

The Investment Case for Online Retail and E-Commerce

Executive Summary

Online retail has permanently disrupted the traditional brick-and-mortar store retail landscape as "clicks" have replaced "bricks." According to research firm eMarketer Insider Intelligence, global ecommerce is expected to surpass \$5.5 trillion in 2022, as digital buyers around the world are spent \$604 billion more than they did in 2021. In the United States, ecommerce sales are expected to grow to \$1.065 billion in 2022, a 15.9% increase over 2021, and significantly higher than pre-pandemic levels.

The global coronavirus pandemic has accelerated the pace of ecommerce growth, propelling online sales to levels not previously expected until years from now-helping existing online retailers expand their dominance in retail. Value-added features such as competitive pricing, shopping convenience, greater product selection and rapid delivery options have solidified online commerce as a disruptive technology that is here to stay.

Ever-increasing internet and mobile penetration are one of the key drivers contributing to this growth, enabling more consumers to shop online anywhere and anytime. New technological innovations in electronic payment, rapid delivery, artificial intelligence and voice-assisted shopping, personalization, as well as virtual and augmented reality continue to enhance the online shopping experience, further driving the expansion and growth of this investment theme.

Additionally, due to the pandemic, digital commerce has added new shoppers that had not previously shopped online, fueling new buying habits such as online grocery, buy online, pickup in store (BOPIS), and buy-now-pay-later (BNPL). This trend has accelerated traditional retail's woes, with 6 U.S. retailers having filed for bankruptcy in 2021, on the heels of twenty-five major retailer bankruptcies in 2020.¹ Amid this marketplace evolution, online retail remains a transformational and dominant force in global retail.

¹ Retail bankruptcies fall in 2021 due to high sales and low interest rates, Digital Commerce 360, January 18, 2022

A Brief History of Online Retail

Online commerce has permanently transformed the retail sector and the way consumers and businesses shop for everything—from books to office supplies, to shoes and furniture. But how did it all begin?

The origins of online commerce pre-date the internet age. Indeed, the first predecessor of online commerce was the mail-order catalog. In the 1970s, protocols such as Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT) were created, providing the infrastructure needed to support electronic transactions.

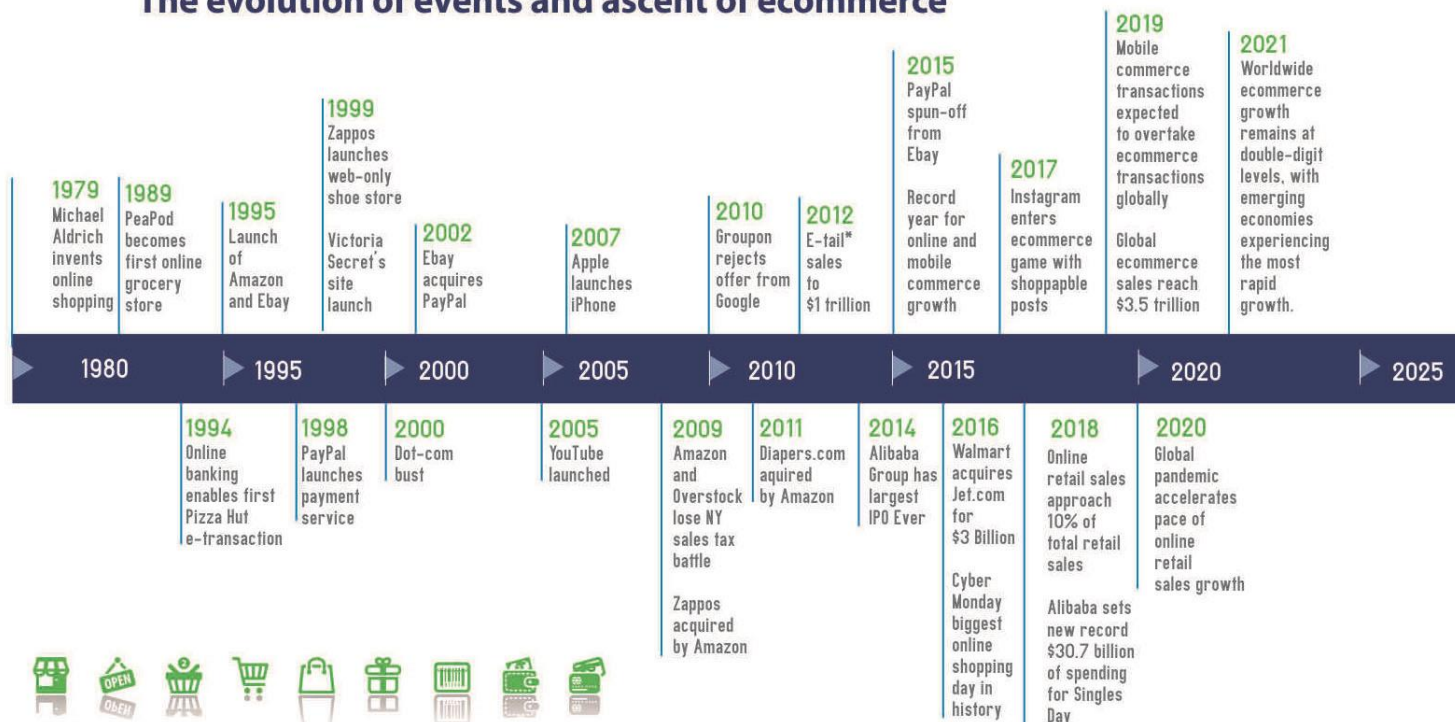
In 1979, the British inventor Michael Aldrich was credited with being the official “inventor of ecommerce.” Aldrich connected a television and a telephone line and invented “teleshopping” or shopping at a distance. Meanwhile in the United States, infomercials (paid television advertisements) gained popularity, paving the way for the first cable home shopping channels. Finally, the internet came along and changed the way we shop forever.

Here’s a brief timeline highlighting some of the historical milestones that cleared the path for modern day e-retail commerce:

History of Online Retail

Major Milestones

The evolution of events and ascent of ecommerce



Online Retail Value Proposition

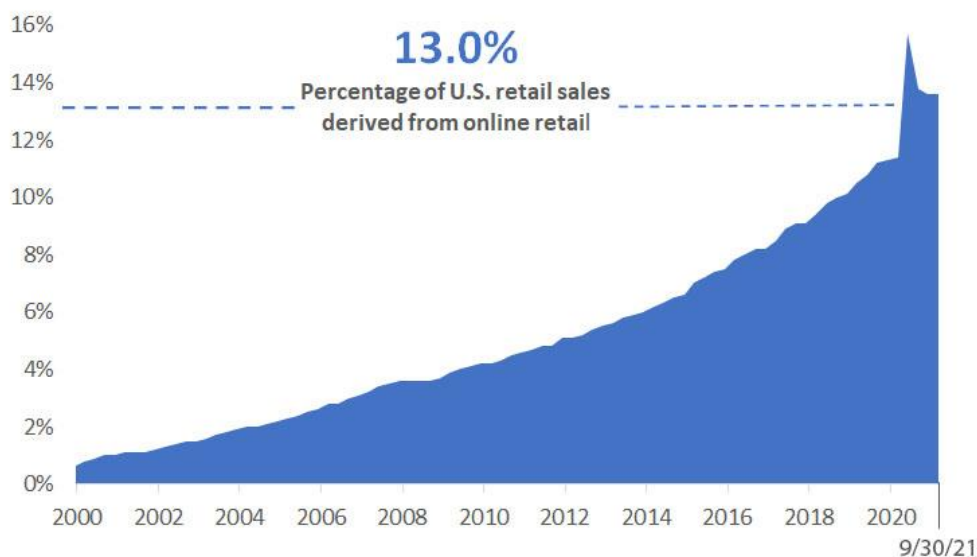
Several key benefits serve as the driving forces behind the growth of ecommerce. These benefits have proven to be valuable for businesses, consumers, and society as a whole.

Business	Consumer	Society
Lower costs associated with not having a physical presence	Enhanced product selection	Less traffic and crowds
Automated inventory management	No geographic sourcing boundaries	Price competition and democratization of selection
Customer analytics	Competitive pricing, virtual auctions	Expanded access to rural areas
Unlimited geographic	Convenience of shopping	Shopping and delivery
Open for business 24/7/365	Time savings for consumers, one-stop shopping	Facilitated delivery of public services, such as education and health care
Reduced advertising and marketing costs	Customer reviews and social input	Global in scope
Scalability, fewer employees	Delivery options	Eco-friendly

Source: EQM Indexes

Growing Global Opportunity

Given the superior benefits online and virtual commerce provide, it is no wonder that this channel has grown at a superior pace than traditional retail. U.S. ecommerce sales now represent 13.0% of total retail sales, after declining slightly from its pandemic lockdown peaking the second quarter of 2020.²



Source: U.S. Department of Commerce Quarterly Retail E-Commerce Sales 3rd Quarter 2021, Reported 11/18/2021

Globally, ecommerce is also growing at a rapid pace, with year-over-year percentage growth of 16.3% in 2021, with sales of more than \$4.9 trillion in 2020, up from \$3.3 trillion in 2019 pre-pandemic. This year in 2022, it is forecasted that ecommerce's percentage of total retail sales worldwide will surpass the 20% mark.³

While U.S. online retail sales comprise only 13% of total retail sales⁴, other large ecommerce markets such as the United Kingdom and China have a much higher proportion of online-to-total retail sales. In addition to the U.S. market, here are some of the other top global markets for ecommerce:

- **China** – China is the world's biggest ecommerce market led by companies such as Alibaba Group and JD.com and sites such as Taobao, TMall and others, with global retail ecommerce sales penetration of 50.2% in 2021.⁵ China's ecommerce market is driven by popular sales events like Alibaba's Singles' Day, the world's largest 24-hour

² US Census Bureau, *Quarterly Retail E-Commerce Sales 3rd Quarter 2021*, November 18, 2021, <https://www2.census.gov/retail/releases/historical/ecommm/20q4.pdf>

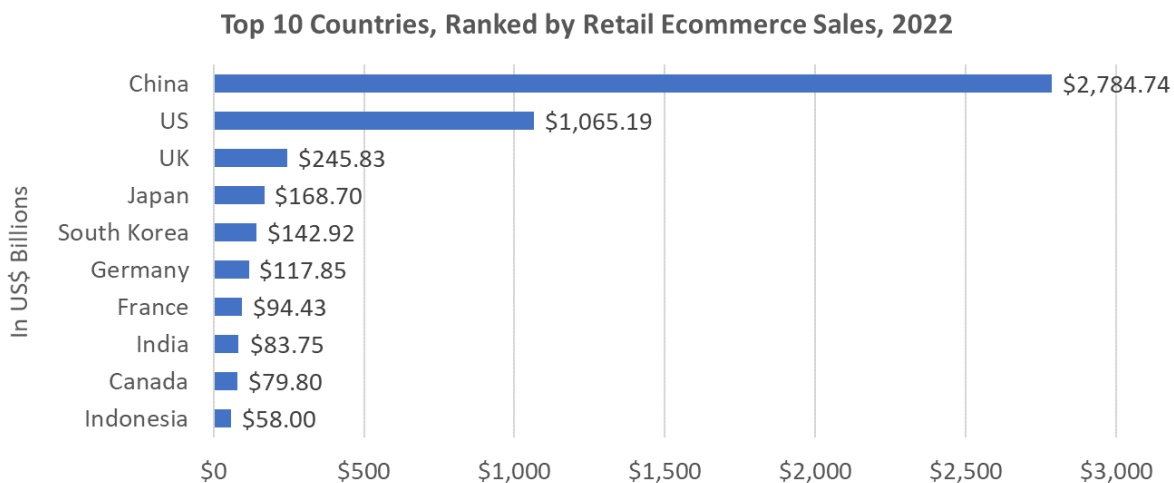
³ Cramer-Flood, Ethan, *Global Ecommerce Forecast 2022*, eMarketer Insider Intelligence, Feb 2022

⁴ https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

⁵ eMarketer *Insider Intelligence*, January 2022

shopping event which generated \$139 billion in record sales alone⁶, China's ecommerce sales totaled almost \$2.5 trillion in 2021.

- **United Kingdom** – Despite its small size, the United Kingdom is a big player in the area of ecommerce, securing third position with \$234.6 billion in annual sales last year. Amazon UK, eBay UK, Asos, Currys PC World, Gumtree, Argos and John Lewis are some the U.K.'s biggest ecommerce sites.⁷ Moreover, the country has one of the highest ecommerce sales percentages at 36.3% of total retail sales in 2021.
- **Japan** – The fourth largest ecommerce player in the world, Japan is the leading mobile commerce (m-commerce) player. Rakuten, Mercari, and Yahoo! Japan are some of Japan's leading ecommerce platforms. Annual online sales are \$164 billion, and it ranks among the fastest-growing globally, boosted by a developed economy, highly urbanized population, 93% internet penetration and single-language culture. Japan's ecommerce businesses also benefit from the small country size and excellent infrastructure, allowing for rapid delivery.⁸
- **South Korea** – South Korea has emerged as the fifth largest global player in online retail, where 32.2% of retail purchases are made online. The biggest online retailer in Korea is coupang.com, followed by private company ssg.com, and yes24.com. Together, these 3 stores account for more than 15% of the online sales revenue in South Korea.
- **Germany** – Germany is Europe's second largest ecommerce market with \$109.6 billion insales in 2021, behind the United Kingdom. Amazon has a good foothold in the German market, similar to the U.K. market. eBay also has a large presence in Germany.



Source: eMarketer Insider Intelligence, January 2022

⁶ Singles' Day, Wikipedia.

⁷ Top 10 Ecommerce Sites in the UK, 2019, <https://ecommerceguide.com/top/top-10-ecommerce-sites-in-the-uk/>

⁸ Gillani, Amyn, Japan: An Overlooked E-Commerce Opportunity, April 6, 2020, <https://www.entrepreneur.com/article/348787>

Ecommerce has emerged as a global shopping phenomenon. From Cyber Monday to Singles Day, here are some of the year's busiest online shopping days around the world.

Top 10 Global Spending Days

Online Retailers Get Greater Share of Total Retail Sales

Global e-commerce sales surpassed **\$4.9 trillion** in 2021.

Thanks to its convenience, price, selection, and rapid delivery options, online shopping has transformed the way we shop.

Here's a list of some of the biggest cyber shopping days around the globe.

Globally, **online sales** have grown at an **annual rate of 20%**, versus only 5% for retail.

GLOBAL SHOPPING CALENDAR

JANUARY 1

NEW YEAR'S DAY

As the holiday shopping season comes to a close, many more shoppers are spending those gift cards online.



FEBRUARY 8

CHINESE NEW YEAR

The Chinese New Year or Spring Festival is a 15-day holiday celebrated by a number of countries in Asia. Cleaning before the New Year is a tradition, followed by the need to shop for new purchases to ring in the new year.



FEBRUARY 14

VALENTINE'S DAY

Western cultures celebrate with the purchase of items such as flowers, chocolates, and jewelry. In 2021, an increasing amount of "love dollars" were spent using mobile devices.



MARCH-MAY

MOTHER'S DAY

In Brazil, it is the second most profitable day for online retailers. In 2021, Mother's Day online sales generated \$6.4 billion R\$, an increase of 73%.



MID-OCTOBER

DIWALI

India's 5-day Diwali festival celebrating the victory of light over darkness, has become a big online shopping period. This year's Festive Sale saw Amazon, Flipkart, Snapdeal, and Myntra battling for ecommerce market share.



NOVEMBER 11

SINGLES DAY

Singles Day, China's 24-hour online shop-a-thon held every year since 2009, generated \$139 billion in sales in 2021 for Alibaba and JD.com.



LATE NOVEMBER

THANKSGIVING

Thanksgiving Day marks the traditional start of the U.S. holiday shopping season. A growing number of shoppers are opting to stay home, eat turkey, watch football, and shop online. In 2021, ecommerce sales surpassed \$5 billion for the first time.



DAY AFTER THANKSGIVING

BLACK FRIDAY

Black Friday, the traditional U.S. holiday shopping day which falls the day after Thanksgiving, has now spread to many countries around the globe. Online shoppers spent a total of \$8.8 billion in 2021, just shy of the \$9 billion mark hit during 2020.



MONDAY AFTER
THANKSGIVING

CYBER MONDAY

Created originally to get more people to shop online, Cyber Monday has become the biggest U.S. online holiday shopping day of the year. Consumers logged Cyber Monday sales of \$10.7 billion in 2021.



DECEMBER 26

BOXING DAY

Boxing Day is traditionally a day synonymous with discounts and savings for UK consumers. Omicron concerns cut foot traffic by 44%, as shopping moved online.

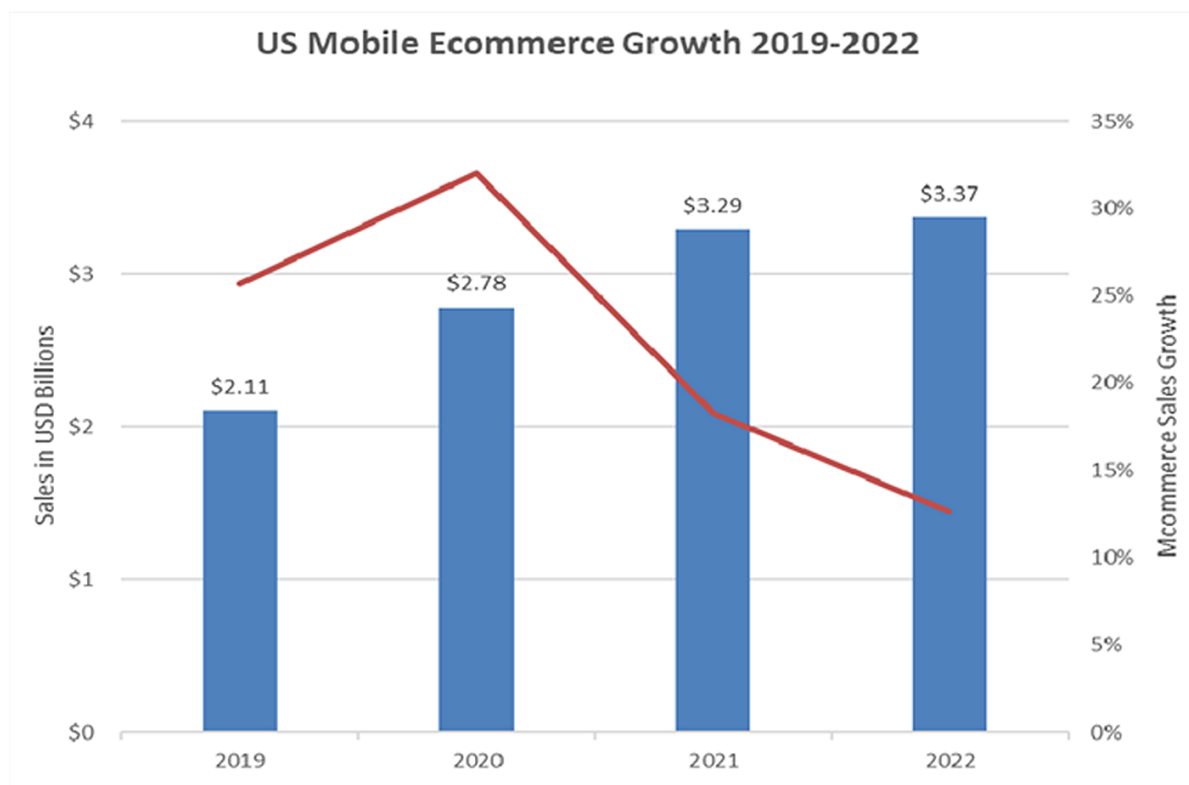


ONLINE COMMERCE

Sources: 8/oomreach, Statista, RedSeer, Alibaba, Adobe Analytics, SimilarWeb

Expanding Internet and Mobile Penetration

Mobile commerce sales reached \$3.2 trillion in 2021, an annual increase of 18% which represents almost 65% of all online purchases.⁹



Source: eMarketer Insider Intelligence, January 2022

Bigger screens, engaging mobile shopping applications and secure payment options have helped encourage mobile commerce growth. Mobile has exploded as a shopping channel, not just from a traffic standpoint, but in terms of sales and dollar growth.

More than 65.6% of the world now has access to the internet and that opportunity set has rapidly expanded with 83.89% also having access to a smartphone, allowing consumers to shop online anywhere, anytime.¹⁰

⁹ Retail M-Commerce Sales Worldwide, eMarketer Insider Intelligence, Jan 2022.

¹⁰ Internet World Stats, 2021 Q1 Estimates, <https://www.internetworldstats.com/stats.htm> and bankmycell.com.

The growth of mobile ecommerce in China, now \$2,068 billion in market size, is a prime example of mobile commerce's potential.¹¹ China's more than 1 billion WeChat users can make purchases on their smartphones using WeChat Pay without leaving the messaging and social commerce platform. More than 18% of these mini-program sites are devoted to ecommerce.¹² China generated \$299.7 billion in social commerce sales in 2021.¹³

Brands, retailers and ecommerce can design a customer-user interface with pictures, videos and GIFs to increase user engagement. These mini-program stores provide access to customer data and promote organic sharing, reducing new customer acquisition costs. For example, China e-retailer Pinduoduo utilizes group-buying promotions to encourage sharing among customers.

Technological Innovation

While mobile penetration is a big driver of current online retail growth, future technological innovations such as seamless and secure methods of electronic payment, voice-assisted shopping, virtual and augmented reality and artificial intelligence will take the online shopping experience to the next level and further drive market expansion.



+ Electronic Payments

Many consider the Uber and Lyft models as the proverbial “gold standard” for invisible payment that digital commerce players want to replicate. In the future, payment will be something that just happens seamlessly in the background without much thought or input from the consumer. As a nation of smartphone users, China has quickly adopted digital-wallet brands such as Alibaba's Alipay and Tencent's WeChat Pay, which are now used to pay for most of their ecommerce purchases.

¹¹ eMarketer Insider Intelligence, Feb 2022.,

¹² Chu, Franklin. *Why China ecommerce is going crazy for WeChat mini-programs*, April 16, 2019, Digitalcommerce360, <https://www.digitalcommerce360.com/2019/04/16/why-china-ecommerce-is-going-crazy-for-wechat-mini%E2%80%91programs/>

¹³ eMarketer, January 2021.

+ Voice-Assisted Shopping

According to Voicebot Research, figures for voice-assisted shopping rose to 45.2 million consumers in 2021 reflecting 120% growth and a compound annual growth rate (CAGR) of 30%.¹⁴ Voice-enabled speakers like the Amazon Echo and Google Home devices also have “push” capabilities, making recommendations based on past purchases and/or customer data.¹⁵

+ Virtual and Augmented Reality

Virtual and augmented reality is another promising growth driver as online shopping aims to marry the “real-life” shopping experience with the convenience of ecommerce on mobile devices. Already, consumers can use their smartphones to visualize product purchases like furniture in their home.

+ Artificial Intelligence

Accounting for an impressive 35% of its overall sales revenue, artificial intelligence (AI) product upselling and cross-selling on Amazon’s ecommerce platform, is a major success story. AI is also being used in ecommerce for providing chatbot customer service, analyzing customer comments, and personalized shopping services. Research firm Gartner forecasts that 80% of all online customer interactions will be managed by AI technologies.¹⁶

Investment Case

Despite the recent acceleration of online commerce spurred by the global pandemic, online retail still makes up a relatively small part of total retail sales at 19%, per the latest global statistics for 2021.¹⁷

Research firm eMarketer Insider Intelligence forecasts that global retail ecommerce sales will grow 12.2% in 2022, generating more than \$5.5 trillion in ecommerce sales. Southeast Asia is expected to exhibit the fastest retail growth in 2022, followed closely by Latin America, at 20.6% and 20.4% respectively.

¹⁴ Kinsella, Brent, *Voice Shopping Rises to 45 Million U.S. Adults in 2021*, Voicebot.ai, December 24, 2021.

¹⁵ Shukairy, Ayat. *The State of Voice Shopping – Statistics and Trends*, Invesp, <https://www.invespcro.com/blog/voice-shopping/>

¹⁶ *How Artificial Intelligence is transforming the E-commerce Industry*, Countants, May 9, 2019, <https://medium.com/@Countants/how-artificial-intelligence-is-transforming-the-e-commerce-industry-countants-scalable-custom-73ae06836d35>

¹⁷ eMarketer Insider Intelligence, Feb 2022

In terms of the fastest growing countries, emerging market economies are exhibiting rapid growth spurred by the pandemic. In order of sales growth, the Philippines, India, Indonesia, Brazil, and Vietnam are expected to achieve the highest sales growth in the coming year.

Top 5 Countries, Ranked by Retail Ecommerce Sales Growth, 2022
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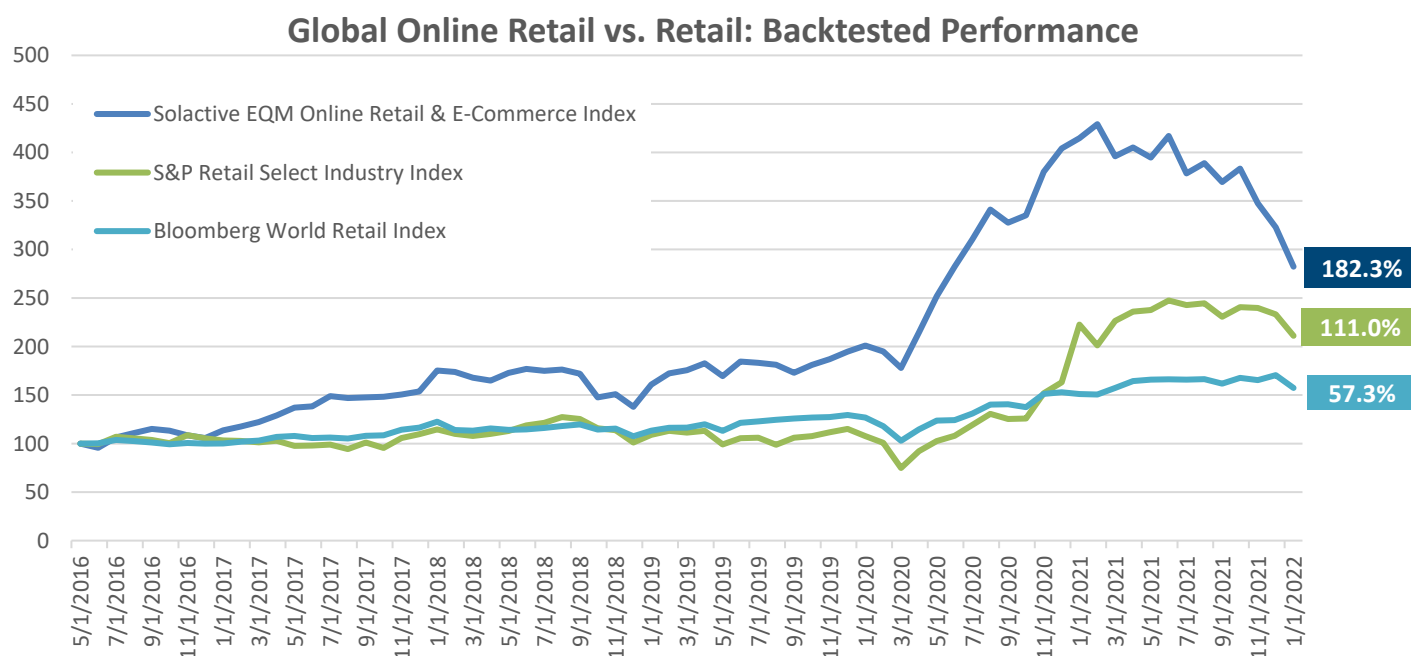
Source: eMarketer, Dec 2021

Explicit exposure to ecommerce retail may provide investors with access to superior growth characteristics than traditional brick-and-mortar retail holdings. A universe of global online retail stocks, as represented by our global online retail indexes, exhibits better long-term earnings growth estimates than traditional retail indices.

Growth Characteristic	Solactive EQM Online Retail & E-Commerce Index	S&P Select Retail Index	Bloomberg World Retail Index
Bloomberg Est LTG EPS	41.68%	17.40%	15.77%

Source: Bloomberg Estimates as of 2/7/2022

Over the last five years, the investment performance of the Solactive EQM Online Retail & E-Commerce Index relative to traditional retail indexes has also been superior, reflecting these earnings and sales expansion.



Source: Bloomberg, as of 2/15/2021

Online shopping is expected continue growing at a fast clip globally, given the continued expansion of internet access and mobile penetration, as well as the introduction of new technological innovations that will further enhance the online shopping experience. Furthermore, the pandemic has accelerated the pace of growth and consumer adoption of new channels such as online grocery, meal delivery, and subscription services.

Over the past year, the bifurcation in retail between the brick-and-mortar traditional retailers, “**the bricks**” and online retailers, “**the clicks**,” has been quite pronounced. Retail bankruptcies have skyrocketed over the last few years, being coined the “retail apocalypse.”¹⁸ Starting in 2010 until today, numerous brick-and-mortar retail stores, especially those of large chains worldwide, have been forced to close.

¹⁸ Retail Apocalypse, Wikipedia, last edited October 26, 2020, https://en.wikipedia.org/wiki/Retail_apocalypse

In 2021, in the pace of retail bankruptcies slowed, as retailers that faced the first wave of the pandemic were able to raise capital at low interest rates while consumer spending was strong. Only 8 retailers filed for bankruptcy in 2021, after 30 failed in 2020.

In 2017, a Business Insider report dubbed this phenomenon as the “Amazon Effect”, calculating that Amazon.com was generating more than 50% of the growth in retail sales.¹⁹ Amazon’s global ecommerce sales were \$325 billion in 2021, with their online stores business up 12.5% over 2020’s peak pandemic levels, as consumers continue to rely heavily on ecommerce due to COVID-19. However, there is recent evidence that as the pandemic has pushed many more consumers online, they are not all going to Amazon, to the benefit of other online sites and categories.²⁰

The broader theme in play is the transformation from the physical world to the virtual world, a theme that is not limited to retail and has impacted other sectors and industries. Below are some of the biggest beneficiaries of this theme:



Source: EQM Indexes

One could argue, as consultant Deloitte does, that the retail apocalypse is really a retail “renaissance.”²¹ A renaissance upends many of the ideas and conceptions that have long governed human behavior, uprooting traditions, institutions, and habits of thought. The rapid growth and expansion of retail ecommerce has led many to proclaim, “the mall is dead.”

But we see it differently.

¹⁹ Taylor, Kate, *One statistic shows how much Amazon could dominate the future of retail*, Business Insider, November 1, 2017, <https://www.businessinsider.com/retail-apocalypse-amazon-accounts-for-half-of-all-retail-growth-2017-11>

²⁰ David, Don, *Amazon’s share of US online retail revenue dips slightly in Q3*, November 3, 2020, Digital Commerce 360, <https://www.digitalcommerce360.com/2020/11/03/amazons-share-of-us-online-retail-revenue-dips-slightly-in-q3/>

²¹ *The great retail bifurcation*, Deloitte Insights, 2018, https://www2.deloitte.com/content/dam/insights/us/articles/4365_The-great-retail-bifurcation/DI_The-great-retail-bifurcation.pdf

The renaissance of retail in online shopping offers consumers a wider selection of merchandise, better prices, and a superior level of convenience. The mall isn't dead, it has just moved online.

*“The mall isn’t dead, it
has just moved online.”*

– EQM Indexes

Conclusion

In our view there are many reasons to own a basket of global stocks directly focused on online retail sales:

- Get explicit investment exposure to the fastest growing global segments of online commerce: online retail, online marketplace, and online travel.
- Participate in the exciting growth potential fueled by the technological innovation driving the “retail renaissance.”
- Gain access to the online-retail growth opportunities worldwide.

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DEFINITIONS²²

Alpha – The excess return of an investment relative to the return of a benchmark index.

Artificial Intelligence – The intelligence demonstrated by machines.

Biometrics – Unique physical characteristics, such as fingerprints, that can be used for automated recognition.

Blockchain – A distributed database that is shared among the nodes of a computer network.

Digital Wallet – A software-based system that securely stores users' payment information and passwords for numerous payment methods and websites.

E-commerce – Buying and selling of goods via the internet.

M-commerce – Commercial transactions via wireless handheld devices, such as cellphones and laptops.

Near-Field Communication (NFC) - A set of communication protocols that enables communication between two electronic devices over a specified distance.

Quick Response (QR) Code – A type of matrix bar code typically made up of black and white pixel patterns.

Unbanked – Those who are not served by a bank or financial institution.

Underbanked – Those who have a bank account, but often rely on alternative financial services, such as money orders, check-cashing services, and payday loans to manage their finances and purchases.