

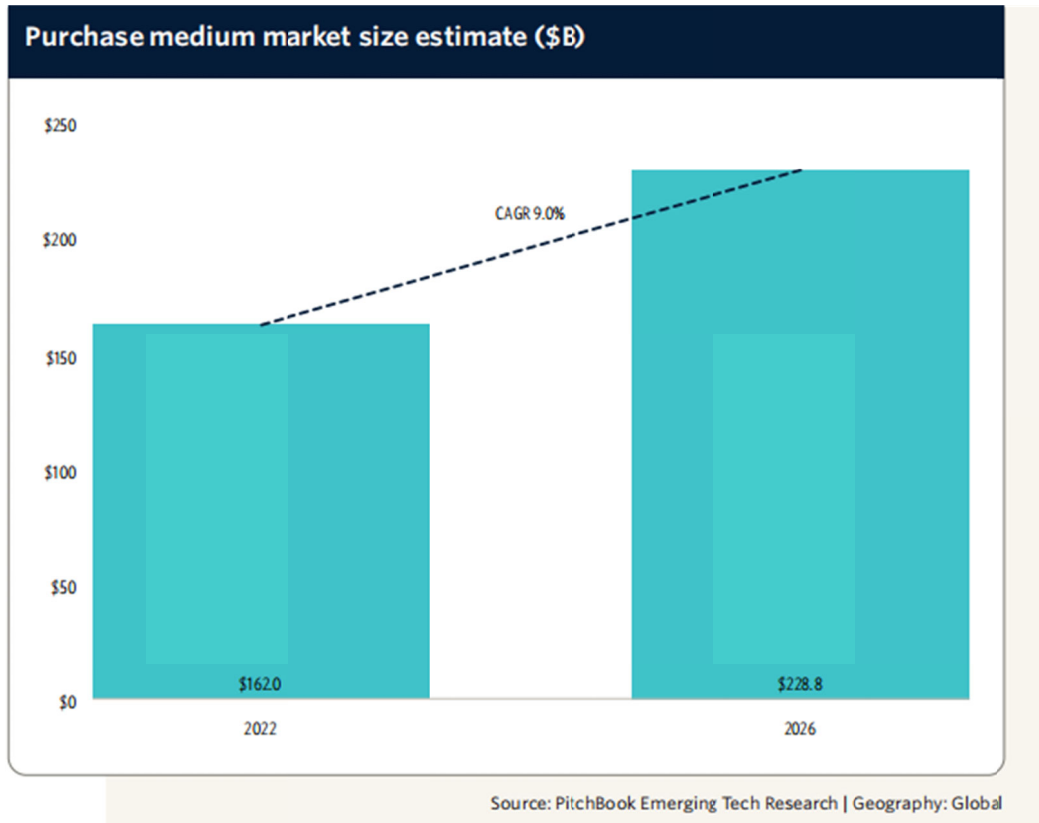
## E-Commerce Semi-Annual 2022 H2 Report

### Executive Summary

E-commerce grew rapidly during the epidemic, but in the second half of 2023, it halted. People largely utilized mobile devices to access the internet, and TikTok and Instagram transformed how they purchase. AI-driven tailored marketing and customization increased customer engagement and conversion rates. Membership models in beauty, fitness, and entertainment show that people want recurring money. However, this shifting environment presents challenges and opportunities. Inflation reduces consumer spending, thus e-commerce enterprises require value-based initiatives. In a crowded market, unique events and innovative goods are required. To address data privacy concerns, users must create trust and make data collecting obvious. Improving transport networks and processing may save costs and boost customer satisfaction. AR and VR provide more realistic purchasing experiences.

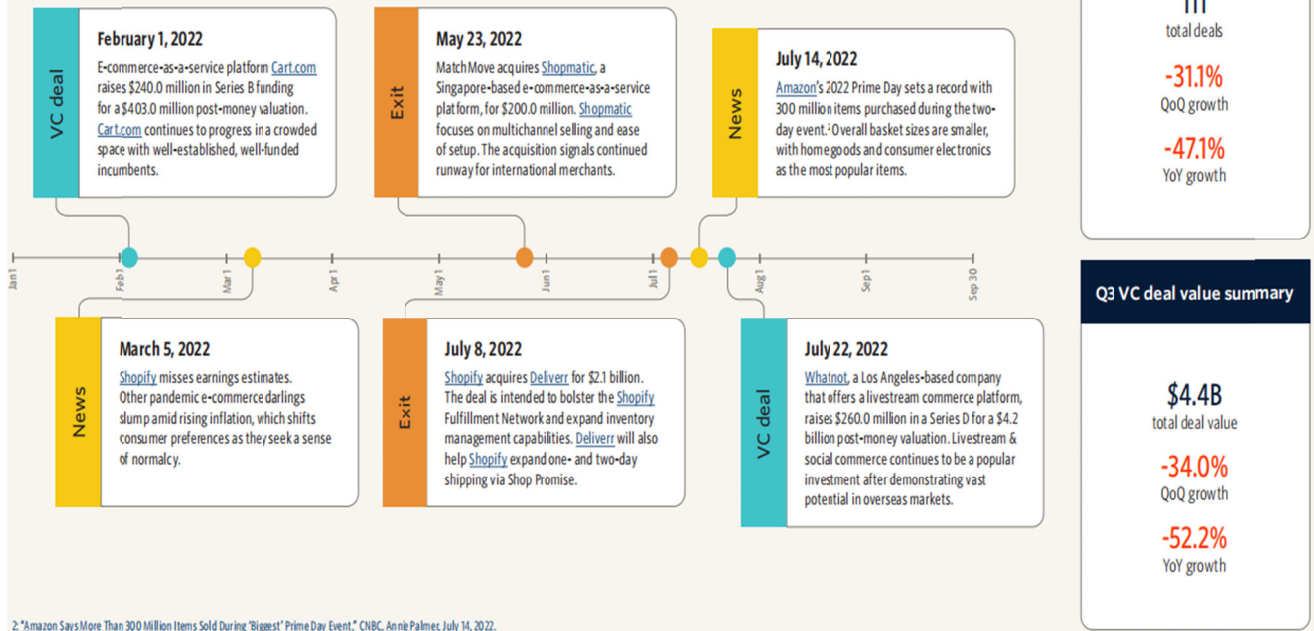
### Market Overview

A worldwide economic roller coaster was the e-commerce industry in the second half of 2023. While there was a little slowdown after the epidemic, the industry nonetheless shown remarkable resilience by continuing to rise despite price spikes, supply chain issues, and general economic uncertainty. In 2023, the worldwide e-commerce sector will be worth an estimated \$3.099 trillion, according to Statista. According to PitchBook and other sources, the industry is expected to reach US\$5.026 trillion by 2028, which is an impressive CAGR of 9.0% (Q4 2022 E-Commerce Report). A more nuanced picture is shown, however, by variations among locations. The global average growth rate is slower than that of emerging regions, such as Latin America and Southeast Asia. More and more individuals are going online and utilizing their phones, which is the reason for this. North America and Europe, which are relatively stable regions, exhibit a more moderate but consistent increase.



From \$13.8 billion in 2020 to \$34.5 billion in 2021, the total amount of worldwide venture capital invested in startups that allow e-commerce increased by almost three times. In Q3 2022, US e-commerce sales were expected to surpass \$1 trillion, while venture capital investment was predicted to surpass \$20 billion during the same quarter. Some of the inventions built on early technology are beginning to develop as this sector grows, making way for new enabling technologies with even more growth potential. While early-stage fundraising momentum is being gathered by livestream & social commerce and virtual & augmented reality shopping experiences, late-stage capital flows are primarily going to headless-commerce platforms, e-commerce-as-a-service providers, buy now, pay later (BNPL) solutions, and one-click checkout technologies.

## Q1-Q3 2022 timeline

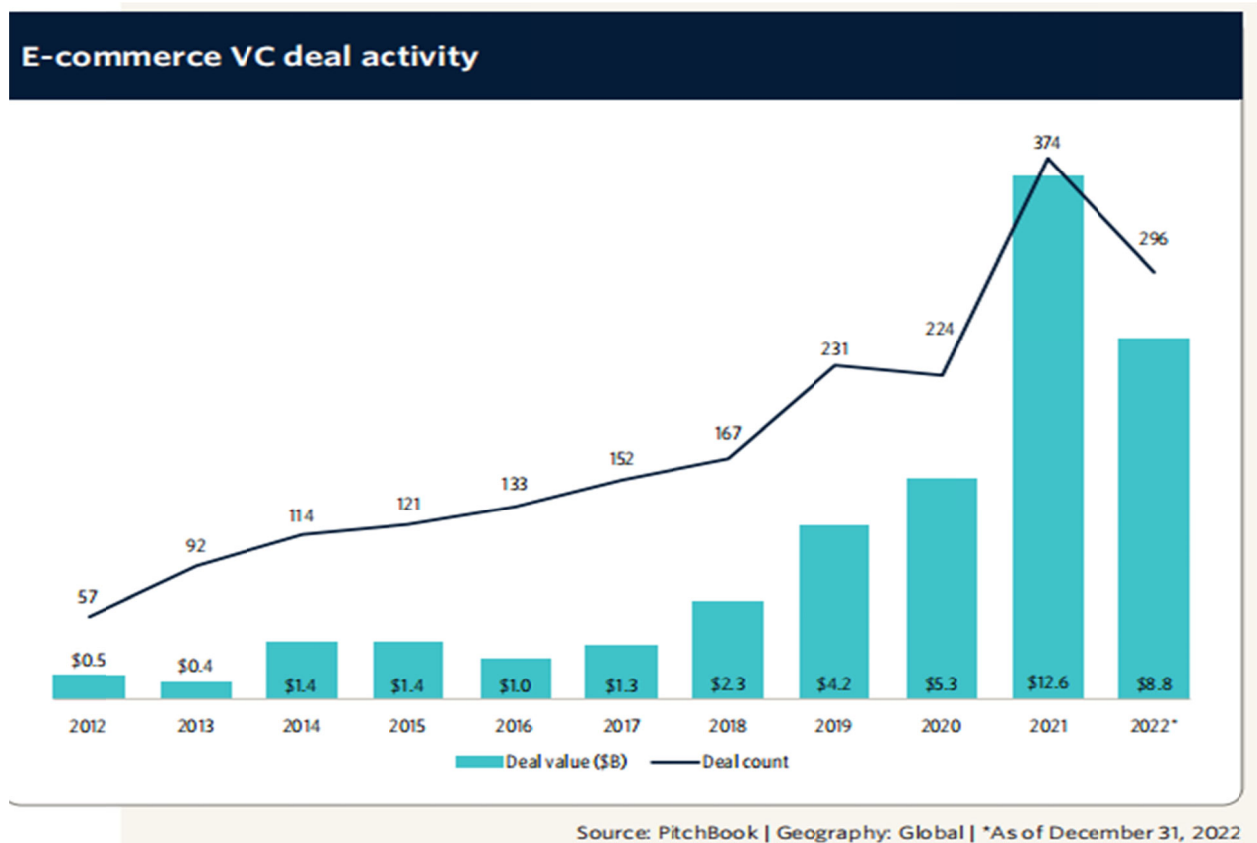


### Vertical overview

E-commerce enablement solutions assist online merchants handle prepurchase product discovery, purchase venues, channels, postpurchase experiences, and horizontal platforms. Technology abounds in this environment. It integrates B2B and D2C business paradigms with finance, supply chain tech, and AI & ML innovation. Starting in Q4 2021, e-commerce transaction activity declined in Q4 2022. In Q4, e-commerce enablement startups raised \$1.0 billion, down 42.1% QoQ and 59.7% YoY. Deal value and count increased significantly from 2019 to 2020. International market volatility, high interest rates, and investor focus on profitability caused the QoQ regression. Exit activity was also down from 2021. After the COVID-19 pandemic, digitalization and e-commerce adoption accelerated, but merchants are seeing prepandemic growth rates, increased acquisition prices, and recession risk.

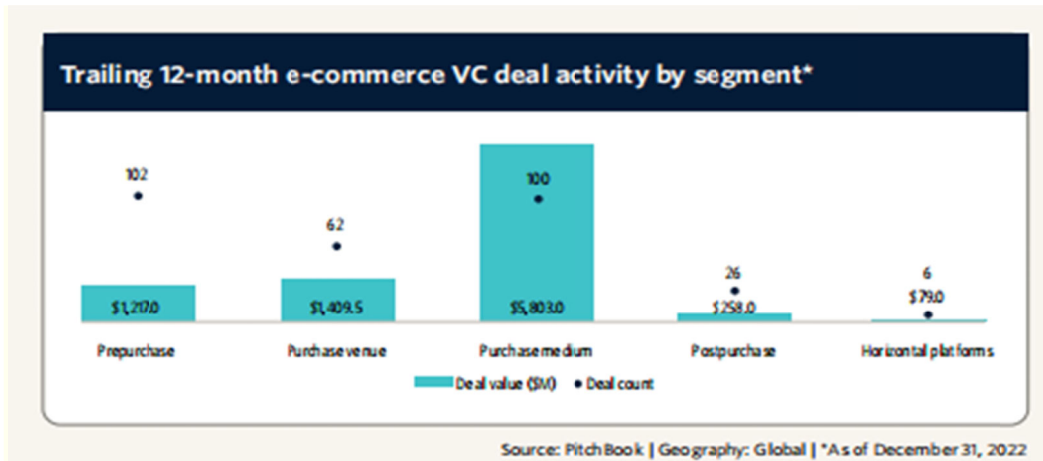
In 2022, Americans spent \$1.09 trillion online. E-commerce uses mature and new technology. Livestream & social commerce and virtual & augmented reality shopping experiences are attracting early-stage capital, while headless commerce platforms, e-commerce-as-a-service providers, BNPL solutions, and one-click checkout technologies are attracting late-

stage capital. Rising client acquisition expenses and uncertainty about consumer attribution after iOS 14's privacy focus are also spurring innovation. In a crowded market with serious competition from Shopify and Amazon, investors want category-defining startups.

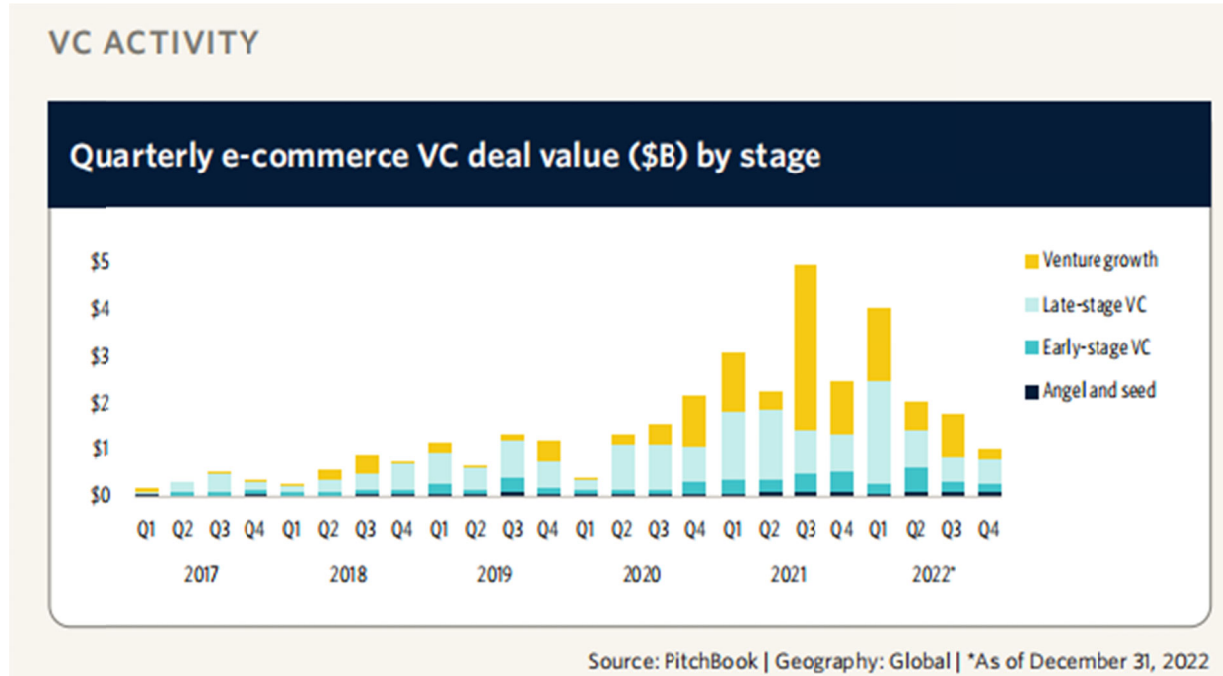


#### VC activity-Q4

Q4 2022 saw \$1.0 billion in investment across 77 transactions for e-commerce, ending 2022 on a low transaction count rose 51.0% while transaction value declined 42.1% QoQ. This indicates a sustained decrease in funding since Q4 2021. The purchase medium and venue categories received the most financing, with \$447.5 million and \$271.2 million, respectively, driven by strong payment and storefronts and headless API funding.

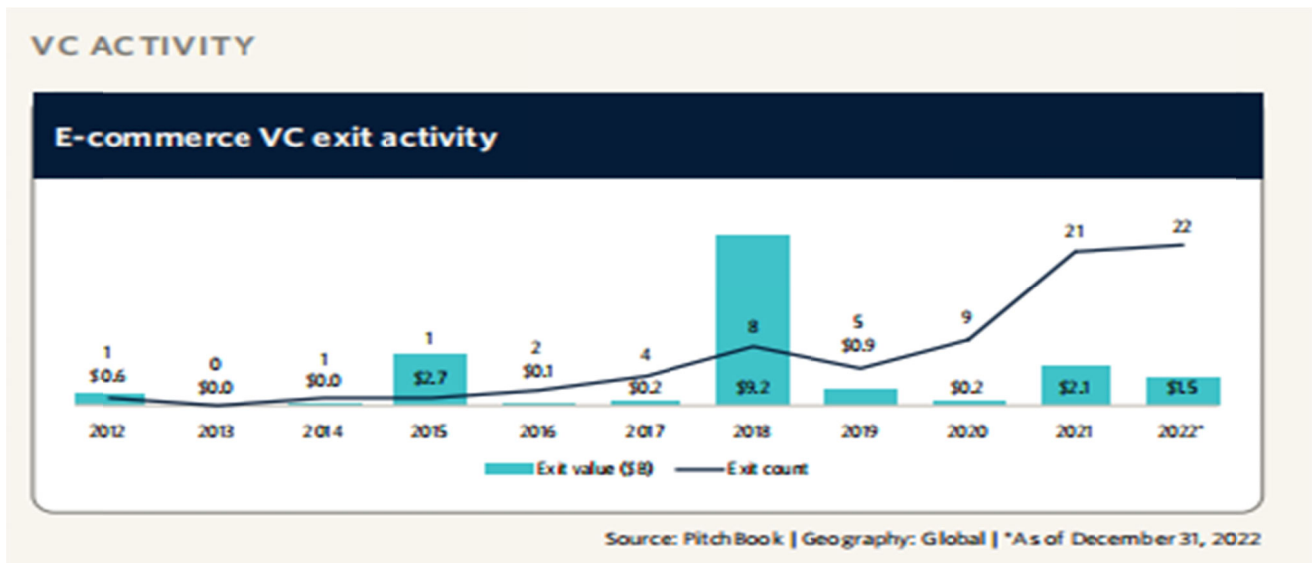


Next in transaction value were \$152.6 million postpurchase startups. In Q4, notable VC investments include Loop Returns' \$114.6 million Series B, ConnexPay's \$109.8 million Series C, and Airwallex's \$100.0 million Series E. End-2022 exits fell YoY and QoQ. In Q4, there were five departures of unknown value, compared to seven exits totaling \$400.0 million in Q3. Overall, 2022 saw \$1.5 billion in exits from 23 agreements. Q4 2021 exit value of \$1.1 billion almost matched 2022's yearly total.

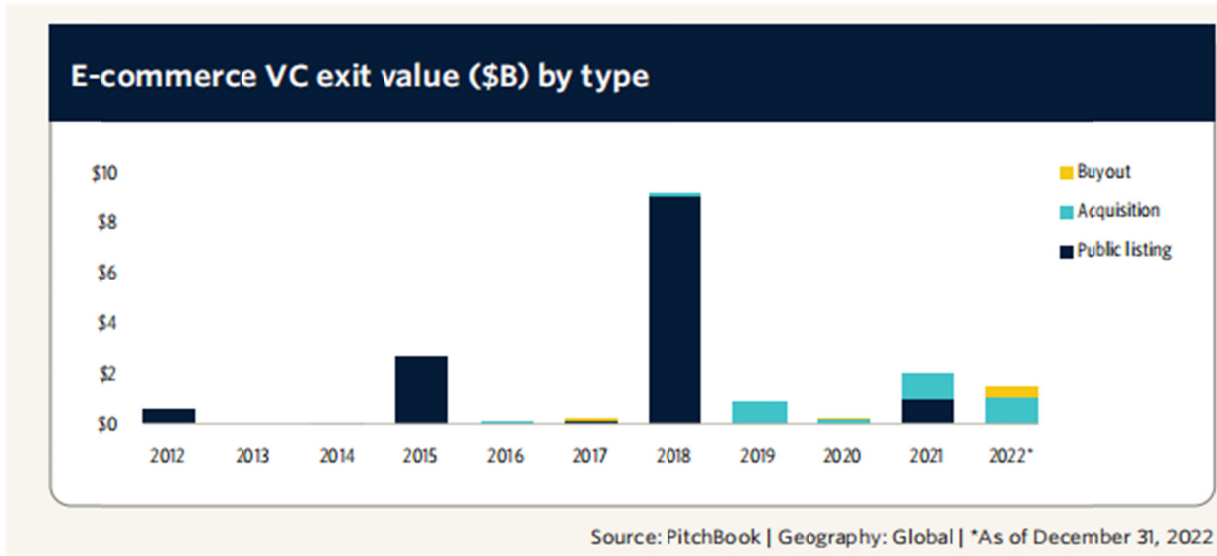


E-commerce merchants face challenges such as intense competition, rising customer acquisition costs, shrinking margins, and the possibility of an economic recession, despite high

consumer spending on e-commerce. Pre-money values increased upstream, except for late-stage acquisitions, which plunged 45.1%. Venture-growth agreements had a 53.6% rise but also significant value swings during the early 2010s. Pre-money values have increased across all phases since 2018.

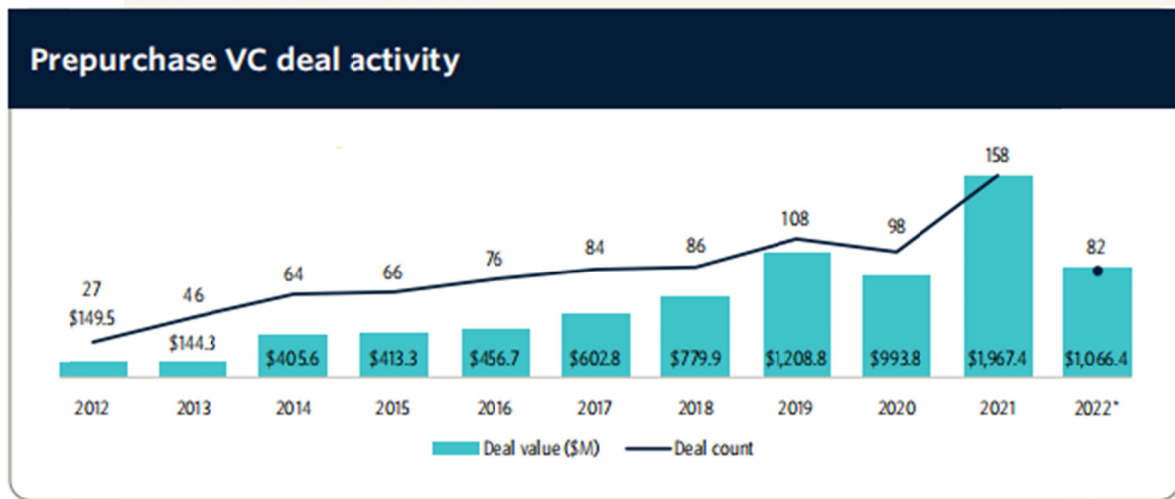


This fall is linked to increasing interest rates, lower M&A activity, and a wide IPO window closing. YoY purchase values were virtually equal, with \$1.0 billion in 2021 and \$1.1 billion in 2022, but just one public offering occurred in 2022. In Q4, notable departures include Perfect Corp's \$1.3 billion reverse merger, StyleSage and PlumSlice Labs purchases, and Pixlee TurnTo and Openbravo buyouts.



### VC activity-Q3

Q3 2022 had considerable VC activity, although it was well behind 2021's record. Venture capital raised \$1.1 billion in 82 transactions. Just about half of 2021's 158 transactions and \$2.0 billion raised. However, 2022 matches 2020's 98 agreements and \$993.8 million raised. The previous record was 98 transactions and \$1.1 billion raised in 2019. The biggest transaction in this sector was Salsify's \$200.0 million Series F led by TPG, worth \$2.0 billion post-money. Summit Partners led Akeneo's \$135.0 million Series D, the second-largest financing and a 1.3x value increase. This part of the e-commerce enabling ecosystem has grown steadily over a decade. Deal volume increased 200% in 2022 compared to 2012.

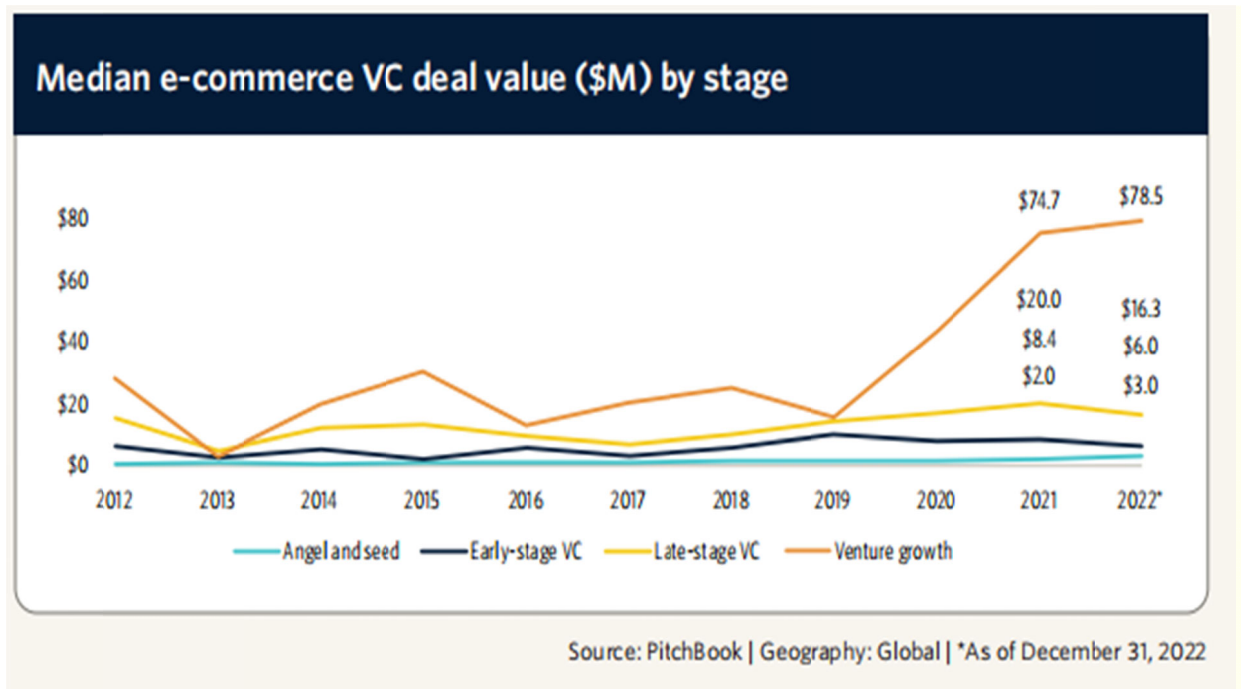


Source: PitchBook | Geography: Global | \*As of September 30, 2022

#### Fundamental Driving Forces: Catalysts for Continued Ascent

Mobile platforms dominate e-commerce traffic, making them crucial shopping partners. Seamless social commerce integration on TikTok and Instagram has changed purchasing patterns and increased sales. The wonder of AI transforms client experiences. AI-powered product suggestions and marketing campaigns boost engagement and conversions (Brendan n.d.). These hyper-individualized approaches are essential to keeping loyal clients in a competitive market. Inflation and recession threats are real. Value-driven and budget-conscious purchasing is changing consumer habits. Despite the economic recession, internet platforms' ease and affordable prices entice clients. The global e-commerce industry has survived economic uncertainty. The sector's growth is assured by core driving factors and smart adaptation to economic realities. In the changing e-commerce environment, embrace change, adapt to trends, and prioritize customer experience (Song et al., 2019).

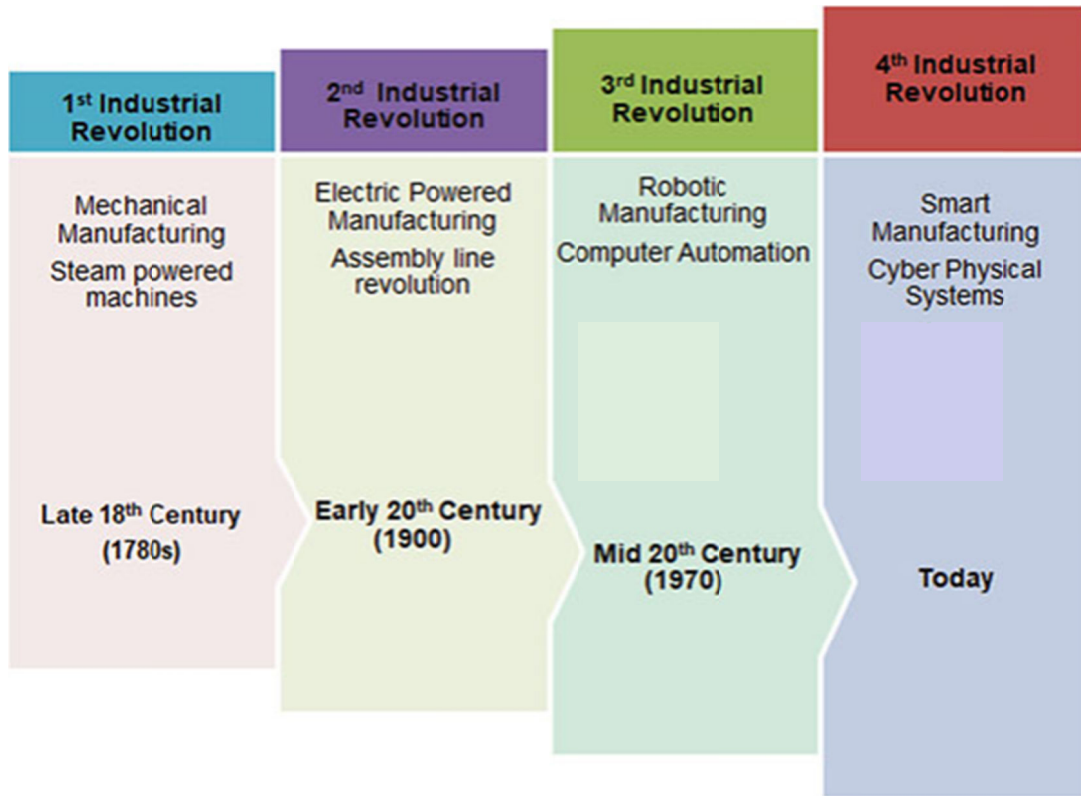




As virtual consumers and companies grow, omnichannel systems requiring hardware and software interoperability will prioritize electronic commerce developments. In an age where information exchange is programmed and electronic commerce trumps brick and mortar, understanding the drivers of e-commerce system development is crucial to meeting industrial revolution needs (Mohdhar et al., 2021).

### Technological advancements

The way people use goods is about to change because of augmented reality (AR) and virtual reality (VR). Also, the way people shop online is going to change. With Snap Inc.'s visual search technology and virtual shops, you can get a full experience of a product, which makes it harder to tell the difference between shopping online and down the street. For the next few years, the most important things in e-commerce will be mobile apps, custom clothing, and new technologies. Companies that adapt to new times and pay attention to customer needs will do very well.



Source: The Future of E-Commerce Systems: 2030 and Beyond

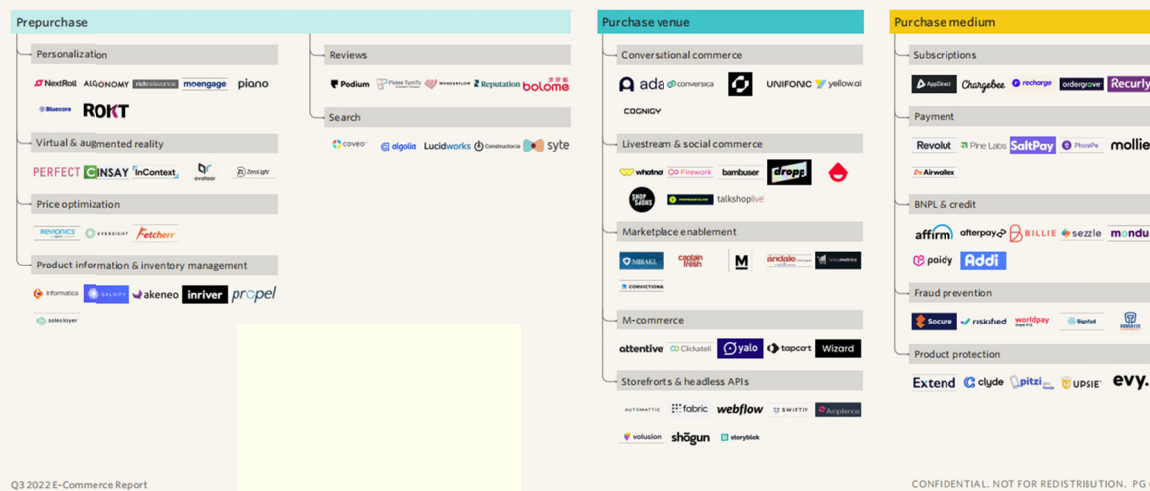
### Key Trends and Insights

E-commerce changed drastically in the second half of 2023. In the second part of the year, social commerce platforms like TikTok and Instagram took traction since they allow you purchase more and utilize celebrities to promote your brand. Due to their ease of use, these platforms transform how consumers purchase and boost sales, particularly among Gen Z and younger buyers. Smartphones and tablets drive most online retail traffic. Apps with unique experiences and simple checkout are essential in this competitive industry.

## E-commerce VC ecosystem market map

Click to view the interactive market map on the PitchBook Platform.

Market map is a representative overview of venture-backed or growth-stage providers in each segment. Companies listed have received venture capital or other notable private investments.



### Challenges and Opportunities

H2 2023 brought more than sunshine and flowers to e-commerce. Subsurface issues cloud the sector's route. Inflation and economic uncertainty forced customers to reassess their priorities and cut spending. Due to supply chain instability, shortages and shipment delays occurred. Multiple merchants flooded the market, making client attention harder to win. Cybersecurity threats were ubiquitous, requiring constant care and data protection. E-commerce faced issues including recruiting and retaining qualified people.

Opportunities developed despite these issues. Many startups succeeded by entering new markets and high-growth sectors. As environmental awareness increased, buyers were more ready to buy companies that backed safe practices and eco-friendly programs. Data analysis and artificial intelligence (AI) may improve corporate operations, target marketing, and personalize consumer experiences. Companies simplified shopping and checkout to make journeys simpler. Great service and personal relationships that built brand loyalty were crucial to standing out in a competitive market. Despite its challenges, H2 2023 proved that the globe was receptive to fresh

ideas and progress. E-commerce evolves constantly. Companies that adapt to new trends and prioritize customer satisfaction will flourish.

### **Conclusion and Recommendations:**

E-commerce boomed and busted in late 2023. The pandemic modestly grew the industry, but it handled economic obstacles and shifting consumer wants well. Interesting, mobile is the most prevalent system. We must update apps and shop on TikTok and Instagram. Raising interest and conversion rates requires personalization, AI, and targeted marketing efforts. To ensure long-term success, omnichannel methods were adopted to eliminate silos and simplify experiences across all links. New tech and AR/VR platforms like Snap proposed interactive product experiences. Utilize these tools to stay ahead in e-commerce. Flexibility, new technology, and market responsiveness enabled e-commerce in H2 2023.

### **Recommendations for Success**

1. Make mobile efficiency a top priority: make apps faster, easier to use, and more personally relevant. You can reach younger people and get them involved in the buying process by using social shopping sites.
2. Get good at personalization: to make personalized marketing efforts and suggestions, buy AI-powered tools and collect a lot of data about your customers.
3. Look into membership models. You might want to give subscription choices for related goods and services. Utilize sites like Kibo or Recurly to make this happen easily.
4. Make your supply chain strong: work with dependable delivery companies and utilize cutting-edge methods such as carbon-neutral shipping and ethical sources to make your business stand out.
5. Use new technologies. Do some research on trends like AR/VR and try out how they could be used in virtual stores and product display.

## References

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