building blocks can be composed across businesses and in new combinations that change what's possible for customers.

Being intentional about building primitives requires patience. Releasing the first couple primitive services can sometimes feel random to customers (or the public at large) before we've unveiled how these building blocks come together. I've mentioned AWS and S3 as an example, but our Health offering is another. In the last 10 years, we've tried several Health experiments across various teams—but they were not driven by our primitives approach. This changed in 2022 when we applied our primitives thinking to the enormous global healthcare problem and opportunity. We've now created several important building blocks to help

transform the customer health experience: Acute Care (via Amazon Clinic), Primary Care (via One Medical), and a Pharmacy service to buy whatever medication a patient may need. Because of our growing success, Amazon customers are now asking us to help them with all kinds of wellness and nutrition opportunities—which can be partially unlocked with some of our existing grocery building blocks, including Whole Foods Market or Amazon Fresh.

As a builder, it's hard to wait for these building blocks to be built versus just combining a bunch of components together to solve a specific problem. The latter can be faster, but almost always slows you down in the future. We've seen this temptation in our robotics efforts in our fulfillment network. There are dozens of processes we seek to automate to improve safety, productivity, and cost. Some of the biggest opportunities require invention in domains such as storage automation, manipulation, sortation, mobility of large cages across long distances, and automatic identification of items. Many teams would skip right to the complex solution, baking in "just enough" of these disciplines to make a concerted solution work, but which doesn't solve much more, can't easily be evolved as new requirements emerge, and that can't be reused for other initiatives needing many of the same components. However, when you think in primitives, like our Robotics team does, you prioritize the building blocks, picking important initiatives that can benefit from each of these primitives, but which build the tool chest to compose more freely (and quickly) for future and complex needs. Our Robotics team has built primitives in each of the above domains that will be lynchpins in our next set of automation, which includes multi-floor storage, trailer loading and unloading, large pallet mobility, and more flexible sortation across our outbound processes (including in vehicles). The team is also building a set of foundation AI models to better identify products in complex environments, optimize the movement of our growing robotic fleet, and better manage the bottlenecks in our facilities.

Sometimes, people ask us "what's your next pillar? You have Marketplace, Prime, and AWS, what's next?" This, of course, is a thought-provoking question. However, a question people never ask, and might be even more interesting is **what's the next set of primitives** you're building that enables breakthrough customer experiences? If you asked me today, I'd lead with Generative AI ("GenAI").

Much of the early public attention has focused on GenAI *applications*, with the remarkable 2022 launch of ChatGPT. But, to our "primitive" way of thinking, there are three distinct layers in the GenAI stack, each of which is gigantic, and each of which we're deeply investing.

The **bottom** layer is for developers and companies wanting to build foundation models ("FMs"). The primary primitives are the compute required to train models and generate inferences (or predictions), and the software that makes it easier to build these models. Starting with compute, the key is the chip inside it. To date, virtually all the leading FMs have been trained on Nvidia chips, and we continue to offer the broadest collection of Nvidia instances of any provider. That said, supply has been scarce and cost remains an issue as customers scale their models and applications. Customers have asked us to push the envelope on price-performance for AI chips, just as we have with Graviton for generalized CPU chips. As a result, we've built custom AI training chips (named Trainium) and inference chips (named Inferentia). In 2023, we announced second versions of our Trainium and Inferentia chips, which are both meaningfully more price-performant than their first versions and other alternatives. This past fall, leading FM-maker, Anthropic, announced it would use Trainium and Inferentia to build, train, and deploy its future FMs. We already have several customers using our AI chips, including Anthropic, Airbnb, Hugging Face, Qualtrics, Ricoh, and Snap.

Customers building their own FM must tackle several challenges in getting a model into production. Getting data organized and fine-tuned, building scalable and efficient training infrastructure, and then deploying models at scale in a low latency, cost-efficient manner is hard. It's why we've built Amazon SageMaker, a managed, end-to-end service that's been a game changer for developers in preparing their data for AI, managing experiments, training models faster (e.g. Perplexity AI trains models 40% faster in SageMaker), lowering inference latency (e.g. Workday has reduced inference latency by 80% with SageMaker), and improving developer productivity (e.g. NatWest reduced its time-to-value for AI from 12-18 months to under seven months using SageMaker).

The **middle** layer is for customers seeking to leverage an existing FM, customize it with their own data, and leverage a leading cloud provider's security and features to build a GenAI application—all as a managed

service. Amazon Bedrock invented this layer and provides customers with the easiest way to build and scale GenAI applications with the broadest selection of first- and third-party FMs, as well as leading ease-of-use capabilities that allow GenAI builders to get higher quality model outputs more quickly. Bedrock is off to a very strong start with tens of thousands of active customers after just a few months. The team continues to iterate rapidly on Bedrock, recently delivering Guardrails (to safeguard what questions applications will answer), Knowledge Bases (to expand models' knowledge base with Retrieval Augmented Generation—or RAG—and real-time queries), Agents (to complete multi-step tasks), and Fine-Tuning (to keep teaching and refining models), all of which improve customers' application quality. We also just added new models from Anthropic (their newly-released Claude 3 is the best performing large language model in the world), Meta (with Llama 2), Mistral, Stability AI, Cohere, and our own Amazon Titan family of FMs. What customers have learned at this early stage of GenAI is that there's meaningful iteration required to build a production GenAI application with the requisite enterprise quality at the cost and latency needed. Customers don't want only one model. They want access to various models and model sizes for different types of applications. Customers want a service that makes this experimenting and iterating simple, and this is what Bedrock does, which is why customers are so excited about it. Customers using Bedrock already include ADP, Amdocs, Bridgewater Associates, Broadridge, Clariant, Dana-Farber Cancer Institute, Delta Air Lines, Druva, Genesys, Genomics England, GoDaddy, Intuit, KT, Lonely Planet, LexisNexis, Netsmart, Perplexity AI, Pfizer, PGA TOUR, Ricoh, Rocket Companies, and Siemens.

The top layer of this stack is the application layer. We're building a substantial number of GenAI applications across every Amazon consumer business. These range from Rufus (our new, AI-powered shopping assistant), to an even more intelligent and capable Alexa, to advertising capabilities (making it simple with natural language prompts to generate, customize, and edit high-quality images, advertising copy, and videos), to customer and seller service productivity apps, to dozens of others. We're also building several apps in AWS, including arguably the most compelling early GenAI use case—a coding companion. We recently launched Amazon Q, an expert on AWS that writes, debugs, tests, and implements code, while also doing transformations (like moving from an old version of Java to a new one), and querying customers' various data repositories (e.g. Intranets, wikis, Salesforce, Amazon S3, ServiceNow, Slack, Atlassian, etc.) to answer questions, summarize data, carry on coherent conversation, and take action. Q is the most capable work assistant available today and evolving fast.

While we're building a substantial number of GenAI applications ourselves, the vast majority will ultimately be built by other companies. However, what we're building in AWS is not just a compelling app or foundation model. These AWS services, at all three layers of the stack, comprise a set of primitives that democratize this next seminal phase of AI, and will empower internal and external builders to transform virtually every customer experience that we know (and invent altogether new ones as well). We're optimistic that much of this world-changing AI will be built on top of AWS.

(By the way, don't underestimate the importance of security in GenAI. Customers' AI models contain some of their most sensitive data. AWS and its partners offer the strongest security capabilities and track record in the world; and as a result, more and more customers want to run their GenAI on AWS.)

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Recently, I was asked a provocative question—how does Amazon remain resilient? While simple in its wording, it's profound because it gets to the heart of our success to date as well as for the future. The answer lies in our discipline around deeply held principles: 1/ hiring builders who are motivated to continually improve and expand what's possible; 2/ solving real customer challenges, rather than what we think may be interesting technology; 3/ building in primitives so that we can innovate and experiment at the highest rate; 4/ not wasting time trying to fight gravity (spoiler alert: you always lose)—when we discover technology that enables better customer experiences, we embrace it; 5/ accepting and learning from failed experiments—actually becoming more energized to try again, with new knowledge to employ.

Today, we continue to operate in times of unprecedented change that come with unusual opportunities for growth across the areas in which we operate. For instance, while we have a nearly \$500B consumer business, about 80% of the worldwide retail market segment still resides in physical stores. Similarly, with a cloud computing business at nearly a \$100B revenue run rate, more than 85% of the global IT spend is still

on-premises. These businesses will keep shifting online and into the cloud. In Media and Advertising, content will continue to migrate from linear formats to streaming. Globally, hundreds of millions of people who don't have adequate broadband access will gain that connectivity in the next few years. Last but certainly not least, Generative AI may be the largest technology transformation since the cloud (which itself, is still in the early stages), and perhaps since the Internet. Unlike the mass modernization of on-premises infrastructure to the cloud, where there's work required to migrate, this GenAI revolution will be built from the start on top of the cloud. The amount of societal and business benefit from the solutions that will be possible will astound us all.

There has never been a time in Amazon's history where we've felt there is so much opportunity to make our customers' lives better and easier. We're incredibly excited about what's possible, focused on inventing the future, and look forward to working together to make it so.

Sincerely,

Andy Jassy

President and Chief Executive Officer

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Amazon.com, Inc.

P.S. As we have always done, our original 1997 Shareholder Letter follows. What's written there is as true today as it was in 1997.



### Dear Shareholders:

2024 was a strong year for Amazon.

Our total revenue grew 11% year-over-year ("YoY") from \$575B to \$638B. By segment, North America revenue increased 10% YoY from \$353B to \$387B, International revenue grew 9% YoY from \$131B to \$143B, and AWS revenue increased 19% YoY, from \$91B to \$108B. For perspective, just 10 years ago, AWS revenue was \$4.6B; and in that same year, Amazon's total revenue was \$89B.

Amazon's operating income in 2024 improved 86% YoY, from \$36.9B (an operating margin of 6.4%) to \$68.6B (an operating margin of 10.8%). Free Cash Flow, adjusted for equipment finance leases improved from \$35.5B in 2023 to \$36.2B.

Apart from the financial results, we made our customers' lives meaningfully better and easier. In our Stores business, we substantially expanded selection, continued lowering prices (independent research firm, Profitero, found Amazon the lowest-priced online U.S. Retailer for the eighth year in a row), and for the second year in a row, we shipped at record speed to our Prime members. AWS launched a slew of new infrastructure and AI services that make it even easier to build remarkable customer experiences, including our latest custom AI silicon (Trainium2), a new set of frontier foundation models in Amazon Nova, and significant expansion of available models and features in our leading Generative AI ("GenAI") services Amazon SageMaker and Amazon Bedrock. Prime Video continued to offer compelling original shows, including new seasons for *Fallout, Reacher, The Boys*, and *The Lord of the Rings: Rings of Power*, movies like *Road House, The Idea of You*, and *Red One*, live sports like *Thursday Night Football* and *UEFA Champions League* in Europe (with the NBA and NASCAR coming in 2025), and new selection, highlighted by Apple TV+ joining Prime Video Channels. We launched a series of new Kindle devices that included a new color version, a larger Scribe option, and our fastest Paperwhites ever (the collection of which drove the highest Kindle unit sales for a single quarter in over a decade). And, we continued to add more selection, price transparency, and same day shipping for Amazon Pharmacy.

These accomplishments are a subset of what the team launched in 2024, but represent a lot of invention, hard work, and thoughtful execution across Amazon. I'm thankful for my teammates and their delivery this past year (some of which you can see in our 2024 results, others of which won't be visible for the next few years).

# A Why Culture

Every year in my annual letter, I try to share insight into what makes Amazon tick. At the highest level, we're aiming to be Earth's most customer-centric company, making customers' lives better and easier every day. This is not easy to do in general, let alone year after year. In fact, it's actually quite hard, especially with the rapid rate of change in technology, customer habits, and new products from large and small companies alike. If we want to have a chance at succeeding in our mission, we have to constantly question everything around us.

We've had this long-held philosophy at Amazon about two-way and one-way door decisions. A two-way door decision is one where if you get the decision wrong, you can walk back through that door, revert to where you were, and there are few (if any) ramifications. You can make these decisions quickly and locally. A one-way door decision is one where it's quite difficult (if not impossible) to walk back through that door if you get the decision wrong, so these decisions are made more methodically. But, both of these constructs assume the door is unlocked. A lot of invention is about trying to open doors that have historically seemed bolted shut. And, over the past 30 years, we've found one of the most important keys to unlock these doors has been a simple question: "Why?"

"Why does this customer experience have to be this way?" "Why can't it be better?" "What are the constraints—why must we accept them?" "Why can't we invent around that?" "Why will it take so long to get to customers?" Why?

My Dad has told me that I was the kind of kid who kept asking why, perhaps to an annoying extent. He's also reminded me how shortly after I joined Amazon in 1997, he tried to persuade me to work somewhere more traditional (and on the east coast closer to family)—only to realize that I'd already found the perfect fit.

That's because Amazon is a Why company. We ask why, and why not, constantly. It helps us deconstruct problems, get to root causes, understand blockers, and unlock doors that might have previously seemed impenetrable. Amazon has an unusually high quotient of this WhyQ (let's call it "YQ"), and it frames the way we think about everything that we do.

Starting in 1995, we asked why can't we offer customers every in-print book?

Then, we asked, why limit ourselves to in-print—why can't we also offer every out-of-print book?

Why not offer every book, ever written, in any language—all available within 60 seconds on a device that's light and fits in the palm of your hand (Kindle)?

When we offer reviews, why must they all come from professional "experts?" Customers are great resources and will be brutally honest. Why not include customer reviews even if they sometimes dissuade a purchase?

Why not offer more than Books? What about Music, Video, Electronics, Tools, Kitchen, Apparel, Home Furnishings?

Why not practically everything?

Why should we be the only sellers of these items? Millions of third-party merchants and small sellers offer similar or unique items. Why not let customers choose the selection, price, and delivery speed they prefer from among these millions of sellers?

After struggling for a couple years to create awareness for sellers' selection, we asked ourselves why not show their selection on the same product detail pages as our first-party selection (where all the traffic was)?

Why not allow our sellers to also store items in our fulfillment network, enable those items to have fast, Prime delivery, and fulfill those items for sellers (a program called Fulfillment by Amazon)?

Why not experiment with relevant advertisements in our store to expose customers to new sellers and items (versus only what our algorithms might surface based on past purchases)?

Why does every company need their own capital-intensive datacenters and infrastructure? Why should every development team keep reinventing services like compute, storage, database, and analytics? Why should builders spend 80% of their time on the undifferentiated heavy lifting vs. their unique customer experience? Why not build a set of services (AWS) to solve that for internal and external builders?

Why do I have to buy a physical video to watch a movie? Why do I need cable or linear TV to watch amazing TV shows (Prime Video)?

Why can't I get my Prime shipping benefits on other websites than just Amazon (Buy with Prime)?

I can go on. But, you get the idea. Every one of these Whys have led to significant invention, and every one of them have made customers' lives better and easier. Some of these seem obvious now. But at the time, these were provocative questions that required curiosity, risk-taking, experimentation, and persistence to make these into success stories.

## Enabling a Why Culture

If you believe having high YQ is critical to inventing for customers, how do you enable it? In my opinion, it's not solved with one mechanism. It needs to be built deeply into your culture and leadership team, and has to be fiercely protected over time if you're lucky enough to be successful. Here are a few of the strategies we employ.

**Create leadership principles that set the tone.** We have 16 Leadership Principles that guide our behavior. They're all integral underpinnings to our YQ, but I'll touch on three in particular:

# Are Right a Lot

"Leaders are right a lot. They have strong judgment and good instincts. They seek diverse perspectives and work to disconfirm their beliefs."

When we first instituted this leadership principle, some people incorrectly assumed it meant that the best leaders were the ones whose ideas were chosen (i.e. they were right, a lot). It led to some people overly digging in and fighting for their ideas. There's nothing wrong with pushing for what you believe. But, in my experience, the best leaders want to hear others' views. They don't wilt or bristle when challenged; they're intrigued. Effective leaders change their minds when presented with new compelling information (which makes it ironic how people dismiss politicians as "flip-floppers" when they change their position). Ultimately, leaders are responsible for getting to the best answer for customers, regardless of whose original idea is chosen.

## Learn and be Curious

"Leaders are never done learning and always seek to improve themselves. They are curious about new possibilities and act to explore them."

In the nearly 28 years I've been at Amazon, the biggest difference in the relative growth of companies and individuals has been their aptitude to learn. At a certain point, some leaders seem to lose their thirst to learn. It's hard to know the reason in each case, but it's as if some people find it too exhausting, too time-consuming, or too threatening to not have all the answers. Regardless, the day we stop learning at Amazon is the day we risk undermining what we're capable of building in the future. People with high YQ are always curious how they can get better, become wiser, and incorporate their new knowledge into better customer experiences.

## Have Backbone; Disagree and Commit

"Leaders are obligated to respectfully challenge decisions when they disagree, even when doing so is uncomfortable or exhausting. Leaders have conviction and are tenacious. They do not compromise for the sake of social cohesion. Once a decision is determined, they commit wholly."

We don't just empower people to challenge one another, we obligate them to do so if they disagree. Questioning, asking the hard questions, forcing the discussion (versus silently thinking a mistake is being made) is necessary to getting to better answers for customers. "I told you so" has no currency at Amazon. It's also important to focus on the second part of this leadership principle: *disagree and commit*. While constructive debate is useful; at some point, teams need to make a decision and take action. From that point on, everybody—even those who advocated for a different solution than the one chosen—must commit to making that decision a success. That means the team goes all in—no pocket-vetoing nor hedging between other options. That's the only way we can preserve speed and confidence that if an issue is heavily debated, the team will ultimately pull together.

Create norms that support the Why. Similar to how our Leadership Principles guide our behavior, we've built norms over the years that guide how we work. Here are a few examples:

<u>Narratives</u>. We stopped presenting information to each other inside the company via powerpoint in 2004. Given how high level powerpoints are, we found that powerpoint was easy for the presenter to prepare, but harder for the audience to understand the substantive issues. Instead, we moved to writing narratives with a maximum of six pages in the body. Narratives are harder for the presenter (it's hard to write a thoughtful sixpage document that highlights the key issues in enough detail to be crisp and clear), but much easier for the audience to engage with and ask the right Why questions.

Working backwards documents. When we build services or features, before we start coding, we write Press Release and Frequently Asked Questions ("FAQ") documents. The Press Release is intended to ensure that what we're proposing building is remarkable to customers (so we don't get to launch and ask "wait, why did we think customers would find this interesting?"). And, the FAQ is designed to force ourselves to ask the

hard questions about which customers will use this capability, what they'll like most, what they'll be most disappointed with, why are we drawing the launch line where we are, why is it better than current alternatives, how should we think about pricing, what pricing dimensions we recommend, and why have we made the architectural decisions we have. The Press Release and FAQ are how we work backwards from customers, and how we push ourselves to ask questions customers would if they were in these meetings.

Be together whenever possible. There are many paths that can lead to breakthrough innovation. Occasionally, a lone genius comes up with a brilliant idea, and everyone else simply executes it. While that can work, it's not how we typically operate. Amazon invention is deeply collaborative. It starts with a seed of an idea, then a group of smart, mission-driven people refine, challenge, and build on it together. And, we've found that this process is far more effective in person than remote. Of course, you can invent with everybody remote (and some cultures seem to prefer that). However, in my experience, it doesn't compare to being in the same room. The energy, the pace, the spontaneous brainstorming, the willingness for people to jump in, the way ideas evolve in real time, and the post-meeting iteration is much better when in the same room—and yields better outcomes for our customers and teams. With what's happening in AI right now, and the likelihood that every customer experience we've ever known will be reinvented, there has never been a more important time, in my opinion, to optimize to invent well.

Tolerating messy meetings. It's hard to "schedule" innovation. You can't book 60 minutes to invent Amazon Prime, or AWS, or Alexa+, or Fulfillment by Amazon, or Regionalization in our Fulfillment Network, or Project Kuiper. These inventions are borne out of somebody asking why we can't change what's possible for customers, and then they take on a life of their own, often meandering down multiple dead ends before getting to a final destination. This might bother some regimented folks. But, when we're inventing, we accept the process being beautifully imperfect.

Operate like a startup (in our case, the world's largest startup). We strive to operate like the world's largest startup. What does that mean?

First, whatever we're contemplating building has to be focused on solving a real customer problem or meaningfully improving a customer experience. Companies can get off track prioritizing technology because they're excited about the technology. Great startups are on a mission to change what's possible for customers.

Second, we have a disproportionate need for builders. These are inventors. They're people constantly dissecting customer experiences, even ones that seem pretty good today, and asking why they can't be better. They're divinely discontent (maybe annoyingly so for team members proud of what they've previously built), and never feel like the job is done.

Third, we want owners. One of the strengths of Amazon over the first 30 years is that we've hired really smart, motivated, inventive, ambitious people who have been great owners. And, that means that our teammates are constantly asking themselves, "What would I do if this was my own money?" "What would I do if I started this company and I was the majority owner?" "Hey, I know I've only been asked to own a part of this project, but I'm not sure if the other parts are being driven well—should I stick my nose into this and make sure or just trust somebody's got it?" Owners feel accountable. They care deeply about the quality and effectiveness of what they own, and view the company's mission as their mission (we want missionaries, not mercenaries). That's part of what our effort to increase the ratio of individual contributors versus managers is about. We want flatter organizations where our owners doing the work feel like they own the two-way door decisions (which are the vast majority), can move rapidly, and are fully accountable for solving the Whys of their customer experiences.

Fourth, speed disproportionately matters for every business, in every industry, at all times. It's a false binary to argue that you can move fast or deliver high standards. If you want to be fast, you can be fast, and still be high quality. We've done it for many years (though we can still be faster). Speed is a leadership decision. The leadership team has to believe it's a priority, reinforce it constantly, organize and remove structural barriers, and build in modular ways that enable pace. But, speed does not happen unless the entire company and culture embrace it. We have this persistent feeling, throughout the company and in every business in which we operate, that there are closing windows all around us. We operate in fiercely competitive market segments, with highly talented, well-funded, ambitious companies at every turn. Customers are always looking

for something better. We spend a lot of time identifying how to unlock these experiences for them as quickly as possible, and know if we don't, somebody else will.

Another way to gain speed is to eliminate bureaucracy. There is a difference between process and bureaucracy. When you're running something at scale, you need mechanisms to deliver the right experience and constant improvement for customers. However, as companies grow and add more managers, unneeded processes get layered on that add little value. Last fall, I asked teammates across the company to send me bureaucracy examples that they were experiencing. I've received almost 1,000 of these emails, and read every single one. Builders hate bureaucracy. It slows them down, frustrates them, and keeps them from doing what they came here to do. As leaders, we don't always see the red tape buried deep in our organizations, but we can sure as heck eliminate it when we do. We've already made over 375 changes based on this feedback. We need to move fast, and we are committed to rooting out bureaucracy that ties up time and dispirits our teammates.

Fifth, you have to be scrappy. As businesses succeed and get larger, they sometimes forget how things got started. We built Amazon Simple Storage Service (S3) with 13 people; Amazon Elastic Compute Cloud (EC2) with 11 people. Managers can confuse themselves that the way to grow and get ahead is to accumulate large teams. Historically, we've had periods where we've allowed this thinking to hold sway. But, it's not the way we fundamentally think about building teams and products, and have adjusted to reflect that again. Our best leaders get the most done with the least number of resources required to do the job. They pride themselves on being lean.

Sixth, you have to be willing to take risks. This sounds easier than it is. You need clever enough people to identify worthwhile bets. And if you have these inventive, ambitious builders with high standards, they're not used to failure. They suspect external (and maybe internal) ridicule awaits them if they try something very different that doesn't work out. So, people often play it safe. But, you can't achieve something extraordinary for customers by playing "not to lose." If your Whys take you down an invention path that delivers an experience that doesn't look like what's been done before, let customer obsession be your compass. You rarely, if ever, change the world by doing the same thing as everybody else.

And finally, you have to care most about delivering compelling results for customers. It's not how charismatic you are. It's not whether you're really good at managing up or sideways. What matters is what we actually get done for customers. That's what we want to reward.

# Next generation Whys

While the team and I feel quite optimistic about the progress and potential of our existing businesses, we have plenty of new Whys we're asking. Below are a few of them and some quick thoughts.

# Why is AI so important? Will it really have as much impact as some claim and when?

Generative AI is going to reinvent virtually every customer experience we know, and enable altogether new ones about which we've only fantasized. The early AI workloads being deployed focus on productivity and cost avoidance (e.g. customer service, business process orchestration, workflow, translation, etc.). This is saving companies a lot of money. Increasingly, you'll see AI change the norms in coding, search, shopping, personal assistants, primary care, cancer and drug research, biology, robotics, space, financial services, neighborhood networks—everything. Some of these areas are already seeing rapid progress; others are still in their infancy. But, if your customer experiences aren't planning to leverage these intelligent models, their ability to query giant corpuses of data and quickly find your needle in the haystack, their ability to keep getting smarter with more feedback and data, and their future agentic capabilities, you will not be competitive. How soon? It won't all happen in a year or two, but, it won't take ten either. It's moving faster than almost anything technology has ever seen.

## OK, I buy AI is big; but why invest this much this quickly?

Fundamentally, if your mission is to make customers' lives better and easier every day, and you believe every customer experience will be reinvented by AI, you're going to invest deeply and broadly in AI. That's why there are more than 1,000 GenAI applications being built across Amazon, aiming to meaningfully change customer experiences in shopping, coding, personal assistants, streaming video and music, advertising, healthcare, reading, and home devices, to name a few. It's also why AWS is quickly developing the key primitives (or building blocks) for AI development, such as custom silicon AI chips in Amazon Trainium to provide better price-performance on training and inference, highly flexible model-building and inference services in Amazon SageMaker and Amazon Bedrock, our own frontier models in Amazon Nova to provide lower cost and latency for customers' applications, and agent creation and management capabilities.

There is also substantial capital investment required. In AWS, the faster demand grows, the more datacenters, chips, and hardware we need to procure (and AI chips are much more expensive than CPU chips). We spend this capital upfront, even though these assets are useful for many years (in the case of datacenters, for at least 15-20 years). We only start monetizing this capital investment many months after we spend the capital, and over many years—which leads to attractive long-term FCF and ROIC (as people have seen in AWS over the last several years). But in periods, like now, of unusually high demand (our AI revenue is growing at triple digit YoY percentages and represents a multi-billion-dollar annual revenue run rate), you're deploying a lot of capital. We continue to believe AI is a once-in-a-lifetime reinvention of everything we know, the demand is unlike anything we've seen before, and our customers, shareholders, and business will be well-served by our investing aggressively now.

## Why do chips and AI have to be this expensive for customers?

AI does not have to be as expensive as it is today, and it won't be in the future. Chips are the biggest culprit. Most AI to date has been built on one chip provider. It's pricey. Trainium should help, as our new Trainium2 chips offer 30-40% better price-performance than the current GPU-powered compute instances generally available today. While model training still accounts for a large amount of the total AI spend, inference (which are the predictions or outputs of the models) will represent the overwhelming majority of future AI cost because customers train their models periodically, but produce inferences constantly in large-scale AI applications. Inference will become another building block service, along with compute, storage, database, and others. We feel strong urgency to make inference less expensive for customers. More price-performant chips will help. But, inference will also get meaningfully more efficient in the next couple of years with improvements in model distillation, prompt caching, computing infrastructure, and model architectures. Reducing the cost per unit in AI will unleash AI being used as expansively as customers desire, and also lead to more overall AI spending. It's like what happened with AWS. Revolutionizing the cost of compute and storage happily led to lower cost per unit, and more invention, better customer experiences, and more absolute infrastructure spend.

# Why have personal assistants not yet taken off? How can Alexa help?

A great personal assistant can answer virtually any question <u>and</u> get things done on your behalf. There have been no digital solutions that can do both yet. That is, until Alexa+ arrived. Alexa+ is not only comparably intelligent to the leading chatbots, but can take a plethora of real actions for you. She can play music, play video, move media from one of your devices to another, set alarms and timers, control your smart home, order across hundreds of millions of ecommerce items, make reservations for restaurants or Ubers, order concert tickets, alert you when your favorite artist announces a tour, find a plumber to fix your sink, and memorize whatever you've done on Amazon. This is pretty game-changing for consumers, and just the start of what Alexa+ will do. We have over 600 million Alexa devices out there today, and expect Alexa+ to play an even more vital role in the lives of these hundreds of millions of customers in the future.

## Why can't we get items to customers even faster? Does it matter?

Every year, people ask whether we've reached the law of diminishing returns on speed of delivery. Our data shows this not to be the case. When we promise faster delivery times, customers complete purchases at a meaningfully higher rate and shop with us more frequently. Amazon Prime started with unlimited, free, two-day delivery for a million products; it's now grown to over 300 million items, with tens of millions available

in one day (or better). An increasing number of deliveries happen same day. This speed improvement is primarily due to our regionalization redesign of our fulfillment network, our new placement algorithms, and the introduction of our innovative same-day fulfillment centers. Although we've set speed records for two consecutive years, we're still honing these innovations, and have others planned. And, don't forget Prime Air, our drones that will get items to customers inside an hour. We are not done improving speed.

# Why can't people in small towns enjoy the same fast delivery speeds as people in cities?

As some other companies are abandoning small-town customers due to cost to serve, we're going the other way—we're investing to serve our rural customers even better. We've already expanded Same-Day and Overnight Delivery to dozens of smaller cities and towns across the U.S., with more coming. This expansion will provide even faster Amazon delivery speeds for many millions of customers, particularly in less densely populated areas, enabling us to deliver over a billion packages each year to customers living in 13,000 zip codes spanning 1.2 million square miles.

## Related, why can't we help the hundreds of millions of people without broadband connectivity?

There are about 400-500 million households around the world, most in small, rural towns that don't have access to broadband connectivity. They can't leverage the Internet to learn, shop, do business, access entertainment, and communicate the same way people take for granted in bigger cities. This digital divide is what Project Kuiper, our low Earth orbit satellite network, aims to solve. We're just launching our first production satellites, and will ultimately have over 3,200 in orbit over the next few years. While capital-intensive to launch, we believe Kuiper will be a meaningful operating income and ROIC business for us.

## Why does healthcare have to be so stressful?

Healthcare, especially in the U.S., is quite frustrating. It's hard to get fast appointments with primary care physicians, often harder with specialists. There's a lot of waiting around. Physicians spend only a few minutes with patients. Then, patients have to drive somewhere (often not close) to get their medications. And, when they get to the pharmacy, they're often surprised by the pricing, what's covered by their insurance, and what you can easily access that's not behind a locked shelf. Customers deserve better. It's why you see such positive customer sentiment and growth for Amazon Pharmacy and Amazon One Medical, and we continue to iterate quickly on selection and transparency for Amazon Pharmacy, and physical clinic capacity for One Medical.

These are some of the Why questions we're asking ourselves right now, and I'm excited about the future inventions to come. We're not going to be bored any time soon.

When I first started working, I thought it was unfathomable that my Dad worked at the same place for 45 years. How could that be? That's so long. I used to tell my friends that would never be me. Now, with almost 28 years and counting at Amazon, I have to answer those same friends with their own Why question.

After all these years, why are you still at Amazon?

I'm obviously a Superfan, but there are several compelling parts to working at Amazon. First, I'm not sure that any company prioritizes customers as relentlessly as we do. Lots of companies say they will; few follow through. Second, it's challenging to find a company where you can make a bigger impact on the world than you can at Amazon. Third, we make significant long-term investments and bets in both inventions and people. This allows our teams to iterate on ideas, and make the right long-term decisions for customers and the company. And, I've never encountered a more intelligent, creative, ambitious, hungry, hard-working, and missionary group of teammates than we have at Amazon. In my opinion, this is a remarkable set of qualities to have at a company. And, for builders who want to change the world, and who have fire in their belly, there's no better place to be than Amazon.

We operate like the world's largest startup in large part because of our culture of Why. We don't always get everything right, and we learn and iterate like crazy. But, we're constantly choosing to prioritize customers, delivery, invention, ownership, speed, scrappiness, curiosity, and building a company that outlasts us all. It remains Day One.

Sincerely,

Andy Jassy

President and Chief Executive Officer

Amena L fassy

Amazon.com, Inc.

P.S. As we have always done, our original 1997 Shareholder Letter follows. What's written there is as true today as it was in 1997.