

The ConnectedEconomy™

Monthly Report

The ConnectedEconomy™ Monthly Report benchmarks the digital transformation of consumers across the 10 activities that represent their day-to-day lives. Each month, PYMNTS surveys a population-based sample of roughly 2,500 U.S. consumers to measure the use and adoption of digital tools for how they live, work, shop, eat (how and where they buy food), travel, bank, communicate, stay well, have fun and pay/are paid. This work builds on 15 studies and the more than 21,000 consumers PYMNTS has surveyed since March 6, 2020, and represents the largest and most consistent data set tracking the digital shift accelerated by the pandemic.

PYMNTS.com
WHAT'S NEXT
IN PAYMENTS: **THE
CONNECTED
ECONOMY™**

PYMNTS.com is where the best minds and the best content meet on the web to learn about “What’s Next” in payments and commerce. Our interactive platform is reinventing the way in which companies in payments share relevant information about the initiatives that shape the future of this dynamic sector and make news. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovation that is at the cutting edge of this new world.



THE RISE
OF THE
SMART HOME

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INTRODUCTION

Consumers in the U.S. have grown accustomed to choice in how they shop, pay and acquire eCommerce purchases. With options like curbside and in-store pickup, same-day shipping and even subscription commerce, there have never been more ways for consumers to fit shopping into their schedules. Expectations for convenience have never been greater.

What many fail to realize is how much consumer demand for convenience in eCommerce is impacting other areas of their lives — including their lives at home.

PYMNTS’ latest research shows that as consumers’ eCommerce activity continues to grow, so does their demand for smart home and other connected home applications. Having a single Roomba or an Alexa device is no longer enough for many Americans. The average U.S. consumer now uses several smart home and other home applications, creating in-home ecosystems of connected devices to automate their housekeeping and chores. Not only do 53 million U.S. consumers use automatic and smart home technologies, such as Roombas and climate control systems, but 79 million Americans also use voice assistants such as Alexa and Google Home to help manage daily chores and their connected homes.

In The ConnectedEconomy™ Monthly Report: The Rise Of The Smart Home, PYMNTS details how consumers’ increasing demands for faster, simpler eCommerce experiences is growing hand in hand with their use of smart home and other digital home applications. We surveyed 2,696 U.S. consumers between May 10 and May 15 as part of our ongoing research into the myriad ways in which the digitization of the U.S. economy is reshaping the way consumers shop, pay and live. This month’s data brief explores how consumers’ increasing need for convenient digital experiences in the eCommerce space is driving demand for similarly convenient experiences in their homes.

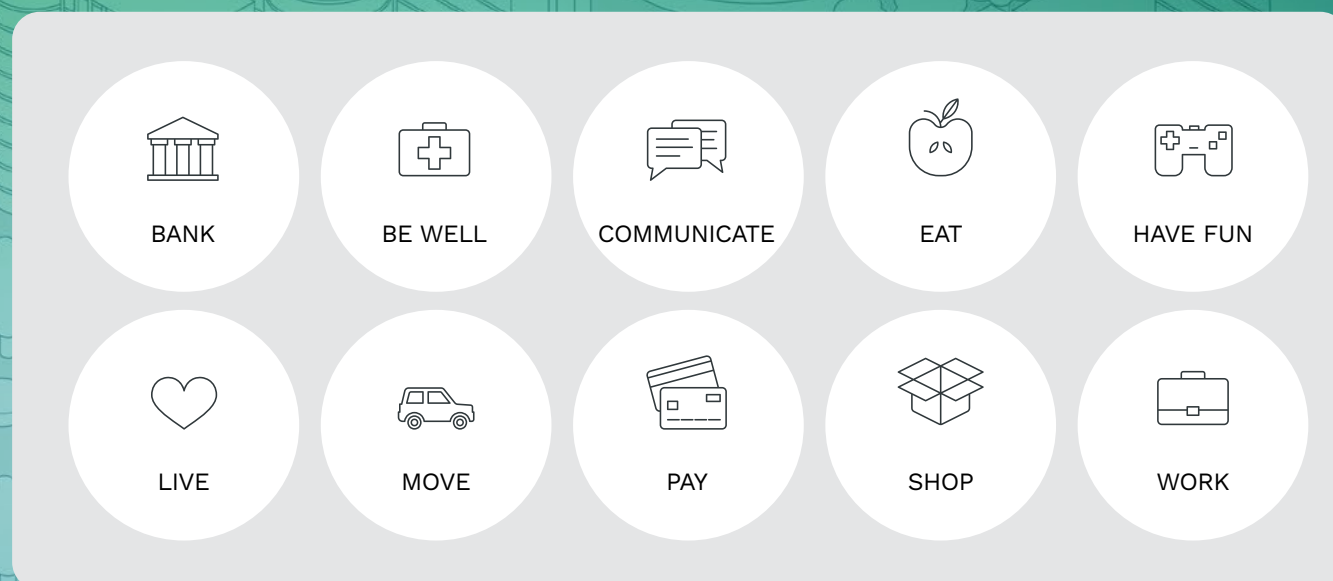
This is what we learned.

THE 10 PILLARS

of the ConnectedEconomy™

Benchmarking consumers' digital behaviors and new routines has been a consistent part of PYMNTS' research since 2016 — well before the pandemic accelerated the shift to digital — but the transition from an app-based world to an ecosystem-driven one was abundantly clear.

PYMNTS accelerated its research efforts in early March 2020, and it now has more observations documenting the shift to digital since the start of the pandemic. PYMNTS' landmark study of 15,000 U.S. consumers, published in June 2021, was intended to further document consumers' digital habits and routines as well as their interest in participating in connected ecosystems to streamline the management of their digital lives.



The ConnectedEconomy™ persona groups

- **CONVENIENCE-SEEKERS**

These consumers are extremely interested in being able to aggregate/integrate all aspects of their lives online into a single super app.

- **COMMERCE-SEEKERS**

These are consumers who are likely to want to aggregate/integrate data pertaining to their shopping, travel or entertainment preferences and activities into a single app, but who are also less likely than others to want to use that app to actually transact.

- **FINANCIAL WELLNESS-SEEKERS**

These consumers are likely to want to aggregate/integrate data related to banking, money management and/or payments into a single super app to have access to that information and then, crucially, use that data to make/receive digital payments.

- **WAIT-AND-SEE**

These consumers are likely to integrate just a few tasks from a limited area of their lives with a super app.

- **NOT INTERESTED**

These consumers do not want to integrate any life area into a super app.

Connected consumers and the devices that connect them

- **BASIC-TECH**

These consumers use computers/smartphones primarily and exhibit low overall ownership of devices, possessing three devices on average.

- **MAINSTREAM-TECH**

These consumers are computer/smartphone/tablet/smart TV/gaming console-dominant and own six to seven devices on average.

- **INTEGRATED-TECH**

These consumers have all the devices that mainstream users have, but they also incorporate smart home and activity tracking devices into their ecosystems. They own 11 to 12 devices on average.

PART I:
Same-day and everyday eCommerce shoppers

Consumers' eCommerce activity reached new heights in April and has remained elevated ever since.

An average of 37% percent of U.S. consumers reported engaging across transactional activities online last month.

This is slightly less than the 38% who transacted online the month prior, but it is still far more than seen at any time between November 2021 and March 2022. It is clear that while the precise share of consumers making digital transactions may vary incrementally between months, their overall propensity to transact online is increasing with time.

37%

SHARE OF U.S. CONSUMERS WHO ENGAGED IN TRANSACTIONAL ACTIVITIES ONLINE LAST MONTH

FIGURE 1:
HOW MUCH CONSUMERS ENGAGE IN DIGITAL TRANSACTIONS
Average share of consumers engaging in digital transactions, by month



Source: PYMNTS.com

PART I:
Same-day and everyday eCommerce shoppers

The average consumer now engages in at least two transactions online per day.
Seventeen percent buy retail products online, 17% buy food or groceries online and 21% transact on their financial institutions’ sites or apps every day.

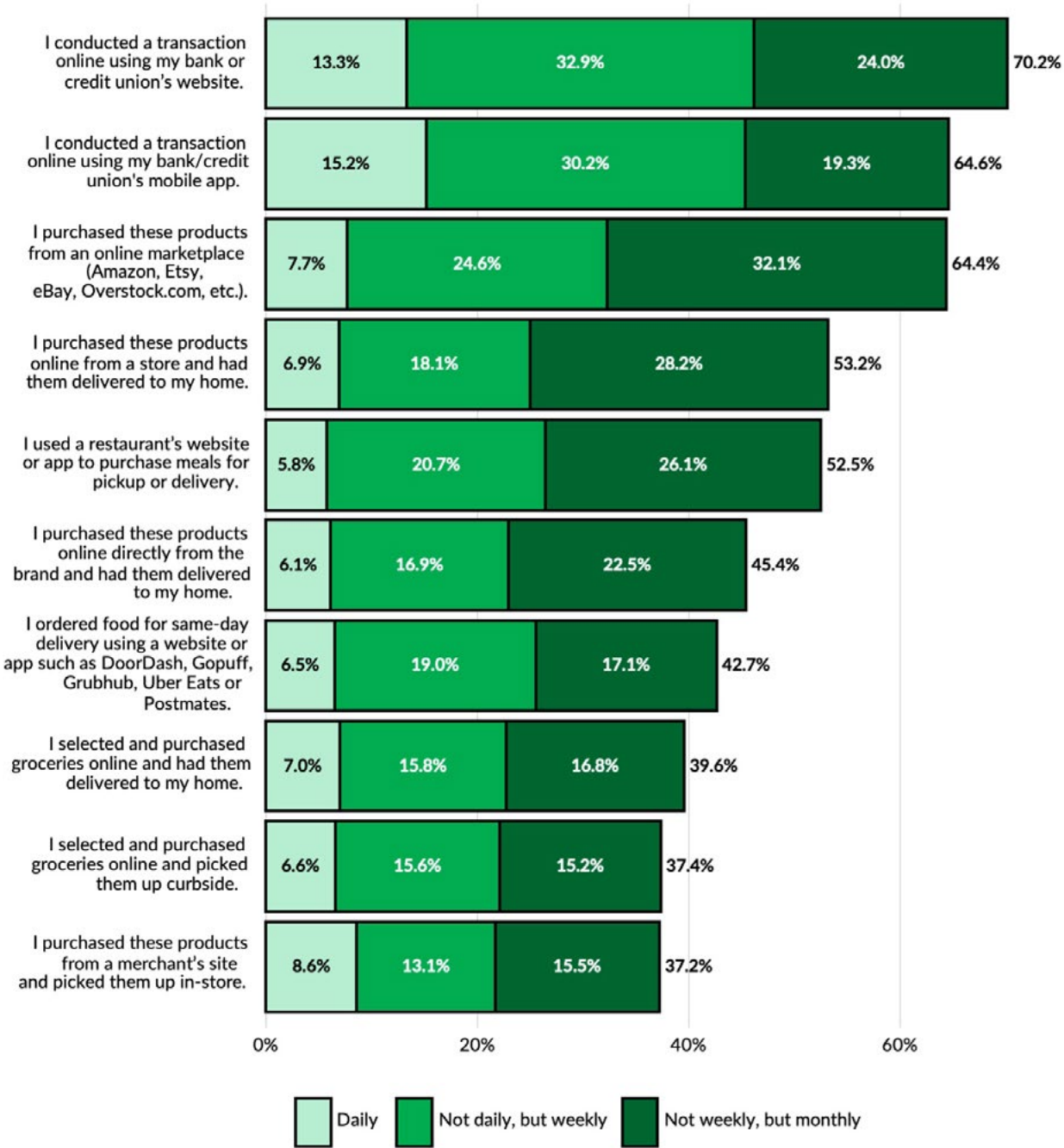
The most common types of eCommerce purchases consumers made every day in May were also the easiest to make and the most convenient to acquire. Our research shows that 7.7% of consumers bought goods on digital marketplaces such as Amazon, Walmart, Wayfair, Etsy or Overstock.com for home delivery every day last month, and 6.9% bought retail items from stores such as Walmart, Target or Costco to be delivered directly to their homes. There were also 6.1% who made direct-to-consumer eCommerce transactions every day last month.

Our survey also revealed that 8.6% of consumers — an estimated 22 million individuals — purchased retail items online for curbside or in-store pickup daily. Picking up eCommerce purchases in stores provides consumers the dual benefit of not having to pay for shipping and acquiring the goods they purchased on the day of purchase if needed.

We estimate that approximately 43 million consumers across the United States made at least one of these types of retail purchases every day last month.

There were also approximately 53 million U.S. consumers who placed either grocery or restaurant orders online every day during that time. These consumers were about equally likely to have placed daily restaurant orders as grocery orders, with 6.5% having placed orders via food aggregators like Grubhub, Uber Eats and DoorDash and 5.8% having placed orders directly from restaurants’ websites every day. This compared to 7% who ordered groceries online for same-day delivery and 6.6% who ordered groceries online for curbside pickup every day.

FIGURE 2:
HOW OFTEN CONSUMERS MAKE DIFFERENT TYPES OF DIGITAL TRANSACTIONS
Share of consumers who engage in select transactional activities with varying frequencies



Source: PYMNTS.com

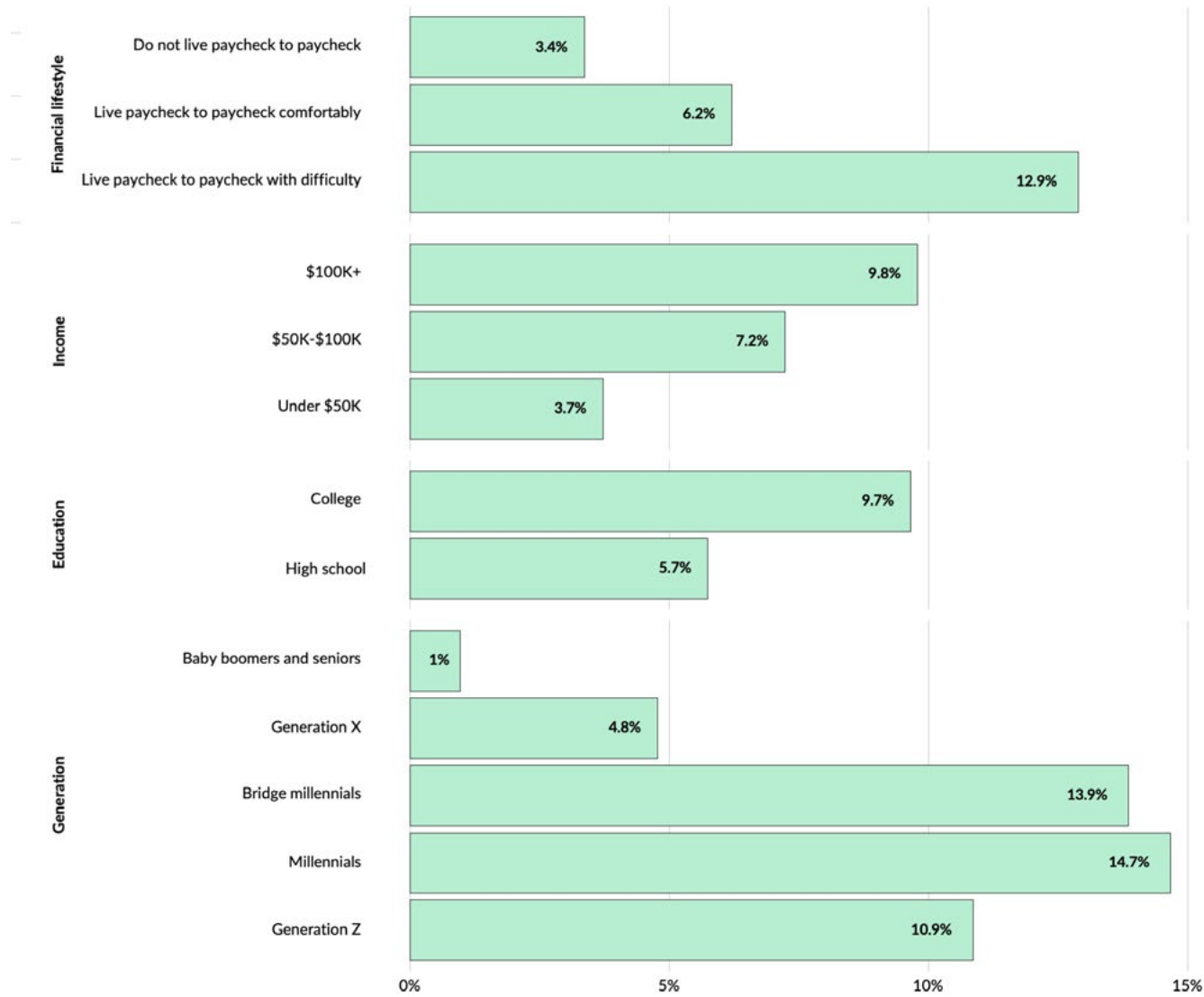
PART I:
Same-day and everyday eCommerce shoppers

Thirty percent of millennials make digital transactions every single day. Twenty-eight percent of consumers who live paycheck to paycheck and struggle to pay their bills make transactions every day.

The propensity to make digital transactions differs sharply between consumers in different age groups and with different education levels, incomes and financial lifestyles. Millennials are by far the most likely to be making daily eCommerce transactions, with 15% of them doing so. This compares to 14% of bridge millennials, 11% of Generation Z and just 4.8% of Generation X.

Consumers earning more than \$100,000 in annual income (high-income consumers) are also more likely to make daily digital transactions, as are those living paycheck to paycheck with difficulty paying their monthly bills. Our research shows that 9.8% of high-income consumers and 13% of those living paycheck to paycheck and struggling to pay their monthly bills made transactions online every day last month.

FIGURE 3:
WHICH CONSUMERS MAKE THE MOST DAILY DIGITAL TRANSACTIONS
Overall average share of consumers in different demographic groups making digital transactions daily



Source: PYMNTS.com

PART II:
Convenience is the name of the eCommerce game

Consumers now expect same-day fulfillment of their eCommerce purchases.

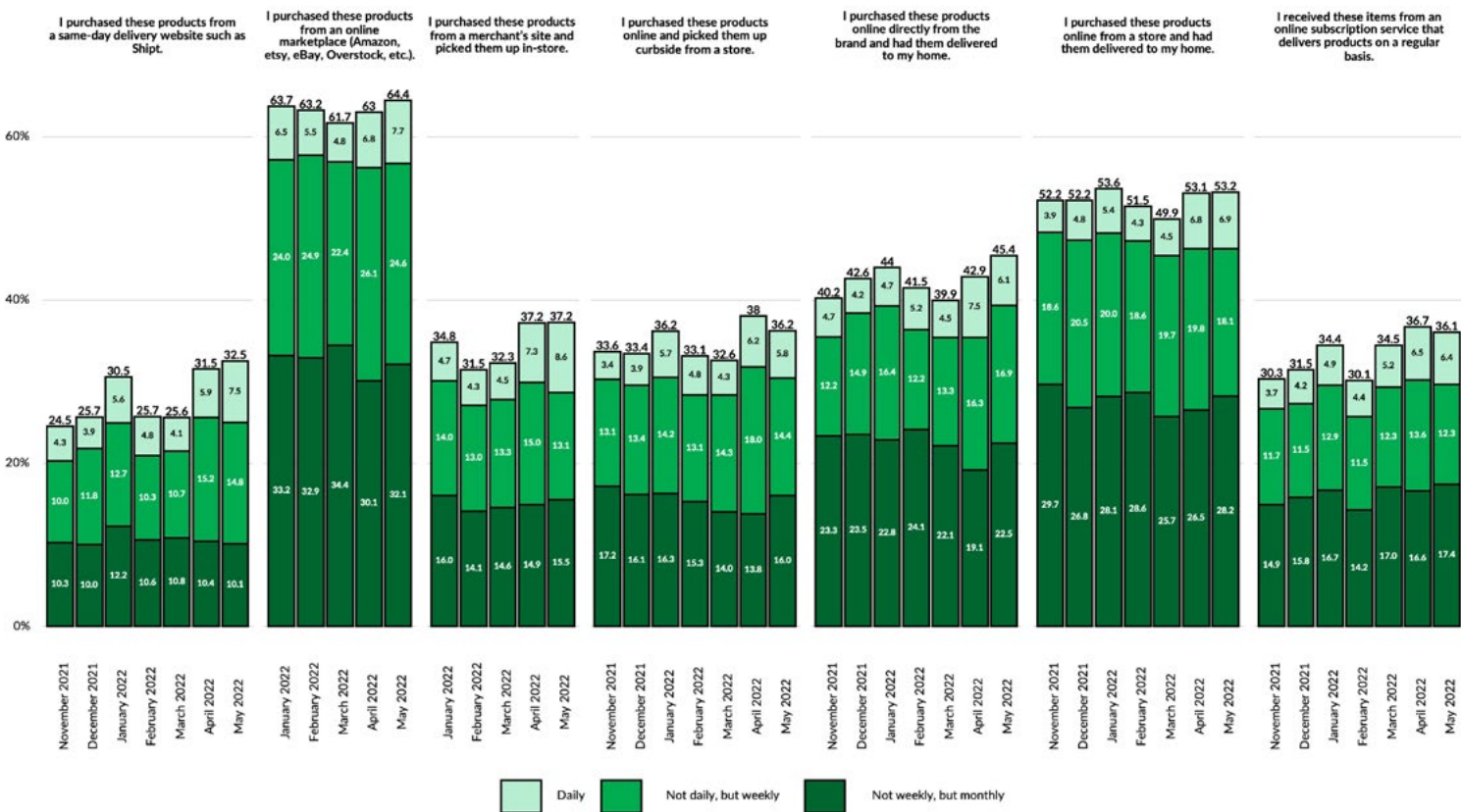
Thirty-four percent of all U.S. consumers now order eCommerce products to be picked up in-store, via curbside or for same-day delivery.

For many eCommerce shoppers, waiting two or more days to receive their purchases is no longer good enough; many expect to acquire their purchases the same day they are purchased. Our research shows that in May, 12% of U.S. consumers made eCommerce purchases online to either be picked up in-store or curbside or delivered the same day. That equates to an estimated 30 million curbside and in-store pickup shoppers.

The most common type of same-day eCommerce purchase consumers made in May were those ordered online for in-store pickup, followed closely by curbside pickup options. Thirty-seven percent of consumers picked up eCommerce orders in store last month, and 36% picked up eCommerce orders curbside. Same-day delivery services were not far behind, however. Thirty-two percent of consumers bought retail items online and had them delivered to their homes the same day.

Consumer retail subscriptions are also growing more popular, with 36% of consumers having used at least one in May. This, too, is a signal of how much eCommerce shoppers have come to expect ease and convenience in their shopping experiences. Subscriptions allow consumers to fully automate the shopping experience, ensuring they receive their purchases without even having to remember to hop online to buy them.

FIGURE 4:
HOW CONSUMER ENGAGEMENT IN SELECT eCommerce ACTIVITIES HAS CHANGED OVER TIME
Share of consumers engaging in select eCommerce activities, by month



Source: PYMNTS.com



PART II:
Convenience is the name of the eCommerce game

Providing a wide variety of order and fulfillment options is critical to winning over millennials and Gen Z consumers.

The average millennial uses four different eCommerce shopping channels per month, and the average Gen Z consumer uses three.

Same-day fulfillment options are now critical to meet the demands of consumers of every age, but it is millennials who use them the most. According to our latest survey, 62% of millennials in the U.S. purchased eCommerce items to be picked up via curbside, and 59% ordered them to be picked up in-store and 55% ordered items online to be delivered to their homes the same day. In total, millennials account for 54% of the same-day shoppers in the U.S.

Bridge millennials — a unique cohort of consumers born between 1977 and 1989 who “bridge the gap” between Gen X and millennials — and Gen Z consumers are roughly tied for second in their demand for same-day eCommerce acquisition. Our research shows that 58% of millennials and 54% of Gen Z consumers ordered their eCommerce purchases to be picked up in-store last month, for instance.

The U.S. is home to roughly 18 million bridge millennial and Gen Z same-day shoppers.

62%
SHARE OF MILLENNIALS
WHO PURCHASED
eCOMMERCE ITEMS
FOR CURBSIDE PICKUP

TABLE 1:
HOW CONSUMER IN DIFFERENT GENERATIONS SHOP ONLINE
Share of consumers engaging in select activities, by generation

	Baby boomers and seniors	Generation X	Bridge millennials	Millennials	Generation Z
I went to a store to select and purchase these products.	84.00%	87%	90.60%	90.60%	89.80%
I purchased these products online from a store and had them delivered to my home.	31.10%	52%	70.90%	73.10%	72.50%
I purchased these products online directly from the brand and had them delivered to my home.	21.30%	41%	60.30%	64.30%	64.70%
I purchased these products online and picked them up curbside from a store.	11.10%	32%	58.30%	61.90%	54.20%
I purchased these products from a merchant's site and picked them up in-store.	11.40%	30%	55.40%	59.40%	57.10%
I received these items from an online subscription service that delivers products on a regular basis.	12.20%	32%	56%	58%	54.60%
I purchased these products from a same-day delivery website such as Shipt.	5.40%	24%	51.70%	54.60%	53.70%
I purchased these products from an online marketplace (Amazon, Etsy, eBay, Overstock.com, etc.).	41.60%	63%	76.90%	79.20%	78.10%

Source: PYMNTS.com



PART III:
Tracking digital engagement at home

The home has become consumers' central digital command hub.

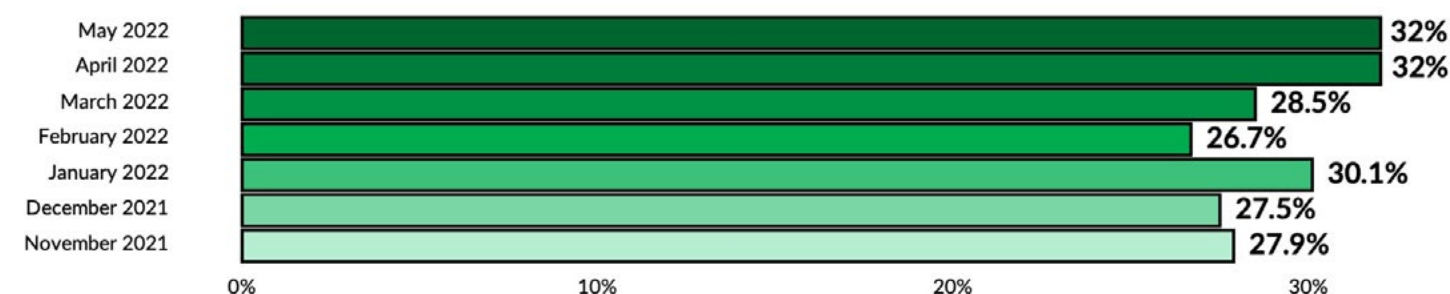
Engagement across activities involving digital and smart home devices last month reached 32% — an estimated 83 million consumers — whether it was home security applications, automated climate controls or in-home voice assistants such as Alexa or Google Home.

Consumers' mounting expectations for convenience in the retail sector is driving a similar demand for convenience in every part of their lives — even in their homes. The share of consumers using smart home devices and other digital home applications is higher than it has been since November 2021, and that upward trend shows no sign of waning.

32%

SHARE OF CONSUMERS
ENGAGED WITH
SMART HOME DEVICES

FIGURE 5:
HOW SMART HOME TECHNOLOGY USAGE HAS CHANGED OVER TIME
Average engagement in smart home-related activities, by month



Source: PYMNTS.com

PART III: Tracking digital engagement at home

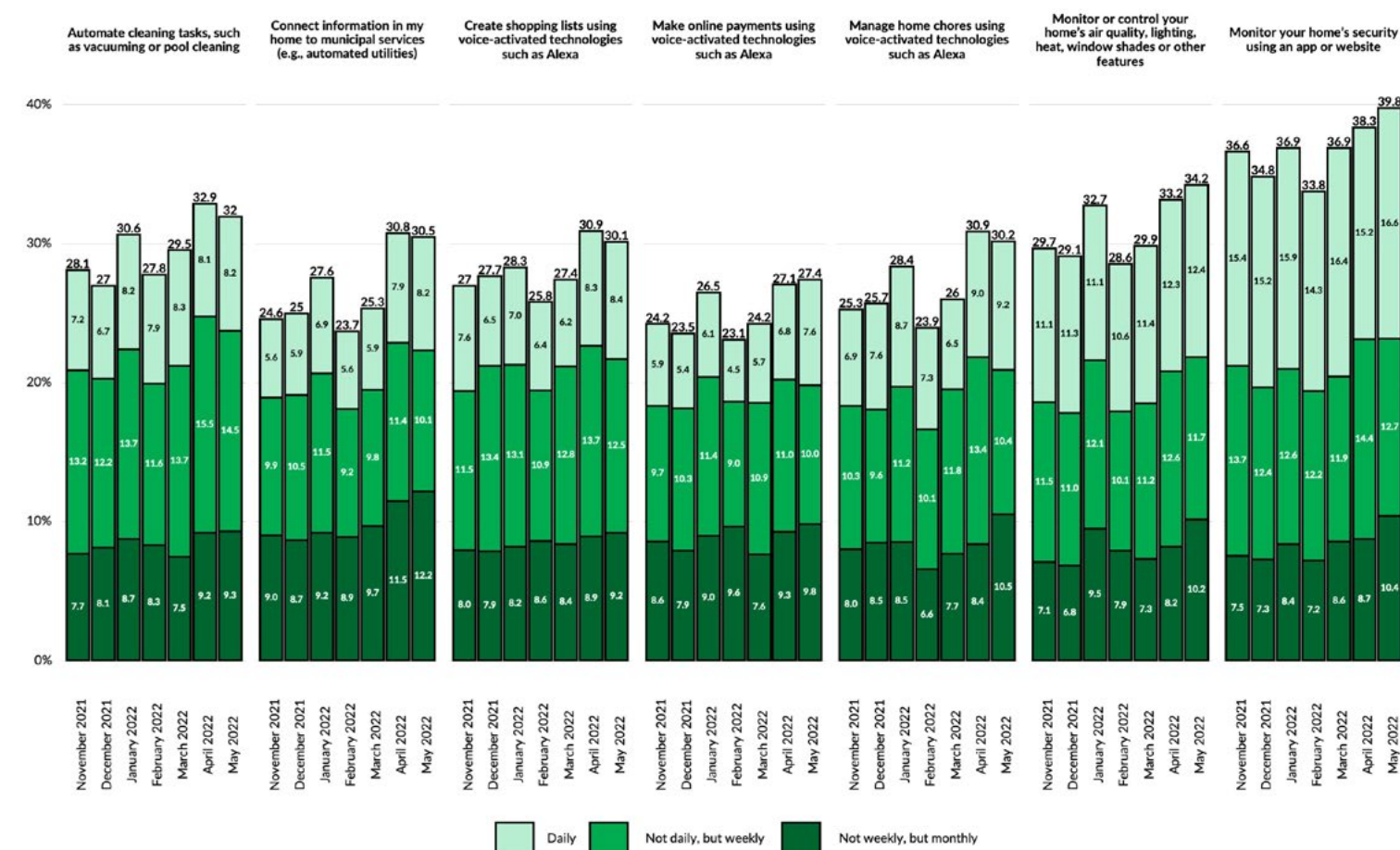
Consumers are using digital tools to help free their schedules of daily chores.

Twelve percent of consumers use automated vacuums such as Roombas and pool cleaners, 13% use automated climate controls and 28% have automated utility systems that share their homes' data with local municipal service providers. In total, we estimate that there were 76 million consumers across the U.S. who used automated home applications at least once in the past 30 days.

Use of in-home voice assistants is also growing more common with each passing month. Not only did 29% of consumers use voice assistants to manage their chores in May, but 26% used them to make eCommerce purchases for groceries, food, retail items or otherwise. These numbers vary from month to month, but the overall trajectory is clear: Smart homes are growing more popular, not less.

Even the share of consumers using climate controls and home security applications is on a steady incline, reaching 35% and 39% of all consumers' homes, respectively, in May. This means that there are now roughly 118 million consumers using one of these two technologies, and their numbers are poised to increase going forward.

FIGURE 6:
CONSUMER USAGE OF SELECT DIGITAL HOUSEHOLD ACTIVITIES OVER TIME
Share of usage of select digital household activities over time



Source: PYMNTS.com

PART III:
Tracking digital engagement at home

Millennials lead all generations in smart home device adoption, but bridge millennials and Gen Z are catching up:
A combined 48 million of these consumers now use automated smart home devices.

Moreover, there are now 43 million millennials across the U.S. using voice assistants to manage their homes’ digital ecosystems.

Millennials are also the most fervent adopters of other smart home and automated home technologies. Fifty-two percent of millennials use automated devices such as automated vacuums and pool cleaning devices to do their chores, 55% use smart home devices to manage their climate controls, and 50% own automated utility systems.

Bridge millennials and Gen Z consumers also stand out. Bridge millennials and Gen Z consumers are much like millennials in their use of automated and smart home devices; 48 million consumers across both age groups use them in some capacity. It is therefore clear that smart home technologies will grow more common as members of the youngest generations who have grown up in an increasingly digital world start to equip their homes with these devices.

50%
SHARE OF MILLENNIALS
WHO OWN AUTOMATED
UTILITY SYSTEMS

TABLE 2:
HOW CONSUMERS IN DIFFERENT GENERATIONS USE DIGITAL HOME TECHNOLOGIES
Share of consumers engaging with select digital activities, by generation

	Baby boomers and seniors	Generation X	Bridge millennials	Millennials	Generation Z
Monitor your home's security using an app or website	17.80%	38%	57.60%	58.30%	55.30%
Create shopping lists using voice-activated technologies such as Alexa	8.50%	26%	49.60%	51.30%	50.90%
Manage home chores using voice-activated technologies such as Alexa	7.00%	25%	46.40%	50.40%	48.50%
Make online payments using voice-activated technologies such as Alexa	5.80%	21%	47.30%	49.10%	43.70%
Monitor or control your home's air quality, lighting, heat, window shades or other features	13.00%	31%	53.20%	55.40%	58.70%
Automate cleaning tasks, such as vacuuming or pool cleaning	12.00%	31%	50%	52%	55.30%
Connect information in my home to municipal services (e.g., automated utilities)	7.10%	23%	46.00%	49.60%	49.80%

Source: PYMNTS.com





The ConnectedEconomy™

Monthly Report

METHODOLOGY

The ConnectedEconomy™ Monthly Report is based on a survey of a census-balanced panel of 2,658 U.S. consumers conducted between April 8 and April 18 as a follow-up to a continuing series of studies examining consumers' shift to a more digital way of engaging in everyday activities. Respondents were 47 years old on average, and 52% were female. Thirty-two percent of respondents held college degrees. We also collected data from consumers in different income brackets: 17% of respondents declared an annual income of more than \$100,000, 31% earned between \$50,000 and \$100,000 and 53% earned less than \$50,000. Additional proprietary data from PYMNTS was used for supplementary analysis.

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