



Digital Economy Index: 2-Year Pandemic Report

ADOBE DIGITAL INSIGHTS



Methodology

Most comprehensive report of its kind



The Digital Economy Index is powered by Adobe Analytics, which analyzes 1 trillion visits to retail sites and over 100 million SKUs.

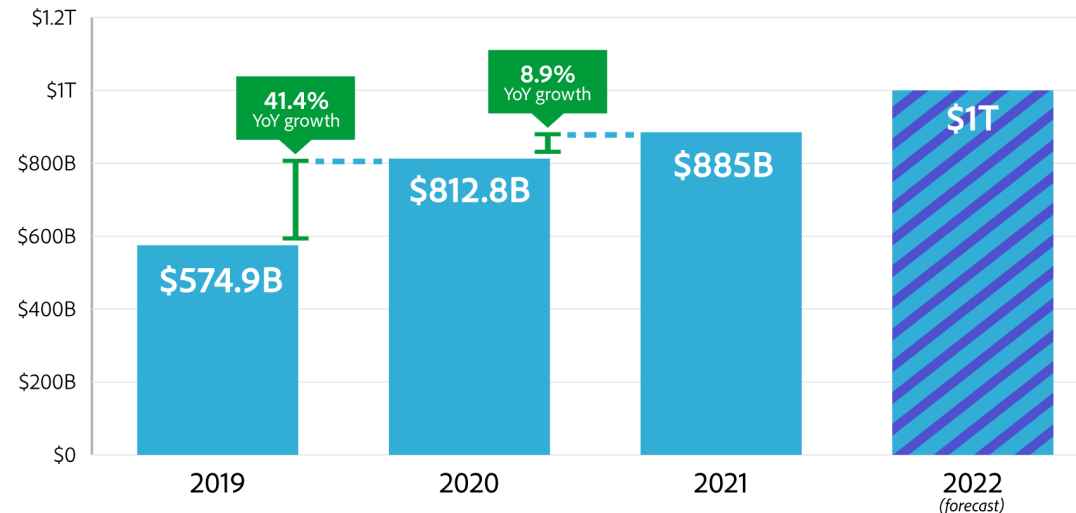
Key Findings

- US online retail spend has generated over 1.7T dollars in revenue after 2 years of surging demand.
- Online Grocery emerged as true winner during the 2-year pandemic period and has held on to its gains.
- Electronics online spending continued to dominate and reach new heights, especially during periods of stimulus-driven cash infusions.
- Apparel saw far more moderate gains over the 2-year pandemic period despite being a major online category.
- Inflation is becoming a much larger contributor to online growth than observed in previous years.
- Out-of-stock levels remain elevated and are expected to remain high through much of 2022.
- BNPL (Buy Now Pay Later) continues to see strong growth after a wave of heavy utilization during the 2021 holiday season.
- Curbside-Pick-up/BOPIS order share has plateaued, but the fulfillment option is seeing consistent selection and support from consumers.

US Consumers have spent more than \$1.7T online since March 2020

- Online shopping spikes, due to the pandemic, were first felt in late February 2020, when spending surged by more than 84% from February-May 2020. The ensuing fallout resulted in dramatic shifts to consumer behavior that saw online spending reach **\$812.8B (+41.4% YoY)** in 2020 and **\$885.0B (+8.9%YoY)** in 2021.
- The shifting intensity of the pandemic, stimulus cash injections, and experiences/services being sidelined are just a few of the major factors that have migrated dollars online and kept them there the last two years.
- Significant consumer demand remains for purchasing durables online with online Grocery seeing a lasting step change in sales. The paradigm for online purchasing has been changed due to the pandemic pushing consumers to rely on ecommerce for more goods than ever before.

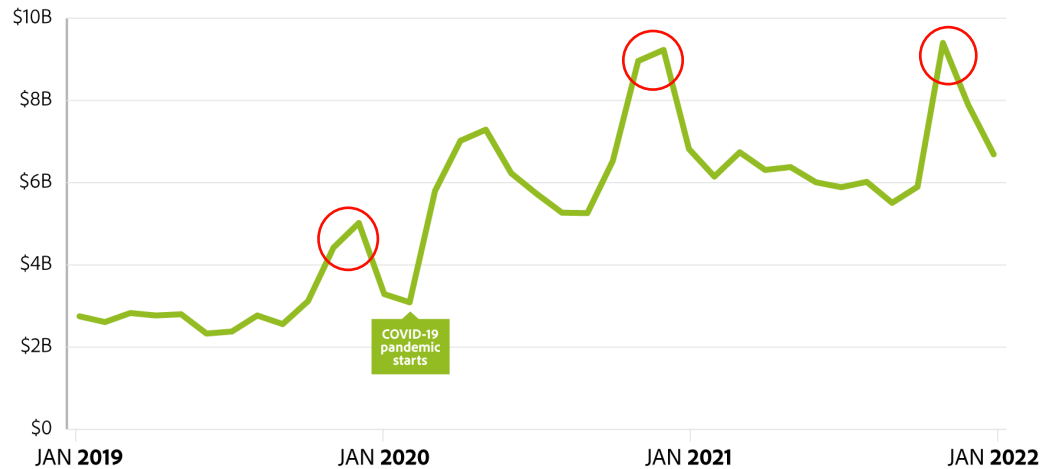
Adobe Digital Economy Index: Annual Online Spend (U.S.)
Source: Adobe Analytics



Online Grocery persists beyond stockpiling surges.

- Spending for online Grocery reached **\$73.7B (+103% YoY)** dollars in 2020 and **\$79.2B (+7.2%YoY)** dollars in 2021.
- Panic buying and stockpiling of grocery items in March 2020 increased sales by **88% MoM**. Early pandemic momentum and holiday seasonal shopping kept sales elevated through the rest of the year. Grocery's share of total online spending rose from **6.3% (FY2019) to 9.1% (FY2020) with a 43% increase YoY**. In FY2021, Grocery's share was 8.9% – down 1.5% from 2020.
- However, what's noteworthy about Grocery sales is that spend levels remained heightened through much of 2021. And monthly Grocery sales have more than doubled (118%) since the pandemic started. This would suggest that consumers became accustomed to purchasing groceries online and that a new normative baseline has emerged for Grocery ecommerce.

Adobe Digital Economy Index: Grocery Online Sales (U.S.)
Source: Adobe Analytics

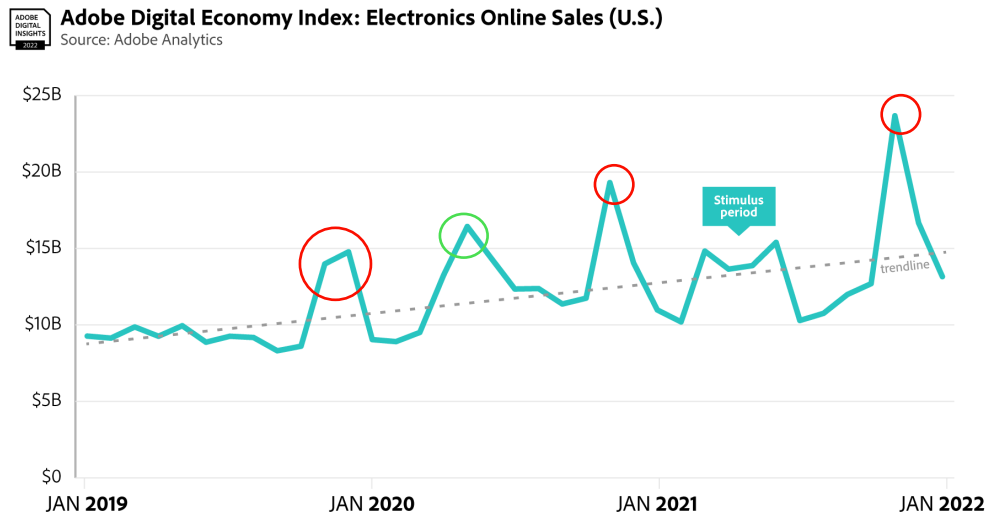


	Avg Monthly Online Sales	Increase
Jan 19-Feb 20	\$ 3.1B	
Since March 2020	\$ 6.7B	118%

○ Holidays (Nov, Dec)

Electronics solidifies its position as an ecommerce leader.

- Electronics was already a leading category in the ecommerce space prior to the pandemic. In 2019, the category drove **\$120.5 billion dollars** and made up just over \$1 in \$5 (21.0%) of total online retail spend. Consumers were clearly comfortable purchasing electronics online.
- As the pandemic hit, and the need to support work-from-home and shelter-in-place became clear, consumers began purchasing electronics heavily. The combination of stimulus-infused demand early in the pandemic, followed by the category's popularity during the holiday season, saw 2020 spending on electronics reach **\$152.8 billion dollars (26.8% YoY growth)** or 18.8% of total ecommerce.
- 2021 generated **\$165.0B (8.0% YoY growth)** leaving Electronics' share of online at 18.6%. The overall trend shows a slow rise over the past three years, with sharp sales peaks driving growth. The key periods averaged an incremental \$5+B of sales over the previous month or +54%



Two-month window	Incremental Monthly Sales
Holiday (3yr avg)	\$ 6.2B
Pandemic	\$ 5.9B
Stimulus	\$ 4.0B

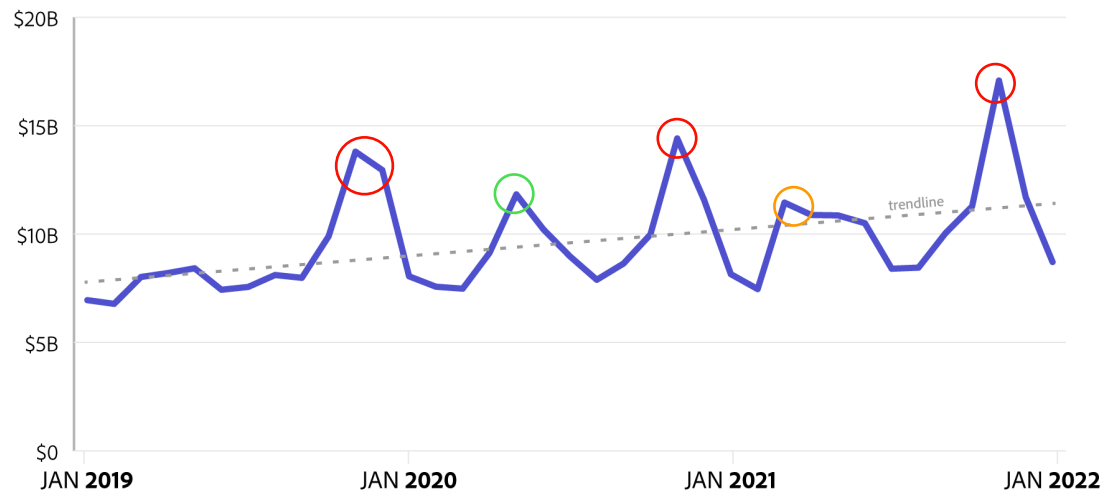
	Avg Monthly Online Sales	Increase
Jan 19-Feb 20	\$ 9.9B	
Since March 2020	\$ 13.6B	38%

- Holidays (Nov, Dec)
- Pandemic and early lockdowns (Mar-May)

Apparel growth hamstrung by pandemic forces and mild demand.

- Apparel was already a leading category in the ecommerce space prior to the pandemic. In 2019, the category drove **\$106.1 billion dollars** and made just under \$1 in \$5 (18.5%) of total online retail spend. With reasonable return policies consumers felt comfortable buying online.
- When the pandemic hit, the demand for apparel dampened. Work-from-home and remote learning became more common, and the need to upkeep a wardrobe decreased. In 2020, Apparel spending grew slowly at **9.1% YoY landing at \$115.8 billion dollars** – or 14.2% of total retail online sales. This was a year in which total online retail sales grew 41%.
- 2021 generated **\$126.2B (9.0% YoY growth)**. The slow to low baseline growth was aided by two atypical spikes: the start of the pandemic and the stimulus of 2021. The key periods averaged an incremental \$3+B of sales over the previous month, or +40%.

Adobe Digital Economy Index: Apparel Online Sales (U.S.)
Source: Adobe Analytics



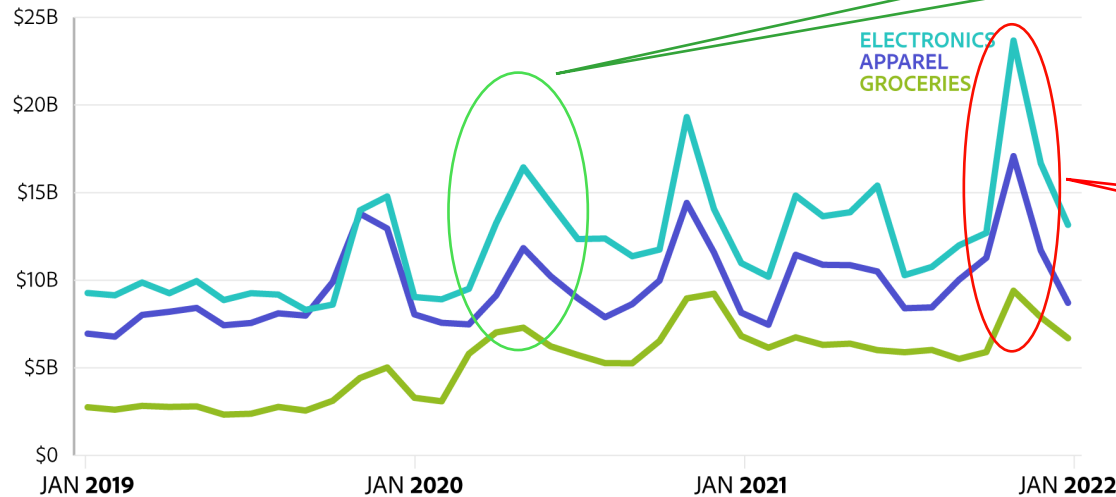
Two-month window	Incremental Monthly Sales	
Holiday (3yr avg)	\$ 3.2B	
Pandemic	\$ 2.9B	
Stimulus	\$ 3.7B	
	Avg Monthly Online Sales	Increase
Jan 19-Feb 20	\$ 8.7B	
Since March 2020	\$ 10.2B	18%

○ Holidays (Nov, Dec)
○ Pandemic and early lockdowns (Mar-May)
○ Stimulus window in 2021

How categories compared: Spend trajectory took different paths.

- At the beginning of 2019, Electronics was the leading category in online sales at 23% and followed by Apparel at 17% and Grocery at 7%. Through 2019, Apparel closed the gap on Electronics with the two categories nearly tied during the Holiday Season. Apparel drove \$26.8B and Electronics \$28.9B in Nov/Dec 2019.
- At the start of the pandemic in March 2020 both Electronics and Grocery made a step up in sales that has persisted to this day. Both categories were given a boost with stay-in-place orders, work-from-home, and remote learning as people upgraded home offices/learning spaces, and ordered food and beverages online. While Apparel saw a lift it wasn't as strong as that seen in Electronics: +39% vs. +67% compared to the month prior.
- The pandemic has changed grocery shopping habits. In the 23 months since the start of the pandemic online Grocery sales are more than twice (118%) the level seen in the 14 months prior. It now accounts for nearly \$1 in \$10 (9.4%) up from 6.8% in early 2019.

Adobe Digital Economy Index: Online Sales by Category (U.S.)
Source: Adobe Analytics



Step change for electronics and grocery at beginning of pandemic.

Electronics and apparel make better gifts than groceries during the holidays.

Inflation contributed to an increase in online growth.

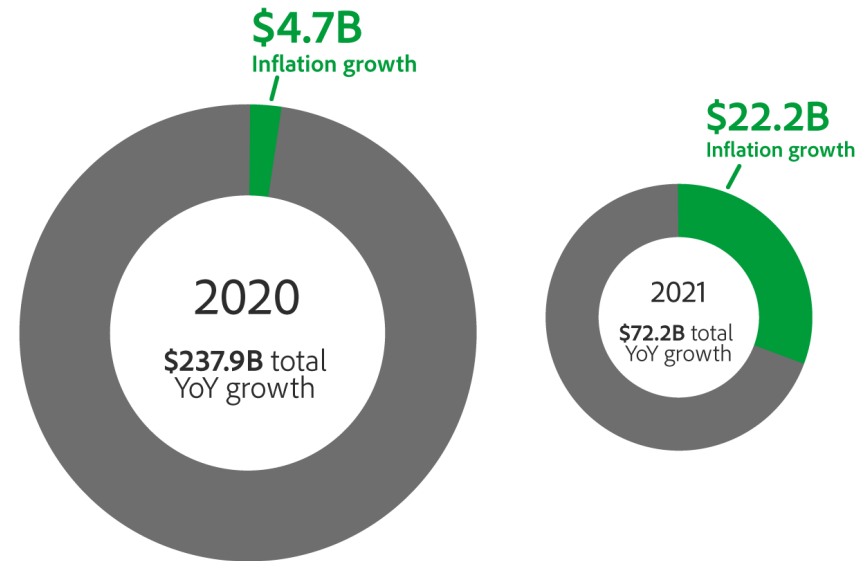
- After more than 6 years of consistent deflation, the past two years (2020 + 2021) have seen overall online inflation emerge. As online deflation trends reversed, and online inflation began to impact categories, Adobe found that that online price increases became a more significant contributor of online growth. Of the **\$310.1B** dollars generated from online growth between 2020-2021, **\$26.9B** dollars of that total was created through inflation.
- Inflation went from contributing approximately 2% to the growth experienced in 2020 to being responsible for 31% of the growth driven in 2021.

	2020	2021
Real Demand Growth Share	98.02%	69.22%
Inflation Growth Share	1.98%	30.78%



Adobe Digital Economy Index: Impact of Inflation on E-Commerce Growth (U.S.)

Source: Adobe Analytics



Consumers shifted their product preferences in the past three years.

When compared to early 2019, spending appeared to shift to a more casual, at-home style.

- In Apparel we saw an increase in athleisure wear instead of more formal office attire.
- Electronics experienced an uptick in work-from-home products and accessories with upgrades or additional monitors.
- With coffee bars temporarily closed and/or workers no longer commuting to the office, consumers stocked up on tea and coffee. In the kitchen they were rounding out the small appliances.

	Comparison of last 12 months(2/21-1/22) to early 2019	
	More Likely Now	Less Likely Now
Apparel	Active Sportswear (1.7x)	Sport Coats and Tailored Jackets (.9x)
	Shirts, Sweaters, and Vests (1.0x)	Skirts, Pants, and Shorts (.8x)
	Accessories (1.4x)	Footwear (.9x)
Electronics	Monitors (1.5x)	Audio Equipment (1.0x)
	Mobile Phone Accessories (2.0x)	Computer Accessories (1.5x)
Groceries	Beverage Materials Including Coffee and Tea (2.2x),	Juices and Nonalcoholic Drinks (1.6x)
	Sugars and Sweets (2.3x)	Other Foods (Shelf Stable) 2.2x

OOS notifications have remained elevated during the pandemic.

- The likelihood of encountering an out-of-stock (OOS) message rose considerably in March 2020 and has stayed there.
 - In the 14 months leading up to the pandemic the odds of an OOS message was 1-in-200 pages.
 - In the 24 months since it has risen to 1-in-59 pages (or 3.4x or 235% increase).
- Since April 2020, the odds have remained relatively stable with an average MoM change of +4% over the past two years. This includes the big impact seen in December 2020 when OOS increased over the soft November (share changed +48%).
- Nothing in the past 6 months shows the trend reverting to pre-pandemic levels.

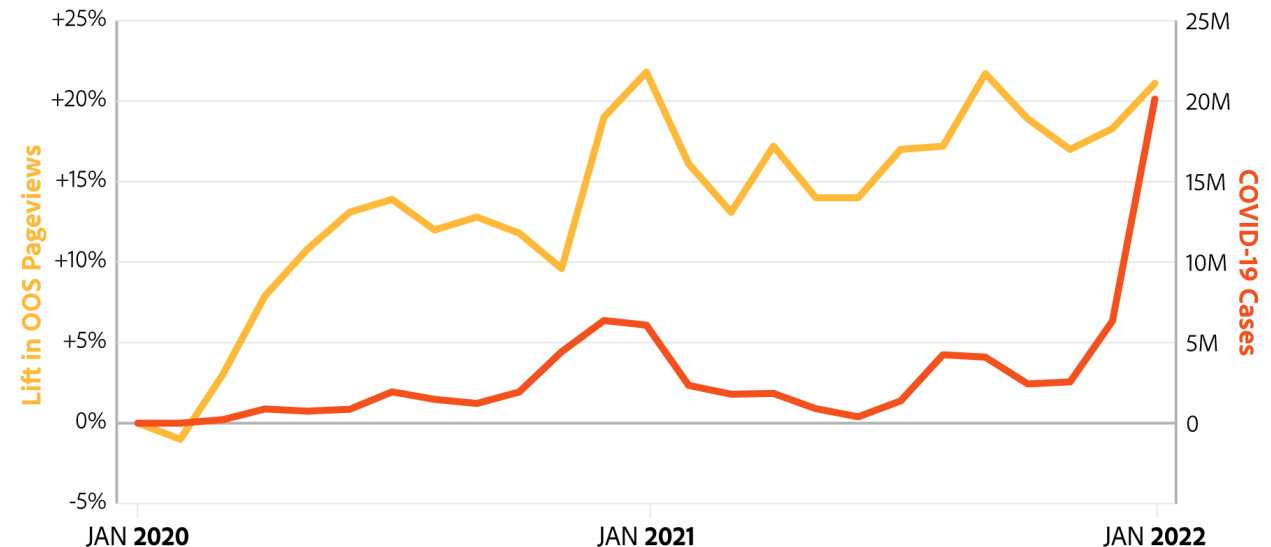
- During the first months of the pandemic, OOS increased appreciably.
- The winter and holiday periods of 2020 saw increase in the likelihood of encountering an OOS.
- Delta (late summer 2021) triggered a rise in OOS, then a drop.
- The large spike in cases due to Omicron did not have a material impact on OOS (or online shopping).

Likelihood is a probability metric so isn't a reflection of total visits.



Adobe Digital Economy Index: Out of Stock (OOS) Pageviews vs. COVID-19 Cases (U.S.)

Source: Adobe Analytics



How OOS behaved during key periods related to the pandemic.

- Since January 2020 consumers have been exposed to **59 billion out-of-stock** (OOS) notifications.
- The dramatic increase in consumer spending at the onset of the pandemic along with supply chain issues led to a normalizing of facing “out-of-stock.”

Onset of Covid-19 (April/May 2020)	Odds of seeing an OOS page doubled (+105%) with the rate of encountering one going from 1 in 149 pages to 1 in 77.
	With an average increase in online spend of 59% each month, total OOS pages increased 130% to 4+ billion page views.

Holiday/Winter (Nov-Jan 2020) By the winter/holiday season odds of seeing OOS increased to 1 in 58 page views (+184% over the first three months 2020).

Given the winter lift of 75% in online sales, the total pages were 6+ billion.

Delta Surge (Aug/Sep 2021)	September saw the odds of seeing OOS rising to 1 in 50; similar to Jan levels in both 2020 and 2021.
	Spend increase was lower than surrounding periods due to a seasonal softness in online spending; but a 32% average increase in sales leading to 5 billion out-of-stock messages.

Holiday/Winter/Omicron (Nov 2021-Jan 2022) This past Winter/Holiday saw similar levels of OOS as the last Holiday/Winter period despite the Omicron surge in cases. 1 in 52 pages – a 212% increase since first three months of 2020.

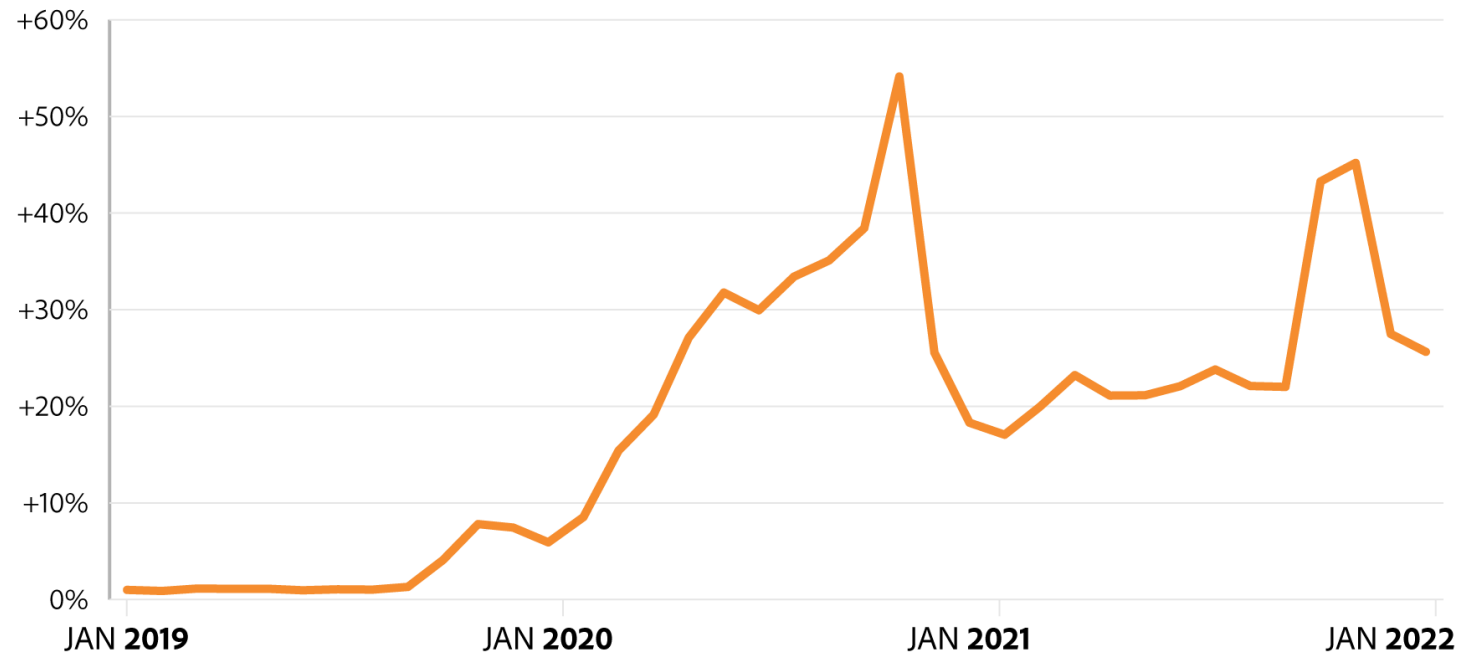
Nearly 10 billion OOS messages were viewed during this period.

Buy Now Pay Later (BNPL) shows no sign of slowing.

Buy now pay later continues to grow in popularity for US consumers.

- BNPL orders so far this year (Jan – Feb) are up 53% year-over-year and up **285% over two years ago**.
- BNPL revenue is up 56% year-over-year and up **323% over two years ago**.

 **Adobe Digital Economy Index: Buy Now Pay Later Orders (U.S.) | Indexed from Jan 2019**
Source: Adobe Analytics



Curbside/BOPIS fulfillment options maintain their demand.

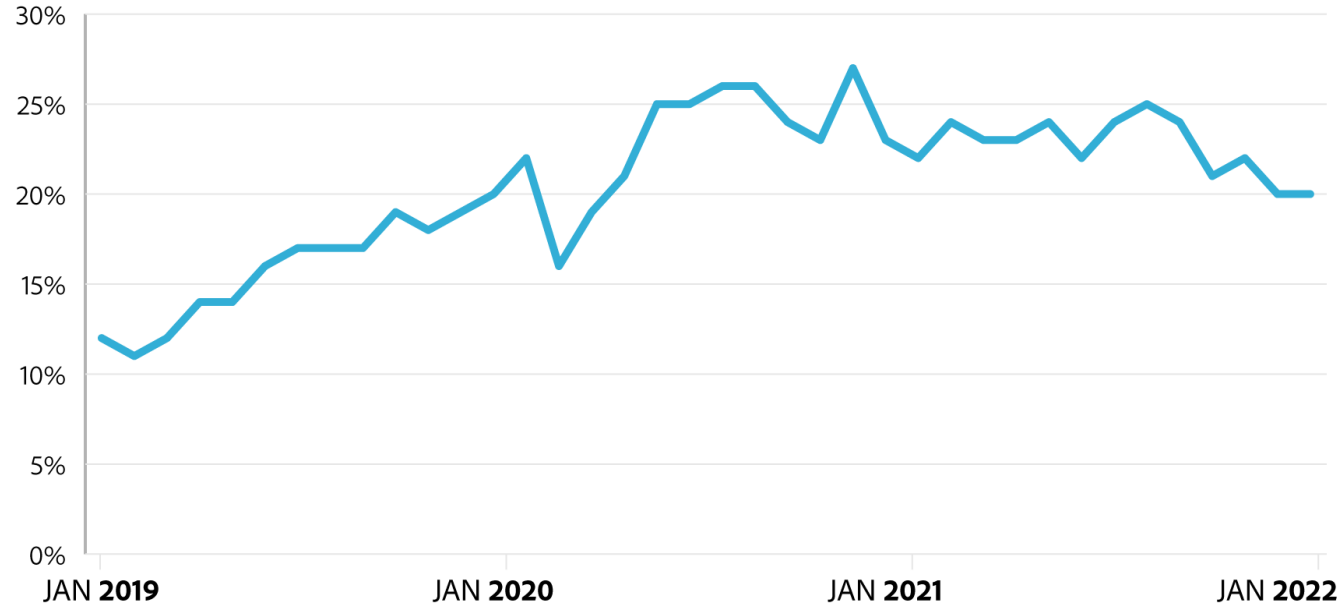
While curbside pickup and buy online, pickup in-store orders are slightly down YoY, they remain a desirable option for consumers.

- 20% of online orders so far this year (Jan – Feb) have been for curbside (for retailers that offer the service). That's compared to 22% of orders for the same period last year.
- Curbside orders are down 7% year-over-year and up 112% over two years ago.
- Curbside revenue is down 5% year-over-year and up 115% over two years ago.



Adobe Digital Economy Index: Curbside Pickup Order Share of All Online Orders (U.S.)

Source: Adobe Analytics



The Next Decade of Ecommerce

The data shows early signals of what will shape the next decade of the digital economy.

- The paradigm for online purchasing has changed. With \$1.7T online spend since March 2020, consumers are primed for a digital-first future.
- Persistent growth in grocery and electronics opens the door for new categories previously untapped in the digital economy.
- Consistently elevated out-of-stock notifications indicate a digital-first future could reshape the supply chain.

