

# HOW WE WILL PAY

REPORT

## CONSUMERS, CONNECTED DEVICES AND THE FUTURE OF PAYMENTS

77%

of consumers want their financial institutions/ bankcard networks to enable these new ways to pay



66%

OF CONSUMERS WOULD USE A CONNECTED DEVICE TO ENABLE A SEAMLESS PAYMENT EXPERIENCE WHEN SHOPPING



61%

of consumers say that shopping — online or in-store — is unproductive, inefficient, time-consuming and even boring



# INTRODUCTION

The pace of technological innovation in recent years has been dizzying. It seems as soon as we read about things like delivery robots and self-driving vehicles being tested at research centers, prototypes are rolled out in the real world.

This is certainly true in the world of payments. It's no longer a science fiction scenario for a car to be able to find the nearest, cheapest gas station when its fuel tank is low and handle payment at the pump — without the driver having to so much as touch a screen or reach for a wallet. In fact, it's even possible for the driver to pick out items from the gas station's convenience store before pulling up. In the rapidly expanding Internet of Things (IoT), refrigerators can not only monitor when bread or other staples are running low, but also arrange automated purchases and drop-off through a grocery delivery service.

As connected devices from cars to wearables become increasingly ubiquitous, we may be approaching an era in which the messy business of waiting in line, dealing with cashiers or even swiping a card becomes obsolete.

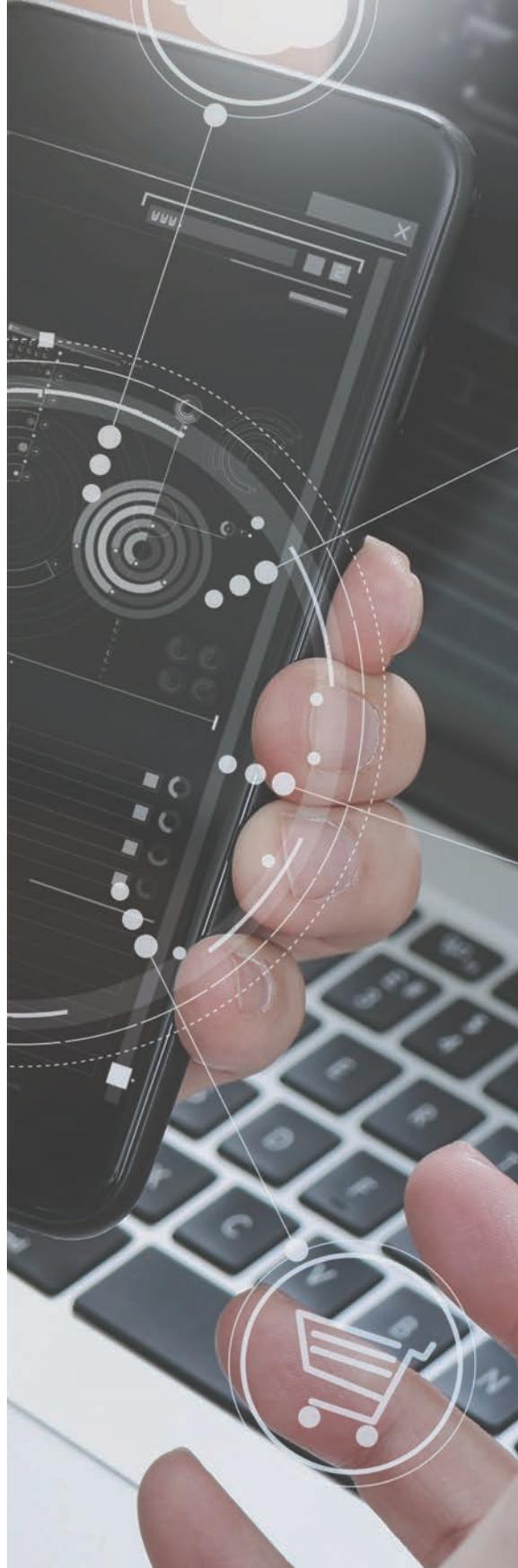
But how do consumers feel about all of this? After all, monetary exchange — whether in the form of seashells, gold coins or dollar bills — has been with us since the dawn of civilization. In the headlong rush toward the next cool, disruptive technology, the feelings of consumers are often overlooked.

PYMNTS decided to find out how consumers feel about the latest innovations in digital payments, some on the horizon and others already upon us. We asked what types of connected devices people own, how often consumers go shopping, what items they buy, how they pay for these items and how they feel about using connected devices to handle such transactions — let's just say we asked a lot of questions.

Our study generated more than six million data points, and we've sifted and analyzed them to find the most salient patterns. We believe the results outlined in this report will prove compelling for anyone interested in understanding both the opportunities and pitfalls on the path toward a cashless future.

## KEY FINDINGS

- People have embraced connected devices to a remarkable degree. Seventy-five percent of all consumers own a connected device that is not a smartphone, computer or laptop.
- The wide-scale adoption of connected devices cuts across demographic boundaries.
- Consumers are dissatisfied with the contemporary shopping experience, both in-store and online. More than 60 percent say the shopping process is inefficient, unproductive, time-consuming and even boring.
- Many people have privacy and security concerns when using connected devices to make purchases, particularly in the case of automated payments. Seventy-six percent of consumers said worries about data privacy might hold them back from using a connected device to make a payment.
- When it comes to handling payments via connected devices, people are much more trusting of the bank and credit card brands with which they're familiar than technology companies like Google and Apple. Seventy-seven percent said they trusted their financial institutions or bankcard networks the most to handle such transactions.



# METHODOLOGY

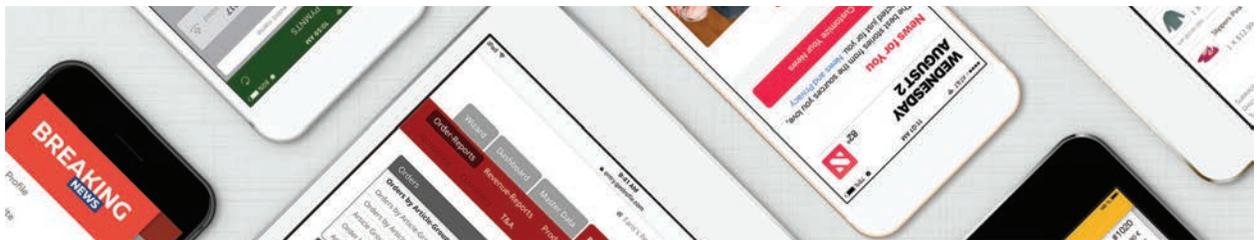
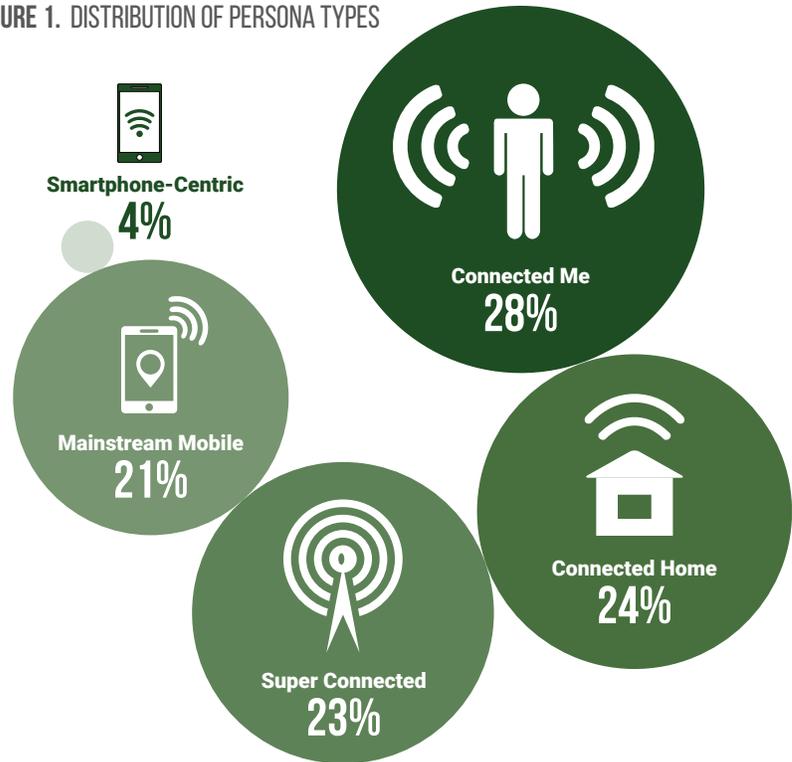


PYMNTS surveyed a random sample of 2,584 adult U.S. shoppers in May 2017. Respondents had to own at least one smartphone to qualify. We asked a range of questions concerning the shoppers' device ownership, use of connected devices and attitudes toward various payment methods. We also asked them to complete seven-day and one-day diaries in which they tracked their purchases and payment methods.

# BEYOND TABLETS AND SMARTPHONES

To say that U.S. consumers have adopted a wide range of connected devices would be an understatement. They've invited these gadgets into their homes and lives – they talk to them, drive with them and even exercise with them. 75 percent of all U.S. consumers own a connected device that is not a smartphone, computer or a laptop. They own connected devices ranging from game consoles and voice-activated assistants (e.g. Alexa or Google Home) to activity trackers (e.g. Vivo or Fitbit) and smart watches. And then there are those who own a whopping six devices or more, a group we call the “Super Connected.”

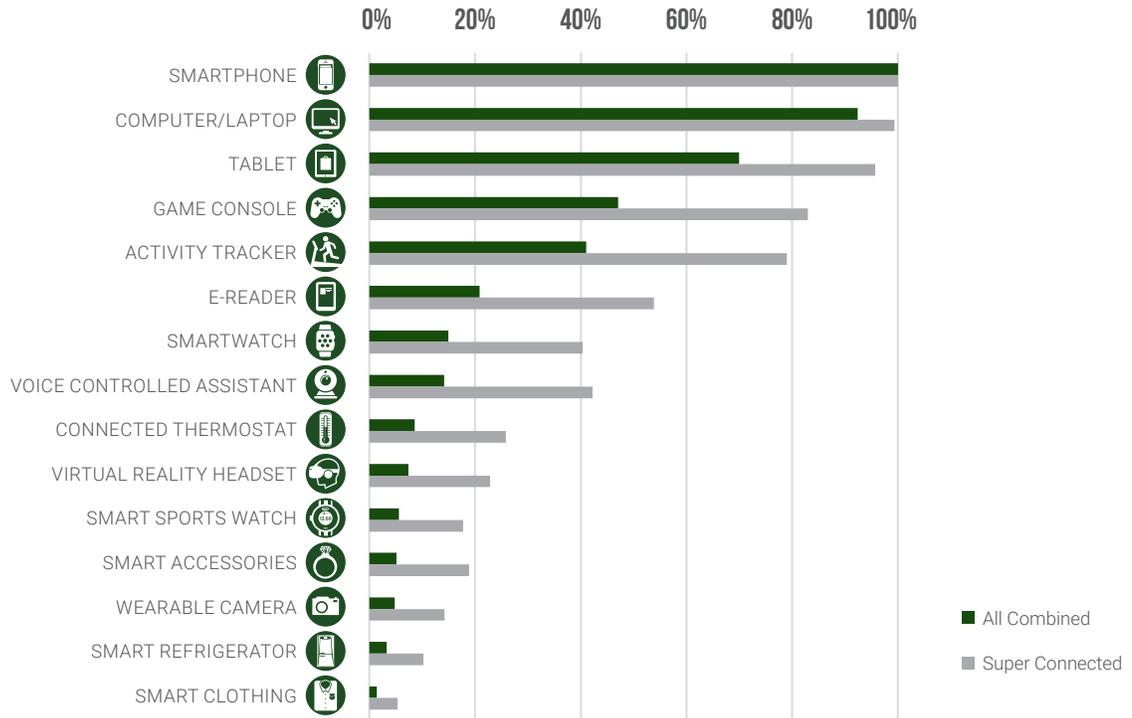
FIGURE 1. DISTRIBUTION OF PERSONA TYPES



We've broken our survey population into five groups based on the number and types of connected devices they own. Besides the Super Connected, there's “Connected Me,” consumers who, in addition to a computer, smartphone and tablet, also own activity trackers, smart watches and other wearables. Those in the “Connected Home” category own devices that are more entertainment- and home-oriented, such as game consoles, smart thermostats and voice-activated assistants. People in the “Mainstream Mobile” group only have a smartphone and a computer or tablet. The “Smartphone-Centric” only own smartphones – a group that makes up just 4 percent of shoppers.

After smartphones, computers and tablets, the most popular devices are game consoles (owned by 47 percent of consumers), followed by activity trackers (41 percent), e-readers (21 percent) and voice-activated assistants (14 percent).

**FIGURE 2. DISTRIBUTION OF RESPONDENTS BY THE TYPE OF DEVICES THEY OWN**



One might assume the Super Connected would be considerably younger and wealthier than the surveyed population as a whole, but this doesn't appear to be the case. People across age and income groups have adopted multiple connected devices. The Super Connected are more likely to be college-educated and have higher incomes – but only by a slight degree. One can find a modest gender difference among the groups: 56 percent in the Super Connected category are male, while 56 percent in the Connected Me group are female.

**TABLE 1. THE DEMOGRAPHICS OF CONNECTED CONSUMERS**

	ALL COMBINED	SMARTPHONE CENTRIC	MAINSTREAM MOBILE	CONNECTED HOME	CONNECTED ME	SUPER CONNECTED
Average Age	41.4	41.6	43.2	40.8	41.3	40.6
Average Income (\$0 per Year)	78.3	76.7	76.4	78.1	79.3	79.3
Average Household Size	2.9	2.8	2.6	3.1	2.8	3.3
College Educated	46.6%	34.8%	43.5%	36.8%	52.0%	54.5%
Female	50.0%	45.5%	50.0%	49.9%	56.5%	44.0%
Have Children	50.0%	51.6%	60.2%	47.7%	55.8%	36.2%

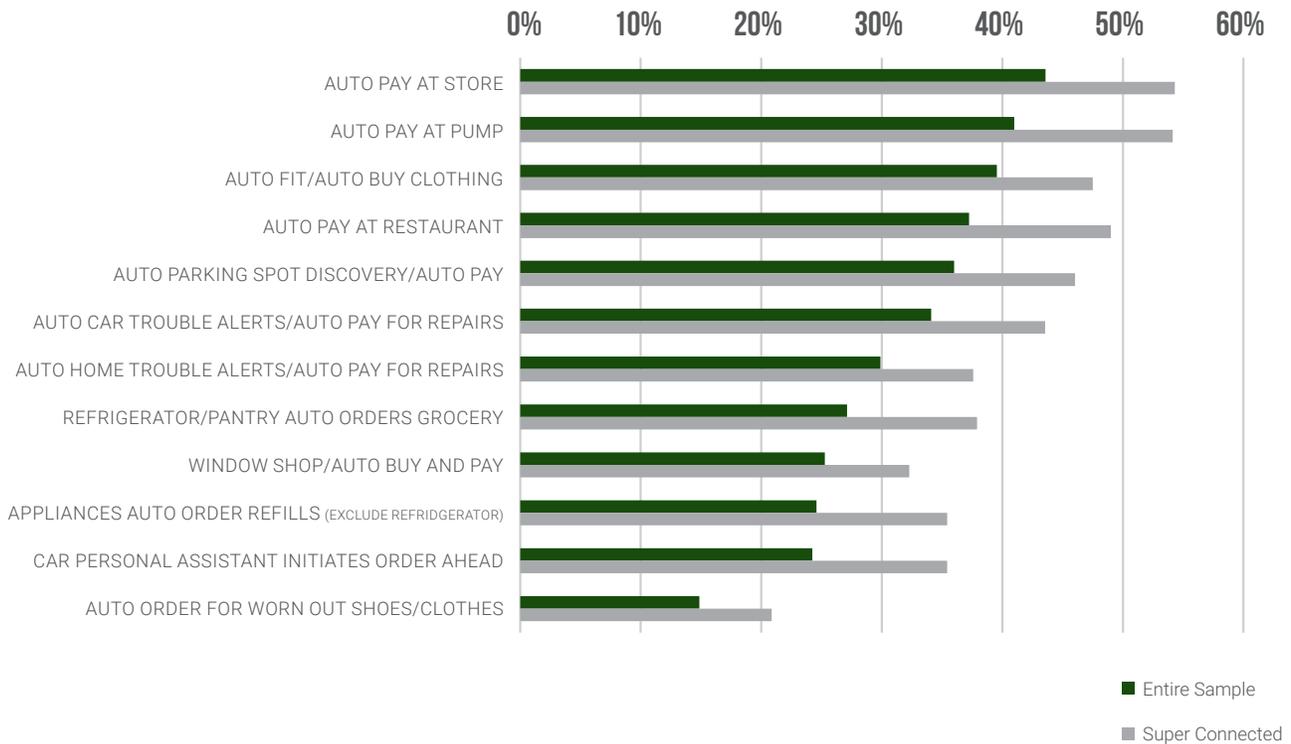
### Embracing the new

American consumers long ago crossed the online shopping rubicon. Nearly 25 percent of people in our survey said they used a computer to make a purchase during the prior seven days, and 18 percent said they used an app to do so. But how do consumers feel about using their connected devices to meet their shopping needs and wants?

Despite the novelty of connected devices, customers were surprisingly open to such possibilities. More than 40 percent of all consumers in our study – from the Smartphone-Centric to the Super Connected – said they would be interested in using a connected device to automatically pay for an item at a store (44 percent) or fuel up at a gas station (41 percent).



FIGURE 3. HOW CONSUMERS WANT TO USE CONNECTED DEVICES





Not surprisingly, the Super Connected were much more interested in such capabilities than the Smartphone-Centric.

At the same time, people were warier of use cases that involved a connected device sensing when a product or repair was needed and automatically arranging a purchase, such as a refrigerator (27 percent of those surveyed) or a vehicle (34 percent).

And given the recently expressed fears about an impending robot takeover, the level of support for such automated technologies is noteworthy. In contrast, a recent poll found that nearly 80 percent of Americans were fearful of riding in self-driving vehicles – a technology that’s been widely reported on, and that has, by and large, been safely tested on roadways.

### Hungry for shopping alternatives

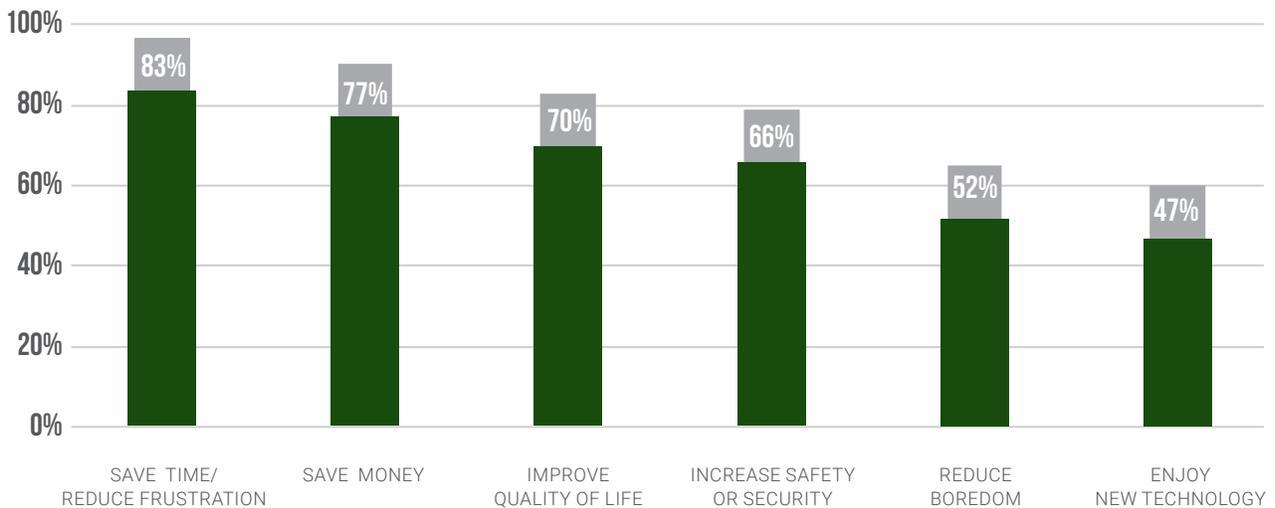
There’s a reason why a significant percentage of consumers appear to be open to novel ways of paying for things: They aren’t exactly in love with the contemporary shopping experience. A majority of respondents (61 percent) said they didn’t find shopping fun or productive, whether in-store or online. More than 25 percent said they found shopping to be time consuming and inefficient.

FIGURE 4. HOW CONSUMERS VIEW SHOPPING



The potential of paying with connected devices to reduce shopping time and frustration appeals most to consumers. In fact, more than 80 percent saw this as a potential benefit of the new technologies. Other potential incentives included saving money (77 percent), improving quality of life (70 percent) and the novelty of trying a new technology (47 percent).

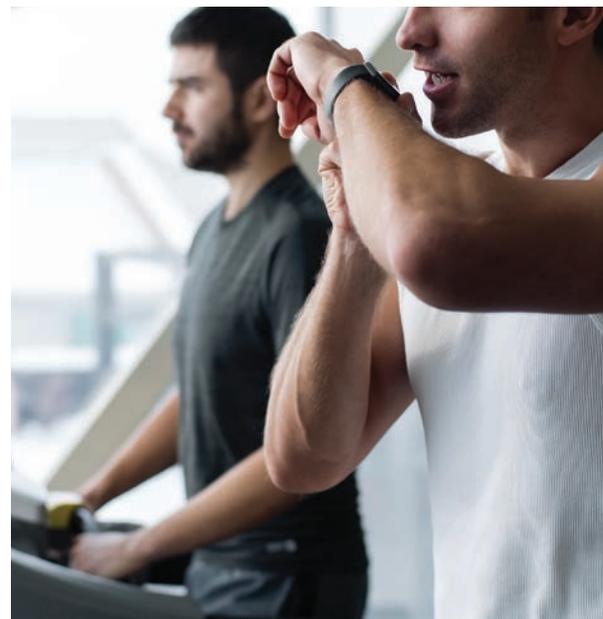
FIGURE 5. WHAT INFLUENCES CONNECTED DEVICE USE WHEN SHOPPING AND PAYING



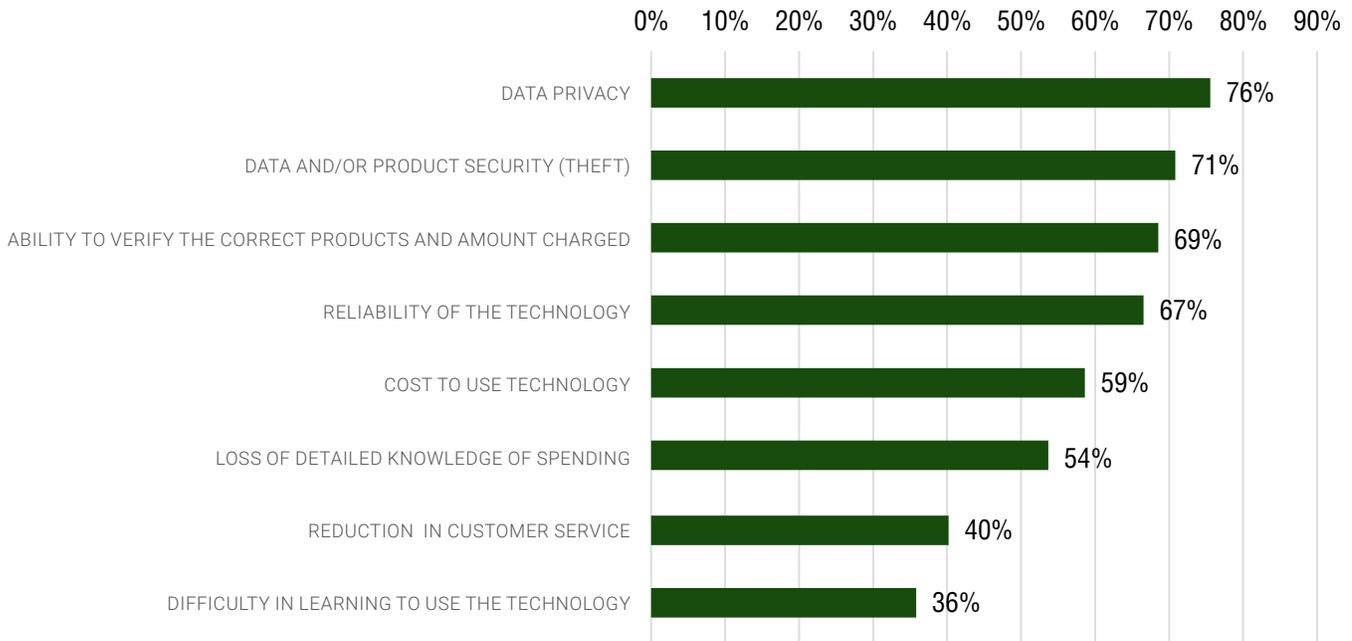
**Causes for concern**

Consumers aren't ready to ditch their physical wallets just yet, though. A majority of shoppers said they have some reservations about using connected technologies to pay for things. To understand why, one need look no further than the steady drumbeat of headlines concerning hacking and data breaches.

More than 70 percent said concerns about data privacy and data theft would give them pause before using a connected device to make a purchase. These were concerns even for Super-Connected technophiles, although not as much as of a concern as the reliability of the technology itself. Another top concern among all shoppers was having the ability to verify a transaction before a payment was made (69 percent). It bears noting these concerns far outweighed any that consumers might have about a reduction in customer service (40 percent).



**FIGURE 6. FACTORS DETERRING CONSUMERS FROM ADOPTING CONNECTED DEVICES**



These results seem to reinforce the idea that, when it comes to when and how they spend their money, people tend to be cautious about new technologies. Consider the very limited adoption of mobile wallets, such as Apple Pay and Samsung Pay, which some believed would portend the end of physical wallets when they debuted a couple of years ago.

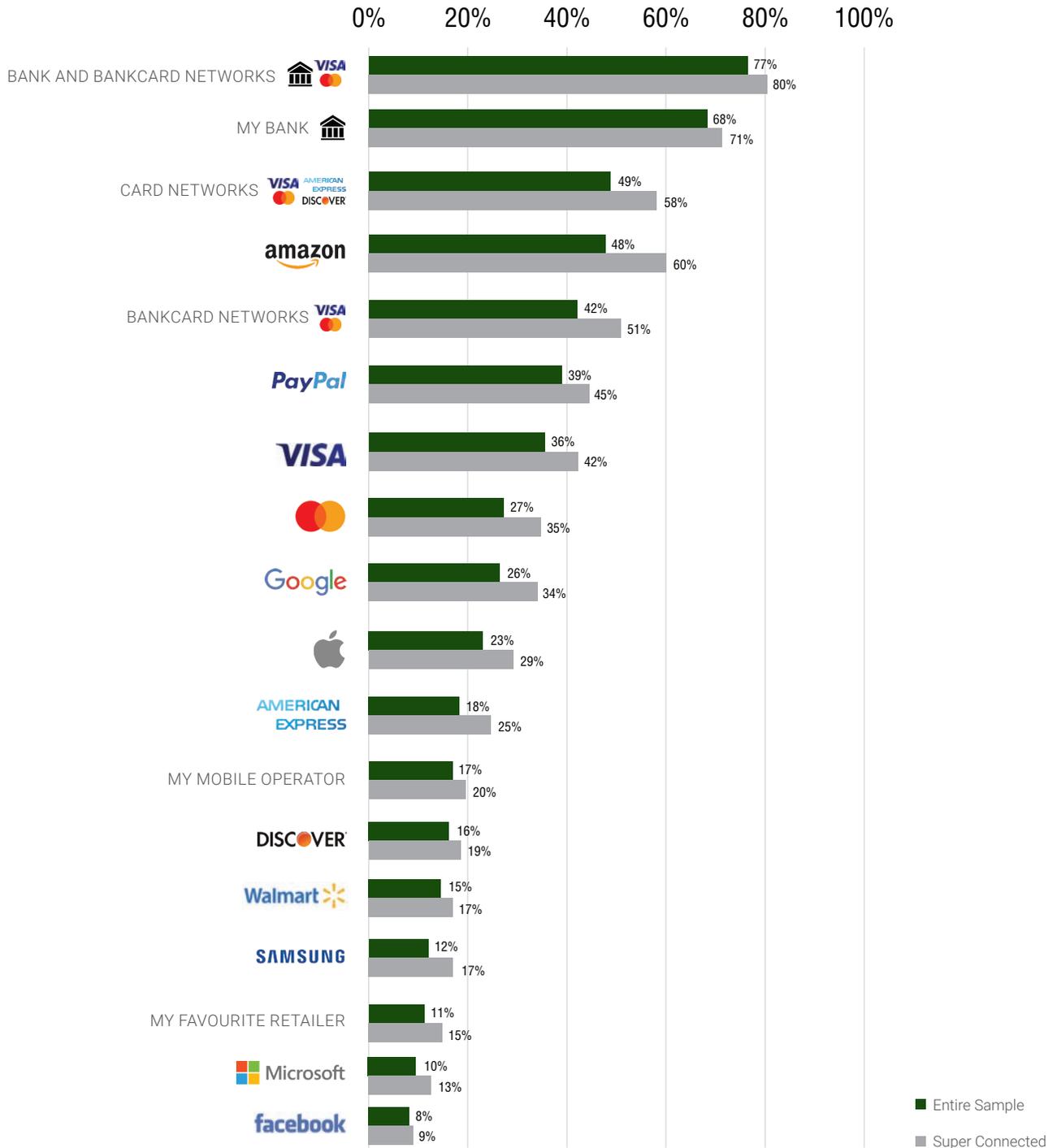
A recent [PYMNTS study](#) found these platforms are only used by about 4 percent of consumers, and that the use of Apple Pay has flatlined.

But our survey indicates established financial institutions may have a leg up in surmounting some of the privacy and security concerns associated with using connected devices as payment platforms.

Nearly 80 percent of respondents said they viewed their financial institutions or bankcard networks as the most trusted parties to facilitate connected-device payments, while fewer than 30 percent said they trusted large technology companies to do so. Google was trusted by 26 percent of respondents, Apple by 23 percent, Microsoft by just 10 percent and Facebook by a mere 8 percent. The one exception was Amazon, trusted by 48 percent, which has long been the most venerable and ubiquitous brand in eCommerce.



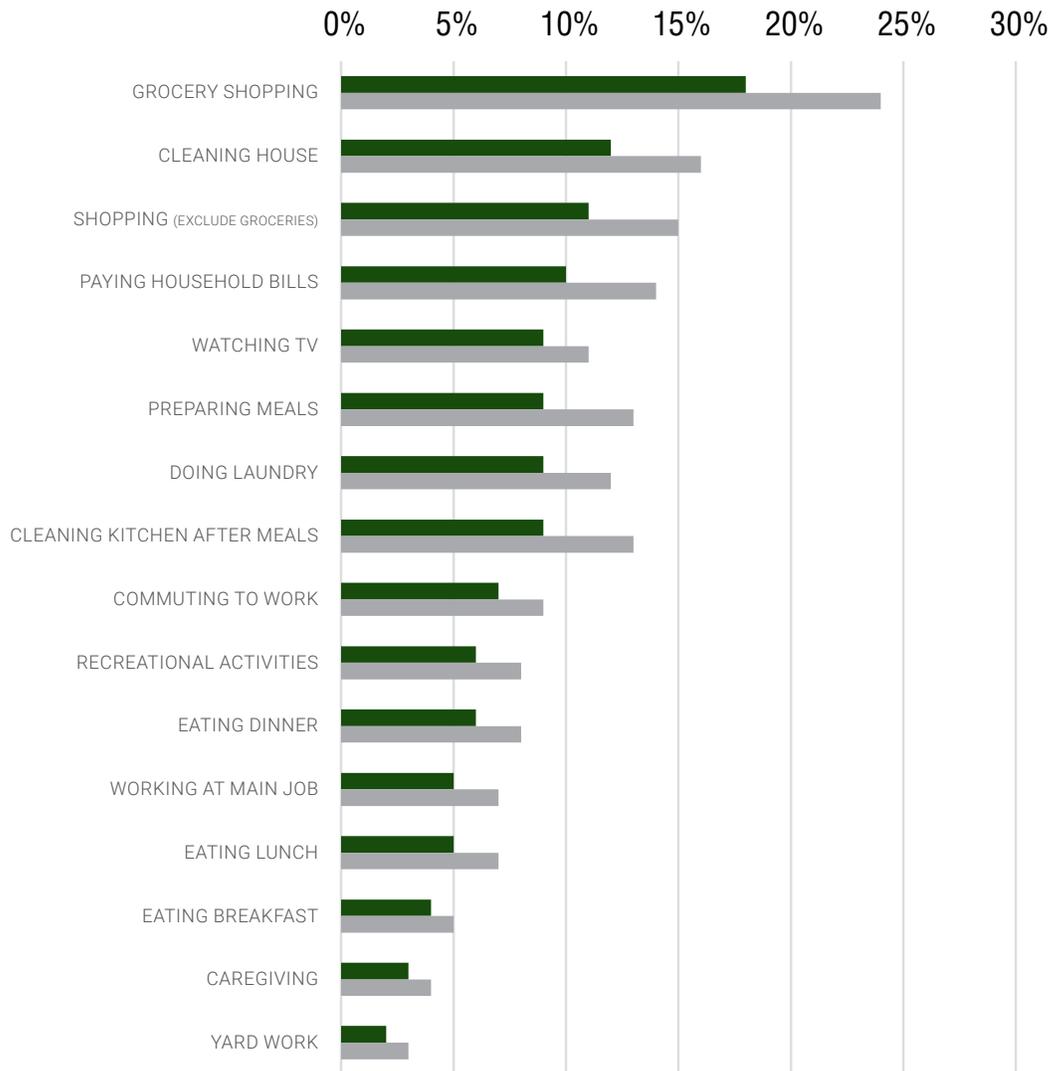
FIGURE 7. WHO CONSUMERS WANT TO POWER THEIR CONNECTED PAYING EXPERIENCE



**The road ahead**

Building a bridge between the world of connected devices and payments offers great promise, but also poses challenges. As our study makes clear, people are more likely than ever to have multiple connected devices at their beck and call every day, but they aren't entirely sure how such technologies can improve their shopping experiences. No more than 20 percent identified a single activity – such as grocery shopping, cleaning or paying bills – that could be improved with the aid of a connected device. And, as previously noted, people have real security and privacy concerns about paying with connected devices, particularly in the case of automated payments.

**FIGURE 8. WHERE CONSUMER SEE THE MOST VALUE IN USING CONNECTED DEVICES TO SHOP AND PAY**



# ABOUT

The “How We Will Pay” study, a PYMNTS and Visa collaboration, asked consumers to respond to a variety of questions that defined specific behavioral patterns, buying habits and shopping preferences related to connected commerce. The study outlines a clear picture of five distinct user personas based on age, geography, purchasing preferences and connectivity levels, providing an in-depth analysis of each group. A detailed analysis of the personas, which range from The Super Connected, who own the most number of connected devices, to the Smartphone-Centric, who rely only on their mobile phones, are listed in the full report. The study was conducted among a panel of approximately 2,600 adult smartphone users ages 18 and older within the United States.

## PYMNTS.com

[PYMNTS.com](http://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.

## VISA

Visa Inc. (NYSE:V) is a global payments technology company that connects consumers, businesses, financial institutions and governments in more than 200 countries and territories to fast, secure and reliable electronic payments. The company operates one of the world’s most advanced processing networks – VisaNet – that is capable of handling more than 65,000 transaction messages a second, with fraud protection for consumers and assured payment for merchants. Visa is not a bank and does not issue cards, extend credit or set rates and fees for consumers. Visa’s innovations, however, enable its financial institution customers to offer consumers more choices: pay now with debit, pay ahead with prepaid or pay later with credit products. For more information, visit [usa.visa.com/about-visa](http://usa.visa.com/about-visa), [visacorporate.tumblr.com](http://visacorporate.tumblr.com) and [@VisaNews](https://twitter.com/VisaNews).

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