

E-Commerce Is A Dynamic \$1 Trillion Growth Market

Introduction

E-commerce continued its long-term upward growth in 2022, furthering the offline retail to online retail shift that began in the late '90s. What is E-commerce? E-Commerce is in essence the selling of goods and services directly to consumers online—in contrast to offline retail or the traditional in-store "bricks and mortar" sales that characterized commerce for decades. Through E-commerce, retailers could leverage the Internet to sell products directly to consumers wherever they were—in their homes, at work, and all over the world—and become E-retailers.

Then, in 2007, Steve Jobs unveiled the first iPhone, setting the stage for M-commerce, which allowed E-retailers to reach consumers anywhere on the globe via their mobile and handheld devices. Cell phone adoption exploded and has penetrated approximately two-thirds of the global market, a similar percentage as that of the global population connected to the Internet. As E-retailers have offered a great shopping experience through desktop and mobile devices, consumers have adjusted their shopping preferences and increasingly gravitate toward online commerce as opposed to offline shopping. The result of this shift has been dramatic: E-commerce sales eclipsed \$1 trillion in 2022 and continue to take share from offline retail, all indicating that E-commerce is continuing its long-term upward growth trajectory.

In this report, we will explore how E-commerce has grown so spectacularly, analyze where that growth came from, examine the key drivers of industry growth, and explain why we think that the future for E-retailers is bright. We will cover this exploration in the following five sections:

- 1. E-Commerce Is A Large And Diverse Growth Market
- 2. E-Commerce Growth Has Been Primarily At The Expense Of Offline Retail
- 3. E-Commerce Has Many Advantages Over Offline Shopping
- 4. Advancements In Technologies And Solutions Enable Excellent Online Shopping Experiences
- 5. Continued Convergence Provides E-Retailers With Exciting Opportunities

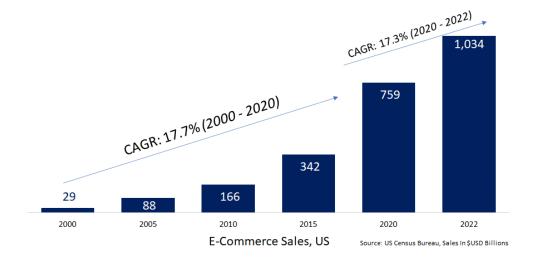
Section 1: E-Commerce Is A Large And Diverse Growth Market

The E-commerce market is very large and, given its size, growing at an impressive rate. The growth of digital buyers who today shop across the full spectrum of retail categories online has served to broaden and deepen the E-commerce market in meaningful ways. Digital buyers are also shopping across many retailers and brands, providing opportunities for both established brands and new retailers to enter the market, innovate and, in doing so, contribute to market growth.

E-Commerce Sales Eclipse \$1 Trillion In 2022

During the last 22 years, E-commerce has grown at a compounded annual growth of approximately 18%, underscoring the dynamic growth of this large market. In 2022 in the United States alone, E-commerce sales reached a record \$1.03 trillion (<u>US Census</u>).





As we will discuss in detail, there are many reasons to be optimistic that E-commerce will continue to experience high, dynamic growth—a market ripe with opportunity for E-retailers. How is it that a massive \$1 trillion in sales market grew so rapidly? High mobile and online shopping adoption rates, wide supply of products within many categories and among many retailers, meaningful advantages over offline retail, and innovative, converging technologies are the underpinnings that have enabled this growth, and the continued strength of these trends encourages our optimism about the future.

M-Commerce Is A Large Component Of E-Commerce And E-Commerce Growth

M-commerce is the designation of E-commerce sales made via cell phones, tablets, smart watches, and other handheld devices. It has quickly become a large component of E-commerce, as adoption as usage rates have increased. M-commerce accounted for 42.5% of US E-commerce sales in 2022 and 6.2% of total retail sales; M-commerce grew 22% and hit a record dollar high of \$440B in 2022 (US Census, eMarketer).



M-commerce is also now the major component of E-commerce growth. Since 2018, M-commerce has accounted for 48% of all E-commerce incremental growth dollars (<u>US Census</u>, <u>eMarketer</u>).

The rise in M-commerce has been enabled by mobile phone adoption and usage. Mobile phone technology advances are making it easier for users to shop on their phones, browse while in stores to comparison shop, and quickly find more selection and deals. Increases in processing power and internet connection speeds is also allowing consumers to more easily use mobile phones for their shopping needs.



The share of the Americans that own a smartphone is now 85%, up from just 35% in Pew Research Center's first survey of smartphone ownership conducted in 2011 (Pew Research). As adoption rates have reached these high levels, mobile phone usage for M-commerce is on the rise. Of US adults, 37% have made a mobile purchase over the past three months of 2022, an increase from 29% in 2021 (Forrester). The combination of a large installed base that is increasingly using phones to shop online strongly suggests that M-commerce will continue being a major factor driving E-commerce growth.

Online Shopping Is Reaching Full Adoption, With Opportunity For Increased Frequency Rates

US online shoppers grew to reach 215 million in 2022, 3.3 million more than in 2021, representing 83% of the adult age population (Oberlo). More than 36% of US online shoppers purchased items online at least

once a month, and 24% did so weekly (Marist Poll). Equally noteworthy, a May 2022 survey indicated that only 5% of respondents had never shopped online (Jungle Scout). According to a BigCommerce survey examining the online shopping and purchase habits of US adults, results show that 96% are shopping online, spending an average of five hours per week making online purchases and allocating an average of 36% of their shopping budget to E-commerce (BigCommerce). In fact, 53% of consumers prefer to purchase online versus in a store (Salesforce). The installed based on digital buyers is large, prefers shopping online, and is allocating more of their dollars to online purchasing.



Consumers Shop The Full Spectrum Of Product Categories Online, At Different Rates

In 1995, Amazon pioneered the E-commerce industry by selling \$15.7 million worth of books online and completed one million transactions by 1997 (GWU). Today, E-commerce has gone far beyond books, overcome logistical and technology challenges, and penetrated all product categories from baby bottles to dishwashers, pillows to couches, screwdrivers to prefabricated homes, and shoes to automobiles. In 2022, \$65 billion was spent online on motor vehicles and parts (US Census) as consumers have grown comfortable purchasing large ticket items online. For food and beverage products, growth is highly enabled by last-mile delivery efficiency. The advancement of solutions and technologies within each category has helped to overcome online purchase barriers. Online product selection and assortment has grown as these barriers have fallen, allowing the market to expand further and enabling consumers to satisfy a broader range of shopping needs.

Tremendous growth potential lies ahead for the E-commerce industry, in large part due to the fact that many industries are significantly underpenetrated in terms of online sales. If 15% is the overall penetration of online sales in the overall retail market (as we discuss later in the report), a number of industries—ranging from motor vehicles to health and personal care to sporting goods—lie significantly below that 15% figure. Even assuming that those industries do not grow over time—a highly conservative assumption—increasing their percentage of online sales will help drive future growth of the overall E-commerce market. How big is this opportunity? While difficult to quantify with precision, these incremental online sales could add tens, or perhaps even hundreds, of billions to the overall E-commerce market in the years ahead.

There are a number of large product categories where E-commerce is just starting to penetrate. For example, online grocery has only a 3% rate of the large \$673B market (Supermarket News). Online grocery



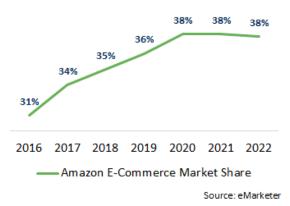
sales are predicted to reach \$100 billion by 2025, and it will be the next major retail sector to be disrupted by E-commerce according to a study by The Food Marketing Institute conducted by Nielsen (Forbes). Increasingly consumers are gaining confidence in buying groceries online. A poll by Gallup found about 20% of consumers had purchased groceries online in the past, with 9% reporting purchasing them once a month or more frequently (Gallup). These surveys indicate an emerging willingness among consumers to buy more product categories online, particularly those more traditionally sold offline.

Amazon Is A Dominant Force, But Not A Monopoly

To satisfy growing consumer demand for access to the full spectrum of product categories, more retailers are entering the online market. One indication of this phenomenon can be seen in the plateauing of Amazon's market share as new and as well as established offline retailers and brands enter the online market. In 2022, Amazon was by far still the largest online retailer, with \$400+ billion in US E-commerce sales and growth of 14.6%, capturing 39.5% market share (Amazon). In FYE 2022, Walmart had \$47.8

billion in US E-commerce sales, up from \$24.1 billion from 2020, representing a 98% increase over two years (Walmart). E-commerce market share for Walmart is now 4.6% in 2022, up from 3.2% in 2020.

While Amazon still dominates E-commerce sales at 8.5x more than the online sales of Walmart (#2 in size), it is notable that Walmart's online business is growing faster than Amazon's or any of the other top 10 U.S. retail E-commerce companies (Forbes). The rise in faster-growing competition like Walmart for Amazon, along with Amazon's already massive scale, may create meaningful competition and help to keep Amazon's market power and dominance in check in the years ahead.



Consumers Shop Across Many Retailers And Brands

The top ten E-retailers are mostly mass-merchants. Ranked by sales volume, they are: Amazon, Walmart, eBay, Apple, Best Buy, Target, The Home Depot, Kroger, Costco, and Wayfair (eMarketer). In 2021, the collective E-commerce revenue of these top ten vendors grew \$92 billion while the US E-commerce market grew \$200B. As such, market share among the top ten stayed about the same.

Amazon's 39.5% market share can be broken into two separate components. The first includes first-party (1P) sales of Amazon goods directly to its consumers in the US, which generated approximately \$150 billion in sales or a 14.7% E-commerce market share (Amazon). The second component relates to third-party (3P) sales on the Amazon site, of which Amazon receives a commission through its Seller Central marketplace, where millions of retailers sell to Amazon's customers. This business generated an estimated \$250 billion in sales (these sales are at gross merchandise value or GMV) giving the marketplace a 24.8% E-commerce market share (Marketplace Source). Also of note, as we will discuss in the next section, Shopify's E-retailers represent 10% of the market, if aggregated.

Counting for the moment only Amazon's 1P sales, the top ten retailers represented approximately 50% of the overall E-commerce market, which means all other E-retailers captured the other 50%, or approximately \$500 billion in 2022. The fact that the other 50% of the E-commerce market not controlled



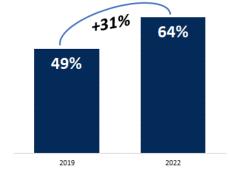


by the top ten has remained relatively constant suggests that the dominant retailers are not taking share in this market. Approximately 25% of this includes the millions of sellers on the Amazon marketplace, 10% are Shopify's cohort of millions, and 16% for all other countless E-retailers, collectively representing a massive and growing \$500 billion market.

The willingness of consumers to shop brands online has increased as more brands have gone online to offer their goods and services. Approximately 71% of consumers switched brands at least once in the past year, as they explored brands to find better deals, improved product quality, and broader selection and availability. In addition, 64% of consumers regularly bought directly from a brand in 2022, up from 49% in 2019 (Salesforce). Established brands are finding that

selling both wholesale and direct-to-consumer (D2C) does not cannibalize sales, and therefore, the historical reluctance from brands to by-pass established ways of doing business with their sales channels is fading. Many brands are attracted to E-commerce to capture margin and control the merchandising

experience. By selling online, new brands can establish themselves without the need to sell through wholesale accounts. E-commerce D2C brand sales were \$156B and 15% of all retail sales in 2022 (eMarketer). Brands like Nike, whose digital sales were \$10.8 billion and 23% of total sales in FYE 2022, are on track to make online sells equal to 50% of total sales in the coming years (CNBC), will be a major contributing factor to this growth. This growth will also be driven in part by an increase in the number of digital D2C brand buyers, as it is estimated that US D2C buyers will reach 111 million next year, representing nearly 40% of the population (eMarketer).



Consumers Worldwide Who Regularly Buy Directly From a Brand Source: Salesforce Connected Shoppers Report

The Vast Majority of E-Retailers Are Small Enterprises

More than 90% of E-commerce companies in the US have revenues of under \$1 million per year, and 8% have revenues between \$1 and \$25 million (McKinsey). The market skews smaller in participant size for several reasons. First, technology advancements are lowering the barriers to entry for upstart E-retailers. Technology platforms, such as Shopify, has made it easier and increased the opportunity for millions of E-retailers to sell online, but to do so collectively on a very large scale. Shopify's worldwide GMV reached \$197 billion in 2022, up 12% over 2021 (Shopify). Shopify is absent from market share comparisons (see market share graph above) because it is neither a retailer nor a marketplace. However, if all Shopify merchants were grouped together as a single E-retailer, it would be the third largest US E-retailer with an approximate 10% market share, indicating that technology platforms contribute greatly to the success of D2C.

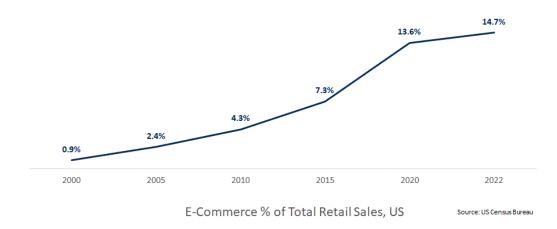
Second, the cost of entry hurdle for E-retailers to sell online is lowered with the ability to gain an audience and cost-effectively acquire customers. Online marketplaces like Amazon's, for example, have no fees or



costs associated with setting up an online store; and selling directly to Amazon's large customer base is done on a commission basis, meaning that E-retailers only pay Amazon once a sale is made. Given this attractive dynamic, the Amazon marketplace adds about 100,000 new sellers per month (EDC). There are numerous other marketplaces that help to lower entry costs for upstart and mid-market E-retailers. These include, for example, eBay and Walmart that serve mass markets as well as smaller industry specific marketplaces, such as FarFetch for fashion and Wayfair for furniture. Approximately 35% of consumers shop at niche marketplaces, especially for apparel, footwear, and home products (McKinsey), highlighting marketplace viability and attractiveness.

Section 2: E-Commerce Growth Has Been Primarily At The Expense Of Offline Retail

The long-term trend of E-Commerce growth is clear and well-established. E-commerce is growing at a faster rate than offline retail and taking market share as a result. With E-commerce currently representing only about 15% of total retail sales in 2022 (<u>US Census</u>), there is plenty of room for E-commerce to grow as the ongoing shift of offline to online shopping continues. The future is indeed quite bright for the E-commerce industry.

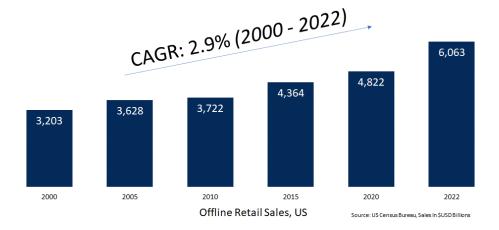


A major driver of the trend shown above is that consumers prefer shopping online. In a 2021 survey, only 46% of respondents said that, given the choice, they would prefer to shop in person rather than online; this represents a 9% decline from 2020 (Raydiant). If this trend continues, one would expect E-Commerce growth to continue.

Offline Retail Is A Heathy, Mature Market That Is Losing Share To Online Commerce

From 2000 to 2022, offline retail sales have grown from \$3.2T to \$6.1T (<u>US Census</u>) which represents a compound annual growth rate of 2.98%, highlighting a healthy, yet mature offline retail market.





Many traditional offline retailers are focused on growing their online presence. Walmart's US E-commerce sales, for example, grew \$23.7 billion from 2020 to 2022, while its total US sales grew \$52 billion over this time. Thus, 46% of all incremental growth dollars at Walmart moved online, pushing E-commerce from 7.1% of its total sales in 2020 to 12.2% of its sales in 2022. (Walmart).

E-Commerce Is Likely To Continue To Outpace Offline Retail Growth And Gain Share

E-commerce has grown much faster than offline retail over the last 22 years. If offline retail continues growing at its approximate historical rate of 3% and E-commerce at around 15% for the next ten years, then E-commerce will represent 33% of the total retail market. At that point, E-commerce would be a \$4T market.

Section 3: E-Commerce Has Many Advantages Over Offline Retail

Consumers are interested in shopping online and increasingly prefer it to the offline shopping experience, for a host of reasons. Online shopping is convenient: it saves time, reduces the "hassle factor," and allows consumers to shop when, where, and how they want. It also enables consumers to undertake true product price, value, and selection discovery. Additionally, online shopping, by creating enjoyable and productive shopping experiences, drives repeat purchase activity. In this section, we highlight major advantages of Ecommerce over offline retail that drive consumers to shop online.

E-Commerce Provides Convenient And Hassle-Free Shopping

Shopping online is quick, fun and convenient; it saves time, and it can be done at anytime and anywhere. It also places control of the shopping experience in the hands of the consumer while providing many helpful evaluation tools such as peer reviews and recommendations. Equally importantly, online shoppers can avoid some of the negative experiences associated with in-store shopping, including driving and parking, crowds, long lines, confusing aisles, empty shelves, unhelpful staff, closed cashiers, among other small inconveniences.

Consumer preference for convenience is consistent across all retail segments: Deloitte estimates that from 2016–2019, retailers offering convenience as a major component of their value proposition drove 67% of total market growth <u>Deloitte</u>). Relatedly, nine out of 10 consumers said they are more likely to choose a retailer based on convenience (<u>NRF</u>). In fact, the ability to shop 24/7 was one of the primary reasons why consumers chose to shop online versus offline (KPMG).



E-Commerce Enables True Price Discovery And Access To The Broadest Selection

Consumers seek out ways to save money and search online to find the best prices on products. In fact, 72% of consumers say they check prices and product reviews on Amazon before making a purchase (<u>FierceRetail</u>). Of the top five influences on consumer purchasing, four are related to price and budget considerations (see graph at right). E-commerce makes the process of price discovery—that is, the ability

to find and identify the best prices, sales, promotions, and free shipping offers—highly efficient. In addition, online shopping enables shoppers access to the greatest variety of goods and services and enables them to locate specific items, access hard to find items, determine stock levels and availability at specific locations (KPMG). Finally, both the price discovery and selection process are greatly aided, enhanced, and made more efficient due to the availability of in-depth product research, such as reviews, ratings, and how-to videos.



Influences on Consumer Purchasing

Price discovery is particularly important because a great deal of data suggest that consumers are highly sensitive to prices when shopping online. They seek to make comparisons, locate attractive deals, and seek strategies to maximize their budgets while shopping online; in fact, 57% of consumers said that the lowest price was the most important decision on where to buy (KPMG). In this light, consumers are often willing to buy private label, white label, and store brand products. Today, 76% of shoppers on Amazon say that they are more likely to purchase a private label product versus a brand name product (Sprout Social). A similar number—75%—believe that private label products are at least "sometimes" similar or better in quality to name brands (SurveyMonkey). This market survey data represents good news for E-retailers, as private label products offer 25–30% higher margins than traditional brands (Deloitte) and allow a way to differentiate product offerings.

There are countless ways E-retailers can increase the perception of value within their catalog of products, such as by offering exclusive designs or luxury designs at lower prices. Several start-ups have created significant value by offering differentiated products or by providing a value shopping experience. Warby Parker, for example, became popular by providing both a unique and luxury product assortment directly to the consumer (D2C) at value prices compared to competitors that were constrained by a pre-internet, pre-online way of doing business. As a fascinating "David vs. Goliath" example, Readers.com built a highgrowth E-commerce model and took considerable market-share from the industry's brick-and-mortar stalwart by offering stylish, high-quality, non-branded reading glasses at mass-market prices. Innovators like Readers.com formulated a new retail strategy and took a digital-first approach, which enabled them to create a novel and exciting online shopping experience for eyewear, thereby capturing an audience and gaining market share.

E-Commerce Offers Instant Gratification

Online commerce provides an opportunity to leverage the distinctly human tendency to seek instant gratification by making impulse purchases. In a 2022 survey, 73% respondents said that most of their online purchases tend to be spontaneous (<u>Slickdeals</u>). While this tendency applies in both the online and



offline shopping contexts, online shopping has the structural advantage in that the desired gratification is literally just a click away.

Although individuals have many reasons for their impulse purchases, sales and promotions clearly influence and encourage such decisions. Another stimulating factor is the availability of free and fast shipping for online consumers. Wait times for delivery are down considerably from the early days. Now some purchases are available within several hours, and most purchases arrive at the latest two days after an order is placed.

Personalization efforts, marketing strategies that lend themselves particularly well to the digital world of online shopping, represent all attempts to make each customers feel unique and provide them with targeted, relevant content—and buying opportunities—that are personal to their interests. Online retailers have gotten highly sophisticated in this game of identifying customers interests and targeting them at the point when they are likely to make a buying decision. It is not surprising then that highly personalized recommendations often lead to impulse purchases, with 49% of shoppers saying that they have purchased a product that they did not intend to buy after receiving a personalized recommendation from a brand. Furthermore, personalization leads to repeat shopping as 44% of shoppers will become repeat buyers after a personalized experience (Segment).

Great Online Shopping Experiences Enhance Customer Loyalty And Retention

In the highly competitive online retail market, customer loyalty and retention are key success factors for online retailers. The benefits of high customer retention rates are clear: it is easier to sell to existing customers; loyal customers tend to recommend retailers to others; retention marketing tends to be less costly than new customer acquisition; the decision and purchase cycle are typically shorter; and frequent customers tend to provide more positive feedback and reviews (Shopify).

A well-executed loyalty rewards program encourages return customers. Nearly 56% of customers say that they are more likely to buy from a brand with a loyalty program (<u>Salesforce</u>). By rewarding their most highly valued customers with the deals and discounts that they love, while also promoting new items, Eretailers can enhance brand loyalty and drive repeat business; thus, increasing customer lifetime value can gain valuable insight and have a direct platform to communicate with consumers.

Membership programs have been shown to significantly boost customer lifetime value. E-retailers are increasingly looking to membership programs to provide them with a recurring revenue stream and to deepen ties with customers. According to a recent <u>JungleScout</u> report, 35% of US consumers are members of Walmart+, and 59% are Amazon Prime subscribers, thus highlighting the attractiveness of these programs to consumers and their benefits to the online retailers offering them.

Section 4: Advancements In Technologies And Solutions Will Enable New and Exciting Online Shopping Experiences

E-commerce has grown and matured as new technologies and solutions have evolved to enhance the shopping experience, overcome challenges, and built trust in and comfort with the online shopping experience. In 2022, 88% of consumers agree that the experience a company provides is as important as its product or services (Salesforce). E-Commerce touches on so many technologies. Advertising platforms, for example, offer many consumer touchpoints for E-retailers while logistics networks deliver a critical aspect to the online shopping experience. Behind the scenes, improvements in enabling technologies ranging from digital payments to supply chain and fulfillment capabilities have enhanced online shopping.



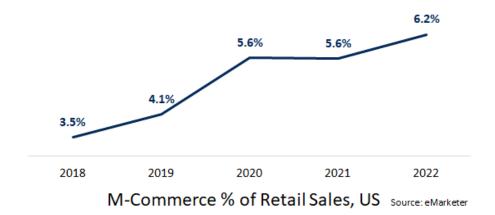
In this section, we review the major technologies and solutions that support and enhance the E-commerce shopping experience and drive future growth.

Mobile Phones Have Changed The Game

Cell phone adoption has been a major driver in the move to online shopping. Consumers can now shop anywhere, including even in a competing offline store, using their cell phones. Nearly 2 out of 3 consumers use mobile phones while instore to do price comparison with other retailers' offerings (KPMG). With mobile phones always available, there is virtually no limit to where and when people shop online: 43% of online shoppers have reported making a purchase while in bed; 25% have made an online purchase from a brick-and-mortar store; 23% have made an online purchase at the office; and 20% claim to have made a purchase from a bathroom or a car (BigCommerce). QR code usage is yet another driver of M-commerce. QR codes have many useful applications, such as for linking to a



specific landing page, allowing consumers to snapshot product details, or accessing pricing and promotion offers easily. In a 2021 Forrester survey, 56% of respondents said that they had used a QR code (CBRE).



The rise of M-commerce has been quick and dramatic. M-commerce as a percentage of US retail sales has increased from 3.5% in 2018 to 6.2% in 2022, an astounding 77% growth rate in market share in 4 years. With the limited ability of offline retail to counteract many of the inherent advantages of mobile technology and the cell phone, M-commerce has grown nearly unchallenged into a \$440 billion market.

Online Entertainment Platforms Provide Access To Large Pools of Consumers

Consumers will continue to gravitate to new and growing online entertainment platforms, creating a significant tailwind for E-commerce as these aggregated pools of consumers provide efficient opportunities to acquire significant numbers of new customers. The online advertising market is also large and growing, with total online advertising expenditure in 2022 reaching \$261 billion with 19% growth over 2021 (Oberlo). Google has 40% market share and Facebook has a declining 27% share (eMarketer), but there is still a large total dollar amount available for new entrants to try to capture.



Social commerce is growing and will continue to provide many advertising opportunities. Consumers use social media to discover and connect with new products and brands. Consumers are more open than ever to buying via social posts and pins, with 30% of online purchasers stating that they would make a purchase from a social media network (BigCommerce). The influencer market started with Instagram and its embrace of creators. Influencer marketing is



 Facebook is the leader in social commerce and Instagram CEO Adam Mosseri said shopping is one of Instagram's top priorities for 2021 and beyond

attracting larger, more seasoned advertisers, which is increasing consumer reach and further driving social commerce. On Amazon, 37% of consumers have made purchases after seeing Amazon influencers talk about or recommend products; indeed, in the absence of being able to touch, feel, and test products in store, consumers watched livestreams of unboxings or product reviews to experience products by proxy, and 9 in 10 people have said that they are willing to buy from brands they follow on social media (eMarketer).



amazon

 Snap has partnered with Amazon to make almost any product searchable with an image As social media is being affected by image creation and sharing platforms, such as TikTok and Snapchat, so too are E-commerce advertising strategies across all social media platforms. Image creation and sharing platforms are facilitating the merger of video, creators, and commerce.

Gaming is evolving into a near real-life consumer experience, and it is not just kids who play video games. For adults between the ages of 45 and 54, time spent gaming increased by 59% in 2020 and for people over 65 the time spent gaming was up by 45%, putting gaming behind only watching YouTube videos as an activity (PC Magazine). US mobile gaming ad spend will grow 10% to \$6.28 billion in 2023 and continue to grow by between 8% and 10% over the next few years (eMarketer). Metaverse, augmented reality (AR) and virtual reality (VR) innovations have improved gaming technology significantly. For advertisers, there is the appeal of a captive audience, a growing market, and reaching consumers across the demographic spectrum.

Many other newer platforms hold the promise of attracting a wide audience. First, retail media has quickly become a very large advertising platform. Retail media will top \$37 billion by 2022 and is closing the gap with search and social advertising (eMarketer). Amazon posted ad revenues of \$11.6 billion in Q4 of 2022, up 23% year-over-year, outpacing other advertising giants like Google and Facebook (Amazon). Second, podcast advertising is still growing rapidly and becoming more widely adopted. US podcast advertising spending grew from \$1.3 billion in 2021 to \$1.7 billion in 2022 and is expected to reach \$2.2 billion in 2023 (eMarketer). Third, one of the fastest areas of advertising spending is connected TV (CTV). In 2022, US advertisers spent \$21 billion on CTV, an increase of 23% over 2021 (eMarketer). Finally, advertising spending on newer CTV channels still lags far behind traditional TV. However, the gap is narrowing and, as more people leave cable, CTV will gain more viewers and advertising dollars.

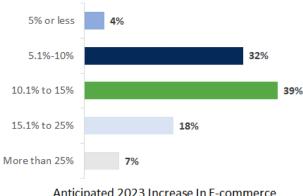
Software And Payment Platforms Underpin Seamless Online Shopping

Software solutions underpinning seamless online shopping have been a dominant driver of E-commerce growth over the last two and half decades. E-retailers have understandably invested heavily in software solutions to enhance the online shopping experience. More than 3 out of 4 E-retailers plan to increase their investment in technology to attract new and retain loyal customers in 2023 (<u>Digital Commerce 360</u>).



Examples of these platforms include: E-commerce platform management software, CRM Software, online marketing and analytics, supply chain management, product catalog management, and channel management software, all of which are designed in one way or another to enhance and facilitate online commerce.

There are a number newer technologies that enhance the consumer's online shopping experience. For example, different viewing options— such as 360 viewing, which allows online shoppers to see products from all angles, and tryon viewing, which allows online shoppers to see



Anticipated 2023 Increase In E-commerce Technology Spend Source: DigitalCommerce 360

what the product looks like on-person—have added new functionality to online shopping. Other technologies offer consumers the ability to order multiple sizes of apparel items, all before having to purchase the item; Amazon, for instance, has implemented this feature, and many others are following suit.

E-retailers have also made it easier for consumers to buy online with novel financing methods, such as buy-now-pay-later (BNPL). Amazon offered a BNPL option via a partnership with Affirm in 2021. Credit cards will remain the dominant payment method in the near future, although digital wallets, which account for 27% of the market, are growing strongly (JP Morgan), with PayPal, Apple Pay, or Google Wallet offering this functionality. The emergence of payment platforms like Dwolla, Stripe, WePay, and BlueSnap that integrate with E-commerce platforms has improved efficiency and security for E-commerce and will continue to offer online buyers flexibility and choice in their payment options.

Technology Has Enhanced And Changed Customer Service

There are many technologies that have enhanced customer service. Attentive customer service is a critical component of successful E-commerce retailing. For example, chatbots reduce purchasing friction as they do not require the consumer to have to call a customer service agent. Chatbots can efficiently address a variety of issues, including 24/7 customer assistance, query response, and shipping and tracking information. Innovators like Conversable, which built a conversation platform for creating intelligent, automated response flows through conversations, helped streamline, among other workflows, the customer support operations for a number of leading brands. Answerbase, a knowledge management platform for customer support and E-commerce, allowed users to ask questions, receive quality answers, and browse relevant content to meet their demand for information about products and services, thus guiding consumers in the purchase decisions. In 2022, 58% of consumers have used chatbots for simple customer service, and 66% of millennials prefer self-service for simple cases (Salesforce). Voice assistants such as Siri, Amazon's Echo, and Google Home are becoming increasingly popular as they provide audio brand signatures, shopping lists, and other assistive technologies.

Supply Chain And Logistics Providers Deliver Critical E-Commerce Services

To provide a better customer experience, E-retailers have reduced their shipping time and cost through augmented and enhanced supply chain and fulfillment capabilities. Approximately 43% of consumers said that they plan to increase online shopping in the next six months (<u>PwC</u>), which will put more pressure on delivery and logistics systems.



Management of the supply chain, including product sourcing, supplier networks, and shipping carriers is becoming a critical core competence for E-retailers, who often rely on third-party providers in their supply chains. Management of the supply chain is important, among other reasons, for communicating availability to consumers and managing their expectations. Having access to a complete sourcing to shipping strategy mitigates unpredictable conditions and potentially rising costs (Inbound Logistics), and most importantly, such access helps to ensure that the E-retailer will have available the products that buyers want to purchase.

Delivery service providers are critical to get products to consumers quickly and as promised. Even UPS and FedEx face challenges and can struggle to execute perfectly during certain periods of high demand. However, when national carriers experience capacity pressure, regional shipping provides an alternative. This combination of national and regional players provides E-retailers shipping coverage across most geographics, which increases customer reach. With delivery costs likely to increase in the future, E-retailers must address cost issues and factor them into shipping strategies. Innovators like ShippingEasy created a highly effective online shipping automation platform, offering discounted USPS and UPS shipping rates to help E-retailers manage this important process. Similarly, ShipStation created the leading web-based order management and shipping software solution designed to help retailers boost the efficiency of processing, fulfilling, and shipping their E-commerce orders.

There are numerous trends driving quick commerce, or Q-commerce, which is the delivery of products in less than 24-hours and in some cases in as little as 10 minutes. The increase in younger people adopting technology, busy lifestyles, urbanization, and aging populations are among those drivers. More than 70% of consumers cite convenience and free shipping as their top reasons to shop online (Conveyco). The top 10 Q-commerce apps were downloaded 48.4 million times worldwide in the first three quarters of 2022; according to Apptopia, 41% of consumers are willing to pay for same-day delivery, while 24% will pay more to deliver their items within a one-hour or two-hour window (PwC). Q-commerce can be added as another tool to complement existing delivery methods to enhance the shopping experience and allow E-retailers to better compete with brick-and-mortar stores.

Finally, drones offer the possibility of further reducing delivery times as they can fly in a straight line from a distribution center to a customer, perhaps doing so even faster than driving to a nearby store, parking, and driving home. Drone delivery times are estimated at around 30 minutes or less within a 10 mile radius (<u>Drone Tech Planet</u>). Walmart made over 6,000 drone deliveries in 2022 with a goal to deliver 1 million packages by drone annually (<u>Walmart</u>).

Section 5: Continued Convergence Provides E-Retailers With Exciting Opportunities

As E-commerce continues to grow, the market landscape can be expected to evolve. In this section, we will discuss how we see this future landscape unfolding, how convergence will transform the retail market, what the key success factors will be, and the opportunity ahead for E-retailers. Additionally, we believe AI will have an outsized impact on reshaping the future E-commerce landscape.

Convergence Will Continue To Transform The Retail Market

Digital convergence is the tendency of different technologies, media, content, services, and applications to merge and become integrated over time (<u>Simplicable</u>). Convergence enables individuals to interact, play, communicate, collaborate, and share information in many new and different ways (<u>Globrocks</u>). It



also allows the ability to view the same multimedia content from different types of devices due to the interconnection of networks (<u>CCM</u>).

Digital convergence will make the debate of online vs. offline less meaningful over time because it is going to create and drive omni-channel opportunities. What is omni-channel? Omni-channel relates to commerce that integrate different methods of interaction available to customers, such as online, mobile, and physical. Customers are provided with a seamless shopping experience, whether they are shopping online from a desktop or mobile device, by telephone, or in a brick-and-mortar store (Forbes). The Eretailers that master this landscape, applying omni-channel marketing tactics for their customers' benefit, will reap the rewards of these investments.

Data, Analytics, And Insight Will Be Key Factors In Omni-Channel Marketing Success

To succeed in a converging market, E-retailers must use data to unify their shopping experiences and build better omni-channel businesses. Data is the fundamental tool in improving and refining the shopping experience and monitoring shoppers across channels affords E-retailers invaluable insight into how to improve and streamline the online shopping experience. E-commerce data can provide insights into mouse clicks and heat maps that show how and where shoppers are moving through a website, including where they face buying impediments.

On average, a little more than half of E-commerce sites currently have omni-channel capabilities (Google). This means they sell to and communicate with customers through multiple channels. For example, E-retailers might have a website, an Amazon Seller Central account, a Facebook shop, an Instagram account, and an email list. An omni-channel approach involves not only having multiple channels but integrating them seamlessly and tracking individual customer interactions across the channels. For this reason, the strategy requires organization and the integration of new technologies. The power of omni-channel marketing is that it allows E-retailers to optimize communications with potential customers and to nurture them through the purchase funnel, from whatever initial entry point they came. The key takeaway: businesses that create a seamless, personalized omni-channel experience for customers will own the future of E-commerce (Oberlo).

Omni-Channel Retailing Represents A Great Growth Opportunity For E-Retailers

E-retailers have a significant opportunity to expand their sales channels and become more omni-channel. For example, E-retailers can venture into offline retail to complement, or even bolster, their online efforts. Additionally, E-retailers can market to consumers while they are present in-store and provide them with the ability to purchase goods on their phones while in-store.

E-retailers are now offering services such as "click-and-collect," where consumers place their orders online and pick up in-store to bypass shipping and perhaps procure the product sooner. Curbside pickup, ship-to-store, and remote pickup (usually at an affiliated partner location such as a UPS, FedEx, post office, or Amazon hub locker) are available now. Target and Walmart are finding traction by leveraging the one thing Amazon lacks: a large brick-and-mortar network. Target offers click-and-collect at its nearly 1,900 U.S. stores. Walmart has the advantage that its fulfillment/distribution infrastructure is much bigger than Amazon's (150-plus centers versus 110), and it has 4,700 retail locations where click orders can be collected (Forbes).

Amazon has already begun a serious expansion into physical retail. In 2022, Amazon generated \$19B instore retail sales (Amazon). Beyond its ownership of Whole Foods, Amazon operates 44 Amazon Fresh stores, 28 Amazon Go stores, and 2 Amazon Style stores. These start-up retail experiments came to market



in a digital-first fashion, using novel technologies to change the physical retail shopping experience. Amazon Go stores, for example, are partially automated and cashier-less, with customers using a self-checkout station to purchase products without being checked out by a human cashier.

Firms like Shopify are now offering features on their platform to help E-retailers establish brick-and-mortar shops and create omni-channel businesses. With an iPad and mobile phone, E-retailers can extend their online stores easily to the offline environment and provide a seamless experience from merchandise selection and inventory levels, to checking out, to after-purchase customer service and to marketing follow-up.

Picking up on the offline to online retail shift, savvy mall operators are helping current E-retailers establish offline retail locations. For example, Simon Malls is partnering with Leap Services, which helps E-retailers open physical spaces faster and more cheaply than they could otherwise do on their own (IBJ). The ability to tap into an existing customer database and direct those customers to a new retail location makes the risks associated with a start-up retail concept less daunting.

Artificial Intelligence Holds The Promise Of Reshaping The E-Commerce Landscape

While AI is not new, the use of AI in novel ways in online commerce is evolving and helping E-retailers make better judgements to reach their goals. The use of AI technologies and machines, big data, computing power, algorithms, predictive and prescriptive analytics, and other technology needed to better understand the online shopper will be increasingly necessary to compete and deliver an excellent consumer shopping experience. AI holds the promise of reshaping the E-commerce landscape in many ways, including the following:

- 1. Delivering personalized user experiences, recommendations, and merchandise;
- 2. Reacting to improved search engine algorithms as they evolve;
- 3. Creating more relevant and targeted advertising;
- 4. Identifying, tracking, and attributing consumer source points to channels, from researching (or being influenced to impulse shop), to selection, to purchasing;
- Automating customer service and call center operations;
- 6. Designing chatbots to engage users in complex and nuanced conversation with intelligent, coherent, engaging and appropriate responses and to continually improve their responses in a more personal and meaningful way;
- 7. Mitigating logistics disruptions and maintaining agile supply chain management systems and processes to reduce time, effort, and costs;
- 8. Controlling inventory, tracking inventory levels and locations, and communicating and reporting on orders in process to set and meet consumer expectations;
- 9. Automating product management features, such as image recognition and annotation;
- 10. Augmenting the logistics workforce, reducing manual processes, and lowering costs; and, finally,
- 11. Tracking and routing orders, comparing postage rates, and batching shipping procedures to lower shipping costs.

Al provides E-retailers many unique benefits and can unlock valuable insights into customer shopping habits. In 2022, 69% of respondents said that they are open to the use of Al to improve online experiences (Salesforce). E-retailer ads, product pages, and digital storefronts can be tailored to each customer. By leveraging Al that learns from past searches, order histories, and shopping patterns, E-retailers can identify each customer's interests and purchasing habits to create a unique shopping experience that maximizes both conversion rates and order sizes.



Of the 4,000 products Amazon sells every minute, approximately 50% are presented to customers by its personalized recommendation engine. When you visit the site, Amazon's algorithms select an assortment of products from their more than 350 million items and arrange them for you according to what they predict you will want at that precise moment. To compete with Amazon, in April 2021, Google announced its Shopping Graph, an Al-enhanced model that recommends products to users as they search. More than a billion people research products on Google each day, and Shopping Graph connects them with more than 24 billion listings from millions of merchants across the web (HBR).

Connecting various devices to the internet—often referred to the Internet of Things, or IoT—and amplifying their capabilities with AI will one day allow for novel ways to facilitate online purchases. For example, asking Alexa to order groceries will cause the smart-assistant to analyze the customer's order history and suggest when re-supply is needed and have it delivered to a default address. Similarly, smart refrigerators will monitor their inventory, create shopping lists, suggest recipes, and place grocery orders. For E-retailers, IoT presents a vast new opportunity to interact with customers, collect data, and simplify the purchasing process.

Concluding Thoughts

E-commerce is on an impressive growth trajectory, growing nicely from a very large base, and market share gains from offline retail are continuing. The future evolution and growth of E-commerce will continue to be dramatic, providing an exciting environment of innovation for many E-retailers well into the future as they compete for market share. At 14.7% of total US retail sales and growing, the ongoing replacement cycle of offline retail by E-Commerce is a long-term trend that will continue. Additional growth will come from the numerous advantages that online shopping offers over offline shopping as well as from the technology advancements that will support and drive E-commerce innovation, creating opportunities for both established and smaller E-retailers. We believe that E-commerce is well-positioned to continue innovating, growing, and taking market share within all retail markets, categories, and channels well into the future.



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