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Quarterly Market Commentary

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Jeff Bezos: Redefining Customer-Centric

To be Earth's most customer-centric company where people can find and discover anything they want to buy online.

Amazon.com Mission Statement

In his magisterial work, *A History of the American People*, Paul Johnson chooses to largely ignore America's presidents from 1865 through 1900, whom he considers generally a mediocre lot. Instead he focuses primarily on the great entrepreneurs and industrial giants of the period such as J.P. Morgan, Andrew Carnegie, J.D. Rockefeller and Thomas Edison. Future historians may well choose to ignore American presidents over the past 25 years and concentrate on the great entrepreneurs of the present age such as Bill Gates (Microsoft), Steve Jobs (Apple), Mark Zuckerberg (Facebook), Elon Musk (Tesla), and Jeff Bezos (Amazon). These men certainly have done more to transform our culture than our current or recent presidents. Two of our previous commentaries explored the lives of Steve Jobs and Elon Musk, and we think it is fitting to write this commentary about Jeff Bezos (pronounced Bay-Zose). Bezos has certainly changed the lifestyle of a great number of people around the globe through Amazon.com, the company he founded in 1995.

In telling this remarkable story, we depend primarily on two excellent books: *The Everything Store – Jeff Bezos and the Age of Amazon* by Brad Stone, and *One Click – Jeff Bezos and the Rise of Amazon.com* by Richard L. Brandt. Like Jobs and Musk, Bezos is a genius. He emerges from these pages as a man of great intelligence, vision, perseverance, breadth, willingness to fail, and above all, an overriding desire to serve customers well. And also like both Jobs and Musk, Bezos's strong personality, intensity, and overwhelming desire to achieve his goals have often created an unhappy culture at Amazon. This commentary is meant for those who do not have the time or inclination to read all 550 pages of these two fine books but would like to understand a man whose passion to put customers first has changed not only the buying habits of many throughout the world but the rapid adoption of cloud computing as well. And we believe that this commentary is also timely, as Bezos and Amazon are much in the news at the moment.

Youth (1964-1986)

Jeff Bezos is the son of Ted Jorgensen and Jacklyn (Jackie) Gise. Ted was a senior in high school in Albuquerque, New Mexico, and Jackie a sophomore when they began dating. Jackie became pregnant, and being in love, they were married after Ted graduated during the summer of 1963. Jeffrey Preston Jorgensen was born in January, 1964. While Jackie finished high school, Ted worked, earning barely enough to make ends meet. Several years after their marriage, Jackie filed for divorce and moved with Jeff back in with her parents. Several years later, Jackie began dating a young Cuban-American named Miguel Bezos. In 1959, Bezos had been attending an elite Jesuit private school, Colegio de Dolores, in Santiago de Cuba from which Fidel Castro had graduated. When the Batista government fell, Castro replaced the school with socialist youth camps and also shut down the lumberyard owned by Miguel's father. Miguel's parents

managed to get him into Operation Peter Pan, a rescue program run by the Catholic Church that brought thousands of teenagers out of Castro's grip and into the United States. When Miguel arrived in Miami at the age of sixteen, he knew one English word: *hamburger*. Miguel was taken to a Catholic school in Delaware called Casa de Sales run by a priest named James Byrne. It was there that Miguel learned English and began to focus on his books. Returning to Cuba was not an option so he enrolled in the University of Albuquerque, a now-defunct Catholic University which gave scholarships to Cuban refugees. He got a job as a clerk on the overnight shift at a bank, where he met the recently divorced Jackie Jorgensen who was also working there. After Miguel (now called Mike) graduated from college, he and Jackie married in Albuquerque, and Mike got a job working for Exxon as a petroleum engineer. Four-year-old Jeffrey Jorgensen was adopted by Mike Bezos and became Jeffrey Preston Bezos. He never saw his biological father again. Mike and Jackie Bezos had two more children, and Jeff did not know that Mike wasn't his biological father until he was ten.

Jackie remembers Jeff as being a precocious child. She tells the story of when he was three years old and no longer wanted to sleep in a crib. They argued but, worried about his safety, she refused to give in. The next day she walked into his bedroom to find him dismantling the crib with a screwdriver. Jeff was greatly influenced by Jackie's father, Lawrence Preston Gise, who owned a cattle ranch called the Lazy G. Jeff spent every summer there until he was 16. He loved it there and worked hard, cleaning stalls, branding and castrating cattle, fixing tractors, and installing plumbing. Bezos later said: "One of the things you learn in a rural area like that is self-reliance. People do everything themselves." In school, he was a bookworm and hypercompetitive. He was a big fan of science fiction, and he and his friends learned how to use the school's computer terminal to play endless hours of a primitive Star Trek game.

Enrolling in Palmetto High School in Miami, where his family had moved, Bezos was a highly motivated student, telling classmates that he intended to be valedictorian. With a formidable intellect, great self-confidence and a competitive personality, Bezos did in fact become valedictorian of his 680-member class and got early admission at Princeton. In his valedictory speech, he began with the Star Trek opening, "Space, the final frontier" and went on to discuss his dream of saving humanity by creating permanent human colonies in orbiting space stations.

At Princeton, Bezos realized that he could not always be number one in his class and switched his concentration from physics to computer science and electrical engineering. He was a self-professed nerd and loved computer programming. Few people remember much about him, but he did get enough A-pluses to earn a 4.2 GPA and membership in Phi Beta Kappa. He also was elected President of the Princeton chapter of Students for the Exploration and Development of Space.

First Jobs (1986-1994)

Bezos knew he wanted to be an entrepreneur but thought it would be wise to learn how the world works first. He received job offers from Intel, Bell Labs, and even Andersen Consulting, but decided to join Fitel, a start-up whose founders, professors at Columbia University, were trying to build a mini-internet. Jeff was one of 15 smart computer scientists who were hired to build the communication protocols. Fitel's first client, Salomon Brothers, was blown away by the system. At the age of 23, Jeff became second in command at the firm, managing a dozen programmers. In April, 1988, Bezos left Fitel to join Bankers Trust, becoming its youngest vice president at the age of 26. Two years later, Bezos joined D.E. Shaw, a hedge fund firm which utilized computers and algorithms to do electronic trading of stocks. D.E. Shaw developed a reputation as a great place for computer scientists and mathematicians to work, hiring only about 1% of those who applied. *Fortune* magazine called it "the most technologically sophisticated firm on Wall Street." Perhaps as important

Key Events in the Life of Jeff Bezos

1964	Jeffrey Preston Jorgensen was born in Albuquerque, New Mexico to teenage parents, Ted Jorgensen and Jackie Gise Jorgensen.
1968	Having divorced Jeff's father, Jackie married Miguel (Mike) Bezos, a refugee from Castro's Cuba, who adopted Jeff and changed his name to Jeff Bezos.
1983	Graduated from top-drawer Miami Palmetto High School where he was class valedictorian and a National Merit Scholar.
1986	Graduated Phi Beta Kappa from Princeton with degrees in computer science and electrical engineering.
1986-1994	Worked at Fitel, a financial communications start-up; Bankers Trust; and D.E. Shaw, a quantitative hedge fund based in New York City.
1993	Married MacKenzie Tuttle, also a Princeton graduate, who worked at D.E. Shaw as a research assistant; they now have four children.
1993-1994	Decided to found an internet company, focusing on an online bookstore.
1994	Left D.E. Shaw and founded Amazon.com (originally called Cadabra).
1995	Launched Amazon, raising \$1 million from 22 investors for a 20% stake.
1996	Venture capital firm, Kleiner Perkins Caufield and Byers, invested \$8 million for a stake of 13% of the company.
1997	Amazon did IPO (initial public offering) at \$18 a share, raising \$54 million, valuing the company at \$429 million.
2000-2001	Stock plunged 95% as Amazon got into cash bind.
2002	Announced first profit ever of 1 cent a share in 4th quarter, 2001.
2002	Amazon launched both Amazon Prime and AWS.
2007	Amazon went into electronic books, launching Kindle.
2013	Bezos personally bought 100% of Washington Post.
2017-2018	Amazon purchased Whole Foods; Bezos's net worth exceeded \$100 billion, as Amazon's stock price reached \$1,500 per share.

as what he learned at D.E. Shaw, he met his wife-to-be MacKenzie Tuttle, a research assistant at the firm. Bezos wanted to marry and created flow charts listing the attributes that he was seeking in a wife. The number one criterion was “resourceful and efficient.” He and MacKenzie are still married and have four children.

Deciding What Business He Would Create (1993-1994)

In 1994, David Shaw asked Bezos to explore this new thing called the “Internet.” What Bezos discovered, when he did some research on the internet, was that it was growing users at a rate of 2,300 percent a year. Bezos reckoned there would be a huge population of internet users in very short order, and he became intrigued with figuring out how to make a profit from this growth trajectory. Unlike Bill Gates, who was passionate about putting a computer on everyone’s desk, or Larry Page and Sergey Brin, who wanted to create a search engine that could bring all the world’s information to everyone, Bezos was not passionate about starting an online bookstore for the world. He primarily wanted to start a company with enormous growth potential which he could monetize using his strong technology and computer skills. He made a list of 20 possible products to sell over the internet. He landed on selling books because it satisfied all his key criteria: a familiar product with a very large market size (\$19 billion in books sold in 1994); thousands of bookstores without an entrenched competitor; easy to acquire inventory and a digital database of books already in place; books were easy to ship; and finally, software could be easily created to sort through millions of titles. Bezos told David Shaw about his idea, and Shaw tried to persuade him not to leave the company. In typical Bezos fashion, he created what he later called a “regret minimization framework.” In other words, he imagined what would be his biggest regret in life when he was old and looking back at his life. And he decided that he would always greatly regret not quitting D.E. Shaw to start this internet business. Parenthetically, this is a great exercise for all budding entrepreneurs. Once he made his decision, he knew he had to move quickly with internet growth exploding.

Launching Amazon.com (1994-1995)

In starting any business from scratch, one needs good people, and Bezos, under the terms of his contract with D.E. Shaw, was prevented from recruiting at his firm. But Bezos had developed a large network since leaving Princeton, and through this network, he got in touch with Shel Kaphan, who became a key player in the early days of Amazon. Bezos was also influenced by a friend, Nick Hanauer, a business executive in Seattle. Hanauer encouraged Bezos to launch Amazon in Seattle and later helped him raise capital from local Seattle contacts. Bezos finally chose Seattle as Amazon’s home because it satisfied three criteria: it had an abundance of tech people whom he would need to launch Amazon; the warehouse of a major book distributor was located near Seattle; and Seattle had an airport offering daily flights so books could be distributed quickly nationwide.

Jeff and MacKenzie flew to Texas to pick up a gift from his father – a 1988 Chevy Blazer. They drove to Seattle from Texas with Jeff, according to legend, writing Amazon’s business plan on the way. They rented a three-bedroom house in Bellevue, a suburb of Seattle, for \$890 a month. And very importantly to Jeff, the house had a garage so he would later be able to boast that he had started the company in a garage just as Hewlett Packard had. Bezos incorporated the company under the name “Cadabra, Inc.” – evidently a play on the word “abracadabra,” which was meant to imply instant delivery. Within months, Bezos changed the name. Apparently the name Cadabra was often confused with the word, “cadaver.” He chose Amazon.com because it would be high on any alphabetical listing and reflected his ambition to become the largest retailer of books, just as the Amazon was the largest river in the world. He also wanted the company always to be referred to as Amazon.com to show that it was an internet company.

It took a year from the time Bezos arrived in Seattle to launch the company. During this period, the company consisted of Jeff and MacKenzie Bezos, Shel Kaphan, and another software engineer, Paul Davis. Kaphan and Davis were in charge of building the technical infrastructure of Amazon.com. Jeff took a course on how to create a bookstore in order to understand the business. They bought several Sun Microsystem workstations and used the open source UNIX operating system that came with it. They chose Oracle's database management system, as the company could be scaled easily on this software. Within a short period, the database contained more than a million books. For the first year they worked out of Bezos's garage and held meetings in a local coffee shop. Amazon.com was launched in July, 1995. The first several days, there were about half a dozen book orders each day. Best-selling books were sold 30% below list price to attract customers. Bezos and the others would personally pack the books for shipment, and Bezos would drive them to the post office in his Chevy Blazer. Three days after launch, one of the founders of Yahoo, Jerry Yang, put the Amazon.com website up on Yahoo's *What's Cool* page. Orders soared. That week, Amazon took in over \$12,000 in orders but they were only able to ship \$846 of books. The next week was worse as \$15,000 in orders came in. Bezos was not prepared for this volume of business; he hadn't even ordered packing tables in their new leased office space. Everyone was working until two in the morning, kneeling on the concrete floor packing the books for shipment. Within three months, Amazon had its first day of logging 100 book sales. In less than a year, they were receiving 100 book orders in the first hour of the day. Bezos did almost no advertising, but the news about Amazon spread by word of mouth and internet "buzz."

Funding Amazon.com (1994-1997)

Bezos had saved enough money to fund the company for several months. Thus, when he incorporated the company in 1994, he bought 10.2 million shares of Amazon.com stock for \$10,000 – at one-tenth of a penny a share. Shortly thereafter, he lent the company \$44,000, but within months, he was running out of money. He then raised another \$100,000 from his father who bought 582,528 shares at 17.17 cents per share, keeping the company afloat for another six months. Shortly after Amazon.com was launched, in the summer of 1995, Bezos's funds were depleted, and Bezos needed to raise more money. His friend, Nick Hanauer, made some calls in Seattle, and Bezos began to make the rounds of potential investors. It was hard going, convincing prospects to invest in an online bookstore. Bezos met with sixty prospects. Finally, Hanauer stepped up and made an early commitment, which convinced some others to invest. In the end, 22 investors bought shares, investing a total of \$981,000, which gave them a 20% stake in the company. A year later, a venture capital firm got wind of the Amazon story and wanted to invest. In a typical Bezos move, he then searched out the premiere venture capitalist in Silicon Valley – John Doerr, who was with Kleiner Perkins Caufield & Byers (KPCB). After much negotiating, KPCB agreed to invest \$8 million for a 13% stake in the company, and Doerr agreed to Bezos's request to join the board of Amazon. Up until this time, Bezos had planned to try to make a profit in the near future, but realizing that he could raise money without yet turning a profit, he postponed profits and focused on growth and increasing market share. In 1996, the internet bubble was forming, and in May, 1997 – less than two years after opening its doors for business – Bezos took Amazon public at \$18 per share, raising another \$54 million, which valued the company at \$429 million. Bezos's stake was worth \$184 million.

Phenomenal Growth Results in Huge Operating Losses (1996-2001)

In Amazon's 1997 Annual Report, Jeff Bezos laid out in his shareholder letter Amazon's culture and how he intended to run the company. This shareholder letter has been reprinted in every annual report since. Inside Amazon, the letter became the equivalent of Holy Scripture. To his credit, Bezos has held remarkably close

over the years to the goals and values expressed in the letter. In it, Bezos repeatedly emphasizes the importance of *shareholder value over the long term*. He writes that market leadership is the most important goal for the company, for the stronger Amazon's market leadership is, the more powerful Amazon's economic model. And he then writes that the most important metrics by which to measure market leadership are: customer and revenue growth, the degree to which customers purchase from Amazon on a repeat basis, and the strength of the brand. Ultimately, market leadership translates directly to higher revenue, higher profitability, greater capital velocity, and stronger returns on capital. He then laid out his key operating philosophies:

- Relentless focus on customers
- Long-term market leadership matters more than short-term profits
- Bold investment decisions with willingness to accept failure
- Lean and cost-conscious culture
- Recruit and retain talented employees, who will think like owners
- Bias for action
- Innovation

During the next four or five years, Amazon pursued a path of frenetic growth, branching out from books to music CDs and movie DVDs. While Bezos enforced strict frugality at Amazon in all areas of operations, such as vesting stock grants only after three years and making all executives fly coach, he was amazingly profligate in this period in acquiring companies. As the internet bubble expanded between 1998 and 2000, Amazon went on a huge buying spree. Amazon raised over \$2 billion in three separate bond issues and bought dozens of companies in every imaginable retail sector, many of which disappeared without a trace in relatively short order. Amazon lost hundreds of millions of dollars on these investments. But revenue and customer growth at Amazon was enormous. In 1999, sales grew 95% over the previous year, and the company attracted three million new customers, bringing the total number of accounts to over 20 million. Revenues were \$1.5 billion but expenses hit \$2 billion.

The Dot.com Bubble Bursts (2000-2002)

In December, 1999, Amazon's stock peaked at \$115 per share. By October, 2001, its stock had dropped to a low of \$5 – a 95% plunge in the market value of the stock. The following chart tells the story:



With continuing operating losses and significant debt on the balance sheet, many investors doubted the viability of Bezos's business model. But Bezos never lost his cool. Under great stress, Bezos laid off first hundreds, then thousands of employees during the dot.com bust. There was also a great exodus of those who

left Amazon voluntarily, as Bezos often demanded too much from his employees. Costs were slashed, and herculean efforts were made to bring revenues in line with expenses. In January, 2002, Bezos announced the financial results of the 4th quarter, 2001. Amazon earned a profit of \$5 million, 1 cent a share – its first quarterly profit ever. Amazon had turned the corner and showed the naysayers: the stock jumped 40%.

Great Innovations at Amazon (2002-2017)

There is not space to enumerate the large number of companies that Bezos has bought and all the ways in which Bezos has changed the landscape in America. But three innovations need to be mentioned. The first is Amazon Prime. What started in 2002 as a service whereby customers could pay an extra fee to receive overnight, one-day, or two-day shipping ultimately became Amazon Prime in 2005. For \$79 annually, Bezos offered free shipping with two-day service or better. His team thought Bezos was crazy, offering a service which was guaranteed to lose a great deal of money. But with no internal support, Bezos introduced Prime. Today approximately 64% of all American households (80 million members) are Prime members, paying \$99 annually and receiving free shipping as well as unlimited movie and TV-streaming service similar to Netflix. Globally more than 100 million households are Prime members.

A key component of Bezos's business philosophy, articulated in his famous 1997 shareholder letter, is taking the long view. A spectacular example of this approach is AWS – Amazon Web Service. In 2002, Bezos asked his technology team to create a new set of APIs (Application Programming Interfaces) which would allow developers to plug into the Amazon website. Bezos pushed this openness to the Web, and Amazon held its first developer conference that year, encouraging developers to become part of the Amazon constituency. Today AWS is in the business of selling basic computer infrastructure like storage, databases and raw computing power. Major companies like Netflix use it to stream movies to its clients, and various agencies of the U.S. government such as the CIA and NASA are clients as well. In 2017, revenues from AWS were \$17.5 billion, representing 73% of Amazon's operating profit. It is clear that Amazon is a technology company as well as a retail firm.

The last example is Kindle – the electronic reading device. It is a remarkable example of the long-term approach that Bezos takes in introducing disruptive products to a market. The concept of manufacturing an electronic reading device was first broached at Amazon in 2004. Manufacturing hardware devices was way outside Amazon's core competency, and there was the problem that the book publishing industry had to be persuaded or forced to digitize hundreds of thousands of books. It took almost four years to solve the litany of issues in order to launch the Kindle, not the least of which was to reach Bezos's goal of having 100,000 books in e-book format. In 2007, Bezos introduced the Kindle at a price of \$399 at a press conference in New York. The Kindle weighed 10 ounces and could carry 200 titles. The E Ink screen was easy on the eyes. The Kindle has been enormously successful, and Kindles can now be purchased at prices ranging from \$80 to \$350. Bezos had again changed the way that many people do things.

What Kind of a Man is Bezos?

Bezos is larger than life. He is a genius. He is highly intelligent and has that rare ability to grasp both the big picture and focus with great intensity on the demanding details. He has deep technical knowledge combined with highly-refined strategic and tactical instincts. He is relentlessly optimistic and able to impart a hugely infectious enthusiasm to his colleagues which helps to overcome his at times off-putting intensity and lack of empathy. He has the rare ability to make bold innovative moves, which may not

pay off for many years, if at all. And more than any of the legendary Silicon Valley founders, he has an all-consuming passion to serve customers well. To him, customers mean more than employees, which is the reason that Amazon over the years has had a reputation of being a very difficult place to work. On the other hand, Bezos is a man to whom family is important – unlike other founders such as Jobs and Musk.

Bezos is also remarkably multi-dimensional. In addition to his creation and leadership of Amazon over more than two decades, he has started and invested large amounts of money in a space exploration company, Blue Origin. He personally invested in Google in its very early days, as well as in Uber and Airbnb. In 2013, he bought *The Washington Post*. The list of his investments would take several pages to enumerate. The same is true of the huge number of Amazon acquisitions, with Whole Foods being just the most recent high-profile purchase. All this has made Bezos the wealthiest man in the world with a net worth of over \$100 billion.

What to Do with Amazon Stock

Since bottoming in 2001 at \$5 a share, Amazon's stock has risen to a high of \$1,617 this year, before retreating to \$1,550 currently. In valuing the stock at this price, investors have looked beyond the fact that the P/E ratio of the stock is approximately 180. Because Amazon invests so much of its cash flow on enhancing its market leadership in various fields and on innovation, investors value Amazon's stock more on the multiple of Amazon's operating cash flow per share which is 38 times. This is still very expensive, but investors believe that if Amazon focused more on profitability and less on growth, these metrics would drop considerably. Amazon is quintessentially a growth company. 2012 sales were \$61 billion and have nearly tripled to \$179 billion in 2017. Clearly the stock market believes that Bezos will continue Amazon's remarkable growth for years. One of the major risks that Amazon faces, like Facebook and Google, is government regulation. This could come if Congress passes legislation addressing privacy and how the data that these companies gather and store may be used. Or it could come from the Department of Justice in anti-trust legislation. Purchasing shares of stock at these exalted heights is risky, but Bezos has thus far proved to be the gold standard. Investors in growth stocks love Bezos and have been richly rewarded. But a tough bear market or a Bezos misstep could be costly to investors. Amazon is the kind of aggressive growth stock that has great potential for rewards and an equally dramatic downside risk, and investors need to be mindful of what they own.

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